



## Old Dominion University Research Foundation

To: Distribution

From: Dr. Shannon Robinson   
Executive Director

Date: December 9, 2022

Subject: Annual Report of Sponsored Program Activity - June 30, 2022

Attached please find the Annual Report of Sponsored Program Activity for the fiscal year ended June 30, 2022. This report measures sponsored program activity administered through Old Dominion University Research Foundation by the amount of actual expenditures (direct costs and indirect cost recoveries) incurred during the fiscal year. Unrecovered indirect cost is not included in this report. This report includes sponsored program activity administered by the Research Foundation for Old Dominion University and for certain independent affiliates with the University. Included in the report is a schedule of proposals submitted and awards funded for the fiscal year ended June 30, 2022, and the four previous fiscal years. Proposal activity is based upon the total dollar amount requested from sponsoring agencies exclusive of institutional or third-party cost share amounts. Award activity reflects the dollar amount of actual funding committed during the reporting period.

The format of the report separately discloses the sponsored program activities of the core University units and the activity of affiliated units. The core University units include all the academic departments, enterprise centers and self-supporting research positions. The affiliated units reflect sponsored programs of the Virginia Space Grant Consortium and the Tidewater Consortium for Higher Education.

Some key points to note with respect to the core University activity are as follows:

- University research expenditures increase by 14.73% from fiscal year 2022 to \$52.7 million.
- Expenditures in excess of \$1 million by funding source for the fiscal year were:

National Science Foundation	\$ 7.3 million
U.S. Department of Education	\$ 6.3 million
U.S. Department of Health and Human Services	\$ 4.6 million
Virginia Department of Education	\$ 2.2 million
U.S. Navy	\$ 2.2 million
U.S. Department of Energy	\$ 2.1 million
Old Dominion University	\$ 1.7 million
National Aeronautics and Space Administration	\$ 1.6 million
Jefferson Science Associates, LLC (JLAB)	\$ 1.6 million
Virginia Department of Environmental Quality	\$ 1.3 million
U.S. Air Force	\$ 1.3 million
John Templeton Foundation	\$ 1.2 million

- The above rankings include agency funding passed through from the University.

- Activity of individual faculty conducting research through University-wide enterprise centers is reflected under the faculty member's home department. The research activity of core staff assigned to an enterprise center is reflected in the center's activity. The Virginia Modeling, Analysis and Simulation Center (VMASC) and Frank Reidy Research Center for Bioelectronics core staff activities are reported under the Office of Research and Other Units.
- University departments (including SSRP's and center activity) exceeding \$1 million for the fiscal year were:

Virginia Modeling, Analysis and Simulation Center	\$ 9.4 million
Communication Disorders and Special Education	\$ 5.4 million
Physics	\$ 3.6 million
Electrical & Computer Engineering	\$ 2.7 million
Biological Sciences	\$ 2.6 million
Chemistry and Biochemistry	\$ 2.4 million
Ocean & Earth Science	\$ 2.0 million
Institute for Innovation & Entrepreneurship	\$ 2.0 million
Computation Modeling & Simulation Engineering	\$ 1.9 million
Mechanical and Aerospace Engineering	\$ 1.6 million
Computer Sciences	\$ 1.5 million
Psychology	\$ 1.3 million
The Center for Educational Partnerships	\$ 1.1 million
Nursing	\$ 1.1 million
Center for Cybersecurity	\$ 1.1 million
Frank Reidy Center for Bioelectronics	\$ 1.0 million
Civil & Environmental Engineering	\$ 1.0 million

- Total University proposal submissions during fiscal year 2022 increased 1.3% to \$254.1 million dollars. Total University Awards funded during fiscal year 2022 increased 15.5% from fiscal year 2021 levels to \$59.6 million dollars.

Should you have any questions concerning the enclosed report please do not hesitate to contact Casey Golliher at 683-7211 (e-mail [cgollihe@odu.edu](mailto:cgollihe@odu.edu)) or me at 683-7210 ([s4robins@odu.edu](mailto:s4robins@odu.edu)).

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## **SCHEDULE 1**

**Summary of Sponsored Program Activity**

**Fiscal Year 2022 through Fiscal Year 2017**

**SCHEDULE 1**  
**OLD DOMINION UNIVERSITY RESEARCH FOUNDATION**  
**SUMMARY OF SPONSORED PROGRAM ACTIVITY**

(MEASURED BY EXPENDITURES INCURRED)  
**FISCAL YEAR 2022 THROUGH FISCAL YEAR 2017**

	FY 22	FY 21	FY 20	FY 19	FY 18	FY 17
<b>COLLEGE OF ARTS &amp; LETTERS</b>						
Dean's Office	\$ 1,000	\$ 2,000	\$ 1	\$ 1,999	\$ -	\$ -
Art	-	39	1,759	-	-	-
Communication & Theatre Arts	16,607	-	-	-	-	2,075
English	184,507	105,717	153,783	126,801	106,763	63,828
History	5,411	1,308	37,771	17,014	75,116	6,300
Political Science & Geography	299,552	134,431	97,023	74,398	77,207	27,324
Philosophy & Religious Studies	36,098	10,090	-	-	-	14,629
Philosophy & Religious Studies - Cybersecurity	-	-	16,401	2,818	-	-
Social Science Research Center	238,868	158,591	144,726	148,221	208,762	166,351
Sociology & Criminal Justice	321,539	379,583	601,295	743,055	766,128	475,311
Women's Studies	2,500	-	-	6,465	8,255	15,128
<b>College Total</b>	<b>\$ 1,106,082</b>	<b>\$ 791,759</b>	<b>\$ 1,052,759</b>	<b>\$ 1,120,771</b>	<b>\$ 1,242,232</b>	<b>\$ 770,946</b>
% Change from prior year	39.70%	-24.79%	-6.07%	-9.78%	61.13%	143.37%
Average yearly increase (decrease)	8.69%					
<b>STROME COLLEGE OF BUSINESS</b>						
Economics	\$ 74,385	\$ 56,857	\$ 71,744	\$ 139,880	\$ 123,154	\$ 70,370
Information Systems & Decision Sciences	260,716	267,168	254,822	224,332	95,253	139,319
Information Systems & Decision Sciences - Cybersecurity	-	1,619	19,348	78,759	66,241	381
Management	172,915	82,294	-	-	-	663
Marketing	8,865	-	8,953	-	13,760	12,308
Public Service	257,834	226,168	68,257	43,697	46,269	25,276
<b>College Total</b>	<b>\$ 774,715</b>	<b>\$ 634,106</b>	<b>\$ 423,124</b>	<b>\$ 486,668</b>	<b>\$ 344,677</b>	<b>\$ 248,316</b>
% Change from prior year	22.17%	49.86%	-13.06%	41.20%	38.81%	-17.97%
Average yearly increase (decrease)	42.40%					

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**SUMMARY OF SPONSORED PROGRAM ACTIVITY**

(MEASURED BY EXPENDITURES INCURRED)  
**FISCAL YEAR 2022 THROUGH FISCAL YEAR 2017**

	FY 22	FY 21	FY 20	FY 19	FY 18	FY 17
<b>DARDEN COLLEGE OF EDUCATION &amp; PROFESSIONAL STUDIES</b>						
Dean's Office	\$ 796,839	\$ 764,725	\$ 506,302	\$ 430,047	\$ 498,687	\$ 465,485
Dean's Office - Cybersecurity	5,888	107	16,401	2,818	-	-
Communication Disorders and Special Education	5,398,785	5,024,178	4,499,676	4,231,210	3,812,902	3,842,934
Counseling and Human Services	607,532	587,402	422,711	368,595	299,968	345,081
Counseling and Human Services - Cybersecurity	4,048	8,436	1,797	-	-	-
Educational Foundations and Leadership	305,864	182,162	235,720	186,213	229,172	562,137
Educational Foundations and Leadership - Cybersecurity	810	-	-	-	-	-
Human Movement Sciences	526,127	428,141	206,586	9,228	30,066	48,658
STEM Education and Professional Studies	275,836	155,498	63,385	144,548	283,082	842,959
Teaching and Learning	876,604	631,020	395,707	259,091	308,853	410,023
 College Total	 \$ 8,798,333	 \$ 7,781,669	 \$ 6,348,286	 \$ 5,631,751	 \$ 5,462,731	 \$ 6,517,277
% Change from prior year	13.06%	22.58%	12.72%	3.09%	-16.18%	-5.76%
Average yearly increase (decrease)	7.00%					
<b>BATTEN COLLEGE OF ENGINEERING &amp; TECHNOLOGY</b>						
Dean's Office	\$ 277,242	\$ 372,513	\$ 989,936	\$ 1,271,521	\$ 533,243	\$ 415,031
Civil & Environmental Engineering	1,001,572	1,037,283	742,504	942,355	1,013,126	1,381,257
Electrical & Computer Engineering	1,222,361	939,313	1,128,342	1,416,907	1,469,081	1,216,735
Electrical & Computer Engineering - ARC	453,992	397,949	407,780	466,449	475,757	504,233
Electrical & Computer Engineering - Bioelectronics	268,071	420,387	1,484,532	1,610,403	1,045,485	534,322
Electrical & Computer Engineering - Cybersecurity	758,891	405,503	635,254	838,891	65,508	43,706
Engineering Management and Systems Engineering	599,601	456,422	691,376	605,194	554,560	414,241
Engineering Management and Systems Engineering - Cybersecurity	-	-	-	300,740	-	-
Engineering Management and Systems Engineering - VMASC	-	-	110,832	-	-	-
Engineering Technology	659,701	380,751	286,616	432,985	726,117	811,348
Engineering Technology - VMASC	-	-	592,632	-	-	-
Mechanical & Aerospace Engineering	1,530,106	1,381,952	1,442,859	1,015,053	1,012,472	1,181,404
Mechanical & Aerospace Engineering - ARC	63,204	51,812	16,325	-	-	15,438
Computation Modeling & Simulation Engineering	593,178	539,644	714,939	1,735,799	567,858	578,978
Computation Modeling & Simulation Engineering - VMASC	1,276,161	1,602,777	1,335,995	-	690,251	597,087
Computation Modeling & Simulation Engineering - Cybersecurity	-	-	39,566	320,123	-	-
 College Total	 \$ 8,704,080	 \$ 7,986,306	 \$ 10,619,487	 \$ 10,956,419	 \$ 8,153,458	 \$ 7,693,679
% Change from prior year	8.99%	-24.80%	-3.08%	34.38%	5.98%	-4.58%
Average yearly increase (decrease)	2.63%					

**SCHEDULE 1**  
**OLD DOMINION UNIVERSITY RESEARCH FOUNDATION**  
**SUMMARY OF SPONSORED PROGRAM ACTIVITY**

(MEASURED BY EXPENDITURES INCURRED)  
**FISCAL YEAR 2022 THROUGH FISCAL YEAR 2017**

	FY 22	FY 21	FY 20	FY 19	FY 18	FY 17
<b>COLLEGE OF HEALTH SCIENCES</b>						
Dean's Office	\$ -	\$ -	\$ 31,468	\$ 44,825	\$ 17,920	\$ -
Community & Environmental Health	144,025	148,016	130,146	203,805	209,101	98,912
Dental Hygiene	7,724	7,493	4,849	6,225	(20,221)	42,674
Medical Diagnostic & Translational Sciences	86,826	343,322	207,806	263,858	428,063	691,061
Medical Diagnostic & Translational Sciences - Bioelectronics	748,365	690,072	1,328,351	2,031,413	2,422,581	2,216,849
Medical Laboratory & Radiation Sciences - VMASC	-	(27,653)	-	-	-	-
Nursing	1,069,646	1,128,753	631,623	647,734	1,077,828	1,937,351
Rehabilitation Sciences	53,364	37,031	53,055	80,785	122,050	80,427
<b>College Total</b>	<b>\$ 2,109,950</b>	<b>\$ 2,327,034</b>	<b>\$ 2,387,297</b>	<b>\$ 3,278,645</b>	<b>\$ 4,257,321</b>	<b>\$ 5,067,273</b>
% Change from prior year	-9.33%	-2.52%	-27.19%	-22.99%	-15.98%	13.88%
Average yearly increase (decrease)	-11.67%					
<b>COLLEGE OF SCIENCES</b>						
Dean's Office	\$ -	\$ -	\$ 7,803	\$ 37,964	\$ -	\$ -
Biological Sciences	2,567,498	2,550,614	2,795,851	2,755,586	2,535,072	2,039,337
Center for Coastal Physical Oceanography	746,890	944,135	1,056,101	811,361	822,626	939,208
Center for Coastal Physical Oceanography - MARI	-	-	10,976	40,412	107,505	58,186
Chemistry and Biochemistry	2,350,872	1,790,205	1,766,205	2,393,826	2,315,738	2,618,322
Chemistry and Biochemistry - ARC	-	-	4,319	3,917	357	-
Chemistry and Biochemistry - Bioelectronics	88,565	11,853	-	-	-	-
Computer Science	1,198,631	1,002,353	947,914	1,008,821	1,538,808	1,614,304
Computer Science - Cybersecurity	181,005	140,946	102,992	317,670	-	-
Computer Science - VMASC	112,800	37,669	170,644	107,538	-	-
Mathematics and Statistics	693,679	834,139	1,001,018	915,496	833,920	669,176
Ocean & Earth Science	1,982,134	1,663,460	2,213,734	2,839,369	2,606,361	2,722,270
Ocean & Earth Science - SSRP	-	-	-	-	499,463	558,257
Physics	3,608,002	3,573,217	3,702,326	3,874,396	3,439,875	3,571,771
Psychology	1,258,540	934,080	846,328	724,267	1,192,251	1,221,594
Psychology- Cybersecurity	10,490	-	-	-	-	-
<b>College Total</b>	<b>\$ 14,799,106</b>	<b>\$ 13,482,671</b>	<b>\$ 14,626,211</b>	<b>\$ 15,830,622</b>	<b>\$ 15,891,977</b>	<b>\$ 16,012,427</b>
% Change from prior year	9.76%	-7.82%	-7.61%	-0.39%	-0.75%	3.34%
Average yearly increase (decrease)	-1.52%					

**SCHEDULE 1**  
**OLD DOMINION UNIVERSITY RESEARCH FOUNDATION**  
**SUMMARY OF SPONSORED PROGRAM ACTIVITY**

(MEASURED BY EXPENDITURES INCURRED)  
**FISCAL YEAR 2022 THROUGH FISCAL YEAR 2017**

	FY 22	FY 21	FY 20	FY 19	FY 18	FY 17
<b>OFFICE OF RESEARCH AND OTHER UNITS</b>						
Center for Educational Partnerships	\$ 1,108,630	\$ 1,075,947	\$ 842,939	\$ 479,755	\$ 555,811	\$ 3,240,456
VMASC: Virginia Modeling, Analysis & Simulation Center	9,427,909	7,677,760	5,289,061	3,699,337	2,574,951	2,386,352
Frank Reidy Research Center for Bioelectronics	1,048,387	1,412,586	924,223	963,475	1,528,092	2,267,188
Center for Bioelectronics	221,683	154,790	-	-	-	-
Center for Cybersecurity	1,061,528	78,916	-	-	-	-
The Graduate School	113,118	487,368	97,345	81,109	169,352	-
University Libraries	8,530	-	-	-	-	-
Student Services	381,681	-	-	-	-	-
Institute for Innovation & Entrepreneurship	1,976,283	1,500,990	1,184,410	1,174,567	1,313,045	1,709,338
Miscellaneous ODU Units	550,856	339,913	918,075	832,665	859,658	933,229
Miscellaneous ODU Units - Cybersecurity	502,035	207,631	370,004	217,001	184,928	-
Miscellaneous ODU Units - VMASC	13,054	-	-	-	-	-
Total Other Units	\$ 16,413,694	\$ 12,935,901	\$ 9,626,057	\$ 7,447,909	\$ 7,185,836	\$ 10,536,563
% Change from prior year	26.88%	34.38%	29.25%	3.65%	-31.80%	-3.45%
Average yearly increase (decrease)	11.16%					
<b>TOTAL UNIVERSITY ACTIVITY</b>	<b>\$ 52,705,960</b>	<b>\$ 45,939,446</b>	<b>\$ 45,083,222</b>	<b>\$ 44,752,785</b>	<b>\$ 42,538,232</b>	<b>\$ 46,846,483</b>
% CHANGE FROM PRIOR YEAR	14.73%	1.90%	0.74%	5.21%	-9.20%	0.84%
Average yearly increase (decrease)	2.50%					
<b>AFFILIATED ACTIVITY</b>						
Virginia Tidewater Consortium for Higher Education	193,110	571,298	541,907	662,057	576,141	575,071
Virginia Space Grant Consortium	3,623,742	3,239,152	3,240,748	3,486,217	3,485,841	3,499,493
<b>TOTAL AFFILIATED ACTIVITY</b>	<b>\$ 3,816,852</b>	<b>\$ 3,810,450</b>	<b>\$ 3,782,655</b>	<b>\$ 4,148,274</b>	<b>\$ 4,061,982</b>	<b>\$ 4,074,564</b>
% CHANGE FROM PRIOR YEAR	0.17%	0.73%	-8.81%	2.12%	-0.31%	1.80%
Average yearly increase (decrease)	-1.26%					
<b>GRAND TOTAL</b>	<b>56,522,812</b>	<b>49,749,896</b>	<b>48,865,877</b>	<b>48,901,059</b>	<b>46,600,214</b>	<b>50,921,047</b>

**SCHEDULE 2**

**Summary of University Activity**

**Major Funding Source**

**Fiscal Year 2022 through Fiscal Year 2018**

**SCHEDULE 2**  
**OLD DOMINION UNIVERSITY RESEARCH FOUNDATION**  
**SUMMARY OF UNIVERSITY ACTIVITY BY MAJOR FUNDING SOURCE**  
(b) MEASURED BY EXPENDITURES INCURRED  
**FISCAL YEAR 2022 THROUGH FISCAL YEAR 2018**

FUNDING SOURCE / AGENCY	FY22		FY21		FY20		FY19		FY18	
	Amount	Percent of Total								
<b>FEDERAL</b>										
NATIONAL SCIENCE FOUNDATION	\$ 7,342,441	13.0%	\$ 5,583,997	11.2%	\$ 6,472,115	13.2%	\$ 8,433,159	17.2%	\$ 6,529,391	14.0%
U.S. DEPARTMENT OF HEALTH AND HUMAN SERVICES	4,509,691	8.0%	4,938,749	9.9%	5,305,256	10.9%	5,989,608	12.2%	6,304,663	13.5%
U.S. NAVY	1,884,843	3.3%	1,314,058	2.6%	2,399,234	4.9%	3,064,766	6.3%	1,833,264	3.9%
NATIONAL AERONAUTICS & SPACE ADMINISTRATION	1,649,603	2.9%	1,708,492	3.4%	1,931,690	4.0%	2,383,714	4.9%	2,676,527	5.7%
U.S. DEPARTMENT OF ENERGY	1,485,545	2.6%	1,412,282	2.8%	1,526,120	3.1%	1,468,616	3.0%	1,487,637	3.2%
U.S. DEPARTMENT OF EDUCATION	1,253,826	2.2%	1,212,364	2.4%	1,271,400	2.6%	1,197,367	2.4%	1,467,534	3.1%
SMALL BUSINESS ADMINISTRATION	717,558	1.3%	811,646	1.6%	588,860	1.2%	472,226	1.0%	485,835	1.0%
U.S. DEPARTMENT OF COMMERCE	500,229	0.9%	405,496	0.8%	408,904	0.8%	183,203	0.4%	332,493	0.7%
NATIONAL SECURITY AGENCY	333,365	0.6%	66,063	0.1%	82,733	0.2%	113,989	0.2%	229,410	0.5%
U.S. AIR FORCE	236,576	0.4%	249,880	0.5%	547,168	1.1%	555,232	1.1%	590,066	1.3%
NATIONAL ENDOWMENT FOR THE HUMANITIES	236,532	0.4%	37,901	0.1%	31,024	0.1%	26,185	0.1%	230,079	0.5%
FERMI NATIONAL ACCELERATOR LABORATORY	219,723	0.4%	180,451	0.4%	260,965	0.5%	373,702	0.8%	167,137	0.4%
U.S. DEPARTMENT OF DEFENSE	219,611	0.4%	287,422	0.6%	179,199	0.4%	146,561	0.3%	-	0.0%
AMES RESEARCH LABS	204,604	0.4%	218,873	0.4%	187,742	0.4%	224,239	0.5%	102,068	0.2%
U.S. DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT	202,573	0.4%	105,709	0.2%	-	0.0%	-	0.0%	-	0.0%
U.S. DEPARTMENT OF JUSTICE	137,808	0.2%	122,426	0.2%	218,227	0.4%	185,806	0.4%	136,825	0.3%
U.S. DEPARTMENT OF AGRICULTURE	81,131	0.1%	43,732	0.1%	74,916	0.2%	175,568	0.4%	167,973	0.4%
INSTITUTE OF MUSEUM AND LIBRARY SERVICES	61,607	0.1%	13,080	0.0%	(1)	0.0%	78,293	0.2%	161,725	0.3%
BROOKHAVEN NATIONAL LABORATORY	8,417	0.0%	86,284	0.2%	120,229	0.2%	37,628	0.1%	42,079	0.1%
U.S. ARMY	8,002	0.0%	213,284	0.4%	499,768	1.0%	252,225	0.5%	194,987	0.4%
OAK RIDGE NATIONAL LABORATORY	-	0.0%	649	0.0%	60,133	0.1%	30,521	0.1%	13,172	0.0%
U.S. FISH AND WILDLIFE SERVICES	-	0.0%	-	0.0%	10,976	0.0%	66,331	0.1%	69,229	0.1%
OTHER FEDERAL	149,401	0.3%	82,424	0.2%	89,537	0.2%	81,897	0.2%	82,599	0.2%
<b>SUBTOTAL FEDERAL</b>	<b>\$ 21,443,086</b>	<b>37.9%</b>	<b>\$ 19,095,262</b>	<b>38.4%</b>	<b>\$ 22,266,195</b>	<b>45.6%</b>	<b>\$ 25,540,836</b>	<b>52.2%</b>	<b>\$ 23,304,693</b>	<b>50.0%</b>
<b>STATE &amp; LOCAL GOVERNMENT AND AGREEMENTS WITH OTHER UNIVERSITIES</b>										
OLD DOMINION UNIVERSITY - SEE NOTE	\$ 13,688,756	24.2%	\$ 12,053,745	24.2%	\$ 10,963,522	22.4%	\$ 9,940,511	20.3%	\$ 9,359,571	20.1%
STATE COUNCIL FOR HIGHER EDUCATION IN VIRGINIA (SCHEV)	933,696	1.7%	722,709	1.5%	770,053	1.6%	858,379	1.8%	819,088	1.8%
VIRGINIA DEPARTMENT OF VETERANS SERVICES	756,952	1.3%	-	0.0%	-	0.0%	-	0.0%	-	0.0%
VIRGINIA POLYTECHNIC INSTITUTE AND STATE UNIVERSITY	734,723	1.3%	585,292	1.2%	389,892	0.8%	338,460	0.7%	336,387	0.7%
HAMPTON UNIVERSITY	706,220	1.2%	279,755	0.6%	90,952	0.2%	84,372	0.2%	63,880	0.1%
UNIVERSITY OF OREGON	581,139	1.0%	474,545	1.0%	317,833	0.7%	268,443	0.5%	-	0.0%
VIRGINIA DEPARTMENT OF EMERGENCY MANAGEMENT	485,560	0.9%	577,129	1.2%	264,676	0.5%	242,109	0.5%	236,566	0.5%
HAMPTON ROADS SANITATION DISTRICT COMMISSION	464,477	0.8%	709,059	1.4%	328,485	0.7%	242,952	0.5%	172,771	0.4%
STEVENS INSTITUTE OF TECHNOLOGY	414,244	0.7%	-	0.0%	19,940	0.0%	-	0.0%	-	0.0%
NORFOLK PUBLIC SCHOOLS	398,831	0.7%	127,917	0.3%	89,713	0.2%	-	0.0%	3,100	0.0%
VIRGINIA DEPARTMENT OF ECONOMIC DEVELOPMENT	366,813	0.6%	600,679	1.2%	892,705	1.8%	-	0.0%	-	0.0%
UNIVERSITY OF VIRGINIA	294,371	0.5%	276,032	0.6%	380,780	0.8%	555,268	1.1%	600,296	1.3%
VA INSTITUTE OF MARINE SCIENCE	288,750	0.5%	276,729	0.6%	304,124	0.6%	255,519	0.5%	196,123	0.4%
STATE UNIVERSITY OF NEW JERSEY (ALL CAMPUSES)	288,080	0.5%	232,388	0.5%	195,860	0.4%	183,320	0.4%	172,197	0.4%
UNIVERSITY OF ILLINOIS (ALL CAMPUSES)	243,652	0.4%	293,631	0.6%	392,577	0.8%	231,972	0.5%	337,789	0.7%
HOWARD UNIVERSITY	238,950	0.4%	83,156	0.2%	-	0.0%	-	0.0%	-	0.0%
VIRGINIA DEPARTMENT OF MOTOR VEHICLES	226,814	0.4%	192,128	0.4%	194,690	0.4%	153,096	0.3%	275,445	0.6%
EASTERN VIRGINIA MEDICAL SCHOOL	213,990	0.4%	129,442	0.3%	76,336	0.2%	83,473	0.2%	64,979	0.1%
VIRGINIA DEPARTMENT OF MINES, MINERALS, AND ENERGY	201,872	0.4%	304,809	0.6%	352,482	0.7%	-	0.0%	-	0.0%
VIRGINIA TRANSPORTATION RESEARCH COUNCIL	197,848	0.4%	285,651	0.6%	204,681	0.4%	35,587	0.1%	-	0.0%
VIRGINIA COMMONWEALTH UNIVERSITY	192,490	0.3%	76,485	0.2%	15,701	0.0%	35,082	0.1%	-	0.0%
EAST CAROLINA UNIVERSITY	170,613	0.3%	158,169	0.3%	59,831	0.1%	2,175	0.0%	-	0.0%
COLORADO SCHOOL OF MINES	163,734	0.3%	35,924	0.1%	104,564	0.2%	214,465	0.4%	235,350	0.5%
VERMONT AGENCY OF EDUCATION	159,003	0.3%	116,853	0.2%	117,105	0.2%	-	0.0%	-	0.0%
MICHIGAN STATE UNIVERSITY	140,068	0.2%	92,048	0.2%	116,081	0.2%	119,238	0.2%	111,685	0.2%
GEORGE MASON UNIVERSITY	135,649	0.2%	179,815	0.4%	213,372	0.4%	104,373	0.2%	116,977	0.3%
PENNSYLVANIA STATE UNIVERSITY	121,590	0.2%	67,340	0.1%	29,450	0.1%	20,350	0.0%	7,115	0.0%
UNIVERSITY OF CINCINNATI	116,902	0.2%	108,585	0.2%	46,209	0.1%	-	0.0%	-	0.0%
HAMPTON ROADS PLANNING DISTRICT COMMISSION	115,418	0.2%	53,785	0.1%	32,264	0.1%	-	0.0%	-	0.0%
UNIVERSITY OF DELAWARE	115,227	0.2%	48,781	0.1%	41,525	0.1%	-	0.0%	-	0.0%
CITY OF VIRGINIA BEACH	105,168	0.2%	15,600	0.0%	16,726	0.0%	46,010	0.1%	43,932	0.1%
UNIVERSITY OF CALIFORNIA (ALL CAMPUSES)	105,105	0.2%	36,860	0.1%	4,843	0.0%	-	0.0%	-	0.0%

**SCHEDULE 2**  
**OLD DOMINION UNIVERSITY RESEARCH FOUNDATION**  
**SUMMARY OF UNIVERSITY ACTIVITY BY MAJOR FUNDING SOURCE**  
(b) MEASURED BY EXPENDITURES INCURRED  
**FISCAL YEAR 2022 THROUGH FISCAL YEAR 2018**

FUNDING SOURCE / AGENCY	FY22		FY21		FY20		FY19		FY18	
	Amount	Percent of Total								
NEWPORT NEWS PUBLIC SCHOOLS	100,319	0.2%	21,154	0.0%	2,106	0.0%	4,530	0.0%	14,252	0.0%
VIRGINIA DEPARTMENT OF BEHAVIORAL HEALTH AND DEVELOPMENTAL SERVICES	89,642	0.2%	69,847	0.1%	37,660	0.1%	-	0.0%	-	0.0%
SOUTH DAKOTA SCHOOL OF MINES AND TECHNOLOGY	88,495	0.2%	25,736	0.1%	59,681	0.1%	15,951	0.0%	55,476	0.1%
VIRGINIA COMMUNITY COLLEGE SYSTEM	78,897	0.1%	115,500	0.2%	35,031	0.1%	67,126	0.1%	66,190	0.1%
STONY BROOK UNIVERSITY	76,531	0.1%	68,032	0.1%	22,669	0.0%	-	0.0%	-	0.0%
NORFOLK STATE UNIVERSITY	66,323	0.1%	396,762	0.8%	304,481	0.6%	327,700	0.7%	316,229	0.7%
VIRGINIA INNOVATION PARTNERSHIP CORPORATION (PREVIOUSLY CIT)	51,135	0.1%	41,965	0.1%	41,997	0.1%	155,448	0.3%	2,555	0.0%
VIRGINIA STATE UNIVERSITY	50,560	0.1%	51,814	0.1%	16,325	0.0%	-	0.0%	-	0.0%
UNIVERSITY OF SOUTH FLORIDA	49,153	0.1%	87,506	0.2%	9,138	0.0%	-	0.0%	-	0.0%
WOODS HOLE OCEANOGRAPHIC INSTITUTION	41,877	0.1%	68,029	0.1%	-	0.0%	-	0.0%	-	0.0%
WESTERN WASHINGTON UNIVERSITY	35,341	0.1%	77,706	0.2%	54,880	0.1%	49,558	0.1%	-	0.0%
UNIVERSITY OF NORTH CAROLINA	32,292	0.1%	1,327	0.0%	16,112	0.0%	17,084	0.0%	72,554	0.2%
TEMPLE UNIVERSITY	30,872	0.1%	52,551	0.1%	67,054	0.1%	74,952	0.2%	77,635	0.2%
TEXAS A&M UNIVERSITY	30,234	0.1%	-	0.0%	50,832	0.1%	206,563	0.4%	163,353	0.4%
DUKE UNIVERSITY	25,124	0.0%	60,158	0.1%	35,813	0.1%	-	0.0%	45,866	0.1%
VIRGINIA DEPARTMENT OF TRANSPORTATION	22,152	0.0%	10,823	0.0%	-	0.0%	59,797	0.1%	83,698	0.2%
COLLEGE OF WILLIAM AND MARY	10,079	0.0%	112,321	0.2%	24,962	0.1%	9,016	0.0%	4,018	0.0%
UNIVERSITY OF MAINE	3,382	0.0%	12,179	0.0%	74,224	0.2%	86,750	0.2%	26,364	0.1%
VIRGINIA DEPARTMENT OF AGRICULTURE	399	0.0%	6,738	0.0%	32,694	0.1%	55,520	0.1%	54,369	0.1%
VIRGINIA GOVERNOR'S OFFICE	-	0.0%	157,251	0.3%	359,402	0.7%	308,404	0.6%	347,249	0.7%
NORTH CAROLINA STATE UNIVERSITY	-	0.0%	11,225	0.0%	-	0.0%	-	0.0%	85,589	0.2%
FLORIDA FISH & WILDLIFE CONSERVATION COMMISSION	-	0.0%	3,912	0.0%	7,805	0.0%	69,643	0.1%	67,166	0.1%
UNIVERSITY OF SOUTHERN MISSISSIPPI	-	0.0%	609	0.0%	38,568	0.1%	28,112	0.1%	71,863	0.2%
VIRGINIA MARINE RESOURCES COMMISSION (VMRC)	-	0.0%	-	0.0%	47,044	0.1%	272,292	0.6%	275,789	0.6%
IOWA STATE UNIVERSITY	-	0.0%	-	0.0%	72,911	0.1%	55,263	0.1%	200,681	0.4%
VIRGINIA PORT AUTHORITY	-	0.0%	-	0.0%	1,359	0.0%	18,783	0.0%	92,023	0.2%
TIDEWATER COMMUNITY COLLEGE	-	0.0%	-	0.0%	-	0.0%	53,702	0.1%	82,818	0.2%
THE CATHOLIC UNIVERSITY OF AMERICA	-	0.0%	-	0.0%	-	0.0%	17,418	0.0%	75,396	0.2%
ROCHESTER INSTITUTE OF TECHNOLOGY	-	0.0%	-	0.0%	-	0.0%	18,967	0.0%	51,750	0.1%
ARIZONA STATE UNIVERSITY	-	0.0%	(207)	0.0%	68,682	0.1%	111,238	0.2%	19,921	0.0%
CRATER PLANNING DISTRICT COMMISSION	-	0.0%	(3,451)	0.0%	194,592	0.4%	158,477	0.3%	124,991	0.3%
OTHER STATE, LOCAL AND UNIVERSITIES	416,438	0.7%	321,307	0.6%	304,370	0.6%	239,380	0.5%	441,650	0.9%
<b>SUBTOTAL STATE, LOCAL &amp; UNIVERSITIES</b>	<b>\$ 24,665,950</b>	<b>43.6%</b>	<b>\$ 20,965,835</b>	<b>42.1%</b>	<b>\$ 19,007,364</b>	<b>38.9%</b>	<b>\$ 16,496,828</b>	<b>33.7%</b>	<b>\$ 16,094,880</b>	<b>34.5%</b>
<b>PRIVATE AND OTHER SPONSORS</b>										
JEFFERSON SCIENCE ASSOCIATES, LLC (JEFFERSON LAB)	\$ 1,608,965	2.8%	\$ 1,466,426	2.9%	\$ 1,201,787	2.5%	\$ 1,037,551	2.1%	\$ 1,004,818	2.2%
JOHN TEMPLETON FOUNDATION	1,247,423	2.2%	\$ 1,654,859	3.3%	\$ 502,866	1.0%	-	0.0%	\$	0.0%
REINVENT HAMPTON ROADS	816,856	1.4%	15,552	0.0%	57,575	0.1%	22,737	0.0%	94,410	0.2%
NATIONAL INSTITUTE OF AEROSPACE ASSOCIATES (NIA)	583,247	1.0%	624,699	1.3%	474,265	1.0%	465,890	1.0%	469,843	1.0%
THE NATIONAL ACADEMIES	579,885	1.0%	481,134	1.0%	477,689	1.0%	457,152	0.9%	398,008	0.9%
CIRCADENCE	549,756	1.0%	387,168	0.8%	-	0.0%	-	0.0%	-	0.0%
VA TECH ARC	486,038	0.9%	13,781	0.0%	-	0.0%	-	0.0%	-	0.0%
PULSE BIOSCIENCES (ELECTROBLATE)	442,529	0.8%	640,441	1.3%	603,786	1.2%	705,637	1.4%	852,986	1.8%
VALKYRIE ENTERPRISES, INC.	307,928	0.5%	301,311	0.6%	-	0.0%	-	0.0%	-	0.0%
FRONTIER TECHNOLOGY INC.	269,844	0.5%	355,837	0.7%	269,650	0.6%	25,799	0.1%	-	0.0%
NATIONAL CENTER FOR TEACHER RESIDENCIES	227,518	0.4%	152,866	0.3%	-	0.0%	-	0.0%	-	0.0%
LIFT TECHNOLOGY OPERATED BY ALMMII	217,242	0.4%	-	0.0%	-	0.0%	-	0.0%	-	0.0%
CENTER FOR MIND AND CULTURE	174,441	0.3%	109,675	0.2%	930	0.0%	7,436	0.0%	155,875	0.3%
D'ANGELO TECHNOLOGIES LLC	147,605	0.3%	156,432	0.3%	26,629	0.1%	35,271	0.1%	-	0.0%
SOUTHERN UNIVERSITIES RESEARCH ASSOC (SURA)	133,785	0.2%	219,063	0.4%	220,918	0.5%	246,227	0.5%	121,800	0.3%
BOOZ ALLEN AND HAMILTON, INC. (BAH)	124,080	0.2%	-	0.0%	-	0.0%	-	0.0%	-	0.0%
MANTECH	120,690	0.2%	230,638	0.5%	-	0.0%	-	0.0%	-	0.0%
UNITED NETWORK FOR ORGAN SHARING (UNOS)	119,453	0.2%	208,497	0.4%	139,036	0.3%	24,039	0.0%	-	0.0%
EWING MARION KAUFFMAN FOUNDATION	94,513	0.2%	40,869	0.1%	-	0.0%	-	0.0%	-	0.0%
EMBODY	92,952	0.2%	78,798	0.2%	42,083	0.1%	2,859	0.0%	9,342	0.0%
NATIONAL PARK FOUNDATION	87,817	0.2%	71,426	0.1%	29,716	0.1%	-	0.0%	-	0.0%
CHILDREN'S HEALTH FOUNDATION	84,262	0.1%	71,214	0.1%	79,421	0.2%	69,372	0.1%	53,569	0.1%
LYNNTECH, INC.	70,876	0.1%	6,569	0.0%	26,931	0.1%	-	0.0%	-	0.0%
MEDICAL CYBERWORLDS, INC.	55,176	0.1%	-	0.0%	-	0.0%	-	0.0%	-	0.0%
KEVIRX, INC.	53,510	0.1%	-	0.0%	-	0.0%	-	0.0%	-	0.0%

**SCHEDULE 2**  
**OLD DOMINION UNIVERSITY RESEARCH FOUNDATION**  
**SUMMARY OF UNIVERSITY ACTIVITY BY MAJOR FUNDING SOURCE**  
(b) (4) (MEASURED BY EXPENDITURES INCURRED)  
**FISCAL YEAR 2022 THROUGH FISCAL YEAR 2018**

FUNDING SOURCE / AGENCY	FY22		FY21		FY20		FY19		FY18	
	Amount	Percent of Total								
PROTOCOL LABS	51,269	0.1%	-	0.0%	-	0.0%	-	0.0%	-	0.0%
EPIC GAMES, INC.	50,576	0.1%	-	0.0%	-	0.0%	-	0.0%	-	0.0%
CHILDREN'S HOSPITAL OF THE KING'S DAUGHTERS	41,321	0.1%	14,328	0.0%	55,604	0.1%	33,280	0.1%	(2,025)	0.0%
APPLIED RESEARCH LLC	39,531	0.1%	51,177	0.1%	110,708	0.2%	43,105	0.1%	17,900	0.0%
SPENCER FOUNDATION	32,056	0.1%	16,689	0.0%	68,084	0.1%	7,384	0.0%	-	0.0%
VR REHAB, INC.	31,038	0.1%	27,175	0.1%	77,384	0.2%	45,071	0.1%	85,746	0.2%
JEFFRESS RESEARCH GRANTS PROGRAM	30,970	0.1%	190,877	0.4%	305,809	0.6%	-	0.2%	112,751	0.2%
LOCKWOOD HILLS	22,305	0.0%	162,203	0.3%	60,303	0.1%	-	0.0%	-	0.0%
CAMBER CORPORATION	22,121	0.0%	339,637	0.7%	581,511	1.2%	311,458	0.6%	115,206	0.2%
HAZEN AND SAWYER, P.C.	20,942	0.0%	62,373	0.1%	51,095	0.1%	-	0.0%	-	0.0%
GREAT LAKES SYSTEMS AND TECHNOLOGY	14,752	0.0%	30,252	0.1%	78,212	0.2%	-	0.0%	-	0.0%
MITRE CORPORATION	10,000	0.0%	115,490	0.2%	80,439	0.2%	11,250	0.0%	-	0.0%
COMMONWEALTH TRANSFUSION FOUNDATION	4,134	0.0%	125,266	0.3%	-	0.0%	-	0.0%	-	0.0%
ALEX - ALTERNATIVE EXPERTS, LLC	2,280	0.0%	3,431	0.0%	9,062	0.0%	85,309	0.2%	-	0.0%
LIFENET	1,392	0.0%	56,132	0.1%	114,452	0.2%	104,238	0.2%	45	0.0%
TED TEXT LLC	1	0.0%	58,649	0.1%	-	0.0%	-	0.0%	-	0.0%
SENTARA HOSPITALS	-	0.0%	274,718	0.6%	124,825	0.3%	295,977	0.6%	81,296	0.2%
DURO WORKFORCE	-	0.0%	54,137	0.1%	33,362	0.1%	-	0.0%	-	0.0%
PREVAILANCE, INC.	-	0.0%	19,165	0.0%	109,778	0.2%	53,003	0.1%	-	0.0%
ELECTRIC POWER RESEARCH INSTITUTE	-	0.0%	6,367	0.0%	68,617	0.1%	-	0.0%	-	0.0%
APPLIED RESEARCH ASSOCIATES, INC.	-	0.0%	1,639	0.0%	21,598	0.0%	19,453	0.0%	109,811	0.2%
OCEAN BAY, LLC	-	0.0%	776	0.0%	-	0.0%	71,939	0.1%	85,398	0.2%
GENEDEG ALLIANCE - (FORMERLY PHILPOTT MANUFACTURING CENTER)	-	0.0%	-	0.0%	-	0.0%	54,135	0.1%	179,259	0.4%
WR SYSTEMS, LTD.	-	0.0%	-	0.0%	-	0.0%	252,545	0.5%	119,355	0.3%
THE GENEVA FOUNDATION	-	0.0%	-	0.0%	-	0.0%	-	0.0%	90,574	0.2%
NON-DISCLOSED SPONSOR	-	0.0%	-	0.0%	-	0.0%	12,934	0.0%	157,382	0.3%
HOGAN-LOVELLS	-	0.0%	-	0.0%	-	0.0%	187,384	0.4%	-	0.0%
CACI, INC.-FEDERAL	-	0.0%	-	0.0%	-	0.0%	82,909	0.2%	163,551	0.4%
BATTELLE CORPORATION	-	0.0%	-	0.0%	-	0.0%	6,268	0.0%	90,337	0.2%
COMMONWEALTH CTR ADV MANUFACT	-	0.0%	-	0.0%	110,270	0.2%	76,656	0.2%	70,423	0.2%
ENGILITY	-	0.0%	-	0.0%	42,687	0.1%	93,518	0.2%	94,136	0.2%
OPPORTUNITY, INC.	-	0.0%	-	0.0%	52,164	0.1%	121,344	0.2%	91,583	0.2%
PLASSER AMERICAN CORPORATION	-	0.0%	-	0.0%	-	0.0%	35,480	0.1%	87,212	0.2%
PEW CHARITABLE TRUSTS	-	0.0%	-	0.0%	-	0.0%	81,025	0.2%	33,755	0.1%
MIDLAND GEOSPATIAL SUPPORT SERVICES JOINT VENTURE	-	0.0%	-	0.0%	-	0.0%	14,916	0.0%	66,996	0.1%
AMERICAN COUNCIL OF LEARNED SOCIETIES	-	0.0%	-	0.0%	-	0.0%	(15,000)	0.0%	55,000	0.1%
BEM CONTROLS, LLC	-	0.0%	-	0.0%	-	0.0%	53,882	0.1%	-	0.0%
WILDLIFE MANAGEMENT INSTITUTE	-	0.0%	-	0.0%	8,602	0.0%	53,808	0.1%	-	0.0%
PULSE CENTERS	-	0.0%	-	0.0%	-	0.0%	343	0.0%	53,582	0.1%
OHIO SUICIDE PREVENTION FOUNDATION	-	0.0%	-	0.0%	11,891	0.0%	52,950	0.1%	5,660	0.0%
THE WISTAR INSTITUTE	-	0.0%	-	0.0%	14,315	0.0%	8,926	0.0%	52,797	0.1%
TRANSIENT PLASMA SYSTEMS, INC.	-	0.0%	(171)	0.0%	-	0.0%	11,614	0.0%	58,557	0.1%
OTHER PRIVATE	723,746	1.3%	329,504	0.7%	868,380	1.8%	824,058	1.7%	797,031	1.7%
SUBTOTAL PRIVATE	\$ 9,794,825	17.3%	\$ 9,227,069	18.5%	\$ 7,212,434	14.8%	\$ 6,271,051	12.8%	\$ 6,033,969	12.9%
FOREIGN										
NATO	\$ 255,163	0.5%	\$ 143,773	0.3%	\$ 65,012	0.1%	\$ -	0.0%	\$ 56,000	0.1%
UNIVERSITAT OF KONSTANZ	171,190	0.3%	-	0.0%	-	0.0%	-	0.0%	-	0.0%
INTERNATIONAL UNION FOR CONSERVATION OF NATURE AND NATURAL RESOURCES (IUCN)	82,907	0.1%	269,485	0.5%	190,918	0.4%	157,874	0.3%	188,617	0.4%
SOUTHAMPTON UNIVERSITY	-	0.0%	-	0.0%	-	0.0%	183,197	0.4%	463,067	1.0%
FERRING PHARMACEUTICALS INC.	-	0.0%	-	0.0%	-	0.0%	37,631	0.1%	135,072	0.3%
UNIVERSITY OF AGDER	-	0.0%	(635)	0.0%	-	0.0%	85,040	0.2%	84,196	0.2%
OTHER FOREIGN	109,691	0.2%	49,107	0.1%	123,956	0.3%	128,604	0.3%	239,722	0.5%
SUBTOTAL FOREIGN	\$ 618,951	1.1%	\$ 461,730	0.9%	\$ 379,886	0.8%	\$ 592,346	1.2%	\$ 1,166,674	2.5%
TOTAL	\$ 56,522,812	100.0%	\$ 49,749,896	100.0%	\$ 48,865,879	100.0%	\$ 48,901,061	100.0%	\$ 46,600,216	100.0%

**SCHEDULE 2**  
**OLD DOMINION UNIVERSITY RESEARCH FOUNDATION**  
**SUMMARY OF UNIVERSITY ACTIVITY BY MAJOR FUNDING SOURCE**  
(MEASURED BY EXPENDITURES INCURRED)  
**FISCAL YEAR 2022 THROUGH FISCAL YEAR 2018**

FUNDING SOURCE / AGENCY	FY22		FY21		FY20		FY19		FY18	
	Amount	Percent of Total	Amount	Percent of Total	Amount	Percent of Total	Amount	Percent of Total	Amount	Percent of Total
<b>NOTE: CERTAIN AGENCIES REQUIRE DIRECT AWARD TO OLD DOMINION UNIVERSITY. THE FOLLOWING REPRESENTS THE EXPENDITURES BY AGENCY ON PROJECTS PASSED THROUGH BY THE UNIVERSITY.</b>										
OLD DOMINION UNIVERSITY PASS THROUGH FROM:										
U.S. DEPARTMENT OF EDUCATION	\$ 5,085,610	9.0%	\$ 4,985,050	10.0%	\$ 4,155,422	8.5%	\$ 4,192,457	8.6%	\$ 4,099,395	8.8%
ODU	1,748,672	3.1%	618,262	1.2%	361,482	0.7%	162,846	0.3%	123,584	0.3%
VIRGINIA DEPARTMENT OF ENVIRONMENTAL QUALITY	1,300,527	2.3%	1,298,211	2.6%	1,068,010	2.2%	964,240	2.0%	-	0.0%
U.S. AIR FORCE	1,057,864	1.9%	1,090,807	2.2%	1,123,034	2.3%	1,007,042	2.1%	1,645,236	3.5%
COASTAL VIRGINIA CENTER FOR CYBER INNOVATION	873,964	1.5%	253,213	0.5%	486,821	1.0%	600,656	1.2%	77,714	0.2%
VIRGINIA DEPARTMENT OF EDUCATION	763,750	1.4%	854,551	1.7%	643,908	1.3%	533,651	1.1%	742,309	1.6%
VIRGINIA DEPARTMENT OF HOUSING AND COMMUNITY DEVELOPMENT	692,463	1.2%	596,212	1.2%	694,526	1.4%	601,723	1.2%	151,106	0.3%
U.S. DEPARTMENT OF ENERGY	603,491	1.1%	338,096	0.7%	266,527	0.5%	155,540	0.3%	90,334	0.2%
STATE COUNCIL FOR HIGHER EDUCATION IN VIRGINIA (SCHEV)	535,916	0.9%	1,003,467	2.0%	633,969	1.3%	298,136	0.6%	545,966	1.2%
U.S. NAVY	305,345	0.5%	450,467	0.9%	573,173	1.2%	-	0.0%	-	0.0%
U.S. DEPARTMENT OF THE INTERIOR	226,294	0.4%	204,862	0.4%	60,230	0.1%	19,218	0.0%	36,923	0.1%
NORFOLK PUBLIC SCHOOLS	189,265	0.3%	115,059	0.2%	127,581	0.3%	138,215	0.3%	-	0.0%
U.S. DEPARTMENT OF HEALTH AND HUMAN SERVICES	65,500	0.1%	8,128	0.0%	22,702	0.0%	-	0.0%	-	0.0%
NATIONAL SECURITY AGENCY	50,493	0.1%	42,716	0.1%	8,987	0.0%	-	0.0%	-	0.0%
VIRGINIA DEPARTMENT OF HEALTH	49,369	0.1%	58,276	0.1%	37,308	0.1%	37,473	0.1%	36,032	0.1%
U.S. ENVIRONMENTAL PROTECTION AGENCY	41,155	0.1%	10,670	0.0%	-	0.0%	170,387	0.3%	1,179,356	2.5%
VIRGINIA BIOSCIENCES HEALTH RESEARCH CORP.	24,803	0.0%	54,262	0.1%	364,438	0.7%	739,561	1.5%	268,750	0.6%
MELLON FOUNDATION	-	0.0%	18,700	0.0%	264,846	0.5%	197,227	0.4%	191,743	0.4%
VIRGINIA DEPARTMENT OF BEHAVIORAL HEALTH AND DEVELOPMENTAL SERVICES	-	0.0%	25,758	0.1%	30,134	0.1%	75,600	0.2%	81,930	0.2%
OTHER SPONSORS	74,277	0.1%	26,979	0.1%	40,624	0.1%	46,540	0.1%	89,191	0.2%
OLD DOMINION UNIVERSITY TOTAL	\$ 13,688,758	24.2%	\$ 12,053,746	24.2%	\$ 10,963,522	22.4%	\$ 9,940,512	20.3%	\$ 9,359,569	20.1%

NOTE: CERTAIN PRIOR YEAR AMOUNTS HAVE BEEN RESTATED TO BE CONSISTENT WITH CURRENT YEAR PRESENTATION.

**SCHEDULE 3**

**Comparison of Direct Cost, Indirect Cost and  
Effective Indirect Cost Rates**

**Fiscal Year 2022 through Fiscal Year 2020**

**SCHEDULE 3**  
**OLD DOMINION UNIVERSITY RESEARCH FOUNDATION**  
**REPORT OF SPONSORED PROGRAM ACTIVITY**  
**DIRECT COST, INDIRECT COST AND EFFECTIVE INDIRECT COST RATE**  
(b) (4) (MEASURED BY EXPENDITURES INCURRED)  
**FISCAL YEAR 2022 THROUGH FISCAL YEAR 2020**

	Fiscal Year 2022						Fiscal Year 2021						Fiscal Year 2020					
	Total Direct Costs	Total Indirect Costs	Total Project Costs	Effective Indirect Cost Rate	Total Direct Costs	Total Indirect Costs	Total Project Costs	Effective Indirect Cost Rate	Total Direct Costs	Total Indirect Costs	Total Project Costs							
<b>COLLEGE OF ARTS AND LETTERS</b>																		
Dean's Office	\$ 1,000	\$ -	\$ 1,000	0.0%	\$ 2,000	\$ -	\$ 2,000	0.0%	\$ 1	\$ -	\$ 1							
Art	-	-	-	0.0%	39	-	39	0.0%	1,759	-	-							1,759
Communication and Theatre Arts	16,226	381	16,607	2.3%	-	-	-	0.0%	-	-	-							-
English	172,609	11,898	184,507	6.9%	98,975	6,742	105,717	6.8%	147,486	6,297	\$ 153,783							
History	5,411	-	5,411	0.0%	1,364	(56)	1,308	-4.1%	29,977	7,794	\$ 37,771							
Philosophy & Religious Studies	28,221	7,877	36,098	27.9%	7,644	2,446	10,090	32.0%	-	-	-							-
Philosophy & Religious Studies - Cybersecurity	-	-	-	0.0%	-	-	-	0.0%	10,872	5,529	\$ 16,401							
Political Science & Geography	266,235	33,317	299,552	12.5%	104,840	29,591	134,431	28.2%	69,156	27,867	\$ 97,023							
Social Science Research Center	223,343	15,525	238,868	7.0%	145,962	12,629	158,591	8.7%	134,253	10,473	\$ 144,726							
Sociology & Criminal Justice	257,591	63,948	321,539	24.8%	293,607	85,976	379,583	29.3%	471,492	129,803	\$ 601,295							
Women's Studies	-	2,500	-	0.0%	-	-	-	0.0%	-	-	-							-
College Total	\$ 973,136	\$ 132,946	\$ 1,106,082	13.7%	\$ 654,431	\$ 137,328	\$ 791,759	21.0%	\$ 864,996	\$ 187,763	\$ 1,052,759							
<b>STROME COLLEGE OF BUSINESS</b>																		
Economics	\$ 63,367	\$ 11,018	\$ 74,385	17.4%	\$ 47,475	\$ 9,382	\$ 56,857	19.8%	\$ 66,053	\$ 5,690	\$ 71,743							
Information Systems / Decision Sciences	246,182	14,534	260,716	5.9%	250,066	17,102	267,168	6.8%	242,252	12,570	\$ 254,822							
Information Systems & Decision Sciences - Cybersecurity	-	-	-	0.0%	1,568	51	1,619	3.3%	17,170	2,178	\$ 19,348							
Management	161,043	11,872	172,915	7.4%	75,553	6,741	82,294	8.9%	-	-	-							-
Marketing	7,957	908	8,865	11.4%	-	-	-	0.0%	8,208	745	\$ 8,953							
Public Service	204,463	53,371	257,834	26.1%	178,690	47,478	226,168	26.6%	54,745	13,511	\$ 68,256							
College Total	\$ 683,012	\$ 91,703	\$ 774,715	13.4%	\$ 553,352	\$ 80,754	\$ 634,106	14.6%	\$ 388,428	\$ 34,694	\$ 423,122							
<b>DARDEN COLLEGE OF EDUCATION &amp; PROFESSIONAL STUDIES</b>																		
Dean's Office	\$ 782,434	\$ 14,405	\$ 796,839	1.8%	\$ 761,931	\$ 2,794	\$ 764,725	0.4%	\$ 506,302	\$ -	\$ 506,302							
Dean's Office - Cybersecurity	4,737	1,151	5,888	24.3%	-	69	38	107	55.1%	10,872	5,529	\$ 16,401						
Communication Disorders and Special Education	4,935,769	463,016	5,398,785	9.4%	4,594,515	429,663	5,024,178	9.4%	4,125,852	373,824	\$ 4,499,676							
Counseling and Human Services	590,080	17,452	607,532	3.0%	563,270	24,132	587,402	4.3%	407,481	15,231	\$ 422,712							
Counseling and Human Services - Cybersecurity	2,758	1,290	4,048	46.8%	-	5,443	2,993	8,436	55.0%	1,160	638	\$ 1,798						
Educational Foundations and Leadership	244,055	61,809	305,864	25.3%	140,389	41,773	182,162	29.8%	194,261	41,459	\$ 235,720							
Educational Foundations and Leadership - Cybersecurity	824	(14)	810	-1.7%	-	-	-	0.0%	-	-	-							-
Human Movement Sciences	494,513	31,614	526,127	6.4%	407,508	20,633	428,141	5.1%	191,509	15,077	\$ 206,586							
STEM Education and Professional Studies	256,432	19,404	275,836	7.6%	139,544	15,954	155,498	11.4%	53,799	9,586	\$ 63,385							
Teaching and Learning	763,872	112,732	876,604	14.8%	527,939	103,081	631,020	19.5%	325,008	70,699	\$ 395,707							
College Total	\$ 8,075,474	\$ 722,859	\$ 8,798,333	9.0%	\$ 7,140,608	\$ 641,061	\$ 7,781,669	9.0%	\$ 5,816,244	\$ 532,043	\$ 6,348,287							
<b>BATTEN COLLEGE OF ENGINEERING &amp; TECHNOLOGY</b>																		
Dean's Office	\$ 173,986	\$ 103,256	\$ 277,242	59.3%	\$ 262,478	\$ 110,035	\$ 372,513	41.9%	\$ 808,261	\$ 181,675	\$ 989,936							
Civil & Environmental Engineering	798,518	203,054	1,001,572	25.4%	890,782	146,501	1,037,283	16.4%	604,241	138,263	\$ 742,504							
Electrical & Computer Engineering	908,483	313,878	1,222,361	34.5%	710,462	228,851	939,313	32.2%	873,965	254,378	\$ 1,128,343							
Electrical & Computer Engineering - ARC	342,138	111,854	453,992	32.7%	335,882	62,067	397,949	18.5%	317,168	90,613	\$ 407,781							
Electrical & Computer Engineering - Bioelectronics	189,340	78,731	268,071	41.6%	291,697	128,690	420,387	44.1%	1,082,253	402,279	\$ 1,484,532							
Electrical & Computer Engineering - Cybersecurity	605,600	153,291	758,891	25.3%	310,975	94,528	405,503	30.4%	470,001	165,253	\$ 635,254							
Engineering Management and Systems Engineering	391,725	207,876	599,601	53.1%	299,493	156,929	456,422	52.4%	450,454	240,922	\$ 691,376							
Engineering Management and Systems Engineering - VMASC	-	-	-	0.0%	-	-	-	0.0%	68,990	41,843	\$ 110,833							
Engineering Technology	548,167	111,534	659,701	20.3%	315,140	65,611	380,751	20.8%	217,819	68,797	\$ 286,616							
Engineering Technology - VMASC	-	-	-	0.0%	-	-	-	0.0%	579,592	13,040	\$ 592,632							
Mechanical & Aerospace Engineering	1,124,026	406,080	1,530,106	36.1%	1,052,653	329,299	1,381,952	31.3%	1,154,238	288,621	\$ 1,442,859							
Mechanical & Aerospace Engineering - ARC	54,225	8,979	63,204	16.6%	43,409	8,403	51,812	19.4%	12,956	3,369	\$ 16,325							
Computation Modeling & Simulation Engineering	437,061	156,117	593,178	35.7%	392,832	146,812	539,644	37.4%	542,290	172,649	\$ 714,939							
Computation Modeling & Simulation Engineering - VMASC	904,581	371,580	1,276,161	41.1%	1,045,638	557,139	1,602,777	53.3%	901,712	434,283	\$ 1,335,995							
Computation Modeling & Simulation Engineering - Cybersecurity	-	-	-	0.0%	-	-	-	0.0%	26,194	13,372	\$ 39,566							
College Total	\$ 6,477,850	\$ 2,226,230	\$ 8,704,080	34.4%	\$ 5,951,441	\$ 2,034,865	\$ 7,986,306	34.2%	\$ 8,110,134	\$ 2,509,357	\$ 10,619,491							

**SCHEDULE 3**  
**OLD DOMINION UNIVERSITY RESEARCH FOUNDATION**  
**REPORT OF SPONSORED PROGRAM ACTIVITY**  
**DIRECT COST, INDIRECT COST AND EFFECTIVE INDIRECT COST RATE**  
(b) (4) (MEASURED BY EXPENDITURES INCURRED)  
**FISCAL YEAR 2022 THROUGH FISCAL YEAR 2020**

	Fiscal Year 2022				Fiscal Year 2021				Fiscal Year 2020			
	TOTAL DIRECT COSTS	TOTAL INDIRECT COSTS	TOTAL PROJECT COSTS	Effective Indirect Cost Rate	TOTAL DIRECT COSTS	TOTAL INDIRECT COSTS	TOTAL PROJECT COSTS	Effective Indirect Cost Rate	TOTAL DIRECT COSTS	TOTAL INDIRECT COSTS	TOTAL PROJECT COSTS	
<b>COLLEGE OF HEALTH SCIENCES</b>												
Dean's Office	\$ -	\$ -	\$ -	0.0%	\$ -	\$ -	\$ -	0.0%	\$ 27,363	\$ 4,105	\$ 31,468	
Community & Environmental Health	125,278	18,747	144,025	15.0%	129,763	18,253	148,016	14.1%	113,500	16,646	130,146	
Dental Hygiene	7,262	462	7,724	6.4%	7,333	160	7,493	2.2%	4,666	183	4,849	
Medical Diagnostic & Translational Sciences	57,706	29,120	86,826	50.5%	293,756	49,566	343,322	16.9%	154,511	53,295	207,806	
Medical Diagnostic & Translational Sciences - Bioelectronics	483,934	264,431	748,365	54.6%	464,289	225,783	690,072	48.6%	981,387	346,964	1,328,351	
Medical Diagnostic & Translational Sciences - VMASC	-	-	0.0%	(27,653)	-	(27,653)	0.0%	-	-	-	-	
Nursing	1,004,983	64,663	1,069,646	6.4%	1,060,415	68,338	1,128,753	6.4%	591,157	40,466	631,623	
Rehabilitation Sciences	50,345	3,019	53,364	6.0%	34,194	2,837	37,031	8.3%	50,915	2,140	53,055	
College Total	\$ 1,729,508	\$ 380,442	\$ 2,109,950	22.0%	\$ 1,962,097	\$ 364,937	\$ 2,327,034	18.6%	\$ 1,923,499	\$ 463,799	\$ 2,387,298	
<b>COLLEGE OF SCIENCES</b>												
Dean's Office	\$ -	\$ -	\$ -	0.0%	\$ -	\$ -	\$ -	0.0%	\$ 5,100	\$ 2,703	\$ 7,803	
Biological Sciences	2,210,364	357,134	2,567,498	16.2%	2,157,464	393,150	2,550,614	18.2%	2,279,931	515,920	2,795,851	
Center for Coastal Physical Oceanography	528,437	218,453	746,890	41.3%	695,680	248,455	944,135	35.7%	807,463	248,637	1,056,100	
Center for Coastal Physical Oceanography - MARI	-	-	0.0%	-	-	-	-	0.0%	10,976	-	10,976	
Chemistry and Biochemistry	1,911,470	439,402	2,350,872	23.0%	1,436,636	353,569	1,790,205	24.6%	1,385,275	380,929	1,766,204	
Chemistry and Biochemistry - ARC	-	-	0.0%	-	-	-	-	0.0%	3,322	997	4,319	
Chemistry and Biochemistry - Bioelectronics	58,257	30,308	88,565	52.0%	7,647	4,206	11,853	55.0%	-	-	-	
Computer Sciences	975,668	222,963	1,198,631	22.9%	807,528	194,825	1,002,353	24.1%	798,511	149,403	947,914	
Computer Sciences - Cybersecurity	137,419	43,586	181,005	31.7%	100,953	39,993	140,946	39.6%	71,259	31,733	102,992	
Computer Sciences - VMASC	94,894	17,906	112,800	18.9%	34,584	3,085	37,669	8.9%	157,437	13,207	170,644	
Mathematics & Statistics	546,102	147,577	693,679	27.0%	661,355	172,784	834,139	26.1%	796,001	205,017	1,001,018	
Ocean & Earth Science	1,493,381	488,753	1,982,134	32.7%	1,242,246	421,214	1,663,460	33.9%	1,594,032	619,702	2,213,734	
Physics	2,865,560	742,442	3,608,002	25.9%	2,838,084	735,133	3,573,217	25.9%	2,881,017	821,310	3,702,327	
Psychology	936,711	321,829	1,258,540	34.4%	701,200	232,880	934,080	33.2%	636,333	209,995	846,328	
Psychology- Cybersecurity	10,490	-	10,490	0.0%	-	-	-	-	-	-	-	
College Total	\$ 11,768,753	\$ 3,030,353	\$ 14,799,106	25.7%	\$ 10,683,377	\$ 2,799,294	\$ 13,482,671	26.2%	\$ 11,426,657	\$ 3,199,553	\$ 14,626,210	
<b>OFFICE OF RESEARCH AND OTHER ACTIVITY</b>												
The Center for Education Partnerships	\$ 864,936	\$ 243,694	\$ 1,108,630	28.2%	\$ 885,186	\$ 190,761	\$ 1,075,947	21.6%	\$ 718,578	\$ 124,361	\$ 842,939	
Frank Reidy Research Center for Bioelectronics	783,825	264,562	1,048,387	33.8%	967,949	444,637	1,412,586	45.9%	616,984	307,239	924,223	
Center for Bioelectronics	165,596	56,087	221,683	33.9%	104,193	50,597	154,790	48.6%	-	-	-	
Virginia Modeling, Analysis and Simulation Center	7,963,156	1,464,753	9,427,909	18.4%	6,437,344	1,240,416	7,677,760	19.3%	4,430,142	858,919	5,289,061	
Center for Cybersecurity	1,022,802	38,726	1,061,528	3.8%	55,687	23,229	78,916	41.7%	-	-	-	
The Graduate School	92,452	20,666	113,118	22.4%	442,823	44,545	487,368	10.1%	80,095	17,250	97,345	
Student Services	355,844	25,837	381,681	7.3%	-	-	-	0.0%	-	-	-	
University Libraries	7,005	1,525	8,530	21.8%	-	-	-	0.0%	-	-	-	
Institute for Innovation & Entrepreneurship	1,578,914	397,369	1,976,283	25.2%	1,222,387	278,603	1,500,990	22.8%	1,018,373	166,037	1,184,410	
Miscellaneous ODU Units	495,115	55,741	550,856	11.3%	318,701	21,212	339,913	6.7%	828,832	89,243	918,075	
Miscellaneous ODU Units - Cybersecurity	405,820	96,215	502,035	23.7%	145,250	62,381	207,631	42.9%	270,405	99,599	370,004	
Miscellaneous ODU Units - VMASC	8,422	4,632	13,054	55.0%	-	-	-	-	-	-	-	
College Total Other Units	\$ 13,743,887	\$ 2,669,807	\$ 16,413,694	19.4%	\$ 10,579,520	\$ 2,356,381	\$ 12,935,901	22.3%	\$ 7,963,409	\$ 1,662,648	\$ 9,626,057	
<b>TOTAL UNIVERSITY ACTIVITY</b>												
	\$ 43,451,620	\$ 9,254,340	\$ 52,705,960	21.3%	\$ 37,524,826	\$ 8,414,620	\$ 45,939,446	22.4%	\$ 36,493,367	\$ 8,589,857	\$ 45,083,224	
<b>AFFILIATED ACTIVITY</b>												
Virginia Space Grant Consortium	3,413,455	210,287	3,623,742	6.2%	3,043,439	195,713	3,239,152	6.4%	3,048,175	192,573	3,240,748	
Virginia Tidewater Consortium for Higher Education	179,177	13,933	193,110	7.8%	530,334	40,964	571,298	7.7%	503,489	38,418	541,907	
TOTAL AFFILIATED ACTIVITY	\$ 3,592,632	\$ 224,220	\$ 3,816,852	6.2%	\$ 3,573,773	\$ 236,677	\$ 3,810,450	6.6%	\$ 3,551,664	\$ 230,991	\$ 3,782,655	
GRAND TOTAL	\$ 47,044,252	\$ 9,478,560	\$ 56,522,812	20.1%	\$ 41,098,599	\$ 8,651,297	\$ 49,749,896	21.1%	\$ 40,045,031	\$ 8,820,848	\$ 48,865,879	

**SCHEDULE 4**

**Sponsored Program Activity**

**Individual Project Listing**

**Fiscal Year 2022**

**SCHEDULE 4**  
**OLD DOMINION UNIVERSITY RESEARCH FOUNDATION**  
**SPONSORED PROGRAM ACTIVITY BY INDIVIDUAL PROJECT**  
 (MEASURED BY EXPENDITURES INCURRED)  
**FOR FISCAL YEAR 2022**

PROJECT NUMBER	SPLIT	SPONSORING AGENCY	PRINCIPAL INVESTIGATOR / PROJECT DIRECTOR	PERSONNEL AND FRINGE BENEFITS	SUPPLIES, CONTRACTUAL, GENERAL, & TRAVEL	EQUIPMENT	STIPENDS, SUBCONTRACTS, TUITION, OTHER	TOTAL DIRECT COSTS	REIMBURSED INDIRECT COSTS	TOTAL PROJECT COSTS	EFFECTIVE INDIRECT COST RATE	ENTERPRISE CODE
<b>COLLEGE OF ARTS &amp; LETTERS</b>												
<b>DEAN, COLLEGE OF ARTS &amp; LETTERS</b>												
200333-010	No	NORFOLK COMMISSION ON THE ARTS & HUMANITIES	STRAWN, CULLEN	0	1,000	0	0	1,000	0	1,000	0.00%	TRAD
<b>TOTAL DEAN, COLLEGE OF ARTS &amp; LETTERS</b>				<b>0</b>	<b>1,000</b>	<b>0</b>	<b>0</b>	<b>1,000</b>	<b>0</b>	<b>1,000</b>	<b>0.00%</b>	
<b>DEPARTMENT OF COMMUNICATION &amp; THEATRE ARTS</b>												
300668-005	No	OLD DOMINION UNIVERSITY	VASHIST, PRIYA	2,302	4,106	0	0	6,408	0	6,408	0.00%	TRAD
300669-010	No	OLD DOMINION UNIVERSITY	VASHIST, PRIYA	2,302	3,697	0	0	5,999	0	5,999	0.00%	TRAD
500444-010	No	ZEIDERS AMERICAN DREAM THEATER	VASHIST, PRIYA	3,768	0	0	51	3,819	381	4,200	9.98%	TRAD
<b>TOTAL DEPARTMENT OF COMMUNICATION &amp; THEATRE ARTS</b>				<b>8,372</b>	<b>7,803</b>	<b>0</b>	<b>51</b>	<b>16,226</b>	<b>381</b>	<b>16,607</b>	<b>2.35%</b>	
<b>DEPARTMENT OF ENGLISH</b>												
100923-010	20%	U.S. DEPARTMENT OF EDUCATION	ZAREVA, ALLA	10,036	2,548	0	0	12,584	1,007	13,591	8.00%	TRAD
300396-010	33%	OLD DOMINION UNIVERSITY	ZAREVA, ALLA	43,219	31,054	0	35,680	109,953	5,942	115,895	5.40%	TRAD
200332-010	15%	VA DEPARTMENT OF ECONOMIC DEVELOPMENT	RICHARDS, DANIEL	40,670	4,321	0	5,081	50,072	4,949	55,021	9.88%	TRAD
<b>TOTAL DEPARTMENT OF ENGLISH</b>				<b>93,925</b>	<b>37,923</b>	<b>0</b>	<b>40,761</b>	<b>172,609</b>	<b>11,898</b>	<b>184,507</b>	<b>6.89%</b>	
<b>DEPARTMENT OF HISTORY</b>												
300669-002	No	OLD DOMINION UNIVERSITY	FRETWELL, ELIZABETH	4,421	990	0	0	5,411	0	5,411	0.00%	TRAD
<b>TOTAL DEPARTMENT OF HISTORY</b>				<b>4,421</b>	<b>990</b>	<b>0</b>	<b>0</b>	<b>5,411</b>	<b>0</b>	<b>5,411</b>	<b>0.00%</b>	
<b>DEPARTMENT OF PHILOSOPHY &amp; RELIGIOUS STUDIES</b>												
100888-010	50%	NATIONAL ENDOWMENT FOR THE HUMANITIES	KISSEL, ANDREW	24,267	348	0	0	24,615	7,877	32,492	32.00%	TRAD
300692-010	50%	OLD DOMINION UNIVERSITY	KISSEL, TERESA	3,606	0	0	0	3,606	0	3,606	0.00%	TRAD
<b>TOTAL DEPARTMENT OF PHILOSOPHY &amp; RELIGIOUS STUDIES</b>				<b>27,873</b>	<b>348</b>	<b>0</b>	<b>0</b>	<b>28,221</b>	<b>7,877</b>	<b>36,098</b>	<b>27.91%</b>	
<b>DEPARTMENT OF POLITICAL SCIENCE &amp; GEOGRAPHY</b>												
400394-010	No	VIRGINIA GEOGRAPHIC ALLIANCE	ADAMS, FRANCIS	0	86	0	0	86	0	86	0.00%	TRAD
300543-010	15%	OLD DOMINION UNIVERSITY	ALLEN, MICHAEL	19,536	8,424	0	2,464	30,424	15,378	45,802	50.55%	TRAD
100527-036	25%	NASA GODDARD SPACEFLIGHT CENTER	ALLEN, THOMAS	2,338	0	0	0	2,338	0	2,338	0.00%	TRAD
200332-010	15%	VA DEPARTMENT OF ECONOMIC DEVELOPMENT	ALLEN, THOMAS	40,670	4,321	0	5,081	50,072	4,949	55,021	9.88%	TRAD
200354-010	5%	CITY OF VIRGINIA BEACH	ALLEN, THOMAS	3,156	0	0	182	3,338	1,836	5,174	55.00%	TRAD
200362-010	17%	VIRGINIA DEPARTMENT OF EMERGENCY MANAGEMENT	ALLEN, THOMAS	665	0	0	8,166	8,831	173	9,004	1.96%	TRAD
300717-005	30%	OLD DOMINION UNIVERSITY	ALLEN, THOMAS	29,227	7,421	0	0	36,648	0	36,648	0.00%	TRAD
300713-010	No	OLD DOMINION UNIVERSITY	KARAHAN, SALTUK	14,343	804	0	0	15,147	0	15,147	0.00%	TRAD
300670-010	30%	OLD DOMINION UNIVERSITY	RICHMAN, JESSE	5,924	1,555	0	0	7,479	0	7,479	0.00%	TRAD
300777-010	33%	OLD DOMINION UNIVERSITY	RICHMAN, JESSE	1,472	479	0	0	1,951	0	1,951	0.00%	TRAD
300717-005	30%	OLD DOMINION UNIVERSITY	SHANNON, NICOLE	29,227	7,421	0	0	36,648	0	36,648	0.00%	TRAD
200332-010	15%	VA DEPARTMENT OF ECONOMIC DEVELOPMENT	WHYTAWL, JENNIFER	40,670	4,321	0	5,081	50,072	4,949	55,021	9.88%	TRAD
300642-010	No	STATE UNIVERSITY OF NEW JERSEY (ALL CAMPUSES)	WHYTAWL, JENNIFER	23,201	0	0	0	23,201	6,032	29,233	26.00%	TRAD
<b>TOTAL DEPARTMENT OF POLITICAL SCIENCE &amp; GEOGRAPHY</b>				<b>210,429</b>	<b>34,832</b>	<b>0</b>	<b>20,974</b>	<b>266,235</b>	<b>33,317</b>	<b>299,552</b>	<b>12.51%</b>	
<b>DEPARTMENT OF SOCIOLOGY &amp; CRIMINAL JUSTICE</b>												
100914-010	30%	NATIONAL SCIENCE FOUNDATION	CHAPPELL, ALLISON	3,591	1,388	0	0	4,979	2,738	7,717	54.99%	TRAD
100792-010	No	NATIONAL INSTITUTE OF JUSTICE	DAI, MENGYAN	41,060	9,212	0	59,888	110,160	27,649	137,809	25.10%	TRAD
200335-010	33%	VA DEPARTMENT OF MOTOR VEHICLES	GAINAY, RANDY	6,500	1	0	0	6,501	1,690	8,191	26.00%	TRAD
200358-010	33%	VA DEPARTMENT OF MOTOR VEHICLES	GAINAY, RANDY	6,897	3,447	0	0	10,344	2,689	13,033	26.00%	TRAD
300670-010	30%	OLD DOMINION UNIVERSITY	GAINAY, RANDY	5,924	1,555	0	0	7,479	0	7,479	0.00%	TRAD
300719-010	50%	OLD DOMINION UNIVERSITY	GAINAY, RANDY	11,982	23,490	0	227	35,699	0	35,699	0.00%	TRAD
300777-010	33%	OLD DOMINION UNIVERSITY	GAINAY, RANDY	1,472	479	0	0	1,951	0	1,951	0.00%	TRAD
100581-010	No	U.S. PUBLIC HEALTH SERVICE (INCLUDING NIH)	YANG, XIUSHI	53,033	25	0	27,420	80,478	29,182	109,660	36.26%	TRAD
<b>TOTAL DEPARTMENT OF SOCIOLOGY &amp; CRIMINAL JUSTICE</b>				<b>130,459</b>	<b>39,597</b>	<b>0</b>	<b>87,535</b>	<b>257,591</b>	<b>63,948</b>	<b>321,539</b>	<b>24.83%</b>	

**SCHEDULE 4**  
**OLD DOMINION UNIVERSITY RESEARCH FOUNDATION**  
**SPONSORED PROGRAM ACTIVITY BY INDIVIDUAL PROJECT**  
(MEASURED BY EXPENDITURES INCURRED)  
**FOR FISCAL YEAR 2022**

PROJECT NUMBER	SPLIT	SPONSORING AGENCY	PRINCIPAL INVESTIGATOR / PROJECT DIRECTOR	PERSONNEL AND FRINGE BENEFITS	SUPPLIES, CONTRACTUAL, GENERAL, & TRAVEL	EQUIPMENT	STIPENDS, SUBCONTRACTS, TUITION, OTHER	TOTAL DIRECT COSTS	REIMBURSED INDIRECT COSTS	TOTAL PROJECT COSTS	EFFECTIVE INDIRECT COST RATE	ENTERPRISE CODE
<b>DEPARTMENT OF WOMEN'S STUDIES</b>												
300669-011	No	OLD DOMINION UNIVERSITY	OSORIO, RUTH	2,500	0	0	0	2,500	0	2,500	0.00%	TRAD
<b>TOTAL DEPARTMENT OF WOMEN'S STUDIES</b>												
<b>SOCIAL SCIENCE RESEARCH CENTER</b>												
200296-030	No	VA DEPARTMENT OF BEHAVIORAL HEALTH/DEVELOPMENTAL SERVICES	VANDECAR-BURDIN, TANCY	30,088	7,300	0	0	37,388	1,869	39,257	5.00%	SSRC
200296-040	No	VA DEPARTMENT OF BEHAVIORAL HEALTH/DEVELOPMENTAL SERVICES	VANDECAR-BURDIN, TANCY	2,497	1,696	0	0	4,193	210	4,403	5.01%	SSRC
200322-010	No	VIRGINIA DEPARTMENT OF SOCIAL SERVICES	VANDECAR-BURDIN, TANCY	31,975	1,749	0	0	33,724	3,372	37,096	10.00%	SSRC
200342-010	No	VA DEPARTMENT OF BEHAVIORAL HEALTH/DEVELOPMENTAL SERVICES	VANDECAR-BURDIN, TANCY	8,203	3,979	0	0	12,182	609	12,791	5.00%	SSRC
200342-020	No	VA DEPARTMENT OF BEHAVIORAL HEALTH/DEVELOPMENTAL SERVICES	VANDECAR-BURDIN, TANCY	11,874	19,735	0	0	31,609	1,580	33,189	5.00%	SSRC
200353-010	No	CITY OF VIRGINIA BEACH	VANDECAR-BURDIN, TANCY	1,215	0	0	453	1,668	0	1,668	0.00%	SSRC
200363-010	25%	STATE COUNCIL FOR HIGHER EDUCATION IN VA (SCHEV)	VANDECAR-BURDIN, TANCY	4,062	875	0	0	4,937	0	4,937	0.00%	SSRC
200367-010	No	JOINT COMMISSION ON HEALTH CARE	VANDECAR-BURDIN, TANCY	1,562	0	0	0	1,562	406	1,968	25.99%	SSRC
300574-010	5%	OLD DOMINION UNIVERSITY	VANDECAR-BURDIN, TANCY	10,701	1,375	0	2,363	14,439	966	15,405	6.69%	SSRC
300577-010	33%	OLD DOMINION UNIVERSITY	VANDECAR-BURDIN, TANCY	2,372	50	0	0	2,422	630	3,052	26.01%	SSRC
300670-010	40%	OLD DOMINION UNIVERSITY	VANDECAR-BURDIN, TANCY	7,898	2,074	0	0	9,972	0	9,972	0.00%	SSRC
300687-010	50%	OLD DOMINION UNIVERSITY	VANDECAR-BURDIN, TANCY	17,073	2,482	0	0	19,555	0	19,555	0.00%	SSRC
300719-010	50%	OLD DOMINION UNIVERSITY	VANDECAR-BURDIN, TANCY	11,982	23,490	0	227	35,699	0	35,699	0.00%	SSRC
300753-010	No	UNIVERSITY OF RHODE ISLAND	VANDECAR-BURDIN, TANCY	3,447	0	0	0	3,447	1,896	5,343	55.00%	SSRC
300772-010	5%	OLD DOMINION UNIVERSITY	VANDECAR-BURDIN, TANCY	44	1,465	0	0	1,509	121	1,630	8.02%	SSRC
300777-010	34%	OLD DOMINION UNIVERSITY	VANDECAR-BURDIN, TANCY	1,516	494	0	0	2,010	0	2,010	0.00%	SSRC
400496-010	50%	MOTHERS AGAINST DRUNK DRIVERS	VANDECAR-BURDIN, TANCY	4,687	1,413	0	351	6,451	3,549	10,000	55.01%	SSRC
400514-010	5%	THE NATIONAL ACADEMIES	VANDECAR-BURDIN, TANCY	425	151	0	0	576	317	893	55.03%	SSRC
<b>TOTAL SOCIAL SCIENCE RESEARCH CENTER</b>												
<b>TOTAL COLLEGE OF ARTS &amp; LETTERS</b>												
				<b>151,621</b>	<b>68,328</b>	<b>0</b>	<b>3,394</b>	<b>223,343</b>	<b>15,525</b>	<b>238,868</b>	<b>6.95%</b>	
				<b>629,600</b>	<b>190,821</b>	<b>0</b>	<b>152,715</b>	<b>973,136</b>	<b>132,946</b>	<b>1,106,082</b>	<b>13.66%</b>	

**SCHEDULE 4**  
**OLD DOMINION UNIVERSITY RESEARCH FOUNDATION**  
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 FOR FISCAL YEAR 2022

PROJECT NUMBER	SPLIT	SPONSORING AGENCY	PRINCIPAL INVESTIGATOR / PROJECT DIRECTOR	PERSONNEL AND FRINGE BENEFITS	SUPPLIES, CONTRACTUAL, GENERAL, & TRAVEL	EQUIPMENT	STIPENDS, SUBCONTRACTS, TUITION, OTHER	TOTAL DIRECT COSTS	REIMBURSED INDIRECT COSTS	TOTAL PROJECT COSTS	EFFECTIVE INDIRECT COST RATE	ENTERPRISE CODE
<b>STROME COLLEGE OF BUSINESS</b>												
<b>DEPARTMENT OF INFORMATION TECHNOLOGY &amp; DECISION SCIENCES</b>												
100731-010	No	NATIONAL SCIENCE FOUNDATION	HE, WU	219,758	0	0	0	219,758	0	219,758	0.00%	TRAD
100621-010	No	NATIONAL SCIENCE FOUNDATION	XU, LI	11,918	4,242	0	0	16,160	8,888	25,048	55.00%	TRAD
100673-010	20%	NATIONAL SCIENCE FOUNDATION	XU, LI	4,031	1,101	0	0	5,132	2,823	7,955	55.01%	TRAD
100673-010	20%	NATIONAL SCIENCE FOUNDATION	LI, LING	4,031	1,101	0	0	5,132	2,823	7,955	55.01%	TRAD
<b>TOTAL DEPARTMENT OF INFORMATION TECHNOLOGY &amp; DECISION SCIENCES</b>				<b>239,738</b>	<b>6,444</b>	<b>0</b>	<b>0</b>	<b>246,182</b>	<b>14,534</b>	<b>260,716</b>	<b>5.90%</b>	
<b>DEPARTMENT OF MANAGEMENT</b>												
300624-010	10%	HAMPTON UNIVERSITY	NAIR, ANIL	40,850	4,811	0	13,089	58,750	11,872	70,622	20.21%	TRAD
400465-010	No	EWING MARION KAUFFMAN FOUNDATION	NAIR, ANIL	50,557	8,066	0	14,189	72,812	0	72,812	0.00%	TRAD
400465-013	No	EWING MARION KAUFFMAN FOUNDATION	NAIR, ANIL	0	15,875	0	0	15,875	0	15,875	0.00%	TRAD
300685-010	No	GEORGE MASON UNIVERSITY	O'TOOLE, JAY	3,708	9,898	0	0	13,606	0	13,606	0.00%	TRAD
<b>TOTAL DEPARTMENT OF MANAGEMENT</b>				<b>95,115</b>	<b>38,650</b>	<b>0</b>	<b>27,278</b>	<b>161,043</b>	<b>11,872</b>	<b>172,915</b>	<b>7.37%</b>	
<b>DEPARTMENT OF MARKETING</b>												
100913-010	20%	U.S. DEPARTMENT OF AGRICULTURE	TANG, CHUANYI	2,180	169	0	0	2,349	235	2,584	10.00%	TRAD
300616-010	25%	DUKE UNIVERSITY	TANG, CHUANYI	3,132	2,476	0	0	5,608	673	6,281	12.00%	TRAD
<b>TOTAL DEPARTMENT OF MARKETING</b>				<b>5,312</b>	<b>2,645</b>	<b>0</b>	<b>0</b>	<b>7,957</b>	<b>908</b>	<b>8,865</b>	<b>11.41%</b>	
<b>DEPARTMENT OF ECONOMICS</b>												
200313-010	No	VIRGINIA ISRAEL ADVISORY BOARD	MCNAB, ROBERT	0	0	0	152	152	0	152	0.00%	TRAD
200354-010	30%	CITY OF VIRGINIA BEACH	MCNAB, ROBERT	18,938	0	0	1,094	20,032	11,018	31,050	55.00%	TRAD
300771-010	No	OLD DOMINION UNIVERSITY	MCNAB, ROBERT	43,183	0	0	0	43,183	0	43,183	0.00%	TRAD
<b>TOTAL DEPARTMENT OF ECONOMICS</b>				<b>62,121</b>	<b>0</b>	<b>0</b>	<b>1,246</b>	<b>63,367</b>	<b>11,018</b>	<b>74,385</b>	<b>17.39%</b>	
<b>SCHOOL OF PUBLIC SERVICE</b>												
300366-010	50%	UNIVERSITY OF NORTH CAROLINA	SAITGALINA, MARINA	10,417	0	0	0	10,417	5,729	16,146	55.00%	TRAD
100824-010	50%	NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION	YUSUF, JUITA (WEI)	17,703	10,727	0	2,725	31,155	15,636	46,791	50.19%	TRAD
100890-010	33%	NATIONAL SCIENCE FOUNDATION	YUSUF, JUITA (WEI)	5,958	0	0	0	5,958	1,549	7,507	26.00%	TRAD
100919-010	14%	NATIONAL SCIENCE FOUNDATION	YUSUF, JUITA (WEI)	22,860	33,443	0	0	56,303	14,639	70,942	26.00%	TRAD
200354-010	27%	CITY OF VIRGINIA BEACH	YUSUF, JUITA (WEI)	17,044	0	0	985	18,029	9,916	27,945	55.00%	TRAD
200362-010	17%	VIRGINIA DEPARTMENT OF EMERGENCY MANAGEMENT	YUSUF, JUITA (WEI)	665	0	0	8,166	8,831	173	9,004	1.96%	TRAD
300366-010	50%	UNIVERSITY OF NORTH CAROLINA	YUSUF, JUITA (WEI)	10,417	0	0	0	10,417	5,729	16,146	55.00%	TRAD
300618-010	No	VA INSTITUTE OF MARINE SCIENCE	YUSUF, JUITA (WEI)	0	238	0	37,507	37,745	0	37,745	0.00%	TRAD
300633-010	50%	VA INSTITUTE OF MARINE SCIENCE	YUSUF, JUITA (WEI)	14,666	792	0	0	15,458	0	15,458	0.00%	TRAD
300694-010	No	UNIVERSITY OF VIRGINIA	YUSUF, JUITA (WEI)	4,472	0	0	0	4,472	0	4,472	0.00%	TRAD
300761-010	No	VA POLYTECHNIC INSTITUTE AND STATE UNIVERSITY	YUSUF, JUITA (WEI)	3,750	0	0	0	3,750	0	3,750	0.00%	TRAD
300728-010	No	VA INSTITUTE OF MARINE SCIENCE	YUSUF, JUITA (WEI)	1,928	0	0	0	1,928	0	1,928	0.00%	TRAD
<b>TOTAL SCHOOL OF PUBLIC SERVICE</b>				<b>109,880</b>	<b>45,200</b>	<b>0</b>	<b>49,383</b>	<b>204,463</b>	<b>53,371</b>	<b>257,834</b>	<b>26.10%</b>	
<b>TOTAL STROME COLLEGE OF BUSINESS</b>				<b>512,166</b>	<b>92,939</b>	<b>0</b>	<b>77,907</b>	<b>683,012</b>	<b>91,703</b>	<b>774,715</b>	<b>13.43%</b>	

**SCHEDULE 4**  
**OLD DOMINION UNIVERSITY RESEARCH FOUNDATION**  
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 FOR FISCAL YEAR 2022

PROJECT NUMBER	SPLIT	SPONSORING AGENCY	PRINCIPAL INVESTIGATOR / PROJECT DIRECTOR	PERSONNEL AND FRINGE BENEFITS	SUPPLIES, CONTRACTUAL, GENERAL, & TRAVEL	EQUIPMENT	STIPENDS, SUBCONTRACTS, TUITION, OTHER	TOTAL DIRECT COSTS	REIMBURSED INDIRECT COSTS	TOTAL PROJECT COSTS	EFFECTIVE INDIRECT COST RATE	ENTERPRISE CODE
<b>DARDEN COLLEGE OF EDUCATION &amp; PROFESSIONAL STUDIES</b>												
<b>DEAN, DARDEN COLLEGE OF EDUCATION &amp; PROFESSIONAL STUDIES</b>												
300360-050	50%	OLD DOMINION UNIVERSITY	BARBER, MARGARET	189	0	0	10,040	10,229	0	10,229	0.00%	TRAD
300360-070	25%	OLD DOMINION UNIVERSITY	BARBER, MARGARET	5,297	0	0	0	5,297	0	5,297	0.00%	TRAD
300360-810	25%	OLD DOMINION UNIVERSITY	BARBER, MARGARET	(2,792)	2,541	0	0	(251)	0	(251)	0.00%	TRAD
300360-810	No	OLD DOMINION UNIVERSITY	BARBER, MARGARET	11,168	392	0	0	11,560	0	11,560	0.00%	TRAD
300478-030	50%	OLD DOMINION UNIVERSITY	BARBER, MARGARET	0	0	0	34,572	34,572	0	34,572	0.00%	TRAD
300360-050	50%	OLD DOMINION UNIVERSITY	BURRELL-CRAFT, KAYLA	189	0	0	10,040	10,229	0	10,229	0.00%	TRAD
300360-060	No	OLD DOMINION UNIVERSITY	BURRELL-CRAFT, KAYLA	47,710	56,175	0	229,033	332,918	0	332,918	0.00%	TRAD
300360-070	75%	OLD DOMINION UNIVERSITY	BURRELL-CRAFT, KAYLA	15,892	0	0	0	15,892	0	15,892	0.00%	TRAD
300360-810	75%	OLD DOMINION UNIVERSITY	BURRELL-CRAFT, KAYLA	(8,376)	7,623	0	0	(753)	0	(753)	0.00%	TRAD
300478-030	50%	OLD DOMINION UNIVERSITY	BURRELL-CRAFT, KAYLA	0	0	0	34,572	34,572	0	34,572	0.00%	TRAD
300478-040	No	OLD DOMINION UNIVERSITY	BURRELL-CRAFT, KAYLA	0	0	0	120,120	120,120	0	120,120	0.00%	TRAD
300749-010	No	OLD DOMINION UNIVERSITY	BURRELL-CRAFT, KAYLA	45,695	914	0	38,318	84,927	3,729	88,656	4.39%	TRAD
400486-010	50%	NATIONAL CENTER FOR TEACHER RESIDENCIES	BURRELL-CRAFT, KAYLA	19,778	1,107	0	88,276	109,161	4,599	113,760	4.21%	TRAD
100896-010	20%	NATIONAL SECURITY AGENCY	DICE, TAMMI	11,115	(66)	0	2,912	13,961	6,077	20,038	43.53%	TRAD
<b>TOTAL DEAN, DARDEN COLLEGE OF EDUCATION &amp; PROFESSIONAL STUDIES</b>				<b>145,865</b>	<b>68,686</b>	<b>0</b>	<b>567,883</b>	<b>782,434</b>	<b>14,405</b>	<b>796,839</b>	<b>1.84%</b>	
<b>DEAN, DARDEN COLLEGE OF EDUCATION &amp; PROFESSIONAL STUDIES - CENTER FOR CYBERSECURITY (CYBER)</b>												
300594-010	20%	OLD DOMINION UNIVERSITY	DICE, TAMMI	524	1,569	0	2,644	4,737	1,151	5,888	24.30%	CYBER
<b>TOTAL DEAN, DARDEN COLLEGE OF EDUCATION &amp; PROFESSIONAL STUDIES - CENTER FOR CYBERSECURITY (CYBER)</b>				<b>524</b>	<b>1,569</b>	<b>0</b>	<b>2,644</b>	<b>4,737</b>	<b>1,151</b>	<b>5,888</b>	<b>24.30%</b>	
<b>DEPARTMENT OF TEACHING &amp; LEARNING</b>												
400486-010	25%	NATIONAL CENTER FOR TEACHER RESIDENCIES	BECK, JORI	9,889	553	0	44,138	54,580	2,300	56,880	4.21%	TRAD
300643-010	30%	OLD DOMINION UNIVERSITY	BUTLER, BRANDON	3,307	0	0	8,358	11,665	0	11,665	0.00%	TRAD
300743-010	20%	OLD DOMINION UNIVERSITY	BUTLER, BRANDON	1,913	0	0	2,251	4,164	0	4,164	0.00%	TRAD
300488-010	70%	GEORGE MASON UNIVERSITY	COLWELL, JAMIE	6,248	1,233	0	3,668	11,149	1,945	13,094	17.45%	TRAD
300696-010	No	GEORGE MASON UNIVERSITY	COLWELL, JAMIE	17,357	0	0	0	17,357	4,513	21,870	26.00%	TRAD
300743-010	10%	OLD DOMINION UNIVERSITY	COLWELL, JAMIE	956	0	0	1,126	2,082	0	2,082	0.00%	TRAD
300592-010	20%	OLD DOMINION UNIVERSITY	CROMPTON, HELEN	86,164	24,484	0	0	110,648	0	110,648	0.00%	TRAD
300765-010	No	OLD DOMINION UNIVERSITY	CROMPTON, HELEN	7,753	0	0	0	7,753	0	7,753	0.00%	TRAD
500379-020	20%	D'ANGELO TECHNOLOGIES LLC	CROMPTON, HELEN	17,891	0	0	0	17,891	11,629	29,520	65.00%	TRAD
300548-010	No	OLD DOMINION UNIVERSITY	ECKHOFF, ANGELA	8,727	330	0	108,524	117,581	725	118,306	0.62%	TRAD
100736-010	15%	NATIONAL SCIENCE FOUNDATION	GUTIERREZ, KRISTIE	13,255	2,652	0	0	15,907	8,749	24,656	55.00%	TRAD
100816-010	17%	NATIONAL SCIENCE FOUNDATION	GUTIERREZ, KRISTIE	36,024	5,610	0	692	42,326	22,898	65,224	54.10%	TRAD
300488-010	30%	GEORGE MASON UNIVERSITY	GUTIERREZ, KRISTIE	2,678	529	0	1,572	4,779	834	5,613	17.45%	TRAD
100736-010	20%	NATIONAL SCIENCE FOUNDATION	KIDD, JENNIFER	17,673	3,536	0	0	21,209	11,665	32,874	55.00%	TRAD
100816-010	21%	NATIONAL SCIENCE FOUNDATION	KIDD, JENNIFER	44,500	6,930	0	855	52,285	28,286	80,571	54.10%	TRAD
300669-017	No	OLD DOMINION UNIVERSITY	SMITH-MUTEGI, DEMETRICE	2,769	240	0	0	3,009	0	3,009	0.00%	TRAD
300643-010	70%	OLD DOMINION UNIVERSITY	SOMMERFELDT, JODY	7,716	0	0	19,501	27,217	0	27,217	0.00%	TRAD
300743-010	70%	OLD DOMINION UNIVERSITY	SOMMERFELDT, JODY	6,695	0	0	7,878	14,573	0	14,573	0.00%	TRAD
100832-010	No	NATIONAL ENDOWMENT FOR THE HUMANITIES	SUH, YONGHEE	12,330	52,623	0	89,709	154,662	16,888	171,550	10.92%	TRAD
300601-010	No	WAYNESBURG UNIVERSITY	SUH, YONGHEE	3,271	9,575	0	0	12,846	0	12,846	0.00%	TRAD
300602-010	No	WAYNESBURG UNIVERSITY	SUH, YONGHEE	1,636	124	0	0	1,760	0	1,760	0.00%	TRAD
300682-010	No	OLD DOMINION UNIVERSITY	SUH, YONGHEE	3,363	486	0	0	3,849	0	3,849	0.00%	TRAD
400486-010	25%	NATIONAL CENTER FOR TEACHER RESIDENCIES	SUTPHIN, LATANYA	9,889	553	0	44,138	54,580	2,300	56,880	4.21%	TRAD
<b>TOTAL DEPARTMENT OF TEACHING &amp; LEARNING</b>				<b>322,004</b>	<b>109,458</b>	<b>0</b>	<b>332,410</b>	<b>763,872</b>	<b>112,732</b>	<b>876,604</b>	<b>14.76%</b>	
<b>DEPARTMENT OF STEM EDUCATION &amp; PROFESSIONAL STUDIES</b>												
100869-010	No	INSTITUTE OF MUSEUM AND LIBRARY SERVICES	ANDERSON, AMELIA	8,764	7,539	0	0	16,303	8,967	25,270	55.00%	TRAD
100907-010	No	INSTITUTE OF MUSEUM AND LIBRARY SERVICES	BURNS, ELIZABETH	1,547	1,546	0	97	3,190	1,701	4,891	53.32%	TRAD
300030-016	5%	UNIVERSITY OF VIRGINIA	KATSIOLUDIS, PETROS	1,628	302	0	0	1,930	0	1,930	0.00%	TRAD
300567-010	15%	OLD DOMINION UNIVERSITY	KATSIOLUDIS, PETROS	12,183	2,873	0	1,809	16,865	1,204	18,069	7.14%	TRAD

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**OLD DOMINION UNIVERSITY RESEARCH FOUNDATION**  
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PROJECT NUMBER	SPLIT	SPONSORING AGENCY	PRINCIPAL INVESTIGATOR / PROJECT DIRECTOR	PERSONNEL AND FRINGE BENEFITS	SUPPLIES, CONTRACTUAL, GENERAL, & TRAVEL	EQUIPMENT	STIPENDS, SUBCONTRACTS, TUITION, OTHER	TOTAL DIRECT COSTS	REIMBURSED INDIRECT COSTS	TOTAL PROJECT COSTS	EFFECTIVE INDIRECT COST RATE	ENTERPRISE CODE
100906-010	20%	INSTITUTE OF MUSEUM AND LIBRARY SERVICES	KIMMEL, SUE	4,604	161	0	0	4,765	1,525	6,290	32.00%	TRAD
100903-010	20%	NATIONAL SCIENCE FOUNDATION	LUO, TIAN	2,314	809	0	0	3,123	1,717	4,840	54.98%	TRAD
300572-010	80%	OLD DOMINION UNIVERSITY	LUO, TIAN	240	0	0	0	240	0	240	0.00%	TRAD
300669-004	No	OLD DOMINION UNIVERSITY	LUO, TIAN	2,571	0	0	0	2,571	0	2,571	0.00%	TRAD
300572-010	20%	OLD DOMINION UNIVERSITY	MA, GANGFENG	60	0	0	0	60	0	60	0.00%	TRAD
200341-010	No	NORFOLK PUBLIC SCHOOLS	MCKINNEY, SUEANNE	0	0	0	183,085	183,085	0	183,085	0.00%	TRAD
100708-010	15%	NATIONAL SCIENCE FOUNDATION	TOMOVIC, CYNTHIA	7,723	77	0	16,500	24,300	4,290	28,590	17.65%	TRAD
<b>TOTAL DEPARTMENT OF STEM EDUCATION &amp; PROFESSIONAL STUDIES</b>				<b>41,634</b>	<b>13,307</b>	<b>0</b>	<b>201,491</b>	<b>256,432</b>	<b>19,404</b>	<b>275,836</b>	<b>7.57%</b>	
<b>DEPARTMENT OF HUMAN MOVEMENT SCIENCES</b>												
300648-010	50%	STONY BROOK UNIVERSITY	BENNETT, HUNTER	6,828	0	0	0	6,828	3,756	10,584	55.01%	TRAD
400398-010	60%	JEFFRESS RESEARCH GRANTS PROGRAM	BENNETT, HUNTER	1,157	4,862	0	0	6,019	0	6,019	0.00%	TRAD
400457-010	40%	NATIONAL ASSOCIATION FOR KINESIOLOGY IN HIGHER EDUCATION	BENNETT, HUNTER	0	408	0	0	408	0	408	0.00%	TRAD
300541-003	10%	OLD DOMINION UNIVERSITY	DAVIS, JONATHAN	93	200	0	0	293	51	344	17.41%	TRAD
300564-010	No	EAST CAROLINA UNIVERSITY	HAEGELE, JUSTIN	17,081	3,459	0	148,430	168,970	1,643	170,613	0.97%	TRAD
300641-010	40%	OLD DOMINION UNIVERSITY	HAEGELE, JUSTIN	0	5,169	0	0	5,169	0	5,169	0.00%	TRAD
300693-010	No	OLD DOMINION UNIVERSITY	HAEGELE, JUSTIN	1,014	977	0	0	1,991	0	1,991	0.00%	TRAD
400398-010	20%	JEFFRESS RESEARCH GRANTS PROGRAM	HAEGELE, JUSTIN	386	1,621	0	0	2,007	0	2,007	0.00%	TRAD
400457-010	50%	NATIONAL ASSOCIATION FOR KINESIOLOGY IN HIGHER EDUCATION	HAEGELE, JUSTIN	0	510	0	0	510	0	510	0.00%	TRAD
400460-010	75%	SPENCER FOUNDATION	HAEGELE, JUSTIN	12,424	5,969	0	0	18,393	0	18,393	0.00%	TRAD
400464-010	No	LIONS OF DISTRICT 24-I	HILL, EDWARD	8,517	5,494	0	13,915	27,926	0	27,926	0.00%	TRAD
100813-010	30%	NATIONAL SCIENCE FOUNDATION	REYNOLDS, LERYN	7,006	1,237	0	0	8,243	4,534	12,777	55.00%	TRAD
400515-010	No	AMERICAN HEART ASSOCIATION	REYNOLDS, LERYN	3,253	0	0	0	3,253	325	3,578	9.99%	TRAD
300541-002	30%	OLD DOMINION UNIVERSITY	USHER, LINDSAY	6,851	262	0	6,209	13,322	1,245	14,567	9.35%	TRAD
300541-001	No	OLD DOMINION UNIVERSITY	ZAJCHOWSKI, CHRISTOPHER	23,346	32,441	0	76,559	132,346	9,763	142,109	7.38%	TRAD
300541-002	40%	OLD DOMINION UNIVERSITY	ZAJCHOWSKI, CHRISTOPHER	9,134	349	0	8,279	17,762	1,660	19,422	9.35%	TRAD
300541-003	90%	OLD DOMINION UNIVERSITY	ZAJCHOWSKI, CHRISTOPHER	840	1,800	0	0	2,640	462	3,102	17.50%	TRAD
300541-004	No	OLD DOMINION UNIVERSITY	ZAJCHOWSKI, CHRISTOPHER	4,166	23,226	0	0	27,392	4,794	32,186	17.50%	TRAD
300541-005	No	NATIONAL PARK SERVICE	ZAJCHOWSKI, CHRISTOPHER	7,174	0	0	11,524	18,698	1,255	19,953	6.71%	TRAD
300541-006	No	NATIONAL PARK SERVICE	ZAJCHOWSKI, CHRISTOPHER	5,035	0	0	0	5,035	881	5,916	17.50%	TRAD
300541-002	30%	OLD DOMINION UNIVERSITY	ZHOU, YILUN	6,851	262	0	6,209	13,322	1,245	14,567	9.35%	TRAD
300641-010	60%	OLD DOMINION UNIVERSITY	ZHU, XIHE	0	7,753	0	0	7,753	0	7,753	0.00%	TRAD
400457-010	10%	NATIONAL ASSOCIATION FOR KINESIOLOGY IN HIGHER EDUCATION	ZHU, XIHE	0	102	0	0	102	0	102	0.00%	TRAD
400460-010	25%	SPENCER FOUNDATION	ZHU, XIHE	4,141	1,990	0	0	6,131	0	6,131	0.00%	TRAD
<b>TOTAL DEPARTMENT OF HUMAN MOVEMENT SCIENCES</b>				<b>125,297</b>	<b>98,091</b>	<b>0</b>	<b>271,125</b>	<b>494,513</b>	<b>31,614</b>	<b>526,127</b>	<b>6.39%</b>	
<b>DEPARTMENT OF COMMUNICATION DISORDERS &amp; SPECIAL EDUCATION</b>												
200339-010	25%	GEORGIA DEPARTMENT OF EDUCATION	BARRETT, SUSAN	0	0	0	255	255	67	322	26.27%	TRAD
100559-010	33%	U.S. DEPARTMENT OF EDUCATION	BOBZIEN, JONNA	7,644	0	0	9,930	17,574	612	18,186	3.48%	TRAD
300636-010	33%	GEORGE MASON UNIVERSITY	BOBZIEN, JONNA	9,323	0	0	6,546	15,869	746	16,615	4.70%	TRAD
400398-010	10%	JEFFRESS RESEARCH GRANTS PROGRAM	BOBZIEN, JONNA	193	810	0	0	1,003	0	1,003	0.00%	TRAD
200291-010	33%	VT AGENCY OF ED	GABLE, ROBERT	3,748	0	0	17,287	21,035	300	21,335	1.43%	TRAD
200291-020	33%	VT AGENCY OF ED	GABLE, ROBERT	11,722	364	0	15,909	27,995	3,142	31,137	11.22%	TRAD
200309-020	33%	NORFOLK PUBLIC SCHOOLS	GABLE, ROBERT	21,761	0	0	1,910	23,671	6,155	29,826	26.00%	TRAD
200339-010	25%	GEORGIA DEPARTMENT OF EDUCATION	GABLE, ROBERT	0	0	0	255	255	67	322	26.27%	TRAD
200355-010	50%	NORFOLK PUBLIC SCHOOLS	GABLE, ROBERT	4,388	0	0	41	4,429	1,151	5,580	25.99%	TRAD
200364-010	33%	NORFOLK PUBLIC SCHOOLS	GABLE, ROBERT	6,758	8,437	0	0	15,195	3,951	19,146	26.00%	TRAD
300480-010	33%	OLD DOMINION UNIVERSITY	GABLE, ROBERT	111,188	19,086	0	815	131,089	10,422	141,511	7.95%	TRAD
300505-010	33%	UNIVERSITY OF OREGON	GABLE, ROBERT	134,542	17,661	0	0	152,203	39,573	191,776	26.00%	TRAD
300552-010	50%	OLD DOMINION UNIVERSITY	GABLE, ROBERT	0	5,454	0	0	5,454	436	5,890	7.99%	TRAD
300560-010	50%	OLD DOMINION UNIVERSITY	GABLE, ROBERT	957	23,201	0	5,313	29,471	1,933	31,404	6.56%	TRAD
300560-020	50%	OLD DOMINION UNIVERSITY	GABLE, ROBERT	3,096	7,717	0	203	11,016	865	11,881	7.85%	TRAD
300574-010	30%	OLD DOMINION UNIVERSITY	GABLE, ROBERT	64,208	8,250	0	14,175	86,633	5,797	92,430	6.69%	TRAD
300621-010	50%	OLD DOMINION UNIVERSITY	GABLE, ROBERT	138,025	3,664	0	300	141,989	11,335	153,324	7.98%	TRAD

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300626-010	50%	OLD DOMINION UNIVERSITY	GABLE, ROBERT	268,108	30,009	0	15,720	313,837	23,849	337,686	7.60%	TRAD
300626-020	50%	OLD DOMINION UNIVERSITY	GABLE, ROBERT	163,960	3,679	0	905	168,544	13,411	181,955	7.96%	TRAD
300627-010	33%	OLD DOMINION UNIVERSITY	GABLE, ROBERT	18,356	0	0	0	18,356	1,469	19,825	8.00%	TRAD
300630-010	33%	OLD DOMINION UNIVERSITY	GABLE, ROBERT	0	0	0	4,685	4,685	0	4,685	0.00%	TRAD
300631-010	33%	OLD DOMINION UNIVERSITY	GABLE, ROBERT	6,215	3,795	0	0	10,010	801	10,811	8.00%	TRAD
300646-010	33%	OLD DOMINION UNIVERSITY	GABLE, ROBERT	6,832	49,716	0	0	56,548	4,524	61,072	8.00%	TRAD
300716-010	50%	OLD DOMINION UNIVERSITY	GABLE, ROBERT	68,192	0	0	0	68,192	5,455	73,647	8.00%	TRAD
300729-010	50%	OLD DOMINION UNIVERSITY	GABLE, ROBERT	121,236	739	0	0	121,975	9,758	131,733	8.00%	TRAD
300729-020	50%	OLD DOMINION UNIVERSITY	GABLE, ROBERT	60,032	0	0	0	60,032	4,803	64,835	8.00%	TRAD
300730-010	33%	OLD DOMINION UNIVERSITY	GABLE, ROBERT	12,688	0	0	0	12,688	1,015	13,703	8.00%	TRAD
300732-010	33%	OLD DOMINION UNIVERSITY	GABLE, ROBERT	7,526	0	0	29,898	37,424	0	37,424	0.00%	TRAD
300739-010	33%	GEORGE MASON UNIVERSITY	GABLE, ROBERT	0	0	0	2,250	2,250	0	2,250	0.00%	TRAD
300764-010	33%	OLD DOMINION UNIVERSITY	GABLE, ROBERT	3,118	12,870	0	11,958	27,946	0	27,946	0.00%	TRAD
300772-010	30%	OLD DOMINION UNIVERSITY	GABLE, ROBERT	263	8,789	0	0	9,052	724	9,776	8.00%	TRAD
300781-010	33%	OLD DOMINION UNIVERSITY	GABLE, ROBERT	0	3,102	0	0	3,102	248	3,350	7.99%	TRAD
200349-010	50%	LOUISIANA DEPARTMENT OF EDUCATION	GANSLE, KRISTIN	11,303	0	0	0	11,303	2,826	14,129	25.00%	TRAD
100559-010	34%	U.S. DEPARTMENT OF EDUCATION	GEAR, SABRA	7,876	0	0	10,230	18,106	630	18,736	3.48%	TRAD
100601-010	25%	U.S. DEPARTMENT OF EDUCATION	GEAR, SABRA	26,344	1,856	0	0	28,200	7,332	35,532	26.00%	TRAD
100559-010	33%	U.S. DEPARTMENT OF EDUCATION	HESTER, PEGGY	7,644	0	0	9,930	17,574	612	18,186	3.48%	TRAD
100601-010	50%	U.S. DEPARTMENT OF EDUCATION	HESTER, PEGGY	52,688	3,713	0	0	56,401	14,664	71,065	26.00%	TRAD
100923-010	30%	U.S. DEPARTMENT OF EDUCATION	JUDGE, SHARON	15,054	3,822	0	0	18,876	1,510	20,386	8.00%	TRAD
300396-010	33%	OLD DOMINION UNIVERSITY	JUDGE, SHARON	43,219	31,054	0	35,680	109,953	5,942	115,895	5.40%	TRAD
300625-010	No	OLD DOMINION UNIVERSITY	LAYDEN, SELENA	8,077	7,040	0	7,556	22,673	1,209	23,882	5.33%	TRAD
300625-020	No	OLD DOMINION UNIVERSITY	LAYDEN, SELENA	6,850	173	0	0	7,023	562	7,585	8.00%	TRAD
300735-010	No	VIRGINIA COMMONWEALTH UNIVERSITY	LAYDEN, SELENA	3,925	2,409	0	5,997	12,331	507	12,838	4.11%	TRAD
200291-010	33%	VT AGENCY OF ED	MAYDOSZ, ANN	3,748	0	0	17,287	21,035	300	21,335	1.43%	TRAD
200291-020	33%	VT AGENCY OF ED	MAYDOSZ, ANN	11,722	364	0	15,909	27,995	3,142	31,137	11.22%	TRAD
200309-020	33%	NORFOLK PUBLIC SCHOOLS	MAYDOSZ, ANN	21,761	0	0	1,910	23,671	6,155	29,826	26.00%	TRAD
200339-010	25%	GEORGIA DEPARTMENT OF EDUCATION	MAYDOSZ, ANN	0	0	0	255	255	67	322	26.27%	TRAD
200347-010	50%	NORFOLK PUBLIC SCHOOLS	MAYDOSZ, ANN	0	9,158	0	1,535	10,693	855	11,548	8.00%	TRAD
200347-020	50%	NORFOLK PUBLIC SCHOOLS	MAYDOSZ, ANN	0	13,320	0	2,000	15,320	1,226	16,546	8.00%	TRAD
200364-010	33%	NORFOLK PUBLIC SCHOOLS	MAYDOSZ, ANN	6,758	8,437	0	0	15,195	3,951	19,146	26.00%	TRAD
300480-010	33%	OLD DOMINION UNIVERSITY	MAYDOSZ, ANN	111,188	19,086	0	815	131,089	10,422	141,511	7.95%	TRAD
300505-010	33%	UNIVERSITY OF OREGON	MAYDOSZ, ANN	134,542	17,661	0	0	152,203	39,573	191,776	26.00%	TRAD
300574-010	30%	OLD DOMINION UNIVERSITY	MAYDOSZ, ANN	64,208	8,250	0	14,175	86,633	5,797	92,430	6.69%	TRAD
300577-010	33%	OLD DOMINION UNIVERSITY	MAYDOSZ, ANN	2,372	50	0	0	2,422	630	3,052	26.01%	TRAD
300581-010	50%	OLD DOMINION UNIVERSITY	MAYDOSZ, ANN	9,904	30,133	0	0	40,037	3,203	43,240	8.00%	TRAD
300627-010	33%	OLD DOMINION UNIVERSITY	MAYDOSZ, ANN	18,356	0	0	0	18,356	1,469	19,825	8.00%	TRAD
300630-010	33%	OLD DOMINION UNIVERSITY	MAYDOSZ, ANN	0	0	0	4,685	4,685	0	4,685	0.00%	TRAD
300631-010	33%	OLD DOMINION UNIVERSITY	MAYDOSZ, ANN	6,215	3,795	0	0	10,010	801	10,811	8.00%	TRAD
300632-010	50%	OLD DOMINION UNIVERSITY	MAYDOSZ, ANN	0	10,628	0	0	10,628	850	11,478	8.00%	TRAD
300632-020	50%	OLD DOMINION UNIVERSITY	MAYDOSZ, ANN	6,797	12,812	0	91,927	111,536	1,569	113,105	1.41%	TRAD
300636-010	33%	GEORGE MASON UNIVERSITY	MAYDOSZ, ANN	9,323	0	0	6,546	15,869	746	16,615	4.70%	TRAD
300637-010	50%	GEORGE MASON UNIVERSITY	MAYDOSZ, ANN	0	5,406	0	1,020	6,426	433	6,859	6.74%	TRAD
300646-010	33%	OLD DOMINION UNIVERSITY	MAYDOSZ, ANN	6,832	49,716	0	0	56,548	4,524	61,072	8.00%	TRAD
300664-010	50%	OLD DOMINION UNIVERSITY	MAYDOSZ, ANN	4,717	11,415	0	0	16,132	1,291	17,423	8.00%	TRAD
300664-020	50%	OLD DOMINION UNIVERSITY	MAYDOSZ, ANN	829	6,520	0	0	7,349	588	7,937	8.00%	TRAD
300690-010	50%	OLD DOMINION UNIVERSITY	MAYDOSZ, ANN	1,928	5,750	0	0	7,678	614	8,292	8.00%	TRAD
300730-010	33%	OLD DOMINION UNIVERSITY	MAYDOSZ, ANN	12,688	0	0	0	12,688	1,015	13,703	8.00%	TRAD
300732-010	33%	OLD DOMINION UNIVERSITY	MAYDOSZ, ANN	7,526	0	0	29,898	37,424	0	37,424	0.00%	TRAD
300739-010	33%	GEORGE MASON UNIVERSITY	MAYDOSZ, ANN	0	0	0	2,250	2,250	0	2,250	0.00%	TRAD
300740-010	50%	GEORGE MASON UNIVERSITY	MAYDOSZ, ANN	0	3,054	0	372	3,426	244	3,670	7.12%	TRAD
300746-010	50%	OLD DOMINION UNIVERSITY	MAYDOSZ, ANN	9,130	6,250	0	15,419	30,799	1,230	32,029	3.99%	TRAD
300764-010	33%	OLD DOMINION UNIVERSITY	MAYDOSZ, ANN	3,118	12,870	0	11,958	27,946	0	27,946	0.00%	TRAD

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300772-010	30%	OLD DOMINION UNIVERSITY	MAYDOSZ, ANN	263	8,789	0	0	9,052	724	9,776	8.00%	TRAD
300780-010	50%	OLD DOMINION UNIVERSITY	MAYDOSZ, ANN	0	0	0	32,750	32,750	0	32,750	0.00%	TRAD
300781-010	33%	OLD DOMINION UNIVERSITY	MAYDOSZ, ANN	0	3,102	0	0	3,102	248	3,350	7.99%	TRAD
300782-010	50%	OLD DOMINION UNIVERSITY	MAYDOSZ, ANN	2,601	49	0	0	2,650	212	2,862	8.00%	TRAD
200327-010	No	VA DEPARTMENT OF EDUCATION	MURPHY, KIMBERLY	4,217	303	0	0	4,520	362	4,882	8.01%	TRAD
100914-010	30%	NATIONAL SCIENCE FOUNDATION	PERROTTI (MICHALEK), ANNE	3,591	1,388	0	0	4,979	2,738	7,717	54.99%	TRAD
300669-005	No	OLD DOMINION UNIVERSITY	PERROTTI (MICHALEK), ANNE	3,266	0	0	0	3,266	0	3,266	0.00%	TRAD
300669-006	No	OLD DOMINION UNIVERSITY	ROITSCH, JANE	3,634	1,640	0	0	5,274	0	5,274	0.00%	TRAD
200291-010	34%	VT AGENCY OF ED	TONELSON, STEPHEN	3,861	0	0	17,811	21,672	309	21,981	1.43%	TRAD
200291-020	34%	VT AGENCY OF ED	TONELSON, STEPHEN	12,077	375	0	16,391	28,843	3,237	32,080	11.22%	TRAD
200309-020	34%	NORFOLK PUBLIC SCHOOLS	TONELSON, STEPHEN	22,420	0	0	1,968	24,388	6,341	30,729	26.00%	TRAD
200339-010	25%	GEORGIA DEPARTMENT OF EDUCATION	TONELSON, STEPHEN	0	0	0	255	255	67	322	26.27%	TRAD
200347-010	50%	NORFOLK PUBLIC SCHOOLS	TONELSON, STEPHEN	0	9,158	0	1,535	10,693	855	11,548	8.00%	TRAD
200347-020	50%	NORFOLK PUBLIC SCHOOLS	TONELSON, STEPHEN	0	13,320	0	2,000	15,320	1,226	16,546	8.00%	TRAD
200355-010	50%	NORFOLK PUBLIC SCHOOLS	TONELSON, STEPHEN	4,388	0	0	41	4,429	1,151	5,580	25.99%	TRAD
200364-010	34%	NORFOLK PUBLIC SCHOOLS	TONELSON, STEPHEN	6,963	8,693	0	0	15,656	4,071	19,727	26.00%	TRAD
300480-010	34%	OLD DOMINION UNIVERSITY	TONELSON, STEPHEN	114,557	19,664	0	840	135,061	10,738	145,799	7.95%	TRAD
300505-010	34%	UNIVERSITY OF OREGON	TONELSON, STEPHEN	138,619	18,197	0	0	156,816	40,772	197,588	26.00%	TRAD
300552-010	50%	OLD DOMINION UNIVERSITY	TONELSON, STEPHEN	0	5,454	0	0	5,454	436	5,890	7.99%	TRAD
300560-010	50%	OLD DOMINION UNIVERSITY	TONELSON, STEPHEN	957	23,201	0	5,313	29,471	1,933	31,404	6.56%	TRAD
300560-020	50%	OLD DOMINION UNIVERSITY	TONELSON, STEPHEN	3,096	7,717	0	203	11,016	865	11,881	7.85%	TRAD
300574-010	35%	OLD DOMINION UNIVERSITY	TONELSON, STEPHEN	74,910	9,625	0	16,538	101,073	6,763	107,836	6.69%	TRAD
300577-010	34%	OLD DOMINION UNIVERSITY	TONELSON, STEPHEN	2,444	52	0	0	2,496	649	3,145	26.00%	TRAD
300581-010	50%	OLD DOMINION UNIVERSITY	TONELSON, STEPHEN	9,904	30,133	0	0	40,037	3,203	43,240	8.00%	TRAD
300621-010	50%	OLD DOMINION UNIVERSITY	TONELSON, STEPHEN	138,025	3,664	0	300	141,989	11,335	153,324	7.98%	TRAD
300626-010	50%	OLD DOMINION UNIVERSITY	TONELSON, STEPHEN	268,108	30,009	0	15,720	313,837	23,849	337,686	7.60%	TRAD
300626-020	50%	OLD DOMINION UNIVERSITY	TONELSON, STEPHEN	163,960	3,679	0	905	168,544	13,411	181,955	7.96%	TRAD
300627-010	34%	OLD DOMINION UNIVERSITY	TONELSON, STEPHEN	18,913	0	0	0	18,913	1,513	20,426	8.00%	TRAD
300630-010	34%	OLD DOMINION UNIVERSITY	TONELSON, STEPHEN	0	0	0	4,827	4,827	0	4,827	0.00%	TRAD
300631-010	34%	OLD DOMINION UNIVERSITY	TONELSON, STEPHEN	6,403	3,910	0	0	10,313	825	11,138	8.00%	TRAD
300632-010	50%	OLD DOMINION UNIVERSITY	TONELSON, STEPHEN	0	10,628	0	0	10,628	850	11,478	8.00%	TRAD
300632-020	50%	OLD DOMINION UNIVERSITY	TONELSON, STEPHEN	6,797	12,812	0	91,927	111,536	1,569	113,105	1.41%	TRAD
300636-010	34%	GEORGE MASON UNIVERSITY	TONELSON, STEPHEN	9,605	0	0	6,744	16,349	768	17,117	4.70%	TRAD
300637-010	50%	GEORGE MASON UNIVERSITY	TONELSON, STEPHEN	0	5,406	0	1,020	6,426	433	6,859	6.74%	TRAD
300646-010	34%	OLD DOMINION UNIVERSITY	TONELSON, STEPHEN	7,039	51,222	0	0	58,261	4,661	62,922	8.00%	TRAD
300664-010	50%	OLD DOMINION UNIVERSITY	TONELSON, STEPHEN	4,717	11,415	0	0	16,132	1,291	17,423	8.00%	TRAD
300664-020	50%	OLD DOMINION UNIVERSITY	TONELSON, STEPHEN	829	6,520	0	0	7,349	588	7,937	8.00%	TRAD
300690-010	50%	OLD DOMINION UNIVERSITY	TONELSON, STEPHEN	1,928	5,750	0	0	7,678	614	8,292	8.00%	TRAD
300716-010	50%	OLD DOMINION UNIVERSITY	TONELSON, STEPHEN	68,192	0	0	0	68,192	5,455	73,647	8.00%	TRAD
300729-010	50%	OLD DOMINION UNIVERSITY	TONELSON, STEPHEN	121,236	739	0	0	121,975	9,758	131,733	8.00%	TRAD
300729-020	50%	OLD DOMINION UNIVERSITY	TONELSON, STEPHEN	60,032	0	0	0	60,032	4,803	64,835	8.00%	TRAD
300730-010	34%	OLD DOMINION UNIVERSITY	TONELSON, STEPHEN	13,073	0	0	0	13,073	1,046	14,119	8.00%	TRAD
300732-010	34%	OLD DOMINION UNIVERSITY	TONELSON, STEPHEN	7,754	0	0	30,804	38,558	0	38,558	0.00%	TRAD
300739-010	34%	GEORGE MASON UNIVERSITY	TONELSON, STEPHEN	0	0	0	2,318	2,318	0	2,318	0.00%	TRAD
300740-010	50%	GEORGE MASON UNIVERSITY	TONELSON, STEPHEN	0	3,054	0	372	3,426	244	3,670	7.12%	TRAD
300746-010	50%	OLD DOMINION UNIVERSITY	TONELSON, STEPHEN	9,130	6,250	0	15,419	30,799	1,230	32,029	3.99%	TRAD
300764-010	34%	OLD DOMINION UNIVERSITY	TONELSON, STEPHEN	3,212	13,260	0	12,320	28,792	0	28,792	0.00%	TRAD
300772-010	35%	OLD DOMINION UNIVERSITY	TONELSON, STEPHEN	307	10,254	0	0	10,561	845	11,406	8.00%	TRAD
300780-010	50%	OLD DOMINION UNIVERSITY	TONELSON, STEPHEN	0	0	0	32,750	32,750	0	32,750	0.00%	TRAD
300781-010	34%	OLD DOMINION UNIVERSITY	TONELSON, STEPHEN	0	3,196	0	0	3,196	256	3,452	8.01%	TRAD
300782-010	50%	OLD DOMINION UNIVERSITY	TONELSON, STEPHEN	2,601	49	0	0	2,650	212	2,862	8.00%	TRAD
100673-010	20%	NATIONAL SCIENCE FOUNDATION	WATSON, SILVANA	4,031	1,101	0	0	5,132	2,823	7,955	55.01%	TRAD
100923-010	50%	U.S. DEPARTMENT OF EDUCATION	WATSON, SILVANA	25,089	6,371	0	0	31,460	2,517	33,977	8.00%	TRAD
300396-010	34%	OLD DOMINION UNIVERSITY	WATSON, SILVANA	44,529	31,995	0	36,761	113,285	6,122	119,407	5.40%	TRAD

**SCHEDULE 4**  
**OLD DOMINION UNIVERSITY RESEARCH FOUNDATION**  
**SPONSORED PROGRAM ACTIVITY BY INDIVIDUAL PROJECT**  
 (MEASURED BY EXPENDITURES INCURRED)  
 FOR FISCAL YEAR 2022

PROJECT NUMBER	SPLIT	SPONSORING AGENCY	PRINCIPAL INVESTIGATOR / PROJECT DIRECTOR	PERSONNEL AND FRINGE BENEFITS	SUPPLIES, CONTRACTUAL, GENERAL, & TRAVEL	EQUIPMENT	STIPENDS, SUBCONTRACTS, TUITION, OTHER	TOTAL DIRECT COSTS	REIMBURSED INDIRECT COSTS	TOTAL PROJECT COSTS	EFFECTIVE INDIRECT COST RATE	ENTERPRISE CODE
TOTAL DEPARTMENT OF COMMUNICATION DISORDERS & SPECIAL EDUCATION				3,287,999	874,229	0	773,541	4,935,769	463,016	5,398,785	9.38%	
<b>DEPARTMENT OF EDUCATIONAL FOUNDATIONS &amp; LEADERSHIP</b>												
300749-020	No	OLD DOMINION UNIVERSITY	BARBER, MARGARET	0	0	60,000	60,000	0	60,000	0.00%	TRAD	
300710-010	No	MICHIGAN STATE UNIVERSITY	COMMODORE, FELECIA	26,784	0	0	0	26,784	14,731	41,515	55.00%	TRAD
300402-010	No	MICHIGAN STATE UNIVERSITY	PEREZ, ANTHONY	2,029	0	0	1,754	3,783	1,116	4,899	29.50%	TRAD
300607-010	No	MICHIGAN STATE UNIVERSITY	PEREZ, ANTHONY	47,248	7,867	0	8,225	63,340	30,314	93,654	47.86%	TRAD
400419-010	No	SPENCER FOUNDATION	PEREZ, ANTHONY	0	1,151	0	0	1,151	0	1,151	0.00%	TRAD
100673-010	20%	NATIONAL SCIENCE FOUNDATION	PRIBESH, SHANA	4,031	1,101	0	0	5,132	2,823	7,955	55.01%	TRAD
100709-010	20%	NATIONAL SCIENCE FOUNDATION	PRIBESH, SHANA	5,056	1,197	0	31,334	37,587	3,439	41,026	9.15%	TRAD
100856-010	20%	NATIONAL SCIENCE FOUNDATION	SANZO, KAREN	1,971	0	0	0	1,971	1,084	3,055	55.00%	TRAD
300697-010	25%	OLD DOMINION UNIVERSITY	SANZO, KAREN	0	130	0	0	130	72	202	55.38%	TRAD
300758-010	20%	OLD DOMINION UNIVERSITY	SANZO, KAREN	5,615	68	0	0	5,683	0	5,683	0.00%	TRAD
400471-010	No	SOUTHERN ASSOCIATION FOR COLLEGE STUDENT AFFAIRS (SACSA)	SMITHERS, LAURA	458	0	0	0	458	0	458	0.00%	TRAD
300612-010	No	UNIVERSITY OF VIRGINIA	WHITE, RACHEL	31,380	275	0	0	31,655	8,230	39,885	26.00%	TRAD
400401-010	No	SPENCER FOUNDATION	WHITE, RACHEL	3,092	3,289	0	0	6,381	0	6,381	0.00%	TRAD
TOTAL DEPARTMENT OF EDUCATIONAL FOUNDATIONS & LEADERSHIP				127,664	15,078	0	101,313	244,055	61,809	305,864	25.33%	
<b>DEPARTMENT OF EDUCATIONAL FOUNDATIONS &amp; LEADERSHIP - CENTER FOR CYBERSECURITY (CYBER)</b>												
100856-010	25%	NATIONAL SCIENCE FOUNDATION	SANZO, KAREN	(26)	0	0	850	824	(14)	810	-1.70%	CYBER
TOTAL DEPARTMENT OF EDUCATIONAL FOUNDATIONS & LEADERSHIP - CENTER FOR CYBERSECURITY (CYBER)				(26)	0	0	850	824	(14)	810	-1.70%	
<b>DEPARTMENT OF COUNSELING &amp; HUMAN SERVICES</b>												
100689-040	10%	U.S. PUBLIC HEALTH SERVICE (HEALTH RESOURCES AND SERVICES AD	CARLISLE, KRISTY	9,077	0	0	23,191	32,268	726	32,994	2.25%	TRAD
100819-010	10%	U.S. PUBLIC HEALTH SERVICE (HEALTH RESOURCES AND SERVICES AD	CARLISLE, KRISTY	7,922	0	0	12,900	20,822	634	21,456	3.04%	TRAD
100912-010	15%	U.S. PUBLIC HEALTH SERVICE (HEALTH RESOURCES AND SERVICES AD	CARLISLE, KRISTY	7,907	15	0	6,481	14,403	634	15,037	4.40%	TRAD
100912-010	5%	U.S. PUBLIC HEALTH SERVICE (HEALTH RESOURCES AND SERVICES AD	HARTSFIELD, JAMIE	2,636	5	0	2,160	4,801	211	5,012	4.39%	TRAD
100689-040	14%	U.S. PUBLIC HEALTH SERVICE (HEALTH RESOURCES AND SERVICES AD	KEMER, GULSAH	12,708	0	0	32,467	45,175	1,017	46,192	2.25%	TRAD
100689-040	24%	U.S. PUBLIC HEALTH SERVICE (HEALTH RESOURCES AND SERVICES AD	MOE, JEFFRY	14,271	0	0	30,458	44,729	1,142	45,871	2.55%	TRAD
100819-010	5%	U.S. PUBLIC HEALTH SERVICE (HEALTH RESOURCES AND SERVICES AD	MOE, JEFFRY	3,961	0	0	6,450	10,411	317	10,728	3.04%	TRAD
100689-040	10%	U.S. PUBLIC HEALTH SERVICE (HEALTH RESOURCES AND SERVICES AD	POPE, AMBER	5,946	0	0	12,691	18,637	476	19,113	2.55%	TRAD
100689-040	24%	U.S. PUBLIC HEALTH SERVICE (HEALTH RESOURCES AND SERVICES AD	POPE, AMBER	7,514	0	0	25,200	32,714	601	33,315	1.84%	TRAD
100689-040	25%	U.S. PUBLIC HEALTH SERVICE (HEALTH RESOURCES AND SERVICES AD	REHFUSS, MARK	14,865	0	0	31,727	46,592	1,189	47,781	2.55%	TRAD
100689-040	45%	U.S. PUBLIC HEALTH SERVICE (HEALTH RESOURCES AND SERVICES AD	REHFUSS, MARK	14,089	0	0	47,250	61,339	1,127	62,466	1.84%	TRAD
100819-010	35%	U.S. PUBLIC HEALTH SERVICE (HEALTH RESOURCES AND SERVICES AD	REHFUSS, MARK	27,727	0	0	45,150	72,877	2,218	75,095	3.04%	TRAD
100912-010	35%	U.S. PUBLIC HEALTH SERVICE (HEALTH RESOURCES AND SERVICES AD	REHFUSS, MARK	18,449	34	0	15,122	33,605	1,479	35,084	4.40%	TRAD
100912-010	5%	U.S. PUBLIC HEALTH SERVICE (HEALTH RESOURCES AND SERVICES AD	SAWYER, JASON	2,636	5	0	2,160	4,801	211	5,012	4.39%	TRAD
100819-010	10%	U.S. PUBLIC HEALTH SERVICE (HEALTH RESOURCES AND SERVICES AD	SIMMONS, JENNIFER	7,922	0	0	12,900	20,822	634	21,456	3.04%	TRAD
100912-010	15%	U.S. PUBLIC HEALTH SERVICE (HEALTH RESOURCES AND SERVICES AD	SIMMONS, JENNIFER	7,907	15	0	6,481	14,403	634	15,037	4.40%	TRAD
100857-020	5%	U.S. PUBLIC HEALTH SERVICE (HEALTH RESOURCES AND SERVICES AD	SIMMONS, JENNIFER	8,278	1,736	621	0	10,635	801	11,436	7.53%	TRAD
100819-010	17%	U.S. PUBLIC HEALTH SERVICE (HEALTH RESOURCES AND SERVICES AD	SPARKMAN-KEY, NARKECCA	13,467	0	0	21,930	35,397	1,077	36,474	3.04%	TRAD
100912-010	15%	U.S. PUBLIC HEALTH SERVICE (HEALTH RESOURCES AND SERVICES AD	SPARKMAN-KEY, NARKECCA	7,907	15	0	6,481	14,403	634	15,037	4.40%	TRAD
100819-010	10%	U.S. PUBLIC HEALTH SERVICE (HEALTH RESOURCES AND SERVICES AD	TARVER, SHUNTAY	7,922	0	0	12,900	20,822	634	21,456	3.04%	TRAD
100912-010	5%	U.S. PUBLIC HEALTH SERVICE (HEALTH RESOURCES AND SERVICES AD	TARVER, SHUNTAY	2,636	5	0	2,160	4,801	211	5,012	4.39%	TRAD
100819-010	10%	U.S. PUBLIC HEALTH SERVICE (HEALTH RESOURCES AND SERVICES AD	WINFIELD, CHANIECE	7,922	0	0	12,900	20,822	634	21,456	3.04%	TRAD
100912-010	5%	U.S. PUBLIC HEALTH SERVICE (HEALTH RESOURCES AND SERVICES AD	WINFIELD, CHANIECE	2,636	5	0	2,160	4,801	211	5,012	4.39%	TRAD
TOTAL DEPARTMENT OF COUNSELING & HUMAN SERVICES				216,305	1,835	621	371,319	590,080	17,452	607,532	2.96%	
<b>DEPARTMENT OF COUNSELING &amp; HUMAN SERVICES - CENTER FOR CYBERSECURITY (CYBER)</b>												
300698-010	20%	OLD DOMINION UNIVERSITY	DICE, TAMMI	2,158	187	0	413	2,758	1,290	4,048	46.77%	CYBER
TOTAL DEPARTMENT OF COUNSELING & HUMAN SERVICES - CENTER FOR CYBERSECURITY (CYBER)				2,158	187	0	413	2,758	1,290	4,048	46.77%	
TOTAL DARDEN COLLEGE OF EDUCATION & PROFESSIONAL STUDIES				4,269,424	1,182,440	621	2,622,989	8,075,474	722,859	8,798,333	8.95%	

**SCHEDULE 4**  
**OLD DOMINION UNIVERSITY RESEARCH FOUNDATION**  
**SPONSORED PROGRAM ACTIVITY BY INDIVIDUAL PROJECT**  
 (MEASURED BY EXPENDITURES INCURRED)  
 FOR FISCAL YEAR 2022

PROJECT NUMBER	SPLIT	SPONSORING AGENCY	PRINCIPAL INVESTIGATOR / PROJECT DIRECTOR	PERSONNEL AND FRINGE BENEFITS	SUPPLIES, CONTRACTUAL, GENERAL, & TRAVEL	EQUIPMENT	STIPENDS, SUBCONTRACTS, TUITION, OTHER	TOTAL DIRECT COSTS	REIMBURSED INDIRECT COSTS	TOTAL PROJECT COSTS	EFFECTIVE INDIRECT COST RATE	ENTERPRISE CODE
<b>BATTEN COLLEGE OF ENGINEERING &amp; TECHNOLOGY</b>												
<b>DEAN, BATTEN COLLEGE OF ENGINEERING &amp; TECHNOLOGY</b>												
100708-010	30%	NATIONAL SCIENCE FOUNDATION	DEAN, ANTHONY	7,633	155	0	18,000	25,788	4,283	30,071	16.61%	TRAD
100720-010	51%	OFFICE OF NAVAL RESEARCH	DEAN, ANTHONY	41,468	0	0	0	41,468	41,982	83,450	101.24%	TRAD
100839-010	33%	OFFICE OF NAVAL RESEARCH	DEAN, ANTHONY	3,871	2,737	0	11,587	18,195	3,635	21,830	19.98%	TRAD
100880-010	25%	NATIONAL SECURITY AGENCY	DEAN, ANTHONY	2,034	408	0	1,949	4,391	1,343	5,734	30.59%	TRAD
100708-010	15%	NATIONAL SCIENCE FOUNDATION	LANDAETA, RAFAEL	3,817	77	0	9,000	12,894	2,142	15,036	16.61%	TRAD
100720-010	49%	OFFICE OF NAVAL RESEARCH	LANDAETA, RAFAEL	39,842	0	0	0	39,842	40,336	80,178	101.24%	TRAD
300447-010	No	UNIVERSITY OF VIRGINIA	LANDAETA, RAFAEL	0	0	0	(2,000)	(2,000)	0	(2,000)	0.00%	TRAD
300447-011	No	UNIVERSITY OF VIRGINIA	LANDAETA, RAFAEL	10,217	0	0	11,515	21,732	3,255	24,987	14.98%	TRAD
300447-012	No	UNIVERSITY OF VIRGINIA	LANDAETA, RAFAEL	0	0	0	257	257	0	257	0.00%	TRAD
300485-010	20%	SOUTH DAKOTA SCHOOL OF MINES AND TECHNOLOGY	STUART, BEN	10,989	430	0	0	11,419	6,280	17,699	55.00%	TRAD
<b>TOTAL DEAN, BATTEN COLLEGE OF ENGINEERING &amp; TECHNOLOGY</b>				<b>119,871</b>	<b>3,807</b>	<b>0</b>	<b>50,308</b>	<b>173,986</b>	<b>103,256</b>	<b>277,242</b>	<b>59.35%</b>	
<b>DEPARTMENT OF CIVIL &amp; ENVIRONMENTAL ENGINEERING</b>												
100876-010	50%	NATIONAL SCIENCE FOUNDATION	CETIN, MECIT	36,659	14,665	0	8,249	59,573	28,228	87,801	47.38%	TRAD
200316-010	25%	VA TRANSPORTATION RESEARCH COUNCIL	CETIN, MECIT	4,235	0	0	0	4,235	1,101	5,336	26.00%	TRAD
200317-010	50%	VA TRANSPORTATION RESEARCH COUNCIL	CETIN, MECIT	1,288	0	0	0	1,288	335	1,623	26.01%	TRAD
200351-010	28%	VA TRANSPORTATION RESEARCH COUNCIL	CETIN, MECIT	18,452	0	0	0	18,452	4,798	23,250	26.00%	TRAD
300783-010	60%	GEORGE MASON UNIVERSITY	CETIN, MECIT	1,544	0	0	0	1,544	401	1,945	25.97%	TRAD
400514-010	63%	THE NATIONAL ACADEMIES	CETIN, MECIT	5,311	1,887	0	0	7,198	3,959	11,157	55.00%	TRAD
300030-016	20%	UNIVERSITY OF VIRGINIA	ERTEN-UNAL, MUJDE	6,513	1,208	0	0	7,721	0	7,721	0.00%	TRAD
300030-017	12%	UNIVERSITY OF VIRGINIA	ERTEN-UNAL, MUJDE	0	44	0	2,442	2,486	0	2,486	0.00%	TRAD
300674-010	20%	OLD DOMINION UNIVERSITY	ERTEN-UNAL, MUJDE	17,425	539	0	0	17,964	9,880	27,844	55.00%	TRAD
200325-010	30%	VA TRANSPORTATION RESEARCH COUNCIL	ISHAK, SHERIF	11,084	0	0	0	11,084	2,882	13,966	26.00%	TRAD
200351-010	24%	VA TRANSPORTATION RESEARCH COUNCIL	ISHAK, SHERIF	15,816	0	0	0	15,816	4,112	19,928	26.00%	TRAD
200366-010	20%	VA TRANSPORTATION RESEARCH COUNCIL	ISHAK, SHERIF	541	84	0	0	625	162	787	25.92%	TRAD
400514-010	33%	THE NATIONAL ACADEMIES	ISHAK, SHERIF	2,762	981	0	0	3,743	2,059	5,802	55.01%	TRAD
100836-010	No	NATIONAL RENEWABLE ENERGY LABORATORY	KUMAR, SANDEEP	15,268	768	0	0	16,036	0	16,036	0.00%	TRAD
100847-010	50%	NATIONAL SCIENCE FOUNDATION	KUMAR, SANDEEP	1,810	1,910	0	18,534	22,254	2,046	24,300	9.19%	TRAD
100860-010	No	NATIONAL SCIENCE FOUNDATION	KUMAR, SANDEEP	0	370	0	0	370	203	573	54.86%	TRAD
100867-010	No	SANDIA NATIONAL LABORATORIES	KUMAR, SANDEEP	2,548	63	0	0	2,611	0	2,611	0.00%	TRAD
300485-010	80%	SOUTH DAKOTA SCHOOL OF MINES AND TECHNOLOGY	KUMAR, SANDEEP	43,956	1,719	0	0	45,675	25,121	70,796	55.00%	TRAD
300533-010	No	MONTANA STATE UNIVERSITY NORTHERN	KUMAR, SANDEEP	7,917	1,601	0	0	9,518	4,079	13,597	42.86%	TRAD
300662-010	40%	OLD DOMINION UNIVERSITY	KUMAR, SANDEEP	15,569	136	0	0	15,705	628	16,333	4.00%	TRAD
200304-010	No	HAMPTON ROADS SANITATION DISTRICT COMMISSION	SCHAFRAN, GARY	2,133	0	0	0	2,133	533	2,666	24.99%	TRAD
200304-020	No	HAMPTON ROADS SANITATION DISTRICT COMMISSION	SCHAFRAN, GARY	113,558	49,389	32,361	0	195,308	40,737	236,045	20.86%	TRAD
200304-030	No	HAMPTON ROADS SANITATION DISTRICT COMMISSION	SCHAFRAN, GARY	43,705	0	0	15,630	59,335	10,926	70,261	18.41%	TRAD
300662-010	30%	OLD DOMINION UNIVERSITY	SCHAFRAN, GARY	11,677	102	0	0	11,779	471	12,250	4.00%	TRAD
500408-010	No	HAZEN AND SAWYER, P.C.	SCHAFRAN, GARY	0	0	0	13,093	13,093	3,274	16,367	25.01%	TRAD
500441-011	No	DEWBERRY	SCHAFRAN, GARY	502	0	0	7,970	8,472	2,118	10,590	25.00%	TRAD
200356-010	No	HAMPTON ROADS SANITATION DISTRICT COMMISSION	SCHAFRAN, GARY	25,721	0	0	13,242	38,963	6,430	45,393	16.50%	TRAD
100876-012	No	NATIONAL SCIENCE FOUNDATION	TAHVILDARI, NAVID	35,217	0	0	0	35,217	19,369	54,586	55.00%	TRAD
200359-010	No	CHESAPEAKE BAY BRIDGE TUNNEL	TAHVILDARI, NAVID	5,192	340	0	0	5,532	1,438	6,970	25.99%	TRAD
300617-010	No	VA INSTITUTE OF MARINE SCIENCE	TAHVILDARI, NAVID	22,475	611	0	0	23,086	0	23,086	0.00%	TRAD
300773-010	No	OLD DOMINION UNIVERSITY	TAHVILDARI, NAVID	3,818	927	0	0	4,745	0	4,745	0.00%	TRAD
400413-010	No	JEFFRESS RESEARCH GRANTS PROGRAM	TAHVILDARI, NAVID	10,861	1,534	0	0	12,395	0	12,395	0.00%	TRAD
500408-011	No	HAZEN AND SAWYER, P.C.	TAHVILDARI, NAVID	0	0	0	3,660	3,660	915	4,575	25.00%	TRAD
500441-010	No	DEWBERRY	TAHVILDARI, NAVID	1,355	0	0	777	2,132	533	2,665	25.00%	TRAD
100653-010	No	NATIONAL SCIENCE FOUNDATION	WANG, XIXI	0	9,714	(18)	20,917	30,613	2,526	33,139	8.25%	TRAD
200316-010	45%	VA TRANSPORTATION RESEARCH COUNCIL	XIE, KUN	7,623	0	0	0	7,623	1,982	9,605	26.00%	TRAD
200317-010	25%	VA TRANSPORTATION RESEARCH COUNCIL	XIE, KUN	644	0	0	0	644	167	811	25.93%	TRAD
200325-010	30%	VA TRANSPORTATION RESEARCH COUNCIL	XIE, KUN	11,084	0	0	0	11,084	2,882	13,966	26.00%	TRAD

**SCHEDULE 4**  
**OLD DOMINION UNIVERSITY RESEARCH FOUNDATION**  
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(MEASURED BY EXPENDITURES INCURRED)  
FOR FISCAL YEAR 2022

PROJECT NUMBER	SPLIT	SPONSORING AGENCY	PRINCIPAL INVESTIGATOR / PROJECT DIRECTOR	PERSONNEL AND FRINGE BENEFITS	SUPPLIES, CONTRACTUAL, GENERAL, & TRAVEL	EQUIPMENT	STIPENDS, SUBCONTRACTS, TUITION, OTHER	TOTAL DIRECT COSTS	REIMBURSED INDIRECT COSTS	TOTAL PROJECT COSTS	EFFECTIVE INDIRECT COST RATE	ENTERPRISE CODE	
200338-010	50%	VA DEPARTMENT OF TRANSPORTATION	XIE, KUN	8,791	0	0	0	8,791	2,286	11,077	26.00%	TRAD	
200351-010	24%	VA TRANSPORTATION RESEARCH COUNCIL	XIE, KUN	15,816	0	0	0	15,816	4,112	19,928	26.00%	TRAD	
200361-010	60%	VA TRANSPORTATION RESEARCH COUNCIL	XIE, KUN	18,921	0	0	0	18,921	4,919	23,840	26.00%	TRAD	
200366-010	50%	VA TRANSPORTATION RESEARCH COUNCIL	XIE, KUN	1,353	209	0	0	1,562	406	1,968	25.99%	TRAD	
400466-010	50%	NATIONAL ACADEMY OF SCIENCES (NAS)	XIE, KUN	5,353	6,584	0	0	11,937	6,565	18,502	55.00%	TRAD	
300662-010	30%	OLD DOMINION UNIVERSITY	YOON, JAEWAN	11,677	102	0	0	11,779	471	12,250	4.00%	TRAD	
<b>TOTAL DEPARTMENT OF CIVIL &amp; ENVIRONMENTAL ENGINEERING</b>				<b>566,174</b>	<b>95,487</b>	<b>32,343</b>	<b>104,514</b>	<b>798,518</b>	<b>203,054</b>	<b>1,001,572</b>	<b>25.43%</b>		
<b>DEPARTMENT OF ELECTRICAL &amp; COMPUTER ENGINEERING</b>													
500420-010	No	GREAT LAKES SYSTEMS AND TECHNOLOGY	BELFOR, LEE	2,121	7,396	0	0	9,517	5,235	14,752	55.01%	TRAD	
300487-010	No	OLD DOMINION UNIVERSITY	BULYSHEVA, ANNA	0	0	0	124	124	37	161	29.84%	TRAD	
500381-010	No	LIFENET	BULYSHEVA, ANNA	0	0	0	713	713	214	927	30.01%	TRAD	
500417-010	No	EMBODY	BULYSHEVA, ANNA	29,885	30,026	0	0	59,911	32,951	92,862	55.00%	TRAD	
100820-010	No	U.S. DEPARTMENT OF ENERGY	DHALI, SHIRSHAK	45,719	3,432	0	0	49,151	27,033	76,184	55.00%	TRAD	
100720-021	No	OFFICE OF NAVAL RESEARCH	ELSAYED-ALI, HANI	4,298	9,291	4,565	0	18,154	0	18,154	0.00%	TRAD	
400345-010	No	NATIONAL INSTITUTE OF AEROSPACE ASSOCIATES (NIA)	GONZALEZ, OSCAR	0	0	0	(5)	(5)	0	0	(5)	0.00%	TRAD
400345-020	No	NATIONAL INSTITUTE OF AEROSPACE ASSOCIATES (NIA)	GONZALEZ, OSCAR	19,817	0	0	0	19,817	5,152	24,969	26.00%	TRAD	
500463-001	7%	BOOZ ALLEN AND HAMILTON, INC. (BAH)	GONZALEZ, OSCAR	5,604	0	0	0	5,604	3,082	8,686	55.00%	TRAD	
100594-010	No	U.S. PUBLIC HEALTH SERVICE (INCLUDING NIH)	IFTEKHARUDDIN, KHAN	97,461	1,007	23,503	7,110	129,081	54,157	183,238	41.96%	TRAD	
100594-030	No	U.S. PUBLIC HEALTH SERVICE (INCLUDING NIH)	IFTEKHARUDDIN, KHAN	4,668	11,409	0	557	16,634	8,843	25,477	53.16%	TRAD	
100594-040	No	U.S. PUBLIC HEALTH SERVICE (INCLUDING NIH)	IFTEKHARUDDIN, KHAN	6,225	0	0	0	6,225	3,424	9,649	55.00%	TRAD	
100659-010	No	ARMY CONTRACTING COMMAND	IFTEKHARUDDIN, KHAN	11,236	(4,700)	0	0	6,536	3,595	10,131	55.00%	TRAD	
100666-020	No	NATIONAL SCIENCE FOUNDATION	IFTEKHARUDDIN, KHAN	0	0	0	18,152	18,152	0	18,152	0.00%	TRAD	
100666-030	100%	NATIONAL SCIENCE FOUNDATION	IFTEKHARUDDIN, KHAN	0	0	0	25,536	25,536	0	25,536	0.00%	TRAD	
100838-010	50%	NATIONAL SCIENCE FOUNDATION	IFTEKHARUDDIN, KHAN	1,377	4,001	0	28,055	33,433	2,958	36,391	8.85%	TRAD	
100876-010	50%	NATIONAL SCIENCE FOUNDATION	IFTEKHARUDDIN, KHAN	36,659	14,665	0	8,249	59,573	28,228	87,801	47.38%	TRAD	
300623-010	30%	HOWARD UNIVERSITY	IFTEKHARUDDIN, KHAN	43,665	588	0	3,092	47,345	24,339	71,684	51.41%	TRAD	
300714-010	40%	OLD DOMINION UNIVERSITY	IFTEKHARUDDIN, KHAN	10,741	0	0	13,947	24,688	5,907	30,595	23.93%	TRAD	
300726-010	No	VIRGINIA COMMONWEALTH UNIVERSITY	IFTEKHARUDDIN, KHAN	75,501	0	0	0	75,501	0	75,501	0.00%	TRAD	
400346-044	No	JEFFERSON SCIENCE ASSOCIATES, LLC (JEFFERSON LAB)	IFTEKHARUDDIN, KHAN	18,889	0	0	0	18,889	0	18,889	0.00%	TRAD	
400346-061	No	JEFFERSON SCIENCE ASSOCIATES, LLC (JEFFERSON LAB)	IFTEKHARUDDIN, KHAN	5,621	0	0	0	5,621	0	5,621	0.00%	TRAD	
100915-010	33%	NATIONAL SECURITY AGENCY	LI, JIANG	4,213	0	0	0	4,213	2,317	6,530	55.00%	TRAD	
100921-010	33%	NASA/HEADQUARTERS	LI, JIANG	2,908	548	0	0	3,456	1,901	5,357	55.01%	TRAD	
300703-010	30%	OLD DOMINION UNIVERSITY	LI, JIANG	10,133	357	0	0	10,490	0	10,490	0.00%	TRAD	
300706-010	10%	STEVENS INSTITUTE OF TECHNOLOGY	LI, JIANG	7,960	43	0	0	8,003	4,402	12,405	55.00%	TRAD	
300737-010	33%	OLD DOMINION UNIVERSITY	LI, JIANG	7,842	2,610	0	0	10,452	0	10,452	0.00%	TRAD	
300760-010	50%	OLD DOMINION UNIVERSITY	LI, JIANG	2,260	9,501	0	0	11,761	0	11,761	0.00%	TRAD	
400346-060	No	JEFFERSON SCIENCE ASSOCIATES, LLC (JEFFERSON LAB)	LI, JIANG	11,891	0	0	0	11,891	0	11,891	0.00%	TRAD	
500312-030	No	APPLIED RESEARCH LLC	LI, JIANG	9,642	0	0	2,845	12,487	6,868	19,355	55.00%	TRAD	
500453-010	No	APPLIED RESEARCH LLC	LI, JIANG	13,017	0	0	0	13,017	7,160	20,177	55.00%	TRAD	
300436-010	50%	COLORADO SCHOOL OF MINES	MARSILLAC, SYLVAIN	35,307	17,510	0	0	52,817	29,050	81,867	55.00%	TRAD	
400346-058	No	JEFFERSON SCIENCE ASSOCIATES, LLC (JEFFERSON LAB)	MARSILLAC, SYLVAIN	5,700	0	0	0	5,700	0	5,700	0.00%	TRAD	
400468-010	50%	JEFFERSON SCIENCE ASSOCIATES, LLC (JEFFERSON LAB)	MARSILLAC, SYLVAIN	6,219	20,574	0	0	26,793	14,736	41,529	55.00%	TRAD	
100846-013	60%	LANGLEY RESEARCH CENTER	POPESCU, DIMITRIE	0	2,107	0	0	2,107	0	2,107	0.00%	TRAD	
500463-001	31%	BOOZ ALLEN AND HAMILTON, INC. (BAH)	POPESCU, DIMITRIE	24,816	0	0	0	24,816	13,649	38,465	55.00%	TRAD	
100720-024	No	OFFICE OF NAVAL RESEARCH	VAHALA, LINDA	0	13,532	0	0	13,532	0	13,532	0.00%	TRAD	
100891-010	No	OFFICE OF NAVAL RESEARCH	VAHALA, LINDA	0	23,336	0	0	23,336	12,835	36,171	55.00%	TRAD	
100901-010	No	U.S. DEPARTMENT OF ENERGY	VAHALA, LINDA	22,452	4,095	0	0	26,547	14,601	41,148	55.00%	TRAD	
300567-010	15%	OLD DOMINION UNIVERSITY	VAHALA, LINDA	12,183	2,873	0	1,809	16,865	1,204	18,069	7.14%	TRAD	
<b>TOTAL DEPARTMENT OF ELECTRICAL &amp; COMPUTER ENGINEERING</b>				<b>596,030</b>	<b>174,201</b>	<b>28,068</b>	<b>110,184</b>	<b>908,483</b>	<b>313,878</b>	<b>1,222,361</b>	<b>34.55%</b>		
<b>DEPARTMENT OF ELECTRICAL &amp; COMPUTER ENGINEERING - APPLIED RESEARCH CENTER (ARC)</b>													
100917-010	50%	U.S. DEPARTMENT OF ENERGY	BAUMGART, HELMUT	19,691	4,844	0	0	24,535	6,379	30,914	26.00%	ARC	
400346-043	No	JEFFERSON SCIENCE ASSOCIATES, LLC (JEFFERSON LAB)	BAUMGART, HELMUT	28,217	0	0	0	28,217	0	28,217	0.00%	ARC	

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PROJECT NUMBER	SPLIT	SPONSORING AGENCY	PRINCIPAL INVESTIGATOR / PROJECT DIRECTOR	PERSONNEL AND FRINGE BENEFITS	SUPPLIES, CONTRACTUAL, GENERAL, & TRAVEL	EQUIPMENT	STIPENDS, SUBCONTRACTS, TUITION, OTHER	TOTAL DIRECT COSTS	REIMBURSED INDIRECT COSTS	TOTAL PROJECT COSTS	EFFECTIVE INDIRECT COST RATE	ENTERPRISE CODE
100567-020	No	LANGLEY RESEARCH CENTER	ELSAYED-ALI, HANI	1,019	0	0	0	1,019	265	1,284	26.01%	ARC
100674-010	No	NATIONAL SCIENCE FOUNDATION	ELSAYED-ALI, HANI	17,588	485	0	0	18,073	9,940	28,013	55.00%	ARC
100886-010	No	FERMI NATIONAL ACCELERATOR LABORATORY	ELSAYED-ALI, HANI	0	0	31,850	0	31,850	0	31,850	0.00%	ARC
100902-010	No	FERMI NATIONAL ACCELERATOR LABORATORY	ELSAYED-ALI, HANI	23,042	775	0	7,099	30,916	6,192	37,108	20.03%	ARC
100918-010	No	U.S. DEPARTMENT OF ENERGY	ELSAYED-ALI, HANI	23,995	3,734	0	1,881	29,610	15,251	44,861	51.51%	ARC
100922-010	No	FERMI NATIONAL ACCELERATOR LABORATORY	ELSAYED-ALI, HANI	0	5,586	0	0	5,586	3,072	8,658	54.99%	ARC
300608-010	No	ELIZABETH CITY STATE UNIVERSITY	ELSAYED-ALI, HANI	12,205	0	0	0	12,205	6,713	18,918	55.00%	ARC
400346-011	No	JEFFERSON SCIENCE ASSOCIATES, LLC (JEFFERSON LAB)	ELSAYED-ALI, HANI	4,608	(12,945)	18,539	0	10,202	0	10,202	0.00%	ARC
400346-048	No	JEFFERSON SCIENCE ASSOCIATES, LLC (JEFFERSON LAB)	ELSAYED-ALI, HANI	27,464	0	0	0	27,464	0	27,464	0.00%	ARC
500378-010	No	FACE CONSTRUCTION TECHNOLOGIES	ELSAYED-ALI, HANI	8,325	33	0	0	8,358	4,597	12,955	55.00%	ARC
500415-020	No	QINETIQ (MTEQ)	ELSAYED-ALI, HANI	0	0	0	200	200	0	200	0.00%	ARC
500429-010	No	BSCS SYSTEMS, INC.	ELSAYED-ALI, HANI	11,046	0	0	0	11,046	2,872	13,918	26.00%	ARC
500432-010	No	BNNT, LLC	ELSAYED-ALI, HANI	0	2,625	0	0	2,625	1,444	4,069	55.01%	ARC
500439-010	No	EMBODY	ELSAYED-ALI, HANI	0	58	0	0	58	32	90	55.17%	ARC
500449-010	No	LIFENET	ELSAYED-ALI, HANI	0	283	0	17	300	165	465	55.00%	ARC
300436-010	50%	COLORADO SCHOOL OF MINES	MARSILLAC, SYLVAIN	35,307	17,510	0	0	52,817	29,050	81,867	55.00%	ARC
400468-010	50%	JEFFERSON SCIENCE ASSOCIATES, LLC (JEFFERSON LAB)	MARSILLAC, SYLVAIN	6,219	20,574	0	0	26,793	14,736	41,529	55.00%	ARC
100903-010	80%	NATIONAL SCIENCE FOUNDATION	NAMKOONG, GON	9,256	3,234	0	0	12,490	6,870	19,360	55.00%	ARC
300392-010	No	NORFOLK STATE UNIVERSITY	NAMKOONG, GON	7,774	0	0	0	7,774	4,276	12,050	55.00%	ARC
<b>TOTAL DEPARTMENT OF ELECTRICAL &amp; COMPUTER ENGINEERING - APPLIED RESEARCH CENTER (ARC)</b>				<b>235,756</b>	<b>46,796</b>	<b>50,389</b>	<b>9,197</b>	<b>342,138</b>	<b>111,854</b>	<b>453,992</b>	<b>32.69%</b>	

**DEPARTMENT OF ELECTRICAL & COMPUTER ENGINEERING - CENTER FOR CYBERSECURITY (CYBER)**

100709-010	20%	NATIONAL SCIENCE FOUNDATION	WU, HONGYI	5,056	1,197	0	31,334	37,587	3,439	41,026	9.15%	CYBER
100723-010	34%	NATIONAL SCIENCE FOUNDATION	WU, HONGYI	21,871	0	0	0	21,871	12,029	33,900	55.00%	CYBER
100814-010	35%	NATIONAL SCIENCE FOUNDATION	WU, HONGYI	19,022	16,088	0	4,305	39,415	19,311	58,726	48.99%	CYBER
100856-010	20%	NATIONAL SCIENCE FOUNDATION	WU, HONGYI	1,971	0	0	0	1,971	1,084	3,055	55.00%	CYBER
100856-010	25%	NATIONAL SCIENCE FOUNDATION	WU, HONGYI	(26)	0	0	850	824	(14)	810	-1.70%	CYBER
100866-010	No	NATIONAL SCIENCE FOUNDATION	WU, HONGYI	0	508	0	0	508	132	640	25.98%	CYBER
100892-010	10%	NATIONAL SCIENCE FOUNDATION	WU, HONGYI	8,156	4,535	0	23,839	36,530	6,980	43,510	19.11%	CYBER
100896-010	20%	NATIONAL SECURITY AGENCY	WU, HONGYI	11,115	(66)	0	2,912	13,961	6,077	20,038	43.53%	CYBER
100906-010	20%	INSTITUTE OF MUSEUM AND LIBRARY SERVICES	WU, HONGYI	4,604	161	0	0	4,765	1,525	6,290	32.00%	CYBER
300567-010	15%	OLD DOMINION UNIVERSITY	WU, HONGYI	12,183	2,873	0	1,809	16,865	1,204	18,069	7.14%	CYBER
300594-010	20%	OLD DOMINION UNIVERSITY	WU, HONGYI	524	1,569	0	2,644	4,737	1,151	5,888	24.30%	CYBER
300623-010	30%	HOWARD UNIVERSITY	WU, HONGYI	43,665	588	0	3,092	47,345	24,339	71,684	51.41%	CYBER
300733-010	No	OLD DOMINION UNIVERSITY	WU, HONGYI	4,202	0	0	0	4,202	0	4,202	0.00%	CYBER
100709-010	40%	NATIONAL SCIENCE FOUNDATION	XIN, CHUNSHENG	10,112	2,394	0	62,668	75,174	6,878	82,052	9.15%	CYBER
100838-010	50%	NATIONAL SCIENCE FOUNDATION	XIN, CHUNSHENG	1,377	4,001	0	28,055	33,433	2,958	36,391	8.85%	CYBER
100839-010	33%	OFFICE OF NAVAL RESEARCH	XIN, CHUNSHENG	6,510	3,472	0	13,237	23,219	5,490	28,709	23.64%	CYBER
100856-010	20%	NATIONAL SCIENCE FOUNDATION	XIN, CHUNSHENG	1,971	0	0	0	1,971	1,084	3,055	55.00%	CYBER
100856-010	25%	NATIONAL SCIENCE FOUNDATION	XIN, CHUNSHENG	(26)	0	0	850	824	(14)	810	-1.70%	CYBER
100880-010	25%	NATIONAL SECURITY AGENCY	XIN, CHUNSHENG	1,959	433	0	1,949	4,341	1,315	5,656	30.29%	CYBER
100892-010	10%	NATIONAL SCIENCE FOUNDATION	XIN, CHUNSHENG	8,156	4,535	0	23,839	36,530	6,980	43,510	19.11%	CYBER
100896-010	30%	NATIONAL SECURITY AGENCY	XIN, CHUNSHENG	16,672	(98)	0	4,368	20,942	9,116	30,058	43.53%	CYBER
100908-010	30%	NATIONAL SECURITY AGENCY	XIN, CHUNSHENG	8,349	987	0	42,759	52,095	5,134	57,229	9.86%	CYBER
300594-010	30%	OLD DOMINION UNIVERSITY	XIN, CHUNSHENG	786	2,354	0	3,966	7,106	1,727	8,833	24.30%	CYBER
300697-010	25%	OLD DOMINION UNIVERSITY	XIN, CHUNSHENG	0	130	0	0	130	72	202	55.38%	CYBER
300698-010	30%	OLD DOMINION UNIVERSITY	XIN, CHUNSHENG	3,237	281	0	619	4,137	1,935	6,072	46.77%	CYBER
300705-010	50%	OLD DOMINION UNIVERSITY	XIN, CHUNSHENG	7,632	10,293	6,312	0	24,237	0	24,237	0.00%	CYBER
300715-010	50%	OLD DOMINION UNIVERSITY	XIN, CHUNSHENG	9,043	3,903	0	0	12,946	0	12,946	0.00%	CYBER
300718-010	50%	COLLEGE OF WILLIAM AND MARY	XIN, CHUNSHENG	0	3,137	0	0	3,137	0	3,137	0.00%	CYBER
300737-010	33%	OLD DOMINION UNIVERSITY	XIN, CHUNSHENG	7,842	2,610	0	0	10,452	0	10,452	0.00%	CYBER
300738-010	33%	OLD DOMINION UNIVERSITY	XIN, CHUNSHENG	0	114	0	0	114	0	114	0.00%	CYBER
300776-010	50%	VA POLYTECHNIC INSTITUTE AND STATE UNIVERSITY	XIN, CHUNSHENG	0	247	0	0	247	136	383	55.06%	CYBER
400475-010	20%	VA TECH ARC	XIN, CHUNSHENG	55,204	2,444	1,041	5,295	63,984	33,223	97,207	51.92%	CYBER

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PROJECT NUMBER	SPLIT	SPONSORING AGENCY	PRINCIPAL INVESTIGATOR / PROJECT DIRECTOR	PERSONNEL AND FRINGE BENEFITS	SUPPLIES, CONTRACTUAL, GENERAL, & TRAVEL	EQUIPMENT	STIPENDS, SUBCONTRACTS, TUITION, OTHER	TOTAL DIRECT COSTS	REIMBURSED INDIRECT COSTS	TOTAL PROJECT COSTS	EFFECTIVE INDIRECT COST RATE	ENTERPRISE CODE
<b>TOTAL DEPARTMENT OF ELECTRICAL &amp; COMPUTER ENGINEERING - CENTER FOR CYBERSECURITY (CYBER)</b>				<b>271,167</b>	<b>68,690</b>	<b>7,353</b>	<b>258,390</b>	<b>605,600</b>	<b>153,291</b>	<b>758,891</b>	<b>25.31%</b>	
<b>DEPARTMENT OF ELECTRICAL &amp; COMPUTER ENGINEERING - FRANK REIDY RESEARCH CENTER FOR BIOELECTRICS (CBE)</b>												
100661-010	No	AIR FORCE RESEARCH LABORATORY	JIANG, CHUNQI	93,747	17,689	12,030	3,791	127,257	61,290	188,547	48.16%	CBE
300595-010	No	UNIVERSITY OF SOUTH FLORIDA	JIANG, CHUNQI	20,127	11,584	0	0	31,711	17,441	49,152	55.00%	CBE
300757-010	No	OLD DOMINION UNIVERSITY	JIANG, CHUNQI	0	0	30,372	0	30,372	0	30,372	0.00%	CBE
<b>TOTAL DEPARTMENT OF ELECTRICAL &amp; COMPUTER ENGINEERING - FRANK REIDY RESEARCH CENTER FOR BIOELECTRICS (CBE)</b>				<b>113,874</b>	<b>29,273</b>	<b>42,402</b>	<b>3,791</b>	<b>189,340</b>	<b>78,731</b>	<b>268,071</b>	<b>41.58%</b>	
<b>DEPARTMENT OF MECHANICAL &amp; AEROSPACE ENGINEERING</b>												
100720-022	No	OFFICE OF NAVAL RESEARCH	ALBERTS, THOMAS	3,922	4,835	0	0	8,757	0	8,757	0.00%	TRAD
300030-016	5%	UNIVERSITY OF VIRGINIA	ALBERTS, THOMAS	1,628	302	0	0	1,930	0	1,930	0.00%	TRAD
100846-011	25%	LANGLEY RESEARCH CENTER	ASH, ROBERT	1,002	684	0	488	2,174	0	2,174	0.00%	TRAD
100827-010	No	NATIONAL SCIENCE FOUNDATION	ASUNDI, SHARANABASAWESHWARA	10,877	3,661	0	12,564	27,102	7,995	35,097	29.50%	TRAD
100846-013	20%	LANGLEY RESEARCH CENTER	ASUNDI, SHARANABASAWESHWARA	0	702	0	0	702	0	702	0.00%	TRAD
300669-001	No	OLD DOMINION UNIVERSITY	ASUNDI, SHARANABASAWESHWARA	5,921	81	0	0	6,002	0	6,002	0.00%	TRAD
100738-010	15%	NATIONAL SCIENCE FOUNDATION	BAWAB, SEBASTIAN	4,136	3,199	0	17,790	25,125	4,035	29,160	16.06%	TRAD
400271-009	No	NATIONAL INSTITUTE OF AEROSPACE ASSOCIATES (NIA)	BAWAB, SEBASTIAN	4,354	1,429	0	0	5,783	0	5,783	0.00%	TRAD
400311-010	26%	CHILDREN'S HEALTH FOUNDATION ACCOUNTING	BAWAB, SEBASTIAN	17,028	2,469	0	2,412	21,909	0	21,909	0.00%	TRAD
400511-010	50%	ABS GLOBAL GOVERNMENT SERVICES	BAWAB, SEBASTIAN	5,034	0	0	0	5,034	3,272	8,306	65.00%	TRAD
400271-008	No	NATIONAL INSTITUTE OF AEROSPACE ASSOCIATES (NIA)	BAYSAL, OKTAY	30,777	0	0	0	30,777	14,055	44,832	45.67%	TRAD
400271-011	No	NATIONAL INSTITUTE OF AEROSPACE ASSOCIATES (NIA)	BRITCHER, COLIN	46,149	0	0	10,871	57,020	11,999	69,019	21.04%	TRAD
400348-020	No	NATIONAL INSTITUTE OF AEROSPACE ASSOCIATES (NIA)	BRITCHER, COLIN	85,183	0	0	0	85,183	22,148	107,331	26.00%	TRAD
100917-010	50%	U.S. DEPARTMENT OF ENERGY	ELMUSTAFA, ABDELMAGEED	19,691	4,844	0	0	24,535	6,379	30,914	26.00%	TRAD
100738-010	25%	NATIONAL SCIENCE FOUNDATION	GHOSH, DIPANKAR	6,894	5,332	0	29,650	41,876	6,724	48,600	16.06%	TRAD
100748-010	No	NATIONAL SCIENCE FOUNDATION	GHOSH, DIPANKAR	22,583	4,908	0	6,664	34,155	15,120	49,275	44.27%	TRAD
100748-020	No	NATIONAL SCIENCE FOUNDATION	GHOSH, DIPANKAR	0	1,395	0	3,167	4,562	0	4,562	0.00%	TRAD
400415-010	55%	JEFFRESS RESEARCH GRANTS PROGRAM	GHOSH, DIPANKAR	95	0	0	9	104	0	104	0.00%	TRAD
100813-010	70%	NATIONAL SCIENCE FOUNDATION	HAO, JULIE	16,348	2,887	0	0	19,235	10,579	29,814	55.00%	TRAD
400391-010	10%	CHILDREN'S HOSPITAL OF THE KING'S DAUGHTERS	HAO, ZHI	0	429	0	0	429	0	429	0.00%	TRAD
100738-010	15%	NATIONAL SCIENCE FOUNDATION	HOU, GENE	4,136	3,199	0	17,790	25,125	4,035	29,160	16.06%	TRAD
100736-010	10%	NATIONAL SCIENCE FOUNDATION	KAIPA, KRISHNANAND	8,837	1,768	0	0	10,605	5,832	16,437	54.99%	TRAD
100816-010	14%	NATIONAL SCIENCE FOUNDATION	KAIPA, KRISHNANAND	29,667	4,620	0	570	34,857	18,858	53,715	54.10%	TRAD
300546-010	No	UNIVERSITY OF CINCINNATI	KAIPA, KRISHNANAND	75,377	43	0	0	75,420	41,481	116,901	55.00%	TRAD
300030-017	12%	UNIVERSITY OF VIRGINIA	KAIPA, KRISHNANAND	0	44	0	2,442	2,486	0	2,486	0.00%	TRAD
100738-010	25%	NATIONAL SCIENCE FOUNDATION	KRAVCHENKO, OLEKSANDR	6,894	5,332	0	29,650	41,876	6,724	48,600	16.06%	TRAD
500450-010	No	JOHNS MANVILLE	KRAVCHENKO, OLEKSANDR	0	3,708	0	0	3,708	2,040	5,748	55.02%	TRAD
300556-013	No	VA POLYTECHNIC INSTITUTE AND STATE UNIVERSITY	LANDMAN, DREW	11,079	0	0	0	11,079	0	11,079	0.00%	TRAD
400203-010	No	NATIONAL INSTITUTE OF AEROSPACE ASSOCIATES (NIA)	LANDMAN, DREW	24,365	0	0	0	24,365	6,334	30,699	26.00%	TRAD
400203-011	No	NATIONAL INSTITUTE OF AEROSPACE ASSOCIATES (NIA)	LANDMAN, DREW	15,594	0	0	0	15,594	4,055	19,649	26.00%	TRAD
400203-013	No	NATIONAL INSTITUTE OF AEROSPACE ASSOCIATES (NIA)	LANDMAN, DREW	12,451	0	0	0	12,451	6,848	19,299	55.00%	TRAD
500436-010	No	AEROENVIRONMENT	LANDMAN, DREW	0	0	0	14	14	7	21	50.00%	TRAD
500440-010	No	AEROENVIRONMENT	LANDMAN, DREW	0	0	0	76	76	40	116	52.63%	TRAD
500451-010	No	AEROENVIRONMENT	LANDMAN, DREW	3,062	0	0	312	3,374	1,855	5,229	54.98%	TRAD
100560-020	No	U.S. PUBLIC HEALTH SERVICE (INCLUDING NIH)	MARUTHAMUTHU, VENKAT	46,481	17,584	0	7,316	71,381	35,236	106,617	49.36%	TRAD
300634-010	No	VIRGINIA COMMONWEALTH UNIVERSITY	QIAN, SHIZHI	41,726	5,040	6,748	1,517	55,031	16,509	71,540	30.00%	TRAD
400415-010	45%	JEFFRESS RESEARCH GRANTS PROGRAM	QIAN, SHIZHI	77	0	0	7	84	0	84	0.00%	TRAD
100736-010	25%	NATIONAL SCIENCE FOUNDATION	RINGLEB, STACIE	22,091	4,420	0	0	26,511	14,581	41,092	55.00%	TRAD
100816-010	17%	NATIONAL SCIENCE FOUNDATION	RINGLEB, STACIE	36,024	5,610	0	692	42,326	22,898	65,224	54.10%	TRAD
100846-011	25%	LANGLEY RESEARCH CENTER	RINGLEB, STACIE	1,002	684	0	488	2,174	0	2,174	0.00%	TRAD
400311-010	30%	CHILDREN'S HEALTH FOUNDATION ACCOUNTING	RINGLEB, STACIE	19,647	2,848	0	2,783	25,278	0	25,278	0.00%	TRAD
400398-010	10%	JEFFRESS RESEARCH GRANTS PROGRAM	RINGLEB, STACIE	193	810	0	0	1,003	0	1,003	0.00%	TRAD
400481-010	No	AMERICAN SOCIETY OF BIOMECHANICS	RINGLEB, STACIE	0	941	0	2	943	0	943	0.00%	TRAD
500407-020	No	VR REHAB, INC.	RINGLEB, STACIE	2,270	0	0	5,401	7,671	2,762	10,433	36.01%	TRAD
500465-010	No	VR REHAB, INC.	RINGLEB, STACIE	11,488	1,000	0	0	12,488	8,117	20,605	65.00%	TRAD

**SCHEDULE 4**  
**OLD DOMINION UNIVERSITY RESEARCH FOUNDATION**  
**SPONSORED PROGRAM ACTIVITY BY INDIVIDUAL PROJECT**  
(MEASURED BY EXPENDITURES INCURRED)

FOR FISCAL YEAR 2022

PROJECT NUMBER	SPLIT	SPONSORING AGENCY	PRINCIPAL INVESTIGATOR / PROJECT DIRECTOR	PERSONNEL AND FRINGE BENEFITS	SUPPLIES, CONTRACTUAL, GENERAL, & TRAVEL	EQUIPMENT	STIPENDS, SUBCONTRACTS, TUITION, OTHER	TOTAL DIRECT COSTS	REIMBURSED INDIRECT COSTS	TOTAL PROJECT COSTS	EFFECTIVE INDIRECT COST RATE	ENTERPRISE CODE
100882-010	67%	U.S. PUBLIC HEALTH SERVICE (INCLUDING NIH)	WRIGGERS, WILLY	100,943	6,225	0	0	107,168	58,942	166,110	55.00%	TRAD
100720-020	No	OFFICE OF NAVAL RESEARCH	XU, TIAN-BING	6,132	(172)	5,080	0	11,040	0	11,040	0.00%	TRAD
400271-014	No	NATIONAL INSTITUTE OF AEROSPACE ASSOCIATES (NIA)	XU, TIAN-BING	27,182	4,398	0	0	31,580	17,369	48,949	55.00%	TRAD
500437-010	No	POLYK TECHNOLOGIES, LLC	XU, TIAN-BING	0	0	0	0	0	(1)	(1)	0.00%	TRAD
500452-010	No	LYNNTech, Inc.	XU, TIAN-BING	31,570	10,284	1,816	0	43,670	27,206	70,876	62.30%	TRAD
100847-010	50%	NATIONAL SCIENCE FOUNDATION	ZHANG, XIAOYU	1,810	1,910	0	18,534	22,254	2,046	24,300	9.19%	TRAD
<b>TOTAL DEPARTMENT OF MECHANICAL &amp; AEROSPACE ENGINEERING</b>				<b>821,720</b>	<b>117,453</b>	<b>13,644</b>	<b>171,209</b>	<b>1,124,026</b>	<b>406,080</b>	<b>1,530,106</b>	<b>36.13%</b>	
<b>DEPARTMENT OF MECHANICAL &amp; AEROSPACE ENGINEERING - APPLIED RESEARCH CENTER (ARC)</b>												
300591-010	No	VIRGINIA STATE UNIVERSITY	ELMUSTAFA, ABDELMAGEED	30,558	3,978	0	7,044	41,580	8,979	50,559	21.59%	ARC
400346-057	No	JEFFERSON SCIENCE ASSOCIATES, LLC (JEFFERSON LAB)	ELMUSTAFA, ABDELMAGEED	12,645	0	0	0	12,645	0	12,645	0.00%	ARC
<b>TOTAL DEPARTMENT OF MECHANICAL &amp; AEROSPACE ENGINEERING - APPLIED RESEARCH CENTER (ARC)</b>				<b>43,203</b>	<b>3,978</b>	<b>0</b>	<b>7,044</b>	<b>54,225</b>	<b>8,979</b>	<b>63,204</b>	<b>16.56%</b>	
<b>DEPARTMENT OF ENGINEERING TECHNOLOGY</b>												
100736-010	10%	NATIONAL SCIENCE FOUNDATION	AYALA, ORLANDO	8,837	1,768	0	0	10,605	5,832	16,437	54.99%	TRAD
100816-010	14%	NATIONAL SCIENCE FOUNDATION	AYALA, ORLANDO	29,667	4,620	0	570	34,857	18,858	53,715	54.10%	TRAD
200009-023	25%	STATE COUNCIL FOR HIGHER EDUCATION IN VA (SCHEV)	AYALA, ORLANDO	1,339	1,150	0	0	2,489	0	2,489	0.00%	TRAD
200009-024	No	STATE COUNCIL FOR HIGHER EDUCATION IN VA (SCHEV)	AYALA, ORLANDO	3,408	4,075	0	0	7,483	0	7,483	0.00%	TRAD
300030-017	12%	UNIVERSITY OF VIRGINIA	AYALA, ORLANDO	0	44	0	2,442	2,486	0	2,486	0.00%	TRAD
400335-010	No	ACS PETROLEUM RESEARCH FOUNDATION	AYALA, ORLANDO	7,482	3,837	0	0	11,319	0	11,319	0.00%	TRAD
100825-010	34%	NATIONAL SCIENCE FOUNDATION	CONSIDINE, CAROL	6,713	1,261	0	0	7,974	2,073	10,047	26.00%	TRAD
300030-016	5%	UNIVERSITY OF VIRGINIA	CONSIDINE, CAROL	1,628	302	0	0	1,930	0	1,930	0.00%	TRAD
300674-010	50%	OLD DOMINION UNIVERSITY	CONSIDINE, CAROL	43,563	1,346	0	0	44,909	24,700	69,609	55.00%	TRAD
500394-010	50%	Arcadis Engineering	CONSIDINE, CAROL	(4,901)	0	0	0	(4,901)	(2,696)	(7,597)	55.01%	TRAD
100708-010	45%	NATIONAL SCIENCE FOUNDATION	DEAN, ANTHONY	11,719	0	0	22,500	34,219	6,445	40,664	18.83%	TRAD
100720-010	No	OFFICE OF NAVAL RESEARCH	DEAN, ANTHONY	(2,460)	0	0	0	(2,460)	(3,505)	(5,965)	142.48%	TRAD
100839-010	33%	OFFICE OF NAVAL RESEARCH	DEAN, ANTHONY	2,639	735	0	1,650	5,024	1,855	6,879	36.92%	TRAD
100880-010	25%	NATIONAL SECURITY AGENCY	DEAN, ANTHONY	(75)	25	0	0	(50)	(28)	(78)	56.00%	TRAD
100908-010	20%	NATIONAL SECURITY AGENCY	DEAN, ANTHONY	5,566	658	0	28,506	34,730	3,423	38,153	9.86%	TRAD
300447-012	No	UNIVERSITY OF VIRGINIA	DEAN, ANTHONY	1,854	0	0	13,841	15,695	593	16,288	3.78%	TRAD
400511-010	50%	ABS GLOBAL GOVERNMENT SERVICES	DEAN, ANTHONY	5,034	0	0	0	5,034	3,272	8,306	65.00%	TRAD
100527-032	No	NASA GODDARD SPACEFLIGHT CENTER	EISAZADEH, HAMID	0	1,537	0	0	1,537	0	1,537	0.00%	TRAD
100720-025	No	OFFICE OF NAVAL RESEARCH	EISAZADEH, HAMID	10,006	3,741	6,005	0	19,752	0	19,752	0.00%	TRAD
300030-017	12%	UNIVERSITY OF VIRGINIA	EISAZADEH, HAMID	0	44	0	2,442	2,486	0	2,486	0.00%	TRAD
100873-010	33%	NATIONAL SCIENCE FOUNDATION	HU, BIN	19,828	0	0	2,130	21,958	10,905	32,863	49.66%	TRAD
100708-010	20%	NATIONAL SCIENCE FOUNDATION	JOVANOVIC, VUKICA	10,297	103	0	22,000	32,400	5,720	38,120	17.65%	TRAD
300030-016	35%	UNIVERSITY OF VIRGINIA	JOVANOVIC, VUKICA	11,399	2,114	0	0	13,513	0	13,513	0.00%	TRAD
300030-017	16%	UNIVERSITY OF VIRGINIA	JOVANOVIC, VUKICA	0	58	0	3,256	3,314	0	3,314	0.00%	TRAD
300567-010	20%	OLD DOMINION UNIVERSITY	JOVANOVIC, VUKICA	16,244	3,830	0	2,412	22,486	1,606	24,092	7.14%	TRAD
300722-010	30%	OLD DOMINION UNIVERSITY	JOVANOVIC, VUKICA	2,063	16,505	0	2,538	21,106	0	21,106	0.00%	TRAD
600233-020	No	SEOUL NATIONAL UNIVERSITY OF SCIENCE AND TECHNOLOGY	JUNG, YOUNGHAN	5,883	51	0	0	5,934	2,373	8,307	39.99%	TRAD
300030-016	5%	UNIVERSITY OF VIRGINIA	KUZLU, MURAT	1,628	302	0	0	1,930	0	1,930	0.00%	TRAD
300030-017	12%	UNIVERSITY OF VIRGINIA	KUZLU, MURAT	0	44	0	2,442	2,486	0	2,486	0.00%	TRAD
300567-010	20%	OLD DOMINION UNIVERSITY	KUZLU, MURAT	16,244	3,830	0	2,412	22,486	1,606	24,092	7.14%	TRAD
300704-010	No	OLD DOMINION UNIVERSITY	KUZLU, MURAT	17,073	25,016	0	0	42,089	0	42,089	0.00%	TRAD
300722-010	70%	OLD DOMINION UNIVERSITY	KUZLU, MURAT	4,813	38,511	0	5,922	49,246	0	49,246	0.00%	TRAD
500463-001	31%	BOOZ ALLEN AND HAMILTON, INC. (BAH)	KUZLU, MURAT	24,816	0	0	0	24,816	13,649	38,465	55.00%	TRAD
100846-013	20%	LANGLEY RESEARCH CENTER	POPESCU, OTILIA	0	702	0	0	702	0	702	0.00%	TRAD
300030-016	5%	UNIVERSITY OF VIRGINIA	POPESCU, OTILIA	1,628	302	0	0	1,930	0	1,930	0.00%	TRAD
300030-017	12%	UNIVERSITY OF VIRGINIA	POPESCU, OTILIA	0	44	0	2,442	2,486	0	2,486	0.00%	TRAD
300567-010	15%	OLD DOMINION UNIVERSITY	POPESCU, OTILIA	12,183	2,873	0	1,809	16,865	1,204	18,069	7.14%	TRAD
500463-001	31%	BOOZ ALLEN AND HAMILTON, INC. (BAH)	POPESCU, OTILIA	24,816	0	0	0	24,816	13,649	38,465	55.00%	TRAD
300030-017	12%	UNIVERSITY OF VIRGINIA	SEEK, MICHAEL	0	44	0	2,442	2,486	0	2,486	0.00%	TRAD
<b>TOTAL DEPARTMENT OF ENGINEERING TECHNOLOGY</b>				<b>300,934</b>	<b>119,472</b>	<b>6,005</b>	<b>121,756</b>	<b>548,167</b>	<b>111,534</b>	<b>659,701</b>	<b>20.35%</b>	

**SCHEDULE 4**  
**OLD DOMINION UNIVERSITY RESEARCH FOUNDATION**  
**SPONSORED PROGRAM ACTIVITY BY INDIVIDUAL PROJECT**  
(measured by expenditures incurred)  
**FOR FISCAL YEAR 2022**

PROJECT NUMBER	SPLIT	SPONSORING AGENCY	PRINCIPAL INVESTIGATOR / PROJECT DIRECTOR	PERSONNEL AND FRINGE BENEFITS	SUPPLIES, CONTRACTUAL, GENERAL, & TRAVEL	EQUIPMENT	STIPENDS, SUBCONTRACTS, TUITION, OTHER	TOTAL DIRECT COSTS	REIMBURSED INDIRECT COSTS	TOTAL PROJECT COSTS	EFFECTIVE INDIRECT COST RATE	ENTERPRISE CODE
<b>DEPARTMENT OF ENGINEERING MANAGEMENT &amp; SYSTEMS ENGINEERING</b>												
100708-010	20%	NATIONAL SCIENCE FOUNDATION	BULLINGTON, KIM	10,297	103	0	22,000	32,400	5,720	38,120	17.65%	TRAD
100790-010	42%	NAVAL SEA SYSTEMS COMMAND	COLLINS, ANDREW	55,195	0	0	0	55,195	35,877	91,072	65.00%	TRAD
100790-011	45%	NAVAL SEA SYSTEMS COMMAND	COLLINS, ANDREW	62,925	0	0	0	62,925	40,901	103,826	65.00%	TRAD
100790-010	10%	NAVAL SEA SYSTEMS COMMAND	COTTER, TEDDY	13,142	0	0	0	13,142	8,542	21,684	65.00%	TRAD
100790-011	5%	NAVAL SEA SYSTEMS COMMAND	COTTER, TEDDY	6,992	0	0	0	6,992	4,545	11,537	65.00%	TRAD
100854-010	25%	OFFICE OF THE SECRETARY OF DEFENSE	GHEORGHE, ADRIAN	3,103	0	0	0	3,103	1,707	4,810	55.01%	TRAD
300720-010	20%	STEVENS INSTITUTE OF TECHNOLOGY	HANDLEY, HOLLY	33,061	1,084	0	0	34,145	22,194	56,339	65.00%	TRAD
100790-011	10%	NAVAL SEA SYSTEMS COMMAND	HUANG, JINGWEI	13,983	0	0	0	13,983	9,089	23,072	65.00%	TRAD
400192-000	No	PRIVATE SPONSORS	KEATING, CHARLES	0	714	0	0	714	0	714	0.00%	TRAD
100854-010	25%	OFFICE OF THE SECRETARY OF DEFENSE	KESKIN, OMER	3,103	0	0	0	3,103	1,707	4,810	55.01%	TRAD
300676-010	No	STEVENS INSTITUTE OF TECHNOLOGY	KOVACIC, SAMUEL	7,909	0	0	591	8,500	0	8,500	0.00%	TRAD
300706-010	80%	STEVENS INSTITUTE OF TECHNOLOGY	KOVACIC, SAMUEL	63,681	346	0	0	64,027	35,215	99,242	55.00%	TRAD
100846-015	No	LANGLEY RESEARCH CENTER	LANDAETA, RAFAEL	0	837	0	1,500	2,337	0	2,337	0.00%	TRAD
100736-010	20%	NATIONAL SCIENCE FOUNDATION	PAZOS-LAGO, PILAR	17,673	3,536	0	0	21,209	11,665	32,874	55.00%	TRAD
100816-010	17%	NATIONAL SCIENCE FOUNDATION	PAZOS-LAGO, PILAR	36,024	5,610	0	692	42,326	22,898	65,224	54.10%	TRAD
400463-010	100%	SPENCER EDUCATION FOUNDATION	PINTO, CESAR	13,415	0	0	0	13,415	0	13,415	0.00%	TRAD
100854-010	25%	OFFICE OF THE SECRETARY OF DEFENSE	SABZ ALI POUR, FARINAZ	3,103	0	0	0	3,103	1,707	4,810	55.01%	TRAD
300706-010	10%	STEVENS INSTITUTE OF TECHNOLOGY	SOUUSA-POZA, ANDRES	7,960	43	0	0	8,003	4,402	12,405	55.00%	TRAD
100854-010	25%	OFFICE OF THE SECRETARY OF DEFENSE	TATAR, UNAL	3,103	0	0	0	3,103	1,707	4,810	55.01%	TRAD
<b>TOTAL DEPARTMENT OF ENGINEERING MANAGEMENT &amp; SYSTEMS ENGINEERING</b>				<b>354,669</b>	<b>12,273</b>	<b>0</b>	<b>24,783</b>	<b>391,725</b>	<b>207,876</b>	<b>599,601</b>	<b>53.07%</b>	
<b>DEPARTMENT OF COMPUTATIONAL MODELING &amp; SIMULATION ENGINEERING</b>												
300678-010	No	NORFOLK STATE UNIVERSITY	AUDETTE, MICHEL	40,895	0	0	0	40,895	0	40,895	0.00%	TRAD
400311-010	44%	CHILDREN'S HEALTH FOUNDATION ACCOUNTING	AUDETTE, MICHEL	28,816	4,178	0	4,081	37,075	0	37,075	0.00%	TRAD
400332-010	46%	ALZHEIMER'S ASSOCIATION	AUDETTE, MICHEL	765	1,416	0	0	2,181	218	2,399	10.00%	TRAD
500456-010	No	MAS GLOBAL SOUTLIONS	AUDETTE, MICHEL	9,011	0	0	80	9,091	5,909	15,000	65.00%	TRAD
100790-010	10%	NAVAL SEA SYSTEMS COMMAND	LEATHRUM, JAMES	13,142	0	0	0	13,142	8,542	21,684	65.00%	TRAD
100790-011	5%	NAVAL SEA SYSTEMS COMMAND	LEATHRUM, JAMES	6,992	0	0	0	6,992	4,545	11,537	65.00%	TRAD
300668-004	No	OLD DOMINION UNIVERSITY	SHEN, YUZHONG	4,722	1,258	0	0	5,980	0	5,980	0.00%	TRAD
300717-004	No	OLD DOMINION UNIVERSITY	SHEN, YUZHONG	34,537	1,869	0	0	36,406	0	36,406	0.00%	TRAD
400332-010	27%	ALZHEIMER'S ASSOCIATION	SHEN, YUZHONG	449	831	0	0	1,280	128	1,408	10.00%	TRAD
400391-010	90%	CHILDREN'S HOSPITAL OF THE KING'S DAUGHTERS	SHEN, YUZHONG	0	3,861	0	(1)	3,860	0	3,860	0.00%	TRAD
400473-001	No	CHILDREN'S HOSPITAL OF THE KING'S DAUGHTERS	SHEN, YUZHONG	21,811	2,080	0	0	23,891	13,140	37,031	55.00%	TRAD
500445-010	45%	LEIDOS	SHEN, YUZHONG	13,447	687	0	0	14,134	7,773	21,907	55.00%	TRAD
100695-010	No	AMES RESEARCH LABS	SOSONKINA, MASHA	109,642	885	0	0	110,527	60,790	171,317	55.00%	TRAD
100723-010	33%	NATIONAL SCIENCE FOUNDATION	SOSONKINA, MASHA	21,227	0	0	0	21,227	11,675	32,902	55.00%	TRAD
100797-010	No	AMES RESEARCH LABS	SOSONKINA, MASHA	20,036	1,439	0	0	21,475	11,811	33,286	55.00%	TRAD
200316-010	30%	VA TRANSPORTATION RESEARCH COUNCIL	YANG, HONG	5,082	0	0	0	5,082	1,321	6,403	25.99%	TRAD
200317-010	25%	VA TRANSPORTATION RESEARCH COUNCIL	YANG, HONG	644	0	0	0	644	167	811	25.93%	TRAD
200325-010	40%	VA TRANSPORTATION RESEARCH COUNCIL	YANG, HONG	14,779	0	0	0	14,779	3,842	18,621	26.00%	TRAD
200338-010	50%	VA DEPARTMENT OF TRANSPORTATION	YANG, HONG	8,791	0	0	0	8,791	2,286	11,077	26.00%	TRAD
200351-010	24%	VA TRANSPORTATION RESEARCH COUNCIL	YANG, HONG	15,816	0	0	0	15,816	4,112	19,928	26.00%	TRAD
200361-010	40%	VA TRANSPORTATION RESEARCH COUNCIL	YANG, HONG	12,614	0	0	0	12,614	3,280	15,894	26.00%	TRAD
200366-010	30%	VA TRANSPORTATION RESEARCH COUNCIL	YANG, HONG	812	126	0	0	938	244	1,182	26.01%	TRAD
300783-010	40%	GEORGE MASON UNIVERSITY	YANG, HONG	1,029	0	0	0	1,029	268	1,297	26.04%	TRAD
400466-010	50%	NATIONAL ACADEMY OF SCIENCES (NAS)	YANG, HONG	5,353	6,584	0	0	11,937	6,565	18,502	55.00%	TRAD
500445-010	55%	LEIDOS	YANG, HONG	16,435	840	0	0	17,275	9,501	26,776	55.00%	TRAD
<b>TOTAL DEPARTMENT OF COMPUTATIONAL MODELING &amp; SIMULATION ENGINEERING</b>				<b>406,847</b>	<b>26,054</b>	<b>0</b>	<b>4,160</b>	<b>437,061</b>	<b>156,117</b>	<b>593,178</b>	<b>35.72%</b>	
<b>DEPARTMENT OF COMPUTATIONAL MODELING &amp; SIMULATION ENGINEERING - VIRGINIA MODELING AND SIMULATION CENTER (VMASC)</b>												
100905-010	No	NATIONAL SCIENCE FOUNDATION	SHETTY, SACHIN	614	0	0	0	614	338	952	55.05%	VMASC
200329-010	No	VIRGINIA INNOVATION PARTNERSHIP CORPORATION (PREVIOUSLY CIT)	SHETTY, SACHIN	39,335	0	0	0	39,335	11,800	51,135	30.00%	VMASC

**SCHEDULE 4**  
**OLD DOMINION UNIVERSITY RESEARCH FOUNDATION**  
**SPONSORED PROGRAM ACTIVITY BY INDIVIDUAL PROJECT**  
(MEASURED BY EXPENDITURES INCURRED)  
**FOR FISCAL YEAR 2022**

PROJECT NUMBER	SPLIT	SPONSORING AGENCY	PRINCIPAL INVESTIGATOR / PROJECT DIRECTOR	PERSONNEL AND FRINGE BENEFITS	SUPPLIES, CONTRACTUAL, GENERAL, & TRAVEL	EQUIPMENT	STIPENDS, SUBCONTRACTS, TUITION, OTHER	TOTAL DIRECT COSTS	REIMBURSED INDIRECT COSTS	TOTAL PROJECT COSTS	EFFECTIVE INDIRECT COST RATE	ENTERPRISE CODE
300388-010	No	NORFOLK STATE UNIVERSITY	SHETTY, SACHIN	7,196	0	0	2,225	9,421	3,958	13,379	42.01%	VMASC
300542-010	No	OLD DOMINION UNIVERSITY	SHETTY, SACHIN	23,323	36,064	0	76,511	135,898	32,663	168,561	24.03%	VMASC
300609-010	No	UNIVERSITY OF ILLINOIS (ALL CAMPUSES)	SHETTY, SACHIN	151,403	0	0	5,324	156,727	83,272	239,999	53.13%	VMASC
300623-010	40%	HOWARD UNIVERSITY	SHETTY, SACHIN	58,220	784	0	4,123	63,127	32,452	95,579	51.41%	VMASC
300656-010	60%	OLD DOMINION UNIVERSITY	SHETTY, SACHIN	6,591	6,420	0	0	13,011	0	13,011	0.00%	VMASC
300657-010	5%	OLD DOMINION UNIVERSITY	SHETTY, SACHIN	234	0	0	0	234	0	234	0.00%	VMASC
300663-010	No	OLD DOMINION UNIVERSITY	SHETTY, SACHIN	23,853	5,913	0	29,697	59,463	0	59,463	0.00%	VMASC
300667-010	60%	VA POLYTECHNIC INSTITUTE AND STATE UNIVERSITY	SHETTY, SACHIN	12,041	0	0	593	12,634	6,949	19,583	55.00%	VMASC
300692-010	50%	OLD DOMINION UNIVERSITY	SHETTY, SACHIN	3,606	0	0	0	3,606	0	3,606	0.00%	VMASC
300717-001	50%	OLD DOMINION UNIVERSITY	SHETTY, SACHIN	34,084	14,035	0	0	48,119	0	48,119	0.00%	VMASC
300747-010	7%	OLD DOMINION UNIVERSITY	SHETTY, SACHIN	1,017	364	0	350	1,731	110	1,841	6.35%	VMASC
300758-010	5%	OLD DOMINION UNIVERSITY	SHETTY, SACHIN	1,404	17	0	0	1,421	0	1,421	0.00%	VMASC
400475-010	60%	VA TECH ARC	SHETTY, SACHIN	165,613	7,333	3,124	15,884	191,954	99,668	291,622	51.92%	VMASC
500434-001	50%	CIRCADENCE	SHETTY, SACHIN	32,402	1,333	0	0	33,735	21,928	55,663	65.00%	VMASC
500447-010	50%	FRONTIER TECHNOLOGY INC.	SHETTY, SACHIN	20,753	0	0	0	20,753	13,490	34,243	65.00%	VMASC
500467-010	40%	FRONTIER TECHNOLOGY INC.	SHETTY, SACHIN	48,814	0	0	0	48,814	31,729	80,543	65.00%	VMASC
400475-010	20%	VA TECH ARC	SHULL, JOHN	55,204	2,444	1,041	5,295	63,984	33,223	97,207	51.92%	VMASC
TOTAL DEPARTMENT OF COMPUTATIONAL MODELING & SIMULATION ENGINEERING - VMASC				<b>685,707</b>	<b>74,707</b>	<b>4,165</b>	<b>140,002</b>	<b>904,581</b>	<b>371,580</b>	<b>1,276,161</b>	<b>41.08%</b>	
TOTAL BATTEN COLLEGE OF ENGINEERING & TECHNOLOGY				<b>4,515,952</b>	<b>772,191</b>	<b>184,369</b>	<b>1,005,338</b>	<b>6,477,850</b>	<b>2,226,230</b>	<b>8,704,080</b>	<b>34.37%</b>	

**SCHEDULE 4**  
**OLD DOMINION UNIVERSITY RESEARCH FOUNDATION**  
**SPONSORED PROGRAM ACTIVITY BY INDIVIDUAL PROJECT**  
(MEASURED BY EXPENDITURES INCURRED)  
FOR FISCAL YEAR 2022

PROJECT NUMBER	SPLIT	SPONSORING AGENCY	PRINCIPAL INVESTIGATOR / PROJECT DIRECTOR	PERSONNEL AND FRINGE BENEFITS	SUPPLIES, CONTRACTUAL, GENERAL, & TRAVEL	EQUIPMENT	STIPENDS, SUBCONTRACTS, TUITION, OTHER	TOTAL DIRECT COSTS	REIMBURSED INDIRECT COSTS	TOTAL PROJECT COSTS	EFFECTIVE INDIRECT COST RATE	ENTERPRISE CODE
<b>COLLEGE OF HEALTH SCIENCES</b>												
<b>SCHOOL OF COMMUNITY &amp; ENVIRONMENTAL HEALTH</b>												
300576-010	No	JOHNS-HOPKINS UNIVERSITY	BANAE, SEAN	380	0	0	0	380	30	410	7.89%	TRAD
300721-010	No	JOHNS-HOPKINS UNIVERSITY	BANAE, SEAN	12,697	0	0	0	12,697	1,016	13,713	8.00%	TRAD
400493-010	No	OBICI HEALTH CARE FOUNDATION	BANAE, SEAN	0	695	0	0	695	70	765	10.07%	TRAD
400485-010	No	THE UNITED STATES-JAPAN FOUNDATION	BECKER, STEVEN	0	199	0	0	199	0	199	0.00%	TRAD
300644-010	50%	JOHNS-HOPKINS UNIVERSITY	GALADIMA, HADIZA	0	3,506	0	0	3,506	281	3,787	8.01%	TRAD
400467-010	No	ROBERT WOOD JOHNSON FOUNDATION	HOGGLUND, LESLIE	0	4,000	0	30,000	34,000	2,480	36,480	7.29%	TRAD
300647-010	No	OLD DOMINION UNIVERSITY	JENG, ANNA	323	0	0	0	323	0	323	0.00%	TRAD
200326-010	75%	SUFFOLK PUBLIC SCHOOLS	KEKEH, MICHELE	4,581	0	0	0	4,581	1,191	5,772	26.00%	TRAD
300605-010	No	OLD DOMINION UNIVERSITY	KEKEH, MICHELE	8,094	0	0	0	8,094	0	8,094	0.00%	TRAD
200326-010	25%	SUFFOLK PUBLIC SCHOOLS	NGUYEN, MY NGOC	1,527	0	0	0	1,527	397	1,924	26.00%	TRAD
300644-010	50%	JOHNS-HOPKINS UNIVERSITY	SHANGANI, SYLVIA	0	3,506	0	0	3,506	281	3,787	8.01%	TRAD
300669-007	No	OLD DOMINION UNIVERSITY	SHANGANI, SYLVIA	5,921	0	0	0	5,921	0	5,921	0.00%	TRAD
400494-010	25%	AMERICAN DENTAL HYGIENE ASSOCIATION	SHUMAN, DEANNE	0	20	0	0	20	0	20	0.00%	TRAD
100733-010	No	U.S. DEPARTMENT OF AGRICULTURE	ZHANG, QI (HARRY)	13,073	1,150	0	0	14,223	1,422	15,645	10.00%	TRAD
100913-010	60%	U.S. DEPARTMENT OF AGRICULTURE	ZHANG, QI (HARRY)	6,539	508	0	0	7,047	705	7,752	10.00%	TRAD
300551-010	No	TUFTS UNIVERSITY	ZHANG, QI (HARRY)	15,294	2,029	0	0	17,323	9,528	26,851	55.00%	TRAD
300616-010	50%	DUKE UNIVERSITY	ZHANG, QI (HARRY)	6,264	4,952	0	0	11,216	1,346	12,562	12.00%	TRAD
400494-010	25%	AMERICAN DENTAL HYGIENE ASSOCIATION	ZHANG, QI (HARRY)	0	20	0	0	20	0	20	0.00%	TRAD
<b>TOTAL SCHOOL OF COMMUNITY &amp; ENVIRONMENTAL HEALTH</b>				<b>74,693</b>	<b>20,585</b>	<b>0</b>	<b>30,000</b>	<b>125,278</b>	<b>18,747</b>	<b>144,025</b>	<b>14.96%</b>	
<b>SCHOOL OF DENTAL HYGIENE</b>												
400453-010	50%	AMERICAN DENTAL HYGIENE ASSOCIATION	BRUHN, ANN	0	722	0	0	722	0	722	0.00%	TRAD
400453-010	50%	AMERICAN DENTAL HYGIENE ASSOCIATION	CLAIBORNE, DENISE	0	722	0	0	722	0	722	0.00%	TRAD
400494-010	50%	AMERICAN DENTAL HYGIENE ASSOCIATION	CLAIBORNE, DENISE	0	40	0	0	40	0	40	0.00%	TRAD
300659-010	No	JOHNS-HOPKINS UNIVERSITY	SUEDBECK, JESSICA	1,205	4,573	0	0	5,778	462	6,240	8.00%	TRAD
<b>TOTAL SCHOOL OF DENTAL HYGIENE</b>				<b>1,205</b>	<b>6,057</b>	<b>0</b>	<b>0</b>	<b>7,262</b>	<b>462</b>	<b>7,724</b>	<b>6.36%</b>	
<b>SCHOOL OF NURSING</b>												
100669-050	No	U.S. PUBLIC HEALTH SERVICE (HEALTH RESOURCES AND SERVICES AD	APATOV, NATHANIEL	0	0	0	17,588	17,588	0	17,588	0.00%	TRAD
100857-010	5%	U.S. PUBLIC HEALTH SERVICE (HEALTH RESOURCES AND SERVICES AD	BIRKHOLZ, LORRI	796	0	2,450	0	3,246	64	3,310	1.97%	TRAD
100857-020	5%	U.S. PUBLIC HEALTH SERVICE (HEALTH RESOURCES AND SERVICES AD	BIRKHOLZ, LORRI	6,650	372	0	0	7,022	562	7,584	8.00%	TRAD
100857-010	5%	U.S. PUBLIC HEALTH SERVICE (HEALTH RESOURCES AND SERVICES AD	CARTAGENA, DIANA	796	0	2,450	0	3,246	64	3,310	1.97%	TRAD
100857-020	5%	U.S. PUBLIC HEALTH SERVICE (HEALTH RESOURCES AND SERVICES AD	CARTAGENA, DIANA	14,928	2,107	621	0	17,656	1,363	19,019	7.72%	TRAD
100670-020	50%	U.S. PUBLIC HEALTH SERVICE (INCLUDING NIH)	GUSTIN, TINA	188	(7)	0	0	181	14	195	7.73%	TRAD
100670-021	50%	U.S. DEPARTMENT OF HEALTH AND HUMAN SERVICES	GUSTIN, TINA	239	(197)	0	0	42	3	45	7.14%	TRAD
100689-040	7%	U.S. PUBLIC HEALTH SERVICE (HEALTH RESOURCES AND SERVICES AD	GUSTIN, TINA	6,354	0	0	16,234	22,588	508	23,096	2.25%	TRAD
100857-010	30%	U.S. PUBLIC HEALTH SERVICE (HEALTH RESOURCES AND SERVICES AD	GUSTIN, TINA	4,773	0	14,699	0	19,472	382	19,854	1.96%	TRAD
100857-020	30%	U.S. PUBLIC HEALTH SERVICE (HEALTH RESOURCES AND SERVICES AD	GUSTIN, TINA	89,569	12,645	3,727	0	105,941	8,177	114,118	7.72%	TRAD
300544-030	No	OLD DOMINION UNIVERSITY	GUSTIN, TINA	11,515	0	0	0	11,515	3,685	15,200	32.00%	TRAD
300556-012	No	VA POLYTECHNIC INSTITUTE AND STATE UNIVERSITY	GUSTIN, TINA	23,994	0	0	0	23,994	0	23,994	0.00%	TRAD
300586-010	50%	LOYOLA UNIVERSITY (CHICAGO)	GUSTIN, TINA	0	9,325	0	0	9,325	746	10,071	8.00%	TRAD
100811-020	20%	U.S. PUBLIC HEALTH SERVICE (HEALTH RESOURCES AND SERVICES AD	HAWKINS, JANICE	2,602	0	0	867	3,469	208	3,677	6.00%	TRAD
100811-030	20%	U.S. PUBLIC HEALTH SERVICE (HEALTH RESOURCES AND SERVICES AD	HAWKINS, JANICE	62,592	6,606	0	19,540	88,738	5,536	94,274	6.24%	TRAD
100811-020	15%	U.S. PUBLIC HEALTH SERVICE (HEALTH RESOURCES AND SERVICES AD	HIGGINS, KAREN	1,951	0	0	650	2,601	156	2,757	6.00%	TRAD
100811-030	15%	U.S. PUBLIC HEALTH SERVICE (HEALTH RESOURCES AND SERVICES AD	HIGGINS, KAREN	46,944	4,955	0	14,655	66,554	4,152	70,706	6.24%	TRAD
100857-010	5%	U.S. PUBLIC HEALTH SERVICE (HEALTH RESOURCES AND SERVICES AD	HIGGINS, KAREN	796	0	2,450	0	3,246	64	3,310	1.97%	TRAD
100857-020	5%	U.S. PUBLIC HEALTH SERVICE (HEALTH RESOURCES AND SERVICES AD	HIGGINS, KAREN	14,928	2,107	621	0	17,656	1,363	19,019	7.72%	TRAD
100811-020	20%	U.S. PUBLIC HEALTH SERVICE (HEALTH RESOURCES AND SERVICES AD	MARTIN, JAMELA	2,602	0	0	867	3,469	208	3,677	6.00%	TRAD
100811-030	20%	U.S. PUBLIC HEALTH SERVICE (HEALTH RESOURCES AND SERVICES AD	MARTIN, JAMELA	62,592	6,606	0	19,540	88,738	5,536	94,274	6.24%	TRAD
100689-040	10%	U.S. PUBLIC HEALTH SERVICE (HEALTH RESOURCES AND SERVICES AD	NESBITT, CHRISTIANNE	5,946	0	0	12,691	18,637	476	19,113	2.55%	TRAD
100857-010	5%	U.S. PUBLIC HEALTH SERVICE (HEALTH RESOURCES AND SERVICES AD	NESBITT, CHRISTIANNE	796	0	2,450	0	3,246	64	3,310	1.97%	TRAD

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 FOR FISCAL YEAR 2022

PROJECT NUMBER	SPLIT	SPONSORING AGENCY	PRINCIPAL INVESTIGATOR / PROJECT DIRECTOR	PERSONNEL AND FRINGE BENEFITS	SUPPLIES, CONTRACTUAL, GENERAL, & TRAVEL	EQUIPMENT	STIPENDS, SUBCONTRACTS, TUITION, OTHER	TOTAL DIRECT COSTS	REIMBURSED INDIRECT COSTS	TOTAL PROJECT COSTS	EFFECTIVE INDIRECT COST RATE	ENTERPRISE CODE
100857-020	5%	U.S. PUBLIC HEALTH SERVICE (HEALTH RESOURCES AND SERVICES AD	NESBITT, CHRISTIANNE	6,650	372	0	0	7,022	562	7,584	8.00%	TRAD
300585-010	25%	EASTERN VIRGINIA MEDICAL SCHOOL	NESBITT, CHRISTIANNE	7,026	0	5,051	0	12,077	1,827	13,904	15.13%	TRAD
100857-020	5%	U.S. PUBLIC HEALTH SERVICE (HEALTH RESOURCES AND SERVICES AD	PARROTT, JESSICA	8,278	1,736	621	0	10,635	801	11,436	7.53%	TRAD
100670-020	50%	U.S. PUBLIC HEALTH SERVICE (INCLUDING NIH)	RUTLEDGE, CAROLYN	188	(7)	0	0	181	14	195	7.73%	TRAD
100670-021	50%	U.S. DEPARTMENT OF HEALTH AND HUMAN SERVICES	RUTLEDGE, CAROLYN	239	(197)	0	0	42	3	45	7.14%	TRAD
100819-010	3%	U.S. PUBLIC HEALTH SERVICE (HEALTH RESOURCES AND SERVICES AD	RUTLEDGE, CAROLYN	2,377	0	0	3,870	6,247	190	6,437	3.04%	TRAD
100857-010	50%	U.S. PUBLIC HEALTH SERVICE (HEALTH RESOURCES AND SERVICES AD	RUTLEDGE, CAROLYN	7,955	0	24,498	0	32,453	636	33,089	1.96%	TRAD
100857-020	50%	U.S. PUBLIC HEALTH SERVICE (HEALTH RESOURCES AND SERVICES AD	RUTLEDGE, CAROLYN	149,282	21,075	6,211	0	176,568	13,629	190,197	7.72%	TRAD
300586-010	50%	LOYOLA UNIVERSITY (CHICAGO)	RUTLEDGE, CAROLYN	0	9,325	0	0	9,325	746	10,071	8.00%	TRAD
100811-020	20%	U.S. PUBLIC HEALTH SERVICE (HEALTH RESOURCES AND SERVICES AD	TREMBLAY, BETH	2,602	0	0	867	3,469	208	3,677	6.00%	TRAD
100811-030	20%	U.S. PUBLIC HEALTH SERVICE (HEALTH RESOURCES AND SERVICES AD	TREMBLAY, BETH	62,592	6,606	0	19,540	88,738	5,536	94,274	6.24%	TRAD
100811-020	25%	U.S. PUBLIC HEALTH SERVICE (HEALTH RESOURCES AND SERVICES AD	WILES, LYNN	3,252	0	0	1,084	4,336	260	4,596	6.00%	TRAD
100811-030	25%	U.S. PUBLIC HEALTH SERVICE (HEALTH RESOURCES AND SERVICES AD	WILES, LYNN	78,240	8,258	0	24,426	110,924	6,920	117,844	6.24%	TRAD
400492-010	No	AANA FOUNDATION	WRIGHT, SUZANNE	0	4,796	0	0	4,796	0	4,796	0.00%	TRAD
<b>TOTAL SCHOOL OF NURSING</b>				<b>690,232</b>	<b>96,483</b>	<b>65,849</b>	<b>152,419</b>	<b>1,004,983</b>	<b>64,663</b>	<b>1,069,646</b>	<b>6.43%</b>	
<b>SCHOOL OF MEDICAL DIAGNOSTIC &amp; TRANSLATIONAL SCIENCES</b>												
100796-010	50%	U.S. PUBLIC HEALTH SERVICE (INCLUDING NIH)	BRUNO, ROBERT	21,619	4,854	0	0	26,473	14,560	41,033	55.00%	TRAD
300603-010	25%	OLD DOMINION UNIVERSITY	BRUNO, ROBERT	157	0	0	0	157	0	157	0.00%	TRAD
400450-010	No	ASCP FOUNDATON	KRAJ, BARBARA	0	0	0	(2)	(2)	0	(2)	0.00%	TRAD
400461-010	No	COMMONWEALTH TRANSFUSION FOUNDATION	KRAJ, BARBARA	0	4,134	0	0	4,134	0	4,134	0.00%	TRAD
300603-010	25%	OLD DOMINION UNIVERSITY	MOLLICA, PETER	157	0	0	0	157	0	157	0.00%	TRAD
300603-010	25%	OLD DOMINION UNIVERSITY	RIETHMAN, HAROLD	157	0	0	0	157	0	157	0.00%	TRAD
100796-010	50%	U.S. PUBLIC HEALTH SERVICE (INCLUDING NIH)	SACHS, PATRICK	21,619	4,854	0	0	26,473	14,560	41,033	55.00%	TRAD
300603-010	25%	OLD DOMINION UNIVERSITY	SACHS, PATRICK	157	0	0	0	157	0	157	0.00%	TRAD
<b>TOTAL SCHOOL OF MEDICAL DIAGNOSTIC &amp; TRANSLATIONAL SCIENCES</b>				<b>43,866</b>	<b>13,842</b>	<b>0</b>	<b>(2)</b>	<b>57,706</b>	<b>29,120</b>	<b>86,826</b>	<b>50.46%</b>	
<b>SCHOOL OF MEDICAL DIAGNOSTIC &amp; TRANSLATIONAL SCIENCES - FRANK REIDY RESEARCH CENTER FOR BIOELECTRICS (CBE)</b>												
100875-010	No	U.S. PUBLIC HEALTH SERVICE (INCLUDING NIH)	CATRAVAS, JOHN	20,546	1,286	0	0	21,832	12,008	33,840	55.00%	CBE
100875-020	No	U.S. PUBLIC HEALTH SERVICE (INCLUDING NIH)	CATRAVAS, JOHN	210,509	46,088	0	0	256,597	141,128	397,725	55.00%	CBE
500461-010	No	KEVIRX, INC.	CATRAVAS, JOHN	31,565	2,958	0	0	34,523	18,988	53,511	55.00%	CBE
500226-021	50%	PULSE BIOSCIENCES (ELECTROBLATE)	MURATORI, CLAUDIA	48,886	6,220	0	3,151	58,257	30,308	88,565	52.02%	CBE
500226-022	70%	PULSE BIOSCIENCES (ELECTROBLATE)	PAKHOMOV, ANDREI	101,215	11,510	0	0	112,725	61,999	174,724	55.00%	CBE
<b>TOTAL SCHOOL OF MEDICAL DIAGNOSTIC &amp; TRANSLATIONAL SCIENCES - FRANK REIDY RESEARCH CENTER FOR BIOELECTRICS (CBE)</b>				<b>412,721</b>	<b>68,062</b>	<b>0</b>	<b>3,151</b>	<b>483,934</b>	<b>264,431</b>	<b>748,365</b>	<b>54.64%</b>	
<b>SCHOOL OF REHABILITATION SCIENCES</b>												
400451-010	No	NATIONAL ASSOCIATION RESEARCH AND EDUCATION FOUNDATION	CAVALLARIO, JULIE	4,858	5,772	0	0	10,630	1,595	12,225	15.00%	TRAD
300669-003	No	OLD DOMINION UNIVERSITY	KAKAR, RUMIT	2,151	0	0	0	2,151	0	2,151	0.00%	TRAD
300590-010	No	VIRGINIA COMMONWEALTH UNIVERSITY	LAVERDURE, PATRICIA	16,194	0	0	10,000	26,194	1,296	27,490	4.95%	TRAD
400388-010	No	MID-ATLANTIC ATHLETIC TRAINERS' ASSOCIATION (MAATA)	MCCANN, RYAN	0	225	0	0	225	0	225	0.00%	TRAD
400425-010	No	NATIONAL ATHLETIC TRAINERS' ASSOCIATION	MCCANN, RYAN	0	810	0	0	810	0	810	0.00%	TRAD
400490-010	No	NATIONAL ATHLETIC TRAINERS' ASSOCIATION	MCCANN, RYAN	0	1,800	0	0	1,800	0	1,800	0.00%	TRAD
400495-010	No	VIRGINIA ATHLETIC TRAINERS ASSOCIATION	MCCANN, RYAN	0	747	0	0	747	0	747	0.00%	TRAD
400332-010	27%	ALZHEIMER'S ASSOCIATION	MORRISON, STEVEN	449	831	0	0	1,280	128	1,408	10.00%	TRAD
400384-010	70%	SENTARA FOUNDATION	MORRISON, STEVEN	4,556	0	0	0	4,556	0	4,556	0.00%	TRAD
400384-010	30%	SENTARA FOUNDATION	RUSSELL, DANIEL	1,952	0	0	0	1,952	0	1,952	0.00%	TRAD
<b>TOTAL SCHOOL OF REHABILITATION SCIENCES</b>				<b>30,160</b>	<b>10,185</b>	<b>0</b>	<b>10,000</b>	<b>50,345</b>	<b>3,019</b>	<b>53,364</b>	<b>6.00%</b>	
<b>TOTAL COLLEGE OF HEALTH SCIENCES</b>				<b>1,252,877</b>	<b>215,214</b>	<b>65,849</b>	<b>195,568</b>	<b>1,729,508</b>	<b>380,442</b>	<b>2,109,950</b>	<b>22.00%</b>	

**SCHEDULE 4**  
**OLD DOMINION UNIVERSITY RESEARCH FOUNDATION**  
**SPONSORED PROGRAM ACTIVITY BY INDIVIDUAL PROJECT**  
(MEASURED BY EXPENDITURES INCURRED)

**FOR FISCAL YEAR 2022**

PROJECT NUMBER	SPLIT	SPONSORING AGENCY	PRINCIPAL INVESTIGATOR / PROJECT DIRECTOR	PERSONNEL AND FRINGE BENEFITS	SUPPLIES, CONTRACTUAL, GENERAL, & TRAVEL	EQUIPMENT	STIPENDS, SUBCONTRACTS, TUITION, OTHER	TOTAL DIRECT COSTS	REIMBURSED INDIRECT COSTS	TOTAL PROJECT COSTS	EFFECTIVE INDIRECT COST RATE	ENTERPRISE CODE
<b>COLLEGE OF SCIENCES</b>												
<b>DEPARTMENT OF BIOLOGICAL SCIENCES</b>												
100688-010	10%	NATIONAL SCIENCE FOUNDATION	BARSHIS, DANIEL	17,957	33,307	2,963	26,054	80,281	13,329	93,610	16.60%	TRAD
100715-010	No	NATIONAL SCIENCE FOUNDATION	BARSHIS, DANIEL	4,479	1,200	0	0	5,679	1,477	7,156	26.01%	TRAD
300673-010	No	PENNSYLVANIA STATE UNIVERSITY	BARSHIS, DANIEL	0	5,000	0	0	5,000	0	5,000	0.00%	TRAD
400344-010	No	US-ISRAEL BINATIONAL SCIENCE FOUNDATION	BARSHIS, DANIEL	0	3,535	0	0	3,535	530	4,065	14.99%	TRAD
400426-010	No	BISHOP MUSEUM	BARSHIS, DANIEL	22,011	5,690	0	11,144	38,845	7,202	46,047	18.54%	TRAD
400429-010	No	NATIONAL PARK FOUNDATION	BARSHIS, DANIEL	67,691	12,551	0	0	80,242	7,575	87,817	9.44%	TRAD
400487-010	50%	REVIVE & RESTORE	BARSHIS, DANIEL	0	7,000	0	0	7,000	700	7,700	10.00%	TRAD
500459-010	No	IBEROSTAR	BARSHIS, DANIEL	0	4,137	2,758	0	6,895	0	6,895	0.00%	TRAD
600239-010	No	UNIVERSITAT KONSTANZ	BARSHIS, DANIEL	75,559	51,759	31,139	0	158,457	12,732	171,189	8.03%	TRAD
100603-010	No	NATIONAL SCIENCE FOUNDATION	BARTOL, IAN	7,470	14,560	5,168	0	27,198	12,116	39,314	44.55%	TRAD
100688-010	90%	NATIONAL SCIENCE FOUNDATION	CARPENTER, KENT	161,616	299,761	26,666	234,488	722,531	119,958	842,489	16.60%	TRAD
300711-010	No	VA INSTITUTE OF MARINE SCIENCE	CARPENTER, KENT	0	18	0	25,233	25,251	0	25,251	0.00%	TRAD
600185-010	No	INTERNATIONAL UNION FOR CONSERVATION OF NATURE AND NATURAL R	CARPENTER, KENT	24,440	0	0	0	24,440	7,332	31,772	30.00%	TRAD
600224-010	No	INTERNATIONAL UNION FOR CONSERVATION OF NATURE AND NATURAL R	CARPENTER, KENT	0	(41)	0	0	(41)	(4)	(45)	9.76%	TRAD
600229-010	No	INTERNATIONAL UNION FOR CONSERVATION OF NATURE AND NATURAL R	CARPENTER, KENT	16,013	3,337	0	0	19,350	1,935	21,285	10.00%	TRAD
600229-020	No	INTERNATIONAL UNION FOR CONSERVATION OF NATURE AND NATURAL R	CARPENTER, KENT	15,085	12,094	0	0	27,179	2,718	29,897	10.00%	TRAD
300606-011	No	OLD DOMINION UNIVERSITY	DAUER, DANIEL	5,394	0	0	7,488	12,882	1,288	14,170	10.00%	TRAD
300606-012	No	OLD DOMINION UNIVERSITY	DAUER, DANIEL	3,318	0	0	5,883	9,201	921	10,122	10.01%	TRAD
300680-011	No	OLD DOMINION UNIVERSITY	DAUER, DANIEL	185,636	25,494	0	3,592	214,722	19,166	233,888	8.93%	TRAD
300680-012	No	OLD DOMINION UNIVERSITY	DAUER, DANIEL	99,023	0	0	0	99,023	9,902	108,925	10.00%	TRAD
300727-010	No	VA INSTITUTE OF MARINE SCIENCE	DAUER, DANIEL	19,703	1,680	0	8,576	29,959	0	29,959	0.00%	TRAD
100684-010	50%	U.S. DEPARTMENT OF HEALTH AND HUMAN SERVICES	GAFF, HOLLY	21,347	8,964	0	99,193	129,504	16,671	146,175	12.87%	TRAD
100851-010	No	U.S. DEPARTMENT OF AGRICULTURE	GAFF, HOLLY	15,830	22,238	0	1,183	39,251	3,807	43,058	9.70%	TRAD
100934-010	No	U.S. DEPARTMENT OF AGRICULTURE	GAFF, HOLLY	8,644	0	0	0	8,644	864	9,508	10.00%	TRAD
300549-010	No	COLUMBIA UNIVERSITY	GAFF, HOLLY	24,604	0	0	1,745	26,349	13,532	39,881	51.36%	TRAD
400484-010	No	WASHINGTON BIOLOGISTS' FIELD CLUB	GAFF, HOLLY	0	1,500	0	0	1,500	0	1,500	0.00%	TRAD
100684-010	15%	U.S. DEPARTMENT OF HEALTH AND HUMAN SERVICES	GAUTHIER, DAVID	6,404	2,689	0	29,758	38,851	5,001	43,852	12.87%	TRAD
100863-010	No	NATIONAL SCIENCE FOUNDATION	GAUTHIER, DAVID	3,848	3,164	0	12,752	19,764	1,823	21,587	9.22%	TRAD
300668-001	No	OLD DOMINION UNIVERSITY	GAUTHIER, DAVID	3,087	6,616	0	0	9,703	0	9,703	0.00%	TRAD
300702-010	No	EASTERN VIRGINIA MEDICAL SCHOOL	HARGRAVE, BARBARA	3,969	0	0	0	3,969	1,032	5,001	26.00%	TRAD
200287-010	No	VA DEPARTMENT OF AGRICULTURE	HORTH, LISA	0	399	0	0	399	0	399	0.00%	TRAD
400268-010	No	VIRGINIA STATE BEEKEEPERS ASSOCIATION	HORTH, LISA	0	298	0	0	298	0	298	0.00%	TRAD
100684-010	35%	U.S. DEPARTMENT OF HEALTH AND HUMAN SERVICES	HYNES, WAYNE	14,943	6,275	0	69,435	90,653	11,670	102,323	12.87%	TRAD
100889-010	No	U.S. PUBLIC HEALTH SERVICE (INCLUDING NIH)	KRAJ, PIOTR	5,956	38,136	0	0	44,092	24,251	68,343	55.00%	TRAD
100555-010	5%	U.S. PUBLIC HEALTH SERVICE (INCLUDING NIH)	OSGOOD, CHRISTOPHER	473	1,128	0	0	1,601	881	2,482	55.03%	TRAD
100585-010	20%	U.S. PUBLIC HEALTH SERVICE (INCLUDING NIH)	OSGOOD, CHRISTOPHER	4,127	4,306	8,049	0	16,482	4,638	21,120	28.14%	TRAD
400487-010	50%	REVIVE & RESTORE	RADICE, VERONICA	0	7,000	0	0	7,000	700	7,700	10.00%	TRAD
100858-010	No	U.S. PUBLIC HEALTH SERVICE (INCLUDING NIH)	SHOLLENBERGER, LISA	10,754	36,165	0	0	46,919	25,805	72,724	55.00%	TRAD
100527-036	25%	NASA GODDARD SPACEFLIGHT CENTER	SLOFY, TAYLOR	2,338	0	0	0	2,338	0	2,338	0.00%	TRAD
100924-010	33%	NATIONAL SCIENCE FOUNDATION	SLOFY, TAYLOR	3,088	397	0	3,168	6,653	1,917	8,570	28.81%	TRAD
300669-008	No	OLD DOMINION UNIVERSITY	SLOFY, TAYLOR	3,737	0	0	0	3,737	0	3,737	0.00%	TRAD
100724-010	No	NATIONAL SCIENCE FOUNDATION	WALLACE, LISA	4,592	9,382	0	9,877	23,851	7,686	31,537	32.23%	TRAD
100924-010	34%	NATIONAL SCIENCE FOUNDATION	WALLACE, LISA	3,182	409	0	3,264	6,855	1,975	8,830	28.81%	TRAD
100542-010	No	NATIONAL SCIENCE FOUNDATION	WALTERS, ERIC	26,975	0	0	35,494	62,469	7,013	69,482	11.23%	TRAD
100861-010	No	NATIONAL SCIENCE FOUNDATION	WHITEMAN, JOHN	9,353	3,509	0	0	12,862	7,074	19,936	55.00%	TRAD
100527-036	25%	NASA GODDARD SPACEFLIGHT CENTER	YANDO, ERIK	2,338	0	0	0	2,338	0	2,338	0.00%	TRAD
100924-010	33%	NATIONAL SCIENCE FOUNDATION	YANDO, ERIK	3,088	397	0	3,168	6,653	1,917	8,570	28.81%	TRAD
<b>TOTAL DEPARTMENT OF BIOLOGICAL SCIENCES</b>				<b>908,072</b>	<b>634,054</b>	<b>76,743</b>	<b>591,495</b>	<b>2,210,364</b>	<b>357,134</b>	<b>2,567,498</b>	<b>16.16%</b>	
<b>DEPARTMENT OF CHEMISTRY &amp; BIOCHEMISTRY</b>												
100646-010	No	U.S. PUBLIC HEALTH SERVICE (INCLUDING NIH)	BAYSE, CRAIG	9,220	149	0	0	9,369	5,153	14,522	55.00%	TRAD

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**FOR FISCAL YEAR 2022**

PROJECT NUMBER	SPLIT	SPONSORING AGENCY	PRINCIPAL INVESTIGATOR / PROJECT DIRECTOR	PERSONNEL AND FRINGE BENEFITS	SUPPLIES, CONTRACTUAL, GENERAL, & TRAVEL	EQUIPMENT	STIPENDS, SUBCONTRACTS, TUITION, OTHER	TOTAL DIRECT COSTS	REIMBURSED INDIRECT COSTS	TOTAL PROJECT COSTS	EFFECTIVE INDIRECT COST RATE	ENTERPRISE CODE
100664-010	60%	NATIONAL SCIENCE FOUNDATION	BAYSE, CRAIG	4,240	1,675	0	23,198	29,113	3,253	32,366	11.17%	TRAD
100927-010	75%	NATIONAL SCIENCE FOUNDATION	BAYSE, CRAIG	0	0	0	38,847	38,847	0	38,847	0.00%	TRAD
300522-010	40%	COLLEGE OF WILLIAM AND MARY	BAYSE, CRAIG	0	982	0	0	982	540	1,522	54.99%	TRAD
400488-010	No	VIRGINIA ACADEMY OF SCIENCE	BAYSE, CRAIG	0	269	0	0	269	0	269	0.00%	TRAD
100698-010	No	NASA/HEADQUARTERS	BERNATH, PETER	44,455	7,267	0	6,813	58,535	28,447	86,982	48.60%	TRAD
100806-010	No	NASA/HEADQUARTERS	BERNATH, PETER	110,497	9,035	0	8,472	128,004	65,743	193,747	51.36%	TRAD
100842-010	No	NASA/HEADQUARTERS	BERNATH, PETER	41,417	2,159	0	8,565	52,141	23,967	76,108	45.97%	TRAD
100887-010	No	NASA/HEADQUARTERS	BERNATH, PETER	18,365	19,658	0	5,091	43,114	20,913	64,027	48.51%	TRAD
100911-010	No	NASA/HEADQUARTERS	BERNATH, PETER	26,728	60	0	6,788	33,576	14,734	48,310	43.88%	TRAD
100916-010	No	NASA/HEADQUARTERS	BERNATH, PETER	5,802	1,314	0	0	7,116	3,914	11,030	55.00%	TRAD
300638-010	No	EASTERN VIRGINIA MEDICAL SCHOOL	COOPER, JOHN	79,047	14,232	0	545	93,824	51,303	145,127	54.68%	TRAD
400459-010	No	CONRAD	COOPER, JOHN	26,009	2,680	0	0	28,689	15,779	44,468	55.00%	TRAD
300606-010	No	OLD DOMINION UNIVERSITY	DONAT, JOHN	16,194	16,587	0	82,821	115,602	5,704	121,306	4.93%	TRAD
300680-010	No	OLD DOMINION UNIVERSITY	DONAT, JOHN	338,161	190,670	0	0	528,831	41,869	570,700	7.92%	TRAD
400489-010	No	VIRGINIA ACADEMY OF SCIENCE	GREENE, LESLEY	0	573	0	0	573	0	573	0.00%	TRAD
300466-010	No	UNIVERSITY OF MAINE	HATCHER, PATRICK	2,367	0	0	0	2,367	1,014	3,381	42.84%	TRAD
100664-010	40%	NATIONAL SCIENCE FOUNDATION	HOLDER, ALVIN	2,827	1,117	0	15,466	19,410	2,169	21,579	11.17%	TRAD
100718-030	50%	U.S. PUBLIC HEALTH SERVICE (INCLUDING NIH)	HOLDER, ALVIN	0	1,565	0	0	1,565	125	1,690	7.99%	TRAD
100718-031	50%	U.S. PUBLIC HEALTH SERVICE (INCLUDING NIH)	HOLDER, ALVIN	0	2,113	0	0	2,113	169	2,282	8.00%	TRAD
100718-040	50%	U.S. PUBLIC HEALTH SERVICE (INCLUDING NIH)	HOLDER, ALVIN	36,289	20,777	0	92,221	149,287	9,952	159,239	6.67%	TRAD
100718-050	50%	U.S. PUBLIC HEALTH SERVICE (INCLUDING NIH)	HOLDER, ALVIN	0	78	0	4,399	4,477	358	4,835	8.00%	TRAD
100893-010	50%	U.S. PUBLIC HEALTH SERVICE (INCLUDING NIH)	HOLDER, ALVIN	6,747	4,042	0	42,163	52,952	863	53,815	1.63%	TRAD
100893-020	50%	U.S. PUBLIC HEALTH SERVICE (INCLUDING NIH)	HOLDER, ALVIN	6,457	1,218	0	5,568	13,243	1,059	14,302	8.00%	TRAD
300766-010	50%	OLD DOMINION UNIVERSITY	HOLDER, ALVIN	0	0	51,600	0	51,600	0	51,600	0.00%	TRAD
300668-003	No	OLD DOMINION UNIVERSITY	LAMBERT, KYLE	8,643	885	0	0	9,528	0	9,528	0.00%	TRAD
300660-010	70%	OLD DOMINION UNIVERSITY	LEE, JAMES	0	9,208	0	0	9,208	0	9,208	0.00%	TRAD
100808-010	No	NATIONAL SCIENCE FOUNDATION	MAO, JINGDONG	11,574	0	0	0	11,574	6,365	17,939	54.99%	TRAD
100927-010	25%	NATIONAL SCIENCE FOUNDATION	MCCOY, PINKY	0	0	0	12,949	12,949	0	12,949	0.00%	TRAD
300766-010	50%	OLD DOMINION UNIVERSITY	PAGOLA, SILVINA	0	0	51,600	0	51,600	0	51,600	0.00%	TRAD
400386-010	No	INTERNATIONAL CENTER FOR DIFFRACTION DATA	PAGOLA, SILVINA	0	(2)	0	300	298	0	298	0.00%	TRAD
300584-010	No	UNIVERSITY OF CALIFORNIA (ALL CAMPUSES)	PASCAL, STEVEN	31,937	25,945	0	15,388	73,270	31,835	105,105	43.45%	TRAD
100730-010	No	NATIONAL SCIENCE FOUNDATION	POUTSMA, JENNIFER	9,995	0	0	0	9,995	5,497	15,492	55.00%	TRAD
300522-010	60%	COLLEGE OF WILLIAM AND MARY	PURCELL, ERIN	0	1,473	0	0	1,473	810	2,283	54.99%	TRAD
300759-010	No	EASTERN VIRGINIA MEDICAL SCHOOL	PURCELL, ERIN	683	6,812	0	0	7,495	749	8,244	9.99%	TRAD
100729-010	No	NATIONAL SCIENCE FOUNDATION	WANG, GUIJUN	70,057	13,541	0	6,224	89,822	45,979	135,801	51.19%	TRAD
100865-010	No	NATIONAL SCIENCE FOUNDATION	WANG, GUIJUN	20,431	8,384	0	0	28,815	15,848	44,663	55.00%	TRAD
300688-010	No	OLD DOMINION UNIVERSITY	WANG, GUIJUN	0	12	0	0	12	0	12	0.00%	TRAD
100490-010	No	NATIONAL SCIENCE FOUNDATION	XU, NANCY	0	11	23,930	0	23,941	6	23,947	0.03%	TRAD
100490-020	No	NATIONAL SCIENCE FOUNDATION	XU, NANCY	0	0	19,540	0	19,540	0	19,540	0.00%	TRAD
100555-010	95%	U.S. PUBLIC HEALTH SERVICE (INCLUDING NIH)	XU, NANCY	8,983	21,440	0	0	30,423	16,732	47,155	55.00%	TRAD
100585-010	80%	U.S. PUBLIC HEALTH SERVICE (INCLUDING NIH)	XU, NANCY	16,509	17,224	32,195	0	65,928	18,553	84,481	28.14%	TRAD
<b>TOTAL DEPARTMENT OF CHEMISTRY &amp; BIOCHEMISTRY</b>				<b>953,634</b>	<b>403,153</b>	<b>178,865</b>	<b>375,818</b>	<b>1,911,470</b>	<b>439,402</b>	<b>2,350,872</b>	<b>22.99%</b>	
 <b>DEPARTMENT OF CHEMISTRY &amp; BIOCHEMISTRY - FRANK REIDY RESEARCH CENTER FOR BIOELECTRICS (CBE)</b>												
500226-021	50%	PULSE BIOSCIENCES (ELECTROBLATE)	PURCELL, ERIN	48,886	6,220	0	3,151	58,257	30,308	88,565	52.02%	CBE
<b>TOTAL DEPARTMENT OF CHEMISTRY &amp; BIOCHEMISTRY - FRANK REIDY RESEARCH CENTER FOR BIOELECTRICS (CBE)</b>				<b>48,886</b>	<b>6,220</b>	<b>0</b>	<b>3,151</b>	<b>58,257</b>	<b>30,308</b>	<b>88,565</b>	<b>52.02%</b>	
 <b>DEPARTMENT OF MATHEMATICS &amp; STATISTICS</b>												
300606-014	No	OLD DOMINION UNIVERSITY	CHAGANTY, NARASINGA	0	0	0	449	449	45	494	10.02%	TRAD
300680-014	No	OLD DOMINION UNIVERSITY	CHAGANTY, NARASINGA	18,202	0	0	0	18,202	1,820	20,022	10.00%	TRAD
200336-010	50%	VA DEPARTMENT OF MOTOR VEHICLES	DIAWARA, NOROU	17,118	12,500	0	20,169	49,787	7,701	57,488	15.47%	TRAD
200357-010	50%	VA DEPARTMENT OF MOTOR VEHICLES	DIAWARA, NOROU	14,155	4,703	0	0	18,858	4,903	23,761	26.00%	TRAD
300672-010	40%	OLD DOMINION UNIVERSITY	DIAWARA, NOROU	7,582	0	0	0	7,582	2,275	9,857	30.01%	TRAD
400203-009	No	NATIONAL INSTITUTE OF AEROSPACE ASSOCIATES (NIA)	HU, FANG	36,956	350	0	0	37,306	9,699	47,005	26.00%	TRAD

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FOR FISCAL YEAR 2022

PROJECT NUMBER	SPLIT	SPONSORING AGENCY	PRINCIPAL INVESTIGATOR / PROJECT DIRECTOR	PERSONNEL AND FRINGE BENEFITS	SUPPLIES, CONTRACTUAL, GENERAL, & TRAVEL	EQUIPMENT	STIPENDS, SUBCONTRACTS, TUITION, OTHER	TOTAL DIRECT COSTS	REIMBURSED INDIRECT COSTS	TOTAL PROJECT COSTS	EFFECTIVE INDIRECT COST RATE	ENTERPRISE CODE	
400203-012	No	NATIONAL INSTITUTE OF AEROSPACE ASSOCIATES (NIA)	HU, FANG	28,560	350	0	0	28,910	7,517	36,427	26.00%	TRAD	
100817-010	No	NATIONAL SCIENCE FOUNDATION	JOO, SOOKYUNG	16,891	3,191	0	0	20,082	11,045	31,127	55.00%	TRAD	
100665-010	No	NATIONAL SCIENCE FOUNDATION	LUO, LI-SHI	38,492	1,875	0	0	40,367	22,202	62,569	55.00%	TRAD	
400347-011	No	JEFFERSON SCIENCE ASSOCIATES, LLC (JEFFERSON LAB)	LUO, LI-SHI	91,995	0	0	0	91,995	0	91,995	0.00%	TRAD	
100913-010	20%	U.S. DEPARTMENT OF AGRICULTURE	PARK, KAYOUNG	2,180	169	0	0	2,349	235	2,584	10.00%	TRAD	
300616-010	25%	DUKE UNIVERSITY	PARK, KAYOUNG	3,132	2,476	0	0	5,608	673	6,281	12.00%	TRAD	
100862-010	No	NATIONAL SCIENCE FOUNDATION	SHI, KE	18,525	2,107	0	0	20,632	11,348	31,980	55.00%	TRAD	
400423-010	No	SIMONS FOUNDATION	SHI, KE	0	2,460	0	0	2,460	492	2,952	20.00%	TRAD	
100815-010	No	NATIONAL SCIENCE FOUNDATION	SONG, GUOHUI	12,015	344	0	0	12,359	6,797	19,156	55.00%	TRAD	
100848-010	No	LANGLEY RESEARCH CENTER	TWEED, JOHN	127,482	0	0	0	127,482	33,145	160,627	26.00%	TRAD	
100871-010	No	NATIONAL SCIENCE FOUNDATION	XU, XIANG	23,561	225	0	0	23,786	13,082	36,868	55.00%	TRAD	
400422-010	No	SIMONS FOUNDATION	XU, XIANG	0	500	0	0	500	100	600	20.00%	TRAD	
100812-010	No	NATIONAL SCIENCE FOUNDATION	XU, YUESHENG	17,930	0	0	0	17,930	9,862	27,792	55.00%	TRAD	
400346-025	No	JEFFERSON SCIENCE ASSOCIATES, LLC (JEFFERSON LAB)	XU, YUESHENG	2,872	0	0	0	2,872	0	2,872	0.00%	TRAD	
400478-010	No	SOUTHERN UNIVERSITIES RESEARCH ASSOC (SURA)	XU, YUESHENG	0	0	0	0	10,286	10,286	0	10,286	0.00%	TRAD
400513-010	No	MEMORIAL SLOAN KETTERING CANCER CENTER	XU, YUESHENG	8,429	0	0	0	8,429	4,636	13,065	55.00%	TRAD	
100685-010	No	ARMY RESEARCH OFFICE	YAMALEEV, NAIL	0	0	0	(2,129)	(2,129)	0	(2,129)	0.00%	TRAD	
<b>TOTAL DEPARTMENT OF MATHEMATICS &amp; STATISTICS</b>				<b>486,077</b>	<b>31,250</b>	<b>0</b>	<b>28,775</b>	<b>546,102</b>	<b>147,577</b>	<b>693,679</b>	<b>27.02%</b>		

**DEPARTMENT OF OCEAN & EARTH SCIENCES**

100805-010	No	NATIONAL SCIENCE FOUNDATION	BOCHDANSKY, ALEXANDER	29,927	12,612	809	11,040	54,388	23,396	77,784	43.02%	TRAD
100879-010	No	NATIONAL SCIENCE FOUNDATION	BOCHDANSKY, ALEXANDER	0	120	236	0	356	66	422	18.54%	TRAD
100928-010	No	NATIONAL SCIENCE FOUNDATION	BOCHDANSKY, ALEXANDER	2,583	25,311	13,415	0	41,309	15,342	56,651	37.14%	TRAD
100608-010	50%	NATIONAL SCIENCE FOUNDATION	BURDIGE, DAVID	212	2,442	0	0	2,654	1,460	4,114	55.01%	TRAD
100705-010	No	NATIONAL SCIENCE FOUNDATION	BURDIGE, DAVID	20,792	1,884	0	0	22,676	12,472	35,148	55.00%	TRAD
100803-010	No	NATIONAL SCIENCE FOUNDATION	CHAPPELL, PHOEBE	40,659	12,187	0	0	52,846	29,066	81,912	55.00%	TRAD
400416-010	No	JEFFRESS RESEARCH GRANTS PROGRAM	CHAPPELL, PHOEBE	1,100	7,257	0	0	8,357	0	8,357	0.00%	TRAD
100936-010	No	NATIONAL SCIENCE FOUNDATION	CHAPPELL, PHOEBE	10,139	5,269	0	0	15,408	8,474	23,882	55.00%	TRAD
100846-016	No	LANGLEY RESEARCH CENTER	CLAYTON, SOPHIE	2,686	0	0	0	2,686	0	2,686	0.00%	TRAD
100870-010	No	NATIONAL SCIENCE FOUNDATION	CLAYTON, SOPHIE	2,597	100	0	0	2,697	863	3,560	32.00%	TRAD
300689-010	50%	OLD DOMINION UNIVERSITY	CLAYTON, SOPHIE	1,782	718	0	0	2,500	0	2,500	0.00%	TRAD
300742-010	No	UNIVERSITY OF DELAWARE	CLAYTON, SOPHIE	5,011	1,306	0	0	6,317	3,474	9,791	54.99%	TRAD
100649-010	No	NATIONAL SCIENCE FOUNDATION	CUTTER, GREGORY	15,878	1,407	0	0	17,285	9,507	26,792	55.00%	TRAD
100677-010	No	NATIONAL SCIENCE FOUNDATION	CUTTER, GREGORY	63,488	9,908	0	1,653	75,049	40,367	115,416	53.79%	TRAD
100868-010	No	NATIONAL SCIENCE FOUNDATION	CUTTER, GREGORY	18,520	61,860	0	0	80,380	44,209	124,589	55.00%	TRAD
100894-010	No	NATIONAL SCIENCE FOUNDATION	CUTTER, GREGORY	0	0	159,064	0	159,064	0	159,064	0.00%	TRAD
100904-010	No	NATIONAL SCIENCE FOUNDATION	CUTTER, GREGORY	48,825	4,742	0	7,002	60,569	29,461	90,030	48.64%	TRAD
300633-010	50%	VA INSTITUTE OF MARINE SCIENCE	DOBBS, FREDERICK	14,666	792	0	0	15,458	0	15,458	0.00%	TRAD
400505-010	No	CONSORTIUM FOR OCEAN LEADERSHIP, INC.	DOBBS, FREDERICK	0	5,914	2,268	0	8,182	0	8,182	0.00%	TRAD
300668-002	No	OLD DOMINION UNIVERSITY	HALE, RICHARD	5,182	3,001	0	0	8,183	0	8,183	0.00%	TRAD
100825-010	33%	NATIONAL SCIENCE FOUNDATION	HARVEY, HENRY RODGER	6,516	1,224	0	0	7,740	2,012	9,752	25.99%	TRAD
100846-014	No	LANGLEY RESEARCH CENTER	HILL, VICTORIA	3,668	230	0	0	3,898	0	3,898	0.00%	TRAD
100920-010	No	NASA/HEADQUARTERS	HILL, VICTORIA	27,769	3,063	0	0	30,832	16,957	47,789	55.00%	TRAD
100921-010	33%	NASA/HEADQUARTERS	HILL, VICTORIA	2,908	548	0	0	3,456	1,901	5,357	55.01%	TRAD
300498-010	50%	VA INSTITUTE OF MARINE SCIENCE	HILL, VICTORIA	41,104	2,089	0	0	43,193	23,742	66,935	54.97%	TRAD
300556-011	33%	VA POLYTECHNIC INSTITUTE AND STATE UNIVERSITY	HILL, VICTORIA	11,016	640	0	185	11,841	0	11,841	0.00%	TRAD
500443-010	33%	NALU SCIENTIFIC	HILL, VICTORIA	5,688	1,670	0	0	7,358	4,047	11,405	55.00%	TRAD
100527-036	25%	NASA GODDARD SPACEFLIGHT CENTER	MCLEOD, GEORGE	2,338	0	0	0	2,338	0	2,338	0.00%	TRAD
200332-010	15%	VA DEPARTMENT OF ECONOMIC DEVELOPMENT	MCLEOD, GEORGE	40,670	4,321	0	5,081	50,072	4,949	55,021	9.88%	TRAD
100735-010	No	NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION	MULHOLLAND, MARGARET	70,758	12,421	0	4,714	87,893	45,721	133,614	52.02%	TRAD
200331-010	No	HAMPTON ROADS SANITATION DISTRICT COMMISSION	MULHOLLAND, MARGARET	26,509	5,122	6,014	805	38,450	3,243	41,693	8.43%	TRAD
200352-010	No	HAMPTON ROADS SANITATION DISTRICT COMMISSION	MULHOLLAND, MARGARET	49,135	4,109	8,910	0	62,154	5,324	67,478	8.57%	TRAD
300558-030	No	OLD DOMINION UNIVERSITY	MULHOLLAND, MARGARET	36,368	1,270	0	0	37,638	3,637	41,275	9.66%	TRAD
300606-013	No	OLD DOMINION UNIVERSITY	MULHOLLAND, MARGARET	4,671	2,035	0	46,735	53,441	5,344	58,785	10.00%	TRAD

**SCHEDULE 4**  
**OLD DOMINION UNIVERSITY RESEARCH FOUNDATION**  
**SPONSORED PROGRAM ACTIVITY BY INDIVIDUAL PROJECT**  
 (MEASURED BY EXPENDITURES INCURRED)  
 FOR FISCAL YEAR 2022

PROJECT NUMBER	SPLIT	SPONSORING AGENCY	PRINCIPAL INVESTIGATOR / PROJECT DIRECTOR	PERSONNEL AND FRINGE BENEFITS	SUPPLIES, CONTRACTUAL, GENERAL, & TRAVEL	EQUIPMENT	STIPENDS, SUBCONTRACTS, TUITION, OTHER	TOTAL DIRECT COSTS	REIMBURSED INDIRECT COSTS	TOTAL PROJECT COSTS	EFFECTIVE INDIRECT COST RATE	ENTERPRISE CODE
300668-008	No	OLD DOMINION UNIVERSITY	MULHOLLAND, MARGARET	2,686	0	0	0	2,686	0	2,686	0.00%	TRAD
300680-013	No	OLD DOMINION UNIVERSITY	MULHOLLAND, MARGARET	106,173	24,005	0	0	130,178	13,018	143,196	10.00%	TRAD
300689-010	50%	OLD DOMINION UNIVERSITY	MULHOLLAND, MARGARET	1,782	718	0	0	2,500	0	2,500	0.00%	TRAD
300695-010	No	OLD DOMINION UNIVERSITY	MULHOLLAND, MARGARET	5,022	0	0	0	5,022	0	5,022	0.00%	TRAD
100712-010	No	NATIONAL SCIENCE FOUNDATION	SCHMIDT, MATTHEW	29,823	6,182	0	0	36,005	19,803	55,808	55.00%	TRAD
100929-010	No	NATIONAL SCIENCE FOUNDATION	SCHMIDT, MATTHEW	624	0	0	0	624	343	967	54.97%	TRAD
100707-010	No	NATIONAL SCIENCE FOUNDATION	SEDWICK, PETER	55,546	12,227	0	0	67,773	37,275	105,048	55.00%	TRAD
100742-010	No	NATIONAL SCIENCE FOUNDATION	SEDWICK, PETER	25,251	1,544	0	0	26,795	14,737	41,532	55.00%	TRAD
100910-010	No	NATIONAL SCIENCE FOUNDATION	SEDWICK, PETER	19,358	6,870	0	0	26,228	14,426	40,654	55.00%	TRAD
100899-010	No	NASA/HEADQUARTERS	TAMBORSKI, JOSEPH	19,200	11,008	0	0	30,208	16,614	46,822	55.00%	TRAD
100936-011	No	NATIONAL SCIENCE FOUNDATION	TAMBORSKI, JOSEPH	6,462	797	0	0	7,259	3,992	11,251	54.99%	TRAD
300669-009	No	OLD DOMINION UNIVERSITY	TAMBORSKI, JOSEPH	4,213	0	0	0	4,213	0	4,213	0.00%	TRAD
500421-010	No	WEANACK LAND LIMITED PARTNERS	WHITTECAR, RICHARD	6,510	1,882	0	0	8,392	2,182	10,574	26.00%	TRAD
100608-010	50%	NATIONAL SCIENCE FOUNDATION	ZIMMERMAN, RICHARD	212	2,442	0	0	2,654	1,460	4,114	55.01%	TRAD
100921-010	34%	NASA/HEADQUARTERS	ZIMMERMAN, RICHARD	2,996	565	0	0	3,561	1,958	5,519	54.98%	TRAD
300498-010	50%	VA INSTITUTE OF MARINE SCIENCE	ZIMMERMAN, RICHARD	41,104	2,089	0	0	43,193	23,742	66,935	54.97%	TRAD
300556-011	33%	VA POLYTECHNIC INSTITUTE AND STATE UNIVERSITY	ZIMMERMAN, RICHARD	11,016	640	0	185	11,841	0	11,841	0.00%	TRAD
500443-010	34%	NALU SCIENTIFIC	ZIMMERMAN, RICHARD	5,861	1,720	0	0	7,581	4,169	11,750	54.99%	TRAD
<b>TOTAL DEPARTMENT OF OCEAN &amp; EARTH SCIENCES</b>				<b>957,004</b>	<b>268,261</b>	<b>190,716</b>	<b>77,400</b>	<b>1,493,381</b>	<b>488,753</b>	<b>1,982,134</b>	<b>32.73%</b>	
<b>CENTER FOR COASTAL PHYSICAL OCEANOGRAPHY</b>												
100686-010	50%	NATIONAL SCIENCE FOUNDATION	DINNIMAN, MICHAEL	3,213	0	0	0	3,213	1,767	4,980	55.00%	TRAD
100747-010	50%	NATIONAL SCIENCE FOUNDATION	DINNIMAN, MICHAEL	10,631	0	0	0	10,631	5,847	16,478	55.00%	TRAD
600242-010	No	UNIVERSITY OF TASMANIA	DINNIMAN, MICHAEL	18,866	0	0	0	18,866	10,376	29,242	55.00%	TRAD
300589-010	No	UNIVERSITY OF DELAWARE	HAGERMAN, GEORGE	18,419	0	0	0	18,419	10,131	28,550	55.00%	TRAD
300683-010	No	OLD DOMINION UNIVERSITY	HAGERMAN, GEORGE	3,799	0	0	0	3,799	0	3,799	0.00%	TRAD
300686-010	No	TEXAS A&M UNIVERSITY	HAGERMAN, GEORGE	19,506	0	0	0	19,506	10,728	30,234	55.00%	TRAD
100667-010	No	NATIONAL SCIENCE FOUNDATION	HOFMANN, EILEEN	9,250	0	0	0	9,250	5,088	14,338	55.01%	TRAD
100686-010	50%	NATIONAL SCIENCE FOUNDATION	HOFMANN, EILEEN	3,213	0	0	0	3,213	1,767	4,980	55.00%	TRAD
100735-011	No	NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION	HOFMANN, EILEEN	63,219	0	0	0	63,219	34,770	97,989	55.00%	TRAD
200331-011	78%	HAMPTON ROADS SANITATION DISTRICT COMMISSION	HOFMANN, EILEEN	0	0	0	668	668	67	735	10.03%	TRAD
300399-010	No	VA INSTITUTE OF MARINE SCIENCE	HOFMANN, EILEEN	3,866	0	0	0	3,866	2,126	5,992	54.99%	TRAD
300554-010	50%	STATE UNIVERSITY OF NEW JERSEY (ALL CAMPUSES)	HOFMANN, EILEEN	4,286	187	0	0	4,473	783	5,256	17.51%	TRAD
300619-010	50%	STATE UNIVERSITY OF NEW JERSEY (ALL CAMPUSES)	HOFMANN, EILEEN	17,003	0	0	0	17,003	9,352	26,355	55.00%	TRAD
300653-010	50%	STATE UNIVERSITY OF NEW JERSEY (ALL CAMPUSES)	HOFMANN, EILEEN	377	0	0	0	377	207	584	54.91%	TRAD
100747-010	50%	NATIONAL SCIENCE FOUNDATION	KLINCK, JOHN	10,631	0	0	0	10,631	5,847	16,478	55.00%	TRAD
200331-011	22%	HAMPTON ROADS SANITATION DISTRICT COMMISSION	KLINCK, JOHN	0	0	0	188	188	19	207	10.11%	TRAD
300385-020	No	STATE UNIVERSITY OF NEW JERSEY (ALL CAMPUSES)	KLINCK, JOHN	39,225	15,215	0	1,743	56,183	29,942	86,125	53.29%	TRAD
300554-010	50%	STATE UNIVERSITY OF NEW JERSEY (ALL CAMPUSES)	KLINCK, JOHN	4,286	187	0	0	4,473	783	5,256	17.51%	TRAD
300611-010	No	WOODS HOLE OCEANOGRAPHIC INSTITUTION	KLINCK, JOHN	26,547	470	0	0	27,017	14,859	41,876	55.00%	TRAD
300619-010	50%	STATE UNIVERSITY OF NEW JERSEY (ALL CAMPUSES)	KLINCK, JOHN	17,003	0	0	0	17,003	9,352	26,355	55.00%	TRAD
300653-010	50%	STATE UNIVERSITY OF NEW JERSEY (ALL CAMPUSES)	KLINCK, JOHN	377	0	0	0	377	207	584	54.91%	TRAD
200314-010	No	VA DEPARTMENT OF MINES, MINERALS, AND ENERGY	OLSEN, PAUL	163,548	8,884	0	0	172,432	29,439	201,871	17.07%	TRAD
300741-010	No	UNIVERSITY OF DELAWARE	UPDYKE, TERESA	37,140	12,464	0	0	49,604	27,282	76,886	55.00%	TRAD
500464-010	No	CODAR	UPDYKE, TERESA	12,337	1,689	0	0	14,026	7,714	21,740	55.00%	TRAD
<b>TOTAL CENTER FOR COASTAL PHYSICAL OCEANOGRAPHY</b>				<b>486,742</b>	<b>39,096</b>	<b>0</b>	<b>2,599</b>	<b>528,437</b>	<b>218,453</b>	<b>746,890</b>	<b>41.34%</b>	
<b>DEPARTMENT OF PSYCHOLOGY</b>												
100626-010	No	U.S. PUBLIC HEALTH SERVICE (INCLUDING NIH)	BRAITMAN, ABBY	123,489	11,337	0	5,229	140,055	10,786	150,841	7.70%	TRAD
100798-010	15%	U.S. PUBLIC HEALTH SERVICE (INCLUDING NIH)	BRAITMAN, ABBY	14,505	5,625	0	900	21,030	11,072	32,102	52.65%	TRAD
100850-010	50%	NATIONAL SCIENCE FOUNDATION	CHEN, JING	8,756	2,793	0	12,662	24,211	6,352	30,563	26.24%	TRAD
100873-010	34%	NATIONAL SCIENCE FOUNDATION	CHEN, JING	20,429	0	0	2,195	22,624	11,236	33,860	49.66%	TRAD
100876-011	No	NATIONAL SCIENCE FOUNDATION	CHEN, JING	30,757	238	0	12,276	43,271	17,047	60,318	39.40%	TRAD
100738-010	20%	NATIONAL SCIENCE FOUNDATION	CIGULAROV, KONSTANTIN	5,515	4,266	0	23,720	33,501	5,380	38,881	16.06%	TRAD

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FOR FISCAL YEAR 2022

PROJECT NUMBER	SPLIT	SPONSORING AGENCY	PRINCIPAL INVESTIGATOR / PROJECT DIRECTOR	PERSONNEL AND FRINGE BENEFITS	SUPPLIES, CONTRACTUAL, GENERAL, & TRAVEL	EQUIPMENT	STIPENDS, SUBCONTRACTS, TUITION, OTHER	TOTAL DIRECT COSTS	REIMBURSED INDIRECT COSTS	TOTAL PROJECT COSTS	EFFECTIVE INDIRECT COST RATE	ENTERPRISE CODE
100898-010	No	OFFICE OF NAVAL RESEARCH	CIGALAROV, KONSTANTIN	54,577	10,889	0	5,170	70,636	17,021	87,657	24.10%	TRAD
100726-030	60%	U.S. DEPARTMENT OF HEALTH AND HUMAN SERVICES	GLENN, CATHERINE	4,958	5,563	0	0	10,521	3,367	13,888	32.00%	TRAD
300677-010	No	STATE UNIVERSITY OF NEW JERSEY (ALL CAMPUSES)	GLENN, CATHERINE	64,630	0	0	0	64,630	35,546	100,176	55.00%	TRAD
300709-010	No	STATE UNIVERSITY OF NEW JERSEY (ALL CAMPUSES)	GLENN, CATHERINE	5,261	0	0	0	5,261	2,894	8,155	55.01%	TRAD
100551-010	90%	U.S. PUBLIC HEALTH SERVICE (INCLUDING NIH)	HENSON, MATT	0	0	0	4,675	4,675	0	4,675	0.00%	TRAD
100551-010	5%	U.S. PUBLIC HEALTH SERVICE (INCLUDING NIH)	HERON, KRISTIN	0	0	0	260	260	0	260	0.00%	TRAD
100798-010	60%	U.S. PUBLIC HEALTH SERVICE (INCLUDING NIH)	HERON, KRISTIN	58,022	22,500	0	3,600	84,122	44,287	128,409	52.65%	TRAD
100844-010	No	U.S. PUBLIC HEALTH SERVICE (INCLUDING NIH)	HERON, KRISTIN	0	0	0	36,375	36,375	0	36,375	0.00%	TRAD
100551-010	5%	U.S. PUBLIC HEALTH SERVICE (INCLUDING NIH)	KELLEY, MICHELLE	0	0	0	260	260	0	260	0.00%	TRAD
100881-010	No	U.S. PUBLIC HEALTH SERVICE (INCLUDING NIH)	KELLEY, MICHELLE	18,153	20,396	0	4,311	42,860	21,202	64,062	49.47%	TRAD
100881-020	No	U.S. PUBLIC HEALTH SERVICE (INCLUDING NIH)	KELLEY, MICHELLE	55,466	33,980	0	6,583	96,029	49,195	145,224	51.23%	TRAD
100798-010	25%	U.S. PUBLIC HEALTH SERVICE (INCLUDING NIH)	LEWIS, ROBIN	24,176	9,375	0	1,500	35,051	18,453	53,504	52.65%	TRAD
100673-010	20%	NATIONAL SCIENCE FOUNDATION	MAJOR, DEBRA	4,031	1,101	0	0	5,132	2,823	7,955	55.01%	TRAD
200009-023	25%	STATE COUNCIL FOR HIGHER EDUCATION IN VA (SCHEV)	MEEA, ALAN	1,339	1,150	0	0	2,489	0	2,489	0.00%	TRAD
200349-010	50%	LOUISIANA DEPARTMENT OF EDUCATION	NOELL, GEORGE	11,303	0	0	0	11,303	2,826	14,129	25.00%	TRAD
300615-020	No	LOUISIANA STATE UNIVERSITY	NOELL, GEORGE	17,276	0	0	0	17,276	9,502	26,778	55.00%	TRAD
100850-010	33%	NATIONAL SCIENCE FOUNDATION	PORTER, BRYAN	1,638	675	0	15,839	18,152	1,272	19,424	7.01%	TRAD
500468-010	No	MEDICAL CYBERWORLDS, INC.	SCRERO, MARK	35,597	0	0	0	35,597	19,579	55,176	55.00%	TRAD
100850-010	50%	NATIONAL SCIENCE FOUNDATION	YAMANI, YUSUKE	8,756	2,793	0	12,662	24,211	6,352	30,563	26.24%	TRAD
100850-010	33%	NATIONAL SCIENCE FOUNDATION	YAMANI, YUSUKE	1,639	675	0	15,844	18,158	1,273	19,431	7.01%	TRAD
200335-010	33%	VA DEPARTMENT OF MOTOR VEHICLES	YAMANI, YUSUKE	6,500	1	0	0	6,501	1,690	8,191	26.00%	TRAD
200358-010	33%	VA DEPARTMENT OF MOTOR VEHICLES	YAMANI, YUSUKE	6,897	3,447	0	0	10,344	2,689	13,033	26.00%	TRAD
300561-010	No	VIRGINIA COMMONWEALTH UNIVERSITY	YAMANI, YUSUKE	3,303	0	0	0	3,303	1,817	5,120	55.01%	TRAD
400271-015	No	NATIONAL INSTITUTE OF AEROSPACE ASSOCIATES (NIA)	YAMANI, YUSUKE	14,247	13,506	0	0	27,753	15,264	43,017	55.00%	TRAD
100850-010	33%	NATIONAL SCIENCE FOUNDATION	YANG, XIAO	1,638	675	0	15,839	18,152	1,272	19,424	7.01%	TRAD
400271-016	No	NATIONAL INSTITUTE OF AEROSPACE ASSOCIATES (NIA)	YANG, XIAO	2,968	0	0	0	2,968	1,632	4,600	54.99%	TRAD
<b>TOTAL DEPARTMENT OF PSYCHOLOGY</b>				<b>605,826</b>	<b>150,985</b>	<b>0</b>	<b>179,900</b>	<b>936,711</b>	<b>321,829</b>	<b>1,258,540</b>	<b>34.36%</b>	
<b>DEPARTMENT OF PSYCHOLOGY - CENTER FOR CYBERSECURITY (CYBER)</b>												
300703-010	30%	OLD DOMINION UNIVERSITY	STILL, JEREMIAH	10,133	357	0	0	10,490	0	10,490	0.00%	CYBER
<b>TOTAL DEPARTMENT OF PSYCHOLOGY - CENTER FOR CYBERSECURITY (CYBER)</b>				<b>10,133</b>	<b>357</b>	<b>0</b>	<b>0</b>	<b>10,490</b>	<b>0</b>	<b>10,490</b>	<b>0.00%</b>	
<b>DEPARTMENT OF PHYSICS</b>												
100388-150	17%	U.S. DEPARTMENT OF ENERGY	AMARYAN, MOSKOV	88,943	1,880	0	1,650	92,473	49,953	142,426	54.02%	TRAD
100392-030	25%	U.S. DEPARTMENT OF ENERGY	BALITSKY, IAN	24,621	300	0	422	25,343	13,707	39,050	54.09%	TRAD
100849-010	33%	NATIONAL SCIENCE FOUNDATION	BRICENO, RAUL	0	0	0	25,780	25,780	0	25,780	0.00%	TRAD
200009-023	25%	STATE COUNCIL FOR HIGHER EDUCATION IN VA (SCHEV)	BRICENO, RAUL	1,339	1,150	0	0	2,489	0	2,489	0.00%	TRAD
300510-010	No	OLD DOMINION UNIVERSITY	BRICENO, RAUL	144,659	0	0	1,745	146,404	79,563	225,967	54.34%	TRAD
400346-050	No	JEFFERSON SCIENCE ASSOCIATES, LLC (JEFFERSON LAB)	BRICENO, RAUL	25,357	0	0	0	25,357	0	25,357	0.00%	TRAD
400499-010	No	JEFFERSON SCIENCE ASSOCIATES, LLC (JEFFERSON LAB)	BRICENO, RAUL	0	0	0	11,000	11,000	0	11,000	0.00%	TRAD
100388-150	15%	U.S. DEPARTMENT OF ENERGY	BUELTMANN, STEPHEN	78,479	1,659	0	1,455	81,593	44,076	125,669	54.02%	TRAD
100388-153	5%	U.S. DEPARTMENT OF ENERGY	BUELTMANN, STEPHEN	3,679	140	777	377	4,973	993	5,966	19.97%	TRAD
100652-010	20%	NATIONAL SCIENCE FOUNDATION	BUELTMANN, STEPHEN	0	0	0	2,880	2,880	0	2,880	0.00%	TRAD
100614-010	40%	NATIONAL SCIENCE FOUNDATION	CIOVATI, GIANLUIGI	11,288	9,996	6,678	352	28,314	5,534	33,848	19.55%	TRAD
400346-041	No	JEFFERSON SCIENCE ASSOCIATES, LLC (JEFFERSON LAB)	CIOVATI, GIANLUIGI	20,366	0	0	0	20,366	0	20,366	0.00%	TRAD
400346-047	No	JEFFERSON SCIENCE ASSOCIATES, LLC (JEFFERSON LAB)	CIOVATI, GIANLUIGI	27,464	0	0	0	27,464	0	27,464	0.00%	TRAD
400346-051	No	JEFFERSON SCIENCE ASSOCIATES, LLC (JEFFERSON LAB)	CIOVATI, GIANLUIGI	4,522	0	0	0	4,522	0	4,522	0.00%	TRAD
300714-010	20%	OLD DOMINION UNIVERSITY	DE SILVA, PAYAGALAGE	5,370	0	0	6,973	12,343	2,954	15,297	23.93%	TRAD
100711-010	25%	U.S. DEPARTMENT OF ENERGY	DE SILVA, SUBASHINI	4,125	0	0	0	4,125	1,073	5,198	26.01%	TRAD
100387-020	50%	U.S. DEPARTMENT OF ENERGY	DELAYEN, JEAN	39,775	1,888	0	1,544	43,207	10,832	54,039	25.07%	TRAD
100614-010	30%	NATIONAL SCIENCE FOUNDATION	DELAYEN, JEAN	8,466	7,497	5,009	264	21,236	4,150	25,386	19.54%	TRAD
100711-010	75%	U.S. DEPARTMENT OF ENERGY	DELAYEN, JEAN	12,376	0	0	0	12,376	3,218	15,594	26.00%	TRAD
100727-010	No	U.S. DEPARTMENT OF ENERGY	DELAYEN, JEAN	3,102	10,574	0	360	14,036	3,556	17,592	25.33%	TRAD
100843-010	No	FERMI NATIONAL ACCELERATOR LABORATORY	DELAYEN, JEAN	63,749	2,260	0	0	66,009	17,162	83,171	26.00%	TRAD

**SCHEDULE 4**  
**OLD DOMINION UNIVERSITY RESEARCH FOUNDATION**  
**SPONSORED PROGRAM ACTIVITY BY INDIVIDUAL PROJECT**  
 (MEASURED BY EXPENDITURES INCURRED)  
 FOR FISCAL YEAR 2022

PROJECT NUMBER	SPLIT	SPONSORING AGENCY	PRINCIPAL INVESTIGATOR / PROJECT DIRECTOR	PERSONNEL AND FRINGE BENEFITS	SUPPLIES, CONTRACTUAL, GENERAL, & TRAVEL	EQUIPMENT	STIPENDS, SUBCONTRACTS, TUITION, OTHER	TOTAL DIRECT COSTS	REIMBURSED INDIRECT COSTS	TOTAL PROJECT COSTS	EFFECTIVE INDIRECT COST RATE	ENTERPRISE CODE
300442-010	50%	TEMPLE UNIVERSITY	DELAYEN, JEAN	8,055	1,702	0	313	10,070	5,366	15,436	53.29%	TRAD
300714-010	40%	OLD DOMINION UNIVERSITY	DELAYEN, JEAN	10,741	0	0	13,947	24,688	5,907	30,595	23.93%	TRAD
400343-010	No	SOUTHERN UNIVERSITIES RESEARCH ASSOC (SURA)	DELAYEN, JEAN	23,008	12,736	0	874	36,618	19,659	56,277	53.69%	TRAD
400346-034	No	JEFFERSON SCIENCE ASSOCIATES, LLC (JEFFERSON LAB)	DELAYEN, JEAN	26,515	0	0	0	26,515	0	26,515	0.00%	TRAD
400346-035	No	JEFFERSON SCIENCE ASSOCIATES, LLC (JEFFERSON LAB)	DELAYEN, JEAN	13,732	0	0	0	13,732	0	13,732	0.00%	TRAD
400346-037	No	JEFFERSON SCIENCE ASSOCIATES, LLC (JEFFERSON LAB)	DELAYEN, JEAN	20,598	0	0	0	20,598	0	20,598	0.00%	TRAD
400346-042	No	JEFFERSON SCIENCE ASSOCIATES, LLC (JEFFERSON LAB)	DELAYEN, JEAN	8,213	0	0	0	8,213	0	8,213	0.00%	TRAD
400452-010	No	JEFFERSON SCIENCE ASSOCIATES, LLC (JEFFERSON LAB)	DELAYEN, JEAN	91,565	2,584	0	0	94,149	51,782	145,931	0.00%	TRAD
300669-012	No	OLD DOMINION UNIVERSITY	GRAU, MATTHEW	2,885	0	0	0	2,885	0	2,885	0.00%	TRAD
100387-020	50%	U.S. DEPARTMENT OF ENERGY	GUREVICH, ALEXANDER	39,775	1,888	0	1,544	43,207	10,832	54,039	25.07%	TRAD
100614-010	30%	NATIONAL SCIENCE FOUNDATION	GUREVICH, ALEXANDER	8,466	7,497	5,009	264	21,236	4,150	25,386	19.54%	TRAD
100668-010	No	AIR FORCE OFFICE OF SCIENTIFIC RESEARCH (AFOSR)	GUREVICH, ALEXANDER	30,987	0	0	0	30,987	17,043	48,030	55.00%	TRAD
300442-010	50%	TEMPLE UNIVERSITY	GUREVICH, ALEXANDER	8,055	1,702	0	313	10,070	5,366	15,436	53.29%	TRAD
400346-039	No	JEFFERSON SCIENCE ASSOCIATES, LLC (JEFFERSON LAB)	GUREVICH, ALEXANDER	18,171	0	0	0	18,171	0	18,171	0.00%	TRAD
100388-150	17%	U.S. DEPARTMENT OF ENERGY	HYDE, CHARLES	88,943	1,880	0	1,650	92,473	49,953	142,426	54.02%	TRAD
100388-153	95%	U.S. DEPARTMENT OF ENERGY	HYDE, CHARLES	69,910	2,664	14,763	7,165	94,502	18,869	113,371	19.97%	TRAD
100697-010	No	BROOKHAVEN NATIONAL LABORATORY	HYDE, CHARLES	5,359	0	0	1,664	7,023	1,393	8,416	19.83%	TRAD
300528-010	No	STONY BROOK UNIVERSITY	HYDE, CHARLES	1,947	0	0	0	1,947	0	1,947	0.00%	TRAD
400346-056	No	JEFFERSON SCIENCE ASSOCIATES, LLC (JEFFERSON LAB)	HYDE, CHARLES	6,407	0	0	0	6,407	0	6,407	0.00%	TRAD
400406-030	25%	SOUTHERN UNIVERSITIES RESEARCH ASSOC (SURA)	HYDE, CHARLES	5,939	0	0	0	5,939	0	5,939	0.00%	TRAD
400479-010	No	SOUTHERN UNIVERSITIES RESEARCH ASSOC (SURA)	HYDE, CHARLES	0	0	0	8,880	8,880	0	8,880	0.00%	TRAD
400498-010	No	JEFFERSON SCIENCE ASSOCIATES, LLC (JEFFERSON LAB)	HYDE, CHARLES	2,810	0	0	4,378	7,188	0	7,188	0.00%	TRAD
100652-010	20%	NATIONAL SCIENCE FOUNDATION	KRAFFT, GEOFFREY	0	0	0	2,880	2,880	0	2,880	0.00%	TRAD
100722-010	No	U.S. DEPARTMENT OF ENERGY	KRAFFT, GEOFFREY	1,372	0	0	0	1,372	357	1,729	26.02%	TRAD
100849-010	33%	NATIONAL SCIENCE FOUNDATION	KRAFFT, GEOFFREY	0	0	0	25,780	25,780	0	25,780	0.00%	TRAD
400320-010	No	THE AMERICAN PHYSICAL SOCIETY (APS)	KRAFFT, GEOFFREY	0	25	0	0	25	0	25	0.00%	TRAD
400346-038	No	JEFFERSON SCIENCE ASSOCIATES, LLC (JEFFERSON LAB)	KRAFFT, GEOFFREY	24,704	0	0	0	24,704	0	24,704	0.00%	TRAD
400346-046	No	JEFFERSON SCIENCE ASSOCIATES, LLC (JEFFERSON LAB)	KRAFFT, GEOFFREY	27,464	0	0	0	27,464	0	27,464	0.00%	TRAD
400346-062	No	JEFFERSON SCIENCE ASSOCIATES, LLC (JEFFERSON LAB)	KRAFFT, GEOFFREY	3,042	0	0	0	3,042	0	3,042	0.00%	TRAD
100388-150	17%	U.S. DEPARTMENT OF ENERGY	KUHN, SEBASTIAN	88,943	1,880	0	1,650	92,473	49,953	142,426	54.02%	TRAD
400476-010	No	SOCIETY OF PHYSICS STUDENTS	NEREM, MATTHEW	0	983	0	0	983	0	983	0.00%	TRAD
100392-030	25%	U.S. DEPARTMENT OF ENERGY	RADYUSHKIN, ANATOLY	24,621	300	0	422	25,343	13,707	39,050	54.09%	TRAD
300444-010	No	OLD DOMINION UNIVERSITY	ROGERS, TED	79,460	0	0	9,312	88,772	43,703	132,475	49.23%	TRAD
100392-030	25%	U.S. DEPARTMENT OF ENERGY	SCHIAVILLA, ROCCO	24,621	300	0	422	25,343	13,707	39,050	54.09%	TRAD
100388-150	17%	U.S. DEPARTMENT OF ENERGY	STEPANYAN, STEPAN	88,943	1,880	0	1,650	92,473	49,953	142,426	54.02%	TRAD
100602-010	No	NATIONAL SCIENCE FOUNDATION	SUKENIK, CHARLES	4,558	41	0	1,124	5,723	2,530	8,253	44.21%	TRAD
100877-010	No	NATIONAL SCIENCE FOUNDATION	SUKENIK, CHARLES	56,899	2,844	0	2,248	61,991	32,859	94,850	53.01%	TRAD
300556-011	34%	VA POLYTECHNIC INSTITUTE AND STATE UNIVERSITY	SUKENIK, CHARLES	11,349	659	0	191	12,199	0	12,199	0.00%	TRAD
400271-012	No	NATIONAL INSTITUTE OF AEROSPACE ASSOCIATES (NIA)	SUKENIK, CHARLES	17,443	806	0	0	18,249	10,037	28,286	55.00%	TRAD
400347-010	No	JEFFERSON SCIENCE ASSOCIATES, LLC (JEFFERSON LAB)	SUKENIK, CHARLES	778,747	0	0	0	778,747	0	778,747	0.00%	TRAD
500443-010	33%	NALU SCIENTIFIC	SUKENIK, CHARLES	5,688	1,670	0	0	7,358	4,047	11,405	55.00%	TRAD
100652-010	60%	NATIONAL SCIENCE FOUNDATION	TERZIC, BALSA	0	0	0	8,640	8,640	0	8,640	0.00%	TRAD
100810-010	No	NATIONAL SCIENCE FOUNDATION	TERZIC, BALSA	43,795	1,936	0	11,366	57,097	25,152	82,249	44.05%	TRAD
100849-010	34%	NATIONAL SCIENCE FOUNDATION	TERZIC, BALSA	0	0	0	26,561	26,561	0	26,561	0.00%	TRAD
100853-010	33%	FERMI NATIONAL ACCELERATOR LABORATORY	TERZIC, BALSA	15,435	0	0	0	15,435	4,013	19,448	26.00%	TRAD
300030-016	20%	UNIVERSITY OF VIRGINIA	TERZIC, BALSA	6,513	1,208	0	0	7,721	0	7,721	0.00%	TRAD
400346-036	No	JEFFERSON SCIENCE ASSOCIATES, LLC (JEFFERSON LAB)	TERZIC, BALSA	27,518	0	0	0	27,518	0	27,518	0.00%	TRAD
400346-052	No	JEFFERSON SCIENCE ASSOCIATES, LLC (JEFFERSON LAB)	TERZIC, BALSA	21,924	0	0	0	21,924	0	21,924	0.00%	TRAD
400346-053	No	JEFFERSON SCIENCE ASSOCIATES, LLC (JEFFERSON LAB)	TERZIC, BALSA	10,411	0	0	0	10,411	0	10,411	0.00%	TRAD
400346-054	No	JEFFERSON SCIENCE ASSOCIATES, LLC (JEFFERSON LAB)	TERZIC, BALSA	10,410	0	0	0	10,410	0	10,410	0.00%	TRAD
100392-030	25%	U.S. DEPARTMENT OF ENERGY	VAN ORDEN, JAY	24,621	300	0	422	25,343	13,707	39,050	54.09%	TRAD
100388-150	17%	U.S. DEPARTMENT OF ENERGY	WEINSTEIN, LAWRENCE	88,943	1,880	0	1,650	92,473	49,953	142,426	54.02%	TRAD
100935-010	No	NATIONAL SCIENCE FOUNDATION	ZHANG, YUAN	3,042	0	0	0	3,042	1,673	4,715	55.00%	TRAD
300684-010	No	OLD DOMINION UNIVERSITY	ZHANG, YUAN	4,102	2,174	0	0	6,276	0	6,276	0.00%	TRAD

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**FOR FISCAL YEAR 2022**

PROJECT NUMBER	SPLIT	SPONSORING AGENCY	PRINCIPAL INVESTIGATOR / PROJECT DIRECTOR	PERSONNEL AND FRINGE BENEFITS	SUPPLIES, CONTRACTUAL, GENERAL, & TRAVEL	EQUIPMENT	STIPENDS, SUBCONTRACTS, TUITION, OTHER	TOTAL DIRECT COSTS	REIMBURSED INDIRECT COSTS	TOTAL PROJECT COSTS	EFFECTIVE INDIRECT COST RATE	ENTERPRISE CODE
<b>TOTAL DEPARTMENT OF PHYSICS</b>				<b>2,554,329</b>	<b>88,883</b>	<b>32,236</b>	<b>190,112</b>	<b>2,865,560</b>	<b>742,442</b>	<b>3,608,002</b>	<b>25.91%</b>	
<b>DEPARTMENT OF COMPUTER SCIENCE</b>												
100558-010	No	LANGLEY RESEARCH CENTER	CHRISOCHOIDES, NIKOS	8,380	0	0	0	8,380	4,609	12,989	55.00%	TRAD
400346-024	No	JEFFERSON SCIENCE ASSOCIATES, LLC (JEFFERSON LAB)	CHRISOCHOIDES, NIKOS	26,298	0	0	0	26,298	0	26,298	0.00%	TRAD
400346-055	No	JEFFERSON SCIENCE ASSOCIATES, LLC (JEFFERSON LAB)	CHRISOCHOIDES, NIKOS	22,703	0	0	0	22,703	0	22,703	0.00%	TRAD
400406-030	75%	SOUTHERN UNIVERSITIES RESEARCH ASSOC (SURA)	CHRISOCHOIDES, NIKOS	17,816	0	0	0	17,816	0	17,816	0.00%	TRAD
300596-010	No	STONY BROOK UNIVERSITY	GANJIGUNTE ASHOK, VIKAS	25,832	0	0	0	25,832	14,208	40,040	55.00%	TRAD
300649-010	50%	STONY BROOK UNIVERSITY	GANJIGUNTE ASHOK, VIKAS	4,315	0	0	0	4,315	2,373	6,688	54.99%	TRAD
300585-010	25%	EASTERN VIRGINIA MEDICAL SCHOOL	GUPTA, AJAY	7,026	0	5,051	0	12,077	1,827	13,904	15.13%	TRAD
400510-010	No	OPEN TECHNOLOGY FUND	HAO, SHUAI	19,663	5,023	0	0	24,686	0	24,686	0.00%	TRAD
100882-010	33%	U.S. PUBLIC HEALTH SERVICE (INCLUDING NIH)	HE, JING	49,718	3,066	0	0	52,784	29,031	81,815	55.00%	TRAD
300585-010	25%	EASTERN VIRGINIA MEDICAL SCHOOL	JAIN, SHUBHAM	7,026	0	5,051	0	12,077	1,827	13,904	15.13%	TRAD
100846-011	50%	LANGLEY RESEARCH CENTER	JAYARATHNA, UKWATTA	2,004	1,369	0	975	4,348	0	4,348	0.00%	TRAD
100897-010	No	NATIONAL SCIENCE FOUNDATION	JAYARATHNA, UKWATTA	47,592	4,604	0	10,219	62,415	28,708	91,123	46.00%	TRAD
100914-010	40%	NATIONAL SCIENCE FOUNDATION	JAYARATHNA, UKWATTA	4,788	1,850	0	0	6,638	3,651	10,289	55.00%	TRAD
100933-010	50%	NATIONAL SCIENCE FOUNDATION	JAYARATHNA, UKWATTA	1,675	0	0	16,030	17,705	921	18,626	5.20%	TRAD
100720-023	No	OFFICE OF NAVAL RESEARCH	LI, YAOHANG	8,861	0	0	0	8,861	0	8,861	0.00%	TRAD
400443-020	No	SOUTHERN UNIVERSITIES RESEARCH ASSOC (SURA)	LI, YAOHANG	9,787	9,885	0	0	19,672	5,115	24,787	26.00%	TRAD
400480-010	No	SOUTHERN UNIVERSITIES RESEARCH ASSOC (SURA)	LI, YAOHANG	0	0	0	9,800	9,800	0	9,800	0.00%	TRAD
200344-010	No	VA TOBACCO INDEMNIFICATN AND COMMUNITY REVITALIZATN COMM	MALY, KURT	21,660	4,195	0	0	25,855	0	25,855	0.00%	TRAD
200346-010	No	HAMPTON ROADS PLANNING DISTRICT COMMISSION	MALY, KURT	43,004	0	0	0	43,004	0	43,004	0.00%	TRAD
300585-010	25%	EASTERN VIRGINIA MEDICAL SCHOOL	MALY, KURT	7,026	0	5,051	0	12,077	1,827	13,904	15.13%	TRAD
600202-010	No	ACHARYA INSTITUTE OF TECHNOLOGY	MALY, KURT	5,506	0	0	20,785	26,291	0	26,291	0.00%	TRAD
300648-010	50%	STONY BROOK UNIVERSITY	OLARIU, STEPHAN	6,828	0	0	0	6,828	3,756	10,584	55.01%	TRAD
300649-010	50%	STONY BROOK UNIVERSITY	OLARIU, STEPHAN	4,315	0	0	0	4,315	2,373	6,688	54.99%	TRAD
400501-010	No	SPACE SCIENCE INSTITUTE (SSI)	POURSARDAR, FARAYANEH	1,772	0	0	0	1,772	567	2,339	32.00%	TRAD
100718-030	50%	U.S. PUBLIC HEALTH SERVICE (INCLUDING NIH)	RANJAN, DESH	0	1,565	0	0	1,565	125	1,690	7.99%	TRAD
100718-031	50%	U.S. PUBLIC HEALTH SERVICE (INCLUDING NIH)	RANJAN, DESH	0	2,113	0	0	2,113	169	2,282	8.00%	TRAD
100718-040	50%	U.S. PUBLIC HEALTH SERVICE (INCLUDING NIH)	RANJAN, DESH	36,289	20,777	0	92,221	149,287	9,952	159,239	6.67%	TRAD
100718-050	50%	U.S. PUBLIC HEALTH SERVICE (INCLUDING NIH)	RANJAN, DESH	0	78	0	4,399	4,477	358	4,835	8.00%	TRAD
100853-010	34%	FERMI NATIONAL ACCELERATOR LABORATORY	RANJAN, DESH	15,903	0	0	0	15,903	4,135	20,038	26.00%	TRAD
300668-006	No	OLD DOMINION UNIVERSITY	SUN, JIANGWEN	396	0	0	0	396	0	396	0.00%	TRAD
300750-010	No	LOUISIANA STATE UNIVERSITY	SUN, JIANGWEN	3,967	0	0	0	3,967	2,182	6,149	55.00%	TRAD
100906-010	20%	INSTITUTE OF MUSEUM AND LIBRARY SERVICES	WEIGLE, MICHELE	4,604	161	0	0	4,765	1,525	6,290	32.00%	TRAD
300731-010	50%	NEW YORK UNIVERSITY	WEIGLE, MICHELE	9,147	0	0	0	9,147	1,463	10,610	15.99%	TRAD
600241-010	50%	INTERNATIONAL INTERNET PRESERVATION CONS	WEIGLE, MICHELE	3,062	0	0	0	3,062	0	3,062	0.00%	TRAD
100864-010	No	LOS ALAMOS NATIONAL LABORATORIES	WU, JIAN	25,237	0	0	7,603	32,840	13,880	46,720	42.27%	TRAD
100933-010	50%	NATIONAL SCIENCE FOUNDATION	WU, JIAN	1,675	0	0	16,030	17,705	921	18,626	5.20%	TRAD
300491-010	No	PENNSYLVANIA STATE UNIVERSITY	WU, JIAN	5,147	700	0	3,100	8,947	3,216	12,163	35.95%	TRAD
300529-010	No	VA POLYTECHNIC INSTITUTE AND STATE UNIVERSITY	WU, JIAN	62,472	1,125	0	18,721	82,318	34,979	117,297	42.49%	TRAD
300562-010	No	PENNSYLVANIA STATE UNIVERSITY	WU, JIAN	57,814	1,306	0	12,791	71,911	32,516	104,427	0.00%	TRAD
300703-010	40%	OLD DOMINION UNIVERSITY	WU, JIAN	13,510	476	0	0	13,986	0	13,986	0.00%	TRAD
100853-010	33%	FERMI NATIONAL ACCELERATOR LABORATORY	ZUBAIR, MOHAMMAD	15,435	0	0	0	15,435	4,013	19,448	26.00%	TRAD
300606-015	No	OLD DOMINION UNIVERSITY	ZUBAIR, MOHAMMAD	0	0	0	6,979	6,979	697	7,676	9.99%	TRAD
300680-015	No	OLD DOMINION UNIVERSITY	ZUBAIR, MOHAMMAD	10,220	0	0	0	10,220	1,022	11,242	10.00%	TRAD
400271-013	No	NATIONAL INSTITUTE OF AEROSPACE ASSOCIATES (NIA)	ZUBAIR, MOHAMMAD	42,373	0	0	0	42,373	11,017	53,390	26.00%	TRAD
400346-022	No	JEFFERSON SCIENCE ASSOCIATES, LLC (JEFFERSON LAB)	ZUBAIR, MOHAMMAD	21,723	0	0	0	21,723	0	21,723	0.00%	TRAD
<b>TOTAL DEPARTMENT OF COMPUTER SCIENCE</b>				<b>682,569</b>	<b>58,293</b>	<b>15,153</b>	<b>219,653</b>	<b>975,668</b>	<b>222,963</b>	<b>1,198,631</b>	<b>22.85%</b>	
<b>DEPARTMENT OF COMPUTER SCIENCE - CENTER FOR CYBERSECURITY (CYBER)</b>												
100801-010	No	NATIONAL SCIENCE FOUNDATION	WANG, CONG	16,962	180	0	4,207	21,349	9,428	30,777	44.16%	CYBER
100873-010	33%	NATIONAL SCIENCE FOUNDATION	WANG, CONG	19,828	0	0	2,130	21,958	10,905	32,863	49.66%	CYBER
100856-010	20%	NATIONAL SCIENCE FOUNDATION	ZHAO, DANELLA	1,971	0	0	0	1,971	1,084	3,055	55.00%	CYBER

**SCHEDULE 4**  
**OLD DOMINION UNIVERSITY RESEARCH FOUNDATION**  
**SPONSORED PROGRAM ACTIVITY BY INDIVIDUAL PROJECT**  
 (MEASURED BY EXPENDITURES INCURRED)  
 FOR FISCAL YEAR 2022

PROJECT NUMBER	SPLIT	SPONSORING AGENCY	PRINCIPAL INVESTIGATOR / PROJECT DIRECTOR	PERSONNEL AND FRINGE BENEFITS	SUPPLIES, CONTRACTUAL, GENERAL, & TRAVEL	EQUIPMENT	STIPENDS, SUBCONTRACTS, TUITION, OTHER	TOTAL DIRECT COSTS	REIMBURSED INDIRECT COSTS	TOTAL PROJECT COSTS	EFFECTIVE INDIRECT COST RATE	ENTERPRISE CODE
100866-010	No	NATIONAL SCIENCE FOUNDATION	ZHAO, DANELLA	17,618	0	0	0	17,618	4,581	22,199	26.00%	CYBER
100880-010	25%	NATIONAL SECURITY AGENCY	ZHAO, DANELLA	1,959	433	0	1,949	4,341	1,315	5,656	30.29%	CYBER
100896-010	30%	NATIONAL SECURITY AGENCY	ZHAO, DANELLA	16,672	(98)	0	4,368	20,942	9,116	30,058	43.53%	CYBER
100908-010	20%	NATIONAL SECURITY AGENCY	ZHAO, DANELLA	5,566	658	0	28,506	34,730	3,423	38,153	9.86%	CYBER
300594-010	30%	OLD DOMINION UNIVERSITY	ZHAO, DANELLA	786	2,354	0	3,966	7,106	1,727	8,833	24.30%	CYBER
300697-010	25%	OLD DOMINION UNIVERSITY	ZHAO, DANELLA	0	130	0	0	130	72	202	55.38%	CYBER
300698-010	30%	OLD DOMINION UNIVERSITY	ZHAO, DANELLA	3,237	281	0	619	4,137	1,935	6,072	46.77%	CYBER
300718-010	50%	COLLEGE OF WILLIAM AND MARY	ZHAO, DANELLA	0	3,137	0	0	3,137	0	3,137	0.00%	CYBER
<b>TOTAL DEPARTMENT OF COMPUTER SCIENCE - CENTER FOR CYBERSECURITY (CYBER)</b>				<b>84,599</b>	<b>7,075</b>	<b>0</b>	<b>45,745</b>	<b>137,419</b>	<b>43,586</b>	<b>181,005</b>	<b>31.72%</b>	
<b>DEPARTMENT OF COMPUTER SCIENCE - VIRGINIA MODELING AND SIMULATION CENTER (VMASC)</b>												
100906-010	20%	INSTITUTE OF MUSEUM AND LIBRARY SERVICES	NELSON, MICHAEL	4,604	161	0	0	4,765	1,525	6,290	32.00%	VMASC
300731-010	50%	NEW YORK UNIVERSITY	NELSON, MICHAEL	9,147	0	0	0	9,147	1,463	10,610	15.99%	VMASC
300747-010	7%	OLD DOMINION UNIVERSITY	NELSON, MICHAEL	1,017	364	0	350	1,731	110	1,841	6.35%	VMASC
500455-010	No	PROTOCOL LABS	NELSON, MICHAEL	26,924	0	0	9,537	36,461	14,808	51,269	40.61%	VMASC
600236-010	50%	INTERNATIONAL INTERNET PRESERVATION CONS	NELSON, MICHAEL	7,929	7,500	0	4,435	19,864	0	19,864	0.00%	VMASC
600241-010	50%	INTERNATIONAL INTERNET PRESERVATION CONS	NELSON, MICHAEL	3,062	0	0	0	3,062	0	3,062	0.00%	VMASC
600236-010	50%	INTERNATIONAL INTERNET PRESERVATION CONS	WEIGLE, MICHELE	7,929	7,500	0	4,435	19,864	0	19,864	0.00%	VMASC
<b>TOTAL DEPARTMENT OF COMPUTER SCIENCE - VIRGINIA MODELING AND SIMULATION CENTER (VMASC)</b>				<b>60,612</b>	<b>15,525</b>	<b>0</b>	<b>18,757</b>	<b>94,894</b>	<b>17,906</b>	<b>112,800</b>	<b>18.87%</b>	
<b>TOTAL COLLEGE OF SCIENCES</b>				<b>7,838,483</b>	<b>1,703,152</b>	<b>493,713</b>	<b>1,733,405</b>	<b>11,768,753</b>	<b>3,030,353</b>	<b>14,799,106</b>	<b>25.75%</b>	

**SCHEDULE 4**  
**OLD DOMINION UNIVERSITY RESEARCH FOUNDATION**  
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 (MEASURED BY EXPENDITURES INCURRED)  
 FOR FISCAL YEAR 2022

PROJECT NUMBER	SPLIT	SPONSORING AGENCY	PRINCIPAL INVESTIGATOR / PROJECT DIRECTOR	PERSONNEL AND FRINGE BENEFITS	SUPPLIES, CONTRACTUAL, GENERAL, & TRAVEL	EQUIPMENT	STIPENDS, SUBCONTRACTS, TUITION, OTHER	TOTAL DIRECT COSTS	REIMBURSED INDIRECT COSTS	TOTAL PROJECT COSTS	EFFECTIVE INDIRECT COST RATE	ENTERPRISE CODE
<b>OFFICE OF RESEARCH AND OTHER ODU UNITS</b>												
<b>THE CENTER FOR EDUCATIONAL PARTNERSHIPS</b>												
100835-010	20%	U.S. DEPARTMENT OF EDUCATION	BROBST, JOSEPH	56,887	19,585	0	40,573	117,045	42,060	159,105	35.93%	TCEP
300503-010	No	WESTERN WASHINGTON UNIVERSITY	BROBST, JOSEPH	7,980	0	0	0	7,980	4,389	12,369	55.00%	TCEP
300527-010	No	WESTERN WASHINGTON UNIVERSITY	BROBST, JOSEPH	11,914	2,907	0	0	14,821	8,151	22,972	55.00%	TCEP
300635-010	No	DELAWARE TECHNICAL AND COMMUNITY COLLEGE	BROBST, JOSEPH	11,475	0	0	0	11,475	6,311	17,786	55.00%	TCEP
100721-010	33%	OFFICE OF NAVAL RESEARCH	CHAPPELL MOOTS, SHANAN	389	0	0	0	389	140	529	35.99%	TCEP
100835-010	20%	U.S. DEPARTMENT OF EDUCATION	CHAPPELL MOOTS, SHANAN	56,887	19,585	0	40,573	117,045	42,060	159,105	35.93%	TCEP
100835-010	10%	U.S. DEPARTMENT OF EDUCATION	FERRELL, VENICIA	28,443	9,793	0	20,287	58,523	21,030	79,553	35.93%	TCEP
100721-010	34%	OFFICE OF NAVAL RESEARCH	GARNER, JOANNA	401	0	0	0	401	144	545	35.91%	TCEP
100835-010	25%	U.S. DEPARTMENT OF EDUCATION	GARNER, JOANNA	71,109	24,482	0	50,717	146,308	52,575	198,883	35.93%	TCEP
100885-010	No	SMITHSONIAN INSTITUTION	GARNER, JOANNA	21,402	2,627	0	0	24,029	6,247	30,276	26.00%	TCEP
300557-010	No	OKLAHOMA STATE UNIVERSITY	GARNER, JOANNA	5,019	0	0	0	5,019	1,305	6,324	26.00%	TCEP
300587-020	30%	OLD DOMINION UNIVERSITY	GARNER, JOANNA	244	58	0	8,811	9,113	0	9,113	0.00%	TCEP
300587-030	30%	OLD DOMINION UNIVERSITY	GARNER, JOANNA	13,052	0	0	0	13,052	0	13,052	0.00%	TCEP
400444-010	No	NATIONAL INVENTORS HALL OF FAME	GARNER, JOANNA	0	0	0	1,911	1,911	287	2,198	15.02%	TCEP
400470-010	No	NATIONAL INVENTORS HALL OF FAME	GARNER, JOANNA	0	0	0	1,137	1,137	626	1,763	55.06%	TCEP
400507-010	No	NATIONAL INVENTORS HALL OF FAME	GARNER, JOANNA	2,874	0	0	0	2,874	1,580	4,454	54.98%	TCEP
400508-010	No	NATIONAL INVENTORS HALL OF FAME	GARNER, JOANNA	3,377	1,950	0	0	5,327	2,930	8,257	55.00%	TCEP
300679-010	No	OLD DOMINION UNIVERSITY	JOE, MIA	14,010	0	0	0	14,010	0	14,010	0.00%	TCEP
300681-010	No	OLD DOMINION UNIVERSITY	JOE, MIA	45,054	48,115	0	0	93,169	0	93,169	0.00%	TCEP
100721-010	33%	OFFICE OF NAVAL RESEARCH	LONEY, MELANI	389	0	0	0	389	140	529	35.99%	TCEP
100835-010	5%	U.S. DEPARTMENT OF EDUCATION	LONEY, MELANI	14,222	4,896	0	10,143	29,261	10,515	39,776	35.94%	TCEP
200290-010	70%	YORK COUNTY SCHOOLS	LONEY, MELANI	15,976	50	0	0	16,026	801	16,827	5.00%	TCEP
300587-020	40%	OLD DOMINION UNIVERSITY	LONEY, MELANI	326	77	0	11,749	12,152	0	12,152	0.00%	TCEP
300587-030	40%	OLD DOMINION UNIVERSITY	LONEY, MELANI	17,402	0	0	0	17,402	0	17,402	0.00%	TCEP
100835-010	20%	U.S. DEPARTMENT OF EDUCATION	WEBSTER, HALLDORA	56,887	19,585	0	40,573	117,045	42,060	159,105	35.93%	TCEP
200290-010	30%	YORK COUNTY SCHOOLS	WEBSTER, HALLDORA	6,847	21	0	0	6,868	343	7,211	4.99%	TCEP
300587-020	30%	OLD DOMINION UNIVERSITY	WEBSTER, HALLDORA	244	58	0	8,811	9,113	0	9,113	0.00%	TCEP
300587-030	30%	OLD DOMINION UNIVERSITY	WEBSTER, HALLDORA	13,052	0	0	0	13,052	0	13,052	0.00%	TCEP
<b>TOTAL THE CENTER FOR EDUCATIONAL PARTNERSHIPS</b>				<b>475,862</b>	<b>153,789</b>	<b>0</b>	<b>235,285</b>	<b>864,936</b>	<b>243,694</b>	<b>1,108,630</b>	<b>28.17%</b>	
<b>FRANK REIDY RESEARCH CENTER FOR BIOELECTRICS (CBE)</b>												
300672-010	60%	OLD DOMINION UNIVERSITY	BEEBE, STEPHEN	11,373	0	0	0	11,373	3,412	14,785	30.00%	CBE
500226-019	90%	PULSE BIOSCIENCES (ELECTROBLATE)	MURATORI, CLAUDIA	0	226	0	2,631	2,857	1,570	4,427	54.95%	CBE
500226-020	40%	PULSE BIOSCIENCES (ELECTROBLATE)	MURATORI, CLAUDIA	0	928	0	1,879	2,807	1,544	4,351	55.01%	CBE
300345-010	No	OLD DOMINION UNIVERSITY	PAKHOMOV, ANDREI	167,040	33,022	0	275,584	475,646	110,034	585,680	23.13%	CBE
300345-012	No	OLD DOMINION UNIVERSITY	PAKHOMOVA, OLGA	84,166	12,878	0	0	97,044	53,375	150,419	55.00%	CBE
500226-019	10%	PULSE BIOSCIENCES (ELECTROBLATE)	PAKHOMOVA, OLGA	0	25	0	292	317	174	491	54.89%	CBE
500226-022	30%	PULSE BIOSCIENCES (ELECTROBLATE)	PAKHOMOVA, OLGA	43,378	4,933	0	0	48,311	26,571	74,882	55.00%	CBE
400474-010	No	BREEDEN-ADAMS FOUNDATION	STACEY, MICHAEL	6,201	8,488	0	0	14,689	0	14,689	0.00%	CBE
300345-013	No	OLD DOMINION UNIVERSITY	VERNIER, PAUL THOMAS	70,174	9,815	0	1,458	81,447	43,994	125,441	54.02%	CBE
300660-010	30%	OLD DOMINION UNIVERSITY	VERNIER, PAUL THOMAS	0	3,946	0	0	3,946	0	3,946	0.00%	CBE
500226-020	60%	PULSE BIOSCIENCES (ELECTROBLATE)	VERNIER, PAUL THOMAS	0	1,391	0	2,818	4,209	2,316	6,525	55.02%	CBE
300345-011	No	OLD DOMINION UNIVERSITY	XIAO, SHU	32,719	6,504	0	1,956	41,179	21,572	62,751	52.39%	CBE
<b>TOTAL FRANK REIDY RESEARCH CENTER FOR BIOELECTRICS (CBE)</b>				<b>415,051</b>	<b>82,156</b>	<b>0</b>	<b>286,618</b>	<b>783,825</b>	<b>264,562</b>	<b>1,048,387</b>	<b>33.75%</b>	
<b>CENTER FOR BIOELECTRONICS (CBX)</b>												
100804-010	No	NATIONAL SCIENCE FOUNDATION	SLAUGHTER, GYMAMA	23,102	2,148	0	0	25,250	13,382	38,632	53.00%	CBX
100807-010	No	NATIONAL SCIENCE FOUNDATION	SLAUGHTER, GYMAMA	61,782	12,369	0	0	74,151	40,783	114,934	55.00%	CBX
100893-010	50%	U.S. PUBLIC HEALTH SERVICE (INCLUDING NIH)	SLAUGHTER, GYMAMA	6,747	4,042	0	42,163	52,952	863	53,815	1.63%	CBX
100893-020	50%	U.S. PUBLIC HEALTH SERVICE (INCLUDING NIH)	SLAUGHTER, GYMAMA	6,457	1,218	0	5,568	13,243	1,059	14,302	8.00%	CBX
<b>TOTAL CENTER FOR BIOELECTRONICS (CBX)</b>				<b>98,088</b>	<b>19,777</b>	<b>0</b>	<b>47,731</b>	<b>165,596</b>	<b>56,087</b>	<b>221,683</b>	<b>33.87%</b>	

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PROJECT NUMBER	SPLIT	SPONSORING AGENCY	PRINCIPAL INVESTIGATOR / PROJECT DIRECTOR	PERSONNEL AND FRINGE BENEFITS	SUPPLIES, CONTRACTUAL, GENERAL, & TRAVEL	EQUIPMENT	STIPENDS, SUBCONTRACTS, TUITION, OTHER	TOTAL DIRECT COSTS	REIMBURSED INDIRECT COSTS	TOTAL PROJECT COSTS	EFFECTIVE INDIRECT COST RATE	ENTERPRISE CODE
<b>VIRGINIA MODELING AND SIMULATION CENTER (VMASC)</b>												
300675-010	10%	OLD DOMINION UNIVERSITY	AGGARWAL, PRIYANKA	16,828	110	0	0	16,938	0	16,938	0.00%	VMASC
100790-011	5%	NAVAL SEA SYSTEMS COMMAND	AMASON, DARRYL	6,992	0	0	0	6,992	4,545	11,537	65.00%	VMASC
300592-010	20%	OLD DOMINION UNIVERSITY	AMASON, DARRYL	86,164	24,484	0	0	110,648	0	110,648	0.00%	VMASC
300639-010	30%	OLD DOMINION UNIVERSITY	AMASON, DARRYL	6,803	2,464	0	0	9,267	0	9,267	0.00%	VMASC
300720-010	20%	STEVENS INSTITUTE OF TECHNOLOGY	AMASON, DARRYL	33,061	1,084	0	0	34,145	22,194	56,339	65.00%	VMASC
300747-010	7%	OLD DOMINION UNIVERSITY	AMASON, DARRYL	1,017	364	0	350	1,731	110	1,841	6.35%	VMASC
500379-020	10%	D'ANGELO TECHNOLOGIES LLC	AMASON, DARRYL	8,946	0	0	0	8,946	5,815	14,761	65.00%	VMASC
500390-010	60%	ALEX – ALTERNATIVE EXPERTS, LLC	AMASON, DARRYL	829	0	0	0	829	539	1,368	65.02%	VMASC
500435-010	20%	VALKYRIE ENTERPRISES, INC.	AMASON, DARRYL	602	0	0	0	602	391	993	64.95%	VMASC
500435-020	20%	VALKYRIE ENTERPRISES, INC.	AMASON, DARRYL	36,723	0	0	0	36,723	23,870	60,593	65.00%	VMASC
300744-010	10%	OLD DOMINION UNIVERSITY	BALL, PATRICK	7,559	2,389	0	0	9,948	0	9,948	0.00%	VMASC
200343-010	20%	VIRGINIA DEPARTMENT OF EMERGENCY MANAGEMENT	BARRACO, ANTHONY	7,616	0	0	0	7,616	4,189	11,805	55.00%	VMASC
300543-010	20%	OLD DOMINION UNIVERSITY	BARRACO, ANTHONY	26,048	11,231	0	3,285	40,564	20,504	61,068	50.55%	VMASC
500460-010	80%	TIM HOILES	BARRACO, ANTHONY	2,021	0	0	0	2,021	1,112	3,133	55.02%	VMASC
100824-010	50%	NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION	BEHR, JOSHUA	17,703	10,727	0	2,725	31,155	15,636	46,791	50.19%	VMASC
100825-010	33%	NATIONAL SCIENCE FOUNDATION	BEHR, JOSHUA	6,516	1,224	0	0	7,740	2,012	9,752	25.99%	VMASC
100883-010	25%	U.S. DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT	BEHR, JOSHUA	23,344	9,329	0	0	32,673	17,970	50,643	55.00%	VMASC
100890-010	34%	NATIONAL SCIENCE FOUNDATION	BEHR, JOSHUA	6,138	0	0	0	6,138	1,596	7,734	26.00%	VMASC
100919-010	33%	NATIONAL SCIENCE FOUNDATION	BEHR, JOSHUA	53,885	78,831	0	0	132,716	34,506	167,222	26.00%	VMASC
300543-010	15%	OLD DOMINION UNIVERSITY	BEHR, JOSHUA	19,536	8,424	0	2,464	30,424	15,378	45,802	50.55%	VMASC
300691-010	33%	OLD DOMINION UNIVERSITY	BEHR, JOSHUA	19,127	8,250	0	8,016	35,393	0	35,393	0.00%	VMASC
500394-010	50%	ARCADIS ENGINEERING	BEHR, JOSHUA	(4,901)	0	0	0	(4,901)	(2,696)	(7,597)	55.01%	VMASC
300545-010	20%	OLD DOMINION UNIVERSITY	BOWLES, DAVID	17,090	24,285	0	18,478	59,853	0	59,853	0.00%	VMASC
300650-010	No	OLD DOMINION UNIVERSITY	BOWLES, DAVID	577	2,499	0	2	3,078	0	3,078	0.00%	VMASC
300661-010	No	OLD DOMINION UNIVERSITY	BOWLES, DAVID	609	3,296	0	0	3,905	0	3,905	0.00%	VMASC
300665-010	No	OLD DOMINION UNIVERSITY	BOWLES, DAVID	11,840	651	0	0	12,491	0	12,491	0.00%	VMASC
400516-001	No	REINVENT HAMPTON ROADS	BOWLES, DAVID	1,621	362	0	0	1,983	0	1,983	0.00%	VMASC
400516-002	No	REINVENT HAMPTON ROADS	BOWLES, DAVID	743	0	0	0	743	0	743	0.00%	VMASC
100790-010	18%	NAVAL SEA SYSTEMS COMMAND	COLLINS, ANDREW	23,655	0	0	0	23,655	15,373	39,028	64.99%	VMASC
100790-011	10%	NAVAL SEA SYSTEMS COMMAND	COLLINS, ANDREW	13,983	0	0	0	13,983	9,089	23,072	65.00%	VMASC
300744-010	10%	OLD DOMINION UNIVERSITY	CORDNER, JESSICA	7,559	2,389	0	0	9,948	0	9,948	0.00%	VMASC
100900-010	25%	NAVAL SURFACE WARFARE CENTER	CROLL, MENION	22,739	164	0	14,976	37,879	24,621	62,500	65.00%	VMASC
100931-010	50%	NAVAL SURFACE WARFARE CENTER	CROLL, MENION	31,404	191	0	0	31,595	20,537	52,132	0.00%	VMASC
500396-002	25%	ManTech	CROLL, MENION	18,483	0	0	0	18,483	12,014	30,497	65.00%	VMASC
300758-010	20%	OLD DOMINION UNIVERSITY	CZACK, RUSSELL	5,615	68	0	0	5,683	0	5,683	0.00%	VMASC
300592-010	20%	OLD DOMINION UNIVERSITY	DIALLO, SAIKOU	86,164	24,484	0	0	110,648	0	110,648	0.00%	VMASC
400439-010	50%	JOHN TEMPLETON FOUNDATION	DIALLO, SAIKOU	14,730	28,471	0	574,030	617,231	6,480	623,711	1.05%	VMASC
500375-004	50%	CAMBER CORPORATION	DIALLO, SAIKOU	(2,063)	0	0	0	(2,063)	(1,341)	(3,404)	65.00%	VMASC
100883-010	25%	U.S. DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT	DIAZ, RAFAEL	23,344	9,329	0	0	32,673	17,970	50,643	55.00%	VMASC
100890-010	33%	NATIONAL SCIENCE FOUNDATION	DIAZ, RAFAEL	5,958	0	0	0	5,958	1,549	7,507	26.00%	VMASC
100919-010	33%	NATIONAL SCIENCE FOUNDATION	DIAZ, RAFAEL	53,885	78,831	0	0	132,716	34,506	167,222	26.00%	VMASC
300658-010	34%	OLD DOMINION UNIVERSITY	DIAZ, RAFAEL	17,057	0	0	0	17,057	0	17,057	0.00%	VMASC
300671-010	25%	OLD DOMINION UNIVERSITY	DIAZ, RAFAEL	5,929	150	0	0	6,079	0	6,079	0.00%	VMASC
300691-010	34%	OLD DOMINION UNIVERSITY	DIAZ, RAFAEL	19,706	8,500	0	8,259	36,465	0	36,465	0.00%	VMASC
300747-010	7%	OLD DOMINION UNIVERSITY	DIAZ, RAFAEL	1,017	364	0	350	1,731	110	1,841	6.35%	VMASC
100830-010	No	NORFOLK NAVAL SHIPYARD	EZELL, BARRY	0	32,010	0	0	32,010	10,243	42,253	32.00%	VMASC
100834-010	No	NAVSUP FLEET LOGISTICS CENTER NORFOLK	EZELL, BARRY	6,005	0	0	573,336	579,341	2,162	581,503	0.37%	VMASC
100841-010	No	JOINT NON-LETHAL WEAPONS DIRECTORATE	EZELL, BARRY	157,524	0	0	0	157,524	15,752	173,276	10.00%	VMASC
100841-020	No	JOINT NON-LETHAL WEAPONS DIRECTORATE	EZELL, BARRY	24,630	0	0	0	24,630	2,463	27,093	10.00%	VMASC
100884-010	No	NAVSUP FLEET LOGISTICS CENTER NORFOLK	EZELL, BARRY	3,443	3,233	0	0	6,676	2,403	9,079	35.99%	VMASC
200324-020	No	HAMPTON ROADS PLANNING DISTRICT COMMISSION	EZELL, BARRY	12,182	0	0	46,400	58,582	3,167	61,749	5.41%	VMASC
200324-030	No	HAMPTON ROADS PLANNING DISTRICT COMMISSION	EZELL, BARRY	1,065	7,399	0	0	8,464	2,201	10,665	26.00%	VMASC

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FOR FISCAL YEAR 2022

PROJECT NUMBER	SPLIT	SPONSORING AGENCY	PRINCIPAL INVESTIGATOR / PROJECT DIRECTOR	PERSONNEL AND FRINGE BENEFITS	SUPPLIES, CONTRACTUAL, GENERAL, & TRAVEL	EQUIPMENT	STIPENDS, SUBCONTRACTS, TUITION, OTHER	TOTAL DIRECT COSTS	REIMBURSED INDIRECT COSTS	TOTAL PROJECT COSTS	EFFECTIVE INDIRECT COST RATE	ENTERPRISE CODE
200343-010	20%	VIRGINIA DEPARTMENT OF EMERGENCY MANAGEMENT	EZELL, BARRY	7,616	0	0	0	7,616	4,189	11,805	55.00%	VMASC
200343-011	No	VIRGINIA DEPARTMENT OF EMERGENCY MANAGEMENT	EZELL, BARRY	119,984	630	0	0	120,614	66,337	186,951	55.00%	VMASC
200348-010	34%	VIRGINIA DEPARTMENT OF EMERGENCY MANAGEMENT	EZELL, BARRY	15,060	484	0	0	15,544	4,041	19,585	26.00%	VMASC
200362-010	15%	VIRGINIA DEPARTMENT OF EMERGENCY MANAGEMENT	EZELL, BARRY	587	0	0	7,206	7,793	153	7,946	1.96%	VMASC
200365-010	50%	VIRGINIA DEPARTMENT OF EMERGENCY MANAGEMENT	EZELL, BARRY	48,213	2,984	0	0	51,197	13,311	64,508	26.00%	VMASC
300654-010	No	OLD DOMINION UNIVERSITY	EZELL, BARRY	1,502	46	0	0	1,548	0	1,548	0.00%	VMASC
300720-010	20%	STEVENS INSTITUTE OF TECHNOLOGY	EZELL, BARRY	33,061	1,084	0	0	34,145	22,194	56,339	65.00%	VMASC
500390-010	40%	ALEX – ALTERNATIVE EXPERTS, LLC	EZELL, BARRY	553	0	0	0	553	359	912	64.92%	VMASC
500433-010	No	LOCKWOOD HILLS	EZELL, BARRY	0	0	0	13,518	13,518	8,787	22,305	65.00%	VMASC
500434-002	50%	CIRCADENCE	EZELL, BARRY	0	36,408	0	0	36,408	23,665	60,073	65.00%	VMASC
500434-003	No	CIRCADENCE	EZELL, BARRY	73,771	672	0	0	74,443	48,388	122,831	65.00%	VMASC
500462-001	No	CIRCADENCE	EZELL, BARRY	38,969	0	0	0	38,969	25,330	64,299	65.00%	VMASC
500462-002	No	CIRCADENCE	EZELL, BARRY	0	1,747	0	0	1,747	1,136	2,883	65.03%	VMASC
500462-003	No	CIRCADENCE	EZELL, BARRY	71,481	5,350	0	0	76,831	49,940	126,771	65.00%	VMASC
500462-004	No	CIRCADENCE	EZELL, BARRY	0	911	0	0	911	592	1,503	64.98%	VMASC
300744-010	40%	OLD DOMINION UNIVERSITY	FLANAGAN, DAVID	30,234	9,555	0	0	39,789	0	39,789	0.00%	VMASC
300717-001	10%	OLD DOMINION UNIVERSITY	FOYTIK, PETER	6,817	2,807	0	0	9,624	0	9,624	0.00%	VMASC
300758-010	20%	OLD DOMINION UNIVERSITY	FOYTIK, PETER	5,615	68	0	0	5,683	0	5,683	0.00%	VMASC
500434-001	50%	CIRCADENCE	FOYTIK, PETER	32,402	1,333	0	0	33,735	21,928	55,663	65.00%	VMASC
500447-010	40%	FRONTIER TECHNOLOGY INC.	FOYTIK, PETER	16,603	0	0	0	16,603	10,792	27,395	65.00%	VMASC
500467-010	40%	FRONTIER TECHNOLOGY INC.	FOYTIK, PETER	48,814	0	0	0	48,814	31,729	80,543	65.00%	VMASC
200362-010	17%	VIRGINIA DEPARTMENT OF EMERGENCY MANAGEMENT	FRYDENLUND, ERIKA	665	0	0	8,166	8,831	173	9,004	1.96%	VMASC
200365-010	50%	VIRGINIA DEPARTMENT OF EMERGENCY MANAGEMENT	FRYDENLUND, ERIKA	48,213	2,984	0	0	51,197	13,311	64,508	26.00%	VMASC
300543-010	25%	OLD DOMINION UNIVERSITY	FRYDENLUND, ERIKA	32,561	14,039	0	4,106	50,706	25,630	76,336	50.55%	VMASC
300717-002	No	OLD DOMINION UNIVERSITY	FRYDENLUND, ERIKA	54,638	7,764	0	0	62,402	0	62,402	0.00%	VMASC
300747-010	7%	OLD DOMINION UNIVERSITY	FRYDENLUND, ERIKA	1,017	364	0	350	1,731	110	1,841	6.35%	VMASC
300639-010	30%	OLD DOMINION UNIVERSITY	GARCIA, HECTOR	6,803	2,464	0	0	9,267	0	9,267	0.00%	VMASC
300658-010	33%	OLD DOMINION UNIVERSITY	GARCIA, HECTOR	16,555	0	0	0	16,555	0	16,555	0.00%	VMASC
400497-010	25%	VIRGINIA SHIP REPAIR ASSOCIATION	GARCIA, HECTOR	4,615	0	0	0	4,615	1,403	6,018	30.40%	VMASC
100883-010	25%	U.S. DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT	GILES, BRIDGET	23,344	9,329	0	0	32,673	17,970	50,643	55.00%	VMASC
100919-010	20%	NATIONAL SCIENCE FOUNDATION	GILES, BRIDGET	32,658	47,776	0	0	80,434	20,913	101,347	26.00%	VMASC
100790-010	10%	NAVAL SEA SYSTEMS COMMAND	GORE, ROSS	13,142	0	0	0	13,142	8,542	21,684	65.00%	VMASC
100790-011	5%	NAVAL SEA SYSTEMS COMMAND	GORE, ROSS	6,992	0	0	0	6,992	4,545	11,537	65.00%	VMASC
200348-010	33%	VIRGINIA DEPARTMENT OF EMERGENCY MANAGEMENT	GORE, ROSS	14,617	469	0	0	15,086	3,923	19,009	26.00%	VMASC
300640-010	20%	OLD DOMINION UNIVERSITY	GORE, ROSS	34,130	76	0	0	34,206	0	34,206	0.00%	VMASC
300652-010	25%	OLD DOMINION UNIVERSITY	GORE, ROSS	1,706	38	0	0	1,744	0	1,744	0.00%	VMASC
300675-010	25%	OLD DOMINION UNIVERSITY	GORE, ROSS	42,070	276	0	0	42,346	0	42,346	0.00%	VMASC
500375-004	50%	CAMBER CORPORATION	GORE, ROSS	(2,063)	0	0	0	(2,063)	(1,341)	(3,404)	65.00%	VMASC
500375-009	20%	CAMBER CORPORATION	GORE, ROSS	0	0	0	312	312	203	515	65.06%	VMASC
500375-010	20%	CAMBER CORPORATION	GORE, ROSS	0	0	0	1	1	1	2	100.00%	VMASC
500375-011	20%	CAMBER CORPORATION	GORE, ROSS	0	0	0	3,193	3,193	2,076	5,269	65.02%	VMASC
500400-013	10%	UNITED NETWORK FOR ORGAN SHARING (UNOS)	GORE, ROSS	1,478	45	0	0	1,523	207	1,730	13.59%	VMASC
500447-010	10%	FRONTIER TECHNOLOGY INC.	GORE, ROSS	4,151	0	0	0	4,151	2,698	6,849	65.00%	VMASC
500467-010	20%	FRONTIER TECHNOLOGY INC.	GORE, ROSS	24,407	0	0	0	24,407	15,865	40,272	65.00%	VMASC
300579-010	No	OLD DOMINION UNIVERSITY	JOE, MIA	1,135	16,429	0	0	17,564	0	17,564	0.00%	VMASC
200345-010	60%	NEWPORT NEWS PUBLIC SCHOOLS	JOHNSON, JESSICA	37,930	904	0	0	38,834	21,358	60,192	55.00%	VMASC
300639-010	14%	OLD DOMINION UNIVERSITY	JOHNSON, JESSICA	3,175	1,150	0	0	4,325	0	4,325	0.00%	VMASC
300671-010	25%	OLD DOMINION UNIVERSITY	JOHNSON, JESSICA	5,929	150	0	0	6,079	0	6,079	0.00%	VMASC
300720-010	20%	STEVENS INSTITUTE OF TECHNOLOGY	JOHNSON, JESSICA	33,061	1,084	0	0	34,145	22,194	56,339	65.00%	VMASC
300725-010	75%	OLD DOMINION UNIVERSITY	JOHNSON, JESSICA	7,055	16,866	0	0	23,921	0	23,921	0.00%	VMASC
300747-010	30%	OLD DOMINION UNIVERSITY	JOHNSON, JESSICA	4,359	1,558	0	1,500	7,417	473	7,890	6.38%	VMASC
300754-010	No	OLD DOMINION UNIVERSITY	JOHNSON, JESSICA	27,877	10,818	0	0	38,695	0	38,695	0.00%	VMASC
400497-010	75%	VIRGINIA SHIP REPAIR ASSOCIATION	JOHNSON, JESSICA	13,846	0	0	0	13,846	4,209	18,055	30.40%	VMASC
500435-010	30%	VALKYRIE ENTERPRISES, INC.	JOHNSON, JESSICA	903	0	0	0	903	587	1,490	65.01%	VMASC

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PROJECT NUMBER	SPLIT	SPONSORING AGENCY	PRINCIPAL INVESTIGATOR / PROJECT DIRECTOR	PERSONNEL AND FRINGE BENEFITS	SUPPLIES, CONTRACTUAL, GENERAL, & TRAVEL	EQUIPMENT	STIPENDS, SUBCONTRACTS, TUITION, OTHER	TOTAL DIRECT COSTS	REIMBURSED INDIRECT COSTS	TOTAL PROJECT COSTS	EFFECTIVE INDIRECT COST RATE	ENTERPRISE CODE
500435-020	30%	VALKYRIE ENTERPRISES, INC.	JOHNSON, JESSICA	55,084	0	0	0	55,084	35,804	90,888	65.00%	VMASC
500448-010	30%	DESIGN INTERACTIVE, INC.	JOHNSON, JESSICA	6,584	0	0	0	6,584	4,279	10,863	64.99%	VMASC
500448-020	30%	DESIGN INTERACTIVE, INC.	JOHNSON, JESSICA	369	0	0	0	369	240	609	65.04%	VMASC
500454-010	75%	EPIC GAMES, INC.	JOHNSON, JESSICA	28,537	552	0	0	29,089	8,843	37,932	30.40%	VMASC
300675-010	20%	OLD DOMINION UNIVERSITY	JORDAN, CRAIG	33,656	220	0	0	33,876	0	33,876	0.00%	VMASC
500400-012	90%	UNITED NETWORK FOR ORGAN SHARING (UNOS)	JORDAN, CRAIG	80,244	0	0	0	80,244	11,700	91,944	14.58%	VMASC
500400-013	45%	UNITED NETWORK FOR ORGAN SHARING (UNOS)	JORDAN, CRAIG	6,650	200	0	0	6,850	932	7,782	13.61%	VMASC
300628-010	No	OLD DOMINION UNIVERSITY	KOSTECZKO, JOSEPH	71,703	16,334	0	0	88,037	0	88,037	0.00%	VMASC
300671-010	25%	OLD DOMINION UNIVERSITY	KOSTECZKO, JOSEPH	5,929	150	0	0	6,079	0	6,079	0.00%	VMASC
100883-010	25%	U.S. DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT	LAWSURE, KALEEN	23,344	9,329	0	0	32,673	17,970	50,643	55.00%	VMASC
300656-010	40%	OLD DOMINION UNIVERSITY	LE, TAN	4,394	4,280	0	0	8,674	0	8,674	0.00%	VMASC
300655-010	No	OLD DOMINION UNIVERSITY	LESLIE, KEVIN	150,321	1,788	0	0	152,109	0	152,109	0.00%	VMASC
300657-010	95%	OLD DOMINION UNIVERSITY	LU, YAN	4,449	0	0	0	4,449	0	4,449	0.00%	VMASC
100790-010	10%	NAVAL SEA SYSTEMS COMMAND	LYNCH, CHRISTOPHER	13,142	0	0	0	13,142	8,542	21,684	65.00%	VMASC
100790-011	5%	NAVAL SEA SYSTEMS COMMAND	LYNCH, CHRISTOPHER	6,992	0	0	0	6,992	4,545	11,537	65.00%	VMASC
200348-010	33%	VIRGINIA DEPARTMENT OF EMERGENCY MANAGEMENT	LYNCH, CHRISTOPHER	14,617	469	0	0	15,086	3,923	19,009	26.00%	VMASC
300675-010	5%	OLD DOMINION UNIVERSITY	LYNCH, CHRISTOPHER	8,414	55	0	0	8,469	0	8,469	0.00%	VMASC
300720-010	20%	STEVENS INSTITUTE OF TECHNOLOGY	LYNCH, CHRISTOPHER	33,061	1,084	0	0	34,145	22,194	56,339	65.00%	VMASC
500400-012	10%	UNITED NETWORK FOR ORGAN SHARING (UNOS)	LYNCH, CHRISTOPHER	8,916	0	0	0	8,916	1,300	10,216	14.58%	VMASC
500400-013	45%	UNITED NETWORK FOR ORGAN SHARING (UNOS)	LYNCH, CHRISTOPHER	6,650	200	0	0	6,850	932	7,782	13.61%	VMASC
300639-010	13%	OLD DOMINION UNIVERSITY	NIELSEN, ALEX	2,948	1,068	0	0	4,016	0	4,016	0.00%	VMASC
300640-010	20%	OLD DOMINION UNIVERSITY	NIELSEN, ALEX	34,130	76	0	0	34,206	0	34,206	0.00%	VMASC
300652-010	25%	OLD DOMINION UNIVERSITY	NIELSEN, ALEX	1,706	38	0	0	1,744	0	1,744	0.00%	VMASC
300675-010	20%	OLD DOMINION UNIVERSITY	NIELSEN, ALEX	33,656	220	0	0	33,876	0	33,876	0.00%	VMASC
300717-003	20%	OLD DOMINION UNIVERSITY	NIELSEN, ALEX	3,840	5,240	0	5,200	14,280	0	14,280	0.00%	VMASC
300744-010	40%	OLD DOMINION UNIVERSITY	NIELSEN, ALEX	30,234	9,555	0	0	39,789	0	39,789	0.00%	VMASC
300779-010	No	OLD DOMINION UNIVERSITY	NIELSEN, ALEX	5,332	0	0	0	5,332	0	5,332	0.00%	VMASC
300789-010	No	OLD DOMINION UNIVERSITY	NIELSEN, ALEX	3,369	0	0	0	3,369	0	3,369	0.00%	VMASC
400456-010	No	CENTER FOR MIND AND CULTURE	NIELSEN, ALEX	93,451	2,817	0	0	96,268	14,440	110,708	15.00%	VMASC
500375-009	80%	CAMBER CORPORATION	NIELSEN, ALEX	0	0	0	1,247	1,247	811	2,058	65.04%	VMASC
500375-010	80%	CAMBER CORPORATION	NIELSEN, ALEX	0	0	0	4	4	3	7	75.00%	VMASC
500375-011	80%	CAMBER CORPORATION	NIELSEN, ALEX	0	0	0	12,774	12,774	8,304	21,078	65.01%	VMASC
300543-010	25%	OLD DOMINION UNIVERSITY	PADILLA, JOSE	32,561	14,039	0	4,106	50,706	25,630	76,336	50.55%	VMASC
300747-010	7%	OLD DOMINION UNIVERSITY	PADILLA, JOSE	1,017	364	0	350	1,731	110	1,841	6.35%	VMASC
100601-010	25%	U.S. DEPARTMENT OF EDUCATION	PAPELIS, YIANNIS	26,344	1,856	0	0	28,200	7,332	35,532	26.00%	VMASC
100900-010	75%	NAVAL SURFACE WARFARE CENTER	PAPELIS, YIANNIS	68,216	491	0	44,929	113,636	73,863	187,499	65.00%	VMASC
100931-010	50%	NAVAL SURFACE WARFARE CENTER	PAPELIS, YIANNIS	31,404	191	0	0	31,595	20,537	52,132	65.00%	VMASC
300556-010	No	VA POLYTECHNIC INSTITUTE AND STATE UNIVERSITY	PAPELIS, YIANNIS	51,573	8,687	0	4,798	65,058	0	65,058	0.00%	VMASC
300556-013	No	VA POLYTECHNIC INSTITUTE AND STATE UNIVERSITY	PAPELIS, YIANNIS	0	0	0	31,000	31,000	0	31,000	0.00%	VMASC
300556-014	No	VA POLYTECHNIC INSTITUTE AND STATE UNIVERSITY	PAPELIS, YIANNIS	4,129	895	0	0	5,024	0	5,024	0.00%	VMASC
300556-015	No	VA POLYTECHNIC INSTITUTE AND STATE UNIVERSITY	PAPELIS, YIANNIS	8,697	12,765	0	0	21,462	0	21,462	0.00%	VMASC
300747-010	7%	OLD DOMINION UNIVERSITY	PAPELIS, YIANNIS	1,017	364	0	350	1,731	110	1,841	6.35%	VMASC
500396-001	No	ManTech	PAPELIS, YIANNIS	(387)	0	0	(659)	(1,046)	(251)	(1,297)	24.00%	VMASC
500396-002	75%	ManTech	PAPELIS, YIANNIS	55,449	0	0	0	55,449	36,042	91,491	65.00%	VMASC
300758-010	15%	OLD DOMINION UNIVERSITY	RANA, MD MASUD	4,211	51	0	0	4,262	0	4,262	0.00%	VMASC
100888-010	25%	NATIONAL ENDOWMENT FOR THE HUMANITIES	RECHOWICZ, KRYSZTOF	12,133	174	0	0	12,307	3,938	16,245	32.00%	VMASC
300545-010	80%	OLD DOMINION UNIVERSITY	RECHOWICZ, KRYSZTOF	68,360	97,139	0	73,914	239,413	0	239,413	0.00%	VMASC
300639-010	13%	OLD DOMINION UNIVERSITY	RECHOWICZ, KRYSZTOF	2,948	1,068	0	0	4,016	0	4,016	0.00%	VMASC
300640-010	20%	OLD DOMINION UNIVERSITY	RECHOWICZ, KRYSZTOF	34,130	76	0	0	34,206	0	34,206	0.00%	VMASC
300652-010	25%	OLD DOMINION UNIVERSITY	RECHOWICZ, KRYSZTOF	1,706	38	0	0	1,744	0	1,744	0.00%	VMASC
300668-007	No	OLD DOMINION UNIVERSITY	RECHOWICZ, KRYSZTOF	1,369	0	0	0	1,369	0	1,369	0.00%	VMASC
300747-010	7%	OLD DOMINION UNIVERSITY	RECHOWICZ, KRYSZTOF	1,017	364	0	350	1,731	110	1,841	6.35%	VMASC
400439-010	50%	JOHN TEMPLETON FOUNDATION	RECHOWICZ, KRYSZTOF	14,730	28,471	0	574,030	617,231	6,480	623,711	1.05%	VMASC
500379-020	20%	D'ANGELO TECHNOLOGIES LLC	RECHOWICZ, KRYSZTOF	17,891	0	0	0	17,891	11,629	29,520	65.00%	VMASC

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500434-002	50%	CIRCADENCE	RECHOWICZ, KRYSZTOF	0	36,408	0	0	36,408	23,665	60,073	65.00%	VMASC
300701-010	No	OLD DOMINION UNIVERSITY	RICHTER, HEATHER	85,232	0	0	0	85,232	0	85,232	0.00%	VMASC
300717-003	80%	OLD DOMINION UNIVERSITY	RICHTER, HEATHER	15,361	20,961	0	20,800	57,122	0	57,122	0.00%	VMASC
300747-010	7%	OLD DOMINION UNIVERSITY	RICHTER, HEATHER	1,017	364	0	350	1,731	110	1,841	6.35%	VMASC
200293-010	No	CITY OF SUFFOLK	ROBINSON, ROBERT	31,694	0	0	0	31,694	0	31,694	0.00%	VMASC
200343-010	60%	VIRGINIA DEPARTMENT OF EMERGENCY MANAGEMENT	ROBINSON, ROBERT	22,849	0	0	0	22,849	12,567	35,416	55.00%	VMASC
200350-010	No	VIRGINIA DEPARTMENT OF VETERANS SERVICES	ROBINSON, ROBERT	411,969	0	0	0	411,969	44,616	456,585	10.83%	VMASC
200360-010	No	VIRGINIA DEPARTMENT OF VETERANS SERVICES	ROBINSON, ROBERT	48,977	9,101	0	224,634	282,712	17,656	300,368	6.25%	VMASC
300592-010	20%	OLD DOMINION UNIVERSITY	ROBINSON, ROBERT	86,164	24,484	0	0	110,648	0	110,648	0.00%	VMASC
300758-010	20%	OLD DOMINION UNIVERSITY	ROBINSON, ROBERT	5,615	68	0	0	5,683	0	5,683	0.00%	VMASC
400482-010	No	LIFT TECHNOLOGY OPERATED BY ALMMII	ROBINSON, ROBERT	129,032	0	0	0	129,032	39,226	168,258	30.40%	VMASC
400482-020	No	LIFT TECHNOLOGY OPERATED BY ALMMII	ROBINSON, ROBERT	32,697	3,635	0	0	36,332	11,045	47,377	30.40%	VMASC
400482-030	No	LIFT TECHNOLOGY OPERATED BY ALMMII	ROBINSON, ROBERT	0	691	0	0	691	210	901	30.39%	VMASC
400482-040	No	LIFT TECHNOLOGY OPERATED BY ALMMII	ROBINSON, ROBERT	0	543	0	0	543	165	708	30.39%	VMASC
500460-010	20%	TIM HOILES	ROBINSON, ROBERT	505	0	0	0	505	278	783	55.05%	VMASC
300390-010	No	UNIVERSITY OF ILLINOIS (ALL CAMPUSES)	SHETTY, SACHIN	0	44	0	0	44	24	68	54.55%	VMASC
300390-020	No	UNIVERSITY OF ILLINOIS (ALL CAMPUSES)	SHETTY, SACHIN	0	52	0	0	52	29	81	55.77%	VMASC
300390-030	No	UNIVERSITY OF ILLINOIS (ALL CAMPUSES)	SHETTY, SACHIN	0	2,027	0	0	2,027	1,115	3,142	55.01%	VMASC
300390-040	No	UNIVERSITY OF ILLINOIS (ALL CAMPUSES)	SHETTY, SACHIN	0	234	0	0	234	129	363	55.13%	VMASC
100888-010	25%	NATIONAL ENDOWMENT FOR THE HUMANITIES	SHULL, JOHN	12,133	174	0	0	12,307	3,938	16,245	32.00%	VMASC
300640-010	20%	OLD DOMINION UNIVERSITY	SHULL, JOHN	34,130	76	0	0	34,206	0	34,206	0.00%	VMASC
300652-010	25%	OLD DOMINION UNIVERSITY	SHULL, JOHN	1,706	38	0	0	1,744	0	1,744	0.00%	VMASC
300675-010	20%	OLD DOMINION UNIVERSITY	SHULL, JOHN	33,656	220	0	0	33,876	0	33,876	0.00%	VMASC
300707-010	No	OLD DOMINION UNIVERSITY	SHULL, JOHN	13,662	55,228	8,109	0	76,999	0	76,999	0.00%	VMASC
300717-001	40%	OLD DOMINION UNIVERSITY	SHULL, JOHN	27,267	11,228	0	0	38,495	0	38,495	0.00%	VMASC
400455-010	No	CENTER FOR MIND AND CULTURE	SHULL, JOHN	42,054	12,205	1,335	0	55,594	8,139	63,733	14.64%	VMASC
100790-011	10%	NAVAL SEA SYSTEMS COMMAND	SMITH, KATHERINE	13,983	0	0	0	13,983	9,089	23,072	65.00%	VMASC
200345-010	40%	NEWPORT NEWS PUBLIC SCHOOLS	SMITH, KATHERINE	25,286	602	0	0	25,888	14,239	40,127	55.00%	VMASC
300640-010	20%	OLD DOMINION UNIVERSITY	SMITH, KATHERINE	34,130	76	0	0	34,206	0	34,206	0.00%	VMASC
300658-010	33%	OLD DOMINION UNIVERSITY	SMITH, KATHERINE	16,555	0	0	0	16,555	0	16,555	0.00%	VMASC
300671-010	25%	OLD DOMINION UNIVERSITY	SMITH, KATHERINE	5,929	150	0	0	6,079	0	6,079	0.00%	VMASC
300691-010	33%	OLD DOMINION UNIVERSITY	SMITH, KATHERINE	19,127	8,250	0	8,016	35,393	0	35,393	0.00%	VMASC
300725-010	25%	OLD DOMINION UNIVERSITY	SMITH, KATHERINE	2,352	5,622	0	0	7,974	0	7,974	0.00%	VMASC
300747-010	7%	OLD DOMINION UNIVERSITY	SMITH, KATHERINE	1,017	364	0	350	1,731	110	1,841	6.35%	VMASC
500435-010	50%	VALKYRIE ENTERPRISES, INC.	SMITH, KATHERINE	1,505	0	0	0	1,505	978	2,483	64.98%	VMASC
500435-020	50%	VALKYRIE ENTERPRISES, INC.	SMITH, KATHERINE	91,806	0	0	0	91,806	59,674	151,480	65.00%	VMASC
500442-010	No	TED TEXT LLC	SMITH, KATHERINE	0	0	0	0	0	1	1	0.00%	VMASC
500448-010	70%	DESIGN INTERACTIVE, INC.	SMITH, KATHERINE	15,362	0	0	0	15,362	9,985	25,347	65.00%	VMASC
500448-020	70%	DESIGN INTERACTIVE, INC.	SMITH, KATHERINE	861	0	0	0	861	560	1,421	65.04%	VMASC
500454-010	25%	EPIC GAMES, INC.	SMITH, KATHERINE	9,512	184	0	0	9,696	2,948	12,644	30.40%	VMASC
300592-010	20%	OLD DOMINION UNIVERSITY	WEISEL, ERIC	86,164	24,484	0	0	110,648	0	110,648	0.00%	VMASC
400193-000	No	VMASC MEMBERSHIP ACCOUNT	WEISEL, ERIC	0	2,099	0	0	2,099	0	2,099	0.00%	VMASC
500379-020	50%	D'ANGELO TECHNOLOGIES LLC	WEISEL, ERIC	44,729	0	0	0	44,729	29,074	73,803	65.00%	VMASC
<b>TOTAL VIRGINIA MODELING AND SIMULATION CENTER (VMASC)</b>				<b>4,631,577</b>	<b>1,024,569</b>	<b>9,444</b>	<b>2,297,566</b>	<b>7,963,156</b>	<b>1,464,753</b>	<b>9,427,909</b>	<b>18.39%</b>	

**CENTER FOR CYBERSECURITY (CYBER)**

300737-010	34%	OLD DOMINION UNIVERSITY	NING, RUI	8,079	2,689	0	0	10,768	0	10,768	0.00%	CYBER
300738-010	34%	OLD DOMINION UNIVERSITY	NING, RUI	0	117	0	0	117	0	117	0.00%	CYBER
300760-010	50%	OLD DOMINION UNIVERSITY	NING, RUI	2,260	9,501	0	0	11,761	0	11,761	0.00%	CYBER
300687-010	50%	OLD DOMINION UNIVERSITY	PAYNE, BRIAN	17,073	2,482	0	0	19,555	0	19,555	0.00%	CYBER
100723-010	33%	NATIONAL SCIENCE FOUNDATION	PURWANTO, WIRAWAN	21,227	0	0	0	21,227	11,675	32,902	55.00%	CYBER
100839-010	34%	OFFICE OF NAVAL RESEARCH	WU, HONGYI	6,708	3,577	0	13,638	23,923	5,656	29,579	23.64%	CYBER
100880-010	25%	NATIONAL SECURITY AGENCY	WU, HONGYI	1,959	433	0	1,949	4,341	1,315	5,656	30.29%	CYBER
100908-010	30%	NATIONAL SECURITY AGENCY	WU, HONGYI	8,349	987	0	42,759	52,095	5,134	57,229	9.86%	CYBER

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PROJECT NUMBER	SPLIT	SPONSORING AGENCY	PRINCIPAL INVESTIGATOR / PROJECT DIRECTOR	PERSONNEL AND FRINGE BENEFITS	SUPPLIES, CONTRACTUAL, GENERAL, & TRAVEL	EQUIPMENT	STIPENDS, SUBCONTRACTS, TUITION, OTHER	TOTAL DIRECT COSTS	REIMBURSED INDIRECT COSTS	TOTAL PROJECT COSTS	EFFECTIVE INDIRECT COST RATE	ENTERPRISE CODE
100915-010	34%	NATIONAL SECURITY AGENCY	WU, HONGYI	4,340	0	0	0	4,340	2,387	6,727	55.00%	CYBER
300697-010	25%	OLD DOMINION UNIVERSITY	WU, HONGYI	0	130	0	0	130	72	202	55.38%	CYBER
300698-010	20%	OLD DOMINION UNIVERSITY	WU, HONGYI	2,158	187	0	413	2,758	1,290	4,048	46.77%	CYBER
300705-010	50%	OLD DOMINION UNIVERSITY	WU, HONGYI	7,632	10,293	6,312	0	24,237	0	24,237	0.00%	CYBER
300715-010	50%	OLD DOMINION UNIVERSITY	WU, HONGYI	9,043	3,903	0	0	12,946	0	12,946	0.00%	CYBER
300734-010	No	UNIVERSITY OF VIRGINIA	WU, HONGYI	0	1,029	0	0	1,029	566	1,595	55.00%	CYBER
300738-010	33%	OLD DOMINION UNIVERSITY	WU, HONGYI	0	114	0	0	114	0	114	0.00%	CYBER
300776-010	50%	VA POLYTECHNIC INSTITUTE AND STATE UNIVERSITY	WU, HONGYI	0	247	0	0	247	136	383	55.06%	CYBER
400491-001	5%	REINVENT HAMPTON ROADS	WU, HONGYI	737	1	0	13,371	14,109	0	14,109	0.00%	CYBER
400491-001	No	REINVENT HAMPTON ROADS	WU, HONGYI	0	25,000	0	193,244	218,244	0	218,244	0.00%	CYBER
400491-002	5%	REINVENT HAMPTON ROADS	WU, HONGYI	737	1	0	9,692	10,430	0	10,430	0.00%	CYBER
400491-002	No	REINVENT HAMPTON ROADS	WU, HONGYI	0	0	0	105,152	105,152	0	105,152	0.00%	CYBER
600230-010	No	NATO	WU, HONGYI	11,224	0	0	3,646	14,870	8,178	23,048	55.00%	CYBER
100915-010	33%	NATIONAL SECURITY AGENCY	XIN, CHUNSHENG	4,213	0	0	0	4,213	2,317	6,530	55.00%	CYBER
400491-001	95%	REINVENT HAMPTON ROADS	XIN, CHUNSHENG	13,994	11	0	254,046	268,051	0	268,051	0.00%	CYBER
400491-002	95%	REINVENT HAMPTON ROADS	XIN, CHUNSHENG	13,994	11	0	184,140	198,145	0	198,145	0.00%	CYBER
<b>TOTAL CENTER FOR CYBERSECURITY (CYBER)</b>				<b>133,727</b>	<b>60,713</b>	<b>6,312</b>	<b>822,050</b>	<b>1,022,802</b>	<b>38,726</b>	<b>1,061,528</b>	<b>3.79%</b>	
<b>INSTITUTE FOR INNOVATION &amp; ENTREPRENEURSHIP</b>												
300420-050	No	VA POLYTECHNIC INSTITUTE AND STATE UNIVERSITY	KASZUBOWSKI, MARTIN	0	10,000	0	0	10,000	2,500	12,500	25.00%	TRAD
400437-010	50%	AMERICAN COUNCIL OF INTERNATIONAL EDUCATION	KASZUBOWSKI, MARTIN	0	6,418	0	33	6,451	968	7,419	15.01%	TRAD
100694-040	No	SMALL BUSINESS ADMINISTRATION	NUNNERY, JOHN	51,706	98	0	0	51,804	13,469	65,273	26.00%	TRAD
100694-050	No	SMALL BUSINESS ADMINISTRATION	NUNNERY, JOHN	71,989	132	0	0	72,121	18,751	90,872	26.00%	TRAD
100713-030	No	SMALL BUSINESS ADMINISTRATION	NUNNERY, JOHN	0	(468)	0	0	(468)	(122)	(590)	26.07%	TRAD
100713-040	No	SMALL BUSINESS ADMINISTRATION	NUNNERY, JOHN	275,753	5,077	0	0	280,830	73,016	353,846	26.00%	TRAD
100713-050	No	SMALL BUSINESS ADMINISTRATION	NUNNERY, JOHN	38,285	549	0	0	38,834	10,097	48,931	26.00%	TRAD
100818-010	No	ECONOMIC DEVELOPMENT ADMINISTRATION	NUNNERY, JOHN	132,806	6,119	0	0	138,925	36,120	175,045	26.00%	TRAD
100852-010	No	SMALL BUSINESS ADMINISTRATION	NUNNERY, JOHN	91,082	35,287	0	0	126,369	32,856	159,225	26.00%	TRAD
200332-010	40%	VA DEPARTMENT OF ECONOMIC DEVELOPMENT	NUNNERY, JOHN	108,454	11,524	0	13,550	133,528	13,198	146,726	9.88%	TRAD
200363-010	25%	STATE COUNCIL FOR HIGHER EDUCATION IN VA (SCHEV)	NUNNERY, JOHN	4,062	875	0	0	4,937	0	4,937	0.00%	TRAD
300624-010	90%	HAMPTON UNIVERSITY	NUNNERY, JOHN	367,654	43,297	0	117,800	528,751	106,847	635,598	20.21%	TRAD
400437-010	50%	AMERICAN COUNCIL OF INTERNATIONAL EDUCATION	NUNNERY, JOHN	0	6,418	0	33	6,451	968	7,419	15.01%	TRAD
400449-010	No	URBAN STRATEGIES, INC.	NUNNERY, JOHN	3,488	10,796	0	(2,712)	11,572	3,714	15,286	32.09%	TRAD
400465-012	No	EWING MARION KAUFFMAN FOUNDATION	NUNNERY, JOHN	0	5,825	0	0	5,825	0	5,825	0.00%	TRAD
400477-010	No	NEW COLLEGE FOUNDATION	NUNNERY, JOHN	9,384	0	0	2,582	11,966	3,830	15,796	32.01%	TRAD
400506-010	No	AMERICAN COUNCIL OF INTERNATIONAL EDUCATION	NUNNERY, JOHN	0	48	0	0	48	12	60	25.00%	TRAD
600240-010	No	NATO	NUNNERY, JOHN	89,830	57,707	0	3,433	150,970	81,145	232,115	53.75%	TRAD
<b>TOTAL INSTITUTE FOR INNOVATION &amp; ENTREPRENEURSHIP</b>				<b>1,244,493</b>	<b>199,702</b>	<b>0</b>	<b>134,719</b>	<b>1,578,914</b>	<b>397,369</b>	<b>1,976,283</b>	<b>25.17%</b>	
<b>VIRGINIA TIDEWATER CONSORTIUM FOR HIGHER EDUCATION</b>												
100618-010	No	U.S. DEPARTMENT OF EDUCATION	DOTOLO, LAWRENCE	151,874	27,303	0	0	179,177	13,933	193,110	7.78%	TRAD
<b>TOTAL VIRGINIA TIDEWATER CONSORTIUM FOR HIGHER EDUCATION</b>				<b>151,874</b>	<b>27,303</b>	<b>0</b>	<b>0</b>	<b>179,177</b>	<b>13,933</b>	<b>193,110</b>	<b>7.78%</b>	
<b>GRADUATE SCHOOL</b>												
200335-010	34%	VA DEPARTMENT OF MOTOR VEHICLES	PORTER, BRYAN	6,697	1	0	0	6,698	1,742	8,440	26.01%	TRAD
200336-010	50%	VA DEPARTMENT OF MOTOR VEHICLES	PORTER, BRYAN	17,118	12,500	0	20,169	49,787	7,701	57,488	15.47%	TRAD
200357-010	50%	VA DEPARTMENT OF MOTOR VEHICLES	PORTER, BRYAN	14,155	4,703	0	0	18,858	4,903	23,761	26.00%	TRAD
200358-010	34%	VA DEPARTMENT OF MOTOR VEHICLES	PORTER, BRYAN	7,106	3,552	0	0	10,658	2,771	13,429	26.00%	TRAD
400496-010	50%	MOTHERS AGAINST DRUNK DRIVERS	PORTER, BRYAN	4,687	1,413	0	351	6,451	3,549	10,000	55.01%	TRAD
<b>TOTAL GRADUATE SCHOOL</b>				<b>49,763</b>	<b>22,169</b>	<b>0</b>	<b>20,520</b>	<b>92,452</b>	<b>20,666</b>	<b>113,118</b>	<b>22.35%</b>	
<b>STUDENT SERVICES</b>												
300614-010	No	OLD DOMINION UNIVERSITY	STUDIVANT, PASSION	69,328	14,218	0	800	84,346	6,684	91,030	7.92%	TRAD
300614-020	No	OLD DOMINION UNIVERSITY	STUDIVANT, PASSION	231,677	7,733	0	27,151	266,561	19,153	285,714	7.19%	TRAD

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PROJECT NUMBER	SPLIT	SPONSORING AGENCY	PRINCIPAL INVESTIGATOR / PROJECT DIRECTOR	PERSONNEL AND FRINGE BENEFITS	SUPPLIES, CONTRACTUAL, GENERAL, & TRAVEL	EQUIPMENT	STIPENDS, SUBCONTRACTS, TUITION, OTHER	TOTAL DIRECT COSTS	REIMBURSED INDIRECT COSTS	TOTAL PROJECT COSTS	EFFECTIVE INDIRECT COST RATE	ENTERPRISE CODE
200363-010	25%	STATE COUNCIL FOR HIGHER EDUCATION IN VA (SCHEV)	STANSBERRY, DONALD	4,062	875	0	0	4,937	0	4,937	0.00%	TRAD
		TOTAL STUDENT SERVICES		<b>305,067</b>	<b>22,826</b>	<b>0</b>	<b>27,951</b>	<b>355,844</b>	<b>25,837</b>	<b>381,681</b>	<b>7.26%</b>	
<b>UNIVERSITY LIBRARIES</b>												
100906-010	20%	INSTITUTE OF MUSEUM AND LIBRARY SERVICES	RITCHIE, JESSICA	4,604	161	0	0	4,765	1,525	6,290	32.00%	TRAD
400483-010	No	SOCIETY OF AMERICAN ARCHIVISTS	RITCHIE, JESSICA	0	2,240	0	0	2,240	0	2,240	0.00%	TRAD
		TOTAL UNIVERSITY LIBRARIES		<b>4,604</b>	<b>2,401</b>	<b>0</b>	<b>0</b>	<b>7,005</b>	<b>1,525</b>	<b>8,530</b>	<b>21.77%</b>	
<b>MISCELLANEOUS ODU UNITS</b>												
200354-010	0.11	CITY OF VIRGINIA BEACH	CONSIDIENE, CAROL	6,944	0	0	401	7,345	4,040	11,385	55.00%	TRAD
300434-010	No	OLD DOMINION UNIVERSITY	COOPER, ROBERT	96,202	3,704	0	2,984	102,890	7,993	110,883	7.77%	TRAD
300629-010	No	OLD DOMINION UNIVERSITY	DEAVER, GREGORY	5,151	0	0	0	5,151	0	5,151	0.00%	TRAD
300629-020	No	OLD DOMINION UNIVERSITY	DEAVER, GREGORY	5,267	0	0	0	5,267	0	5,267	0.00%	TRAD
200009-023	0.25	STATE COUNCIL FOR HIGHER EDUCATION IN VA (SCHEV)	GENARD, GIOVANNA	1,339	1,150	0	0	2,489	0	2,489	0.00%	TRAD
100726-030	0.30	U.S. DEPARTMENT OF HEALTH AND HUMAN SERVICES	HOLLEY, ANGELA	2,479	2,781	0	0	5,260	1,683	6,943	32.00%	TRAD
100726-030	0.10	U.S. DEPARTMENT OF HEALTH AND HUMAN SERVICES	KILLEEN, RAGAN	826	927	0	0	1,753	561	2,314	32.00%	TRAD
300434-010	No	OLD DOMINION UNIVERSITY	LOVE, LILA	155,109	49,661	0	43,752	248,522	16,382	264,904	6.59%	TRAD
200362-010	0.17	VIRGINIA DEPARTMENT OF EMERGENCY MANAGEMENT	MCLEOD, GEORGE	665	0	0	8,166	8,831	173	9,004	1.96%	TRAD
300717-005	0.40	OLD DOMINION UNIVERSITY	MCLEOD, GEORGE	38,969	9,895	0	0	48,864	0	48,864	0.00%	TRAD
200363-010	0.25	STATE COUNCIL FOR HIGHER EDUCATION IN VA (SCHEV)	PAYNE, BRIAN	4,062	875	0	0	4,937	0	4,937	0.00%	TRAD
200354-010	0.27	CITY OF VIRGINIA BEACH	WHITEHEAD, JESSICA	17,044	0	0	985	18,029	9,916	27,945	55.00%	TRAD
200362-010	0.17	VIRGINIA DEPARTMENT OF EMERGENCY MANAGEMENT	WHITEHEAD, JESSICA	665	0	0	8,166	8,831	173	9,004	1.96%	TRAD
300674-010	0.30	OLD DOMINION UNIVERSITY	WHITEHEAD, JESSICA	26,138	808	0	0	26,946	14,820	41,766	55.00%	TRAD
		TOTAL MISCELLANEOUS ODU UNITS		<b>360,860</b>	<b>69,801</b>	<b>0</b>	<b>64,454</b>	<b>495,115</b>	<b>55,741</b>	<b>550,856</b>	<b>11.26%</b>	
<b>MISCELLANEOUS ODU UNITS - CENTER FOR CYBERSECURITY (CYBER)</b>												
100709-010	0.20	NATIONAL SCIENCE FOUNDATION	PAYNE, BRIAN	5,056	1,197	0	31,334	37,587	3,439	41,026	9.15%	CYBER
100814-010	0.65	NATIONAL SCIENCE FOUNDATION	PAYNE, BRIAN	35,327	29,877	0	7,994	73,198	35,863	109,061	48.99%	CYBER
100856-010	0.20	NATIONAL SCIENCE FOUNDATION	PAYNE, BRIAN	1,971	0	0	0	1,971	1,084	3,055	55.00%	CYBER
100856-010	0.25	NATIONAL SCIENCE FOUNDATION	PAYNE, BRIAN	(26)	0	0	850	824	(14)	810	-1.70%	CYBER
100892-010	0.80	NATIONAL SCIENCE FOUNDATION	PAYNE, BRIAN	65,251	36,281	0	190,708	292,240	55,843	348,083	19.11%	CYBER
		TOTAL MISCELLANEOUS ODU UNITS - CENTER FOR CYBERSECURITY (CYBER)		<b>107,579</b>	<b>67,355</b>	<b>0</b>	<b>230,886</b>	<b>405,820</b>	<b>96,215</b>	<b>502,035</b>	<b>23.71%</b>	
<b>MISCELLANEOUS ODU UNITS - VIRGINIA MODELING AND SIMULATION CENTER (VMASC)</b>												
300667-010	40%	VA POLYTECHNIC INSTITUTE AND STATE UNIVERSITY	LE, TAN	8,027	0	0	395	8,422	4,632	13,054	55.00%	VMASC
		TOTAL MISCELLANEOUS ODU UNITS - VIRGINIA MODELING AND SIMULATION CENTER (VMASC)		<b>8,027</b>	<b>0</b>	<b>0</b>	<b>395</b>	<b>8,422</b>	<b>4,632</b>	<b>13,054</b>	<b>55.00%</b>	
<b>VIRGINIA SPACE GRANT CONSORTIUM (VSGC)</b>												
100607-010	No	NATIONAL SCIENCE FOUNDATION	CARTER, CHRISTOPHER	12,841	15,757	0	21,921	50,519	7,436	57,955	14.72%	VSGC
100872-010	No	NATIONAL SCIENCE FOUNDATION	CARTER, CHRISTOPHER	31,100	60,896	0	4,530	96,526	23,919	120,445	24.78%	VSGC
100527-010	No	NASA GODDARD SPACEFLIGHT CENTER	SANDY, MARY	0	0	0	28	28	0	28	0.00%	VSGC
100846-010	No	LANGLEY RESEARCH CENTER	SANDY, MARY	309,163	30,184	0	327,202	666,549	88,230	754,779	13.24%	VSGC
100855-010	No	LANGLEY RESEARCH CENTER	SANDY, MARY	29,197	47,653	0	0	76,850	19,981	96,831	26.00%	VSGC
100926-010	No	FEDERAL AVIATION ADMINISTRATION	SANDY, MARY	8,715	4,527	0	11,204	24,446	3,443	27,889	14.08%	VSGC
200005-010	No	STATE COUNCIL FOR HIGHER EDUCATION IN VA (SCHEV)	SANDY, MARY	228,920	56,644	0	80,705	366,269	0	366,269	0.00%	VSGC
200005-011	No	STATE COUNCIL FOR HIGHER EDUCATION IN VA (SCHEV)	SANDY, MARY	80,653	42,292	0	31,589	154,534	0	154,534	0.00%	VSGC
200009-010	No	STATE COUNCIL FOR HIGHER EDUCATION IN VA (SCHEV)	SANDY, MARY	0	0	0	174,649	174,649	0	174,649	0.00%	VSGC
200009-020	No	STATE COUNCIL FOR HIGHER EDUCATION IN VA (SCHEV)	SANDY, MARY	27,469	1,422	0	52,698	81,589	0	81,589	0.00%	VSGC
200278-010	No	STATE COUNCIL FOR HIGHER EDUCATION IN VA (SCHEV)	SANDY, MARY	27,180	52,789	0	39,500	119,469	0	119,469	0.00%	VSGC
300030-010	No	UNIVERSITY OF VIRGINIA	SANDY, MARY	69,679	22,701	0	57,183	149,563	0	149,563	0.00%	VSGC
300040-010	No	VA POLYTECHNIC INSTITUTE AND STATE UNIVERSITY	SANDY, MARY	273,380	18,351	0	0	291,731	0	291,731	0.00%	VSGC
300125-010	No	OLD DOMINION UNIVERSITY	SANDY, MARY	143,234	79,695	0	13,721	236,650	0	236,650	0.00%	VSGC
300419-010	No	VIRGINIA COMMUNITY COLLEGE SYSTEM	SANDY, MARY	0	492	0	78,406	78,898	0	78,898	0.00%	VSGC
300598-010	No	OLD DOMINION UNIVERSITY	SANDY, MARY	29,145	0	0	35,165	64,310	0	64,310	0.00%	VSGC

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(MEASURED BY EXPENDITURES INCURRED)  
FOR FISCAL YEAR 2022

PROJECT NUMBER	SPLIT	SPONSORING AGENCY	PRINCIPAL INVESTIGATOR / PROJECT DIRECTOR	PERSONNEL AND FRINGE BENEFITS	SUPPLIES, CONTRACTUAL, GENERAL, & TRAVEL	EQUIPMENT	STIPENDS, SUBCONTRACTS, TUITION, OTHER	TOTAL DIRECT COSTS	REIMBURSED INDIRECT COSTS	TOTAL PROJECT COSTS	EFFECTIVE INDIRECT COST RATE	ENTERPRISE CODE
300604-010	No	VA POLYTECHNIC INSTITUTE AND STATE UNIVERSITY	SANDY, MARY	23,409	5,541	0	53,595	82,545	0	82,545	0.00%	VSGC
300699-010	No	OLD DOMINION UNIVERSITY	SANDY, MARY	0	0	0	10,800	10,800	0	10,800	0.00%	VSGC
300700-010	No	OLD DOMINION UNIVERSITY	SANDY, MARY	4,832	0	0	0	4,832	0	4,832	0.00%	VSGC
300700-010	No	OLD DOMINION UNIVERSITY	SANDY, MARY	14,264	0	0	0	14,264	0	14,264	0.00%	VSGC
300724-010	No	OLD DOMINION UNIVERSITY	SANDY, MARY	0	0	0	37,500	37,500	0	37,500	0.00%	VSGC
300756-010	No	OLD DOMINION UNIVERSITY	SANDY, MARY	0	2,400	0	32,500	34,900	0	34,900	0.00%	VSGC
300769-010	No	OLD DOMINION UNIVERSITY	SANDY, MARY	81	0	0	7,040	7,121	0	7,121	0.00%	VSGC
300774-010	No	OLD DOMINION UNIVERSITY	SANDY, MARY	0	0	0	60,000	60,000	0	60,000	0.00%	VSGC
300787-010	No	OLD DOMINION UNIVERSITY	SANDY, MARY	429	0	0	0	429	0	429	0.00%	VSGC
400204-010	No	THE NATIONAL ACADEMIES	SANDY, MARY	204,566	27,427	0	269,723	501,716	60,318	562,034	12.02%	VSGC
400472-010	No	MITRE CORPORATION	SANDY, MARY	7,937	0	0	(1)	7,936	2,064	10,000	26.01%	VSGC
500458-010	No	LYNX STRATEGY GROUP LLC	SANDY, MARY	10,520	2,600	0	0	13,120	3,411	16,531	26.00%	VSGC
500458-010	No	LYNX STRATEGY GROUP LLC	SANDY, MARY	0	0	0	5,712	5,712	1,485	7,197	26.00%	VSGC
<b>TOTAL VIRGINIA SPACE GRANT CONSORTIUM (VSGC)</b>				<b>1,536,714</b>	<b>471,371</b>	<b>0</b>	<b>1,405,370</b>	<b>3,413,455</b>	<b>210,287</b>	<b>3,623,742</b>	<b>6.16%</b>	
<b>TOTAL OFFICE OF RESEARCH AND OTHER ODU UNITS</b>				<b>9,523,286</b>	<b>2,223,932</b>	<b>15,756</b>	<b>5,573,545</b>	<b>17,336,519</b>	<b>2,894,027</b>	<b>20,230,546</b>	<b>16.69%</b>	
<b>GRAND TOTAL</b>				<b>28,541,788</b>	<b>6,380,689</b>	<b>760,308</b>	<b>11,361,467</b>	<b>47,044,252</b>	<b>9,478,560</b>	<b>56,522,812</b>	<b>20.15%</b>	

**SCHEDULE 5**

**Enterprise Centers Including Projects Reported as  
Activity of an Academic Department  
Fiscal Year 2022**

**SCHEDULE 5**  
**OLD DOMINION UNIVERSITY RESEARCH FOUNDATION**  
**ENTERPRISE CENTERS INCLUDING PROJECTS REPORTED AS ACTIVITY OF AN ACADEMIC DEPARTMENT**  
(MEASURED BY EXPENDITURES INCURRED)  
**FOR FISCAL YEAR 2022**

PROJECT NUMBER	SPLIT	SPONSORING AGENCY	PRINCIPAL INVESTIGATOR / PROJECT DIRECTOR	DEPT	PERSONNEL AND FRINGE BENEFITS	SUPPLIES, CONTRACTUAL, GENERAL, & TRAVEL	EQUIPMENT	STIPENDS, SUBCONTRACTS, TUITION, OTHER	TOTAL DIRECT COSTS	REIMBURSED INDIRECT COSTS	TOTAL PROJECT COSTS	EFFECTIVE INDIRECT COST RATE	ENTERPRISE CODE
<b>APPLIED RESEARCH CENTER (ARC)</b>													
100917-010	50%	U.S. DEPARTMENT OF ENERGY	BAUMGART, HELMUT	4054	19,691	4,844	0	0	24,535	6,379	30,914	26.00%	ARC
400346-043	No	JEFFERSON SCIENCE ASSOCIATES, LLC (JEFFERSON LAB)	BAUMGART, HELMUT	4054	28,217	0	0	0	28,217	0	28,217	0.00%	ARC
300591-010	No	VIRGINIA STATE UNIVERSITY	ELMUSTAFA, ABDELMAGEED	4054	30,558	3,978	0	7,044	41,580	8,979	50,559	21.59%	ARC
400346-057	No	JEFFERSON SCIENCE ASSOCIATES, LLC (JEFFERSON LAB)	ELMUSTAFA, ABDELMAGEED	4054	12,645	0	0	0	12,645	0	12,645	0.00%	ARC
100567-020	No	LANGLEY RESEARCH CENTER	ELSAYED-ALI, HANI	4054	1,019	0	0	0	1,019	265	1,284	26.01%	ARC
100674-010	No	NATIONAL SCIENCE FOUNDATION	ELSAYED-ALI, HANI	4054	17,588	485	0	0	18,073	9,940	28,013	55.00%	ARC
100886-010	No	FERMI NATIONAL ACCELERATOR LABORATORY	ELSAYED-ALI, HANI	4054	0	0	31,850	0	31,850	0	31,850	0.00%	ARC
100902-010	No	FERMI NATIONAL ACCELERATOR LABORATORY	ELSAYED-ALI, HANI	4054	23,042	775	0	7,099	30,916	6,192	37,108	20.03%	ARC
100918-010	No	U.S. DEPARTMENT OF ENERGY	ELSAYED-ALI, HANI	4054	23,995	3,734	0	1,881	29,610	15,251	44,861	51.51%	ARC
100922-010	No	FERMI NATIONAL ACCELERATOR LABORATORY	ELSAYED-ALI, HANI	4054	0	5,586	0	0	5,586	3,072	8,658	54.99%	ARC
300608-010	No	ELIZABETH CITY STATE UNIVERSITY	ELSAYED-ALI, HANI	4054	12,205	0	0	0	12,205	6,713	18,918	55.00%	ARC
400346-011	No	JEFFERSON SCIENCE ASSOCIATES, LLC (JEFFERSON LAB)	ELSAYED-ALI, HANI	4054	4,608	(12,945)	18,539	0	10,202	0	10,202	0.00%	ARC
400346-048	No	JEFFERSON SCIENCE ASSOCIATES, LLC (JEFFERSON LAB)	ELSAYED-ALI, HANI	4054	27,464	0	0	0	27,464	0	27,464	0.00%	ARC
500378-010	No	FACE CONSTRUCTION TECHNOLOGIES	ELSAYED-ALI, HANI	4054	8,325	33	0	0	8,358	4,597	12,955	55.00%	ARC
500415-020	No	QINETIQ (MTEQ)	ELSAYED-ALI, HANI	4054	0	0	0	200	200	0	200	0.00%	ARC
500429-010	No	BSCE SYSTEMS, INC.	ELSAYED-ALI, HANI	4054	11,046	0	0	0	11,046	2,872	13,918	26.00%	ARC
500432-010	No	BNNT, LLC	ELSAYED-ALI, HANI	4054	0	2,625	0	0	2,625	1,444	4,069	55.01%	ARC
500439-010	No	EMBODY	ELSAYED-ALI, HANI	4054	0	58	0	0	58	32	90	55.17%	ARC
500449-010	No	LIFENET	ELSAYED-ALI, HANI	4054	0	283	0	17	300	165	465	55.00%	ARC
300436-010	50%	COLORADO SCHOOL OF MINES	MARSILLAC, SYLVAIN	4065	35,307	17,510	0	0	52,817	29,050	81,867	55.00%	ARC
400468-010	50%	JEFFERSON SCIENCE ASSOCIATES, LLC (JEFFERSON LAB)	MARSILLAC, SYLVAIN	4054	6,219	20,574	0	0	26,793	14,736	41,529	55.00%	ARC
100903-010	80%	NATIONAL SCIENCE FOUNDATION	NAMKOONG, GON	4054	9,256	3,234	0	0	12,490	6,870	19,360	55.00%	ARC
300392-010	No	NORFOLK STATE UNIVERSITY	NAMKOONG, GON	4054	7,774	0	0	0	7,774	4,276	12,050	55.00%	ARC
<b>TOTAL APPLIED RESEARCH CENTER (ARC)</b>					<b>278,959</b>	<b>50,774</b>	<b>50,389</b>	<b>16,241</b>	<b>396,363</b>	<b>120,833</b>	<b>517,196</b>	<b>30.49%</b>	
<b>FRANK REIDY RESEARCH CENTER FOR BIOELECTRICS (CBE)</b>													
300672-010	60%	OLD DOMINION UNIVERSITY	BEEBE, STEPHEN	4073	11,373	0	0	0	11,373	3,412	14,785	30.00%	CBE
100875-010	No	U.S. PUBLIC HEALTH SERVICE (INCLUDING NIH)	CATRAVAS, JOHN	5056	20,546	1,286	0	0	21,832	12,008	33,840	55.00%	CBE
100875-020	No	U.S. PUBLIC HEALTH SERVICE (INCLUDING NIH)	CATRAVAS, JOHN	5056	210,509	46,088	0	0	256,597	141,128	397,725	55.00%	CBE
500461-010	No	KEVIRX, INC.	CATRAVAS, JOHN	5056	31,565	2,958	0	0	34,523	18,988	53,511	55.00%	CBE
100661-010	No	AIR FORCE RESEARCH LABORATORY	JIANG, CHUNQI	4054	93,747	17,689	12,030	3,791	127,257	61,290	188,547	48.16%	CBE
300595-010	No	UNIVERSITY OF SOUTH FLORIDA	JIANG, CHUNQI	4054	20,127	11,584	0	0	31,711	17,441	49,152	55.00%	CBE
300757-010	No	OLD DOMINION UNIVERSITY	JIANG, CHUNQI	4054	0	0	30,372	0	30,372	0	30,372	0.00%	CBE
500226-019	90%	PULSE BIOSCIENCES (ELECTROBLATE)	MURATORI, CLAUDIA	4073	0	226	0	2,631	2,857	1,570	4,427	54.95%	CBE
500226-020	40%	PULSE BIOSCIENCES (ELECTROBLATE)	MURATORI, CLAUDIA	4073	0	928	0	1,879	2,807	1,544	4,351	55.01%	CBE
500226-021	50%	PULSE BIOSCIENCES (ELECTROBLATE)	MURATORI, CLAUDIA	5056	48,886	6,220	0	3,151	58,257	30,308	88,565	52.02%	CBE
300345-010	No	OLD DOMINION UNIVERSITY	PAKHOMOV, ANDREI	4073	167,040	33,022	0	275,584	475,646	110,034	585,680	23.13%	CBE
500226-022	70%	PULSE BIOSCIENCES (ELECTROBLATE)	PAKHOMOV, ANDREI	5056	101,215	11,510	0	0	112,725	61,999	174,724	55.00%	CBE
300345-012	No	OLD DOMINION UNIVERSITY	PAKHOMOVA, OLGA	4073	84,166	12,878	0	0	97,044	53,375	150,419	55.00%	CBE
500226-019	10%	PULSE BIOSCIENCES (ELECTROBLATE)	PAKHOMOVA, OLGA	4073	0	25	0	292	317	174	491	54.89%	CBE
500226-022	30%	PULSE BIOSCIENCES (ELECTROBLATE)	PAKHOMOVA, OLGA	4073	43,378	4,933	0	0	48,311	26,571	74,882	0.00%	CBE
500226-021	50%	PULSE BIOSCIENCES (ELECTROBLATE)	PURCELL, ERIN	6082	48,886	6,220	0	3,151	58,257	30,308	88,565	52.02%	CBE
400474-010	No	BREEDEN-ADAMS FOUNDATION	STACEY, MICHAEL	4073	6,201	8,488	0	0	14,689	0	14,689	0.00%	CBE
300345-013	No	OLD DOMINION UNIVERSITY	VERNIER, PAUL THOMAS	4073	70,174	9,815	0	1,458	81,447	43,994	125,441	54.02%	CBE
300660-010	30%	OLD DOMINION UNIVERSITY	VERNIER, PAUL THOMAS	4073	0	3,946	0	0	3,946	0	3,946	0.00%	CBE
500226-020	60%	PULSE BIOSCIENCES (ELECTROBLATE)	VERNIER, PAUL THOMAS	4073	0	1,391	0	2,818	4,209	2,316	6,525	55.02%	CBE
300345-011	No	OLD DOMINION UNIVERSITY	XIAO, SHU	4073	32,719	6,504	0	1,956	41,179	21,572	62,751	52.39%	CBE
<b>TOTAL FRANK REIDY RESEARCH CENTER FOR BIOELECTRICS (CBE)</b>					<b>990,532</b>	<b>185,711</b>	<b>42,402</b>	<b>296,711</b>	<b>1,515,356</b>	<b>638,032</b>	<b>2,153,388</b>	<b>42.10%</b>	

**SCHEDULE 5**  
**OLD DOMINION UNIVERSITY RESEARCH FOUNDATION**  
**ENTERPRISE CENTERS INCLUDING PROJECTS REPORTED AS ACTIVITY OF AN ACADEMIC DEPARTMENT**  
(MEASURED BY EXPENDITURES INCURRED)  
**FOR FISCAL YEAR 2022**

PROJECT NUMBER	SPLIT	SPONSORING AGENCY	PRINCIPAL INVESTIGATOR / PROJECT DIRECTOR	DEPT	PERSONNEL AND FRINGE BENEFITS	SUPPLIES, CONTRACTUAL, GENERAL, & TRAVEL	EQUIPMENT	STIPENDS, SUBCONTRACTS, TUITION, OTHER	TOTAL DIRECT COSTS	REIMBURSED INDIRECT COSTS	TOTAL PROJECT COSTS	EFFECTIVE INDIRECT COST RATE	ENTERPRISE CODE
<b>CENTER FOR BIOELECTRONICS (CBX)</b>													
100804-010	No	NATIONAL SCIENCE FOUNDATION	SLAUGHTER, GYMAMA	4074	23,102	2,148	0	0	25,250	13,382	38,632	53.00%	CBX
100807-010	No	NATIONAL SCIENCE FOUNDATION	SLAUGHTER, GYMAMA	4074	61,782	12,369	0	0	74,151	40,783	114,934	55.00%	CBX
100893-010	50%	U.S. PUBLIC HEALTH SERVICE (INCLUDING NIH)	SLAUGHTER, GYMAMA	4074	6,747	4,042	0	42,163	52,952	863	53,815	1.63%	CBX
100893-020	50%	U.S. PUBLIC HEALTH SERVICE (INCLUDING NIH)	SLAUGHTER, GYMAMA	4074	6,457	1,218	0	5,568	13,243	1,059	14,302	8.00%	CBX
<b>TOTAL CENTER FOR BIOELECTRONICS (CBX)</b>					<b>98,088</b>	<b>19,777</b>	<b>0</b>	<b>47,731</b>	<b>165,596</b>	<b>56,087</b>	<b>221,683</b>	<b>33.87%</b>	
<b>CENTER FOR CYBERSECURITY (CYBER)</b>													
300594-010	20%	OLD DOMINION UNIVERSITY	DICE, TAMMI	3040	524	1,569	0	2,644	4,737	1,151	5,888	24.30%	CYBER
300698-010	20%	OLD DOMINION UNIVERSITY	DICE, TAMMI	3047	2,158	187	0	413	2,758	1,290	4,048	46.77%	CYBER
300737-010	34%	OLD DOMINION UNIVERSITY	NING, RUI	9915	8,079	2,689	0	0	10,768	0	10,768	0.00%	CYBER
300738-010	34%	OLD DOMINION UNIVERSITY	NING, RUI	9915	0	117	0	0	117	0	117	0.00%	CYBER
300760-010	50%	OLD DOMINION UNIVERSITY	NING, RUI	9915	2,260	9,501	0	0	11,761	0	11,761	0.00%	CYBER
100709-010	20%	NATIONAL SCIENCE FOUNDATION	PAYNE, BRIAN	9910	5,056	1,197	0	31,334	37,587	3,439	41,026	9.15%	CYBER
100814-010	65%	NATIONAL SCIENCE FOUNDATION	PAYNE, BRIAN	9910	35,327	29,877	0	7,994	73,198	35,863	109,061	48.99%	CYBER
100856-010	20%	NATIONAL SCIENCE FOUNDATION	PAYNE, BRIAN	9910	1,971	0	0	0	1,971	1,084	3,055	55.00%	CYBER
100856-010	25%	NATIONAL SCIENCE FOUNDATION	PAYNE, BRIAN	9910	(26)	0	0	850	824	(14)	810	-1.70%	CYBER
100892-010	80%	NATIONAL SCIENCE FOUNDATION	PAYNE, BRIAN	9910	65,251	36,281	0	190,708	292,240	55,843	348,083	19.11%	CYBER
300687-010	50%	OLD DOMINION UNIVERSITY	PAYNE, BRIAN	9915	17,073	2,482	0	0	19,555	0	19,555	0.00%	CYBER
100723-010	33%	NATIONAL SCIENCE FOUNDATION	PURWANTO, WIRAWAN	9915	21,227	0	0	0	21,227	11,675	32,902	55.00%	CYBER
100856-010	25%	NATIONAL SCIENCE FOUNDATION	SANZO, KAREN	3046	(26)	0	0	850	824	(14)	810	-1.70%	CYBER
300703-010	30%	OLD DOMINION UNIVERSITY	STILL, JEREMIAH	6087	10,133	357	0	0	10,490	0	10,490	0.00%	CYBER
100801-010	No	NATIONAL SCIENCE FOUNDATION	WANG, CONG	6093	16,962	180	0	4,207	21,349	9,428	30,777	44.16%	CYBER
100873-010	33%	NATIONAL SCIENCE FOUNDATION	WANG, CONG	6093	19,828	0	0	2,130	21,958	10,905	32,863	49.66%	CYBER
100709-010	20%	NATIONAL SCIENCE FOUNDATION	WU, HONGYI	4054	5,056	1,197	0	31,334	37,587	3,439	41,026	9.15%	CYBER
100723-010	34%	NATIONAL SCIENCE FOUNDATION	WU, HONGYI	4054	21,871	0	0	0	21,871	12,029	33,900	55.00%	CYBER
100814-010	35%	NATIONAL SCIENCE FOUNDATION	WU, HONGYI	4054	19,022	16,088	0	4,305	39,415	19,311	58,726	48.99%	CYBER
100839-010	34%	OFFICE OF NAVAL RESEARCH	WU, HONGYI	9915	6,708	3,577	0	13,638	23,923	5,656	29,579	23.64%	CYBER
100856-010	20%	NATIONAL SCIENCE FOUNDATION	WU, HONGYI	4054	1,971	0	0	0	1,971	1,084	3,055	55.00%	CYBER
100856-010	25%	NATIONAL SCIENCE FOUNDATION	WU, HONGYI	4054	(26)	0	0	850	824	(14)	810	-1.70%	CYBER
100866-010	No	NATIONAL SCIENCE FOUNDATION	WU, HONGYI	4054	0	508	0	0	508	132	640	25.98%	CYBER
100880-010	25%	NATIONAL SECURITY AGENCY	WU, HONGYI	9915	1,959	433	0	1,949	4,341	1,315	5,656	30.29%	CYBER
100892-010	10%	NATIONAL SCIENCE FOUNDATION	WU, HONGYI	4054	8,156	4,535	0	23,839	36,530	6,980	43,510	19.11%	CYBER
100896-010	20%	NATIONAL SECURITY AGENCY	WU, HONGYI	4054	11,115	(66)	0	2,912	13,961	6,077	20,038	43.53%	CYBER
100906-010	20%	INSTITUTE OF MUSEUM AND LIBRARY SERVICES	WU, HONGYI	4054	4,604	161	0	0	4,765	1,525	6,290	32.00%	CYBER
100908-010	30%	NATIONAL SECURITY AGENCY	WU, HONGYI	9915	8,349	987	0	42,759	52,095	5,134	57,229	9.86%	CYBER
100915-010	34%	NATIONAL SECURITY AGENCY	WU, HONGYI	9915	4,340	0	0	0	4,340	2,387	6,727	55.00%	CYBER
300567-010	15%	OLD DOMINION UNIVERSITY	WU, HONGYI	4054	12,183	2,873	0	1,809	16,865	1,204	18,069	7.14%	CYBER
300594-010	20%	OLD DOMINION UNIVERSITY	WU, HONGYI	4054	524	1,569	0	2,644	4,737	1,151	5,888	24.30%	CYBER
300623-010	30%	HOWARD UNIVERSITY	WU, HONGYI	4054	43,665	588	0	3,092	47,345	24,339	71,684	51.41%	CYBER
300697-010	25%	OLD DOMINION UNIVERSITY	WU, HONGYI	9915	0	130	0	0	130	72	202	55.38%	CYBER
300698-010	20%	OLD DOMINION UNIVERSITY	WU, HONGYI	9915	2,158	187	0	413	2,758	1,290	4,048	46.77%	CYBER
300705-010	50%	OLD DOMINION UNIVERSITY	WU, HONGYI	9915	7,632	10,293	6,312	0	24,237	0	24,237	0.00%	CYBER
300715-010	50%	OLD DOMINION UNIVERSITY	WU, HONGYI	9915	9,043	3,903	0	0	12,946	0	12,946	0.00%	CYBER
300733-010	No	OLD DOMINION UNIVERSITY	WU, HONGYI	4054	4,202	0	0	0	4,202	0	4,202	0.00%	CYBER
300734-010	No	UNIVERSITY OF VIRGINIA	WU, HONGYI	9915	0	1,029	0	0	1,029	566	1,595	55.00%	CYBER
300738-010	33%	OLD DOMINION UNIVERSITY	WU, HONGYI	9915	0	114	0	0	114	0	114	0.00%	CYBER
300776-010	50%	VA POLYTECHNIC INSTITUTE AND STATE UNIVERSITY	WU, HONGYI	9915	0	247	0	0	247	136	383	55.06%	CYBER
400491-001	5%	REINVENT HAMPTON ROADS	WU, HONGYI	9915	737	1	0	13,371	14,109	0	14,109	0.00%	CYBER

**SCHEDULE 5**  
**OLD DOMINION UNIVERSITY RESEARCH FOUNDATION**  
**ENTERPRISE CENTERS INCLUDING PROJECTS REPORTED AS ACTIVITY OF AN ACADEMIC DEPARTMENT**  
(MEASURED BY EXPENDITURES INCURRED)  
**FOR FISCAL YEAR 2022**

PROJECT NUMBER	SPLIT	SPONSORING AGENCY	PRINCIPAL INVESTIGATOR / PROJECT DIRECTOR	DEPT	PERSONNEL AND FRINGE BENEFITS	SUPPLIES, CONTRACTUAL, GENERAL, & TRAVEL	EQUIPMENT	STIPENDS, SUBCONTRACTS, TUITION, OTHER	TOTAL DIRECT COSTS	REIMBURSED INDIRECT COSTS	TOTAL PROJECT COSTS	EFFECTIVE INDIRECT COST RATE	ENTERPRISE CODE	
400491-001	No	REINVENT HAMPTON ROADS	WU, HONGYI	9915	0	25,000	0	193,244	218,244	0	218,244	0.00%	CYBER	
400491-002	5%	REINVENT HAMPTON ROADS	WU, HONGYI	9915	737	1	0	9,692	10,430	0	10,430	0.00%	CYBER	
400491-002	No	REINVENT HAMPTON ROADS	WU, HONGYI	9915	0	0	0	105,152	105,152	0	105,152	0.00%	CYBER	
600230-010	No	NATO	WU, HONGYI	9915	11,224	0	0	3,646	14,870	8,178	23,048	55.00%	CYBER	
100709-010	40%	NATIONAL SCIENCE FOUNDATION	XIN, CHUNSHENG	4054	10,112	2,394	0	62,668	75,174	6,878	82,052	9.15%	CYBER	
100838-010	50%	NATIONAL SCIENCE FOUNDATION	XIN, CHUNSHENG	4054	1,377	4,001	0	28,055	33,433	2,958	36,391	8.85%	CYBER	
100839-010	33%	OFFICE OF NAVAL RESEARCH	XIN, CHUNSHENG	4054	6,510	3,472	0	13,237	23,219	5,490	28,709	23.64%	CYBER	
100856-010	20%	NATIONAL SCIENCE FOUNDATION	XIN, CHUNSHENG	4054	1,971	0	0	0	1,971	1,084	3,055	55.00%	CYBER	
100856-010	25%	NATIONAL SCIENCE FOUNDATION	XIN, CHUNSHENG	4054	(26)	0	0	850	824	(14)	810	-1.70%	CYBER	
100880-010	25%	NATIONAL SECURITY AGENCY	XIN, CHUNSHENG	4054	1,959	433	0	1,949	4,341	1,315	5,656	30.29%	CYBER	
100892-010	10%	NATIONAL SCIENCE FOUNDATION	XIN, CHUNSHENG	4054	8,156	4,535	0	23,839	36,530	6,980	43,510	19.11%	CYBER	
100896-010	30%	NATIONAL SECURITY AGENCY	XIN, CHUNSHENG	4054	16,672	(98)	0	4,368	20,942	9,116	30,058	43.53%	CYBER	
100908-010	30%	NATIONAL SECURITY AGENCY	XIN, CHUNSHENG	4054	8,349	987	0	42,759	52,095	5,134	57,229	9.86%	CYBER	
100915-010	33%	NATIONAL SECURITY AGENCY	XIN, CHUNSHENG	9915	4,213	0	0	0	4,213	2,317	6,530	0.00%	CYBER	
300594-010	30%	OLD DOMINION UNIVERSITY	XIN, CHUNSHENG	4054	786	2,354	0	3,966	7,106	1,727	8,833	24.30%	CYBER	
300697-010	25%	OLD DOMINION UNIVERSITY	XIN, CHUNSHENG	4054	0	130	0	0	0	72	202	55.38%	CYBER	
300698-010	30%	OLD DOMINION UNIVERSITY	XIN, CHUNSHENG	4054	3,237	281	0	619	4,137	1,935	6,072	46.77%	CYBER	
300705-010	50%	OLD DOMINION UNIVERSITY	XIN, CHUNSHENG	4054	7,632	10,293	6,312	0	24,237	0	24,237	0.00%	CYBER	
300715-010	50%	OLD DOMINION UNIVERSITY	XIN, CHUNSHENG	4054	9,043	3,903	0	0	12,946	0	12,946	0.00%	CYBER	
300718-010	50%	COLLEGE OF WILLIAM AND MARY	XIN, CHUNSHENG	4054	0	3,137	0	0	0	3,137	0	3,137	0.00%	CYBER
300737-010	33%	OLD DOMINION UNIVERSITY	XIN, CHUNSHENG	4054	7,842	2,610	0	0	10,452	0	10,452	0.00%	CYBER	
300738-010	33%	OLD DOMINION UNIVERSITY	XIN, CHUNSHENG	4054	0	114	0	0	114	0	114	0.00%	CYBER	
300776-010	50%	VA POLYTECHNIC INSTITUTE AND STATE UNIVERSITY	XIN, CHUNSHENG	4054	0	247	0	0	247	136	383	55.06%	CYBER	
400475-010	20%	VA TECH ARC	XIN, CHUNSHENG	4054	55,204	2,444	1,041	5,295	63,984	33,223	97,207	51.92%	CYBER	
400491-001	95%	REINVENT HAMPTON ROADS	XIN, CHUNSHENG	9915	13,994	11	0	254,046	268,051	0	268,051	0.00%	CYBER	
400491-002	95%	REINVENT HAMPTON ROADS	XIN, CHUNSHENG	9915	13,994	11	0	184,140	198,145	0	198,145	0.00%	CYBER	
100856-010	20%	NATIONAL SCIENCE FOUNDATION	ZHAO, DANELLA	6093	1,971	0	0	0	1,971	1,084	3,055	55.00%	CYBER	
100866-010	No	NATIONAL SCIENCE FOUNDATION	ZHAO, DANELLA	6093	17,618	0	0	0	17,618	4,581	22,199	26.00%	CYBER	
100880-010	25%	NATIONAL SECURITY AGENCY	ZHAO, DANELLA	6093	1,959	433	0	1,949	4,341	1,315	5,656	30.29%	CYBER	
100896-010	30%	NATIONAL SECURITY AGENCY	ZHAO, DANELLA	6093	16,672	(98)	0	4,368	20,942	9,116	30,058	43.53%	CYBER	
100908-010	20%	NATIONAL SECURITY AGENCY	ZHAO, DANELLA	6093	5,566	658	0	28,506	34,730	3,423	38,153	9.86%	CYBER	
300594-010	30%	OLD DOMINION UNIVERSITY	ZHAO, DANELLA	6093	786	2,354	0	3,966	7,106	1,727	8,833	24.30%	CYBER	
300697-010	25%	OLD DOMINION UNIVERSITY	ZHAO, DANELLA	6093	0	130	0	0	130	72	202	55.38%	CYBER	
300698-010	30%	OLD DOMINION UNIVERSITY	ZHAO, DANELLA	6093	3,237	281	0	619	4,137	1,935	6,072	46.77%	CYBER	
300718-010	50%	COLLEGE OF WILLIAM AND MARY	ZHAO, DANELLA	6093	0	3,137	0	0	3,137	0	3,137	0.00%	CYBER	
<b>TOTAL CENTER FOR CYBERSECURITY (CYBER)</b>				<b>609,861</b>	<b>205,946</b>	<b>13,665</b>	<b>1,360,978</b>	<b>2,190,450</b>	<b>334,245</b>	<b>2,524,695</b>	<b>15.26%</b>			

**SOCIAL SCIENCE RESEARCH CENTER (SSRC)**

200296-030	No	VA DEPARTMENT OF BEHAVIORAL HEALTH/DEVELOPMENTAL SERVICES	VANDECAR-BURDIN, TANCY	1060	30,088	7,300	0	0	37,388	1,869	39,257	5.00%	SSRC
200296-040	No	VA DEPARTMENT OF BEHAVIORAL HEALTH/DEVELOPMENTAL SERVICES	VANDECAR-BURDIN, TANCY	1060	2,497	1,696	0	0	4,193	210	4,403	5.01%	SSRC
200322-010	No	VIRGINIA DEPARTMENT OF SOCIAL SERVICES	VANDECAR-BURDIN, TANCY	1060	31,975	1,749	0	0	33,724	3,372	37,096	10.00%	SSRC
200342-010	No	VA DEPARTMENT OF BEHAVIORAL HEALTH/DEVELOPMENTAL SERVICES	VANDECAR-BURDIN, TANCY	1060	8,203	3,979	0	0	12,182	609	12,791	5.00%	SSRC
200342-020	No	VA DEPARTMENT OF BEHAVIORAL HEALTH/DEVELOPMENTAL SERVICES	VANDECAR-BURDIN, TANCY	1060	11,874	19,735	0	0	31,609	1,580	33,189	5.00%	SSRC
200353-010	No	CITY OF VIRGINIA BEACH	VANDECAR-BURDIN, TANCY	1060	1,215	0	0	453	1,668	0	1,668	0.00%	SSRC
200363-010	25%	STATE COUNCIL FOR HIGHER EDUCATION IN VA (SCHEV)	VANDECAR-BURDIN, TANCY	1060	4,062	875	0	0	4,937	0	4,937	0.00%	SSRC
200367-010	No	JOINT COMMISSION ON HEALTH CARE	VANDECAR-BURDIN, TANCY	1060	1,562	0	0	0	1,562	406	1,968	25.99%	SSRC
300574-010	5%	OLD DOMINION UNIVERSITY	VANDECAR-BURDIN, TANCY	1060	10,701	1,375	0	2,363	14,439	966	15,405	6.69%	SSRC
300577-010	33%	OLD DOMINION UNIVERSITY	VANDECAR-BURDIN, TANCY	1060	2,372	50	0	0	2,422	630	3,052	26.01%	SSRC
300670-010	40%	OLD DOMINION UNIVERSITY	VANDECAR-BURDIN, TANCY	1060	7,898	2,074	0	0	9,972	0	9,972	0.00%	SSRC
300687-010	50%	OLD DOMINION UNIVERSITY	VANDECAR-BURDIN, TANCY	1060	17,073	2,482	0	0	19,555	0	19,555	0.00%	SSRC

**SCHEDULE 5**  
**OLD DOMINION UNIVERSITY RESEARCH FOUNDATION**  
**ENTERPRISE CENTERS INCLUDING PROJECTS REPORTED AS ACTIVITY OF AN ACADEMIC DEPARTMENT**  
(MEASURED BY EXPENDITURES INCURRED)  
**FOR FISCAL YEAR 2022**

PROJECT NUMBER	SPLIT	SPONSORING AGENCY	PRINCIPAL INVESTIGATOR / PROJECT DIRECTOR	DEPT	PERSONNEL AND FRINGE BENEFITS	SUPPLIES, CONTRACTUAL, GENERAL, & TRAVEL	EQUIPMENT	STIPENDS, SUBCONTRACTS, TUITION, OTHER	TOTAL DIRECT COSTS	REIMBURSED INDIRECT COSTS	TOTAL PROJECT COSTS	EFFECTIVE INDIRECT COST RATE	ENTERPRISE CODE
300719-010	50%	OLD DOMINION UNIVERSITY	VANDECAR-BURDIN, TANCY	1060	11,982	23,490	0	227	35,699	0	35,699	0.00%	SSRC
300753-010	No	UNIVERSITY OF RHODE ISLAND	VANDECAR-BURDIN, TANCY	1060	3,447	0	0	0	3,447	1,896	5,343	55.00%	SSRC
300772-010	5%	OLD DOMINION UNIVERSITY	VANDECAR-BURDIN, TANCY	1060	44	1,465	0	0	1,509	121	1,630	8.02%	SSRC
300777-010	34%	OLD DOMINION UNIVERSITY	VANDECAR-BURDIN, TANCY	1060	1,516	494	0	0	2,010	0	2,010	0.00%	SSRC
400496-010	50%	MOTHERS AGAINST DRUNK DRIVERS	VANDECAR-BURDIN, TANCY	1060	4,687	1,413	0	351	6,451	3,549	10,000	55.01%	SSRC
400514-010	5%	THE NATIONAL ACADEMIES	VANDECAR-BURDIN, TANCY	1060	425	151	0	0	576	317	893	55.03%	SSRC
<b>TOTAL SOCIAL SCIENCE RESEARCH CENTER (SSRC)</b>					<b>151,621</b>	<b>68,328</b>	<b>0</b>	<b>3,394</b>	<b>223,343</b>	<b>15,525</b>	<b>238,868</b>	<b>6.95%</b>	
<b>THE CENTER FOR EDUCATIONAL PARTNERSHIPS (TCEP)</b>													
100835-010	20%	U.S. DEPARTMENT OF EDUCATION	BROBST, JOSEPH	3048	56,887	19,585	0	40,573	117,045	42,060	159,105	35.93%	TCEP
300503-010	No	WESTERN WASHINGTON UNIVERSITY	BROBST, JOSEPH	3048	7,980	0	0	0	7,980	4,389	12,369	55.00%	TCEP
300527-010	No	WESTERN WASHINGTON UNIVERSITY	BROBST, JOSEPH	3048	11,914	2,907	0	0	14,821	8,151	22,972	55.00%	TCEP
300635-010	No	DELAWARE TECHNICAL AND COMMUNITY COLLEGE	BROBST, JOSEPH	3048	11,475	0	0	0	11,475	6,311	17,786	55.00%	TCEP
100721-010	33%	OFFICE OF NAVAL RESEARCH	CHAPPELL MOOTS, SHANAN	3048	389	0	0	0	389	140	529	35.99%	TCEP
100835-010	20%	U.S. DEPARTMENT OF EDUCATION	CHAPPELL MOOTS, SHANAN	3048	56,887	19,585	0	40,573	117,045	42,060	159,105	35.93%	TCEP
100835-010	10%	U.S. DEPARTMENT OF EDUCATION	FERRELL, VENICIA	3048	28,443	9,793	0	20,287	58,523	21,030	79,553	35.93%	TCEP
100721-010	34%	OFFICE OF NAVAL RESEARCH	GARNER, JOANNA	3048	401	0	0	0	401	144	545	35.91%	TCEP
100835-010	25%	U.S. DEPARTMENT OF EDUCATION	GARNER, JOANNA	3048	71,109	24,482	0	50,717	146,308	52,575	198,883	35.93%	TCEP
100885-010	No	SMITHSONIAN INSTITUTION	GARNER, JOANNA	3048	21,402	2,627	0	0	24,029	6,247	30,276	26.00%	TCEP
300557-010	No	OKLAHOMA STATE UNIVERSITY	GARNER, JOANNA	3048	5,019	0	0	0	5,019	1,305	6,324	26.00%	TCEP
300587-020	30%	OLD DOMINION UNIVERSITY	GARNER, JOANNA	3048	244	58	0	8,811	9,113	0	9,113	0.00%	TCEP
400444-010	No	NATIONAL INVENTORS HALL OF FAME	GARNER, JOANNA	3048	0	0	0	1,911	1,911	287	2,198	15.02%	TCEP
400470-010	No	NATIONAL INVENTORS HALL OF FAME	GARNER, JOANNA	3048	0	0	0	1,137	1,137	626	1,763	55.06%	TCEP
300587-030	30%	OLD DOMINION UNIVERSITY	GARNER, JOANNA	3048	13,052	0	0	0	13,052	0	13,052	0.00%	TCEP
400507-010	No	NATIONAL INVENTORS HALL OF FAME	GARNER, JOANNA	3048	2,874	0	0	0	2,874	1,580	4,454	54.98%	TCEP
400508-010	No	NATIONAL INVENTORS HALL OF FAME	GARNER, JOANNA	3048	3,377	1,950	0	0	5,327	2,930	8,257	55.00%	TCEP
300679-010	No	OLD DOMINION UNIVERSITY	JOE, MIA	3048	14,010	0	0	0	14,010	0	14,010	0.00%	TCEP
300681-010	No	OLD DOMINION UNIVERSITY	JOE, MIA	3048	45,054	48,115	0	0	93,169	0	93,169	0.00%	TCEP
100721-010	33%	OFFICE OF NAVAL RESEARCH	LONEY, MELANI	3048	389	0	0	0	389	140	529	35.99%	TCEP
100835-010	5%	U.S. DEPARTMENT OF EDUCATION	LONEY, MELANI	3048	14,222	4,896	0	10,143	29,261	10,515	39,776	35.94%	TCEP
200290-010	70%	YORK COUNTY SCHOOLS	LONEY, MELANI	3048	15,976	50	0	0	16,026	801	16,827	5.00%	TCEP
300587-020	40%	OLD DOMINION UNIVERSITY	LONEY, MELANI	3048	326	77	0	11,749	12,152	0	12,152	0.00%	TCEP
300587-030	40%	OLD DOMINION UNIVERSITY	LONEY, MELANI	3048	17,402	0	0	0	17,402	0	17,402	0.00%	TCEP
100835-010	20%	U.S. DEPARTMENT OF EDUCATION	WEBSTER, HALLDORA	3048	56,887	19,585	0	40,573	117,045	42,060	159,105	35.93%	TCEP
200290-010	30%	YORK COUNTY SCHOOLS	WEBSTER, HALLDORA	3048	6,847	21	0	0	6,868	343	7,211	4.99%	TCEP
300587-020	30%	OLD DOMINION UNIVERSITY	WEBSTER, HALLDORA	3048	244	58	0	8,811	9,113	0	9,113	0.00%	TCEP
300587-030	30%	OLD DOMINION UNIVERSITY	WEBSTER, HALLDORA	3048	13,052	0	0	0	13,052	1	13,053	0.01%	TCEP
<b>TOTAL THE CENTER FOR EDUCATIONAL PARTNERSHIPS (TCEP)</b>					<b>475,862</b>	<b>153,789</b>	<b>0</b>	<b>235,285</b>	<b>864,936</b>	<b>243,695</b>	<b>1,108,631</b>	<b>28.17%</b>	

**VIRGINIA MODELING AND SIMULATION CENTER (VMASC)**

300675-010	10%	OLD DOMINION UNIVERSITY	AGGARWAL, PRIYANKA	4071	16,828	110	0	0	16,938	0	16,938	0.00%	VMASC
100790-011	5%	NAVAL SEA SYSTEMS COMMAND	AMASON, DARRYL	4071	6,992	0	0	0	6,992	4,545	11,537	65.00%	VMASC
300592-010	20%	OLD DOMINION UNIVERSITY	AMASON, DARRYL	4071	86,164	24,484	0	0	110,648	0	110,648	0.00%	VMASC
300639-010	30%	OLD DOMINION UNIVERSITY	AMASON, DARRYL	4071	6,803	2,464	0	0	9,267	0	9,267	0.00%	VMASC
300720-010	20%	STEVENS INSTITUTE OF TECHNOLOGY	AMASON, DARRYL	4071	33,061	1,084	0	0	34,145	22,194	56,339	65.00%	VMASC
300747-010	7%	OLD DOMINION UNIVERSITY	AMASON, DARRYL	4071	1,017	364	0	350	1,731	110	1,841	6.35%	VMASC
500379-020	10%	D'ANGELO TECHNOLOGIES LLC	AMASON, DARRYL	4071	8,946	0	0	0	8,946	5,815	14,761	65.00%	VMASC
500390-010	60%	ALEX – ALTERNATIVE EXPERTS, LLC	AMASON, DARRYL	4071	829	0	0	0	829	539	1,368	65.02%	VMASC
500435-010	20%	VALKYRIE ENTERPRISES, INC.	AMASON, DARRYL	4071	602	0	0	0	602	391	993	64.95%	VMASC
500435-020	20%	VALKYRIE ENTERPRISES, INC.	AMASON, DARRYL	4071	36,723	0	0	0	36,723	23,870	60,593	65.00%	VMASC

**SCHEDULE 5**  
**OLD DOMINION UNIVERSITY RESEARCH FOUNDATION**  
**ENTERPRISE CENTERS INCLUDING PROJECTS REPORTED AS ACTIVITY OF AN ACADEMIC DEPARTMENT**  
(MEASURED BY EXPENDITURES INCURRED)  
**FOR FISCAL YEAR 2022**

PROJECT NUMBER	SPLIT	SPONSORING AGENCY	PRINCIPAL INVESTIGATOR / PROJECT DIRECTOR	DEPT	PERSONNEL AND FRINGE BENEFITS	SUPPLIES, CONTRACTUAL, GENERAL, & TRAVEL	EQUIPMENT	STIPENDS, SUBCONTRACTS, TUITION, OTHER	TOTAL DIRECT COSTS	REIMBURSED INDIRECT COSTS	TOTAL PROJECT COSTS	EFFECTIVE INDIRECT COST RATE	ENTERPRISE CODE
300744-010	10%	OLD DOMINION UNIVERSITY	BALL, PATRICK	4071	7,559	2,389	0	0	9,948	0	9,948	0.00%	VMASC
200343-010	20%	VIRGINIA DEPARTMENT OF EMERGENCY MANAGEMENT	BARRACO, ANTHONY	4071	7,616	0	0	0	7,616	4,189	11,805	55.00%	VMASC
300543-010	20%	OLD DOMINION UNIVERSITY	BARRACO, ANTHONY	4071	26,048	11,231	0	3,285	40,564	20,504	61,068	50.55%	VMASC
500460-010	80%	TIM HOILES	BARRACO, ANTHONY	4071	2,021	0	0	0	2,021	1,112	3,133	55.02%	VMASC
100824-010	50%	NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION	BEHR, JOSHUA	4071	17,703	10,727	0	2,725	31,155	15,636	46,791	50.19%	VMASC
100825-010	33%	NATIONAL SCIENCE FOUNDATION	BEHR, JOSHUA	4071	6,516	1,224	0	0	7,740	2,012	9,752	25.99%	VMASC
100883-010	25%	U.S. DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT	BEHR, JOSHUA	4071	23,344	9,329	0	0	32,673	17,970	50,643	55.00%	VMASC
100890-010	34%	NATIONAL SCIENCE FOUNDATION	BEHR, JOSHUA	4071	6,138	0	0	0	6,138	1,596	7,734	26.00%	VMASC
100919-010	33%	NATIONAL SCIENCE FOUNDATION	BEHR, JOSHUA	4071	53,885	78,831	0	0	132,716	34,506	167,222	26.00%	VMASC
300543-010	15%	OLD DOMINION UNIVERSITY	BEHR, JOSHUA	4071	19,536	8,424	0	2,464	30,424	15,378	45,802	50.55%	VMASC
300691-010	33%	OLD DOMINION UNIVERSITY	BEHR, JOSHUA	4071	19,127	8,250	0	8,016	35,393	0	35,393	0.00%	VMASC
500394-010	50%	ARCADIS ENIGINEERING	BEHR, JOSHUA	4071	(4,901)	0	0	0	(4,901)	(2,696)	(7,597)	55.01%	VMASC
300545-010	20%	OLD DOMINION UNIVERSITY	BOWLES, DAVID	4071	17,090	24,285	0	18,478	59,853	0	59,853	0.00%	VMASC
300650-010	No	OLD DOMINION UNIVERSITY	BOWLES, DAVID	4071	577	2,499	0	2	3,078	0	3,078	0.00%	VMASC
300661-010	No	OLD DOMINION UNIVERSITY	BOWLES, DAVID	4071	609	3,296	0	0	3,905	0	3,905	0.00%	VMASC
300665-010	No	OLD DOMINION UNIVERSITY	BOWLES, DAVID	4071	11,840	651	0	0	12,491	0	12,491	0.00%	VMASC
400516-001	No	REINVENT HAMPTON ROADS	BOWLES, DAVID	4071	1,621	362	0	0	1,983	0	1,983	0.00%	VMASC
400516-002	No	REINVENT HAMPTON ROADS	BOWLES, DAVID	4071	743	0	0	0	743	0	743	0.00%	VMASC
100790-010	18%	NAVAL SEA SYSTEMS COMMAND	COLLINS, ANDREW	4071	23,655	0	0	0	23,655	15,376	39,031	65.00%	VMASC
100790-011	10%	NAVAL SEA SYSTEMS COMMAND	COLLINS, ANDREW	4071	13,983	0	0	0	13,983	9,089	23,072	65.00%	VMASC
300744-010	10%	OLD DOMINION UNIVERSITY	CORDNER, JESSICA	4071	7,559	2,389	0	0	9,948	0	9,948	0.00%	VMASC
100900-010	25%	NAVAL SURFACE WARFARE CENTER	CROLL, MENION	4071	22,739	164	0	14,976	37,879	24,621	62,500	65.00%	VMASC
100931-010	50%	NAVAL SURFACE WARFARE CENTER	CROLL, MENION	4071	31,404	191	0	0	31,595	20,537	52,132	0.00%	VMASC
500396-002	25%	MANTECH	CROLL, MENION	4071	18,483	0	0	0	18,483	12,014	30,497	65.00%	VMASC
300758-010	20%	OLD DOMINION UNIVERSITY	CZACK, RUSSELL	4071	5,615	68	0	0	5,683	0	5,683	0.00%	VMASC
300592-010	20%	OLD DOMINION UNIVERSITY	DIALLO, SAIKOU	4071	86,164	24,484	0	0	110,648	0	110,648	0.00%	VMASC
400439-010	50%	JOHN TEMPLETON FOUNDATION	DIALLO, SAIKOU	4071	14,730	28,471	0	574,030	617,231	6,480	623,711	1.05%	VMASC
500375-004	50%	CAMBER CORPORATION	DIALLO, SAIKOU	4071	(2,063)	0	0	0	(2,063)	(1,341)	(3,404)	65.00%	VMASC
100883-010	25%	U.S. DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT	DIAZ, RAFAEL	4071	23,344	9,329	0	0	32,673	17,970	50,643	55.00%	VMASC
100890-010	33%	NATIONAL SCIENCE FOUNDATION	DIAZ, RAFAEL	4071	5,958	0	0	0	5,958	1,549	7,507	26.00%	VMASC
100919-010	33%	NATIONAL SCIENCE FOUNDATION	DIAZ, RAFAEL	4071	53,885	78,831	0	0	132,716	34,506	167,222	26.00%	VMASC
300658-010	34%	OLD DOMINION UNIVERSITY	DIAZ, RAFAEL	4071	17,057	0	0	0	17,057	0	17,057	0.00%	VMASC
300671-010	25%	OLD DOMINION UNIVERSITY	DIAZ, RAFAEL	4071	5,929	150	0	0	6,079	0	6,079	0.00%	VMASC
300691-010	34%	OLD DOMINION UNIVERSITY	DIAZ, RAFAEL	4071	19,706	8,500	0	8,259	36,465	0	36,465	0.00%	VMASC
300747-010	7%	OLD DOMINION UNIVERSITY	DIAZ, RAFAEL	4071	1,017	364	0	350	1,731	110	1,841	6.35%	VMASC
100830-010	No	NORFOLK NAVAL SHIPYARD	EZELL, BARRY	4071	0	32,010	0	0	32,010	10,243	42,253	32.00%	VMASC
100834-010	No	NAVSUP FLEET LOGISTICS CENTER NORFOLK	EZELL, BARRY	4071	6,005	0	0	573,336	579,341	2,162	581,503	0.37%	VMASC
100841-010	No	JOINT NON-LETHAL WEAPONS DIRECTORATE	EZELL, BARRY	4071	157,524	0	0	0	157,524	15,752	173,276	10.00%	VMASC
100841-020	No	JOINT NON-LETHAL WEAPONS DIRECTORATE	EZELL, BARRY	4071	24,630	0	0	0	24,630	2,463	27,093	10.00%	VMASC
100884-010	No	NAVSUP FLEET LOGISTICS CENTER NORFOLK	EZELL, BARRY	4071	3,443	3,233	0	0	6,676	2,403	9,079	35.99%	VMASC
200324-020	No	HAMPTON ROADS PLANNING DISTRICT COMMISSION	EZELL, BARRY	4071	12,182	0	0	46,400	58,582	3,167	61,749	5.41%	VMASC
200324-030	No	HAMPTON ROADS PLANNING DISTRICT COMMISSION	EZELL, BARRY	4071	1,065	7,399	0	0	8,464	2,201	10,665	26.00%	VMASC
200343-010	20%	VIRGINIA DEPARTMENT OF EMERGENCY MANAGEMENT	EZELL, BARRY	4071	7,616	0	0	0	7,616	4,189	11,805	55.00%	VMASC
200343-011	No	VIRGINIA DEPARTMENT OF EMERGENCY MANAGEMENT	EZELL, BARRY	4071	119,984	630	0	0	120,614	66,337	186,951	55.00%	VMASC
200348-010	34%	VIRGINIA DEPARTMENT OF EMERGENCY MANAGEMENT	EZELL, BARRY	4071	15,060	484	0	0	15,544	4,041	19,585	26.00%	VMASC
200362-010	15%	VIRGINIA DEPARTMENT OF EMERGENCY MANAGEMENT	EZELL, BARRY	4071	587	0	0	7,206	7,793	153	7,946	1.96%	VMASC
200365-010	50%	VIRGINIA DEPARTMENT OF EMERGENCY MANAGEMENT	EZELL, BARRY	4071	48,213	2,984	0	0	51,197	13,311	64,508	26.00%	VMASC
300654-010	No	OLD DOMINION UNIVERSITY	EZELL, BARRY	4071	1,502	46	0	0	1,548	0	1,548	0.00%	VMASC
300720-010	20%	STEVENS INSTITUTE OF TECHNOLOGY	EZELL, BARRY	4071	33,061	1,084	0	0	34,145	22,194	56,339	65.00%	VMASC
500390-010	40%	ALEX – ALTERNATIVE EXPERTS, LLC	EZELL, BARRY	4071	553	0	0	0	553	359	912	64.92%	VMASC

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**FOR FISCAL YEAR 2022**

PROJECT NUMBER	SPLIT	SPONSORING AGENCY	PRINCIPAL INVESTIGATOR / PROJECT DIRECTOR	DEPT	PERSONNEL AND FRINGE BENEFITS	SUPPLIES, CONTRACTUAL, GENERAL, & TRAVEL	EQUIPMENT	STIPENDS, SUBCONTRACTS, TUITION, OTHER	TOTAL DIRECT COSTS	REIMBURSED INDIRECT COSTS	TOTAL PROJECT COSTS	EFFECTIVE INDIRECT COST RATE	ENTERPRISE CODE
500433-010	No	LOCKWOOD HILLS	EZELL, BARRY	4071	0	0		13,518	13,518	8,787	22,305	65.00%	VMASC
500434-002	50%	CIRCADENCE	EZELL, BARRY	4071	0	36,408	0	0	36,408	23,665	60,073	65.00%	VMASC
500434-003	No	CIRCADENCE	EZELL, BARRY	4071	73,771	672	0	0	74,443	48,388	122,831	65.00%	VMASC
500462-001	No	CIRCADENCE	EZELL, BARRY	4071	38,969	0	0	0	38,969	25,330	64,299	65.00%	VMASC
500462-002	No	CIRCADENCE	EZELL, BARRY	4071	0	1,747	0	0	1,747	1,136	2,883	65.03%	VMASC
500462-003	No	CIRCADENCE	EZELL, BARRY	4071	71,481	5,350	0	0	76,831	49,940	126,771	65.00%	VMASC
500462-004	No	CIRCADENCE	EZELL, BARRY	4071	0	911	0	0	911	592	1,503	64.98%	VMASC
300744-010	40%	OLD DOMINION UNIVERSITY	FLANAGAN, DAVID	4071	30,234	9,555	0	0	39,789	0	39,789	0.00%	VMASC
300717-001	10%	OLD DOMINION UNIVERSITY	FOYTIK, PETER	4071	6,817	2,807	0	0	9,624	0	9,624	0.00%	VMASC
300758-010	20%	OLD DOMINION UNIVERSITY	FOYTIK, PETER	4071	5,615	68	0	0	5,683	0	5,683	0.00%	VMASC
500434-001	50%	CIRCADENCE	FOYTIK, PETER	4071	32,402	1,333	0	0	33,735	21,928	55,663	65.00%	VMASC
500447-010	40%	FRONTIER TECHNOLOGY INC.	FOYTIK, PETER	4071	16,603	0	0	0	16,603	10,792	27,395	65.00%	VMASC
500467-010	40%	FRONTIER TECHNOLOGY INC.	FOYTIK, PETER	4071	48,814	0	0	0	48,814	31,729	80,543	65.00%	VMASC
200362-010	17%	VIRGINIA DEPARTMENT OF EMERGENCY MANAGEMENT	FRYDENLUND, ERIKA	4071	665	0	0	8,166	8,831	173	9,004	1.96%	VMASC
200365-010	50%	VIRGINIA DEPARTMENT OF EMERGENCY MANAGEMENT	FRYDENLUND, ERIKA	4071	48,213	2,984	0	0	51,197	13,311	64,508	26.00%	VMASC
300543-010	25%	OLD DOMINION UNIVERSITY	FRYDENLUND, ERIKA	4071	32,561	14,039	0	4,106	50,706	25,630	76,336	50.55%	VMASC
300717-002	No	OLD DOMINION UNIVERSITY	FRYDENLUND, ERIKA	4071	54,638	7,764	0	0	62,402	0	62,402	0.00%	VMASC
300747-010	7%	OLD DOMINION UNIVERSITY	FRYDENLUND, ERIKA	4071	1,017	364	0	350	1,731	110	1,841	6.35%	VMASC
300639-010	30%	OLD DOMINION UNIVERSITY	GARCIA, HECTOR	4071	6,803	2,464	0	0	9,267	0	9,267	0.00%	VMASC
300658-010	33%	OLD DOMINION UNIVERSITY	GARCIA, HECTOR	4071	16,555	0	0	0	16,555	0	16,555	0.00%	VMASC
400497-010	25%	VIRGINIA SHIP REPAIR ASSOCIATION	GARCIA, HECTOR	4071	4,615	0	0	0	4,615	1,403	6,018	30.40%	VMASC
100883-010	25%	U.S. DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT	GILES, BRIDGET	4071	23,344	9,329	0	0	32,673	17,970	50,643	55.00%	VMASC
100919-010	20%	NATIONAL SCIENCE FOUNDATION	GILES, BRIDGET	4071	32,658	47,776	0	0	80,434	20,913	101,347	26.00%	VMASC
100790-010	10%	NAVAL SEA SYSTEMS COMMAND	GORE, ROSS	4071	13,142	0	0	0	13,142	8,542	21,684	65.00%	VMASC
100790-011	5%	NAVAL SEA SYSTEMS COMMAND	GORE, ROSS	4071	6,992	0	0	0	6,992	4,545	11,537	65.00%	VMASC
200348-010	33%	VIRGINIA DEPARTMENT OF EMERGENCY MANAGEMENT	GORE, ROSS	4071	14,617	469	0	0	15,086	3,923	19,009	26.00%	VMASC
300640-010	20%	OLD DOMINION UNIVERSITY	GORE, ROSS	4071	34,130	76	0	0	34,206	0	34,206	0.00%	VMASC
300652-010	25%	OLD DOMINION UNIVERSITY	GORE, ROSS	4071	1,706	38	0	0	1,744	0	1,744	0.00%	VMASC
300675-010	25%	OLD DOMINION UNIVERSITY	GORE, ROSS	4071	42,070	276	0	0	42,346	0	42,346	0.00%	VMASC
500375-004	50%	CAMBER CORPORATION	GORE, ROSS	4071	(2,063)	0	0	0	(2,063)	(1,341)	(3,404)	65.00%	VMASC
500375-009	20%	CAMBER CORPORATION	GORE, ROSS	4071	0	0	0	312	312	203	515	65.06%	VMASC
500375-010	20%	CAMBER CORPORATION	GORE, ROSS	4071	0	0	0	1	1	1	2	100.00%	VMASC
500375-011	20%	CAMBER CORPORATION	GORE, ROSS	4071	0	0	0	3,193	3,193	2,076	5,269	65.02%	VMASC
500400-013	10%	UNITED NETWORK FOR ORGAN SHARING (UNOS)	GORE, ROSS	4071	1,478	45	0	0	1,523	207	1,730	13.59%	VMASC
500447-010	10%	FRONTIER TECHNOLOGY INC.	GORE, ROSS	4071	4,151	0	0	0	4,151	2,698	6,849	65.00%	VMASC
500467-010	20%	FRONTIER TECHNOLOGY INC.	GORE, ROSS	4071	24,407	0	0	0	24,407	15,865	40,272	65.00%	VMASC
300579-010	No	OLD DOMINION UNIVERSITY	JOE, MIA	4071	1,135	16,429	0	0	17,564	0	17,564	0.00%	VMASC
200345-010	60%	NEWPORT NEWS PUBLIC SCHOOLS	JOHNSON, JESSICA	4071	37,930	904	0	0	38,834	21,358	60,192	55.00%	VMASC
300639-010	14%	OLD DOMINION UNIVERSITY	JOHNSON, JESSICA	4071	3,175	1,150	0	0	4,325	0	4,325	0.00%	VMASC
300671-010	25%	OLD DOMINION UNIVERSITY	JOHNSON, JESSICA	4071	5,929	150	0	0	6,079	0	6,079	0.00%	VMASC
300720-010	20%	STEVENS INSTITUTE OF TECHNOLOGY	JOHNSON, JESSICA	4071	33,061	1,084	0	0	34,145	22,194	56,339	65.00%	VMASC
300725-010	75%	OLD DOMINION UNIVERSITY	JOHNSON, JESSICA	4071	7,055	16,866	0	0	23,921	0	23,921	0.00%	VMASC
300747-010	30%	OLD DOMINION UNIVERSITY	JOHNSON, JESSICA	4071	4,359	1,558	0	1,500	7,417	473	7,890	6.38%	VMASC
300754-010	100%	OLD DOMINION UNIVERSITY	JOHNSON, JESSICA	4071	27,877	10,818	0	0	38,695	0	38,695	0.00%	VMASC
400497-010	75%	VIRGINIA SHIP REPAIR ASSOCIATION	JOHNSON, JESSICA	4071	13,846	0	0	0	13,846	4,209	18,055	30.40%	VMASC
500435-010	30%	VALKYRIE ENTERPRISES, INC.	JOHNSON, JESSICA	4071	903	0	0	0	903	587	1,490	65.01%	VMASC
500435-020	30%	VALKYRIE ENTERPRISES, INC.	JOHNSON, JESSICA	4071	55,084	0	0	0	55,084	35,804	90,888	65.00%	VMASC
500448-010	30%	DESIGN INTERACTIVE, INC.	JOHNSON, JESSICA	4071	6,584	0	0	0	6,584	4,279	10,863	64.99%	VMASC
500448-020	30%	DESIGN INTERACTIVE, INC.	JOHNSON, JESSICA	4071	369	0	0	0	369	240	609	65.04%	VMASC
500454-010	75%	EPIC GAMES, INC.	JOHNSON, JESSICA	4071	28,537	552	0	0	29,089	8,843	37,932	30.40%	VMASC

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PROJECT NUMBER	SPLIT	SPONSORING AGENCY	PRINCIPAL INVESTIGATOR / PROJECT DIRECTOR	DEPT	PERSONNEL AND FRINGE BENEFITS	SUPPLIES, CONTRACTUAL, GENERAL, & TRAVEL	EQUIPMENT	STIPENDS, SUBCONTRACTS, TUITION, OTHER	TOTAL DIRECT COSTS	REIMBURSED INDIRECT COSTS	TOTAL PROJECT COSTS	EFFECTIVE INDIRECT COST RATE	ENTERPRISE CODE
300675-010	20%	OLD DOMINION UNIVERSITY	JORDAN, CRAIG	4071	33,656	220	0	0	33,876	0	33,876	0.00%	VMASC
500400-012	90%	UNITED NETWORK FOR ORGAN SHARING (UNOS)	JORDAN, CRAIG	4071	80,244	0	0	0	80,244	11,700	91,944	14.58%	VMASC
500400-013	45%	UNITED NETWORK FOR ORGAN SHARING (UNOS)	JORDAN, CRAIG	4071	6,650	200	0	0	6,850	932	7,782	13.61%	VMASC
300628-010	No	OLD DOMINION UNIVERSITY	KOSTECZKO, JOSEPH	4071	71,703	16,334	0	0	88,037	0	88,037	0.00%	VMASC
300671-010	25%	OLD DOMINION UNIVERSITY	KOSTECZKO, JOSEPH	4071	5,929	150	0	0	6,079	0	6,079	0.00%	VMASC
100883-010	25%	U.S. DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT	LAWSURE, KALEEN	4071	23,344	9,329	0	0	32,673	17,970	50,643	55.00%	VMASC
300656-010	40%	OLD DOMINION UNIVERSITY	LE, TAN	4071	4,394	4,280	0	0	8,674	0	8,674	0.00%	VMASC
300667-010	40%	VA POLYTECHNIC INSTITUTE AND STATE UNIVERSITY	LE, TAN	9910	8,027	0	0	395	8,422	4,632	13,054	55.00%	VMASC
300655-010	No	OLD DOMINION UNIVERSITY	LESLIE, KEVIN	4071	150,321	1,788	0	0	152,109	0	152,109	0.00%	VMASC
300657-010	95%	OLD DOMINION UNIVERSITY	LU, YAN	4071	4,449	0	0	0	4,449	0	4,449	0.00%	VMASC
100790-010	10%	NAVAL SEA SYSTEMS COMMAND	LYNCH, CHRISTOPHER	4071	13,142	0	0	0	13,142	8,542	21,684	65.00%	VMASC
100790-011	5%	NAVAL SEA SYSTEMS COMMAND	LYNCH, CHRISTOPHER	4071	6,992	0	0	0	6,992	4,545	11,537	65.00%	VMASC
200348-010	33%	VIRGINIA DEPARTMENT OF EMERGENCY MANAGEMENT	LYNCH, CHRISTOPHER	4071	14,617	469	0	0	15,086	3,923	19,009	26.00%	VMASC
300675-010	5%	OLD DOMINION UNIVERSITY	LYNCH, CHRISTOPHER	4071	8,414	55	0	0	8,469	0	8,469	0.00%	VMASC
300720-010	20%	STEVENS INSTITUTE OF TECHNOLOGY	LYNCH, CHRISTOPHER	4071	33,061	1,084	0	0	34,145	22,194	56,339	56.00%	VMASC
500400-012	10%	UNITED NETWORK FOR ORGAN SHARING (UNOS)	LYNCH, CHRISTOPHER	4071	8,916	0	0	0	8,916	1,300	10,216	14.58%	VMASC
500400-013	45%	UNITED NETWORK FOR ORGAN SHARING (UNOS)	LYNCH, CHRISTOPHER	4071	6,650	200	0	0	6,850	932	7,782	13.61%	VMASC
100906-010	20%	INSTITUTE OF MUSEUM AND LIBRARY SERVICES	NELSON, MICHAEL	6093	4,604	161	0	0	4,765	1,525	6,290	32.00%	VMASC
300731-010	50%	NEW YORK UNIVERSITY	NELSON, MICHAEL	6093	9,147	0	0	0	9,147	1,463	10,610	15.99%	VMASC
300747-010	7%	OLD DOMINION UNIVERSITY	NELSON, MICHAEL	6093	1,017	364	0	350	1,731	110	1,841	6.35%	VMASC
500455-010	No	PROTOCOL LABS	NELSON, MICHAEL	6093	26,924	0	0	9,537	36,461	14,808	51,269	0.00%	VMASC
600236-010	50%	INTERNATIONAL INTERNET PRESERVATION CONS	NELSON, MICHAEL	6093	7,929	7,500	0	4,435	19,864	0	19,864	0.00%	VMASC
600241-010	50%	INTERNATIONAL INTERNET PRESERVATION CONS	NELSON, MICHAEL	6093	3,062	0	0	0	3,062	0	3,062	0.00%	VMASC
300639-010	13%	OLD DOMINION UNIVERSITY	NIELSEN, ALEX	4071	2,948	1,068	0	0	4,016	0	4,016	0.00%	VMASC
300640-010	20%	OLD DOMINION UNIVERSITY	NIELSEN, ALEX	4071	34,130	76	0	0	34,206	0	34,206	0.00%	VMASC
300652-010	25%	OLD DOMINION UNIVERSITY	NIELSEN, ALEX	4071	1,706	38	0	0	1,744	0	1,744	0.00%	VMASC
300675-010	20%	OLD DOMINION UNIVERSITY	NIELSEN, ALEX	4071	33,656	220	0	0	33,876	0	33,876	0.00%	VMASC
300717-003	20%	OLD DOMINION UNIVERSITY	NIELSEN, ALEX	4071	3,840	5,240	0	5,200	14,280	0	14,280	0.00%	VMASC
300744-010	40%	OLD DOMINION UNIVERSITY	NIELSEN, ALEX	4071	30,234	9,555	0	0	39,789	0	39,789	0.00%	VMASC
300779-010	No	OLD DOMINION UNIVERSITY	NIELSEN, ALEX	4071	5,332	0	0	0	5,332	0	5,332	0.00%	VMASC
300789-010	No	OLD DOMINION UNIVERSITY	NIELSEN, ALEX	4071	3,369	0	0	0	3,369	0	3,369	0.00%	VMASC
400456-010	No	CENTER FOR MIND AND CULTURE	NIELSEN, ALEX	4071	93,451	2,817	0	0	96,268	14,440	110,708	15.00%	VMASC
500375-009	80%	CAMBER CORPORATION	NIELSEN, ALEX	4071	0	0	0	1,247	1,247	811	2,058	65.04%	VMASC
500375-010	80%	CAMBER CORPORATION	NIELSEN, ALEX	4071	0	0	0	4	4	3	7	75.00%	VMASC
500375-011	80%	CAMBER CORPORATION	NIELSEN, ALEX	4071	0	0	0	12,774	12,774	8,304	21,078	65.01%	VMASC
300543-010	25%	OLD DOMINION UNIVERSITY	PADILLA, JOSE	4071	32,561	14,039	0	4,106	50,706	25,630	76,336	50.55%	VMASC
300747-010	7%	OLD DOMINION UNIVERSITY	PADILLA, JOSE	4071	1,017	364	0	350	1,731	110	1,841	6.35%	VMASC
100601-010	25%	U.S. DEPARTMENT OF EDUCATION	PAPELIS, YIANNIS	4071	26,344	1,856	0	0	28,200	7,332	35,532	26.00%	VMASC
100900-010	75%	NAVAL SURFACE WARFARE CENTER	PAPELIS, YIANNIS	4071	68,216	491	0	44,929	113,636	73,863	187,499	65.00%	VMASC
100931-010	50%	NAVAL SURFACE WARFARE CENTER	PAPELIS, YIANNIS	4071	31,404	191	0	0	31,595	20,537	52,132	65.00%	VMASC
300556-010	No	VA POLYTECHNIC INSTITUTE AND STATE UNIVERSITY	PAPELIS, YIANNIS	4071	51,573	8,687	0	4,798	65,058	0	65,058	0.00%	VMASC
300556-013	No	VA POLYTECHNIC INSTITUTE AND STATE UNIVERSITY	PAPELIS, YIANNIS	4071	0	0	0	31,000	31,000	0	31,000	0.00%	VMASC
300556-014	No	VA POLYTECHNIC INSTITUTE AND STATE UNIVERSITY	PAPELIS, YIANNIS	4071	4,129	895	0	0	5,024	0	5,024	0.00%	VMASC
300556-015	No	VA POLYTECHNIC INSTITUTE AND STATE UNIVERSITY	PAPELIS, YIANNIS	4071	8,697	12,765	0	0	21,462	0	21,462	0.00%	VMASC
300747-010	7%	OLD DOMINION UNIVERSITY	PAPELIS, YIANNIS	4071	1,017	364	0	350	1,731	110	1,841	6.35%	VMASC
500396-001	No	ManTech	PAPELIS, YIANNIS	4071	(387)	0	0	(659)	(1,046)	(251)	(1,297)	24.00%	VMASC
500396-002	75%	ManTech	PAPELIS, YIANNIS	4071	55,449	0	0	0	55,449	36,042	91,491	65.00%	VMASC
300758-010	15%	OLD DOMINION UNIVERSITY	RANA, MD MASUD	4071	4,211	51	0	0	4,262	0	4,262	0.00%	VMASC
100888-010	25%	NATIONAL ENDOWMENT FOR THE HUMANITIES	RECHOWICZ, KRYSZTOF	4071	12,133	174	0	0	12,307	3,938	16,245	32.00%	VMASC
300545-010	80%	OLD DOMINION UNIVERSITY	RECHOWICZ, KRYSZTOF	4071	68,360	97,139	0	73,914	239,413	0	239,413	0.00%	VMASC

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300639-010	13%	OLD DOMINION UNIVERSITY	RECHOWICZ, KRYSZTOF	4071	2,948	1,068	0	0	4,016	0	4,016	0.00%	VMASC
300640-010	20%	OLD DOMINION UNIVERSITY	RECHOWICZ, KRYSZTOF	4071	34,130	76	0	0	34,206	0	34,206	0.00%	VMASC
300652-010	25%	OLD DOMINION UNIVERSITY	RECHOWICZ, KRYSZTOF	4071	1,706	38	0	0	1,744	0	1,744	0.00%	VMASC
300668-007	No	OLD DOMINION UNIVERSITY	RECHOWICZ, KRYSZTOF	4071	1,369	0	0	0	1,369	0	1,369	0.00%	VMASC
300747-010	7%	OLD DOMINION UNIVERSITY	RECHOWICZ, KRYSZTOF	4071	1,017	364	0	350	1,731	110	1,841	6.35%	VMASC
400439-010	50%	JOHN TEMPLETON FOUNDATION	RECHOWICZ, KRYSZTOF	4071	14,730	28,471	0	574,030	617,231	6,480	623,711	1.05%	VMASC
500379-020	20%	D'ANGELO TECHNOLOGIES LLC	RECHOWICZ, KRYSZTOF	4071	17,891	0	0	0	17,891	11,629	29,520	65.00%	VMASC
500434-002	50%	CIRCADENCE	RECHOWICZ, KRYSZTOF	4071	0	36,408	0	0	36,408	23,665	60,073	65.00%	VMASC
300701-010	No	OLD DOMINION UNIVERSITY	RICHTER, HEATHER	4071	85,232	0	0	0	85,232	0	85,232	0.00%	VMASC
300717-003	80%	OLD DOMINION UNIVERSITY	RICHTER, HEATHER	4071	15,361	20,961	0	20,800	57,122	0	57,122	0.00%	VMASC
300747-010	7%	OLD DOMINION UNIVERSITY	RICHTER, HEATHER	4071	1,017	364	0	350	1,731	110	1,841	6.35%	VMASC
200293-010	No	CITY OF SUFFOLK	ROBINSON, ROBERT	4071	31,694	0	0	0	31,694	0	31,694	0.00%	VMASC
200343-010	60%	VIRGINIA DEPARTMENT OF EMERGENCY MANAGEMENT	ROBINSON, ROBERT	4071	22,849	0	0	0	22,849	12,567	35,416	55.00%	VMASC
200350-010	No	VIRGINIA DEPARTMENT OF VETERANS SERVICES	ROBINSON, ROBERT	4071	411,969	0	0	0	411,969	44,616	456,585	10.83%	VMASC
200360-010	No	VIRGINIA DEPARTMENT OF VETERANS SERVICES	ROBINSON, ROBERT	4071	48,977	9,101	0	224,634	282,712	17,656	300,368	6.25%	VMASC
300592-010	20%	OLD DOMINION UNIVERSITY	ROBINSON, ROBERT	4071	86,164	24,484	0	0	110,648	0	110,648	0.00%	VMASC
300758-010	20%	OLD DOMINION UNIVERSITY	ROBINSON, ROBERT	4071	5,615	68	0	0	5,683	0	5,683	0.00%	VMASC
400482-010	No	LIFT TECHNOLOGY OPERATED BY ALMMII	ROBINSON, ROBERT	4071	129,032	0	0	0	129,032	39,226	168,258	30.40%	VMASC
400482-020	No	LIFT TECHNOLOGY OPERATED BY ALMMII	ROBINSON, ROBERT	4071	32,697	3,635	0	0	36,332	11,045	47,377	30.40%	VMASC
400482-030	No	LIFT TECHNOLOGY OPERATED BY ALMMII	ROBINSON, ROBERT	4071	0	691	0	0	691	210	901	30.39%	VMASC
400482-040	No	LIFT TECHNOLOGY OPERATED BY ALMMII	ROBINSON, ROBERT	4071	0	543	0	0	543	165	708	30.39%	VMASC
500460-010	20%	TIM HOILES	ROBINSON, ROBERT	4071	505	0	0	0	505	278	783	55.05%	VMASC
100905-010	No	NATIONAL SCIENCE FOUNDATION	SHETTY, SACHIN	4075	614	0	0	0	614	338	952	55.05%	VMASC
200329-010	No	VIRGINIA INNOVATION PARTNERSHIP CORPORATION (PREVIOUSLY CIT)	SHETTY, SACHIN	4075	39,335	0	0	0	39,335	11,800	51,135	30.00%	VMASC
300388-010	No	NORFOLK STATE UNIVERSITY	SHETTY, SACHIN	4075	7,195	0	0	2,225	9,420	3,958	13,378	42.02%	VMASC
300390-010	No	UNIVERSITY OF ILLINOIS (ALL CAMPUSES)	SHETTY, SACHIN	4071	0	44	0	0	44	24	68	54.55%	VMASC
300390-020	No	UNIVERSITY OF ILLINOIS (ALL CAMPUSES)	SHETTY, SACHIN	4071	0	52	0	0	52	29	81	55.77%	VMASC
300390-030	No	UNIVERSITY OF ILLINOIS (ALL CAMPUSES)	SHETTY, SACHIN	4071	0	2,027	0	0	2,027	1,115	3,142	55.01%	VMASC
300390-040	No	UNIVERSITY OF ILLINOIS (ALL CAMPUSES)	SHETTY, SACHIN	4071	0	234	0	0	234	129	363	55.13%	VMASC
300542-010	No	OLD DOMINION UNIVERSITY	SHETTY, SACHIN	4075	23,323	36,064	0	76,512	135,899	32,663	168,562	24.03%	VMASC
300609-010	No	UNIVERSITY OF ILLINOIS (ALL CAMPUSES)	SHETTY, SACHIN	4075	151,403	0	0	5,324	156,727	83,272	239,999	53.13%	VMASC
300623-010	40%	HOWARD UNIVERSITY	SHETTY, SACHIN	4075	58,220	784	0	4,123	63,127	32,452	95,579	51.41%	VMASC
300656-010	60%	OLD DOMINION UNIVERSITY	SHETTY, SACHIN	4075	6,592	6,420	0	0	13,012	0	13,012	0.00%	VMASC
300657-010	5%	OLD DOMINION UNIVERSITY	SHETTY, SACHIN	4075	234	0	0	0	234	0	234	0.00%	VMASC
300663-010	No	OLD DOMINION UNIVERSITY	SHETTY, SACHIN	4075	23,853	5,913	0	29,697	59,463	0	59,463	0.00%	VMASC
300667-010	60%	VA POLYTECHNIC INSTITUTE AND STATE UNIVERSITY	SHETTY, SACHIN	4075	12,041	0	0	593	12,634	6,949	19,583	55.00%	VMASC
300692-010	50%	OLD DOMINION UNIVERSITY	SHETTY, SACHIN	4075	3,607	0	0	0	3,607	0	3,607	0.00%	VMASC
300717-001	50%	OLD DOMINION UNIVERSITY	SHETTY, SACHIN	4075	34,084	14,035	0	0	48,119	0	48,119	0.00%	VMASC
300747-010	7%	OLD DOMINION UNIVERSITY	SHETTY, SACHIN	4075	1,017	364	0	350	1,731	110	1,841	6.35%	VMASC
300758-010	5%	OLD DOMINION UNIVERSITY	SHETTY, SACHIN	4075	1,404	17	0	0	1,421	0	1,421	0.00%	VMASC
400475-010	60%	VA TECH ARC	SHETTY, SACHIN	4075	165,613	7,334	3,124	15,883	191,954	99,668	291,622	51.92%	VMASC
500434-001	50%	CIRCADENCE	SHETTY, SACHIN	4075	32,403	1,333	0	0	33,736	21,928	55,664	65.00%	VMASC
500447-010	50%	FRONTIER TECHNOLOGY INC.	SHETTY, SACHIN	4075	20,753	0	0	0	20,753	13,490	34,243	65.00%	VMASC
500467-010	40%	FRONTIER TECHNOLOGY INC.	SHETTY, SACHIN	4075	48,814	0	0	0	48,814	31,729	80,543	65.00%	VMASC
100888-010	25%	NATIONAL ENDOWMENT FOR THE HUMANITIES	SHULL, JOHN	4071	12,133	174	0	0	12,307	3,938	16,245	32.00%	VMASC
300640-010	20%	OLD DOMINION UNIVERSITY	SHULL, JOHN	4071	34,130	76	0	0	34,206	0	34,206	0.00%	VMASC
300652-010	25%	OLD DOMINION UNIVERSITY	SHULL, JOHN	4071	1,706	38	0	0	1,744	0	1,744	0.00%	VMASC
300675-010	20%	OLD DOMINION UNIVERSITY	SHULL, JOHN	4071	33,656	220	0	0	33,876	0	33,876	0.00%	VMASC
300707-010	No	OLD DOMINION UNIVERSITY	SHULL, JOHN	4071	13,662	55,228	8,109	0	76,999	0	76,999	0.00%	VMASC
300717-001	40%	OLD DOMINION UNIVERSITY	SHULL, JOHN	4071	27,267	11,228	0	0	38,495	0	38,495	0.00%	VMASC

**SCHEDULE 5**  
**OLD DOMINION UNIVERSITY RESEARCH FOUNDATION**  
**ENTERPRISE CENTERS INCLUDING PROJECTS REPORTED AS ACTIVITY OF AN ACADEMIC DEPARTMENT**  
(MEASURED BY EXPENDITURES INCURRED)  
**FOR FISCAL YEAR 2022**

PROJECT NUMBER	SPLIT	SPONSORING AGENCY	PRINCIPAL INVESTIGATOR / PROJECT DIRECTOR	DEPT	PERSONNEL AND FRINGE BENEFITS	SUPPLIES, CONTRACTUAL, GENERAL, & TRAVEL	EQUIPMENT	STIPENDS, SUBCONTRACTS, TUITION, OTHER	TOTAL DIRECT COSTS	REIMBURSED INDIRECT COSTS	TOTAL PROJECT COSTS	EFFECTIVE INDIRECT COST RATE	ENTERPRISE CODE
400455-010	No	CENTER FOR MIND AND CULTURE	SHULL, JOHN	4071	42,054	12,205	1,335	0	55,594	8,139	63,733	14.64%	VMASC
400475-010	20%	VA TECH ARC	SHULL, JOHN	4075	55,205	2,445	1,041	5,294	63,985	33,223	97,208	51.92%	VMASC
100790-011	10%	NAVAL SEA SYSTEMS COMMAND	SMITH, KATHERINE	4071	13,983	0	0	0	13,983	9,089	23,072	65.00%	VMASC
200345-010	40%	NEWPORT NEWS PUBLIC SCHOOLS	SMITH, KATHERINE	4071	25,286	602	0	0	25,888	14,239	40,127	55.00%	VMASC
300640-010	20%	OLD DOMINION UNIVERSITY	SMITH, KATHERINE	4071	34,130	76	0	0	34,206	0	34,206	0.00%	VMASC
300658-010	33%	OLD DOMINION UNIVERSITY	SMITH, KATHERINE	4071	16,555	0	0	0	16,555	0	16,555	0.00%	VMASC
300671-010	25%	OLD DOMINION UNIVERSITY	SMITH, KATHERINE	4071	5,929	150	0	0	6,079	0	6,079	0.00%	VMASC
300691-010	33%	OLD DOMINION UNIVERSITY	SMITH, KATHERINE	4071	19,127	8,250	0	8,016	35,393	0	35,393	0.00%	VMASC
300725-010	25%	OLD DOMINION UNIVERSITY	SMITH, KATHERINE	4071	2,352	5,622	0	0	7,974	0	7,974	0.00%	VMASC
300747-010	7%	OLD DOMINION UNIVERSITY	SMITH, KATHERINE	4071	1,017	364	0	350	1,731	110	1,841	6.35%	VMASC
500435-010	50%	VALKYRIE ENTERPRISES, INC.	SMITH, KATHERINE	4071	1,505	0	0	0	1,505	978	2,483	64.98%	VMASC
500435-020	50%	VALKYRIE ENTERPRISES, INC.	SMITH, KATHERINE	4071	91,806	0	0	0	91,806	59,674	151,480	65.00%	VMASC
500442-010	No	TED TEXT LLC	SMITH, KATHERINE	4071	0	0	0	0	0	1	1	0.00%	VMASC
500448-010	70%	DESIGN INTERACTIVE, INC.	SMITH, KATHERINE	4071	15,362	0	0	0	15,362	9,985	25,347	65.00%	VMASC
500448-020	70%	DESIGN INTERACTIVE, INC.	SMITH, KATHERINE	4071	861	0	0	0	861	560	1,421	65.04%	VMASC
500454-010	25%	EPIC GAMES, INC.	SMITH, KATHERINE	4071	9,512	184	0	0	9,696	2,948	12,644	30.40%	VMASC
600236-010	50%	INTERNATIONAL INTERNET PRESERVATION CONS	WEIGLE, MICHELE	6093	7,929	7,500	0	4,435	19,864	0	19,864	0.00%	VMASC
300592-010	20%	OLD DOMINION UNIVERSITY	WEISEL, ERIC	4071	86,164	24,484	0	0	110,648	0	110,648	0.00%	VMASC
400193-000	No	VMASC MEMBERSHIP ACCOUNT	WEISEL, ERIC	4071	0	2,099	0	0	2,099	0	2,099	0.00%	VMASC
500379-020	50%	D'ANGELO TECHNOLOGIES LLC	WEISEL, ERIC	4071	44,729	0	0	0	44,729	29,074	73,803	65.00%	VMASC
<b>VIRGINIA MODELING AND SIMULATION CENTER (VMASC)</b>													
<b>TOTAL ENTERPRISE CENTERS INCLUDING PROJECTS REPORTED AS ACTIVITY OF AN ACADEMIC DEPARTMENT</b>													
<b>7,990,849</b>													
<b>1,799,128</b>													
<b>120,065</b>													
<b>4,417,059</b>													
<b>14,327,101</b>													
<b>3,267,291</b>													
<b>17,594,392</b>													
<b>22.80%</b>													

## **SCHEDULE 6**

**Sponsored Program Activity**

**Proposals Submitted and Awards Funded**

**Fiscal Year 2022 through Fiscal Year 2018**

**SCHEDULE 6**  
**OLD DOMINION UNIVERSITY RESEARCH FOUNDATION**  
**SUMMARY OF PROPOSAL AND AWARD ACTIVITY**  
**FISCAL YEAR 2022 THROUGH FISCAL YEAR 2018**

	PROPOSALS SUBMITTED					AWARDS FUNDED				
	FY 22	FY 21	FY 20	FY 19	FY 18	FY 22	FY 21	FY 20	FY 19	FY 18
<b>COLLEGE OF ARTS &amp; LETTERS</b>										
Art	\$ 7,000	\$ -	\$ 5,000	\$ -	\$ -	\$ 7,000	\$ -	\$ -	\$ 2,250	\$ -
Communication & Theatre Arts	144,323	80,200	277,419	383,136	98,956	7,000	20,200	-	-	-
English	75,000	821,446	21,000	-	4,000	71,485	249,531	174,540	149,094	146,385
History	250,000	67,000	147,404	-	75,000	-	7,000	-	-	75,000
International Studies	-	299,927	1,915	-	-	-	-	-	-	-
Philosophy & Religious Studies	92,500	395,000	236,000	25,768	18,680	92,500	42,580	-	19,220	-
Political Science & Geography	6,269,743	1,805,693	156,184	3,174,901	629,132	195,313	296,071	159,580	63,475	100,415
Social Science Research Center	1,107,325	856,333	636,770	1,202,714	281,686	358,596	114,520	212,102	200,263	193,540
Sociology & Criminal Justice	1,411,866	796,417	1,448,625	1,293,575	1,588,925	173,677	50,079	334,955	1,079,904	599,664
Women's Studies	160,150	-	-	-	-	38,300	-	-	-	18,886
World Languages & Cultures	5,500	-	-	-	-	-	-	-	-	-
Dean's Office	-	-	5,000	4,950	4,950	-	1,000	2,000	2,000	-
College Total	\$ 9,523,407	\$ 5,122,016	\$ 2,930,317	\$ 6,090,044	\$ 2,701,329	\$ 943,871	\$ 780,981	\$ 883,177	\$ 1,516,206	\$ 1,133,890
% Change from prior year	85.93%	74.79%	-51.88%	125.45%	-47.25%	20.86%	-11.57%	-41.75%	33.72%	-17.50%
Average yearly increase ( decrease)	50.51%					-3.35%				
<b>STROME COLLEGE OF BUSINESS AND PUBLIC ADMINISTRATION</b>										
Economics	\$ 77,768	\$ 269,246	\$ 302,411	\$ 184,407	\$ 131,296	\$ 77,768	\$ 26,850	\$ 111,478	\$ 153,732	\$ 100,000
Finance, Insurance and Real Estate	23,500	-	-	-	-	6,000	-	-	-	-
Information Systems/Decision Science	294,704	198,527	211,838	1,147,060	1,644,963	229,918	218,969	217,720	196,604	338,655
Management	32,000	1,126,686	149,979	19,325	-	95,203	465,922	-	-	-
Marketing	236,737	42,500	80,000	569,068	-	30,000	12,500	18,750	-	-
School of Public Service	1,052,944	1,327,659	504,015	354,399	565,023	373,620	175,733	178,511	40,734	45,128
College Total	\$ 1,717,653	\$ 2,964,618	\$ 1,248,243	\$ 2,274,259	\$ 2,341,282	\$ 812,509	\$ 899,974	\$ 526,459	\$ 391,070	\$ 483,783
% Change from prior year	-42.06%	137.50%	-45.11%	-2.86%	-62.24%	-9.72%	70.95%	34.62%	-19.16%	9.44%
Average yearly increase ( decrease)	-5.33%					13.59%				
<b>DARDEN COLLEGE OF EDUCATION &amp; PROFESSIONAL STUDIES</b>										
Communication Disorders and Special Education	8,133,801	16,575,470	5,597,193	12,497,236	8,552,305	5,507,040	5,069,666	4,780,228	4,965,604	3,824,280
Counseling and Human Services	1,883,801	3,135,000	817,574	1,281,136	1,390,103	601,000	327,400	1,262,164	339,269	334,421
Educational Foundations and Leadership	9,635,961	1,945,959	4,142,739	1,785,834	325,492	500,804	125,461	257,992	151,612	395,910
Human Movement Sciences	3,895,676	3,332,804	2,463,160	1,440,098	156,884	787,495	674,749	724,541	59,981	24,715
STEM Education and Professional Studies	1,387,599	1,699,130	1,643,093	1,538,044	2,039,326	167,698	801,131	56,739	345,267	358,351
Teaching and Learning	3,509,080	987,218	1,540,543	2,895,005	1,657,126	514,782	456,419	1,163,600	460,392	32,000
Dean's Office	2,245,546	1,197,114	1,184,008	619,314	702,703	888,433	1,000,423	593,830	291,720	468,185
College Total	\$ 30,691,464	\$ 28,872,695	\$ 17,388,310	\$ 22,056,667	\$ 14,823,939	\$ 8,967,252	\$ 8,455,249	\$ 8,839,094	\$ 6,613,845	\$ 5,437,862
% Change from prior year	6.30%	66.05%	-21.17%	48.79%	-48.72%	6.06%	-4.34%	33.65%	21.63%	-14.54%
Average yearly increase ( decrease)	14.79%					12.98%				

**SCHEDULE 6**  
**OLD DOMINION UNIVERSITY RESEARCH FOUNDATION**  
**SUMMARY OF PROPOSAL AND AWARD ACTIVITY**  
**FISCAL YEAR 2022 THROUGH FISCAL YEAR 2018**

	PROPOSALS SUBMITTED					AWARDS FUNDED				
	FY 22	FY 21	FY 20	FY 19	FY 18	FY 22	FY 21	FY 20	FY 19	FY 18
<b>BATTEN COLLEGE OF ENGINEERING &amp; TECHNOLOGY</b>										
Civil & Environmental Engineering	\$ 5,998,289	\$ 16,278,678	\$ 10,820,001	\$ 11,204,420	\$ 11,070,179	\$ 1,659,644	\$ 1,655,545	\$ 1,973,951	\$ 311,001	\$ 562,086
Electrical & Computer Engineering	17,639,914	25,045,639	28,154,718	22,941,179	18,663,198	3,499,769	1,773,719	3,160,183	4,411,614	3,286,824
Engineering Management & Systems Engineering	968,258	815,243	1,292,757	5,908,403	8,964,742	1,176,961	64,500	1,156,104	1,090,196	736,806
Engineering Technology	6,878,828	5,462,777	3,794,061	4,781,795	6,841,175	917,357	227,372	1,117,290	1,108,725	1,469,064
Mechanical & Aerospace Engineering	8,463,017	17,166,377	11,327,258	21,313,788	9,837,146	1,122,319	1,408,267	1,492,622	1,830,812	1,148,510
Computational Modeling & Simulation Engineering	13,869,721	13,257,029	14,341,193	11,124,615	11,870,761	1,538,503	1,951,211	2,240,891	2,099,288	2,245,758
Dean's Office	90,000	994,340	2,191,960	3,945,886	2,196,972	60,000	38,899	893,231	686,868	1,217,236
College Total	\$ 53,908,027	\$ 79,020,083	\$ 71,921,948	\$ 81,220,086	\$ 69,444,173	\$ 9,974,553	\$ 7,119,513	\$ 12,034,272	\$ 11,538,504	\$ 10,666,284
% Change from prior year	-31.78%	9.87%	-11.45%	16.96%	-2.78%	40.10%	-40.84%	4.30%	8.18%	8.88%
Average yearly increase ( decrease)	-4.47%					-1.30%				
<b>COLLEGE OF HEALTH SCIENCES</b>										
Community & Environmental Health	\$ 665,479	\$ 3,560,470	\$ 1,553,912	\$ 2,320,772	\$ 1,920,808	\$ 159,714	\$ 269,161	\$ 200,167	\$ 195,175	\$ 108,495
Dental Hygiene	177,965	77,757	150,080	378,631	248,698	5,000	18,000	27,080	24,580	21,347
Medical Diagnostic & Translation Sciences	6,256,924	9,297,689	4,488,503	8,367,895	7,401,738	537,776	920,473	527,090	2,054,167	1,016,435
Nursing	3,572,954	694,785	5,512,357	4,003,517	741,252	580,496	1,136,587	1,351,763	689,031	902,948
Rehabilitative Sciences	4,112,991	5,451,071	111,128	283,519	2,160,993	37,572	27,346	45,145	72,727	332,822
Dean's Office	493,251	151,529	2,500	5,000	34,320	-	-	-	35,534	3,500
College Total	\$ 15,279,564	\$ 19,233,301	\$ 11,818,480	\$ 15,359,334	\$ 12,507,809	\$ 1,320,558	\$ 2,371,567	\$ 2,151,245	\$ 3,071,214	\$ 2,385,547
% Change from prior year	22.80%	22.80%	22.80%	22.80%	-45.60%	-44.32%	10.24%	-29.95%	28.74%	-24.14%
Average yearly increase ( decrease)	4.43%					-8.93%				
<b>COLLEGE OF SCIENCES</b>										
Biological Sciences	\$ 9,945,012	\$ 11,245,141	\$ 23,938,562	\$ 19,669,550	\$ 20,180,662	\$ 3,119,505	\$ 2,026,865	\$ 2,955,001	\$ 1,614,083	\$ 8,630,596
Center for Coastal Physical Oceanography	3,068,038	10,937,547	932,389	491,479	1,505,198	455,007	577,163	584,482	491,878	984,115
Chemistry and Biochemistry	16,451,850	14,920,122	26,169,341	12,899,711	10,074,984	2,718,091	2,044,733	1,412,480	1,260,811	1,755,060
Computer Science	9,371,571	6,574,651	8,145,059	9,285,954	9,280,151	1,882,972	1,801,096	1,488,819	1,009,917	754,950
Mathematics and Statistics	2,172,492	6,304,608	2,841,263	3,621,630	7,666,647	622,620	2,121,697	1,404,096	987,478	809,420
Ocean & Earth Sciences	21,921,780	11,726,706	11,267,053	7,595,972	7,955,365	3,404,062	2,579,980	1,043,826	2,701,640	2,311,194
Physics	4,217,825	3,835,206	6,389,451	5,893,239	9,097,709	4,166,483	4,856,722	2,281,495	4,301,120	3,208,820
Psychology	4,851,526	6,446,925	9,345,506	4,398,299	9,321,721	1,444,895	1,595,315	801,818	982,538	1,010,540
Dean's Office	374,585	-	250,000	1,824,722	-	-	-	-	-	33,600
College Total	\$ 72,374,679	\$ 71,990,906	\$ 89,278,624	\$ 65,680,556	\$ 75,082,437	\$ 17,813,635	\$ 17,603,571	\$ 11,972,017	\$ 13,349,465	\$ 19,498,295
% Change from prior year	0.53%	-19.36%	35.93%	-12.52%	-58.45%	1.19%	47.04%	-10.32%	-31.54%	24.75%
Average yearly increase ( decrease)	-0.72%					-1.73%				

**SCHEDULE 6**  
**OLD DOMINION UNIVERSITY RESEARCH FOUNDATION**  
**SUMMARY OF PROPOSAL AND AWARD ACTIVITY**  
**FISCAL YEAR 2022 THROUGH FISCAL YEAR 2018**

	PROPOSALS SUBMITTED					AWARDS FUNDED				
	FY 22	FY 21	FY 20	FY 19	FY 18	FY 22	FY 21	FY 20	FY 19	FY 18
<b>OFFICE OF RESEARCH AND OTHER UNITS</b>										
Office of Research	\$ 225,239	\$ 316,081	\$ 959,163	\$ 51,008	\$ 38,419	\$ 217,165	\$ 342,116	\$ 617,047	\$ -	\$ -
VMASC: Virginia Modeling, Analysis & Simulation Center	37,082,650	12,643,758	28,975,513	9,764,942	25,179,745	13,735,454	7,305,530	12,582,223	3,429,836	2,530,191
School of Cybersecurity	2,879,163	5,414,298	-	-	-	2,611,475	264,861	-	-	-
Frank Reidy Research Center for Bioelectrics	13,968,029	12,568,090	8,426,266	8,583,737	17,801,256	-	2,141,200	1,628,717	3,136,897	2,998,236
Institute for Innovation & Entrepreneurship	725,637	3,205,668	1,265,484	3,379,780	2,415,998	1,545,510	1,692,429	2,335,548	1,034,847	1,024,493
The Graduate School	206,089	174,556	199,587	3,225,288	1,767,104	196,798	151,525	150,698	139,237	750,568
Office of Distance Learning	119,682	-	-	-	-	-	-	-	-	-
Center For Educ Partnership	9,177,989	4,072,297	3,478,882	7,686,923	22,940,225	262,377	438,668	2,613,073	999,240	39,049
Student Support Services	1,019,107	-	2,442,982	387,785	401,985	438,655	376,155	437,357	1,172,098	342,272
University Libraries	167,474	22,947	285,588	7,690	13,000	19,672	2,775	-	-	3,000
Miscellaneous Units	5,009,119	5,237,150	6,888,370	3,897,595	3,318,536	708,422	1,612,745	391,832	257,476	124,730
Office of Research and Other Units Total	\$ 70,580,178	\$ 43,654,845	\$ 52,921,835	\$ 36,984,748	\$ 73,876,268	\$ 19,735,528	\$ 14,328,004	\$ 20,756,495	\$ 10,169,631	\$ 7,812,539
% Change from prior year	61.68%	-17.51%	43.09%	-49.94%	42.00%	37.74%	-30.97%	104.10%	30.17%	6.52%
Average yearly increase ( decrease)	-0.89%					30.52%				
<b>TOTAL UNIVERSITY ACTIVITY</b>	<b>\$ 254,074,972</b>	<b>\$ 250,858,464</b>	<b>\$ 247,507,757</b>	<b>\$ 229,665,694</b>	<b>\$ 250,777,237</b>	<b>\$ 59,567,906</b>	<b>\$ 51,558,859</b>	<b>\$ 57,162,759</b>	<b>\$ 46,649,935</b>	<b>\$ 47,418,200</b>
<b>% CHANGE FROM PRIOR YEAR</b>	<b>1.28%</b>	<b>1.35%</b>	<b>7.77%</b>	<b>-8.42%</b>	<b>-31.74%</b>	<b>15.53%</b>	<b>-9.80%</b>	<b>22.54%</b>	<b>-1.62%</b>	<b>7.56%</b>
Average yearly increase ( decrease)	0.26%					5.12%				
<b>AFFILIATED UNITS</b>										
VA Tidewater Consortium for Higher Education	\$ -	\$ 2,857,975	\$ -	\$ 306,369	\$ 125,615	\$ -	\$ 571,595	\$ 669,884	\$ 661,684	\$ 641,939
VA Space Grant Consortium	3,203,080	5,665,976	9,303,662	3,758,640	4,900,217	3,539,082	3,225,389	3,843,972	1,697,358	2,158,725
Total Affiliated Units	\$ 3,203,080	\$ 8,523,951	\$ 9,303,662	\$ 4,065,009	\$ 5,025,832	\$ 3,539,082	\$ 3,796,984	\$ 4,513,856	\$ 2,359,042	\$ 2,800,664
% Change from prior year	-62.42%	-8.38%	128.87%	-19.12%	80.90%	-6.79%	-15.88%	91.34%	-15.77%	-42.60%
Average yearly increase ( decrease)	-7.25%					5.27%				
<b>GRAND TOTAL</b>	<b>\$ 257,278,052</b>	<b>\$ 259,382,415</b>	<b>\$ 256,811,419</b>	<b>\$ 233,730,703</b>	<b>\$ 255,803,069</b>	<b>\$ 63,106,988</b>	<b>\$ 55,355,843</b>	<b>\$ 61,676,615</b>	<b>\$ 49,008,977</b>	<b>\$ 50,218,864</b>
<b>% CHANGE FROM PRIOR YEAR</b>	<b>-0.81%</b>	<b>1.00%</b>	<b>9.87%</b>	<b>-8.63%</b>	<b>-30.90%</b>	<b>14.00%</b>	<b>-10.25%</b>	<b>25.85%</b>	<b>-2.41%</b>	<b>2.56%</b>
Average yearly increase ( decrease)	0.12%					5.13%				