



## Old Dominion University Research Foundation

To: Distribution

From: Julian F. Facenda *Julian*  
Executive Director

Date: October 31, 2019

Subject: Annual Report of Sponsored Program Activity - June 30, 2019

Attached please find the Annual Report of Sponsored Program Activity for the fiscal year ended June 30, 2019. 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 entities affiliated with the University. Included in the report is a schedule of proposals submitted and awards funded for the fiscal year ended June 30, 2019 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 of 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 5.2% from fiscal year 2018 to \$44.8 million.
- Expenditures in excess of \$1 million by funding source for the fiscal year were:

National Science Foundation	\$ 8.1 million
U.S. Department of Health and Human Services	\$ 6.0 million
U.S. Navy	\$ 3.7 million
U.S. Department of Education	\$ 2.9 million
Virginia Department of Education	\$ 2.1 million
U.S. Department of Energy	\$ 1.6 million
National Aeronautics and Space Administration	\$ 1.5 million
Virginia Department of Environmental Quality	\$ 1.1 million
Jefferson Science Associates, LLC (JLAB)	\$ 1.0 million
U.S. Air Force	\$ 1.0 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:

Electrical & Computer Engineering	\$ 4.3 million
Communication Disorders and Special Education	\$ 4.2 million
Physics	\$ 3.9 million
Virginia Modeling, Analysis and Simulation Center	\$ 3.7 million
Ocean, Earth and Atmospheric Sciences	\$ 3.7 million
Biological Sciences	\$ 2.8 million
Chemistry and Biochemistry	\$ 2.4 million
Medical Diagnostic and Translational Sciences	\$ 2.3 million
Computation Modeling & Simulation Engineering	\$ 2.1 million
Computer Sciences	\$ 1.4 million
Dean of Engineering	\$ 1.3 million
Institute for Innovation & Enterprise	\$ 1.1 million
Mechanical and Aerospace Engineering	\$ 1.0 million

- Total University proposal submissions during fiscal year 2019 decreased 8.4% to \$229.7 million dollars. Total University Awards funded during fiscal year 2019 decreased 1.6% from fiscal year 2018 levels to \$46.6 million dollars.

The following charts graphically depict ODURF- related current fiscal year research expenditures and the trend in research activity over the past six years:

#### **Chart A – Research Expenditures for University Activity Excluding Affiliates**

This chart indicates percentage of total research expenditures for fiscal year 2019 for each college and other university units.

#### **Chart B – Total Proposals Submitted and Awards Funded Including Affiliates**

This chart indicates the change in proposal submissions from \$186 million during fiscal year 2008 to \$234 million dollars during fiscal year 2019. Awards funded during this same period increased from \$38 million to \$49 million.

Should you have any questions concerning the enclosed report please do not hesitate to contact me at 683-7210.

Chart A – Research Expenditures for University Units Excluding Affiliates

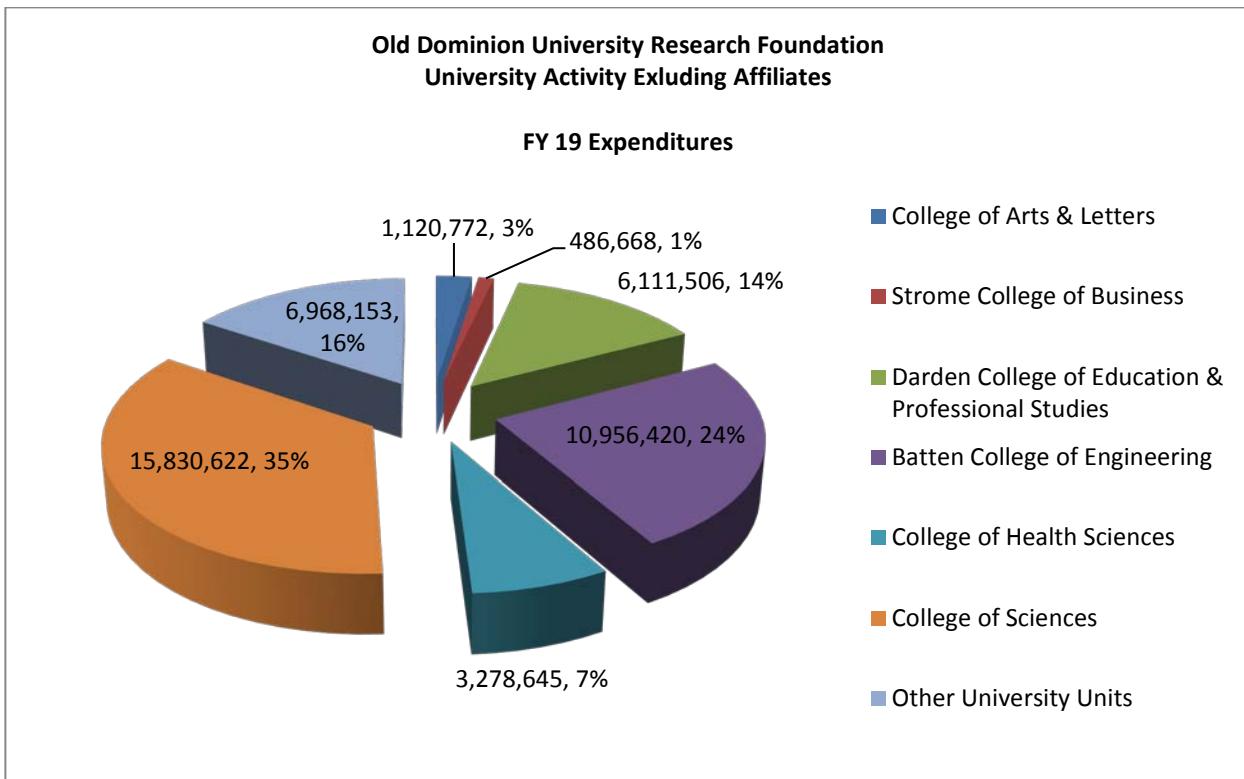
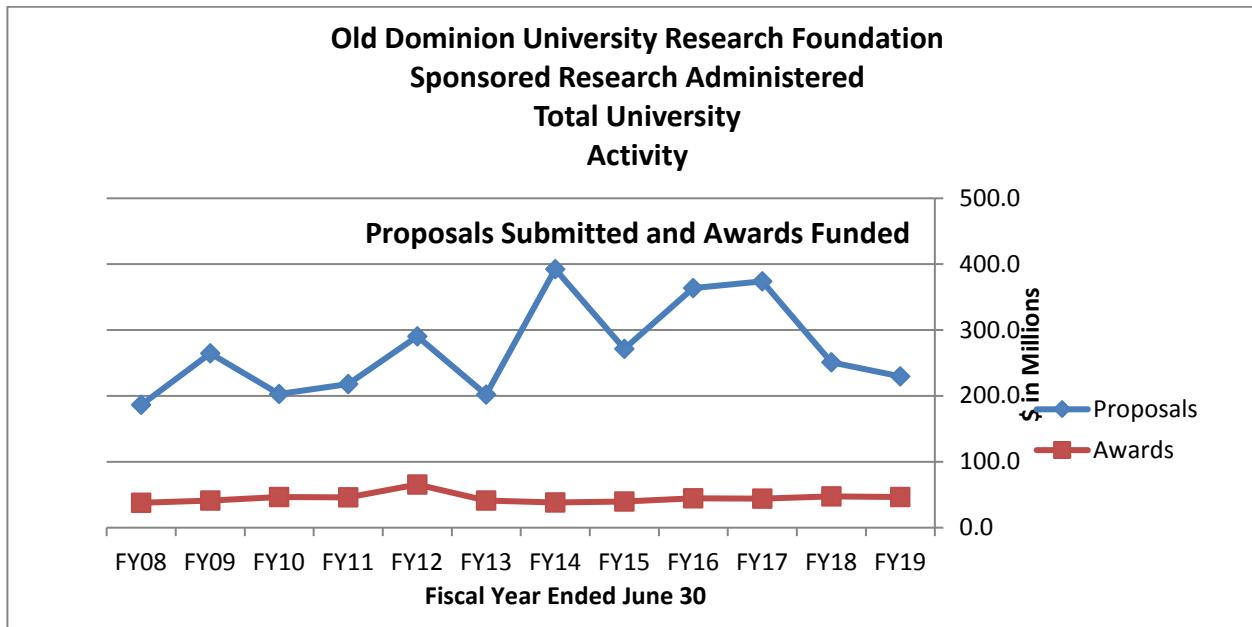


Chart B – Proposals Submitted and Awards Funded



**DISTRIBUTION**

Research Foundation Board of Trustees  
University Vice Presidents  
College Deans  
Academic Department Chairs  
Center Directors  
Affiliated Unit Directors  
Institutional Research Office  
University Budget Office

## CONTENTS

- Schedule 1**      -     Summary of Sponsored Program Activity  
Fiscal Year 2019 through Fiscal Year 2014
- Schedule 2**      -     Summary of Sponsored Program Activity by Major Funding  
Source – Fiscal Year 2019 through Fiscal Year 2015
- Schedule 3**      -     Comparison of Direct Cost, Indirect Cost and Effective Indirect  
Cost Rates – University Units – Fiscal Year 2019 through Fiscal Year 2017
- Schedule 4**      -     Sponsored Program Activity Individual Project Listing  
Fiscal Year 2019
- Schedule 5**      -     Enterprise Centers Including Projects Reported as Activity of an  
Academic Department – Fiscal Year 2019
- Schedule 6**      -     Sponsored Program Activity – Proposals Submitted and  
Awards Funded – Fiscal Year 2019 through Fiscal Year 2015

## **SCHEDULE 1**

**Summary of Sponsored Program Activity**

**Fiscal Year 2019 through Fiscal Year 2014**

**SCHEDULE 1**  
**OLD DOMINION UNIVERSITY RESEARCH FOUNDATION**  
**SUMMARY OF SPONSORED PROGRAM ACTIVITY**  
 (MEASURED BY EXPENDITURES INCURRED)  
**FISCAL YEAR 2019 THROUGH FISCAL YEAR 2014**

	FY 19	FY 18	FY 17	FY 16	FY 15	FY 14
<b>COLLEGE OF ARTS &amp; LETTERS</b>						
Dean's Office	\$ 1,999	\$ -	\$ -	\$ 2,129	\$ 14,430	\$ 30,491
Communication & Theatre Arts	-	-	2,075	33,450	1,868	6,905
English	126,801	106,763	63,828	50,117	60,229	81,313
Foreign Languages/Literatures	-	-	-	-	3,826	1,867
History	17,014	75,116	6,300	4,259	26,459	58,682
History - Cybersecurity	2,818					
Political Science & Geography	74,398	77,207	27,324	61,425	29,781	83,956
Philosophy & Religious Studies	-	-	14,629	3,455	-	-
Social Science Research Center	148,221	208,762	166,351	149,199	130,809	175,408
Sociology & Criminal Justice	743,055	766,128	475,311	12,752	13,661	7,384
Women's Studies	6,465	8,255	15,128	-	-	-
<b>College Total</b>	<b>\$ 1,120,772</b>	<b>\$ 1,242,232</b>	<b>\$ 770,946</b>	<b>\$ 316,786</b>	<b>\$ 281,063</b>	<b>\$ 446,006</b>
% Change from prior year	-9.78%	61.13%	143.37%	12.71%	-36.98%	-1.36%
Average yearly increase ( decrease)	30.26%	34.94%				
<b>STROME COLLEGE OF BUSINESS</b>						
Economics	139,880	123,154	70,370	126,425	(442)	60,093
Finance	-	-	-	2,444	7,495	-
Information Systems & Decision Sciences	224,332	95,253	139,319	158,436	148,544	-
Information Systems & Decision Sciences - Cybersecurity	78,759	66,241	381	-	-	-
Management	-	-	663	1,293	-	-
Marketing	-	13,760	12,308	3,863	-	-
Public Service	43,697	46,269	25,276	10,262	10,404	22,176
<b>College Total</b>	<b>\$ 486,668</b>	<b>\$ 344,677</b>	<b>\$ 248,316</b>	<b>\$ 302,722</b>	<b>\$ 166,001</b>	<b>\$ 82,269</b>
% Change from prior year	41.20%	38.81%	-17.97%	82.36%	101.78%	-45.42%
Average yearly increase ( decrease)	98.31%	25.74%				

## DARDEN COLLEGE OF EDUCATION & PROFESSIONAL STUDIES

Dean's Office	\$ 430,047	\$ 498,687	\$ 465,485	\$ 436,482	\$ 264,167	\$ 320,669
Dean's Office - Cybersecurity	2,818					
Center for Educational Partnerships	479,755	555,811	3,240,456	5,183,002	4,669,983	3,630,365
Communication Disorders and Special Education	4,231,210	3,812,902	3,842,934	3,708,022	3,650,009	3,544,135
Counseling and Human Services	368,595	299,968	345,081	72,310	111,934	124,783
Educational Foundations and Leadership	186,213	229,172	562,137	816,336	798,728	916,845
Human Movement Sciences	9,228	30,066	48,658	41,308	109,017	124,789
STEM Education and Professional Studies	144,548	283,082	842,959	1,320,821	1,848,198	1,730,137
Teaching and Learning	259,091	308,853	410,023	520,525	433,989	483,439
 College Total	 \$ 6,111,506	 \$ 6,018,542	 \$ 9,757,734	 \$ 12,098,806	 \$ 11,886,025	 \$ 10,875,162
% Change from prior year	1.54%	-38.32%	-19.35%	1.79%	9.30%	34.83%
Average yearly increase ( decrease)	-8.76%	-5.08%				

## BATTEN COLLEGE OF ENGINEERING & TECHNOLOGY

Dean's Office	\$ 1,271,521	\$ 533,243	\$ 415,031	\$ 290,154	\$ 101,365	\$ 111,954
Civil & Environmental Engineering	942,355	1,013,126	1,381,257	890,440	648,563	510,504
Civil & Environmental Engineering - VMASC	-	-	-	47,474	-	47,752
Electrical & Computer Engineering	1,416,907	1,469,081	1,216,735	921,054	893,818	1,213,846
Electrical & Computer Engineering - ARC	466,449	475,757	504,233	591,501	1,189,505	1,055,824
Electrical & Computer Engineering - Bioelectronics	1,610,403	1,045,485	534,322	775,182	1,043,637	379,808
Electrical & Computer Engineering - Cybersecurity	838,891	65,508	43,706	-	-	-
Engineering Career Management Center	-	-	-	-	-	103,513
Engineering Management and Systems Engineering	605,194	554,560	414,241	410,275	536,522	136,861
Engineering Management and Systems Engineering - NCSOSE	-	-	-	11,012	41,687	158,340
Engineering Management and Systems Engineering - Cybersecurity	300,740	-	-	-	-	-
Engineering Technology	432,985	726,117	811,348	861,881	370,170	349,540
Engineering Technology - ARC	-	-	-	-	3,063	90,721
Mechanical & Aerospace Engineering	1,015,053	1,012,472	1,181,404	731,570	799,335	619,202
Mechanical & Aerospace Engineering - ARC	-	-	15,438	23,721	24,024	40,953
Computation Modeling & Simulation Engineering	1,735,799	567,858	578,878	505,132	398,185	452,114
Computation Modeling & Simulation Engineering - VMASC	-	690,251	597,087	2,003,612	3,087,263	2,754,598
Computation Modeling & Simulation Engineering - Cybersecurity	320,123	-	-	-	-	-
 College Total	 \$ 10,956,420	 \$ 8,153,458	 \$ 7,693,679	 \$ 8,063,007	 \$ 9,137,137	 \$ 8,025,530
% Change from prior year	34.38%	5.98%	-4.58%	-11.76%	13.85%	-8.07%
Average yearly increase ( decrease)	7.30%	-1.32%				

### COLLEGE OF HEALTH SCIENCES

Dean's Office	\$ 44,825	\$ 17,920	\$ -	\$ (72)	\$ 25,073	\$ 5,744
Community & Environmental Health	203,805	209,101	98,912	95,308	99,218	355,423
Dental Hygiene	6,225	(20,221)	42,674	53,022	63,993	41,673
Medical Diagnostic & Translational Sciences	263,858	428,063	691,061	358,374	23,438	5,744
Medical Diagnostic & Translational Sciences - Bioelectronics	2,031,413	2,422,581	2,216,849	2,479,922	1,447,102	1,469,850
Nursing	647,734	1,077,828	1,937,351	1,362,754	930,615	646,297
School of Rehabilitation Sciences	80,785	122,050	80,427	100,441	199,606	227,299
 College Total	 \$ 3,278,645	 \$ 4,257,321	 \$ 5,067,273	 \$ 4,449,749	 \$ 2,789,045	 \$ 2,752,030
% Change from prior year	-22.99%	-15.98%	13.88%	59.54%	1.35%	-3.66%
Average yearly increase ( decrease)	3.83%	9.81%				

### COLLEGE OF SCIENCES

Dean's Office	\$ 37,964	\$ -	\$ -	\$ 1,420	\$ 8,820	\$ 19,560
Biological Sciences	2,755,586	2,535,072	2,039,337	1,742,699	1,614,718	1,665,748
Biological Sciences - Bioelectronics	-	-	-	-	-	13,785
Center for Coastal Physical Oceanography	851,773	822,626	939,208	693,392	865,985	1,289,616
Center for Coastal Physical Oceanography - MARI	-	107,505	58,186	32,915	-	-
Chemistry and Biochemistry	2,393,826	2,315,738	2,618,322	2,202,356	1,780,131	1,519,745
Chemistry and Biochemistry - ARC	3,917	357	-	-	-	-
Chemistry and Biochemistry - VCERC	-	-	-	(5,971)	49,077	284,215
Computer Science	1,008,821	1,538,808	1,614,304	1,607,758	1,188,118	995,043
Computer Science - VMASC	107,538	-	-	-	-	-
Computer Science - Cybersecurity	317,670	-	-	-	-	-
Mathematics and Statistics	915,496	833,920	669,176	751,636	684,811	827,479
Ocean, Earth & Atmospheric Sciences	2,839,369	2,606,361	2,722,270	3,229,908	2,379,550	3,721,649
Ocean, Earth & Atmospheric Sciences - SSRP	-	499,463	558,257	349,294	494,657	285,222
Physics	3,874,396	3,439,875	3,571,771	3,562,835	3,415,041	4,097,273
Psychology	724,267	1,192,251	1,221,594	1,326,747	1,292,856	1,536,955
 College Total	 \$ 15,830,622	 \$ 15,891,977	 \$ 16,012,427	 \$ 15,494,987	 \$ 13,773,764	 \$ 16,256,290
% Change from prior year	-0.39%	-0.75%	3.34%	12.50%	-15.27%	7.14%
Average yearly increase ( decrease)	-0.52%	0.95%				

**OFFICE OF RESEARCH AND OTHER UNITS**

VMASC: Virginia Modeling, Analysis & Simulation Center	\$ 3,699,337	\$ 2,574,951	\$ 2,386,352	\$ 1,822,109	\$ 1,995,708	\$ 2,199,704
Frank Reidy Research Center for Bioelectronics	963,475	1,528,092	2,267,188	1,350,583	516,121	386,742
The Graduate School	81,109	169,352	-	-	-	-
Institute for Innovation & Entrepreneurship	1,174,567	1,313,045	1,709,338	1,658,975	1,355,165	1,365,604
Miscellaneous ODU Units	832,665	859,658	933,229	898,552	744,696	662,388
Miscellaneous ODU Units - Cybersecurity	217,001	184,928	-	-	-	-
<b>Total Other Units</b>	<b>\$ 6,968,154</b>	<b>\$ 6,630,025</b>	<b>\$ 7,296,107</b>	<b>\$ 5,730,219</b>	<b>\$ 4,611,690</b>	<b>\$ 4,614,438</b>
% Change from prior year	5.10%	-9.13%	27.33%	24.25%	-0.06%	-19.97%
Average yearly increase ( decrease)	10.20%	3.00%				

**TOTAL UNIVERSITY ACTIVITY**

<b>% CHANGE FROM PRIOR YEAR</b>	<b>5.21%</b>	<b>-9.20%</b>	<b>0.84%</b>	<b>8.94%</b>	<b>-0.95%</b>	<b>4.51%</b>
Average yearly increase ( decrease)	0.79%	0.65%				

**AFFILIATED ACTIVITY**

Virginia Commercial Space Flight Authority	\$ -	\$ -	\$ -	\$ -	\$ 13,442,449	\$ 20,074,491
Virginia Space Flight Academy	-	-	-	-	-	21,042
Virginia Tidewater Consortium for Higher Education	662,057	576,141	575,071	633,094	567,905	670,218
Virginia Space Grant Consortium	3,486,217	3,485,841	3,499,493	3,369,477	4,136,516	4,683,565
<b>TOTAL AFFILIATED ACTIVITY</b>	<b>\$ 4,148,274</b>	<b>\$ 4,061,982</b>	<b>\$ 4,074,564</b>	<b>\$ 4,002,572</b>	<b>\$ 18,146,870</b>	<b>\$ 25,449,316</b>
<b>% CHANGE FROM PRIOR YEAR</b>	<b>2.12%</b>	<b>-0.31%</b>	<b>1.80%</b>	<b>-77.94%</b>	<b>-28.69%</b>	<b>-22.37%</b>
Average yearly increase ( decrease)	-16.74%	-17.52%				
<b>GRAND TOTAL</b>	<b>48,901,060</b>	<b>46,600,214</b>	<b>50,921,047</b>	<b>50,458,846</b>	<b>60,791,595</b>	<b>68,501,041</b>

**SCHEDULE 2**

**Summary of University Activity**

**Major Funding Source**

**Fiscal Year 2019 through Fiscal Year 2015**

**SCHEDULE 2**  
**OLD DOMINION UNIVERSITY RESEARCH FOUNDATION**  
**SUMMARY OF UNIVERSITY ACTIVITY BY MAJOR FUNDING SOURCE**  
(MEASURED BY EXPENDITURES INCURRED)  
**FISCAL YEAR 2019 THROUGH FISCAL YEAR 2015**

FUNDING SOURCE / AGENCY	FY19		FY18		FY17		FY16		FY15	
	Amount	Percent of Total								
<b>FEDERAL</b>										
National Science Foundation	\$ 8,433,159	17.2%	\$ 6,529,391	14.0%	\$ 6,721,391	14.3%	\$ 6,551,190	14.1%	585401202.0%	13.7%
U.S. Department of Health & Human Services	5,993,011	12.3%	6,304,663	13.5%	6,633,834	14.2%	4,254,422	9.2%	2,980,391	7.0%
United States Navy	3,086,452	6.3%	1,747,861	3.8%	2,230,435	4.8%	3,063,024	6.6%	3,366,028	7.9%
National Aeronautics & Space Administration	2,383,714	4.9%	2,676,528	5.7%	1,464,654	3.1%	1,157,102	2.5%	1,293,397	3.0%
U.S. Department of Energy	1,468,616	3.0%	1,487,637	3.2%	1,507,898	3.2%	1,644,625	3.5%	-	0.0%
U.S. Department of Education	1,197,367	2.4%	1,467,534	3.1%	4,216,252	9.0%	6,693,743	14.4%	8,634,757	20.2%
United States Air Force	555,232	1.1%	865,729	1.9%	493,352	1.1%	261,040	0.6%	35,265	0.1%
Small Business Administration	472,226	1.0%	485,835	1.0%	483,600	1.0%	400,172	0.9%	420,985	1.0%
Fermi National Accelerator Lab	373,702	0.8%	167,137	0.4%	159,185	0.3%	251,207	0.5%	351,579	0.8%
United States Army	252,225	0.5%	195,239	0.4%	6,079	0.0%	11,638	0.0%	162,513	0.4%
AMES Research Labs	224,239	0.5%	74,070	0.2%	65,865	0.1%	45,922	0.1%	2,354	0.0%
National Oceanic & Atmospheric Administration	181,623	0.4%	199,609	0.4%	257,530	0.5%	63,088	0.1%	35,092	0.1%
U.S. Department of Agriculture	172,167	0.4%	167,973	0.4%	139,902	0.3%	707	0.0%	-	0.0%
U.S. Department of Justice	164,119	0.3%	136,825	0.3%	6,218	0.0%	101,136	0.2%	58,648	0.1%
SERDP	146,561	0.3%	-	0.0%	-	0.0%	-	0.0%	-	0.0%
National Security Agency	113,989	0.2%	-	0.0%	99,401	0.2%	17,275	0.0%	-	0.0%
Institute of Museum and Library Services	78,293	0.2%	161,725	0.3%	248,376	0.5%	322,314	0.7%	219,942	0.5%
U.S. Fish and Wildlife	66,331	0.1%	69,229	0.1%	58,186	0.1%	27,916	0.1%	-	0.0%
National Endowment/Humanities	26,185	0.1%	230,079	0.5%	110,225	0.2%	242,957	0.5%	126,131	0.3%
U.S. Environmental Protection Agency	6,783	0.0%	7,500	0.0%	17,770	0.0%	66,944	0.1%	60,940	0.1%
National Institute of Standards and Technology	-	0.0%	107,400	0.2%	164,434	0.4%	349,808	0.8%	251,433	0.6%
NON-DISCLOSED SPONSORS	-	0.0%	-	0.0%	71,852	0.2%	-	0.0%	-	0.0%
U.S. Department of Defense - Other	-	0.0%	-	0.0%	94,468	0.2%	367,194	0.8%	617,406	1.4%
U.S. Department of Housing and Urban Development	-	0.0%	-	0.0%	52,377	0.1%	100,248	0.2%	6,576	0.0%
Other Federal	144,844	0.3%	183,831	0.4%	80,309	0.2%	130,086	0.3%	200,135	0.5%
<b>SUBTOTAL FEDERAL</b>	<b>\$ 25,540,836</b>	<b>51.9%</b>	<b>\$ 23,265,797</b>	<b>49.5%</b>	<b>\$ 25,383,592</b>	<b>54.0%</b>	<b>\$ 26,123,759</b>	<b>56.0%</b>	<b>\$ 24,677,586</b>	<b>57.4%</b>

**SCHEDULE 2**  
**OLD DOMINION UNIVERSITY RESEARCH FOUNDATION**  
**SUMMARY OF UNIVERSITY ACTIVITY BY MAJOR FUNDING SOURCE**  
(MEASURED BY EXPENDITURES INCURRED)  
**FISCAL YEAR 2019 THROUGH FISCAL YEAR 2015**

FUNDING SOURCE / AGENCY	FY19		FY18		FY17		FY16		FY15	
	Amount	Percent of Total								
<b>STATE &amp; LOCAL GOVERNMENT AND AGREEMENTS WITH OTHER UNIVERSITIES</b>										
Old Dominion University - See Note	\$ 9,940,511	20.3%	\$ 9,398,469	20.2%	\$ 8,805,528	18.8%	\$ 7,912,031	17.0%	\$ 7,024,744	16.5%
State Council of Higher Education for Virginia	858,379	1.8%	819,088	1.8%	-	0.0%	48,032	0.1%	109,031	0.3%
University of Virginia	555,268	1.1%	600,296	1.3%	444,556	0.9%	306,900	0.7%	233,490	0.5%
VA Polytechnic Institute and State University	338,460	0.7%	336,387	0.7%	37,868	0.1%	50,062	0.1%	276,454	0.6%
Norfolk State University	327,700	0.7%	316,229	0.7%	302,588	0.6%	182,110	0.4%	49,419	0.1%
Governor's Office	308,404	0.6%	347,249	0.7%	452,707	1.0%	424,733	0.9%	-	0.0%
Virginia Marine Resources Commission	272,292	0.6%	275,789	0.6%	281,506	0.6%	268,114	0.6%	306,969	0.7%
University of Oregon	268,443	0.5%	-	0.0%	-	0.0%	-	0.0%	-	0.0%
Virginia Institute of Marine Sciences	255,519	0.5%	196,123	0.4%	122,410	0.3%	101,293	0.2%	77,524	0.2%
Hampton Roads Sanitation District Commission	242,952	0.5%	172,771	0.4%	109,972	0.2%	113,734	0.3%	186,822	0.4%
Virginia Department of Emergency Management	242,109	0.5%	236,566	0.5%	87,512	0.2%	85,308	0.2%	99,816	0.2%
University of Illinois	231,972	0.5%	337,789	0.7%	263,331	0.6%	-	0.0%	128,817	0.3%
Colorado School of Mines	214,465	0.4%	235,350	0.5%	37,712	0.1%	-	0.0%	-	0.0%
Texas A&M University	206,563	0.4%	163,353	0.4%	133,692	0.3%	130,156	0.3%	59,947	0.1%
State University of New Jersey (all campuses)	183,320	0.4%	172,197	0.4%	224,870	0.5%	131,470	0.3%	152,130	0.4%
Crater Planning District Commission	158,477	0.3%	124,991	0.3%	131,139	0.3%	146,141	0.3%	111,352	0.3%
Center of Innovative Technology	155,448	0.3%	-	0.0%	-	0.0%	129,133	0.3%	83,791	0.2%
Virginia Department of Motor Vehicles	153,096	0.3%	275,445	0.6%	234,061	0.5%	246,916	0.5%	262,515	0.6%
Michigan State University	119,238	0.2%	111,685	0.2%	71,699	0.2%	111,461	0.2%	184,156	0.4%
Arizona State University	111,238	0.2%	19,921	0.0%	16,832	0.0%	18,168	0.0%	-	0.0%
George Mason University	104,373	0.2%	116,977	0.3%	140,655	0.3%	165,351	0.4%	56,657	0.1%
Eastern Virginia Medical School	83,473	0.2%	64,979	0.1%	107,954	0.2%	162,934	0.4%	145,427	0.3%
Temple University	74,952	0.2%	77,635	0.2%	111,014	0.2%	59,589	0.1%	48,262	0.1%
Florida Fish & Wildlife Conservation Commission	69,643	0.1%	67,166	0.1%	61,844	0.1%	47,258	0.1%	-	0.0%
Virginia Department of Transportation	59,797	0.1%	83,698	0.2%	66,089	0.1%	71,051	0.2%	85,179	0.2%
Iowa State University	55,263	0.4%	200,681	0.4%	229,776	0.4%	236,604	0.4%	221,568	0.5%
City of Virginia Beach	46,010	0.8%	43,932	0.8%	18,504	0.8%	247,497	0.5%	456,935	1.1%
City of Portsmouth	31,621	0.1%	40,468	0.1%	21,821	0.0%	151,616	0.3%	343,603	0.8%
University of Southern Mississippi	28,112	0.1%	71,863	0.2%	163,162	0.3%	50,764	0.1%	36,788	0.1%
University of Maryland	23,261	0.0%	34,433	0.1%	140,576	0.3%	114,225	0.2%	54,735	0.1%
State University of New Jersey	-	0.0%	-	0.0%	224,870	0.5%	131,470	0.3%	152,130	0.4%
University of Michigan	-	0.0%	111,685	0.2%	71,699	0.2%	110,461	0.2%	184,156	0.4%
North Carolina State University	-	0.0%	85,589	0.2%	61,517	0.1%	43,004	0.1%	57,743	0.1%
Rochester Institute of Technology	-	0.0%	51,750	0.1%	60,514	0.1%	73,600	0.2%	46	0.0%
University of Colorado	-	0.0%	3,575	0.0%	63,635	0.1%	19,475	0.0%	-	0.0%
Georgia Regents University	-	0.5%	-	0.5%	307,004	0.5%	535,479	0.5%	321,166	0.8%
Johns-Hopkins Hospital	-	0.0%	-	0.0%	121,847	0.3%	43,157	0.1%	-	0.0%
Commonwealth Health Research Board	-	0.0%	-	0.0%	91,828	0.2%	81,654	0.2%	-	0.0%
University of Idaho	-	0.0%	-	0.0%	-	0.0%	109,712	0.2%	373,854	0.9%
Florida Department of Environmental Protection	-	0.0%	-	0.0%	-	0.0%	107,779	0.2%	2,584	0.0%
Virginia Department of Environmental Quality	-	0.0%	-	0.0%	-	0.0%	-	0.4%	269,920	0.4%
University of Southern California	-	0.0%	-	0.0%	84,742	0.2%	115,849	0.2%	124,226	0.3%
University of Toledo	-	0.0%	(16,299)	0.0%	-	0.0%	2,482	0.0%	(9,562)	0.0%
Other State & Local	776,470	1.6%	955,946	2.1%	914,049	1.9%	794,034	1.7%	117,430	0.3%
<b>SUBTOTAL STATE &amp; LOCAL</b>	<b>\$ 16,496,828</b>	<b>35.2%</b>	<b>\$ 16,133,774</b>	<b>35.7%</b>	<b>\$ 14,821,085</b>	<b>32.1%</b>	<b>\$ 13,880,806</b>	<b>29.6%</b>	<b>\$ 12,389,827</b>	<b>28.9%</b>

**SCHEDULE 2**  
**OLD DOMINION UNIVERSITY RESEARCH FOUNDATION**  
**SUMMARY OF UNIVERSITY ACTIVITY BY MAJOR FUNDING SOURCE**  
(MEASURED BY EXPENDITURES INCURRED)  
**FISCAL YEAR 2019 THROUGH FISCAL YEAR 2015**

FUNDING SOURCE / AGENCY	FY19		FY18		FY17		FY16		FY15	
	Amount	Percent of Total								
<b>PRIVATE AND OTHER SPONSORS</b>										
Jefferson Science Associates	\$ 1,037,551	2.1%	\$ 1,004,818	2.2%	\$ 1,178,928	2.5%	\$ 1,164,984	2.5%	\$ 1,061,585	2.5%
Pulse Biosciences, Inc.	705,637	1.4%	906,568	1.9%	854,008	1.8%	1,006,931	2.2%	214,159	0.5%
National Institute of Aerospace	465,890	1.0%	469,843	1.0%	473,785	1.0%	459,190	1.0%	319,519	0.7%
The National Academies	457,152	0.9%	398,008	0.9%	37,576	0.1%	-	0.0%	-	0.0%
Camber Corporation	311,458	0.6%	115,206	0.2%	-	0.0%	-	0.0%	-	0.0%
Sentara Hospitals	295,977	0.6%	81,296	0.2%	(245)	0.0%	56,745	0.1%	63,766	0.1%
WR Systems LTD	252,545	0.5%	119,355	0.3%	-	0.0%	-	0.0%	19,030	0.0%
Southern Universities Research Association (SURA)	246,227	0.5%	121,800	0.3%	-	0.0%	-	0.0%	-	0.0%
Hogan-Lovells	187,384	0.4%	-	0.0%	-	0.0%	-	0.0%	-	0.0%
University of Southampton	183,197	0.4%	463,067	1.0%	594,160	1.3%	606,869	1.3%	613,368	1.4%
World Conservation Union (IUCN)	157,874	0.3%	188,617	0.4%	213,108	0.5%	152,773	0.3%	134,104	0.3%
Opportunity, Inc.	121,344	0.2%	91,583	0.2%	-	0.0%	14,376	0.0%	118,474	0.3%
Lifenet	104,238	0.2%	45	0.0%	100,905	0.2%	9,679	0.0%	3,360	0.0%
Engility	93,518	0.2%	94,136	0.2%	126,096	0.3%	85,513	0.2%	-	0.0%
ALEX - Alternative Experts, LLC	85,309	0.2%	-	0.0%	-	0.0%	-	0.0%	-	0.0%
University of Agder	85,040	0.2%	58,937	0.1%	84,299	0.2%	-	0.0%	-	0.0%
CACI, Inc.--Federal	82,909	0.2%	163,551	0.4%	-	0.0%	-	0.0%	-	0.0%
Pew Charitable Trusts	81,025	0.2%	33,755	0.1%	-	0.0%	-	0.0%	-	0.0%
Jeffress	79,919	0.2%	112,751	0.2%	123,323	0.3%	90,880	0.2%	75,561	0.2%
Commonwealth Center for Advanced Manufacturing	76,656	0.2%	70,423	0.2%	148,902	0.3%	117,383	0.3%	138,773	0.3%
Ocean Bay, LLC	71,939	0.1%	85,398	0.2%	-	0.0%	-	0.0%	-	0.0%
Children's Heath Foundation, Inc.	69,372	0.1%	53,569	0.1%	23,664	0.1%	-	0.0%	52,493	0.1%
Non-Disclosed	61,175	0.1%	157,383	0.3%	181,808	0.4%	170,200	0.4%	136,827	0.3%
Genedge Alliance (formerly Philpott Manufacturing)	54,135	0.1%	179,259	0.4%	307,053	0.7%	259,820	0.6%	223,265	0.5%
BEM Controls, LLC	53,882	0.1%	-	0.0%	-	0.0%	-	0.0%	-	0.0%
Wildlife Management Institute	53,808	0.1%	-	0.0%	-	0.0%	-	0.0%	-	0.0%
Ohio Suicide Prevention Foundation	52,950	0.1%	5,660	0.0%	-	0.0%	-	0.0%	-	0.0%
Vr Rehab, Inc.	45,071	0.1%	85,746	0.2%	-	0.0%	-	0.0%	-	0.0%
Blue Moon Fund	39,987	0.1%	48,955	0.1%	147,305	0.3%	166,253	0.4%	-	0.0%
Ferring Pharmaceuticals Inc.	37,631	0.1%	135,072	0.3%	43,345	0.1%	-	0.0%	-	0.0%
Plasser American Corporation	35,480	0.1%	87,212	0.2%	10,307	0.0%	-	0.0%	-	0.0%
Midland GIS Solutions	14,916	0.0%	66,996	0.1%	-	0.0%	-	0.0%	-	0.0%
General Dynamics	13,127	0.0%	-	0.0%	-	0.0%	97,954	0.2%	-	0.0%
Center for Mind and Culture	7,436	0.0%	155,875	0.3%	-	0.0%	-	0.0%	-	0.0%
Battelle Corporation	6,268	0.0%	90,337	0.2%	152,594	0.3%	41,146	0.1%	-	0.0%
Qatar University	(11,325)	0.0%	27,745	0.1%	84,255	0.2%	127,698	0.3%	25,861	0.1%
The Geneva Foundation	-	0.0%	90,574	0.2%	227,252	0.5%	110,173	0.2%	-	0.0%
NATO	-	0.0%	56,000	0.1%	56,800	0.1%	-	0.0%	-	0.0%
Dominion Resources Services, Inc.	-	0.0%	19,068	0.0%	(2,504)	0.0%	158,722	0.3%	122,159	0.3%
LMI	-	0.0%	-	0.0%	100,704	0.2%	113,096	0.2%	127,880	0.3%
Boston VA Research Institute, Inc	-	0.0%	-	0.0%	61,417	0.1%	67,810	0.1%	-	0.0%
Stihl	-	0.0%	-	0.0%	29,394	0.1%	100,103	0.2%	16,103	0.0%
American Diabetes Association	-	0.0%	-	0.0%	15,093	0.0%	55,927	0.1%	194,606	0.5%
Advanced Anti-Terror Technologies, Inc.	-	0.0%	-	0.0%	-	0.0%	117,383	0.3%	106,091	0.2%
Oncosure Medical, Inc.	-	0.0%	-	0.0%	-	0.0%	25,764	0.1%	129,990	0.3%
Continental Automotive Systems, Inc	-	0.0%	-	0.0%	-	0.0%	-	0.0%	148,000	0.3%
Cubic Applications, Inc.	-	0.0%	-	0.0%	-	0.0%	-	0.0%	147,073	0.3%
Medical Cyberworlds, Inc.	-	0.0%	-	0.0%	-	0.0%	-	0.0%	139,377	0.3%
Applied Research Associates, Inc.	-	0.0%	109,811	0.2%	-	0.0%	-	0.0%	-	0.0%
Other Private Sponsors	1,146,692	2.3%	1,252,227	2.7%	1,214,327	2.6%	1,046,718	2.3%	1,107,117	2.6%
<b>SUBTOTAL PRIVATE</b>	<b>\$ 6,863,396</b>	<b>14.0%</b>	<b>\$ 7,200,645</b>	<b>15.5%</b>	<b>\$ 6,671,804</b>	<b>14.2%</b>	<b>\$ 6,451,709</b>	<b>13.9%</b>	<b>\$ 5,577,313</b>	<b>13.1%</b>
<b>TOTAL</b>	<b>\$ 48,901,060</b>	<b>101.1%</b>	<b>\$ 46,600,216</b>	<b>100.7%</b>	<b>\$ 46,876,482</b>	<b>100.3%</b>	<b>\$ 46,456,274</b>	<b>99.5%</b>	<b>\$ 42,644,726</b>	<b>99.3%</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.

**SCHEDULE 2**  
**OLD DOMINION UNIVERSITY RESEARCH FOUNDATION**  
**SUMMARY OF UNIVERSITY ACTIVITY BY MAJOR FUNDING SOURCE**  
(MEASURED BY EXPENDITURES INCURRED)  
**FISCAL YEAR 2019 THROUGH FISCAL YEAR 2015**

FUNDING SOURCE / AGENCY	FY19		FY18		FY17		FY16		FY15	
	Amount	Percent of Total								
<b>Old Dominion University pass through from:</b>										
U.S. Department of Education	\$ 2,279,784	4.7%	\$ 2,107,455	4.5%	\$ 1,173,032	2.5%	\$ 758,034	1.6%	\$ 420,562	1.0%
Virginia Department Of Education	2,148,830	4.4%	2,299,531	4.9%	3,464,512	7.4%	4,138,355	8.9%	4,008,186	9.4%
Virginia Department of Environmental Quality	1,134,626	2.3%	1,179,356	2.5%	1,236,651	2.6%	1,068,484	2.3%	909,391	2.1%
United States Air Force	1,007,042	2.1%	1,684,133	3.6%	1,304,868	2.8%	466,154	1.0%	-	0.0%
Virginia Biosciences Health Research Corp.	632,238	1.3%	106,679	0.2%	339,013	0.7%	508,416	1.1%	-	0.0%
United States Navy	601,723	1.2%	151,106	0.3%	-	0.0%	-	0.0%	-	0.0%
Hampton Roads Cyber Collaboration	600,656	1.2%	71,733	0.2%	-	0.0%	-	0.0%	-	0.0%
U.S. Department of Labor	361,896	0.7%	553,902	1.2%	364,696	0.8%	-	0.0%	-	0.0%
Old Dominion University	359,595	0.7%	247,671	0.5%	376,791	0.8%	352,261	0.8%	639,858	1.5%
National Aeronautics & Space Administration	296,181	0.6%	330,780	0.7%	-	0.0%	-	0.0%	-	0.0%
Virginia Department Of Behavioral Health and Developmental Services	183,488	0.4%	224,750	0.5%	192,742	0.4%	76,500	0.2%	57,140	0.1%
U.S. Department of Energy	155,540	0.3%	90,334	0.2%	226,505	0.5%	480,206	1.0%	245,720	0.6%
Foreign	40,857	0.1%	62,128	0.1%	-	0.0%	(210)	0.0%	194,204	0.5%
Virginia Department Of Health	36,505	0.1%	-	0.0%	4,349	0.0%	-	0.0%	-	0.0%
State Council of Higher Education for Virginia	(100)	0.0%	101,004	0.2%	17,139	0.0%	-	0.0%	-	0.0%
Other Sponsors	101,651	0.2%	187,908	0.4%	105,230	0.2%	63,831	0.1%	549,682	1.3%
Old Dominion University Total	\$ 9,940,511	20.3%	\$ 9,398,469	20.2%	\$ 8,805,528	18.8%	\$ 7,912,031	17.0%	\$ 7,024,744	16.5%

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 2019 through Fiscal Year 2017**

**SCHEDULE 3**  
**OLD DOMINION UNIVERSITY RESEARCH FOUNDATION**  
**REPORT OF SPONSORED PROGRAM ACTIVITY**  
**DIRECT COST, INDIRECT COST AND EFFECTIVE INDIRECT COST RATE**  
**(MEASURED BY EXPENDITURES INCURRED)**  
**FISCAL YEAR 2019 THROUGH FISCAL YEAR 2017**

	Fiscal Year 2019					Fiscal Year 2018					Fiscal Year 2017				
	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	Effective Indirect Cost Rate			
<b>COLLEGE OF ARTS AND LETTERS</b>															
Dean's Office	\$ 1,999	\$ -	\$ 1,999	0.0%	\$ -	\$ -	\$ -	0.0%	\$ -	\$ -	\$ -	-	0.0%		
Communication and Theatre Arts														2,075	0.0%
English	120,525	6,276	126,801	5.2%	100,876	5,887	106,763	5.8%	58,683	5,145	63,828	8.8%			
History	9,276	7,738	17,014	83.4%	75,116	-	75,116	0.0%	6,300	-	6,300	0.0%			
Philosophy & Religious Studies - Cybersecurity	1,818	1,000	2,818	55.0%	-	-	-	0.0%	9,155	5,474	14,629	59.8%			
Political Science & Geography	58,723	15,675	74,398	26.7%	55,679	21,528	77,207	38.7%	19,907	7,417	27,324	37.3%			
Social Science Research Center	128,683	19,538	148,221	15.2%	189,245	19,517	208,762	10.3%	153,287	13,064	166,351	8.5%			
Sociology & Criminal Justice	573,332	169,723	743,055	29.6%	646,432	119,697	766,128	18.5%	348,563	126,748	475,311	36.4%			
Women's Studies	6,465	-	6,465	0.0%	8,255	-	8,255	0.0%	15,128	-	15,128	0.0%			
College Total	\$ 900,821	\$ 219,950	\$ 1,120,772	24.4%	\$ 1,075,603	\$ 166,629	\$ 1,242,231	15.5%	\$ 613,097	\$ 157,849	\$ 770,946	25.7%			
<b>COLLEGE OF BUSINESS AND PUBLIC ADMINISTRATION</b>															
Economics	\$ 95,017	\$ 44,863	\$ 139,880	47.2%	\$ 113,057	\$ 10,097	\$ 123,154	8.9%	\$ 47,904	\$ 22,466	\$ 70,370	46.9%			
Information Systems / Decision Sciences	206,883	17,449	224,332	8.4%	62,755	32,499	95,253	51.8%	93,184	46,135	139,319	49.5%			
Information Systems & Decision Sciences - CYBERSECURITY	64,322	14,437	78,759	22.4%	51,716	14,525	66,241	28.1%	381	-	381	0.0%			
Management	-	-	-	0.0%	-	-	-	0.0%	663	-	663	0.0%			
Marketing	-	-	-	0.0%	11,008	2,752	13,760	25.0%	9,847	2,462	12,308	25.0%			
Public Service	35,697	8,001	43,697	22.4%	31,661	14,608	46,269	46.1%	17,488	7,788	25,276	44.5%			
College Total	\$ 401,919	\$ 84,749	\$ 486,668	21.1%	\$ 270,197	\$ 74,481	\$ 344,677	27.6%	\$ 169,465	\$ 78,851	\$ 248,316	46.5%			
<b>COLLEGE OF EDUCATION</b>															
Dean's Office	\$ 430,047	\$ -	\$ 430,047	0.0%	\$ 498,687	\$ -	\$ 498,687	0.0%	\$ 456,897	\$ 8,588	\$ 465,485	1.9%			
Dean's Office - Cybersecurity	1,818	1,000	2,818	55.0%	-	-	-	0.0%	-	-	-	0.0%			
Center for Education Partnerships	444,863	34,892	479,755	7.8%	537,382	18,429	555,811	3.4%	3,008,429	232,028	3,240,457	7.7%			
Communication Disorders and Special Education	3,880,395	350,816	4,231,210	9.0%	3,527,428	285,474	3,812,902	8.1%	3,573,972	268,962	3,842,934	7.5%			
Counseling and Human Services	355,883	12,713	368,595	3.6%	289,571	10,396	299,968	3.6%	330,903	14,177	345,081	4.3%			
Educational Foundations and Leadership	139,533	46,681	186,213	33.5%	173,444	55,728	229,172	32.1%	482,372	79,765	562,137	16.5%			
Human Movement Sciences	9,228	-	9,228	0.0%	30,013	53	30,066	0.2%	45,923	2,734	48,658	6.0%			
STEM Education and Professional Studies	107,847	36,701	144,548	34.0%	261,567	21,515	283,082	8.2%	761,856	81,103	842,959	10.6%			
Teaching and Learning	226,187	32,904	259,091	14.5%	269,854	39,000	308,853	14.5%	359,562	50,462	410,023	14.0%			
College Total	\$ 5,595,800	\$ 515,706	\$ 6,111,506	9.2%	\$ 5,587,947	\$ 430,595	\$ 6,018,542	7.7%	\$ 9,019,915	\$ 737,818	\$ 9,757,734	8.2%			

**SCHEDULE 3**  
**OLD DOMINION UNIVERSITY RESEARCH FOUNDATION**  
**REPORT OF SPONSORED PROGRAM ACTIVITY**  
**DIRECT COST, INDIRECT COST AND EFFECTIVE INDIRECT COST RATE**  
**(MEASURED BY EXPENDITURES INCURRED)**  
**FISCAL YEAR 2019 THROUGH FISCAL YEAR 2017**

	Fiscal Year 2019					Fiscal Year 2018					Fiscal Year 2017		
	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	Effective Indirect Cost Rate	
<b>COLLEGE OF ENGINEERING</b>													
Dean's Office	\$ 983,927	\$ 287,594	\$ 1,271,521	29.2%	\$ 424,865	\$ 108,378	\$ 533,243	25.5%	\$ 271,427	\$ 143,603	\$ 415,031	52.9%	
Civil & Environmental Engineering	700,483	241,873	942,356	34.5%	797,222	215,904	1,013,126	27.1%	1,119,109	262,148	1,381,257	23.4%	
Electrical & Computer Engineering	1,029,710	387,197	1,416,907	37.6%	1,020,967	448,113	1,469,081	43.9%	844,860	373,270	1,218,130	44.2%	
Electrical & Computer Engineering - ARC	367,620	98,829	466,449	26.9%	356,225	119,532	475,757	33.6%	393,407	109,434	502,841	27.8%	
Electrical & Computer Engineering - Bioelectrics	1,264,333	346,070	1,610,403	27.4%	685,184	360,301	1,045,485	52.6%	369,388	164,935	534,323	44.7%	
Electrical & Computer Engineering - CYBERSECURITY	770,985	67,906	838,892	8.8%	58,408	7,101	65,508	12.2%	30,676	13,031	43,706	42.5%	
Engineering Management and Systems Engineering	410,629	194,564	605,194	47.4%	367,836	186,724	554,560	50.8%	290,176	124,065	414,241	42.8%	
Engineering Management and Systems Engineering - Cybersecur	300,740	-	300,740	0.0%	-	-	-	0.0%	-	-	-	0.0%	
Engineering Technology	317,150	115,835	432,985	36.5%	574,639	151,477	726,117	26.4%	628,690	182,658	811,348	29.1%	
Mechanical & Aerospace Engineering	801,325	213,728	1,015,053	26.7%	745,804	266,668	1,012,472	35.8%	889,564	291,840	1,181,404	32.8%	
Mechanical & Aerospace Engineering - ARC	-	-	-	0.0%	-	-	-	0.0%	15,438	-	15,438	0.0%	
Computation Modeling & Simulation Engineering	1,233,990	501,809	1,735,799	40.7%	396,259	171,599	567,858	43.3%	376,226	202,649	578,875	53.9%	
Computation Modeling & Simulation Engineering - VMASC	-	-	-	0.0%	458,142	232,108	690,251	50.7%	527,027	70,061	597,088	13.3%	
Computation Modeling & Simulation Engineering - Cybersecurity	313,671	6,452	320,123	2.1%	-	-	-	0.0%	-	-	-	0.0%	
College Total	\$ 8,494,563	\$ 2,461,857	\$ 10,956,420	29.0%	\$ 5,885,552	\$ 2,267,907	\$ 8,153,459	38.5%	\$ 5,755,988	\$ 1,937,694	\$ 7,693,682	33.7%	
<b>COLLEGE OF HEALTH SCIENCES</b>													
Dean's Office	\$ 41,227	\$ 3,598	\$ 44,825	8.7%	\$ 17,352	\$ 568	\$ 17,920	3.3%	\$ -	\$ -	\$ -	0.0%	
Community & Environmental Health	167,928	35,877	203,805	21.4%	155,379	53,722	209,101	34.6%	86,087	12,824	98,912	14.9%	
Dental Hygiene	5,764	461	6,225	8.0%	(15,216)	(5,005)	(20,221)	32.9%	34,843	7,831	42,674	22.5%	
Medical Diagnostic & Translational Sciences	217,839	46,018	263,858	21.1%	364,162	63,900	428,063	17.5%	582,198	108,863	691,061	18.7%	
Medical Diagnostic & Translational Sciences - Bioelectronics	1,433,430	597,983	2,031,413	41.7%	1,874,813	547,768	2,422,581	29.2%	1,637,580	579,271	2,216,851	35.4%	
Nursing	618,705	29,029	647,734	4.7%	1,032,499	45,329	1,077,828	4.4%	1,858,132	79,219	1,937,351	4.3%	
School of Rehabilitation Sciences	77,255	3,529	80,785	4.6%	115,783	6,267	122,050	5.4%	74,224	6,203	80,427	8.4%	
College Total	\$ 2,562,149	\$ 716,496	\$ 3,278,645	28.0%	\$ 3,544,772	\$ 712,549	\$ 4,257,321	20.1%	\$ 4,273,064	\$ 794,211	\$ 5,067,275	18.6%	

**SCHEDULE 3**  
**OLD DOMINION UNIVERSITY RESEARCH FOUNDATION**  
**REPORT OF SPONSORED PROGRAM ACTIVITY**  
**DIRECT COST, INDIRECT COST AND EFFECTIVE INDIRECT COST RATE**  
**(MEASURED BY EXPENDITURES INCURRED)**  
**FISCAL YEAR 2019 THROUGH FISCAL YEAR 2017**

	Fiscal Year 2019					Fiscal Year 2018					Fiscal Year 2017		
	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	Effective Indirect Cost Rate	
<b>COLLEGE OF SCIENCES</b>													
Dean's Office	\$ 24,813	\$ 13,151	\$ 37,964	53.0%	\$ -	\$ -	\$ -	0.0%	\$ -	\$ -	\$ -	-	0.0%
Biological Sciences	2,236,900	518,686	2,755,586	23.2%	2,047,524	487,548	2,535,072	23.8%	1,690,759	348,578	2,039,337	20.6%	
Center for Coastal Physical Oceanography	529,359	282,003	811,361	53.3%	579,340	243,286	822,626	42.0%	710,014	229,194	939,208	32.3%	
Center for Coastal Physical Oceanography - MARI	40,332	80	40,412	0.2%	104,002	3,503	107,505	3.4%	58,186	-	58,186	0.0%	
Chemistry and Biochemistry	1,814,855	578,971	2,393,826	31.9%	1,761,776	553,963	2,315,738	31.4%	1,988,626	629,696	2,618,322	31.7%	
Chemistry and Biochemistry - ARC	3,013	904	3,917	30.0%	263	94	357	35.8%	-	-	-	0.0%	
Computer Sciences	817,294	191,526	1,008,821	23.4%	1,160,155	378,653	1,538,808	32.6%	1,187,779	426,526	1,614,304	35.9%	
Computer Sciences - ARC	88,513	19,024	107,538	21.5%	-	-	-	0.0%	-	-	-	0.0%	
Computer Sciences - Cybersecurity	312,456	5,213	317,670	1.7%	-	-	-	0.0%	-	-	-	0.0%	
Mathematics & Statistics	719,652	195,845	915,496	27.2%	653,234	180,686	833,920	27.7%	525,980	143,196	669,176	27.2%	
Ocean, Earth & Atmospheric Sciences	2,086,305	753,064	2,839,369	36.1%	1,949,829	656,532	2,606,361	33.7%	2,006,550	715,720	2,722,270	35.7%	
Ocean, Earth & Atmospheric Sciences - SSRP	-	-	-	0.0%	412,654	86,810	499,463	21.0%	455,646	102,611	558,257	22.5%	
Physics	3,128,475	745,921	3,874,396	23.8%	2,777,603	662,272	3,439,875	23.8%	2,906,176	665,595	3,571,771	22.9%	
Psychology	567,597	156,670	724,267	27.6%	973,559	218,693	1,192,251	22.5%	956,613	264,981	1,221,594	27.7%	
College Total	\$ 12,369,564	\$ 3,461,059	\$ 15,830,622	28.0%	\$ 12,419,938	\$ 3,472,039	\$ 15,891,977	28.0%	\$ 12,486,330	\$ 3,526,097	\$ 16,012,427	28.2%	
<b>OFFICE OF RESEARCH AND OTHER ACTIVITY</b>													
Frank Reidy Research Center for Bioelectronics	\$ 653,323	\$ 310,152	\$ 963,475	47.5%	\$ 1,054,270	\$ 473,822	\$ 1,528,092	44.9%	\$ 1,485,982	\$ 781,204	\$ 2,267,186	52.6%	
Virginia Modeling, Analysis and Simulation Center	3,143,126	556,211	3,699,337	17.7%	1,996,377	578,573	2,574,951	29.0%	1,769,842	616,510	2,386,352	34.8%	
The Graduate School	64,446	16,663	81,109	25.9%	141,159	28,193	169,352	20.0%	-	-	-	0.0%	
Institute for Innovation & Entrepreneurship	1,021,496	153,071	1,174,567	15.0%	1,150,599	162,446	1,313,045	14.1%	1,552,527	156,811	1,709,338	10.1%	
Miscellaneous ODU Units	746,229	86,436	832,665	11.6%	784,646	75,012	859,658	9.6%	829,495	103,731	933,226	12.5%	
Miscellaneous ODU Units - Cybersecurity	166,577	50,424	217,001	30.3%	151,910	33,018	184,928	21.7%	-	-	-	0.0%	
College Total Other Units	\$ 5,795,196	\$ 1,172,958	\$ 6,968,154	20.2%	\$ 5,278,960	\$ 1,351,065	\$ 6,630,025	25.6%	\$ 5,637,847	\$ 1,658,255	\$ 7,296,102	29.4%	
<b>TOTAL UNIVERSITY ACTIVITY</b>	<b>\$ 36,120,012</b>	<b>\$ 8,632,775</b>	<b>\$ 44,752,787</b>	<b>23.9%</b>	<b>\$ 34,062,968</b>	<b>\$ 8,475,264</b>	<b>\$ 42,538,233</b>	<b>24.9%</b>	<b>\$ 37,955,707</b>	<b>\$ 8,890,775</b>	<b>\$ 46,846,482</b>	<b>23.4%</b>	
<b>AFFILIATED ACTIVITY</b>													
Virginia Space Grant Consortium	3,278,671	207,546	3,486,217	6.3%	3,274,896	210,945	3,485,841	6.4%	3,231,281	268,213	3,499,493	8.3%	
Virginia Tidewater Consortium for Higher Education	615,601	46,456	662,057	7.5%	534,687	41,454	576,141	7.8%	533,395	41,676	575,071	7.8%	
<b>TOTAL AFFILIATED ACTIVITY</b>	<b>\$ 3,894,272</b>	<b>\$ 254,002</b>	<b>\$ 4,148,274</b>	<b>13.9%</b>	<b>\$ 3,809,584</b>	<b>\$ 252,398</b>	<b>\$ 4,061,982</b>	<b>14.2%</b>	<b>\$ 3,764,675</b>	<b>\$ 309,889</b>	<b>\$ 4,074,564</b>	<b>16.1%</b>	
<b>GRAND TOTAL</b>	<b>\$ 40,014,284</b>	<b>\$ 8,886,777</b>	<b>\$ 48,901,060</b>	<b>22.2%</b>	<b>\$ 37,872,552</b>	<b>\$ 8,727,663</b>	<b>\$ 46,600,215</b>	<b>23.0%</b>	<b>\$ 41,720,383</b>	<b>\$ 9,200,664</b>	<b>\$ 50,921,047</b>	<b>22.1%</b>	

SSRP= self supporting research program

**SCHEDULE 4**

**Sponsored Program Activity**

**Individual Project Listing**

**Fiscal Year 2019**

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

**FOR FISCAL YEAR 2019**

PROJECT NUMBER	SPONSORING AGENCY	PRINCIPAL INVESTIGATOR / PROJECT DIRECTOR	PROJECT DIRECT COST				PROJECT IDC AND FEES			TOTAL PROJECT COSTS	EFFECTIVE INDIRECT COST RATE	CENTER
			PERSONNEL AND FRINGE BENEFITS	SUPPLIES, CONTRACTUAL, GENERAL, & TRAVEL	EQUIPMENT	SUBCONTRACTS, CONSTRUCTION, TUITION & OTHER	TOTAL DIRECT COSTS	REIMBURSED INDIRECT COSTS	TOTAL SPECIAL FEES			
<b>COLLEGE OF ARTS AND LETTERS</b>												
Dean's Office												
200279-010	NORFOLK COMMISSION ON THE ARTS & HUMANITIES	STRAWN, C.	-	1,999	-	-	1,999	-	-	1,999		TRAD
			-	1,999	-	-	1,999	-	-	1,999	0.00%	
English												
400363-010	ASSOCIATION FOR COMPUTING MACHINERY	RICHARDS, D.	-	750	-	40	790	-	-	790		TRAD
300396-010	* OLD DOMINION UNIVERSITY	ZAREVA, A.	47,145	31,306	-	41,285	119,735	6,276	-	126,011		TRAD
			47,145	32,056	-	41,325	120,525	6,276	-	126,801	5.21%	
History												
600219-010	NORWEGIAN MARITIME MUSEUM	HEIDBRINK, I.	29,762	-	-	-	29,762	7,738	-	37,500		TRAD
300426-010	UNIVERSITY OF MICHIGAN	NUTZMAN, M.	(5,486)	-	-	-	(5,486)	-	-	(5,486)		TRAD
400326-010	AMERICAN COUNCIL OF LEARNED SOCIETIES	NUTZMAN, M.	(15,000)	-	-	-	(15,000)	-	-	(15,000)		TRAD
			9,276	-	-	-	9,276	7,738	-	17,014	83.42%	
Philosophy & Religious Studies - Cybersecurity												
100799-010	* NATIONAL SECURITY AGENCY	WITTKOWER, D.	1,818	-	-	-	1,818	1,000	-	2,818		TRAD
			1,818	-	-	-	1,818	1,000	-	2,818	55.00%	
Political Science and Geography												
100682-010	* U.S. FISH AND WILDLIFE SERVICES	ALLEN, T.	13,761	-	-	-	13,761	3,578	-	17,339		TRAD
300412-010	EAST CAROLINA STATE UNIVERSITY	ALLEN, T.	1,404	-	-	-	1,404	772	-	2,175		TRAD
400361-010	WILDLIFE MANAGEMENT INSTITUTE	ALLEN, T.	40,986	1,719	-	-	42,705	11,103	-	53,808		TRAD
100682-010	* U.S. FISH AND WILDLIFE SERVICES	ALLEN, T.	-	853	-	-	853	222	-	1,075		TRAD
500336-010	* SCIENCE SYSTEMS & APPLICATIONS, INC.	ALLEN, T.	-	-	-	0	0	-	-	0		TRAD
			56,151	2,571	-	0	58,723	15,675	-	74,398	26.69%	
Sociology and Criminal Justice												
*	NATIONAL INSTITUTE OF JUSTICE	DAI, M.	94,238	11,308	-	523	106,069	58,050	-	164,119		TRAD
100792-010	NATIONAL INSTITUTE OF JUSTICE	DAI, M.	2,482	11,509	-	-	13,991	7,695	-	21,686		TRAD
200221-020	* CITY OF SUFFOLK	GAINNEY, R.	1,665	-	-	-	1,665	433	-	2,098		TRAD
200248-010	* VIRGINIA OFFICE OF THE ATTORNEY GENERAL	GAINNEY, R.	8,752	-	-	-	8,752	2,276	-	11,028		TRAD
300519-010	* EASTERN VIRGINIA MEDICAL SCHOOL	GAINNEY, R.	467	269	-	-	735	-	-	735		TRAD
500372-010	* HOGAN-LOVELLS	GAINNEY, R.	23,076	1,103	-	-	24,179	13,298	-	37,477		TRAD
200267-010	CITY OF PORTSMOUTH	SUMTER, M.	17,539	-	-	2,892	20,431	11,237	-	31,668		TRAD
200248-010	* VIRGINIA OFFICE OF THE ATTORNEY GENERAL	TRIPLETT, R.	8,752	-	-	-	8,752	2,276	-	11,028		TRAD
100581-010	U.S. PUBLIC HEALTH SERVICE (NATIONAL INSTITUTES OF HEA YANG, X.		119,676	15,703	-	253,378	388,757	74,459	-	463,216		TRAD
			276,647	39,892	-	256,793	573,332	169,723	-	743,055	29.60%	
Women's Studies												
600205-010	UNIVERSITY OF TORONTO	FISH, J.	-	6,465	-	-	6,465	-	-	6,465		TRAD
			-	6,465	-	-	6,465	-	-	6,465	0.00%	

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

**FOR FISCAL YEAR 2019**

PROJECT NUMBER	SPONSORING AGENCY	PROJECT DIRECT COST					PROJECT IDC AND FEES				TOTAL PROJECT COSTS	EFFECTIVE INDIRECT COST RATE	CENTER
		PRINCIPAL INVESTIGATOR / PROJECT DIRECTOR	PERSONNEL AND FRINGE BENEFITS	SUPPLIES, CONTRACTUAL, GENERAL, & TRAVEL	EQUIPMENT	SUBCONTRACTS, CONSTRUCTION, TUITION & OTHER	TOTAL DIRECT COSTS	REIMBURSED INDIRECT COSTS	TOTAL SPECIAL FEES				
<b>Social Science Research Center</b>													
200233-010	CITY OF PORTSMOUTH	VANDECAR-BURDIN, T.	-	(37)	-	-	(37)	(10)	-	(47)		SSRC	
200254-010	CITY OF VIRGINIA BEACH	VANDECAR-BURDIN, T.	-	-	-	95	95	15	-	110		SSRC	
200269-010	VIRGINIA BEACH DEPARTMENT OF PUBLIC HEALTH	VANDECAR-BURDIN, T.	2,757	42	-	-	2,798	1,539	-	4,337		SSRC	
200285-010	CITY OF VIRGINIA BEACH	VANDECAR-BURDIN, T.	1,064	-	-	53	1,117	-	-	1,117		SSRC	
200295-010	CITY OF CHESAPEAKE	VANDECAR-BURDIN, T.	412	480	-	-	892	491	-	1,382		SSRC	
300312-010	OLD DOMINION UNIVERSITY	VANDECAR-BURDIN, T.	4,855	(98)	-	-	4,757	238	-	4,995		SSRC	
300433-010	OLD DOMINION UNIVERSITY	VANDECAR-BURDIN, T.	-	-	-	564	564	-	-	564		SSRC	
300450-010	OLD DOMINION UNIVERSITY	VANDECAR-BURDIN, T.	-	-	-	-	-	(0)	-	(0)		SSRC	
300481-010	OLD DOMINION UNIVERSITY	VANDECAR-BURDIN, T.	21,633	4,813	-	-	26,446	1,322	-	27,769		SSRC	
300513-010	OLD DOMINION UNIVERSITY	VANDECAR-BURDIN, T.	16,538	13,430	-	-	29,969	1,498	-	31,467		SSRC	
300521-010	OLD DOMINION UNIVERSITY	VANDECAR-BURDIN, T.	6,580	1,831	-	-	8,411	-	-	8,411		SSRC	
400371-010	AMERICAN SOCIETY OF BIOMECHANICS	VANDECAR-BURDIN, T.	490	-	-	-	490	269	-	759		SSRC	
400411-010	VIRGINIA ARTS FESTIVAL	VANDECAR-BURDIN, T.	968	857	-	-	1,825	474	-	2,299		SSRC	
200221-020	* CITY OF SUFFOLK	VANDECAR-BURDIN, T.	1,665	-	-	-	1,665	433	-	2,098		SSRC	
200248-010	* VIRGINIA OFFICE OF THE ATTORNEY GENERAL	VANDECAR-BURDIN, T.	9,018	-	-	-	9,018	2,345	-	11,362		SSRC	
300333-010	* OLD DOMINION UNIVERSITY	VANDECAR-BURDIN, T.	-	(15)	-	-	(15)	(1)	-	(16)		SSRC	
300356-020	* OLD DOMINION UNIVERSITY	VANDECAR-BURDIN, T.	4,850	33	-	-	4,883	391	-	5,274		SSRC	
300356-040	* OLD DOMINION UNIVERSITY	VANDECAR-BURDIN, T.	229	-	-	-	229	18	-	247		SSRC	
300432-010	* OLD DOMINION UNIVERSITY	VANDECAR-BURDIN, T.	-	-	-	10,828	10,828	542	-	11,369		SSRC	
300519-010	* EASTERN VIRGINIA MEDICAL SCHOOL	VANDECAR-BURDIN, T.	4,199	2,417	-	-	6,615	-	-	6,615		SSRC	
500372-010	* HOGAN-LOVELLS	VANDECAR-BURDIN, T.	17,307	827	-	-	18,134	9,974	-	28,108		SSRC	
			92,564	24,579	-	11,540	128,683	19,538	-	148,221	15.18%		
			\$ 483,600	\$ 107,563	\$ -	\$ 309,658	\$ 900,821	\$ 219,950	\$ -	\$ 1,120,772	24.42%		
<b>TOTAL ARTS AND LETTERS</b>													

**SCHEDULE 4**  
**OLD DOMINION UNIVERSITY RESEARCH FOUNDATION**  
**SPONSORED PROGRAM ACTIVITY BY INDIVIDUAL PROJECT**

(MEASURED BY EXPENDITURES INCURRED)

**FOR FISCAL YEAR 2019**

PROJECT NUMBER	SPONSORING AGENCY	PROJECT DIRECT COST					PROJECT IDC AND FEES			TOTAL PROJECT COSTS	EFFECTIVE INDIRECT COST RATE	CENTER
		PRINCIPAL INVESTIGATOR / PROJECT DIRECTOR	PERSONNEL AND FRINGE BENEFITS	SUPPLIES, CONTRACTUAL, GENERAL, & TRAVEL	EQUIPMENT	SUBCONTRACTS, CONSTRUCTION, TUITION & OTHER	TOTAL DIRECT COSTS	REIMBURSED INDIRECT COSTS	TOTAL SPECIAL FEES			
<b>STROME COLLEGE OF BUSINESS</b>												
Economics												
500372-010	* HOGAN-LOVELLS	AGARWAL, V.	11,538	551	-	-	12,089	6,649	-	18,738		TRAD
500372-010	* HOGAN-LOVELLS	BLAKE-GONZALEZ, B.	5,769	276	-	-	6,045	3,325	-	9,369		TRAD
300520-010	GEORGE MASON UNIVERSITY	MCNAB, R.	13,948	2,489	-	-	16,436	1,644	-	18,080		TRAD
500372-010	* HOGAN-LOVELLS	MCNAB, R.	57,689	2,757	-	-	60,447	33,246	-	93,692		TRAD
			88,944	6,073	-	-	95,017	44,863	-	139,880	47.22%	
Information Systems / Decision Sciences												
100621-010	* NATIONAL SCIENCE FOUNDATION	HE, W.	2,105	-	-	-	2,105	1,158	-	3,263		TRAD
100731-010	NATIONAL SCIENCE FOUNDATION	HE, W.	165,931	-	-	-	165,931	-	-	165,931		TRAD
100621-010	* NATIONAL SCIENCE FOUNDATION	HE, W.	4,237	1,149	-	-	5,385	2,962	-	8,347		TRAD
100673-010	* NATIONAL SCIENCE FOUNDATION	LI, L.	8,114	258	-	4,613	12,986	4,605	-	17,590		TRAD
100621-010	* NATIONAL SCIENCE FOUNDATION	XU, L.	6,342	1,149	-	-	7,490	4,120	-	11,610		TRAD
100673-010	* NATIONAL SCIENCE FOUNDATION	XU, L.	8,114	258	-	4,613	12,986	4,605	-	17,590		TRAD
			194,843	2,814	-	9,226	206,883	17,449	-	224,332	8.43%	
Information Systems & Decision Sciences - CYBERSECURITY												
100648-010	* NATIONAL SCIENCE FOUNDATION	HE, W.	2,556	6,001	-	22,129	30,686	4,706	-	35,392		CYBER
100706-010	* NATIONAL SECURITY AGENCY	HE, W.	5,939	4,372	-	-	10,311	5,671	-	15,982		CYBER
100709-010	* NATIONAL SCIENCE FOUNDATION	HE, W.	5,505	1,876	-	15,944	23,325	4,059	-	27,384		CYBER
			14,000	12,249	-	38,073	64,322	14,437	-	78,759	22.44%	
Public Service												
200246-010	* CITY OF VIRGINIA BEACH	NICULA, J.	6,239	92	-	-	6,331	1,646	-	7,977		TRAD
100625-010	* NATIONAL SCIENCE FOUNDATION	YUSUF, J.	1,793	155	-	-	1,948	1,071	-	3,020		TRAD
200246-010	* CITY OF VIRGINIA BEACH	YUSUF, J.	6,239	92	-	-	6,331	1,646	-	7,977		TRAD
300366-010	* UNIVERSITY OF NORTH CAROLINA	YUSUF, J.	3,011	3,603	-	-	6,613	3,637	-	10,251		TRAD
300471-010	* VA INSTITUTE OF MARINE SCIENCE (VIMS)	YUSUF, J.	4,563	312	-	-	4,875	-	-	4,875		TRAD
300492-010	* OLD DOMINION UNIVERSITY	YUSUF, J.	8,478	1,122	-	-	9,599	-	-	9,599		TRAD
			30,322	5,375	-	-	35,697	8,001	-	43,697	22.41%	
<b>TOTAL BUSINESS AND PUBLIC ADMINISTRATION</b>			<b>\$ 328,108</b>	<b>\$ 26,511</b>	<b>\$ -</b>	<b>\$ 47,300</b>	<b>\$ 401,919</b>	<b>\$ 84,749</b>	<b>\$ -</b>	<b>\$ 486,668</b>	<b>21.09%</b>	

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

**FOR FISCAL YEAR 2019**

PROJECT NUMBER	SPONSORING AGENCY	PROJECT DIRECT COST					PROJECT IDC AND FEES			TOTAL PROJECT COSTS	EFFECTIVE INDIRECT COST RATE	CENTER
		PRINCIPAL INVESTIGATOR / PROJECT DIRECTOR	PERSONNEL AND FRINGE BENEFITS	SUPPLIES, CONTRACTUAL, GENERAL, & TRAVEL	EQUIPMENT	SUBCONTRACTS, CONSTRUCTION, TUITION & OTHER	TOTAL DIRECT COSTS	REIMBURSED INDIRECT COSTS	TOTAL SPECIAL FEES			
<b>DARDEN COLLEGE OF EDUCATION &amp; PROFESSIONAL STUDIES</b>												
Dean's Office												
300360-040	* OLD DOMINION UNIVERSITY	BARBER, M.	988	-	-	3,334	4,322	-	-	4,322		TRAD
300360-810	OLD DOMINION UNIVERSITY	BRAY, J.	55	37,291	-	2,557	39,903	-	-	39,903		TRAD
300360-020	* OLD DOMINION UNIVERSITY	BRAY, J.	-	-	-	1,065	1,065	-	-	1,065		TRAD
300360-030	* OLD DOMINION UNIVERSITY	BRAY, J.	3,355	2,624	-	25,489	31,468	-	-	31,468		TRAD
300360-040	* OLD DOMINION UNIVERSITY	BRAY, J.	494	-	-	1,667	2,161	-	-	2,161		TRAD
300478-010	* OLD DOMINION UNIVERSITY	BRAY, J.	-	3,927	-	43,067	46,993	-	-	46,993		TRAD
400389-010	THE UP CENTER	DICE, T.	10,000	-	-	-	10,000	-	-	10,000		TRAD
300360-030	* OLD DOMINION UNIVERSITY	DICKINSON, G.	2,045	2,363	-	13,785	18,193	-	-	18,193		TRAD
300360-040	* OLD DOMINION UNIVERSITY	DICKINSON, G.	988	-	-	3,334	4,322	-	-	4,322		TRAD
300478-010	* OLD DOMINION UNIVERSITY	DICKINSON, G.	-	1,501	-	23,303	24,805	-	-	24,805		TRAD
300360-020	* OLD DOMINION UNIVERSITY	SHAEFFER, M.	-	-	-	533	533	-	-	533		TRAD
300360-030	* OLD DOMINION UNIVERSITY	SHAEFFER, M.	16,777	13,118	-	127,444	157,339	-	-	157,339		TRAD
300360-040	* OLD DOMINION UNIVERSITY	SHAEFFER, M.	7,412	-	-	25,004	32,416	-	-	32,416		TRAD
300478-010	* OLD DOMINION UNIVERSITY	SHAEFFER, M.	-	3,811	-	41,800	45,611	-	-	45,611		TRAD
300360-030	* OLD DOMINION UNIVERSITY	UNDERWOOD, J.	1,227	1,418	-	8,271	10,916	-	-	10,916		TRAD
			43,342	66,052	-	320,652	430,047	-	-	430,047	0.00%	
Dean's Office - Cybersecurity												
100799-010	* NATIONAL SECURITY AGENCY	DICE, T.	1,818	-	-	-	1,818	1,000.03	-	2,818		CYBER
			1,818	-	-	-	1,818	1,000	-	2,818	55.00%	
<b>Center for Educational Partnerships</b>												
300502-010	* WESTERN WASHINGTON UNIVERSITY	BROBST, J.	11,518	64	-	-	11,582	609	-	12,191		TCEP
300503-010	WESTERN WASHINGTON UNIVERSITY	BROBST, J.	16,242	-	-	-	16,242	8,933	-	25,175		TCEP
100721-010	* OFFICE OF NAVAL RESEARCH	CHAPPELL, S.	4,688	8,250	-	59,085	72,023	4,658	-	76,681		TCEP
200210-010	* NEWPORT NEWS PUBLIC SCHOOLS	CHAPPELL, S.	2,265	-	-	-	2,265	-	-	2,265		TCEP
200213-010	* CHESAPEAKE PUBLIC SCHOOLS	CHAPPELL, S.	5,710	-	-	-	5,710	-	-	5,710		TCEP
200216-010	VIRGINIA BEACH CITY PUBLIC SCHOOLS	CHAPPELL, S.	(376)	-	-	7,291	6,915	-	-	6,915		TCEP
300502-010	* WESTERN WASHINGTON UNIVERSITY	CHAPPELL, S.	11,518	64	-	-	11,582	609	-	12,191		TCEP
200009-022	STATE COUNCIL FOR HIGHER EDUCATION IN VA (SCHEV)	GARNER, J.	553	1,666	-	-	2,219	-	-	2,219		TCEP
200188-040	* OLD DOMINION UNIVERSITY	GARNER, J.	3,184	4,725	-	9,261	17,170	633	-	17,803		TCEP
200210-010	* NEWPORT NEWS PUBLIC SCHOOLS	GARNER, J.	2,265	-	-	-	2,265	-	-	2,265		TCEP
200213-010	* CHESAPEAKE PUBLIC SCHOOLS	GARNER, J.	5,710	-	-	-	5,710	-	-	5,710		TCEP
200225-010	PRINCE WILLIAM COUNTY PUBLIC SCHOOLS	GARNER, J.	7,789	-	-	-	7,789	4,284	-	12,073		TCEP
100721-010	* OFFICE OF NAVAL RESEARCH	GARNER, J.	4,830	8,500	-	60,876	74,205	4,799	-	79,004		TCEP
200183-040	* OLD DOMINION UNIVERSITY	GARNER, J.	2,784	5,197	-	4,706	12,687	639	-	13,326		TCEP
400354-010	* CHESAPEAKE BAY FOUNDATION	GARNER, J.	-	1,468	-	-	1,468	-	-	1,468		TCEP
100721-010	* OFFICE OF NAVAL RESEARCH	LONEY, M.	4,688	8,250	-	59,085	72,023	4,658	-	76,681		TCEP
200183-040	* OLD DOMINION UNIVERSITY	LONEY, M.	6,497	12,127	-	10,980	29,603	1,490	-	31,093		TCEP
200188-040	* OLD DOMINION UNIVERSITY	LONEY, M.	13,798	20,475	-	40,133	74,405	2,742	-	77,147		TCEP
200290-010	* YORK COUNTY SCHOOLS	LONEY, M.	11,324	433	-	-	11,757	588	-	12,345		TCEP
400354-010	* CHESAPEAKE BAY FOUNDATION	LONEY, M.	-	2,202	-	-	2,202	-	-	2,202		TCEP
200290-010	* YORK COUNTY SCHOOLS	WEBSTER, H.	4,853	186	-	-	5,039	252	-	5,291		TCEP
			119,839	73,608	-	251,416	444,863	34,892	-	479,755	7.84%	

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**OLD DOMINION UNIVERSITY RESEARCH FOUNDATION**  
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**FOR FISCAL YEAR 2019**

PROJECT NUMBER	SPONSORING AGENCY	PROJECT DIRECT COST				PROJECT IDC AND FEES				TOTAL PROJECT COSTS	EFFECTIVE INDIRECT COST RATE	CENTER
		PRINCIPAL INVESTIGATOR / PROJECT DIRECTOR	PERSONNEL AND FRINGE BENEFITS	SUPPLIES, CONTRACTUAL, GENERAL, & TRAVEL	EQUIPMENT	SUBCONTRACTS, CONSTRUCTION, TUITION & OTHER	TOTAL DIRECT COSTS	REIMBURSED INDIRECT COSTS	TOTAL SPECIAL FEES			
<b>Communication Disorders and Special Education</b>												
300346-040	* OLD DOMINION UNIVERSITY	BOBZIEN, J.	6,399	592	-	19,752	26,743	-	-	26,743		TRAD
100559-010	* U.S. DEPARTMENT OF EDUCATION	BOBZIEN, J.	14,297	682	-	61,735	76,714	1,198	-	77,912		TRAD
300458-010	* GEORGE MASON UNIVERSITY	BOBZIEN, J.	1,587	125	-	5,544	7,256	137	-	7,393		TRAD
300356-020	* OLD DOMINION UNIVERSITY	GABLE, R.	-	33	-	-	33	3	-	35		TRAD
300449-010	* OLD DOMINION UNIVERSITY	GABLE, R.	195,671	29,199	-	-	224,870	17,990	-	242,860		TRAD
300456-010	* OLD DOMINION UNIVERSITY	GABLE, R.	167,892	27,874	-	4,886	200,653	15,661	-	216,314		TRAD
300456-020	* OLD DOMINION UNIVERSITY	GABLE, R.	118,343	10,959	-	3,074	132,375	10,344	-	142,719		TRAD
300457-010	* GEORGE MASON UNIVERSITY	GABLE, R.	423	372	-	2,682	3,478	64	-	3,541		TRAD
300458-010	* GEORGE MASON UNIVERSITY	GABLE, R.	-	-	-	2,824	2,824	-	-	2,824		TRAD
300496-010	* OLD DOMINION UNIVERSITY	GABLE, R.	884	-	-	-	884	71	-	955		TRAD
300333-010	* OLD DOMINION UNIVERSITY	GABLE, R.	-	(75)	-	-	(75)	(6)	-	(81)		TRAD
300346-030	* OLD DOMINION UNIVERSITY	GABLE, R.	-	-	-	1	1	-	-	1		TRAD
300346-040	* OLD DOMINION UNIVERSITY	GABLE, R.	6,399	592	-	19,752	26,743	-	-	26,743		TRAD
300356-030	* OLD DOMINION UNIVERSITY	GABLE, R.	6,892	25	-	-	6,917	553	-	7,471		TRAD
300356-040	* OLD DOMINION UNIVERSITY	GABLE, R.	12,697	-	-	-	12,697	1,016	-	13,712		TRAD
300393-010	* OLD DOMINION UNIVERSITY	GABLE, R.	68,317	17,831	-	-	86,147	6,892	-	93,039		TRAD
300404-010	* OLD DOMINION UNIVERSITY	GABLE, R.	8,434	3,141	-	(0)	11,575	926	-	12,501		TRAD
300405-010	* OLD DOMINION UNIVERSITY	GABLE, R.	3,046	18,636	-	3,434	25,116	1,734	-	26,849		TRAD
300405-020	* OLD DOMINION UNIVERSITY	GABLE, R.	-	79,857	-	-	79,857	6,389	-	86,246		TRAD
300456-010	* OLD DOMINION UNIVERSITY	GABLE, R.	29,903	32,258	-	8,320	70,481	4,973	-	75,454		TRAD
300456-020	* OLD DOMINION UNIVERSITY	GABLE, R.	20,865	22,141	-	4,727	47,733	3,440	-	51,173		TRAD
300480-010	* OLD DOMINION UNIVERSITY	GABLE, R.	100,238	48,354	-	15,338	163,930	11,887	-	175,818		TRAD
300496-010	* OLD DOMINION UNIVERSITY	GABLE, R.	62,375	-	-	-	62,375	4,990	-	67,365		TRAD
300499-010	* OLD DOMINION UNIVERSITY	GABLE, R.	15,018	-	-	-	15,018	1,201	-	16,220		TRAD
300500-010	* OLD DOMINION UNIVERSITY	GABLE, R.	153,211	1,196	-	-	154,407	12,353	-	166,760		TRAD
300500-020	* OLD DOMINION UNIVERSITY	GABLE, R.	118,473	80	-	-	118,553	9,484	-	128,037		TRAD
300501-010	* GEORGE MASON UNIVERSITY	GABLE, R.	3,381	-	-	936	4,317	270	-	4,588		TRAD
300505-010	* UNIVERSITY OF OREGON	GABLE, R.	58,714	11,593	-	-	70,306	18,280	-	88,586		TRAD
400383-010	* SASED - MIDWEST PBIS	GABLE, R.	2,829	1,099	-	-	3,928	1,021	-	4,949		TRAD
100559-010	* U.S. DEPARTMENT OF EDUCATION	GEAR, S.	14,730	703	-	63,606	79,039	1,235	-	80,273		TRAD
100601-010	* U.S. DEPARTMENT OF EDUCATION	GEAR, S.	61,305	13,556	-	10,815	85,675	19,464	-	105,139		TRAD
100559-010	* U.S. DEPARTMENT OF EDUCATION	HESTER, P.	14,297	682	-	61,735	76,714	1,198	-	77,912		TRAD
100601-010	* U.S. DEPARTMENT OF EDUCATION	HESTER, P.	122,609	27,112	-	21,629	171,350	38,928	-	210,278		TRAD
300396-010	* OLD DOMINION UNIVERSITY	JUDGE, S.	47,145	31,306	-	41,285	119,735	6,276	-	126,011		TRAD

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**FOR FISCAL YEAR 2019**

PROJECT NUMBER	SPONSORING AGENCY	PRINCIPAL INVESTIGATOR / PROJECT DIRECTOR	PROJECT DIRECT COST				PROJECT IDC AND FEES			TOTAL PROJECT COSTS	EFFECTIVE INDIRECT COST RATE	CENTER
			PERSONNEL AND FRINGE BENEFITS	SUPPLIES, CONTRACTUAL, GENERAL, & TRAVEL	EQUIPMENT	SUBCONTRACTS, CONSTRUCTION, TUITION & OTHER	TOTAL DIRECT COSTS	REIMBURSED INDIRECT COSTS	TOTAL SPECIAL FEES			
300346-030	* OLD DOMINION UNIVERSITY	MAYDOSZ, A.	-	-	-	1	1	-	-	1	TRAD	
300346-040	* OLD DOMINION UNIVERSITY	MAYDOSZ, A.	9,599	888	-	29,628	40,115	-	-	40,115	TRAD	
300356-030	* OLD DOMINION UNIVERSITY	MAYDOSZ, A.	6,892	25	-	-	6,917	553	-	7,471	TRAD	
300356-040	* OLD DOMINION UNIVERSITY	MAYDOSZ, A.	12,697	-	-	-	12,697	1,016	-	13,712	TRAD	
300457-010	* GEORGE MASON UNIVERSITY	MAYDOSZ, A.	411	361	-	2,603	3,375	62	-	3,437	TRAD	
300458-010	* GEORGE MASON UNIVERSITY	MAYDOSZ, A.	-	-	-	2,824	2,824	-	-	2,824	TRAD	
300499-010	* OLD DOMINION UNIVERSITY	MAYDOSZ, A.	15,018	-	-	-	15,018	1,201	-	16,220	TRAD	
300501-010	* GEORGE MASON UNIVERSITY	MAYDOSZ, A.	3,381	-	-	936	4,317	270	-	4,588	TRAD	
300505-010	* UNIVERSITY OF OREGON	MAYDOSZ, A.	58,714	11,593	-	-	70,306	18,280	-	88,586	TRAD	
300506-010	* GEORGE MASON UNIVERSITY	MAYDOSZ, A.	1,587	125	-	2,720	4,432	137	-	4,569	TRAD	
400383-010	* SASED - MIDWEST PBIS	MAYDOSZ, A.	2,829	1,099	-	-	3,928	1,021	-	4,949	TRAD	
300475-010	OLD DOMINION UNIVERSITY	MURPHY, K.	3,130	540	-	51	3,721	294	-	4,015	TRAD	
300333-010	* OLD DOMINION UNIVERSITY	TONELSON, S.	-	(210)	-	-	(210)	(17)	-	(227)	TRAD	
300346-030	* OLD DOMINION UNIVERSITY	TONELSON, S.	-	-	-	1	1	-	-	1	TRAD	
300346-040	* OLD DOMINION UNIVERSITY	TONELSON, S.	9,599	888	-	29,628	40,115	-	-	40,115	TRAD	
300356-020	* OLD DOMINION UNIVERSITY	TONELSON, S.	-	66	-	-	66	5	-	71	TRAD	
300356-030	* OLD DOMINION UNIVERSITY	TONELSON, S.	7,101	26	-	-	7,127	570	-	7,697	TRAD	
300356-040	* OLD DOMINION UNIVERSITY	TONELSON, S.	20,315	-	-	-	20,315	1,625	-	21,940	TRAD	
300393-010	* OLD DOMINION UNIVERSITY	TONELSON, S.	68,317	17,831	-	-	86,147	6,892	-	93,039	TRAD	
300404-010	* OLD DOMINION UNIVERSITY	TONELSON, S.	8,434	3,141	-	(0)	11,575	926	-	12,501	TRAD	
300405-010	* OLD DOMINION UNIVERSITY	TONELSON, S.	3,046	18,636	-	3,434	25,116	1,734	-	26,849	TRAD	
300405-020	* OLD DOMINION UNIVERSITY	TONELSON, S.	-	79,857	-	-	79,857	6,389	-	86,246	TRAD	
300456-010	* OLD DOMINION UNIVERSITY	TONELSON, S.	197,795	60,132	-	13,206	271,134	20,634	-	291,768	TRAD	
300456-020	* OLD DOMINION UNIVERSITY	TONELSON, S.	139,207	33,100	-	7,801	180,108	13,785	-	193,893	TRAD	
300457-010	* GEORGE MASON UNIVERSITY	TONELSON, S.	411	361	-	2,603	3,375	62	-	3,437	TRAD	
300458-010	* GEORGE MASON UNIVERSITY	TONELSON, S.	-	-	-	2,824	2,824	-	-	2,824	TRAD	
300480-010	* OLD DOMINION UNIVERSITY	TONELSON, S.	100,238	48,354	-	15,338	163,930	11,887	-	175,818	TRAD	
300496-010	* OLD DOMINION UNIVERSITY	TONELSON, S.	63,259	-	-	-	63,259	5,061	-	68,320	TRAD	
300497-010	OLD DOMINION UNIVERSITY	TONELSON, S.	-	10,958	-	1,673	12,632	877	-	13,508	TRAD	
300500-010	* OLD DOMINION UNIVERSITY	TONELSON, S.	153,211	1,196	-	-	154,407	12,353	-	166,760	TRAD	
300500-020	* OLD DOMINION UNIVERSITY	TONELSON, S.	118,473	80	-	-	118,553	9,484	-	128,037	TRAD	
300505-010	* UNIVERSITY OF OREGON	TONELSON, S.	60,493	11,944	-	-	72,437	18,834	-	91,271	TRAD	
300516-010	OLD DOMINION UNIVERSITY	TONELSON, S.	-	55,508	-	2,601	58,109	4,441	-	62,549	TRAD	
300523-010	OLD DOMINION UNIVERSITY	TONELSON, S.	-	8,616	-	-	8,616	689	-	9,305	TRAD	
400383-010	* SASED - MIDWEST PBIS	TONELSON, S.	2,915	1,132	-	-	4,047	1,052	-	5,099	TRAD	
300499-010	* OLD DOMINION UNIVERSITY	TONELSON, S.	15,473	-	-	-	15,473	1,238	-	16,711	TRAD	
300501-010	* GEORGE MASON UNIVERSITY	TONELSON, S.	3,483	-	-	965	4,448	279	-	4,727	TRAD	
300506-010	* GEORGE MASON UNIVERSITY	TONELSON, S.	1,635	129	-	2,802	4,566	141	-	4,707	TRAD	
100673-010	* NATIONAL SCIENCE FOUNDATION	WATSON, S.	8,114	258	-	4,613	12,986	4,605	-	17,590	TRAD	
300396-010	* OLD DOMINION UNIVERSITY	WATSON, S.	48,573	32,254	-	42,536	123,363	6,466	-	129,830	TRAD	
			2,580,724	778,806	-	520,864	3,880,395	350,816	-	4,231,210	9.04%	

**SCHEDULE 4**  
**OLD DOMINION UNIVERSITY RESEARCH FOUNDATION**  
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			PERSONNEL AND FRINGE BENEFITS	SUPPLIES, CONTRACTUAL, GENERAL, & TRAVEL	EQUIPMENT	SUBCONTRACTS, CONSTRUCTION, TUITION & OTHER	TOTAL DIRECT COSTS	REIMBURSED INDIRECT COSTS	TOTAL SPECIAL FEES				
<b>Counseling and Human Services</b>													
100689-010	* U.S. DEPARTMENT OF HEALTH AND HUMAN SERVICES	KEMER, G.	9,444	138	-	10,775	20,357	767	-	21,123		TRAD	
100689-020	* U.S. DEPARTMENT OF HEALTH AND HUMAN SERVICES	KEMER, G.	15,325	-	-	30,137	45,461	1,226	-	46,687		TRAD	
100689-020	* U.S. DEPARTMENT OF HEALTH AND HUMAN SERVICES	MOE, J.	26,271	-	-	51,663	77,934	2,102	-	80,035		TRAD	
100689-010	* U.S. DEPARTMENT OF HEALTH AND HUMAN SERVICES	MOE, J.	16,190	236	-	18,471	34,897	1,314	-	36,211		TRAD	
100689-010	* U.S. DEPARTMENT OF HEALTH AND HUMAN SERVICES	REHFUSS, M.	16,865	246	-	19,241	36,351	1,369	-	37,720		TRAD	
100689-020	* U.S. DEPARTMENT OF HEALTH AND HUMAN SERVICES	REHFUSS, M.	27,366	-	-	53,815	81,181	2,189	-	83,370		TRAD	
300349-011	* EASTERN VIRGINIA MEDICAL SCHOOL	REHFUSS, M.	8,645	-	-	-	8,645	692	-	9,337		TRAD	
300349-010	EASTERN VIRGINIA MEDICAL SCHOOL	REHFUSS, M.	38,184	-	-	12,873	51,057	3,055	-	54,112		TRAD	
			158,290	619	-	196,974	365,883	12,713	-	368,595	3.57%		
<b>Educational Foundations and Leadership</b>													
300509-010	* UNIVERSITY OF MASSACHUSETTS (ALL CAMPUSES)	DICKMAN, R.	605	395	-	-	1,000	-	-	1,000		TRAD	
300294-020	TEMPLE UNIVERSITY	PEREZ, A.	3,990	-	-	1,578	5,568	2,115	-	7,682		TRAD	
300402-010	MICHIGAN STATE UNIVERSITY	PEREZ, A.	59,895	4,997	-	18,654	83,547	35,691	-	119,238		TRAD	
100673-010	* NATIONAL SCIENCE FOUNDATION	PRIBESH, S.	8,114	258	-	4,613	12,986	4,605	-	17,590		TRAD	
100709-010	* NATIONAL SCIENCE FOUNDATION	PRIBESH, S.	5,505	1,876	-	15,944	23,325	4,059	-	27,384		TRAD	
200188-040	* OLD DOMINION UNIVERSITY	SANZO, K.	1,061	1,575	-	3,087	5,723	211	-	5,934		TRAD	
400401-010	SPENCER FOUNDATION	WHITE, R.	7,384	-	-	-	7,384	-	-	7,384		TRAD	
			86,555	9,101	-	43,877	139,533	46,681	-	186,213	33.45%		
<b>Human Movement Sciences</b>													
400338-010	SOCIETY OF HEALTH AND PHYSICAL EDUCATORS (SHAPE AMI)	HAEGELE, J.	-	160	-	-	160	-	-	160		TRAD	
400372-010	USA TRIATHLON	HILL, E.	-	574	-	426	1,000	-	-	1,000		TRAD	
300454-010	EASTERN VIRGINIA MEDICAL SCHOOL	WILSON, P.	7,316	752	-	-	8,068	-	-	8,068		TRAD	
			7,316	1,486	-	426	9,228	-	-	9,228	0.00%		
<b>STEM Education and Professional Studies</b>													
100599-010	* OFFICE OF NAVAL RESEARCH	ARCAUTE, K.	24,300	4,483	5,525	-	34,307	15,830	-	50,137		TRAD	
100702-010	* NATIONAL SCIENCE FOUNDATION	ARCAUTE, K.	6,654	1,887	-	-	8,541	4,697	-	13,238		TRAD	
300395-010	UNIVERSITY OF MARYLAND	DISCALA, J.	12,547	-	-	-	12,547	6,901	-	19,449		TRAD	
300361-010	* TIDEWATER COMMUNITY COLLEGE	KATSILOUDIS, P.	10,372	3,487	-	-	13,858	7,622	-	21,481		TRAD	
300030-013	UNIVERSITY OF VIRGINIA	TOMOVIC, C.	9,667	192	-	16,152	26,011	-	-	26,011		TRAD	
100708-010	* NATIONAL SCIENCE FOUNDATION	TOMOVIC, C.	2,918	83	-	8,956	11,956	1,650	-	13,607		TRAD	
300030-014	* UNIVERSITY OF VIRGINIA	TOMOVIC, C.	351	245	-	30	625	-	-	625		TRAD	
			66,808	10,376	5,525	25,138	107,847	36,701	-	144,548	34.03%		

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

**FOR FISCAL YEAR 2019**

PROJECT NUMBER	SPONSORING AGENCY	PROJECT DIRECT COST				PROJECT IDC AND FEES				TOTAL PROJECT COSTS	EFFECTIVE INDIRECT COST RATE	CENTER
		PRINCIPAL INVESTIGATOR / PROJECT DIRECTOR	PERSONNEL AND FRINGE BENEFITS	SUPPLIES, CONTRACTUAL, GENERAL, & TRAVEL	EQUIPMENT	SUBCONTRACTS, CONSTRUCTION, TUITION & OTHER	TOTAL DIRECT COSTS	REIMBURSED INDIRECT COSTS	TOTAL SPECIAL FEES			
<b>Teaching and Learning</b>												
300488-010	* GEORGE MASON UNIVERSITY	COLWELL, J.	15,269	-	-	-	15,269	3,970	-	19,239	TRAD	
300340-010	JAMES MADISON UNIVERSITY	CROMPTON, H.	-	897	-	-	897	233	-	1,131	TRAD	
100252-010	* NATIONAL SCIENCE FOUNDATION	CROMPTON, H.	2,680	4,397	-	3,805	10,883	3,751	-	14,634	TRAD	
300518-010	* OLD DOMINION UNIVERSITY	CROMPTON, H.	10,372	-	-	-	10,372	415	-	10,787	TRAD	
300360-020	* OLD DOMINION UNIVERSITY	DICKINSON, G.	-	-	-	533	533	-	-	533	TRAD	
300360-030	* OLD DOMINION UNIVERSITY	DICKINSON, G.	6,343	4,196	-	49,937	60,476	-	-	60,476	TRAD	
300478-010	* OLD DOMINION UNIVERSITY	DICKINSON, G.	-	2,310	-	18,497	20,807	-	-	20,807	TRAD	
100802-010	* NATIONAL SCIENCE FOUNDATION	ENDERSON, M.	6,703	754	-	-	7,456	4,101	-	11,558	TRAD	
100736-010	* NATIONAL SCIENCE FOUNDATION	GUTIERREZ, K.	5,027	278	-	-	5,304	2,917	-	8,222	TRAD	
300488-010	* GEORGE MASON UNIVERSITY	GUTIERREZ, K.	6,544	-	-	-	6,544	1,701	-	8,245	TRAD	
100489-010	NATIONAL SCIENCE FOUNDATION	KIDD, J.	11,667	5,687	-	-	17,354	9,197	-	26,552	TRAD	
100736-010	* NATIONAL SCIENCE FOUNDATION	KIDD, J.	6,702	370	-	-	7,072	3,890	-	10,962	TRAD	
400370-010	* ARTS MIDWEST	LEE, G.	1,745	7,777	-	-	9,523	2,476	-	11,999	TRAD	
400322-010	NATIONAL WRITING PROJECT CORPORATION	LEE, L.	-	108	-	-	108	9	-	117	TRAD	
400323-010	NATIONAL WRITING PROJECT CORPORATION	LEE, L.	132	2,906	-	10,591	13,628	243	-	13,871	TRAD	
300360-030	* OLD DOMINION UNIVERSITY	SOMMERFELDT, J.	3,806	2,518	-	29,962	36,266	-	-	36,286	TRAD	
300453-010	WAYNESBURG UNIVERSITY	SUH, Y.	1,091	1,779	-	804	3,674	-	-	3,674	TRAD	
			78,082	33,977	-	114,128	226,187	32,904	-	259,091	14.55%	
<b>EDUCATION TOTAL</b>			<b>\$ 3,142,774</b>	<b>\$ 974,026</b>	<b>\$ 5,525</b>	<b>\$ 1,473,475</b>	<b>\$ 5,595,800</b>	<b>\$ 515,706</b>	<b>- \$ 6,111,506</b>	<b>9.22%</b>		

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**OLD DOMINION UNIVERSITY RESEARCH FOUNDATION**  
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**FOR FISCAL YEAR 2019**

PROJECT NUMBER	SPONSORING AGENCY	PROJECT DIRECT COST					PROJECT IDC AND FEES			TOTAL PROJECT COSTS	EFFECTIVE INDIRECT COST RATE	CENTER
		PRINCIPAL INVESTIGATOR / PROJECT DIRECTOR	PERSONNEL AND FRINGE BENEFITS	SUPPLIES, CONTRACTUAL, GENERAL, & TRAVEL	EQUIPMENT	SUBCONTRACTS, CONSTRUCTION, TUITION & OTHER	TOTAL DIRECT COSTS	REIMBURSED INDIRECT COSTS	TOTAL SPECIAL FEES			

**BATTEN COLLEGE OF ENGINEERING & TECHNOLOGY**

Dean's Office

100638-010	NATIONAL SCIENCE FOUNDATION	ADAMS, S.	2,984	5,379	-	-	8,363	4,600	-	12,962	TRAD
100644-010	NATIONAL SCIENCE FOUNDATION	ADAMS, S.	16,146	24,525	-	220,422	261,092	22,369	-	283,461	TRAD
100734-010	NATIONAL SCIENCE FOUNDATION	ADAMS, S.	-	6,199	-	8,500	14,699	1,612	-	16,311	TRAD
300447-010	UNIVERSITY OF VIRGINIA	ADAMS, S.	13,964	-	-	333	14,296	4,468	-	18,765	TRAD
100538-010	* OFFICE OF NAVAL RESEARCH	DEAN, A.	46,159	5,906	-	-	52,065	28,636	-	80,702	TRAD
100599-010	* OFFICE OF NAVAL RESEARCH	DEAN, A.	48,599	8,965	11,050	-	68,614	31,660	-	100,274	TRAD
100599-010	* OFFICE OF NAVAL RESEARCH	DEAN, A.	24,300	4,483	5,525	-	34,307	15,830	-	50,137	TRAD
100702-010	* NATIONAL SCIENCE FOUNDATION	DEAN, A.	6,654	1,887	-	-	8,541	4,697	-	13,238	TRAD
100708-010	* NATIONAL SCIENCE FOUNDATION	DEAN, A.	16,195	383	-	35,911	52,489	9,118	-	61,607	TRAD
100720-010	* OFFICE OF NAVAL RESEARCH	DEAN, A.	24,203	100,166	3,315	-	127,684	68,403	-	196,087	TRAD
100720-012	* OFFICE OF NAVAL RESEARCH	DEAN, A.	12,975	9,563	-	-	22,538	-	-	22,538	TRAD
100720-013	* OFFICE OF NAVAL RESEARCH	DEAN, A.	24,042	5,040	-	-	29,081	-	-	29,081	TRAD
100720-014	* OFFICE OF NAVAL RESEARCH	DEAN, A.	7,528	12,763	-	-	20,290	-	-	20,290	TRAD
100791-010	* OFFICE OF NAVAL RESEARCH	DEAN, A.	26,937	280	-	2,274	29,491	17,691	-	47,183	TRAD
500343-010	* CACI, INC.--FEDERAL	DEAN, A.	10,698	-	-	(0)	10,698	5,884	-	16,582	TRAD
100527-026	NASA GODDARD SPACEFLIGHT CENTER	LANDAETA, R.	-	-	-	7,400	7,400	-	-	7,400	TRAD
100708-010	* NATIONAL SCIENCE FOUNDATION	LANDAETA, R.	8,098	191	-	17,956	26,245	4,559	-	30,804	TRAD
100720-010	* OFFICE OF NAVAL RESEARCH	LANDAETA, R.	23,254	96,238	3,185	-	122,677	65,720	-	188,397	TRAD
100720-012	* OFFICE OF NAVAL RESEARCH	LANDAETA, R.	12,466	9,188	-	-	21,654	-	-	21,654	TRAD
100720-013	* OFFICE OF NAVAL RESEARCH	LANDAETA, R.	23,099	4,842	-	-	27,941	-	-	27,941	TRAD
100720-014	* OFFICE OF NAVAL RESEARCH	LANDAETA, R.	7,233	12,262	-	-	19,495	-	-	19,495	TRAD
100630-010	* NATIONAL SCIENCE FOUNDATION	STUART, B.	82	1,987	-	-	2,070	1,138	-	3,208	TRAD
300485-010	* SOUTH DAKOTA SCHOOL OF MINES & TECHNOLOGY	STUART, B.	1,021	1,176	-	-	2,197	1,209	-	3,406	TRAD
			356,636	311,421	23,075	292,795	983,927	287,594	-	1,271,521	29.23%

Civil and Environmental Engineering

200253-010	* VA DEPARTMENT OF TRANSPORTATION	CETIN, M.	33,230	299	-	5,592	39,120	8,717	-	47,837	TRAD
200284-010	* VA TRANSPORTATION RESEARCH COUNCIL	CETIN, M.	8,354	119	-	-	8,473	2,203	-	10,676	TRAD
300258-010	* UNIVERSITY OF MARYLAND	CETIN, M.	-	1,869	-	-	1,869	991	-	2,860	TRAD
300305-010	* UNIVERSITY OF VIRGINIA	CETIN, M.	(102)	-	-	-	(102)	(54)	-	(156)	TRAD
300305-012	* UNIVERSITY OF VIRGINIA	CETIN, M.	569	-	-	-	569	302	-	871	TRAD
300305-013	* UNIVERSITY OF VIRGINIA	CETIN, M.	22,970	19	-	-	22,989	12,184	-	35,173	TRAD
300305-014	UNIVERSITY OF VIRGINIA	CETIN, M.	15,355	993	-	-	16,348	8,664	-	25,012	TRAD
300305-015	UNIVERSITY OF VIRGINIA	CETIN, M.	4,626	920	-	-	5,546	2,939	-	8,486	TRAD
300305-016	UNIVERSITY OF VIRGINIA	CETIN, M.	26,545	71	-	-	26,615	14,638	-	41,254	TRAD
300305-017	* UNIVERSITY OF VIRGINIA	CETIN, M.	1,393	1,028	-	-	2,421	1,332	-	3,753	TRAD
300305-018	UNIVERSITY OF VIRGINIA	CETIN, M.	23,992	2,252	-	-	26,245	14,434	-	40,679	TRAD
300305-019	* UNIVERSITY OF VIRGINIA	CETIN, M.	15,504	1,723	-	-	17,227	9,475	-	26,701	TRAD
300511-010	* GEORGE MASON UNIVERSITY	CETIN, M.	2,700	825	-	-	3,525	917	-	4,442	TRAD
500382-010	* LEIDOS	CETIN, M.	2,946	-	-	-	2,946	1,620	-	4,566	TRAD
300305-012	* UNIVERSITY OF VIRGINIA	CETIN, M.	33	535	-	-	568	301	-	869	TRAD
600197-040	MYONGJI UNIVERSITY	CHAE, Y.	10,955	3,438	-	936	15,329	8,431	-	23,760	TRAD
600221-010	MYONGJI UNIVERSITY	CHAE, Y.	8,581	2,000	-	-	10,581	5,820	-	16,401	TRAD

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**OLD DOMINION UNIVERSITY RESEARCH FOUNDATION**  
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**FOR FISCAL YEAR 2019**

PROJECT NUMBER	SPONSORING AGENCY	PRINCIPAL INVESTIGATOR / PROJECT DIRECTOR	PROJECT DIRECT COST				PROJECT IDC AND FEES			TOTAL PROJECT COSTS	EFFECTIVE INDIRECT COST RATE	CENTER
			PERSONNEL AND FRINGE BENEFITS	SUPPLIES, CONTRACTUAL, GENERAL, & TRAVEL	EQUIPMENT	SUBCONTRACTS, CONSTRUCTION, TUITION & OTHER	TOTAL DIRECT COSTS	REIMBURSED INDIRECT COSTS	TOTAL SPECIAL FEES			
300030-014	* UNIVERSITY OF VIRGINIA	ERTEN-UNAL, M.	701	490	-	60	1,251	-	-	1,251	TRAD	
300494-010	* HAMPTON UNIVERSITY	ERTEN-UNAL, M.	10,753	-	-	-	10,753	5,914	-	16,668	TRAD	
100250-010	NATIONAL SCIENCE FOUNDATION	KUMAR, S.	48,061	2,387	-	-	50,449	26,738	-	77,187	TRAD	
100250-011	NATIONAL SCIENCE FOUNDATION	KUMAR, S.	7,533	-	-	614	8,147	4,143	-	12,289	TRAD	
100250-020	NATIONAL SCIENCE FOUNDATION	KUMAR, S.	-	-	-	6,963	6,963	-	-	6,963	TRAD	
100574-010	SANDIA NATIONAL LABORATORIES	KUMAR, S.	23,498	93	-	-	23,592	-	-	23,592	TRAD	
100593-010	* NATIONAL SCIENCE FOUNDATION	KUMAR, S.	4,564	1,723	-	51,583	57,869	3,457	-	61,327	TRAD	
100593-020	* NATIONAL SCIENCE FOUNDATION	KUMAR, S.	-	-	-	3,210	3,210	-	-	3,210	TRAD	
100630-010	* NATIONAL SCIENCE FOUNDATION	KUMAR, S.	4,768	9,771	906	2,899	18,344	7,997	-	26,341	TRAD	
100630-011	NATIONAL SCIENCE FOUNDATION	KUMAR, S.	7,692	6,477	-	2,818	16,987	7,793	-	24,781	TRAD	
100630-020	NATIONAL SCIENCE FOUNDATION	KUMAR, S.	-	-	-	1,540	1,540	-	-	1,540	TRAD	
100696-010	U.S. ENVIRONMENTAL PROTECTION AGENCY	KUMAR, S.	-	2,110	3,513	-	5,623	1,160	-	6,783	TRAD	
300485-010	* SOUTH DAKOTA SCHOOL OF MINES & TECHNOLOGY	KUMAR, S.	4,085	4,705	-	-	8,789	4,834	-	13,623	TRAD	
500298-010	* FIBERIGHT, LLC	KUMAR, S.	-	-	-	-	-	(0)	-	(0)	TRAD	
500402-010	ZIVO BIOSCIENCE	KUMAR, S.	8,913	483	-	-	9,396	5,168	-	14,563	TRAD	
100544-010	NATIONAL SCIENCE FOUNDATION	MA, G.	-	2,825	-	-	2,825	1,497	-	4,323	TRAD	
300482-010	MICHIGAN TECH UNIVERSITY	MA, G.	3,891	-	-	-	3,891	2,140	-	6,031	TRAD	
500302-010	A-ZONE ENVIRONMENTAL SERVICES LLC	MEKKAWY, M.	-	-	-	2,353	2,353	1,294	-	3,647	TRAD	
300305-013	* UNIVERSITY OF VIRGINIA	PALETI, R.	7,073	-	-	-	7,073	3,749	-	10,822	TRAD	
100580-010	NATIONAL SCIENCE FOUNDATION	STUART, B.	-	-	-	(4,643)	(4,643)	-	-	(4,643)	TRAD	
100630-010	* NATIONAL SCIENCE FOUNDATION	STUART, B.	2,302	2,899	453	1,449	7,103	2,860	-	9,963	TRAD	
500298-010	* FIBERIGHT, LLC	STUART, B.	-	-	-	-	-	(0)	-	(0)	TRAD	
300435-010	VA INSTITUTE OF MARINE SCIENCE (VIMS)	TAHVILDARI, N.	31,938	4,711	-	1,646	38,296	-	-	38,296	TRAD	
300305-017	* UNIVERSITY OF VIRGINIA	TAHVILDARI, N.	4,939	3,645	-	-	8,584	4,721	-	13,305	TRAD	
100653-010	NATIONAL SCIENCE FOUNDATION	WANG, X.	17,944	7,675	-	69,295	94,914	6,661	-	101,575	TRAD	
100699-010	STRATEGIC ENVIRONMENTAL RESEARCH & DEVELOPMENT PF WANG, X.		75,864	5,382	-	12,504	93,751	52,810	-	146,561	TRAD	
300448-010	VA POLYTECHNIC INSTITUTE AND STATE UNIVERSITY	WANG, X.	9,813	9,257	-	-	19,070	4,958	-	24,029	TRAD	
300486-010	VA POLYTECHNIC INSTITUTE AND STATE UNIVERSITY	WANG, X.	913	3,172	-	-	4,085	1,062	-	5,147	TRAD	
			452,896	83,898	4,872	158,818	700,483	241,873	-	942,356	34.53%	

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**FOR FISCAL YEAR 2019**

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		PRINCIPAL INVESTIGATOR / PROJECT DIRECTOR	PERSONNEL AND FRINGE BENEFITS	SUPPLIES, CONTRACTUAL, GENERAL, & TRAVEL	EQUIPMENT	SUBCONTRACTS, CONSTRUCTION, TUITION & OTHER	TOTAL DIRECT COSTS	REIMBURSED INDIRECT COSTS	TOTAL SPECIAL FEES				
<b>Electrical and Computer Engineering</b>													
300311-010	ROCHESTER INSTITUTE OF TECHNOLOGY	BAILEY, C.	6,199	-	-	-	6,199	3,285	-	9,484		TRAD	
300431-010	UNIVERSITY OF VIRGINIA	BELFORD, L.	-	-	-	3,022	3,022	-	-	3,022		TRAD	
500219-001	* WR SYSTEMS, LTD.	BELFORD, L.	4,392	100	-	0	4,493	2,920	-	7,413		TRAD	
500219-002	* WR SYSTEMS, LTD.	BELFORD, L.	17,568	400	-	0	17,969	11,680	-	29,648		TRAD	
500219-003	* WR SYSTEMS, LTD.	BELFORD, L.	12,955	400	-	-	13,355	8,681	-	22,035		TRAD	
500219-004	* WR SYSTEMS, LTD.	BELFORD, L.	3,238	100	-	-	3,338	2,170	-	5,508		TRAD	
100256-010	* NATIONAL SCIENCE FOUNDATION	CHEN, C.	-	285	-	11,080	11,365	151	-	11,515		TRAD	
100256-010	* NATIONAL SCIENCE FOUNDATION	DHALI, S.	-	427	-	16,620	17,047	226	-	17,273		TRAD	
400376-010	* COMMONWEALTH CENTER FOR ADVANCED MANUFACTURING	DHALI, S.	2,624	72	-	-	2,696	1,483	-	4,178		TRAD	
400271-003	NATIONAL INSTITUTE OF AEROSPACE ASSOCIATES (NIA)	GONZALEZ, O.	1,387	-	-	-	1,387	361	-	1,748		TRAD	
400345-010	NATIONAL INSTITUTE OF AEROSPACE ASSOCIATES (NIA)	GONZALEZ, O.	48,841	-	-	8,381	57,222	12,699	-	69,920		TRAD	
100737-010	NATIONAL SCIENCE FOUNDATION	GRAY, W.	19,313	2,521	-	-	21,835	12,009	-	33,844		TRAD	
100594-010	U.S. PUBLIC HEALTH SERVICE (NATIONAL INSTITUTES OF HEA	IFTEKHARUDDIN, K.	193,835	18,228	-	61,596	273,659	116,635	-	390,294		TRAD	
100594-020	U.S. PUBLIC HEALTH SERVICE (NATIONAL INSTITUTES OF HEA	IFTEKHARUDDIN, K.	-	28,645	-	-	28,645	15,755	-	44,399		TRAD	
100648-010	* NATIONAL SCIENCE FOUNDATION	IFTEKHARUDDIN, K.	1,893	1,957	-	15,077	18,927	2,117	-	21,044		TRAD	
100659-010	ARMY CONTRACTING COMMAND	IFTEKHARUDDIN, K.	23,875	600	-	63,394	87,869	13,461	-	101,330		TRAD	
100720-011	OFFICE OF NAVAL RESEARCH	IFTEKHARUDDIN, K.	39,222	5,782	6,500	-	51,504	-	-	51,504		TRAD	
300305-012	* UNIVERSITY OF VIRGINIA	IFTEKHARUDDIN, K.	904	802	-	-	1,706	904	-	2,610		TRAD	
300305-019	* UNIVERSITY OF VIRGINIA	IFTEKHARUDDIN, K.	12,685	1,410	-	-	14,095	7,752	-	21,846		TRAD	
400240-006	COMMONWEALTH CENTER FOR ADVANCED MANUFACTURING	IFTEKHARUDDIN, K.	10,627	-	-	0	10,627	2,763	-	13,390		TRAD	
100613-010	NATIONAL SCIENCE FOUNDATION	KRUSIENSKI, D.	21,720	6,785	-	2,400	30,905	15,677	-	46,582		TRAD	
100648-010	* NATIONAL SCIENCE FOUNDATION	LI, J.	1,893	1,957	-	15,077	18,927	2,117	-	21,044		TRAD	
100656-010	* NASA GODDARD SPACEFLIGHT CENTER	LI, J.	31,424	4,224	-	519	36,167	19,606	-	55,774		TRAD	
500263-010	INTELLIGENT AUTOMATION, INC.	LI, J.	1,082	-	-	239	1,321	700	-	2,020		TRAD	
500312-030	APPLIED RESEARCH LLC	LI, J.	23,925	3,885	-	-	27,810	15,295	-	43,105		TRAD	

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**FOR FISCAL YEAR 2019**

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		PRINCIPAL INVESTIGATOR / PROJECT DIRECTOR	PERSONNEL AND FRINGE BENEFITS	SUPPLIES, CONTRACTUAL, GENERAL, & TRAVEL	EQUIPMENT	SUBCONTRACTS, CONSTRUCTION, TUITION & OTHER	TOTAL DIRECT COSTS	REIMBURSED INDIRECT COSTS	TOTAL SPECIAL FEES			
100256-010	* NATIONAL SCIENCE FOUNDATION	MARSILLAC, S.	-	356	-	13,850	14,206	189	-	14,394	TRAD	
300344-010	UNIVERSITY OF TOLEDO	MARSILLAC, S.	-	-	-	15	15	8	-	23	TRAD	
300428-010	COLORADO SCHOOL OF MINES	MARSILLAC, S.	27,830	21,285	3,969	-	53,084	27,013	-	80,097	TRAD	
300436-010	COLORADO SCHOOL OF MINES	MARSILLAC, S.	16,231	1,276	-	-	17,507	9,629	-	27,136	TRAD	
100595-010	* NASA GODDARD SPACEFLIGHT CENTER	POPESCU, D.	-	32	-	431	463	8	-	472	TRAD	
100595-011	* NASA GODDARD SPACEFLIGHT CENTER	POPESCU, D.	-	35	-	-	35	-	-	35	TRAD	
500219-001	* WR SYSTEMS, LTD.	POPESCU, D.	4,392	100	-	0	4,493	2,920	-	7,413	TRAD	
500219-002	* WR SYSTEMS, LTD.	POPESCU, D.	17,568	400	-	0	17,969	11,680	-	29,648	TRAD	
500219-003	* WR SYSTEMS, LTD.	POPESCU, D.	12,955	400	-	-	13,355	8,681	-	22,035	TRAD	
500219-004	* WR SYSTEMS, LTD.	POPESCU, D.	3,238	100	-	-	3,338	2,170	-	5,508	TRAD	
100241-010	NATIONAL SCIENCE FOUNDATION	VAHALA, L.	3,709	2,688	-	-	6,397	3,390	-	9,787	TRAD	
400271-001	NATIONAL INSTITUTE OF AEROSPACE ASSOCIATES (NIA)	VAHALA, L.	3,484	-	-	-	3,484	906	-	4,390	TRAD	
100538-010	* OFFICE OF NAVAL RESEARCH	VAHALA, L.	8,393	1,074	-	-	9,466	5,207	-	14,673	TRAD	
100612-010	NATIONAL SCIENCE FOUNDATION	WU, H.	41,206	-	-	5,990	47,196	22,663	-	69,860	TRAD	
100706-010	* NATIONAL SECURITY AGENCY	WU, H.	3,959	2,803	-	-	6,762	3,719	-	10,482	TRAD	
100709-010	* NATIONAL SCIENCE FOUNDATION	WU, H.	1,754	-	-	7,999	9,753	965	-	10,717	TRAD	
100723-010	* NATIONAL SCIENCE FOUNDATION	WU, H.	1,286	-	-	-	1,286	707	-	1,993	TRAD	
100745-010	* NATIONAL SCIENCE FOUNDATION	WU, H.	462	300	-	-	762	419	-	1,181	TRAD	
100791-010	* OFFICE OF NAVAL RESEARCH	WU, H.	4,438	-	-	1,460	5,898	2,885	-	8,783	TRAD	
100253-010	NATIONAL SCIENCE FOUNDATION	XIN, C.	2,540	-	-	-	2,540	1,346	-	3,887	TRAD	
100648-010	* NATIONAL SCIENCE FOUNDATION	XIN, C.	1,893	1,957	-	15,077	18,927	2,117	-	21,044	TRAD	
100680-010	NATIONAL SCIENCE FOUNDATION	XIN, C.	5,001	-	-	-	5,001	2,751	-	7,752	TRAD	
100706-010	* NATIONAL SECURITY AGENCY	XIN, C.	5,939	4,205	-	-	10,144	5,579	-	15,722	TRAD	
100709-010	* NATIONAL SCIENCE FOUNDATION	XIN, C.	1,754	-	-	7,999	9,753	965	-	10,717	TRAD	
100745-010	* NATIONAL SCIENCE FOUNDATION	XIN, C.	462	300	-	-	762	419	-	1,181	TRAD	
100791-010	* OFFICE OF NAVAL RESEARCH	XIN, C.	4,307	-	-	1,417	5,725	2,800	-	8,524	TRAD	
300374-010	SOUTH DAKOTA SCHOOL OF MINES & TECHNOLOGY	ZHANG, Y.	-	(696)	-	-	(696)	(383)	-	(1,078)	TRAD	
			652,398	115,195	10,469	251,647	1,029,710	387,197	-	1,416,907	37.60%	

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

**FOR FISCAL YEAR 2019**

PROJECT NUMBER	SPONSORING AGENCY	PROJECT DIRECT COST					PROJECT IDC AND FEES				TOTAL PROJECT COSTS	EFFECTIVE INDIRECT COST RATE	CENTER
		PRINCIPAL INVESTIGATOR / PROJECT DIRECTOR	PERSONNEL AND FRINGE BENEFITS	SUPPLIES, CONTRACTUAL, GENERAL, & TRAVEL	EQUIPMENT	SUBCONTRACTS, CONSTRUCTION, TUITION & OTHER	TOTAL DIRECT COSTS	REIMBURSED INDIRECT COSTS	TOTAL SPECIAL FEES				
<b>Electrical and Computer Engineering - Applied Research Center</b>													
300311-010	ROCHESTER INSTITUTE OF TECHNOLOGY	BAILEY, C.	6,199	-	-	-	6,199	3,285	-	9,484		ARC	
300409-010	* UNIVERSITY OF VIRGINIA	BAUMGART, H.	-	(34)	-	-	(34)	-	-	(34)		ARC	
500121-010	MICROACT, INC.	BAUMGART, H.	-	-	-	(15,115)	(15,115)	(3,930)	-	(19,045)		ARC	
100567-020	LANGLEY RESEARCH CENTER	ELSAYED-ALI, H.	18,684	245	-	-	18,929	4,921	-	23,850		ARC	
100674-010	NATIONAL SCIENCE FOUNDATION	ELSAYED-ALI, H.	48,622	2,340	2,701	584	54,247	28,029	-	82,277		ARC	
200272-010	* CENTER FOR INNOVATIVE TECHNOLOGY	ELSAYED-ALI, H.	25,900	11,664	-	-	37,564	11,269	-	48,833		ARC	
300409-010	* UNIVERSITY OF VIRGINIA	ELSAYED-ALI, H.	-	(80)	-	-	(80)	-	-	(80)		ARC	
300430-010	UNIVERSITY OF VIRGINIA	ELSAYED-ALI, H.	4,040	2,672	-	135	6,847	-	-	6,847		ARC	
300467-010	UNIVERSITY OF VIRGINIA	ELSAYED-ALI, H.	7,866	409	-	-	8,275	-	-	8,275		ARC	
400125-020	EMBODY	ELSAYED-ALI, H.	-	525	-	1,076	1,601	880	-	2,481		ARC	
400346-011	JEFFERSON SCIENCE ASSOCIATES, LLC (JEFFERSON LAB)	ELSAYED-ALI, H.	27,907	2,020	-	-	29,927	-	-	29,927		ARC	
400352-010	EMBODY	ELSAYED-ALI, H.	-	120	-	124	244	134	-	378		ARC	
500288-010	FACE CONSTRUCTION TECHNOLOGIES	ELSAYED-ALI, H.	-	-	-	244	244	134	-	379		ARC	
500322-010	AONA CORP (ACCELERATOR DRIVEN NEUTRON APPLICATION)	ELSAYED-ALI, H.	9,539	110	-	351	10,000	-	-	10,000		ARC	
500345-010	MTEQ MANUFACTURING SERVICES	ELSAYED-ALI, H.	-	908	-	1,513	2,421	-	-	2,421		ARC	
500361-010	BLACK LABORATORIES, LLC	ELSAYED-ALI, H.	-	1,290	-	-	1,290	710	-	2,000		ARC	
500369-010	EVERGREEN TECHNOLOGIES, LLC	ELSAYED-ALI, H.	-	1,580	-	-	1,580	411	-	1,991		ARC	
500374-010	II-VI INFARED, INC.	ELSAYED-ALI, H.	5,457	-	-	-	5,457	1,419	-	6,876		ARC	
500378-010	FACE CONSTRUCTION TECHNOLOGIES	ELSAYED-ALI, H.	15,444	3,545	-	-	18,989	10,444	-	29,433		ARC	
500380-010	MTEQ MANUFACTURING SERVICES	ELSAYED-ALI, H.	-	17,600	-	-	17,600	-	-	17,600		ARC	
500385-010	DR. DANIEL P. HENKEL	ELSAYED-ALI, H.	-	350	-	-	350	193	-	543		ARC	
100256-010	* NATIONAL SCIENCE FOUNDATION	MARSILLAC, S.	-	356	-	13,850	14,206	189	-	14,394		ARC	
300344-010	UNIVERSITY OF TOLEDO	MARSILLAC, S.	-	-	-	15	15	8	-	23		ARC	
300428-010	COLORADO SCHOOL OF MINES	MARSILLAC, S.	27,830	21,285	3,969	-	53,084	27,013	-	80,097		ARC	
300436-010	COLORADO SCHOOL OF MINES	MARSILLAC, S.	16,231	1,276	-	-	17,507	9,629	-	27,136		ARC	
100256-010	* NATIONAL SCIENCE FOUNDATION	NAMKOONG, G.	-	1,138	-	44,320	45,458	603	-	46,062		ARC	
100527-028	NASA GODDARD SPACEFLIGHT CENTER	NAMKOONG, G.	2,385	915	-	-	3,300	-	-	3,300		ARC	
300392-010	NORFOLK STATE UNIVERSITY	NAMKOONG, G.	6,341	-	-	-	6,341	3,487	-	9,828		ARC	
300465-010	UNIVERSITY OF VIRGINIA	NAMKOONG, G.	5,716	5,196	-	717	11,629	-	-	11,629		ARC	
600211-010	SAMIL TECH COMPANY, LTD	NAMKOONG, G.	9,508	36	-	-	9,544	-	-	9,544		ARC	
			237,667	75,468	6,670	47,815	367,620	98,829	-	466,449	26.88%		
<b>Electrical and Computer Engineering - Center for Bioelectronics</b>													
100517-010	* U.S. PUBLIC HEALTH SERVICE (NATIONAL INSTITUTES OF HEA)	BULYSHEVA, A.	14,698	8,305	-	-	23,004	12,192	-	35,195		CBE	
300474-010	OLD DOMINION UNIVERSITY	BULYSHEVA, A.	14,037	29,715	26,314	473,750	543,817	13,126	-	556,943		CBE	
300487-010	* OLD DOMINION UNIVERSITY	BULYSHEVA, A.	20,028	6,047	-	3,750	29,825	7,823	-	37,648		CBE	
500381-010	* LIFENET	BULYSHEVA, A.	15,871	9,242	3,223	3,750	32,085	7,534	-	39,619		CBE	
100661-010	AIR FORCE RESEARCH LABORATORY	JIANG, C.	80,210	11,868	-	-	92,078	50,643	-	142,721		CBE	
500328-010	TRANSIENT PLASMA SYSTEMS, INC.	JIANG, C.	-	311	-	7,071	7,382	4,232	-	11,614		CBE	
100732-010	* U.S. PUBLIC HEALTH SERVICE (NATIONAL INSTITUTES OF HEA)	JIANG, C.	11,274	6,112	-	-	17,386	9,562	-	26,949		CBE	
100740-010	* U.S. PUBLIC HEALTH SERVICE (NATIONAL INSTITUTES OF HEA)	KONG, M.	45,969	4,843	-	-	50,812	27,947	-	78,758		CBE	
600186-010	* UNIVERSITY OF SOUTHAMPTON	KONG, M.	66,576	14,763	3,790	-	85,129	43,109	-	128,238		CBE	
100807-010	NATIONAL SCIENCE FOUNDATION	SLAUGHTER, G.	15,404	-	-	-	15,404	8,472	-	23,877		CBE	
100809-010	NATIONAL SCIENCE FOUNDATION	SLAUGHTER, G.	55,798	2,040	-	-	57,837	31,810	-	89,648		CBE	
300345-011	OLD DOMINION UNIVERSITY	XIAO, S.	62,441	11,702	-	-	74,143	40,779	-	114,922		CBE	
500226-016	PULSE BIOSCIENCES (ELECTROBLATE)	XIAO, S.	10,649	9,655	-	-	20,304	11,167	-	31,471		CBE	
100548-010	* U.S. PUBLIC HEALTH SERVICE (NATIONAL INSTITUTES OF HEA)	XIAO, S.	3,287	368	-	-	3,655	2,010	-	5,665		CBE	
300345-013	* OLD DOMINION UNIVERSITY	XIAO, S.	2,363	489	-	-	2,852	1,568	-	4,420		CBE	
300479-010	* VIRGINIA COMMONWEALTH UNIVERSITY	XIAO, S.	2,098	1,410	-	-	3,508	-	-	3,508		CBE	
500226-011	* PULSE BIOSCIENCES (ELECTROBLATE)	XIAO, S.	18,845	13,100	-	-	31,945	17,570	-	49,515		CBE	
100548-010	* U.S. PUBLIC HEALTH SERVICE (NATIONAL INSTITUTES OF HEA)	ZEMLIN, C.	26,294	2,945	-	-	29,239	16,081	-	45,320		CBE	
400333-010	AMERICAN HEART ASSOCIATION	ZEMLIN, C.	34,071	2,332	-	-	36,403	-	-	36,403		CBE	
500359-010	ATRICURE, INC	ZEMLIN, C.	-	27,754	-	-	27,754	15,265	-	43,019		CBE	
300487-010	* OLD DOMINION UNIVERSITY	ZEMLIN, C.	20,028	6,047	-	3,750	29,825	7,823	-	37,648		CBE	
500226-007	* PULSE BIOSCIENCES (ELECTROBLATE)	ZEMLIN, C.	17,749	110	-	-	17,859	9,823	-	27,682		CBE	
500381-010	* LIFENET	ZEMLIN, C.	15,871	9,242	3,223	3,750	32,085	7,534	-	39,619		CBE	
			553,562	178,401	36,549	495,821	1,264,333	346,070	-	1,610,403	27.37%		

**SCHEDULE 4**  
**OLD DOMINION UNIVERSITY RESEARCH FOUNDATION**  
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(MEASURED BY EXPENDITURES INCURRED)

**FOR FISCAL YEAR 2019**

PROJECT NUMBER	SPONSORING AGENCY	PRINCIPAL INVESTIGATOR / PROJECT DIRECTOR	PROJECT DIRECT COST				PROJECT IDC AND FEES			TOTAL PROJECT COSTS	EFFECTIVE INDIRECT COST RATE	CENTER
			PERSONNEL AND FRINGE BENEFITS	SUPPLIES, CONTRACTUAL, GENERAL, & TRAVEL	EQUIPMENT	SUBCONTRACTS, CONSTRUCTION, TUITION & OTHER	TOTAL DIRECT COSTS	REIMBURSED INDIRECT COSTS	TOTAL SPECIAL FEES			
<b>Electrical and Computer Engineering - Center for Cybersecurity</b>												
100648-010	* NATIONAL SCIENCE FOUNDATION	IFTEKHARUDDIN, K.	663	4,044	-	7,052	11,759	2,589	-	14,348	CYBER	
100746-010	* NATIONAL SCIENCE FOUNDATION	IFTEKHARUDDIN, K.	-	-	300,740	-	300,740	-	-	300,740	CYBER	
100648-010	* NATIONAL SCIENCE FOUNDATION	LI, J.	663	4,044	-	7,052	11,759	2,589	-	14,348	CYBER	
100612-010	NATIONAL SCIENCE FOUNDATION	WU, H.	7,487	6,891	-	-	14,378	7,908	-	22,286	CYBER	
100706-010	* NATIONAL SECURITY AGENCY	WU, H.	-	112	-	-	112	61	-	173	CYBER	
100723-010	* NATIONAL SCIENCE FOUNDATION	WU, H.	12,086	-	-	1,237	13,323	6,647	-	19,970	CYBER	
100745-010	* NATIONAL SCIENCE FOUNDATION	WU, H.	3,789	-	-	2,236	6,025	2,084	-	8,109	CYBER	
100746-010	* NATIONAL SCIENCE FOUNDATION	WU, H.	-	-	300,740	-	300,740	-	-	300,740	CYBER	
100791-010	* OFFICE OF NAVAL RESEARCH	WU, H.	23,316	289	-	883	24,487	15,343	-	39,830	CYBER	
100799-010	* NATIONAL SECURITY AGENCY	WU, H.	1,818	-	-	-	1,818	1,000	-	2,818	CYBER	
100648-010	* NATIONAL SCIENCE FOUNDATION	XIN, C.	663	4,044	-	7,052	11,759	2,589	-	14,348	CYBER	
100680-010	NATIONAL SCIENCE FOUNDATION	XIN, C.	4,863	299	-	-	5,162	2,839	-	8,001	CYBER	
100680-020	NATIONAL SCIENCE FOUNDATION	XIN, C.	-	-	-	10,000	10,000	-	-	10,000	CYBER	
100706-010	* NATIONAL SECURITY AGENCY	XIN, C.	-	168	-	-	168	92	-	260	CYBER	
100709-010	* NATIONAL SCIENCE FOUNDATION	XIN, C.	7,502	3,752	-	15,890	27,144	6,190	-	33,334	CYBER	
100745-010	* NATIONAL SCIENCE FOUNDATION	XIN, C.	3,789	-	-	2,236	6,025	2,084	-	8,109	CYBER	
100791-010	* OFFICE OF NAVAL RESEARCH	XIN, C.	22,630	280	-	857	23,767	14,892	-	38,658	CYBER	
100799-010	* NATIONAL SECURITY AGENCY	XIN, C.	1,818	-	-	-	1,818	1,000	-	2,818	CYBER	
			91,088	23,921	601,480	54,495	770,985	67,906	-	838,892	8.81%	
<b>Mechanical &amp; Aerospace Engineering</b>												
100725-011	OFFICE OF NAVAL RESEARCH	ALBERTS, T.	43,416	230	-	-	43,646	11,348	-	54,994	TRAD	
400203-001	NATIONAL INSTITUTE OF AEROSPACE ASSOCIATES (NIA)	ASH, R.	579	-	-	-	579	150	-	729	TRAD	
100595-010	* NASA GODDARD SPACEFLIGHT CENTER	ASH, R.	-	32	-	431	463	8	-	472	TRAD	
100595-011	* NASA GODDARD SPACEFLIGHT CENTER	ASH, R.	-	35	-	-	35	-	-	35	TRAD	
100628-010	AMES RESEARCH LABS	BAWAB, S.	5,406	-	-	20,127	25,533	-	-	25,533	TRAD	
400271-007	NATIONAL INSTITUTE OF AEROSPACE ASSOCIATES (NIA)	BAWAB, S.	-	-	-	6,222	6,222	-	-	6,222	TRAD	
400271-009	NATIONAL INSTITUTE OF AEROSPACE ASSOCIATES (NIA)	BAWAB, S.	6,959	-	-	-	6,959	-	-	6,959	TRAD	
400365-010	NATIONAL INSTITUTE OF AEROSPACE ASSOCIATES (NIA)	BAWAB, S.	-	-	-	(6,222)	(6,222)	-	-	(6,222)	TRAD	
100588-010	* OFFICE OF NAVAL RESEARCH	BAWAB, S.	20,622	267	-	3,618	24,507	13,578	-	38,084	TRAD	
100599-010	* OFFICE OF NAVAL RESEARCH	BAWAB, S.	24,300	4,483	5,525	-	34,307	15,830	-	50,137	TRAD	
100738-010	* NATIONAL SCIENCE FOUNDATION	BAWAB, S.	3,177	592	-	7,506	11,275	2,073	-	13,348	TRAD	
400311-010	* CHILDREN'S HEATH FOUNDATION, INC.	BAWAB, S.	12,573	5,464	-	-	18,037	-	-	18,037	TRAD	
400271-008	NATIONAL INSTITUTE OF AEROSPACE ASSOCIATES (NIA)	BAYDAL, O.	29,864	1,025	-	3,389	34,278	9,371	-	43,648	TRAD	
400408-010	NATIONAL INSTITUTE OF AEROSPACE ASSOCIATES (NIA)	BAYDAL, O.	2,565	-	-	-	2,565	-	-	2,565	TRAD	
400271-005	NATIONAL INSTITUTE OF AEROSPACE ASSOCIATES (NIA)	BRITCHER, C.	39,928	4,217	-	7,219	51,364	11,478	-	62,842	TRAD	
400348-010	NATIONAL INSTITUTE OF AEROSPACE ASSOCIATES (NIA)	BRITCHER, C.	86,657	-	-	-	86,657	22,531	-	109,187	TRAD	
100599-010	* OFFICE OF NAVAL RESEARCH	GHOSH, D.	16,293	114	-	-	16,407	9,024	-	25,430	TRAD	
100599-010	* OFFICE OF NAVAL RESEARCH	GHOSH, D.	8,007	4,368	5,525	-	17,900	6,806	-	24,707	TRAD	
100748-010	NATIONAL SCIENCE FOUNDATION	GHOSH, D.	10,021	4,498	-	5,319	19,838	7,985	-	27,823	TRAD	
100738-010	* NATIONAL SCIENCE FOUNDATION	GHOSH, D.	5,296	987	-	12,510	18,792	3,455	-	22,247	TRAD	
100458-010	* NATIONAL SCIENCE FOUNDATION	HAO, J.	-	-	-	-	-	(0)	-	(0)	TRAD	
400391-010	* CHILDREN'S HOSPITAL OF THE KING'S DAUGHTERS	HAO, Z.	3,328	-	-	-	3,328	-	-	3,328	TRAD	
100256-010	* NATIONAL SCIENCE FOUNDATION	HOU, G.	-	285	-	11,080	11,365	151	-	11,515	TRAD	
100588-010	* OFFICE OF NAVAL RESEARCH	HOU, G.	20,622	267	-	3,618	24,507	13,578	-	38,084	TRAD	
100738-010	* NATIONAL SCIENCE FOUNDATION	HOU, G.	3,177	592	-	7,506	11,275	2,073	-	13,348	TRAD	
100702-010	* NATIONAL SCIENCE FOUNDATION	KAIPA, K.	6,654	1,887	-	-	8,541	4,697	-	13,238	TRAD	
100736-010	* NATIONAL SCIENCE FOUNDATION	KAIPA, K.	3,351	185	-	-	3,536	1,945	-	5,481	TRAD	

**SCHEDULE 4**  
**OLD DOMINION UNIVERSITY RESEARCH FOUNDATION**  
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**FOR FISCAL YEAR 2019**

PROJECT NUMBER	SPONSORING AGENCY	PRINCIPAL INVESTIGATOR / PROJECT DIRECTOR	PROJECT DIRECT COST				PROJECT IDC AND FEES			TOTAL PROJECT COSTS	EFFECTIVE INDIRECT COST RATE	CENTER
			PERSONNEL AND FRINGE BENEFITS	SUPPLIES, CONTRACTUAL, GENERAL, & TRAVEL	EQUIPMENT	SUBCONTRACTS, CONSTRUCTION, TUITION & OTHER	TOTAL DIRECT COSTS	REIMBURSED INDIRECT COSTS	TOTAL SPECIAL FEES			
100527-024	NASA GODDARD SPACEFLIGHT CENTER	KRAVCHENKO, O.	-	3,543	-	-	3,543	-	-	3,543	TRAD	
100738-010	* NATIONAL SCIENCE FOUNDATION	KRAVCHENKO, O.	5,296	987	-	12,510	18,792	3,455	-	22,247	TRAD	
400271-006	NATIONAL INSTITUTE OF AEROSPACE ASSOCIATES (NIA)	KRAVCHENKO, O.	10,820	700	-	5,052	16,572	182	-	16,754	TRAD	
400373-010	JEFFRESS RESEARCH GRANTS PROGRAM	KRAVCHENKO, O.	33,349	18,174	-	-	51,523	-	-	51,523	TRAD	
400203-004	NATIONAL INSTITUTE OF AEROSPACE ASSOCIATES (NIA)	LANDMAN, D.	17,264	-	-	-	17,264	9,495	-	26,759	TRAD	
100560-010	U.S. PUBLIC HEALTH SERVICE (NATIONAL INSTITUTES OF HEA MARUTHAMUTHU, V.		30,012	35,200	-	-	65,212	34,563	-	99,775	TRAD	
100549-010	AIR FORCE RESEARCH LABORATORY	NEWMAN, B.	-	-	-	-	-	(7,169)	-	(7,169)	TRAD	
100458-010	* NATIONAL SCIENCE FOUNDATION	QUIAN, S.	-	-	-	-	-	(0)	-	(0)	TRAD	
100736-010	* NATIONAL SCIENCE FOUNDATION	RINGLEB, S.	8,378	463	-	-	8,840	4,862	-	13,703	TRAD	
400311-010	* CHILDREN'S HEATH FOUNDATION, INC.	RINGLEB, S.	14,508	6,304	-	-	20,812	-	-	20,812	TRAD	
100532-010	* U.S. PUBLIC HEALTH SERVICE (NATIONAL INSTITUTES OF HEA WRIGGERS, W.		48,611	3,754	-	-	52,365	28,801	-	81,165	TRAD	
100593-010	* NATIONAL SCIENCE FOUNDATION	ZHANG, X.	4,564	1,723	-	51,583	57,869	3,457	-	61,327	TRAD	
100593-020	* NATIONAL SCIENCE FOUNDATION	ZHANG, X.	-	-	-	12,840	12,840	-	-	12,840	TRAD	
			525,595	100,372	11,050	164,307	801,324	213,728	-	1,015,053	26.67%	
<b>Engineering Technology</b>												
100630-010	* NATIONAL SCIENCE FOUNDATION	AYALA, O.	795	1,629	151	483	3,057	1,333	-	4,390	TRAD	
100736-010	* NATIONAL SCIENCE FOUNDATION	AYALA, O.	3,351	185	-	-	3,536	1,945	-	5,481	TRAD	
400335-010	ACS PETROLEUM RESEARCH FOUNDATION	AYALA, O.	11,721	-	-	-	11,721	-	-	11,721	TRAD	
400376-010	COMMONWEALTH CENTER FOR ADVANCED MANUFACTURING CHITIKESHI, S.		37,856	265	-	-	38,121	20,967	-	59,088	TRAD	
200246-010	* CITY OF VIRGINIA BEACH	CONDISINE, C.	1,626	-	-	-	1,626	423	-	2,049	TRAD	
200246-020	* CITY OF VIRGINIA BEACH	CONDISINE, C.	4,613	92	-	-	4,705	1,223	-	5,928	TRAD	
300365-010	* OLD DOMINION UNIVERSITY	CONDISINE, C.	8,355	-	-	-	8,355	1,253	-	9,609	TRAD	
300492-010	* OLD DOMINION UNIVERSITY	CONDISINE, C.	8,478	1,122	-	-	9,599	-	-	9,599	TRAD	
300494-010	* HAMPTON UNIVERSITY	CONDISINE, C.	4,609	-	-	-	4,609	2,535	-	7,143	TRAD	
400277-010	* BLUE MOON FUND	CONDISINE, C.	11,455	17,172	-	95	28,721	4,308	-	33,030	TRAD	
100599-010	* OFFICE OF NAVAL RESEARCH	JOVANOVIC, V.	24,300	4,483	5,525	-	34,307	15,830	-	50,137	TRAD	
100702-010	* NATIONAL SCIENCE FOUNDATION	JOVANOVIC, V.	6,654	1,887	-	-	8,541	4,697	-	13,238	TRAD	
100708-010	* NATIONAL SCIENCE FOUNDATION	JOVANOVIC, V.	10,797	255	-	23,941	34,993	6,079	-	41,071	TRAD	
300030-014	* UNIVERSITY OF VIRGINIA	JOVANOVIC, V.	1,052	735	-	90	1,876	-	-	1,876	TRAD	
300361-010	* TIDEWATER COMMUNITY COLLEGE	JOVANOVIC, V.	12,965	4,358	-	-	17,323	9,528	-	26,851	TRAD	
500384-010	BEM CONTROLS, LLC	KUZLU, M.	33,162	1,601	-	-	34,762	19,119	-	53,882	TRAD	
300365-010	* OLD DOMINION UNIVERSITY	LESTER, J.	1,671	-	-	-	1,671	251	-	1,922	TRAD	
100702-010	* NATIONAL SCIENCE FOUNDATION	POPESCU, O.	6,654	1,887	-	-	8,541	4,697	-	13,238	TRAD	
200009-021	STATE COUNCIL FOR HIGHER EDUCATION IN VA (SCHEV)	POPESCU, O.	-	1,244	-	-	1,244	-	-	1,244	TRAD	
400327-010	AMERICAN IRON AND STEEL INSTITUTION	SEEK, M.	-	-	-	1,096	1,096	-	-	1,096	TRAD	
300365-010	* OLD DOMINION UNIVERSITY	SEEK, M.	6,684	-	-	-	6,684	1,003	-	7,687	TRAD	
100599-010	* OFFICE OF NAVAL RESEARCH	TOMOVIC, M.	24,300	4,483	5,525	-	34,307	15,830	-	50,137	TRAD	
100708-010	* NATIONAL SCIENCE FOUNDATION	TOMOVIC, M.	5,180	109	-	9,000	14,288	2,909	-	17,197	TRAD	
300361-010	* TIDEWATER COMMUNITY COLLEGE	TOMOVIC, M.	2,593	872	-	-	3,465	1,906	-	5,370	TRAD	
			228,869	42,376	11,201	34,705	317,150	115,835	-	432,985	36.52%	

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

**FOR FISCAL YEAR 2019**

PROJECT NUMBER	SPONSORING AGENCY	PROJECT DIRECT COST				PROJECT IDC AND FEES				TOTAL PROJECT COSTS	EFFECTIVE INDIRECT COST RATE	CENTER
		PRINCIPAL INVESTIGATOR / PROJECT DIRECTOR	PERSONNEL AND FRINGE BENEFITS	SUPPLIES, CONTRACTUAL, GENERAL, & TRAVEL	EQUIPMENT	SUBCONTRACTS, CONSTRUCTION, TUITION & OTHER	TOTAL DIRECT COSTS	REIMBURSED INDIRECT COSTS	TOTAL SPECIAL FEES			
<b>Engineering Management</b>												
100531-001	* NAVAL SEA SYSTEMS COMMAND	COLLINS, A.	(1)	-	-	-	(1)	(1)	-	(1)		TRAD
100790-010	* NAVAL SEA SYSTEMS COMMAND	COLLINS, A.	73,164	10,134	-	6,122	89,420	54,143	-	143,564		TRAD
100790-010	* NAVAL SEA SYSTEMS COMMAND	COLLINS, A.	22,708	408	-	-	23,116	15,025	-	38,141		TRAD
100800-010	* NAVAL AIR WARFARE CENTER TSD	COLLINS, A.	4,699	677	-	-	5,376	3,495	-	8,871		TRAD
200244-011	* VA PORT AUTHORITY	COLLINS, A.	-	-	-	-	-	0	-	0		TRAD
100790-010	* NAVAL SEA SYSTEMS COMMAND	COTTER, S.	12,194	1,689	-	1,020	14,903	9,024	-	23,927		TRAD
500343-010	* CACI, INC.--FEDERAL	COTTER, S.	10,698	-	-	(0)	10,698	5,884	-	16,582		TRAD
500343-010	* CACI, INC.--FEDERAL	DANIELS, C.	10,698	-	-	(0)	10,698	5,884	-	16,582		TRAD
100654-010	* NATIONAL SECURITY AGENCY	GHEORGE, A.	-	553	-	-	553	304	-	857		TRAD
100691-010	* NATIONAL SECURITY AGENCY	GHEORGE, A.	17,873	3,857	-	-	21,730	11,952	-	33,682		TRAD
300515-010	OLD DOMINION UNIVERSITY	GHEORGHE, A.	-	32,985	-	-	32,985	-	-	32,985		TRAD
500260-020	CONTRACTING RESOURCES GROUP	HANDLEY, H.	-	-	-	89	89	47	-	137		TRAD
500260-030	CONTRACTING RESOURCES GROUP	HANDLEY, H.	11,634	-	-	47	11,681	6,424	-	18,105		TRAD
500348-010	NON-DISCLOSED SPONSORS	HANDLEY, H.	8,345	-	-	-	8,345	4,590	-	12,934		TRAD
500389-010	ALION SCIENCE AND TECHNOLOGY CORPORATION	HANDLEY, H.	12,002	-	-	-	12,002	7,801	-	19,804		TRAD
500404-010	VOLVO TECHNOLOGY OF AMERICA, INC.	HANDLEY, H.	8,141	600	-	-	8,741	4,808	-	13,549		TRAD
400192-000	PRIVATE SPONSOR	KEATING, C.	-	1,087	-	-	1,087	-	-	1,087		TRAD
500393-010	GENERAL DYNAMICS	KEATING, C.	7,338	962	-	170	8,469	4,658	-	13,127		TRAD
100527-026	NASA GODDARD SPACEFLIGHT CENTER	LANDAETA, R.	-	-	-	2,600	2,600	-	-	2,600		TRAD
100736-010	* NATIONAL SCIENCE FOUNDATION	PAZOS-LAGO, M.	6,702	370	-	-	7,072	3,890	-	10,962		TRAD
500297-020	VIRGINIA NATURAL GAS	PAZOS-LAGO, P.	-	-	-	0	0	0	-	0		TRAD
500377-010	VIRGINIA NATURAL GAS	PAZOS-LAGO, P.	10,972	-	-	-	10,972	2,962	-	13,934		TRAD
100741-010	OFFICE OF NAVAL RESEARCH	PINTO, C.	29,104	176	-	-	29,280	16,104	-	45,385		TRAD
500304-030	FM GLOBAL	PINTO, C.	13,788	-	-	101	13,889	3,611	-	17,500		TRAD
100654-010	* NATIONAL SECURITY AGENCY	PINTO, C.	-	553	-	-	553	304	-	857		TRAD
100741-010	* OFFICE OF NAVAL RESEARCH	PINTO, C.	15,834	-	-	-	15,834	8,709	-	24,543		TRAD
600195-010	QATAR UNIVERSITY	RABADI, G.	-	3,050	-	(0)	3,050	610	-	3,660		TRAD
500343-010	* CACI, INC.--FEDERAL	RABADI, G.	10,698	-	-	(0)	10,698	5,884	-	16,582		TRAD
100790-010	* NAVAL SEA SYSTEMS COMMAND	SECK, M.	3,785	68	-	-	3,853	2,504	-	6,357		TRAD
100708-010	* NATIONAL SCIENCE FOUNDATION	SIBSON, K.	10,797	255	-	23,941	34,993	6,079	-	41,071		TRAD
100691-010	* NATIONAL SECURITY AGENCY	SOUSA-POZA, A.	5,958	1,286	-	-	7,243	3,984	-	11,227		TRAD
500343-010	* CACI, INC.--FEDERAL	SOUSA-POZA, A.	10,698	-	-	(0)	10,698	5,884	-	16,582		TRAD
			317,829	58,710	-	34,090	410,629	194,564	-	605,194	47.38%	
<b>Engineering Management - Cybersecurity</b>												
100746-010	* NATIONAL SCIENCE FOUNDATION	HUANG, J.	-	-	300,740	-	300,740	-	-	300,740		CYBER
			-	-	300,740	-	300,740	-	-	300,740	0.00%	

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

**FOR FISCAL YEAR 2019**

PROJECT NUMBER	SPONSORING AGENCY	PROJECT DIRECT COST					PROJECT IDC AND FEES				TOTAL PROJECT COSTS	EFFECTIVE INDIRECT COST RATE	CENTER
		PRINCIPAL INVESTIGATOR / PROJECT DIRECTOR	PERSONNEL AND FRINGE BENEFITS	SUPPLIES, CONTRACTUAL, GENERAL, & TRAVEL	EQUIPMENT	SUBCONTRACTS, CONSTRUCTION, TUITION & OTHER	TOTAL DIRECT COSTS	REIMBURSED INDIRECT COSTS	TOTAL SPECIAL FEES				
<b>Computation Modeling &amp; Simulation Engineering</b>													
100599-010	* OFFICE OF NAVAL RESEARCH	AUDETTE, M.	24,300	4,483	5,525	-	34,307	15,830	-	50,137		TRAD	
400311-010	* CHILDREN'S HEATH FOUNDATION, INC.	AUDETTE, M.	21,278	9,246	-	-	30,524	-	-	30,524		TRAD	
400332-010	* ALZHEIMER'S ASSOCIATION	AUDETTE, M.	13,436	(3,182)	-	-	10,254	1,025	-	11,279		TRAD	
100790-010	* NAVAL SEA SYSTEMS COMMAND	LEATHRUM, J.	15,979	1,757	-	1,020	18,756	11,528	-	30,284		TRAD	
500341-001	* APPLIED RESEARCH ASSOCIATES, INC.	LEATHRUM, J.	(12)	-	-	0	(12)	(7)	-	(19)		TRAD	
500342-001	* WR SYSTEMS, LTD.	LEATHRUM, J.	13,196	-	-	1,754	14,950	9,718	-	24,668		TRAD	
100527-027	NASA GODDARD SPACEFLIGHT CENTER	LIU, Z.	3,273	2,903	-	-	6,176	-	-	6,176		TRAD	
500397-010	* FRONTIER TECHNOLOGY INC.	LIU, Z.	6,254	-	-	-	6,254	4,065	-	10,320		TRAD	
100599-010	* OFFICE OF NAVAL RESEARCH	MCKENZIE, F.	24,300	4,483	5,525	-	34,307	15,830	-	50,137		TRAD	
400391-010	* CHILDREN'S HOSPITAL OF THE KING'S DAUGHTERS	MCKENZIE, F.	29,952	-	-	-	29,952	-	-	29,952		TRAD	
500341-001	* APPLIED RESEARCH ASSOCIATES, INC.	MIELKE, R.	(6)	-	-	0	(6)	(3)	-	(9)		TRAD	
500342-001	* WR SYSTEMS, LTD.	MIELKE, R.	6,598	-	-	877	7,475	4,859	-	12,334		TRAD	
400332-010	* ALZHEIMER'S ASSOCIATION	SHEN, Y.	7,886	(1,868)	-	-	6,019	602	-	6,620		TRAD	
500397-010	* FRONTIER TECHNOLOGY INC.	SHEN, Y.	6,254	-	-	-	6,254	4,065	-	10,320		TRAD	
100538-010	* OFFICE OF NAVAL RESEARCH	SHEN, Y.	20,982	2,685	-	-	23,666	13,016	-	36,683		TRAD	
100518-010	AMES RESEARCH LABS	SOSONKINA, M.	(232)	(531)	-	-	(763)	(404)	-	(1,167)		TRAD	
100695-010	AMES RESEARCH LABS	SOSONKINA, M.	110,555	5,984	-	-	116,539	64,096	-	180,635		TRAD	
100797-010	AMES RESEARCH LABS	SOSONKINA, M.	12,411	-	-	-	12,411	6,826	-	19,238		TRAD	
300241-010	IAWA STATE UNIVERSITY	SOSONKINA, M.	16,446	6,654	-	-	23,100	12,243	-	35,343		TRAD	
300343-020	IAWA STATE UNIVERSITY	SOSONKINA, M.	9,961	3,059	-	-	13,020	6,900	-	19,920		TRAD	
100723-010	* NATIONAL SCIENCE FOUNDATION	SOSONKINA, M.	1,248	-	-	-	1,248	686	-	1,934		TRAD	
200253-010	* VA DEPARTMENT OF TRANSPORTATION	YANG, H.	8,307	75	-	1,398	9,780	2,179	-	11,959		TRAD	
200284-010	* VA TRANSPORTATION RESEARCH COUNCIL	YANG, H.	19,493	277	-	-	19,771	5,140	-	24,911		TRAD	
300511-010	* GEORGE MASON UNIVERSITY	YANG, H.	2,209	675	-	-	2,884	750	-	3,634		TRAD	
500382-010	* LEIDOS	YANG, H.	4,418	-	-	-	4,418	2,430	-	6,849		TRAD	
500397-010	* FRONTIER TECHNOLOGY INC.	YANG, H.	3,127	-	-	-	3,127	2,033	-	5,160		TRAD	
			381,612	36,699	11,050	5,049	434,410	183,409	-	617,820	42.22%		
<b>Computation Modeling &amp; Simulation Engineering - VMASC</b>													
100617-010	AIR FORCE MATERIAL COMMAND	SHETTY, S.	21,728	21,115	-	75,000	117,843	23,563	-	141,406		VMASC	
100728-010	AIR FORCE MATERIAL COMMAND	SHETTY, S.	48,388	61,621	-	32,340	142,349	60,505	-	202,855		VMASC	
200273-010	CENTER FOR INNOVATIVE TECHNOLOGY	SHETTY, S.	77,366	-	-	614	77,980	23,210	-	101,190		VMASC	
300388-010	NORFOLK STATE UNIVERSITY	SHETTY, S.	63,106	11,201	-	29,404	103,711	40,869	-	144,580		VMASC	
300390-010	UNIVERSITY OF ILLINOIS (ALL CAMPUSES)	SHETTY, S.	33,274	49,498	-	29,730	112,502	45,524	-	158,026		VMASC	
300397-010	UNIVERSITY OF ILLINOIS (ALL CAMPUSES)	SHETTY, S.	2,676	18,361	-	1,923	22,961	11,571	-	34,531		VMASC	
300514-010	UNIVERSITY OF ILLINOIS (ALL CAMPUSES)	SHETTY, S.	31,281	-	-	-	31,281	8,133	-	39,414		VMASC	
400358-010	SENTARA HOSPITALS	SHETTY, S.	134,035	56,918	-	-	190,953	105,024	-	295,977		VMASC	
			641,512	235,725	-	171,286	1,048,523	443,819	-	1,492,341	42.33%		
<b>Computation Modeling &amp; Simulation Engineering - Cybersecurity</b>													
100723-010	* NATIONAL SCIENCE FOUNDATION	SOSONKINA, M.	11,730	-	-	1,201	12,931	6,452	-	19,383		CYBER	
100746-010	* NATIONAL SCIENCE FOUNDATION	SOSONKINA, M.	-	-	300,740	-	300,740	-	-	300,740		CYBER	
			11,730	-	300,740	1,201	313,671	6,452	-	320,123	2.06%		
<b>TOTAL ENGINEERING</b>			<b>\$ 4,221,737</b>	<b>\$ 1,245,176</b>	<b>\$ 1,317,897</b>	<b>\$ 1,709,754</b>	<b>\$ 8,494,563</b>	<b>\$ 2,461,857</b>	<b>\$ -</b>	<b>\$ 10,956,421</b>	<b>28.98%</b>		

**SCHEDULE 4**  
**OLD DOMINION UNIVERSITY RESEARCH FOUNDATION**  
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(MEASURED BY EXPENDITURES INCURRED)

**FOR FISCAL YEAR 2019**

PROJECT NUMBER	SPONSORING AGENCY	PRINCIPAL INVESTIGATOR / PROJECT DIRECTOR	PROJECT DIRECT COST				PROJECT IDC AND FEES			TOTAL PROJECT COSTS	EFFECTIVE INDIRECT COST RATE	CENTER					
			PERSONNEL AND FRINGE BENEFITS	SUPPLIES, CONTRACTUAL, GENERAL, & TRAVEL	EQUIPMENT	SUBCONTRACTS, CONSTRUCTION, TUITION & OTHER	TOTAL DIRECT COSTS	REIMBURSED INDIRECT COSTS	TOTAL SPECIAL FEES								
<b>COLLEGE OF HEALTH SCIENCES</b>																	
Dean's Office																	
100689-010	* U.S. DEPARTMENT OF HEALTH AND HUMAN SERVICES	ADAMS-TUFTS, K.	8,322	69	-	12,712	21,102	671	-	21,774	TRAD						
400362-010	* OHIO SUICIDE PREVENTION FOUNDATION	ADAMS-TUFTS, K.	718	1,120	-	-	1,838	184	-	2,022	TRAD						
300477-010	A. T. STILL UNIVERSITY	VAN LUNEN, B.	2,033	-	-	-	2,033	305	-	2,338	TRAD						
400340-010	NATIONAL ASSOCIATION RESEARCH AND EDUCATION FOUND.	VAN LUNEN, B.	4,627	11,626	-	-	16,254	2,438	-	18,692	TRAD						
			15,701	12,815	-	12,712	41,227	3,598	-	44,825	8.73%						
Community & Environmental Health																	
100689-020	* U.S. DEPARTMENT OF HEALTH AND HUMAN SERVICES	ADAMS-TUFTS, K.	4,062	-	-	7,744	11,806	325	-	12,131	TRAD						
400362-010	* OHIO SUICIDE PREVENTION FOUNDATION	ADAMS-TUFTS, K.	333	130	-	116	579	46	-	625	TRAD						
400395-010	* HEALTHY CHESAPEAKE	AKPINAR-ELCI, M.	1,168	-	-	-	1,168	-	-	1,168	TRAD						
400403-010	* OBICI HEALTH CARE FOUNDATION	AKPINAR-ELCI, M.	1,481	-	-	-	1,481	74	-	1,555	TRAD						
400277-010	* BLUE MOON FUND	BECKER, S.	1,273	1,908	-	11	3,191	479	-	3,670	TRAD						
100446-010	U.S. PUBLIC HEALTH SERVICE (CENTERS FOR DISEASE CONTI	BLANDO, J.	5,915	-	-	3,276	9,191	4,595	-	13,786	TRAD						
100739-010	* U.S. PUBLIC HEALTH SERVICE (CENTERS FOR DISEASE CONTI	BLANDO, J.	2,973	1,945	-	407	5,324	1,384	-	6,709	TRAD						
100641-010	NAVAL MEDICAL CENTER PORTSMOUTH	CRAMER, R.	(1,437)	-	-	60	(1,377)	(358)	-	(1,736)	TRAD						
100717-010	ALABAMA VETERANS AFFAIRS MEDICAL CENTER	CRAMER, R.	10,748	1,545	-	80	12,373	-	-	12,373	TRAD						
100726-010	* U.S. DEPARTMENT OF HEALTH AND HUMAN SERVICES	CRAMER, R.	18,442	3,235	-	-	21,676	6,936	-	28,612	TRAD						
400362-010	* OHIO SUICIDE PREVENTION FOUNDATION	CRAMER, R.	19,980	23,750	-	2,200	45,929	4,373	-	50,302	TRAD						
100506-010	* U.S. DEPARTMENT OF HEALTH AND HUMAN SERVICES	JENG, A.	204	118	-	-	322	-	-	322	TRAD						
400395-010	* HEALTHY CHESAPEAKE	KEKEH, M.	1,168	-	-	-	1,168	-	-	1,168	TRAD						
400403-010	* OBICI HEALTH CARE FOUNDATION	KEKEH, M.	1,481	-	-	-	1,481	74	-	1,555	TRAD						
100739-010	* U.S. PUBLIC HEALTH SERVICE (CENTERS FOR DISEASE CONTI	LESER, K.	1,982	1,296	-	271	3,550	923	-	4,472	TRAD						
100620-010	U.S. DEPARTMENT OF AGRICULTURE	ZHANG, Q.	17,628	2,637	-	-	20,265	2,027	-	22,292	TRAD						
100645-010	* U.S. PUBLIC HEALTH SERVICE (NATIONAL INSTITUTES OF HEA	ZHANG, Q.	14,964	6,181	-	-	21,146	11,630	-	32,776	TRAD						
100733-010	U.S. DEPARTMENT OF AGRICULTURE	ZHANG, Q.	2,342	750	-	-	3,092	309	-	3,402	TRAD						
300416-010	OLD DOMINION UNIVERSITY	ZHANG, Q.	5,526	-	-	-	5,526	3,039	-	8,565	TRAD						
100645-010	* U.S. PUBLIC HEALTH SERVICE (NATIONAL INSTITUTES OF HEA	ZHANG, Q.	-	38	-	-	38	21	-	58	TRAD						
			110,233	43,532	-	14,164	167,928	35,877	-	203,805	21.36%						
Dental Hygiene																	
300349-011	* EASTERN VIRGINIA MEDICAL SCHOOL	MCCOMBS, G.	3,758	-	-	-	3,758	301	-	4,058	TRAD						
300349-011	* EASTERN VIRGINIA MEDICAL SCHOOL	TOLLE, S.	2,006	-	-	-	2,006	160	-	2,167	TRAD						
			5,764	-	-	-	5,764	461	-	6,225	8.00%						
Medical Diagnostic Translation Sciences																	
100796-010	* U.S. PUBLIC HEALTH SERVICE (NATIONAL INSTITUTES OF HEA	BRUNO, R.	10,045	4,436	-	-	14,482	7,965	-	22,446	TRAD						
300479-010	* VIRGINIA COMMONWEALTH UNIVERSITY	BRUNO, R.	6,294	4,230	-	-	10,525	-	-	10,525	TRAD						
400331-010	* JEFFRESS RESEARCH GRANTS PROGRAM	BRUNO, R.	2,926	11,180	-	-	14,105	-	-	14,105	TRAD						
100517-010	* U.S. PUBLIC HEALTH SERVICE (NATIONAL INSTITUTES OF HEA	GUO, S.	4,739	3,722	-	-	8,461	4,484	-	12,945	TRAD						
400378-010	AMERICAN SOCIETY FOR CLINICAL PATHOLOGY	KRAJ, B.	-	2,500	-	-	2,500	-	-	2,500	TRAD						
300479-010	* VIRGINIA COMMONWEALTH UNIVERSITY	MOLLICA, P.	6,294	4,230	-	-	10,525	-	-	10,525	TRAD						
100578-010	U.S. PUBLIC HEALTH SERVICE (NATIONAL INSTITUTES OF HEA	RIETHMAN, H.	28,888	11,906	-	71,578	112,372	22,437	-	134,809	TRAD						
400272-010	THE WISTAR INSTITUTE	RIETHMAN, H.	5,759	-	-	-	5,759	3,167	-	8,926	TRAD						
300479-010	* VIRGINIA COMMONWEALTH UNIVERSITY	SACHS, P.	6,294	4,230	-	-	10,525	-	-	10,525	TRAD						
100796-010	* U.S. PUBLIC HEALTH SERVICE (NATIONAL INSTITUTES OF HEA	SACHS, P.	10,045	4,436	-	-	14,482	7,965	-	22,446	TRAD						
400331-010	* JEFFRESS RESEARCH GRANTS PROGRAM	SACHS, P.	2,926	11,180	-	-	14,105	-	-	14,105	TRAD						
			84,211	62,051	-	71,578	217,839	46,018	-	263,858	21.12%						

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

**FOR FISCAL YEAR 2019**

PROJECT NUMBER	SPONSORING AGENCY	PRINCIPAL INVESTIGATOR / PROJECT DIRECTOR	PROJECT DIRECT COST				PROJECT IDC AND FEES			TOTAL PROJECT COSTS	EFFECTIVE INDIRECT COST RATE	CBE CENTER
			PERSONNEL AND FRINGE BENEFITS	SUPPLIES, CONTRACTUAL, GENERAL, & TRAVEL	EQUIPMENT	SUBCONTRACTS, CONSTRUCTION, TUITION & OTHER	TOTAL DIRECT COSTS	REIMBURSED INDIRECT COSTS	TOTAL SPECIAL FEES			
<b>Medical Diagnostic Translation Sciences - Center for Bioelectronics</b>												
100692-010	U.S. PUBLIC HEALTH SERVICE (NATIONAL INSTITUTES OF HEA CATRAVAS, J.	CATRAVAS, J.	104,492	25,329	-	-	129,821	71,402	-	201,222	CBE	
100789-010	U.S. PUBLIC HEALTH SERVICE (NATIONAL INSTITUTES OF HEA CATRAVAS, J.	CATRAVAS, J.	82,369	29,973	-	-	112,342	61,788	-	174,130	CBE	
600210-010	FERRING PHARMACEUTICALS INC.	CATRAVAS, J.	17,912	99	-	6,267	24,278	13,353	-	37,631	CBE	
500366-010	* OLYMPUS CORPORATION OF THE AMERICAS	CATRAVAS, J.	-	(71)	-	1,174	1,103	(81)	-	1,022	CBE	
100579-010	U.S. PUBLIC HEALTH SERVICE (NATIONAL INSTITUTES OF HEA HELLER, L.	CATRAVAS, J.	72,283	16,127	-	66,632	155,042	48,625	-	203,667	CBE	
100516-010	U.S. PUBLIC HEALTH SERVICE (NATIONAL INSTITUTES OF HEA HELLER, R.	CATRAVAS, J.	160,099	46,745	-	-	206,844	109,627	-	316,471	CBE	
500226-000	PULSE BIOSCIENCES (ELECTROBLATE)	HELLER, R.	-	(34)	-	-	(34)	-	-	(34)	CBE	
100517-010	* U.S. PUBLIC HEALTH SERVICE (NATIONAL INSTITUTES OF HEA HELLER, R.	HELLER, R.	68,592	38,758	-	-	107,350	56,895	-	164,245	CBE	
100740-010	* U.S. PUBLIC HEALTH SERVICE (NATIONAL INSTITUTES OF HEA HELLER, R.	HELLER, R.	45,969	4,843	-	-	50,812	27,947	-	78,758	CBE	
500226-013	* PULSE BIOSCIENCES (ELECTROBLATE)	HELLER, R.	15,925	3,143	-	-	19,067	10,487	-	29,555	CBE	
100548-010	* U.S. PUBLIC HEALTH SERVICE (NATIONAL INSTITUTES OF HEA PAKHOMOV, A.	PAKHOMOV, A.	26,294	2,945	-	-	29,239	16,081	-	45,320	CBE	
300345-010	OLD DOMINION UNIVERSITY	PAKHOMOV, A.	168,437	42,705	-	266,914	478,056	116,128	-	594,185	CBE	
500226-014	PULSE BIOSCIENCES (ELECTROBLATE)	PAKHOMOV, A.	77,697	18,644	-	-	96,340	52,987	-	149,328	CBE	
300345-013	* OLD DOMINION UNIVERSITY	PAKHOMOV, A.	19,200	3,970	-	-	23,169	12,743	-	35,913	CBE	
			859,268	233,175	-	340,988	1,433,430	597,983	-	2,031,413	41.72%	

**SCHEDULE 4**  
**OLD DOMINION UNIVERSITY RESEARCH FOUNDATION**  
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**FOR FISCAL YEAR 2019**

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			PERSONNEL AND FRINGE BENEFITS	SUPPLIES, CONTRACTUAL, GENERAL, & TRAVEL	EQUIPMENT	SUBCONTRACTS, CONSTRUCTION, TUITION & OTHER	TOTAL DIRECT COSTS	REIMBURSED INDIRECT COSTS	TOTAL SPECIAL FEES			
<b>Nursing</b>												
100669-020	U.S. DEPARTMENT OF HEALTH AND HUMAN SERVICES	APATOV, N.	-	-	-	30,717	30,717	-	-	30,717		TRAD
100533-030	* U.S. DEPARTMENT OF HEALTH AND HUMAN SERVICES	FOWLER, C.	12,724	1,153	-	11,917	25,794	1,110	-	26,904		TRAD
100670-010	* U.S. PUBLIC HEALTH SERVICE (NATIONAL INSTITUTES OF HEA FOWLER, C.		21,861	2,752	-	4,241	28,855	1,969	-	30,824		TRAD
100689-010	* U.S. DEPARTMENT OF HEALTH AND HUMAN SERVICES	FOWLER, C.	6,746	98	-	7,696	14,540	548	-	15,088		TRAD
100689-020	* U.S. DEPARTMENT OF HEALTH AND HUMAN SERVICES	FOWLER, C.	5,143	-	-	10,463	15,606	411	-	16,017		TRAD
100670-021	* U.S. DEPARTMENT OF HEALTH AND HUMAN SERVICES	GUSTIN, T.	-	22,938	-	-	22,938	1,835	-	24,773		TRAD
100533-030	* U.S. DEPARTMENT OF HEALTH AND HUMAN SERVICES	HANEY, T.	12,724	1,153	-	11,917	25,794	1,110	-	26,904		TRAD
100670-010	* U.S. PUBLIC HEALTH SERVICE (NATIONAL INSTITUTES OF HEA HANEY, T.		3,025	2,500	-	-	5,525	442	-	5,967		TRAD
100670-020	* U.S. PUBLIC HEALTH SERVICE (NATIONAL INSTITUTES OF HEA HANEY, T.		63,290	4,375	-	46,245	113,911	5,413	-	119,324		TRAD
400368-010	* AMERICAN ASSOCIATION OF COLLEGES OF NURSING	HANEY, T.	-	521	-	-	521	-	-	521		TRAD
100670-010	* U.S. PUBLIC HEALTH SERVICE (NATIONAL INSTITUTES OF HEA HIGGINS, K.		1,008	833	-	-	1,842	147	-	1,989		TRAD
100670-020	* U.S. PUBLIC HEALTH SERVICE (NATIONAL INSTITUTES OF HEA HIGGINS, K.		21,097	1,458	-	15,415	37,970	1,804	-	39,775		TRAD
400368-010	* AMERICAN ASSOCIATION OF COLLEGES OF NURSING	KARLOWICZ, K.	-	348	-	-	348	-	-	348		TRAD
400368-010	* AMERICAN ASSOCIATION OF COLLEGES OF NURSING	MARTIN, J.	-	2,864	-	-	2,864	-	-	2,864		TRAD
100670-020	* U.S. PUBLIC HEALTH SERVICE (NATIONAL INSTITUTES OF HEA NESBITT, C.		11,296	686	-	18,881	30,863	959	-	31,822		TRAD
100689-020	* U.S. DEPARTMENT OF HEALTH AND HUMAN SERVICES	NESBITT, C.	5,803	-	-	11,063	16,866	464	-	17,331		TRAD
100533-030	* U.S. DEPARTMENT OF HEALTH AND HUMAN SERVICES	POSTON, R.	12,724	1,153	-	11,917	25,794	1,110	-	26,904		TRAD
100670-010	* U.S. PUBLIC HEALTH SERVICE (NATIONAL INSTITUTES OF HEA POSTON, R.		1,513	1,250	-	-	2,763	221	-	2,984		TRAD
100670-020	* U.S. PUBLIC HEALTH SERVICE (NATIONAL INSTITUTES OF HEA POSTON, R.		31,645	2,188	-	23,123	56,955	2,707	-	59,662		TRAD
100533-030	* U.S. DEPARTMENT OF HEALTH AND HUMAN SERVICES	RUTLEDGE, C.	2,570	958	-	17,875	21,403	282	-	21,685		TRAD
100670-010	* U.S. PUBLIC HEALTH SERVICE (NATIONAL INSTITUTES OF HEA RUTLEDGE, C.		1,513	1,250	-	-	2,763	221	-	2,984		TRAD
100670-020	* U.S. PUBLIC HEALTH SERVICE (NATIONAL INSTITUTES OF HEA RUTLEDGE, C.		20,349	1,502	-	4,241	26,092	1,748	-	27,840		TRAD
100670-021	* U.S. DEPARTMENT OF HEALTH AND HUMAN SERVICES	RUTLEDGE, C.	-	1,825	-	-	1,825	146	-	1,971		TRAD
300504-010	WESTERN CAROLINA UNIVERSITY	RUTLEDGE, C.	22,433	-	-	-	22,433	1,795	-	24,228		TRAD
100533-030	* U.S. DEPARTMENT OF HEALTH AND HUMAN SERVICES	RUTLEDGE, C.	16,515	772	-	-	17,287	1,383	-	18,670		TRAD
100670-020	* U.S. PUBLIC HEALTH SERVICE (NATIONAL INSTITUTES OF HEA RUTLEDGE, C.		11,296	686	-	18,881	30,863	959	-	31,822		TRAD
100670-021	* U.S. DEPARTMENT OF HEALTH AND HUMAN SERVICES	RUTLEDGE, C.	-	21,113	-	-	21,113	1,689	-	22,802		TRAD
400368-010	* AMERICAN ASSOCIATION OF COLLEGES OF NURSING	SHARP, P.	-	521	-	-	521	-	-	521		TRAD
400368-010	* AMERICAN ASSOCIATION OF COLLEGES OF NURSING	TREMBLAY, B.	-	1,043	-	-	1,043	-	-	1,043		TRAD
100533-030	* U.S. DEPARTMENT OF HEALTH AND HUMAN SERVICES	WILES, L.	6,362	577	-	5,958	12,897	555	-	13,452		TRAD
			291,636	76,517	-	250,552	618,705	29,029	-	647,734	4.69%	

**SCHEDULE 4**  
**OLD DOMINION UNIVERSITY RESEARCH FOUNDATION**  
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 (MEASURED BY EXPENDITURES INCURRED)

**FOR FISCAL YEAR 2019**

PROJECT NUMBER	SPONSORING AGENCY	PROJECT DIRECT COST				PROJECT IDC AND FEES				TOTAL PROJECT COSTS	EFFECTIVE INDIRECT COST RATE	TRAD CENTER
		PRINCIPAL INVESTIGATOR / PROJECT DIRECTOR	PERSONNEL AND FRINGE BENEFITS	SUPPLIES, CONTRACTUAL, GENERAL, & TRAVEL	EQUIPMENT	SUBCONTRACTS, CONSTRUCTION, TUITION & OTHER	TOTAL DIRECT COSTS	REIMBURSED INDIRECT COSTS	TOTAL SPECIAL FEES			
<b>School of Rehabilitation Sciences</b>												
400381-010	NATIONAL ASSOCIATION RESEARCH AND EDUCATION FOUND; CAVALLARIO, J.	709	150	-	-	859	-	-	-	859	4.57%	TRAD
100670-010	* U.S. PUBLIC HEALTH SERVICE (NATIONAL INSTITUTES OF HEA KOTT, K.	1,513	1,250	-	-	2,763	221	-	-	2,984	4.57%	TRAD
100670-020	* U.S. PUBLIC HEALTH SERVICE (NATIONAL INSTITUTES OF HEA KOTT, K.	31,645	2,188	-	23,123	56,955	2,707	-	-	59,662	4.57%	TRAD
400380-010	NATIONAL ATHLETIC TRAINERS' ASSOCIATION	MCCANN, R.	994	-	-	994	-	-	-	994	4.57%	TRAD
400388-010	MID-ATLANTIC ATHLETIC TRAINERS' ASSOCIATION (MAATA)	MCCANN, R.	-	462	-	462	-	-	-	462	4.57%	TRAD
300441-010	GEORGE MASON UNIVERSITY	MORRISON, S.	1,274	-	-	1,274	-	-	-	1,274	4.57%	TRAD
400314-010	MID ATLANTIC TRAINERS' ASSOCIATION	MORRISON, S.	-	-	265	265	-	-	-	265	4.57%	TRAD
400332-010	* ALZHEIMER'S ASSOCIATION	MORRISON, S.	7,886	(1,868)	-	6,019	602	-	-	6,620	4.57%	TRAD
400384-010	* SENTARA FOUNDATION	MORRISON, S.	5,365	-	-	5,365	-	-	-	5,365	4.57%	TRAD
400384-010	* SENTARA FOUNDATION	RUSSELL, D.	2,299	-	-	2,299	-	-	-	2,299	4.57%	TRAD
			50,691	3,176	-	23,388	77,255	3,529	-	80,785	4.57%	
			\$ 1,417,503	\$ 431,266	\$ -	\$ 713,380	\$ 2,562,149	\$ 716,496	\$ -	\$ 3,278,645	27.96%	
<b>TOTAL HEALTH SCIENCES</b>												

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**OLD DOMINION UNIVERSITY RESEARCH FOUNDATION**  
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**FOR FISCAL YEAR 2019**

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			PERSONNEL AND FRINGE BENEFITS	SUPPLIES, CONTRACTUAL, GENERAL, & TRAVEL	EQUIPMENT	SUBCONTRACTS, CONSTRUCTION, TUITION & OTHER	TOTAL DIRECT COSTS	REIMBURSED INDIRECT COSTS	TOTAL SPECIAL FEES								
<b>COLLEGE OF SCIENCES</b>																	
Dean's Office																	
100550-030	U.S. PUBLIC HEALTH SERVICE (NATIONAL INSTITUTES OF HEA DAINES, D.		12,554	12,259	-	-	24,813	13,151	-	37,964	TRAD						
			12,554	12,259	-	-	24,813	13,151	-	37,964	53.00%						
Biological Sciences																	
100715-010	NATIONAL SCIENCE FOUNDATION	BARSHIS, D.	3,758	1,795	-	480	6,032	1,444	-	7,476	TRAD						
300386-010	VA INSTITUTE OF MARINE SCIENCE (VIMS)	BARSHIS, D.	3,863	3,127	-	-	6,990	-	-	6,990	TRAD						
400344-010	US-ISRAEL BINATIONAL SCIENCE FOUNDATION	BARSHIS, D.	-	20,910	-	-	20,910	3,137	-	24,047	TRAD						
400390-010	PAUL G ALLEN FAMILY FOUNDATION	BARSHIS, D.	4,355	5,138	-	-	9,493	-	-	9,493	TRAD						
100688-010	* NATIONAL SCIENCE FOUNDATION	BARSHIS, D.	15,065	17,344	2	7,043	39,453	8,426	-	47,880	TRAD						
100603-010	NATIONAL SCIENCE FOUNDATION	BARTOL, I.	33,756	16,267	-	-	50,022	27,512	-	77,535	TRAD						
100610-010	NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION	BUTLER, M.	8,549	34,525	-	-	43,074	11,199	-	54,274	TRAD						
100744-010	NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION	BUTLER, M.	12,178	6,672	-	-	18,849	4,901	-	23,750	TRAD						
200214-011	FLORIDA FISH & WILDLIFE CONSERVATION COMMISSION	BUTLER, M.	2,583	6,422	-	654	9,658	2,511	-	12,169	TRAD						
200243-010	FLORIDA FISH & WILDLIFE CONSERVATION COMMISSION	BUTLER, M.	33,271	20,984	-	-	54,255	3,219	-	57,474	TRAD						
300379-010	UNIVERSITY OF FLORIDA	BUTLER, M.	-	-	-	-	-	(1)	-	(1)	TRAD						
400399-010	NATIONAL FISH AND WILDLIFE FOUNDATION	BUTLER, M.	4,825	4,254	5,161	-	14,239	2,360	-	16,599	TRAD						
100688-010	* NATIONAL SCIENCE FOUNDATION	CARPENTER, K.	75,214	76,318	-	18,385	169,917	39,398	-	209,315	TRAD						
300461-010	ARIZONA STATE UNIVERSITY	CARPENTER, K.	33,112	35,912	-	4,250	73,274	37,963	-	111,238	TRAD						
600174-010	QATAR UNIVERSITY	CARPENTER, K.	(12,488)	-	-	-	(12,488)	(2,498)	-	(14,985)	TRAD						
600185-010	WORLD CONSERVATION UNION (IUCN)	CARPENTER, K.	14,903	1,609	-	-	16,512	4,954	-	21,465	TRAD						
600190-010	WORLD CONSERVATION UNION (IUCN)	CARPENTER, K.	40,771	6,567	-	3,229	50,566	2,367	-	52,933	TRAD						
600207-010	WORLD CONSERVATION UNION (IUCN)	CARPENTER, K.	44,086	5,222	-	-	49,308	5,424	-	54,732	TRAD						
600220-010	WORLD CONSERVATION UNION (IUCN)	CARPENTER, K.	26,092	39	-	-	26,131	2,613	-	28,744	TRAD						
100688-010	* NATIONAL SCIENCE FOUNDATION	CARPENTER, K.	60,371	79,776	17	45,000	185,164	36,438	-	221,602	TRAD						
100550-021	U.S. PUBLIC HEALTH SERVICE (NATIONAL INSTITUTES OF HEA DAINES, D.		(106)	(47)	-	-	(153)	(81)	-	(234)	TRAD						
100550-030	U.S. PUBLIC HEALTH SERVICE (NATIONAL INSTITUTES OF HEA DAINES, D.		31,285	6,368	-	-	37,653	19,956	-	57,609	TRAD						
300437-011	OLD DOMINION UNIVERSITY	DAUER, D.	3,934	-	-	19,829	23,763	1,704	-	25,467	TRAD						
300437-012	OLD DOMINION UNIVERSITY	DAUER, D.	1,718	-	-	13,190	14,908	1,488	-	16,396	TRAD						
300476-011	OLD DOMINION UNIVERSITY	DAUER, D.	183,314	22,763	-	-	206,077	18,850	-	224,927	TRAD						
300476-012	OLD DOMINION UNIVERSITY	DAUER, D.	86,067	-	-	-	86,067	8,607	-	94,673	TRAD						
300437-013	OLD DOMINION UNIVERSITY	EGERTON, T.	2,290	-	-	12,435	14,725	1,474	-	16,198	TRAD						
300438-010	OLD DOMINION UNIVERSITY	EGERTON, T.	1,117	(260)	-	-	857	112	-	968	TRAD						
300473-010	OLD DOMINION UNIVERSITY	EGERTON, T.	24,833	9,189	-	-	34,021	2,483	-	36,505	TRAD						
300476-013	OLD DOMINION UNIVERSITY	EGERTON, T.	97,512	1,071	-	-	98,583	9,858	-	108,442	TRAD						
100586-010	U.S. DEPARTMENT OF AGRICULTURE	GAFF, H.	-	2,757	-	-	2,757	-	-	2,757	TRAD						
100714-010	U.S. PUBLIC HEALTH SERVICE (CENTERS FOR DISEASE CONT) GAFF, H.		55,066	2,099	-	532	57,697	31,441	-	89,138	TRAD						
100684-010	* U.S. DEPARTMENT OF HEALTH AND HUMAN SERVICES	GAFF, H.	27,053	49,883	-	88,189	165,125	42,314	-	207,439	TRAD						
200200-010	* VA DEPARTMENT OF GAME AND INLAND FISHERIES	GAFF, H.	-	-	97	-	97	-	-	97	TRAD						
300439-010	* UNIVERSITY OF RICHMOND	GAFF, H.	3,579	2,017	-	-	5,596	-	-	5,596	TRAD						
400334-010	* NATIONAL CAPITAL LYME DISEASE ASSOCIATION	GAFF, H.	-	(2)	-	-	(2)	-	-	(2)	TRAD						
100684-010	* U.S. DEPARTMENT OF HEALTH AND HUMAN SERVICES	GAUTHIER, D.	8,116	14,965	-	26,457	49,537	12,694	-	62,232	TRAD						
200200-010	* VA DEPARTMENT OF GAME AND INLAND FISHERIES	GAUTHIER, D.	-	-	290	-	290	-	-	290	TRAD						
200212-010	VA DEPARTMENT OF AGRICULTURE	HORTH, L.	1,113	435	-	-	1,548	-	-	1,548	TRAD						
200239-010	VA DEPARTMENT OF AGRICULTURE	HORTH, L.	524	615	-	-	1,139	-	-	1,139	TRAD						
200264-010	VA DEPARTMENT OF AGRICULTURE	HORTH, L.	1,970	17,187	-	-	19,157	-	-	19,157	TRAD						
200287-010	VA DEPARTMENT OF AGRICULTURE	HORTH, L.	16,725	16,951	-	-	33,676	-	-	33,676	TRAD						
400268-010	VIRGINIA STATE BEEKEEPERS ASSOCIATION	HORTH, L.	-	199	-	-	199	-	-	199	TRAD						

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**FOR FISCAL YEAR 2019**

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			PERSONNEL AND FRINGE BENEFITS	SUPPLIES, CONTRACTUAL, GENERAL, & TRAVEL	EQUIPMENT	SUBCONTRACTS, CONSTRUCTION, TUITION & OTHER	TOTAL DIRECT COSTS	REIMBURSED INDIRECT COSTS	TOTAL SPECIAL FEES			
100684-010	* U.S. DEPARTMENT OF HEALTH AND HUMAN SERVICES	HYNES, W.	11,146	21,824	-	30,666	63,637	18,134	-	81,771	TRAD	
300439-010	* UNIVERSITY OF RICHMOND	HYNES, W.	1,193	7	-	-	1,200	-	-	1,200	TRAD	
400334-010	* NATIONAL CAPITAL LYME DISEASE ASSOCIATION	HYNES, W.	-	(5)	-	-	(5)	-	-	(5)	TRAD	
400360-010	NATIONAL CAPITAL LYME DISEASE ASSOCIATION	HYNES, W.	1,826	9,033	-	-	10,859	-	-	10,859	TRAD	
400366-010	NATIONAL CAPITAL LYME DISEASE ASSOCIATION	HYNES, W.	-	257	-	-	257	-	-	257	TRAD	
100684-010	* U.S. DEPARTMENT OF HEALTH AND HUMAN SERVICES	HYNES, W.	7,790	13,094	-	31,066	51,950	11,486	-	63,437	TRAD	
300439-010	* UNIVERSITY OF RICHMOND	HYNES, W.	-	665	-	-	665	-	-	665	TRAD	
100496-010	U.S. PUBLIC HEALTH SERVICE (NATIONAL INSTITUTES OF HEA KRAJ, P.	-	-	(224)	-	-	(224)	(119)	-	(343)	TRAD	
400339-010	* PEW CHARITABLE TRUSTS	MAXWELL, S.	7,255	33,441	-	-	40,696	(183)	-	40,513	TRAD	
100671-010	* U.S. PUBLIC HEALTH SERVICE (NATIONAL INSTITUTES OF HEA NEELAKANTA, G.	-	103,377	22,959	-	-	126,336	69,485	-	195,821	TRAD	
400302-010	JEFFRESS RESEARCH GRANTS PROGRAM	OSGOOD, C.	-	186	-	-	186	-	-	186	TRAD	
400304-010	ALFRED P. SLOAN FOUNDATION	OSGOOD, C.	979	10,350	-	1,578	12,907	-	-	12,907	TRAD	
100555-010	* U.S. PUBLIC HEALTH SERVICE (NATIONAL INSTITUTES OF HEA OSGOOD, C.	-	2,286	265	19	-	2,570	1,403	-	3,973	TRAD	
100585-010	* U.S. PUBLIC HEALTH SERVICE (NATIONAL INSTITUTES OF HEA OSGOOD, C.	-	6,270	619	1,337	-	8,226	3,789	-	12,015	TRAD	
400339-010	* PEW CHARITABLE TRUSTS	OSGOOD, C.	7,255	33,441	-	-	40,696	(183)	-	40,513	TRAD	
100671-010	* U.S. PUBLIC HEALTH SERVICE (NATIONAL INSTITUTES OF HEA SULTANA, H.	-	68,918	15,306	-	-	84,224	46,323	-	130,547	TRAD	
400019-050	EASTERN VIRGINIA MEDICAL SCHOOL	SWANSON, J.	-	(1,619)	-	-	(1,619)	-	-	(1,619)	TRAD	
100724-010	NATIONAL SCIENCE FOUNDATION	WALLACE, L.	4,277	5,461	-	-	9,738	5,356	-	15,094	TRAD	
100542-010	NATIONAL SCIENCE FOUNDATION	WALTERS, E.	50,047	30,437	-	19,439	99,923	20,926	-	120,849	TRAD	
			1,222,989	684,567	6,536	322,808	2,236,900	518,686	-	2,755,586	23.19%	
<b>Center for Coastal Physical Oceanography</b>												
300385-010	STATE UNIVERSITY OF NEW JERSEY (ALL CAMPUSES)	ATKINSON, L.	-	-	-	-	-	(0)	-	(0)	TRAD	
300385-020	STATE UNIVERSITY OF NEW JERSEY (ALL CAMPUSES)	ATKINSON, L.	79,390	38,881	-	-	118,271	65,049	-	183,321	TRAD	
300451-010	UNIVERSITY OF RHODE ISLAND	ATKINSON, L.	17,873	-	-	-	17,873	9,830	-	27,703	TRAD	
300273-011	VA INSTITUTE OF MARINE SCIENCE (VIMS)	COVI, M.	518	1,994	-	-	2,512	-	-	2,512	TRAD	
300484-010	VA INSTITUTE OF MARINE SCIENCE (VIMS)	COVI, M.	1,685	-	-	-	1,685	438	-	2,123	TRAD	
100598-010	* NATIONAL SCIENCE FOUNDATION	DINNIMAN, M.	10,807	-	-	-	10,807	5,944	-	16,751	TRAD	
100662-010	* NATIONAL SCIENCE FOUNDATION	DINNIMAN, M.	8,560	-	-	-	8,560	4,708	-	13,268	TRAD	
100686-010	* NATIONAL SCIENCE FOUNDATION	DINNIMAN, M.	16,034	911	-	-	16,945	9,320	-	26,265	TRAD	
100747-010	* NATIONAL SCIENCE FOUNDATION	DINNIMAN, M.	4,280	135	-	-	4,415	2,428	-	6,844	TRAD	
100539-010	* NATIONAL SCIENCE FOUNDATION	HOFMANN, E.	-	221	-	-	221	117	-	339	TRAD	
100686-010	* NATIONAL SCIENCE FOUNDATION	HOFMANN, E.	16,034	911	-	-	16,945	9,320	-	26,265	TRAD	
100735-011	NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION	HOFMANN, E.	11,566	-	-	-	11,566	6,361	-	17,927	TRAD	
200249-011	* HAMPTON ROADS SANITATION DISTRICT COMMISSION	HOFMANN, E.	3,247	-	-	1,196	4,444	444	-	4,888	TRAD	
200275-011	* HAMPTON ROADS SANITATION DISTRICT COMMISSION	HOFMANN, E.	9,553	-	-	-	9,553	955	-	10,508	TRAD	
300279-010	PENNSYLVANIA STATE UNIVERSITY	HOFMANN, E.	9,748	-	-	-	9,748	5,166	-	14,914	TRAD	
300322-010	UNIVERSITY OF SOUTHERN MISSISSIPPI	HOFMANN, E.	15,696	2,678	-	-	18,374	9,738	-	28,112	TRAD	
300399-010	VA INSTITUTE OF MARINE SCIENCE (VIMS)	HOFMANN, E.	54,471	-	-	-	54,471	29,959	-	84,430	TRAD	
400355-010	CHESAPEAKE BAY FOUNDATION	HOFMANN, E.	-	1,754	-	-	1,754	-	-	1,754	TRAD	
400356-010	CHESAPEAKE BAY FOUNDATION	HOFMANN, E.	-	2,363	-	-	2,363	-	-	2,363	TRAD	
100577-010	NATIONAL SCIENCE FOUNDATION	KLINCK, J.	46,412	5,618	-	-	52,030	28,616	-	80,646	TRAD	
100589-010	NASA GODDARD SPACEFLIGHT CENTER	KLINCK, J.	27,312	1,604	8,398	-	37,315	15,904	-	53,219	TRAD	
100598-010	* NATIONAL SCIENCE FOUNDATION	KLINCK, J.	10,807	-	-	-	10,807	5,944	-	16,751	TRAD	
100657-010	NASA GODDARD SPACEFLIGHT CENTER	KLINCK, J.	14,679	651	-	-	15,330	8,432	-	23,762	TRAD	
100660-010	LOS ALAMOS NATIONAL LABORATORIES	KLINCK, J.	21,042	-	-	-	21,042	11,573	-	32,614	TRAD	
100687-010	NASA/HEADQUARTERS	KLINCK, J.	44,308	44,150	-	23,198	111,656	48,652	-	160,308	TRAD	
100747-010	* NATIONAL SCIENCE FOUNDATION	KLINCK, J.	4,280	135	-	-	4,415	2,428	-	6,844	TRAD	
200275-011	* HAMPTON ROADS SANITATION DISTRICT COMMISSION	KLINCK, J.	6,368	-	-	-	6,368	637	-	7,005	TRAD	
100539-010	* NATIONAL SCIENCE FOUNDATION	ST- LAURENT, P.	-	221	-	-	221	117	-	339	TRAD	
			434,670	102,228	8,398	24,395	569,691	282,082	-	851,773	49.52%	

**SCHEDULE 4**  
**OLD DOMINION UNIVERSITY RESEARCH FOUNDATION**  
**SPONSORED PROGRAM ACTIVITY BY INDIVIDUAL PROJECT**

(MEASURED BY EXPENDITURES INCURRED)

**FOR FISCAL YEAR 2019**

PROJECT NUMBER	SPONSORING AGENCY	PRINCIPAL INVESTIGATOR / PROJECT DIRECTOR	PROJECT DIRECT COST				PROJECT IDC AND FEES				TOTAL PROJECT COSTS	EFFECTIVE INDIRECT COST RATE	CENTER
			PERSONNEL AND FRINGE BENEFITS	SUPPLIES, CONTRACTUAL, GENERAL, & TRAVEL	EQUIPMENT	SUBCONTRACTS, CONSTRUCTION, TUITION & OTHER	TOTAL DIRECT COSTS	REIMBURSED INDIRECT COSTS	TOTAL SPECIAL FEES				
<b>Center for Coastal Physical Oceanography - MARI</b>													
100565-010	U.S. FISH AND WILDLIFE SERVICES	PLAG, H.	15,942	4,037	-	20,046	40,025	-	-	40,025	MARI	MARI	
100678-010	NASA/HEADQUARTERS	PLAG, H.	307	-	-	-	307	80	-	387			
			16,249	4,037	-	20,046	40,332	80	-	40,412	0.20%		
<b>Chemistry and Biochemistry</b>													
100646-010	U.S. PUBLIC HEALTH SERVICE (NATIONAL INSTITUTES OF HEA	BAYSE, C.	53,074	4,681	-	11,304	69,059	31,765	-	100,825	TRAD		
400375-010	VIRGINIA ACADEMY OF SCIENCE	BAYSE, C.	2,367	-	-	-	2,367	-	-	2,367	TRAD		
100664-010	* NATIONAL SCIENCE FOUNDATION	BAYSE, C.	9,645	1,396	-	41,339	52,380	6,073	-	58,452	TRAD		
300522-010	* COLLEGE OF WILLIAM AND MARY	BAYSE, C.	689	-	-	-	689	379	-	1,068	TRAD		
100039-010	NASA GODDARD SPACEFLIGHT CENTER	BERNATH, P.	(1,892)	-	-	-	(1,892)	(1,003)	-	(2,895)	TRAD		
100584-010	NASA GODDARD SPACEFLIGHT CENTER	BERNATH, P.	68,466	2,918	-	-	71,383	39,261	-	110,644	TRAD		
100611-010	NASA GODDARD SPACEFLIGHT CENTER	BERNATH, P.	172,081	18,620	-	2,679	193,380	104,886	-	298,266	TRAD		
100698-010	NASA/HEADQUARTERS	BERNATH, P.	86,630	906	-	-	87,536	48,145	-	135,680	TRAD		
300275-010	OLD DOMINION UNIVERSITY	BERNATH, P.	-	(56)	-	-	(56)	(30)	-	(86)	TRAD		
100693-010	OAK RIDGE NATIONAL LABORATORY	CHEN, H.	19,223	468	-	-	19,691	10,830	-	30,521	TRAD		
300437-010	OLD DOMINION UNIVERSITY	DONAT, J.	19,358	49,583	-	22,774	91,715	4,870	-	96,585	TRAD		
300476-010	OLD DOMINION UNIVERSITY	DONAT, J.	298,732	162,544	-	-	461,275	37,535	-	498,810	TRAD		
100627-010	* U.S. DEPARTMENT OF AGRICULTURE	GREENE, L.	10,201	8,045	-	-	18,246	7,820	-	26,066	TRAD		
300440-010	VIRGINIA ACADEMY OF SCIENCE	GREENE, L.	-	763	-	-	763	-	-	763	TRAD		
100627-010	* U.S. DEPARTMENT OF AGRICULTURE	GREENE, L.	9,837	2,811	-	-	12,648	5,421	-	18,070	TRAD		
100523-010	NATIONAL SCIENCE FOUNDATION	HATCHER, P.	3,168	-	-	-	3,168	1,679	-	4,847	TRAD		
100597-010	NATIONAL SCIENCE FOUNDATION	HATCHER, P.	22,483	7,059	-	3,884	33,426	16,248	-	49,674	TRAD		
300323-010	TEXAS A&M UNIVERSITY	HATCHER, P.	-	578	-	-	578	306	-	885	TRAD		
300464-010	TEXAS A&M UNIVERSITY	HATCHER, P.	108,219	24,477	-	-	132,696	72,983	-	205,678	TRAD		
300466-010	UNIVERSITY OF MAINE	HATCHER, P.	47,610	3,389	-	9,726	60,725	26,025	-	86,750	TRAD		
100452-010	NATIONAL SCIENCE FOUNDATION	HOLDER, A.	9,564	10,644	-	-	20,208	10,710	-	30,918	TRAD		
100664-010	* NATIONAL SCIENCE FOUNDATION	HOLDER, A.	6,430	930	-	27,559	34,920	4,048	-	38,968	TRAD		
100718-010	* U.S. PUBLIC HEALTH SERVICE (NATIONAL INSTITUTES OF HEA	HOLDER, A.	26,846	3,428	-	43,317	73,591	4,676	-	78,267	TRAD		
100718-020	U.S. PUBLIC HEALTH SERVICE (NATIONAL INSTITUTES OF HEA	HOLDER, A.	7,019	-	-	3,635	10,654	562	-	11,215	TRAD		
300455-020	* UNIVERSITY OF NORTH TEXAS HEALTH SCIENCE CENTER	HOLDER, A.	-	168	-	-	168	-	-	168	TRAD		
100627-010	* U.S. DEPARTMENT OF AGRICULTURE	LEE, J.	46,756	25,331	-	-	72,086	30,896	-	102,982	TRAD		
100637-010	U.S. GEOLOGICAL SURVEY	MAO, J.	3,213	3,322	-	-	6,535	-	-	6,535	TRAD		
100681-010	NATIONAL SCIENCE FOUNDATION	MAO, J.	20,150	762	-	-	20,913	11,502	-	32,415	TRAD		
100808-010	NATIONAL SCIENCE FOUNDATION	MAO, J.	1,406	-	-	-	1,406	773	-	2,179	TRAD		
100512-010	* NATIONAL SCIENCE FOUNDATION	MOPPER, K.	-	186	-	-	186	99	-	285	TRAD		
100512-020	* NATIONAL SCIENCE FOUNDATION	MOPPER, K.	8,009	2,176	-	-	10,186	5,398	-	15,584	TRAD		
100512-021	NATIONAL SCIENCE FOUNDATION	MOPPER, K.	-	767	-	-	767	407	-	1,174	TRAD		
400386-010	INTERNATIONAL CENTER FOR DIFFRACTION DATA	PAGOLA, S.	-	4,523	-	-	4,523	-	-	4,523	TRAD		
100556-010	NATIONAL SCIENCE FOUNDATION	POUTSMA, J.	4,478	-	-	-	4,478	2,373	-	6,851	TRAD		
300355-010	COLLEGE OF WILLIAM AND MARY	POUTSMA, J.	4,095	-	-	-	4,095	2,252	-	6,347	TRAD		
100606-010	U.S. PUBLIC HEALTH SERVICE (NATIONAL INSTITUTES OF HEA	PURCELL, E.	40,433	17,554	-	-	57,987	4,639	-	62,626	TRAD		
300522-010	* COLLEGE OF WILLIAM AND MARY	PURCELL, E.	1,033	-	-	-	1,033	568	-	1,602	TRAD		
500226-017	* PULSE BIOSCIENCES (ELECTROBLATE)	PURCELL, E.	7,873	3,024	-	-	10,897	5,993	-	16,890	TRAD		
200272-010	* CENTER FOR INNOVATIVE TECHNOLOGY	RAMJEE, B.	521	640	-	-	1,161	348	-	1,509	TRAD		

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

**FOR FISCAL YEAR 2019**

PROJECT NUMBER	SPONSORING AGENCY	PRINCIPAL INVESTIGATOR / PROJECT DIRECTOR	PROJECT DIRECT COST				PROJECT IDC AND FEES			TOTAL PROJECT COSTS	EFFECTIVE INDIRECT COST RATE	CENTER
			PERSONNEL AND FRINGE BENEFITS	SUPPLIES, CONTRACTUAL, GENERAL, & TRAVEL	EQUIPMENT	SUBCONTRACTS, CONSTRUCTION, TUITION & OTHER	TOTAL DIRECT COSTS	REIMBURSED INDIRECT COSTS	TOTAL SPECIAL FEES			
100729-010	NATIONAL SCIENCE FOUNDATION	WANG, G.	27,519	17,938	-	2,990	48,448	25,002	-	73,450	TRAD	
300483-010	OLD DOMINION UNIVERSITY	WANG, G.	1,507	1,140	-	-	2,647	-	-	2,647	TRAD	
500301-010	BOEHRINGER INGELHEIM	WANG, G.	-	251	4,672	198	5,121	-	-	5,121	TRAD	
100555-010	* U.S. PUBLIC HEALTH SERVICE (NATIONAL INSTITUTES OF HEA XU, N.		43,425	5,042	365	-	48,832	26,657	-	75,489	TRAD	
100585-010	* U.S. PUBLIC HEALTH SERVICE (NATIONAL INSTITUTES OF HEA XU, N.		16,278	814	5,348	-	22,440	9,400	-	31,840	TRAD	
100254-010	NATIONAL SCIENCE FOUNDATION	XU, N.	-	-	-	-	-	(0)	-	(0)	TRAD	
100490-010	NATIONAL SCIENCE FOUNDATION	XU, N.	12,077	2,048	384	-	14,509	7,486	-	21,995	TRAD	
100490-020	NATIONAL SCIENCE FOUNDATION	XU, N.	-	-	-	1,700	1,700	-	-	1,700	TRAD	
100490-030	NATIONAL SCIENCE FOUNDATION	XU, N.	1,505	-	-	2,286	3,791	-	-	3,791	TRAD	
100585-011	U.S. PUBLIC HEALTH SERVICE (NATIONAL INSTITUTES OF HEA XU, N.		11,335	-	-	-	11,335	6,234	-	17,569	TRAD	
100585-010	* U.S. PUBLIC HEALTH SERVICE (NATIONAL INSTITUTES OF HEA XU, X.		8,801	1,663	-	-	10,464	5,755	-	16,219	TRAD	
			1,240,162	390,533	10,769	173,391	1,814,855	578,971	-	2,393,826	31.90%	
<b>Chemistry and Biochemistry- ARC</b>												
200272-010	* CENTER FOR INNOVATIVE TECHNOLOGY	RAMJEE, B.	2,357	656	-	-	3,013	904	-	3,917	ARC	
			2,357	656	-	-	3,013	904	-	3,917	30.00%	
<b>Computer Sciences</b>												
100483-010	* NATIONAL SCIENCE FOUNDATION	CHERNIKOV, A.	19,905	3,376	-	-	23,282	12,339	-	35,621	TRAD	
400303-020	NATIONAL INSTITUTE OF AEROSPACE ASSOCIATES (NIA)	CHERNIKOV, A.	32,243	1,500	-	2,642	36,385	2,171	-	38,555	TRAD	
100558-010	LANGLEY RESEARCH CENTER	CHRISOCHOIDES, N.	61,717	395	-	11,309	73,422	34,162	-	107,583	TRAD	
400406-010	SOUTHERN UNIVERSITIES RESEARCH ASSOC (SURA)	CHRISOCHOIDES, N.	9,293	-	-	-	9,293	-	-	9,293	TRAD	
100483-010	* NATIONAL SCIENCE FOUNDATION	CHRISOCHOIDES, N.	38,640	6,554	-	-	45,194	23,953	-	69,147	TRAD	
100689-020	* U.S. DEPARTMENT OF HEALTH AND HUMAN SERVICES	GUPTA, A.	10,946	-	-	21,526	32,472	876	-	33,348	TRAD	
100689-010	* U.S. DEPARTMENT OF HEALTH AND HUMAN SERVICES	GUPTA, A.	6,746	98	-	7,696	14,540	548	-	15,088	TRAD	
100532-010	* U.S. PUBLIC HEALTH SERVICE (NATIONAL INSTITUTES OF HEA HE, J.		17,163	1,345	-	-	18,507	10,179	-	28,687	TRAD	
100468-010	* NATIONAL SCIENCE FOUNDATION	HE, J.	3,302	2,657	-	-	5,959	3,158	-	9,117	TRAD	
100468-010	* NATIONAL SCIENCE FOUNDATION	JI, S.	1,321	1,063	-	-	2,384	1,263	-	3,647	TRAD	
100186-010	NATIONAL SCIENCE FOUNDATION	LI, Y.	1,380	-	-	-	1,380	690	-	2,070	TRAD	
100527-023	NASA GODDARD SPACEFLIGHT CENTER	LI, Y.	1,301	240	-	3,805	5,346	-	-	5,346	TRAD	
500069-010	PRENTICE HALL BUSINESS PUBLISHING	MALY, K.	-	1,918	-	-	1,918	-	-	1,918	TRAD	
600202-010	ACHARYA INSTITUTE OF TECHNOLOGY	MALY, K.	1,638	2,859	-	23,618	28,115	-	-	28,115	TRAD	
100467-010	NATIONAL SCIENCE FOUNDATION	NADEEM, T.	(1,546)	-	-	-	(1,546)	(820)	-	(2,366)	TRAD	
100552-010	* NATIONAL SCIENCE FOUNDATION	NELSON, M.	17,168	1,778	-	2,023	20,969	10,042	-	31,010	TRAD	
100519-010	* INSTITUTE OF MUSEUM AND LIBRARY SERVICES	NELSON, M.	11,918	-	-	15,000	26,918	6,317	-	33,234	TRAD	
100676-010	* NATIONAL ENDOWMENT FOR THE HUMANITIES	NELSON, M.	3,192	-	-	-	3,192	1,755	-	4,947	TRAD	
300380-010	* OLD DOMINION UNIVERSITY	NELSON, M.	36,021	2,563	-	13,657	52,241	-	-	52,241	TRAD	
100554-010	* NATIONAL SCIENCE FOUNDATION	RANJAN, D.	15,792	-	904	-	16,696	8,370	-	25,065	TRAD	
100468-010	* NATIONAL SCIENCE FOUNDATION	RANJAN, D.	991	797	-	-	1,788	947	-	2,735	TRAD	
100718-010	* U.S. PUBLIC HEALTH SERVICE (NATIONAL INSTITUTES OF HEA RANJAN, D.		26,846	3,428	-	43,317	73,591	4,676	-	78,267	TRAD	
100718-020	* U.S. PUBLIC HEALTH SERVICE (NATIONAL INSTITUTES OF HEA RANJAN, D.		7,019	-	-	3,635	10,654	562	-	11,215	TRAD	

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

**FOR FISCAL YEAR 2019**

PROJECT NUMBER	SPONSORING AGENCY	PROJECT DIRECT COST					PROJECT IDC AND FEES			TOTAL PROJECT COSTS	EFFECTIVE INDIRECT COST RATE	CENTER
		PRINCIPAL INVESTIGATOR / PROJECT DIRECTOR	PERSONNEL AND FRINGE BENEFITS	SUPPLIES, CONTRACTUAL, GENERAL, & TRAVEL	EQUIPMENT	SUBCONTRACTS, CONSTRUCTION, TUITION & OTHER	TOTAL DIRECT COSTS	REIMBURSED INDIRECT COSTS	TOTAL SPECIAL FEES			
100801-010	NATIONAL SCIENCE FOUNDATION	WANG, C.	1,449	-	-	-	1,449	797	-	2,245	TRAD	
100745-010	* NATIONAL SCIENCE FOUNDATION	WANG, C.	462	300	-	-	762	419	-	1,181	TRAD	
600214-010	HUAWEI TECHNOLOGIES CO. LTD	WANG, C.	2,063	1,814	-	-	3,877	2,132	-	6,010	TRAD	
100519-010	* INSTITUTE OF MUSEUM AND LIBRARY SERVICES	WEIGLE, M.	14,263	1,520	-	15,000	30,782	8,365	-	39,147	TRAD	
100552-010	* NATIONAL SCIENCE FOUNDATION	WEIGLE, M.	35,951	3,263	5,000	3,696	47,910	20,783	-	68,693	TRAD	
100676-010	* NATIONAL ENDOWMENT FOR THE HUMANITIES	WEIGLE, M.	6,216	2,231	-	-	8,447	4,646	-	13,093	TRAD	
300380-010	* OLD DOMINION UNIVERSITY	WEIGLE, M.	58,573	9,435	-	30,606	98,613	-	-	98,613	TRAD	
300491-010	PENNSYLVANIA STATE UNIVERSITY	WU, J.	1,745	1,762	-	-	3,507	1,929	-	5,435	TRAD	
100554-010	* NATIONAL SCIENCE FOUNDATION	ZUBAIR, M.	15,792	-	-	904	16,696	8,370	-	25,065	TRAD	
300437-015	OLD DOMINION UNIVERSITY	ZUBAIR, M.	3,222	-	-	5,500	8,722	873	-	9,595	TRAD	
300476-015	OLD DOMINION UNIVERSITY	ZUBAIR, M.	17,823	-	-	-	17,823	1,782	-	19,606	TRAD	
500268-003	ENGILITY	ZUBAIR, M.	27,381	(12)	-	-	27,370	7,116	-	34,486	TRAD	
500268-004	ENGILITY	ZUBAIR, M.	44,223	2,628	-	-	46,851	12,181	-	59,032	TRAD	
100468-010	* NATIONAL SCIENCE FOUNDATION	ZUBAIR, M.	991	797	-	-	1,788	947	-	2,735	TRAD	
			553,146	54,311	5,000	204,837	817,294	191,526	-	1,008,821	23.43%	
<b>Computer Sciences - VMASC</b>												
100552-010	* NATIONAL SCIENCE FOUNDATION	NELSON, M.	18,782	1,484	5,000	1,674	26,941	10,741	-	37,682	VMASC	
100676-010	* NATIONAL ENDOWMENT FOR THE HUMANITIES	NELSON, M.	3,024	2,231	-	-	5,255	2,890	-	8,145	VMASC	
300472-010	VA POLYTECHNIC INSTITUTE AND STATE UNIVERSITY	NELSON, M.	6,081	-	-	-	6,081	3,345	-	9,426	VMASC	
100519-010	* INSTITUTE OF MUSEUM AND LIBRARY SERVICES	NELSON, M.	2,345	1,520	-	-	3,864	2,048	-	5,912	VMASC	
300380-010	* OLD DOMINION UNIVERSITY	NELSON, M.	22,552	6,871	-	16,949	46,372	-	-	46,372	VMASC	
			52,784	12,106	5,000	18,623	88,513	19,024	-	107,538	21.49%	
<b>Computer Sciences - Cybersecurity</b>												
100746-010	* NATIONAL SCIENCE FOUNDATION	CHRISOCHOIDES, N.	-	-	300,740	-	300,740	-	-	300,740	CYBER	
100745-010	* NATIONAL SCIENCE FOUNDATION	WANG, C.	3,789	-	-	2,236	6,025	2,084	-	8,109	CYBER	
600214-010	HUAWEI TECHNOLOGIES CO. LTD	WANG, C.	-	-	-	3,873	3,873	2,129	-	6,002	CYBER	
100799-010	* NATIONAL SECURITY AGENCY	ZHAO, D.	1,818	-	-	-	1,818	1,000	-	2,818	CYBER	
			5,607	-	300,740	6,109	312,456	5,213	-	317,670	1.67%	
<b>Mathematics and Statistics</b>												
100700-010	LANGLEY RESEARCH CENTER	BADAVI, F.	184,069	5,329	-	-	189,399	49,244	-	238,642	TRAD	
300437-014	OLD DOMINION UNIVERSITY	CHAGANTY, R.	-	-	-	5,587	5,587	558	-	6,145	TRAD	
300476-014	OLD DOMINION UNIVERSITY	CHAGANTY, R.	16,165	-	-	-	16,165	1,617	-	17,782	TRAD	
200282-010	* VA DEPARTMENT OF MOTOR VEHICLES	DIAWARA, N.	13,223	4,314	-	-	17,537	4,560	-	22,097	TRAD	
100689-010	* U.S. DEPARTMENT OF HEALTH AND HUMAN SERVICES	DIAWARA, N.	6,746	98	-	7,696	14,540	548	-	15,088	TRAD	
100689-020	* U.S. DEPARTMENT OF HEALTH AND HUMAN SERVICES	DIAWARA, N.	10,946	-	-	21,526	32,472	876	-	33,348	TRAD	
200257-010	* VA DEPARTMENT OF MOTOR VEHICLES	DIAWARA, N.	5,991	897	-	176	7,063	1,791	-	8,854	TRAD	
300493-010	OLD DOMINION UNIVERSITY	DIAWARA, N.	2,029	2,437	-	-	4,466	-	-	4,466	TRAD	
100802-010	* NATIONAL SCIENCE FOUNDATION	DIAWARA, N.	3,351	377	-	-	3,728	2,051	-	5,779	TRAD	
100501-010	* NATIONAL SCIENCE FOUNDATION	DOBBS, F.	-	10,984	-	262	11,246	5,821	-	17,067	TRAD	
400203-005	NATIONAL INSTITUTE OF AEROSPACE ASSOCIATES (NIA)	HU, F.	33,185	1,060	-	532	34,777	8,904	-	43,681	TRAD	
400203-006	NATIONAL INSTITUTE OF AEROSPACE ASSOCIATES (NIA)	HU, F.	27,593	2,686	-	-	30,279	7,873	-	38,152	TRAD	
400309-020	SIMONS FOUNDATION	JOO, S.	-	4,972	-	-	4,972	829	-	5,800	TRAD	
400309-030	SIMONS FOUNDATION	JOO, S.	-	1,627	-	-	1,627	271	-	1,898	TRAD	
100665-010	NATIONAL SCIENCE FOUNDATION	LUO, L.	20,908	-	-	-	20,908	11,499	-	32,407	TRAD	
400347-011	JEFFERSON SCIENCE ASSOCIATES, LLC (JEFFERSON LAB)	LUO, L.	61,854	-	-	-	61,854	-	-	61,854	TRAD	
100645-010	* U.S. PUBLIC HEALTH SERVICE (NATIONAL INSTITUTES OF HEA PARK, K.		4,988	2,073	-	-	7,061	3,884	-	10,945	TRAD	
100243-010	* NATIONAL SCIENCE FOUNDATION	PENG, Y.	3,657	3,643	-	-	7,300	3,869	-	11,168	TRAD	
100480-010	* LANGLEY RESEARCH CENTER	TWEED, J.	6,684	-	-	-	6,684	1,738	-	8,422	TRAD	
100480-010	* LANGLEY RESEARCH CENTER	WILSON, J.	126,995	-	-	-	126,995	33,019	-	160,014	TRAD	
100794-010	NATIONAL SCIENCE FOUNDATION	XU, Y.	-	-	-	11,544	11,544	-	-	11,544	TRAD	
100685-010	ARMY RESEARCH OFFICE	YAMALEEV, N.	93,734	3,618	-	-	97,352	53,543	-	150,895	TRAD	
100564-010	NATIONAL SCIENCE FOUNDATION	ZHOU, R.	5,672	425	-	-	6,096	3,353	-	9,450	TRAD	
			627,790	44,539	-	47,323	719,652	195,845	-	915,496	27.21%	

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**OLD DOMINION UNIVERSITY RESEARCH FOUNDATION**  
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 (MEASURED BY EXPENDITURES INCURRED)

**FOR FISCAL YEAR 2019**

PROJECT NUMBER	SPONSORING AGENCY	PROJECT DIRECT COST					PROJECT IDC AND FEES				TOTAL PROJECT COSTS	EFFECTIVE INDIRECT COST RATE	CENTER
		PRINCIPAL INVESTIGATOR / PROJECT DIRECTOR	PERSONNEL AND FRINGE BENEFITS	SUPPLIES, CONTRACTUAL, GENERAL, & TRAVEL	EQUIPMENT	SUBCONTRACTS, CONSTRUCTION, TUITION & OTHER	TOTAL DIRECT COSTS	REIMBURSED INDIRECT COSTS	TOTAL SPECIAL FEES				
<b>Ocean, Earth and Atmospheric Sciences</b>													
100805-010	NATIONAL SCIENCE FOUNDATION	BOCHDANSKY, A.	9,651	14,076	1,869	-	25,596	13,050	-	38,646	TRAD		
100536-010	NATIONAL SCIENCE FOUNDATION	BURDige, D.	23,865	5,310	-	39,235	68,410	16,046	-	84,456	TRAD		
100705-010	NATIONAL SCIENCE FOUNDATION	BURDige, D.	20,662	4,828	2,500	-	27,990	14,019	-	42,009	TRAD		
100608-010	* NATIONAL SCIENCE FOUNDATION	BURDige, D.	44,665	8,014	8,697	2,389	63,764	28,973	-	92,737	TRAD		
100530-010	NATIONAL SCIENCE FOUNDATION	CHAPPELL, P.	6,951	15,323	-	-	22,274	11,805	-	34,080	TRAD		
100547-010	NATIONAL SCIENCE FOUNDATION	CHAPPELL, P.	1,258	217	-	-	1,474	781	-	2,256	TRAD		
100666-010	NATIONAL SCIENCE FOUNDATION	CHAPPELL, P.	-	-	-	45,566	45,566	-	-	45,566	TRAD		
100803-010	NATIONAL SCIENCE FOUNDATION	CHAPPELL, P.	19,554	6,976	-	-	26,530	14,591	-	41,121	TRAD		
100625-010	* NATIONAL SCIENCE FOUNDATION	COVI, M.	13,652	878	-	-	14,530	7,991	-	22,521	TRAD		
200246-010	* CITY OF VIRGINIA BEACH	COVI, M.	6,239	92	-	-	6,331	1,646	-	7,977	TRAD		
300366-010	* UNIVERSITY OF NORTH CAROLINA	COVI, M.	2,007	2,402	-	-	4,409	2,425	-	6,834	TRAD		
300471-010	* VA INSTITUTE OF MARINE SCIENCE (VIMS)	COVI, M.	41,066	2,808	-	-	43,874	-	-	43,874	TRAD		
200238-010	CITY OF VIRGINIA BEACH	COVI, M.	10,219	-	-	-	10,219	2,657	-	12,876	TRAD		
300468-010	UNIVERSITY OF VIRGINIA	COVI, M.	5,350	301	-	-	5,651	1,469	-	7,120	TRAD		
300469-010	UNIVERSITY OF VIRGINIA	COVI, M.	546	1,006	-	-	1,553	78	-	1,630	TRAD		
300484-010	VA INSTITUTE OF MARINE SCIENCE (VIMS)	COVI, M.	19,806	2,440	-	3,654	25,900	5,784	-	31,684	TRAD		
300512-010	UNIVERSITY OF VIRGINIA	COVI, M.	2,512	-	-	-	2,512	-	-	2,512	TRAD		
400317-010	ELIZABETH RIVER PROJECT (LIVING RIVER RESTORATION TRC)	COVI, M.	10,043	-	-	-	10,043	2,611	-	12,654	TRAD		
400379-010	MID-ATLANTIC COASTAL OCEAN OBSERVING REGIONAL ASSO	COVI, M.	6,215	-	-	-	6,215	1,989	-	8,204	TRAD		
100257-010	NATIONAL SCIENCE FOUNDATION	CUTTER, G.	-	14,504	-	-	14,504	7,687	-	22,191	TRAD		
100484-010	NATIONAL SCIENCE FOUNDATION	CUTTER, G.	24,264	15,593	-	-	39,857	21,124	-	60,981	TRAD		
100649-010	NATIONAL SCIENCE FOUNDATION	CUTTER, G.	93,974	171,084	-	-	265,058	145,782	-	410,839	TRAD		
100677-010	NATIONAL SCIENCE FOUNDATION	CUTTER, G.	23,585	7,356	-	-	30,941	17,017	-	47,958	TRAD		
400400-010	SAN FRANCISCO ESTUARY INSTITUTE	CUTTER, G.	2,284	117	-	-	2,401	1,320	-	3,721	TRAD		
100501-010	* NATIONAL SCIENCE FOUNDATION	DOBBS, F.	-	10,139	-	242	10,381	5,374	-	15,755	TRAD		
100655-010	* NATIONAL SCIENCE FOUNDATION	FILIPPINO, K.	10,530	-	-	45,224	55,754	5,792	-	61,546	TRAD		
100252-010	* NATIONAL SCIENCE FOUNDATION	GEORGEN, J.	24,124	39,576	-	34,244	97,944	33,761	-	131,705	TRAD		
100616-010	NATIONAL SCIENCE FOUNDATION	GEORGEN, J.	-	-	1,756	-	1,756	-	-	1,756	TRAD		
100651-010	NATIONAL SCIENCE FOUNDATION	GEORGEN, J.	3,207	549	-	-	3,756	2,066	-	5,822	TRAD		
100527-025	NASA GODDARD SPACEFLIGHT CENTER	HALE, R.	3,788	420	-	-	4,208	-	-	4,208	TRAD		
200286-010	HAMPTON ROADS SANITATION DISTRICT COMMISSION	HALE, R.	29,092	1,127	-	8,590	38,809	7,555	-	46,363	TRAD		
100511-010	NASA/HEADQUARTERS	HAMILTON, B.	9,410	1,980	-	-	11,390	6,037	-	17,427	TRAD		
100657-010	NASA GODDARD SPACEFLIGHT CENTER	HAMILTON, B.	3,178	(5,222)	5,438	-	3,394	(1,124)	-	2,270	TRAD		
100655-010	* NATIONAL SCIENCE FOUNDATION	HARVEY, H.	10,530	-	-	45,224	55,754	5,792	-	61,546	TRAD		
100540-010	NORTH PACIFIC RESEARCH BOARD	HARVEY, R.	444	588	-	-	1,033	547	-	1,580	TRAD		
100615-010	NATIONAL SCIENCE FOUNDATION	HARVEY, R.	57,223	16,648	-	3,969	77,840	40,629	-	118,469	TRAD		
600198-010	STANTEC	HARVEY, R.	-	-	-	-	-	0	-	0	TRAD		
100656-010	* NASA GODDARD SPACEFLIGHT CENTER	HILL, V.	31,424	4,224	-	519	36,167	19,606	-	55,774	TRAD		
300498-010	* VA INSTITUTE OF MARINE SCIENCE (VIMS)	HILL, V.	13,108	33	-	-	13,140	7,227	-	20,368	TRAD		
100604-010	NATIONAL SCIENCE FOUNDATION	HILL, V.	34,153	14,813	17,216	-	66,181	26,931	-	93,112	TRAD		
200255-010	VA MARINE RESOURCES COMMISSION (VMRC)	JONES, C.	57,879	4,853	-	-	62,732	15,683	-	78,415	TRAD		
200283-010	VA MARINE RESOURCES COMMISSION (VMRC)	JONES, C.	150,595	4,506	-	-	155,102	38,775	-	193,877	TRAD		
100735-010	NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION	MULHOLLAND, M.	44,979	8,226	-	3,204	56,409	29,263	-	85,672	TRAD		
200249-010	HAMPTON ROADS SANITATION DISTRICT COMMISSION	MULHOLLAND, M.	27,490	2,674	-	-	30,164	3,016	-	33,181	TRAD		
200275-010	HAMPTON ROADS SANITATION DISTRICT COMMISSION	MULHOLLAND, M.	94,595	15,188	-	3,147	112,930	10,978	-	123,909	TRAD		
100512-010	* NATIONAL SCIENCE FOUNDATION	MULHOLLAND, M.	-	304	-	-	304	161	-	465	TRAD		
100512-020	* NATIONAL SCIENCE FOUNDATION	MULHOLLAND, M.	13,068	3,551	-	-	16,619	8,808	-	25,427	TRAD		
200249-011	* HAMPTON ROADS SANITATION DISTRICT COMMISSION	MULHOLLAND, M.	7,950	-	-	-	7,950	795	-	8,745	TRAD		
200275-011	* HAMPTON ROADS SANITATION DISTRICT COMMISSION	MULHOLLAND, M.	7,593	-	-	-	7,593	759	-	8,353	TRAD		

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			PERSONNEL AND FRINGE BENEFITS	SUPPLIES, CONTRACTUAL, GENERAL, & TRAVEL	EQUIPMENT	SUBCONTRACTS, CONSTRUCTION, TUITION & OTHER	TOTAL DIRECT COSTS	REIMBURSED INDIRECT COSTS	TOTAL SPECIAL FEES			
100679-010	NATIONAL SCIENCE FOUNDATION	SCHMIDT, M.	78,705	10,174	-	-	88,880	48,884	-	137,763	TRAD	
100712-010	NATIONAL SCIENCE FOUNDATION	SCHMIDT, M.	13,792	2,082	16,327	-	32,201	8,731	-	40,932	TRAD	
100546-010	NATIONAL SCIENCE FOUNDATION	SEDWICK, P.	-	-	3,509	-	3,509	-	-	3,509	TRAD	
100563-010	NATIONAL SCIENCE FOUNDATION	SEDWICK, P.	46,440	9,085	-	-	55,525	30,539	-	86,064	TRAD	
100707-010	NATIONAL SCIENCE FOUNDATION	SEDWICK, P.	4,274	2,209	-	-	6,484	3,566	-	10,050	TRAD	
100742-010	NATIONAL SCIENCE FOUNDATION	SEDWICK, P.	7,709	15,042	-	-	22,750	12,513	-	35,263	TRAD	
100802-010	* NATIONAL SCIENCE FOUNDATION	WHITTECAR, G.	3,351	377	-	-	3,728	2,051	-	5,779	TRAD	
200188-040	* OLD DOMINION UNIVERSITY	WHITTECAR, G.	3,184	4,725	-	9,261	17,170	633	-	17,803	TRAD	
300041-010	VA POLYTECHNIC INSTITUTE AND STATE UNIVERSITY	WHITTECAR, G.	-	1,571	-	-	1,571	550	-	2,121	TRAD	
500318-010	WEANACK LAND LIMITED PARTNERS	WHITTECAR, G.	6,134	943	-	-	7,077	1,840	-	8,917	TRAD	
100608-010	* NATIONAL SCIENCE FOUNDATION	ZIMMERMAN, R.	44,665	8,014	8,697	2,389	63,764	28,973	-	92,737	TRAD	
100656-010	* NASA GODDARD SPACEFLIGHT CENTER	ZIMMERMAN, R.	32,376	4,352	-	535	37,263	20,201	-	57,464	TRAD	
300498-010	* VA INSTITUTE OF MARINE SCIENCE (VIMS)	ZIMMERMAN, R.	13,108	33	-	-	13,140	7,227	-	20,368	TRAD	
			1,276,465	456,106	66,008	247,393	2,045,973	752,984	-	2,798,957	36.80%	
Physics												
100388-150	* U.S. DEPARTMENT OF ENERGY	AMARYAN, M.	83,155	10,601	4,157	1,611	99,523	51,566	-	151,089	TRAD	
100388-151	* U.S. DEPARTMENT OF ENERGY	AMARYAN, M.	2,330	130	-	-	2,460	640	-	3,100	TRAD	
300348-010	* CATHOLIC UNIVERSITY (THE CATHOLIC UNIVERSITY OF AMERICA)	AMARYAN, M.	-	327	8,210	-	8,536	173	-	8,709	TRAD	
100652-010	* NATIONAL SCIENCE FOUNDATION	ARETI, H.	-	364	-	29,204	29,568	200	-	29,768	TRAD	
100392-030	* U.S. DEPARTMENT OF ENERGY	BALITSKY, I.	16,270	2,588	-	1,968	20,826	9,995	-	30,820	TRAD	
300510-010	OLD DOMINION UNIVERSITY	BRICENO, R.	5,546	-	-	-	5,546	3,050	-	8,596	TRAD	
100388-150	* U.S. DEPARTMENT OF ENERGY	BUELTMANN, S.	73,372	9,354	3,668	1,421	87,815	45,499	-	133,314	TRAD	
100388-151	* U.S. DEPARTMENT OF ENERGY	BUELTMANN, S.	2,330	130	-	-	2,460	640	-	3,100	TRAD	
100652-010	* NATIONAL SCIENCE FOUNDATION	BUELTMANN, S.	-	312	-	25,032	25,344	172	-	25,516	TRAD	
100614-010	* NATIONAL SCIENCE FOUNDATION	CIOVATI, G.	14,662	2,166	-	4,726	21,553	4,375	-	25,929	TRAD	
100711-010	* U.S. DEPARTMENT OF ENERGY	DE SILVA, P.	7,764	-	-	256	8,020	2,115	-	10,135	TRAD	
100387-020	* U.S. DEPARTMENT OF ENERGY	DELAYEN, J.	47,607	6,072	10,201	44,750	108,630	13,957	-	122,587	TRAD	
100443-040	FERMI NATIONAL ACCELERATOR LABORATORY	DELAYEN, J.	-	-	-	171,814	171,814	44,672	-	216,486	TRAD	
100492-010	* NATIONAL SCIENCE FOUNDATION	DELAYEN, J.	18,180	6,050	22,576	21,273	68,079	12,842	-	80,922	TRAD	
100614-010	* NATIONAL SCIENCE FOUNDATION	DELAYEN, J.	10,996	1,624	-	3,544	16,165	3,281	-	19,446	TRAD	
100703-010	FERMI NATIONAL ACCELERATOR LABORATORY	DELAYEN, J.	84,970	22,348	-	21,996	129,314	27,903	-	157,216	TRAD	
100711-010	* U.S. DEPARTMENT OF ENERGY	DELAYEN, J.	23,293	-	-	767	24,061	6,344	-	30,405	TRAD	
100727-010	U.S. DEPARTMENT OF ENERGY	DELAYEN, J.	6,616	-	-	-	6,616	1,720	-	8,336	TRAD	
300442-010	* TEMPLE UNIVERSITY	DELAYEN, J.	13,583	6,091	-	3,141	22,815	10,820	-	33,635	TRAD	
400343-010	SOUTHERN UNIVERSITIES RESEARCH ASSOC (SURA)	DELAYEN, J.	84,749	21,661	52,391	19,607	178,408	58,525	-	236,934	TRAD	
100388-150	* U.S. DEPARTMENT OF ENERGY	DODGE, G.	83,155	10,601	4,157	1,611	99,523	51,566	-	151,089	TRAD	
100388-151	* U.S. DEPARTMENT OF ENERGY	DODGE, G.	2,330	130	-	-	2,460	640	-	3,100	TRAD	
100652-010	* NATIONAL SCIENCE FOUNDATION	DODGE, G.	-	364	-	29,204	29,568	200	-	29,768	TRAD	

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**FOR FISCAL YEAR 2019**

PROJECT NUMBER	SPONSORING AGENCY	PRINCIPAL INVESTIGATOR / PROJECT DIRECTOR	PROJECT DIRECT COST				PROJECT IDC AND FEES			TOTAL PROJECT COSTS	EFFECTIVE INDIRECT COST RATE	CENTER
			PERSONNEL AND FRINGE BENEFITS	SUPPLIES, CONTRACTUAL, GENERAL, & TRAVEL	EQUIPMENT	SUBCONTRACTS, CONSTRUCTION, TUITION & OTHER	TOTAL DIRECT COSTS	REIMBURSED INDIRECT COSTS	TOTAL SPECIAL FEES			
100554-010	* NATIONAL SCIENCE FOUNDATION	GODUNOV, A.	15,792	-	-	904	16,696	8,370	-	25,065	TRAD	
100387-020	* U.S. DEPARTMENT OF ENERGY	GUREVICH, A.	47,607	6,072	10,201	44,750	108,630	13,957	-	122,587	TRAD	
100492-010	* NATIONAL SCIENCE FOUNDATION	GUREVICH, A.	18,180	6,050	22,576	21,273	68,079	12,842	-	80,922	TRAD	
100614-010	* NATIONAL SCIENCE FOUNDATION	GUREVICH, A.	10,996	1,624	-	3,544	16,165	3,281	-	19,446	TRAD	
100668-010	AIR FORCE OFFICE OF SCIENTIFIC RESEARCH (AFOSR)	GUREVICH, A.	10,220	6,096	22,912	-	39,228	8,974	-	48,201	TRAD	
300442-010	* TEMPLE UNIVERSITY	GUREVICH, A.	13,583	6,091	-	3,141	22,815	10,820	-	33,635	TRAD	
100602-010	NATIONAL SCIENCE FOUNDATION	HAVEY, M.	59,043	14,348	-	15,915	89,306	40,365	-	129,671	TRAD	
100532-010	* U.S. PUBLIC HEALTH SERVICE (NATIONAL INSTITUTES OF HEA HE, J.		3,671	264	-	-	3,935	2,164	-	6,099	TRAD	
100388-150	* U.S. DEPARTMENT OF ENERGY	HYDE, C.	83,155	10,601	4,157	1,611	99,523	51,566	-	151,089	TRAD	
100388-151	* U.S. DEPARTMENT OF ENERGY	HYDE, C.	2,330	130	-	-	2,460	640	-	3,100	TRAD	
100429-010	BROOKHAVEN NATIONAL LABORATORY	HYDE, C.	-	-	-	0	0	-	-	0	TRAD	
100697-010	BROOKHAVEN NATIONAL LABORATORY	HYDE, C.	17,313	-	-	-	17,313	4,501	-	21,815	TRAD	
400346-010	* JEFFERSON SCIENCE ASSOCIATES, LLC (JEFFERSON LAB)	HYDE, C.	247,254	-	-	-	247,254	-	-	247,254	TRAD	
400347-010	JEFFERSON SCIENCE ASSOCIATES, LLC (JEFFERSON LAB)	HYDE, C.	687,482	34	-	-	687,516	-	-	687,516	TRAD	
300348-010	* CATHOLIC UNIVERSITY (THE CATHOLIC UNIVERSITY OF AMERICA)	HYDE, C.	-	327	8,210	-	8,536	173	-	8,709	TRAD	
100704-010	NATIONAL SCIENCE FOUNDATION	KRAFFT, G.	-	-	-	6,090	6,090	-	-	6,090	TRAD	
100722-010	U.S. DEPARTMENT OF ENERGY	KRAFFT, G.	17,417	-	-	-	17,417	4,528	-	21,945	TRAD	
400320-010	AMERICAN PHYSICAL SOCIETY (APS)	KRAFFT, G.	-	-	-	13,901	13,901	-	-	13,901	TRAD	
600217-010	TRIUMF	KRAFFT, G.	-	-	-	4,372	4,372	-	-	4,372	TRAD	
100388-150	* U.S. DEPARTMENT OF ENERGY	KUHN, S.	83,155	10,601	4,157	1,611	99,523	51,566	-	151,089	TRAD	
100388-151	* U.S. DEPARTMENT OF ENERGY	KUHN, S.	2,330	130	-	-	2,460	640	-	3,100	TRAD	
100392-030	* U.S. DEPARTMENT OF ENERGY	RADYUSHKIN, A.	16,270	2,588	-	1,968	20,826	9,995	-	30,820	TRAD	
100663-010	BROOKHAVEN NATIONAL LABORATORY	ROGERS, T.	12,516	34	-	-	12,551	3,263	-	15,814	TRAD	
300444-010	OLD DOMINION UNIVERSITY	ROGERS, T.	76,321	15,756	-	4,310	96,388	50,643	-	147,031	TRAD	
100392-030	* U.S. DEPARTMENT OF ENERGY	SCHIAVILLA, R.	16,270	2,588	-	1,968	20,826	9,995	-	30,820	TRAD	
100388-151	* U.S. DEPARTMENT OF ENERGY	STEPANYAN, S.	32,622	1,822	-	-	34,444	8,955	-	43,400	TRAD	
100554-010	* NATIONAL SCIENCE FOUNDATION	TERZIC, B.	15,792	-	-	904	16,696	8,370	-	25,065	TRAD	
300030-014	* UNIVERSITY OF VIRGINIA	TERZIC, B.	701	490	-	60	1,251	-	-	1,251	TRAD	
100392-030	* U.S. DEPARTMENT OF ENERGY	VAN ORDEN, J.	16,270	2,588	-	1,968	20,826	9,995	-	30,820	TRAD	
100535-010	U.S. DEPARTMENT OF ENERGY	VUSKOVIC, L.	36,461	14,899	-	-	51,360	27,221	-	78,581	TRAD	
100388-150	* U.S. DEPARTMENT OF ENERGY	WEINSTEIN, L.	83,155	10,601	4,157	1,611	99,523	51,566	-	151,089	TRAD	
100388-151	* U.S. DEPARTMENT OF ENERGY	WEINSTEIN, L.	2,330	130	-	-	2,460	640	-	3,100	TRAD	
400374-010	JEFFERSON SCIENCE ASSOCIATES, LLC (JEFFERSON LAB)	WEINSTEIN, L.	-	-	-	11,000	11,000	-	-	11,000	TRAD	
			2,209,144	214,776	181,729	522,826	3,128,475	745,921	-	3,874,396	23.84%	

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

**FOR FISCAL YEAR 2019**

PROJECT NUMBER	SPONSORING AGENCY	PROJECT DIRECT COST				PROJECT IDC AND FEES				TOTAL PROJECT COSTS	EFFECTIVE INDIRECT COST RATE	TRAD CENTER
		PRINCIPAL INVESTIGATOR / PROJECT DIRECTOR	PERSONNEL AND FRINGE BENEFITS	SUPPLIES, CONTRACTUAL, GENERAL, & TRAVEL	EQUIPMENT	SUBCONTRACTS, CONSTRUCTION, TUITION & OTHER	TOTAL DIRECT COSTS	REIMBURSED INDIRECT COSTS	TOTAL SPECIAL FEES			
<b>Psychology</b>												
100619-010	* U.S. PUBLIC HEALTH SERVICE (NATIONAL INSTITUTES OF HEA BARRACO, C.		5,095	873	-	-	5,967	3,282	-	9,249		TRAD
500329-010	VR REHAB, INC.	BLISS, J.	18,818	-	-	-	18,818	10,350	-	29,168		TRAD
500330-020	VR REHAB, INC.	BLISS, J.	4,878	-	-	-	4,878	3,073	-	7,951		TRAD
500331-020	VR REHAB, INC.	BLISS, J.	4,878	-	-	-	4,878	3,073	-	7,951		TRAD
100521-010	* AIR FORCE OFFICE OF SCIENTIFIC RESEARCH (AFOSR)	BLISS, J.	-	(1,661)	-	-	(1,661)	(432)	-	(2,093)		TRAD
100626-010	U.S. PUBLIC HEALTH SERVICE (NATIONAL INSTITUTES OF HEA BRAITMAN, A.		119,938	18,930	-	-	138,868	11,109	-	149,978		TRAD
100619-010	* U.S. PUBLIC HEALTH SERVICE (NATIONAL INSTITUTES OF HEA BRAITMAN, A.		5,095	873	-	-	5,967	3,282	-	9,249		TRAD
100798-010	* U.S. PUBLIC HEALTH SERVICE (NATIONAL INSTITUTES OF HEA BRAITMAN, A.		5,026	64	-	-	5,089	2,799	-	7,888		TRAD
100690-010	NATIONAL SCIENCE FOUNDATION	CHEN, J.	12,756	8,379	-	-	21,135	11,624	-	32,759		TRAD
300508-010	OLD DOMINION UNIVERSITY	CIGULAROV, K.	-	1,293	-	1,207	2,500	-	-	2,500		TRAD
100738-010	* NATIONAL SCIENCE FOUNDATION	CIGULAROV, K.	4,237	789	-	10,008	15,034	2,764	-	17,798		TRAD
100551-010	* U.S. PUBLIC HEALTH SERVICE (NATIONAL INSTITUTES OF HEA HENSON, M.		42,520	3,822	-	111,644	157,986	24,561	-	182,547		TRAD
100551-010	* U.S. PUBLIC HEALTH SERVICE (NATIONAL INSTITUTES OF HEA HERON, K.		2,362	212	-	6,202	8,777	1,365	-	10,141		TRAD
100619-010	* U.S. PUBLIC HEALTH SERVICE (NATIONAL INSTITUTES OF HEA HERON, K.		18,195	3,117	-	-	21,312	11,722	-	33,033		TRAD
100798-010	* U.S. PUBLIC HEALTH SERVICE (NATIONAL INSTITUTES OF HEA HERON, K.		20,103	254	-	-	20,357	11,196	-	31,553		TRAD
400353-010	AMERICAN PSYCHOLOGICAL FOUNDATION	HU, X.	1,205	-	-	-	1,205	-	-	1,205		TRAD
100521-010	* AIR FORCE OFFICE OF SCIENTIFIC RESEARCH (AFOSR)	HU, X.	-	(1,661)	-	-	(1,661)	(432)	-	(2,093)		TRAD
400396-010	AMERICAN PSYCHOLOGICAL FOUNDATION	JUDAH, M.	-	2,152	-	591	2,744	-	-	2,744		TRAD
100726-010	* U.S. DEPARTMENT OF HEALTH AND HUMAN SERVICES	JUDAH, M.	7,377	1,294	-	-	8,670	2,775	-	11,445		TRAD
100551-010	* U.S. PUBLIC HEALTH SERVICE (NATIONAL INSTITUTES OF HEA KELLEY, M.		2,362	212	-	6,202	8,777	1,365	-	10,141		TRAD
100619-010	* U.S. PUBLIC HEALTH SERVICE (NATIONAL INSTITUTES OF HEA KELLEY, M.		2,911	499	-	-	3,410	1,875	-	5,285		TRAD
100619-010	* U.S. PUBLIC HEALTH SERVICE (NATIONAL INSTITUTES OF HEA LEWIS, R.		36,389	6,234	-	-	42,624	23,443	-	66,067		TRAD
100798-010	* U.S. PUBLIC HEALTH SERVICE (NATIONAL INSTITUTES OF HEA LEWIS, R.		8,376	106	-	-	8,482	4,665	-	13,147		TRAD
100570-010	NATIONAL SCIENCE FOUNDATION	MAJOR, D.	7,396	1,717	-	-	9,112	4,830	-	13,942		TRAD
100673-010	* NATIONAL SCIENCE FOUNDATION	MAJOR, D.	8,114	258	-	4,613	12,986	4,605	-	17,590		TRAD
300489-010	UNIVERSITY OF COLORADO	PAULSON, J.	4,470	-	-	-	4,470	2,459	-	6,929		TRAD
100619-010	* U.S. PUBLIC HEALTH SERVICE (NATIONAL INSTITUTES OF HEA WINSTEAD, B.		5,095	873	-	-	5,967	3,282	-	9,249		TRAD
100521-010	* AIR FORCE OFFICE OF SCIENTIFIC RESEARCH (AFOSR)	YAMANI, Y.	-	(1,661)	-	-	(1,661)	(432)	-	(2,093)		TRAD
200236-010	* VA DEPARTMENT OF MOTOR VEHICLES	YAMANI, Y.	-	-	-	-	-	(0)	-	(0)		TRAD
200256-010	* VA DEPARTMENT OF MOTOR VEHICLES	YAMANI, Y.	8,287	3,400	-	-	11,687	3,039	-	14,726		TRAD
200281-010	* VA DEPARTMENT OF MOTOR VEHICLES	YAMANI, Y.	13,803	7,078	-	-	20,882	5,429	-	26,311		TRAD
			369,684	57,446	-	140,467	567,597	156,670	-	724,267	27.60%	
			\$ 8,023,602	\$ 2,033,564	\$ 584,180	\$ 1,728,216	\$ 12,369,563	\$ 3,461,059	\$ -	\$ 15,830,622	27.98%	
<b>TOTAL SCIENCES</b>												

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

**FOR FISCAL YEAR 2019**

PROJECT NUMBER	SPONSORING AGENCY	PROJECT DIRECT COST					PROJECT IDC AND FEES				TOTAL PROJECT COSTS	EFFECTIVE INDIRECT COST RATE	CBE CENTER
		PRINCIPAL INVESTIGATOR / PROJECT DIRECTOR	PERSONNEL AND FRINGE BENEFITS	SUPPLIES, CONTRACTUAL, GENERAL, & TRAVEL	EQUIPMENT	SUBCONTRACTS, CONSTRUCTION, TUITION & OTHER	TOTAL DIRECT COSTS	REIMBURSED INDIRECT COSTS	TOTAL SPECIAL FEES				
<b>OFFICE OF RESEARCH AND OTHER ACTIVITY</b>													
Frank Reidy Research Center for Bioelectronics													
500314-010	PULSE CENTERS	BEEBE, S.	-	159	-	63	221	122	-	343	CBE		
300427-010	* OLD DOMINION UNIVERSITY	BEEBE, S.	37,001	431	-	5,000	42,432	11,230	-	53,662	CBE		
300427-910	* PULSE BIOSCIENCES (ELECTROBLATE)	BEEBE, S.	22,153	21,072	10,916	1,312	55,453	12,967	-	68,420	CBE		
300455-020	* UNIVERSITY OF NORTH TEXAS HEALTH SCIENCE CENTER	BEEBE, S.	-	168	-	-	168	-	-	168	CBE		
500226-013	* PULSE BIOSCIENCES (ELECTROBLATE)	BEEBE, S.	15,457	3,050	-	-	18,507	10,179	-	28,685	CBE		
600186-010	* UNIVERSITY OF SOUTHAMPTON	CHEN, H.	28,533	6,327	1,624	-	36,484	18,475	-	54,959	CBE		
100517-010	* U.S. PUBLIC HEALTH SERVICE (NATIONAL INSTITUTES OF HEA	GUO, S.	9,960	4,583	-	-	14,543	7,708	-	22,251	CBE		
100732-010	* U.S. PUBLIC HEALTH SERVICE (NATIONAL INSTITUTES OF HEA	GUO, S.	26,306	14,262	-	-	40,568	22,312	-	62,880	CBE		
300427-010	* OLD DOMINION UNIVERSITY	GUO, S.	29,241	127	-	-	29,368	8,810	-	38,179	CBE		
300427-010	* OLD DOMINION UNIVERSITY	GUO, S.	7,760	304	-	5,000	13,064	2,419	-	15,483	CBE		
300427-910	* PULSE BIOSCIENCES (ELECTROBLATE)	GUO, S.	1,604	5,764	-	-	7,368	2,210	-	9,579	CBE		
500226-009	* PULSE BIOSCIENCES (ELECTROBLATE)	GUO, S.	479	1,925	-	-	2,405	1,323	-	3,727	CBE		
500226-011	* PULSE BIOSCIENCES (ELECTROBLATE)	GUO, S.	3,326	2,312	-	-	5,637	3,101	-	8,738	CBE		
500226-013	* PULSE BIOSCIENCES (ELECTROBLATE)	GUO, S.	15,457	3,050	-	-	18,507	10,179	-	28,685	CBE		
500226-010	* PULSE BIOSCIENCES (ELECTROBLATE)	MURATORI, C.	15,315	2,452	-	-	17,767	9,772	-	27,539	CBE		
500226-015	* PULSE BIOSCIENCES (ELECTROBLATE)	MURATORI, C.	77,991	21,847	-	-	99,839	54,911	-	154,750	CBE		
500226-017	* PULSE BIOSCIENCES (ELECTROBLATE)	MURATORI, C.	7,873	3,024	-	-	10,897	5,993	-	16,890	CBE		
100548-010	* U.S. PUBLIC HEALTH SERVICE (NATIONAL INSTITUTES OF HEA	PAKHOMOVA, O.	3,287	368	-	-	3,655	2,010	-	5,665	CBE		
300345-012	OLD DOMINION UNIVERSITY	PAKHOMOVA, O.	74,552	40,269	-	-	114,821	63,152	-	177,973	CBE		
300345-013	* OLD DOMINION UNIVERSITY	PAKHOMOVA, O.	2,363	489	-	-	2,852	1,568	-	4,420	CBE		
500226-010	* PULSE BIOSCIENCES (ELECTROBLATE)	PAKHOMOVA, O.	6,564	1,051	-	-	7,614	4,188	-	11,802	CBE		
500226-015	* PULSE BIOSCIENCES (ELECTROBLATE)	PAKHOMOVA, O.	19,498	5,462	-	-	24,960	13,728	-	38,687	CBE		
500366-010	* OLYMPUS CORPORATION OF THE AMERICAS	PAKHOMOVA, O.	-	(71)	-	1,174	1,103	(81)	-	1,022	CBE		
100548-010	* U.S. PUBLIC HEALTH SERVICE (NATIONAL INSTITUTES OF HEA	SEmenov, I.	6,574	736	-	-	7,310	4,020	-	11,330	CBE		
300345-013	* OLD DOMINION UNIVERSITY	SEmenov, I.	1,182	244	-	-	1,426	784	-	2,210	CBE		
400393-010	BREEDEN-ADAMS FOUNDATION	STACEY, M.	-	4,506	-	-	4,506	-	-	4,506	CBE		
100474-010	AIR FORCE OFFICE OF SCIENTIFIC RESEARCH (AFOSR)	VERNIER, P.	20,534	1,815	-	-	22,349	11,845	-	34,195	CBE		
300345-013	* OLD DOMINION UNIVERSITY	VERNIER, P.	40,322	6,774	-	-	47,096	25,903	-	72,999	CBE		
500226-009	* PULSE BIOSCIENCES (ELECTROBLATE)	VERNIER, T.	479	1,925	-	-	2,405	1,323	-	3,727	CBE		
			473,810	154,424	12,540	12,549	653,323	310,152	-	963,475	47.47%		

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

**FOR FISCAL YEAR 2019**

PROJECT NUMBER	SPONSORING AGENCY	PROJECT DIRECT COST					PROJECT IDC AND FEES				TOTAL PROJECT COSTS	EFFECTIVE INDIRECT COST RATE	CENTER
		PRINCIPAL INVESTIGATOR / PROJECT DIRECTOR	PERSONNEL AND FRINGE BENEFITS	SUPPLIES, CONTRACTUAL, GENERAL, & TRAVEL	EQUIPMENT	SUBCONTRACTS, CONSTRUCTION, TUITION & OTHER	TOTAL DIRECT COSTS	REIMBURSED INDIRECT COSTS	TOTAL SPECIAL FEES				
<b>Computation Modeling &amp; Simulation Engineering - VMASC</b>													
100531-001	* NAVAL SEA SYSTEMS COMMAND	BARRACO, A.	(1)	-	-	-	(1)	(1)	-	(1)	-	VMASC	
600201-010	* UNIVERSITY OF AGDER	BARRACO, A.	16,455	5	-	-	16,459	9,053	-	-	25,512	VMASC	
300492-010	* OLD DOMINION UNIVERSITY	BEHR, J.	8,735	1,155	-	-	9,890	-	-	-	9,890	VMASC	
500341-001	* APPLIED RESEARCH ASSOCIATES, INC.	CROLL, M.	(6)	-	-	0	(6)	(3)	-	-	(9)	VMASC	
500342-001	* WR SYSTEMS, LTD.	CROLL, M.	6,598	-	-	877	7,475	4,859	-	-	12,334	VMASC	
500362-010	* G2 OPS, INC.	CROLL, M.	(0)	-	-	0	(0)	(0)	-	-	(0)	VMASC	
100710-010	* NAVAL SPEC WARFARE DEVELOPMENT GROUP	CVIJETIC, B.	-	-	-	-	-	(0)	-	-	(0)	VMASC	
500376-010	* CAMBER CORPORATION	CVIJETIC, B.	8,947	-	-	53	9,000	5,850	-	-	14,850	VMASC	
500391-010	* CAMBER CORPORATION	CVIJETIC, B.	15,687	-	-	-	15,687	10,197	-	-	25,884	VMASC	
500354-010	CAMBER CORPORATION	DIALLO, S.	-	-	-	0	0	0	-	-	1	VMASC	
500388-010	SIRIUS-BETA CORPORATION	DIALLO, S.	2,961	-	-	265	3,226	1,774	-	-	5,000	VMASC	
500395-010	KADSCI	DIALLO, S.	25,001	-	-	-	25,001	16,250	-	-	41,251	VMASC	
500400-010	UNITED NETWORK FOR ORGAN SHARING (UNOS)	DIALLO, S.	15,190	319	-	-	15,509	8,530	-	-	24,039	VMASC	
300490-010	* OLD DOMINION UNIVERSITY	DIALLO, S.	19,016	2,679	-	-	21,695	-	-	-	21,695	VMASC	
400351-010	* CENTER FOR MIND AND CULTURE	DIALLO, S.	2,248	985	-	-	3,233	485	-	-	3,718	VMASC	
500341-001	* APPLIED RESEARCH ASSOCIATES, INC.	DIALLO, S.	4,600	-	-	-	4,600	2,530	-	-	7,131	VMASC	
500375-001	* CAMBER CORPORATION	DIALLO, S.	41,526	-	-	-	41,526	26,992	-	-	68,518	VMASC	
500376-010	* CAMBER CORPORATION	DIALLO, S.	8,947	-	-	53	9,000	5,850	-	-	14,850	VMASC	
500391-010	* CAMBER CORPORATION	DIALLO, S.	15,687	-	-	-	15,687	10,197	-	-	25,884	VMASC	
600201-010	* UNIVERSITY OF AGDER	DIALLO, S.	16,455	5	-	-	16,459	9,053	-	-	25,512	VMASC	
100800-010	* NAVAL AIR WARFARE CENTER TSD	EZELL, B.	149	22	-	-	171	111	-	-	282	VMASC	
200245-010	VIRGINIA DEPARTMENT OF EMERGENCY MANAGEMENT	EZELL, B.	-	(2,848)	-	-	(2,848)	(1,566)	-	-	(4,415)	VMASC	
200252-010	* VIRGINIA DEPARTMENT OF EMERGENCY MANAGEMENT	EZELL, B.	(0)	-	-	-	(0)	(0)	-	-	(0)	VMASC	
200270-010	VIRGINIA DEPARTMENT OF EMERGENCY MANAGEMENT	EZELL, B.	88,296	27,365	-	37,435	153,096	69,192	-	-	222,288	VMASC	
200292-010	VA PORT AUTHORITY	EZELL, B.	2,764	804	-	-	3,569	928	-	-	4,497	VMASC	
200294-010	* VA PORT AUTHORITY	EZELL, B.	7,800	1,839	-	-	9,639	2,506	-	-	12,145	VMASC	
200297-010	VIRGINIA DEPARTMENT OF EMERGENCY MANAGEMENT	EZELL, B.	14,028	1,608	-	-	15,636	8,600	-	-	24,236	VMASC	
400328-010	* BATTELLE CORPORATION	EZELL, B.	2,426	-	-	-	2,426	1,335	-	-	3,761	VMASC	
400364-010	MITRE CORPORATION	EZELL, B.	7,259	-	-	(1)	7,258	3,992	-	-	11,250	VMASC	
400387-010	FOODBANK OF SOUTHEAST VA AND EASTERN SHORE	EZELL, B.	-	1,470	-	-	1,470	382	-	-	1,852	VMASC	
500341-001	* APPLIED RESEARCH ASSOCIATES, INC.	EZELL, B.	4,600	-	-	-	4,600	2,530	-	-	7,131	VMASC	
500341-002	* APPLIED RESEARCH ASSOCIATES, INC.	EZELL, B.	-	-	-	0	0	2	-	-	2	VMASC	
500341-003	* APPLIED RESEARCH ASSOCIATES, INC.	EZELL, B.	3,409	-	-	-	3,409	1,875	-	-	5,284	VMASC	
500362-010	* G2 OPS, INC.	EZELL, B.	(0)	-	-	0	(0)	(0)	-	-	(0)	VMASC	
500367-010	LPR, INC.	EZELL, B.	444	-	-	-	444	116	-	-	560	VMASC	
500390-010	* ALEX - ALTERNATIVE EXPERTS, LLC	EZELL, B.	20,612	69	-	-	20,681	13,443	-	-	34,123	VMASC	
500401-010	* CHESAPEAKE REGIONAL HEALTHCARE	EZELL, B.	8,787	2,004	-	-	10,791	2,806	-	-	13,597	VMASC	
500362-010	* G2 OPS, INC.	FLANAGAN, D.	(0)	-	-	0	(0)	(0)	-	-	(0)	VMASC	
200244-011	* VA PORT AUTHORITY	FOYLIK, P.	-	-	-	-	-	0	-	-	0	VMASC	
300445-010	* OLD DOMINION UNIVERSITY	FRYDENLUND, E.	371	3,565	-	-	3,936	-	-	-	3,936	VMASC	

**SCHEDULE 4**  
**OLD DOMINION UNIVERSITY RESEARCH FOUNDATION**  
**SPONSORED PROGRAM ACTIVITY BY INDIVIDUAL PROJECT**

(MEASURED BY EXPENDITURES INCURRED)

**FOR FISCAL YEAR 2019**

PROJECT NUMBER	SPONSORING AGENCY	PRINCIPAL INVESTIGATOR / PROJECT DIRECTOR	PROJECT DIRECT COST				PROJECT IDC AND FEES			TOTAL PROJECT COSTS	EFFECTIVE INDIRECT COST RATE	CENTER
			PERSONNEL AND FRINGE BENEFITS	SUPPLIES, CONTRACTUAL, GENERAL, & TRAVEL	EQUIPMENT	SUBCONTRACTS, CONSTRUCTION, TUITION & OTHER	TOTAL DIRECT COSTS	REIMBURSED INDIRECT COSTS	TOTAL SPECIAL FEES			
100710-010	* NAVAL SPEC WARFARE DEVELOPMENT GROUP	GARCIA, H.	-	-	-	-	-	(0)	-	(0)	VMASC	
500391-010	* CAMBER CORPORATION	GAY, B.	15,687	-	-	-	15,687	10,197	-	25,884	VMASC	
300490-010	* OLD DOMINION UNIVERSITY	GILES, B.	26,623	3,750	-	-	30,373	-	-	30,373	VMASC	
100790-010	* NAVAL SEA SYSTEMS COMMAND	GORE, R.	15,979	1,757	-	1,020	18,756	11,528	-	30,284	VMASC	
300446-010	* OLD DOMINION UNIVERSITY	GORE, R.	(423)	-	-	-	(423)	-	-	(423)	VMASC	
500375-001	* CAMBER CORPORATION	GORE, R.	41,526	-	-	-	41,526	26,992	-	68,518	VMASC	
500376-010	* CAMBER CORPORATION	GORE, R.	9,218	-	-	55	9,273	6,027	-	15,300	VMASC	
500391-010	* CAMBER CORPORATION	GORE, R.	15,687	-	-	-	15,687	10,197	-	25,884	VMASC	
600201-010	* UNIVERSITY OF AGDER	GORE, R.	21,940	6	-	-	21,946	12,070	-	34,016	VMASC	
200252-010	* VIRGINIA DEPARTMENT OF EMERGENCY MANAGEMENT	GORE, R.	(0)	-	-	-	(0)	(0)	-	(0)	VMASC	
400328-010	* BATTELLE CORPORATION	GORE, R.	1,618	-	-	-	1,618	890	-	2,507	VMASC	
500362-010	* G2 OPS, INC.	GORE, R.	(0)	-	-	0	(0)	(0)	-	(0)	VMASC	
300490-010	* OLD DOMINION UNIVERSITY	JORDAN, C.	22,820	3,214	-	-	26,034	-	-	26,034	VMASC	
100790-010	* NAVAL SEA SYSTEMS COMMAND	LYNCH, C.	15,979	1,757	-	1,020	18,756	11,528	-	30,284	VMASC	
100800-010	* NAVAL AIR WARFARE CENTER TSD	LYNCH, C.	2,611	376	-	-	2,987	1,941	-	4,928	VMASC	
400351-010	* CENTER FOR MIND AND CULTURE	LYNCH, C.	2,248	985	-	-	3,233	485	-	3,718	VMASC	
100534-010	OFFICE OF NAVAL RESEARCH	MICHAELI, J.	5,329	-	-	-	5,329	2,824	-	8,153	VMASC	
100588-010	* OFFICE OF NAVAL RESEARCH	MICHAELI, J.	27,496	356	-	4,824	32,675	18,103	-	50,779	VMASC	
100725-010	OFFICE OF NAVAL RESEARCH	MICHAELI, J.	35,378	-	-	3,414	38,792	19,458	-	58,250	VMASC	
300463-010	OLD DOMINION UNIVERSITY	MICHAELI, J.	394,958	61,765	-	145,000	601,723	-	-	601,723	VMASC	
300328-010	NORFOLK STATE UNIVERSITY	PADILLA, J.	106,098	1,719	-	8,330	116,148	57,143	-	173,291	VMASC	
300445-010	* OLD DOMINION UNIVERSITY	PADILLA, J.	371	3,565	-	-	3,936	-	-	3,936	VMASC	
500342-001	* WR SYSTEMS, LTD.	PAPELIS, Y.	39,589	-	-	5,262	44,850	29,153	-	74,004	VMASC	
100521-010	* AIR FORCE OFFICE OF SCIENTIFIC RESEARCH (AFOSR)	PAPELIS, Y.	-	(554)	-	-	(554)	(144)	-	(698)	VMASC	
100601-010	* U.S. DEPARTMENT OF EDUCATION	PAPELIS, Y.	61,305	13,556	-	10,815	85,675	19,464	-	105,139	VMASC	
300518-010	* OLD DOMINION UNIVERSITY	PAPELIS, Y.	10,372	-	-	-	10,372	415	-	10,787	VMASC	
500341-001	* APPLIED RESEARCH ASSOCIATES, INC.	PAPELIS, Y.	(37)	-	-	0	(37)	(20)	-	(57)	VMASC	
500350-010	SIMIS, INC.	PAPELIS, Y.	-	27,063	7,202	-	34,265	-	-	34,265	VMASC	
300446-010	* OLD DOMINION UNIVERSITY	PARODI, V.	(634)	-	-	-	(634)	-	-	(634)	VMASC	
300490-010	* OLD DOMINION UNIVERSITY	PARODI, V.	7,607	1,071	-	-	8,678	-	-	8,678	VMASC	
500368-010	PREVAILANCE, INC.	RECHOWICZ, K.	20,532	-	-	-	20,532	13,346	-	33,878	VMASC	
500368-020	PREVAILANCE, INC.	RECHOWICZ, K.	11,591	-	-	-	11,591	7,534	-	19,125	VMASC	
100710-010	* NAVAL SPEC WARFARE DEVELOPMENT GROUP	RECHOWICZ, K.	-	-	-	-	-	(0)	-	(0)	VMASC	
100531-001	* NAVAL SEA SYSTEMS COMMAND	ROBINSON, R.	(1)	-	-	-	(1)	(1)	-	(1)	VMASC	
200244-011	* VA PORT AUTHORITY	ROBINSON, R.	-	-	-	-	-	0	-	0	VMASC	
300258-010	* UNIVERSITY OF MARYLAND	ROBINSON, R.	-	623	-	-	623	330	-	953	VMASC	
300462-010	* OLD DOMINION UNIVERSITY	ROBINSON, R.	134,472	38,140	-	369,045	541,657	-	-	541,657	VMASC	
500391-010	* CAMBER CORPORATION	SHULL, J.	15,687	-	-	-	15,687	10,197	-	25,884	VMASC	
100629-010	NORFOLK NAVAL SHIPYARD	WEISEL, E.	-	17,632	-	-	17,632	5,642	-	23,274	VMASC	
100634-010	NAVSUP FLEET LOGISTICS CENTER NORFOLK	WEISEL, E.	4,819	-	-	718,476	723,295	1,735	-	725,030	VMASC	
100642-010	NAVSUP FLEET LOGISTICS CENTER NORFOLK	WEISEL, E.	-	-	-	(116)	(116)	-	-	(116)	VMASC	
100643-010	NAVSUP FLEET LOGISTICS CENTER NORFOLK	WEISEL, E.	-	-	-	-	-	(0)	-	(0)	VMASC	
100647-010	NAVSUP FLEET LOGISTICS CENTER NORFOLK	WEISEL, E.	4,819	55,984	-	-	60,803	21,889	-	82,692	VMASC	
400193-000	NONE	WEISEL, E.	2,094	46,058	-	89	48,241	-	-	48,241	VMASC	
500339-010	OCEAN BAY, LLC	WEISEL, E.	45,099	1,313	-	-	46,413	25,527	-	71,939	VMASC	
500379-010	D'ANGELO TECHNOLOGIES LLC	WEISEL, E.	21,376	-	-	-	21,376	13,894	-	35,271	VMASC	
			1,508,824	321,183	7,202	1,305,917	3,143,126	556,211	-	3,699,337	17.70%	

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

**FOR FISCAL YEAR 2019**

PROJECT NUMBER	SPONSORING AGENCY	PRINCIPAL INVESTIGATOR / PROJECT DIRECTOR	PROJECT DIRECT COST				PROJECT IDC AND FEES			TOTAL PROJECT COSTS	EFFECTIVE INDIRECT COST RATE	CENTER
			PERSONNEL AND FRINGE BENEFITS	SUPPLIES, CONTRACTUAL, GENERAL, & TRAVEL	EQUIPMENT	SUBCONTRACTS, CONSTRUCTION, TUITION & OTHER	TOTAL DIRECT COSTS	REIMBURSED INDIRECT COSTS	TOTAL SPECIAL FEES			
<b>The Graduate School</b>												
200236-010	* VA DEPARTMENT OF MOTOR VEHICLES	PORTER, B.	-	-	-	-	-	(0)	-	(0)		TRAD
200256-010	* VA DEPARTMENT OF MOTOR VEHICLES	PORTER, B.	8,287	3,400	-	-	11,687	3,039	-	14,726		TRAD
200257-010	* VA DEPARTMENT OF MOTOR VEHICLES	PORTER, B.	12,163	1,821	-	356	14,340	3,636	-	17,976		TRAD
200281-010	* VA DEPARTMENT OF MOTOR VEHICLES	PORTER, B.	13,803	7,078	-	-	20,882	5,429	-	26,311		TRAD
200282-010	* VA DEPARTMENT OF MOTOR VEHICLES	PORTER, B.	13,223	4,314	-	-	17,537	4,560	-	22,097		TRAD
			47,476	16,613	-	356	64,446	16,663	-	81,109	25.86%	
<b>Institute for Innovation &amp; Entrepreneurship</b>												
200271-010	VA PORT AUTHORITY	BRINKER, J.	527	901	-	270	1,699	442	-	2,141		TRAD
400387-010	FOODBANK OF SOUTHEAST VA AND EASTERN SHORE	BRINKER, J.	9,712	-	-	-	9,712	2,525	-	12,237		TRAD
500264-020	GENEDGE ALLIANCE - (FORMERLY PHILPOTT MANUFACTURING)	BRINKER, J.	-	(135)	-	-	(135)	-	-	(135)		TRAD
500264-030	GENEDGE ALLIANCE - (FORMERLY PHILPOTT MANUFACTURING)	BRINKER, J.	52,295	135	-	-	52,431	-	-	52,431		TRAD
500313-010	GENEDGE ALLIANCE - (FORMERLY PHILPOTT MANUFACTURING)	BRINKER, J.	-	-	-	1,840	1,840	-	-	1,840		TRAD
500325-020	PLASSER AMERICAN CORPORATION	BRINKER, J.	(16,656)	14	-	996	(15,646)	262	-	(15,384)		TRAD
500351-010	TAMESHIA JEFFERS	BRINKER, J.	-	-	-	234	234	60	-	294		TRAD
500355-010	LPR, INC.	BRINKER, J.	(177)	1,634	-	86	1,543	401	-	1,944		TRAD
500356-010	ARDX	BRINKER, J.	(840)	-	-	-	(840)	(218)	-	(1,059)		TRAD
500358-010	PLASSER AMERICAN CORPORATION	BRINKER, J.	199	-	-	2,727	2,927	761	-	3,688		TRAD
500360-010	SEACOAST ELECTRIC COMPANY, INC.	BRINKER, J.	-	-	-	0	0	0	-	1		TRAD
500363-010	LPR, INC.	BRINKER, J.	134	4,007	-	-	4,140	1,076	-	5,216		TRAD
500365-010	TABET MANUFACTURING CO.	BRINKER, J.	170	3,095	-	-	3,264	849	-	4,113		TRAD
500367-010	LPR, INC.	BRINKER, J.	2,073	1,776	-	-	3,850	1,001	-	4,851		TRAD
500373-010	PLASSER AMERICAN CORPORATION	BRINKER, J.	21,448	172	-	-	21,620	5,621	-	27,241		TRAD
500383-010	CHESAPEAKE REGIONAL HEALTHCARE	BRINKER, J.	8,745	1,918	-	-	10,663	2,772	-	13,435		TRAD
500386-010	LIFENET	BRINKER, J.	11,824	4,895	-	-	16,719	4,347	-	21,066		TRAD
500392-010	LPR, INC.	BRINKER, J.	2,125	-	-	-	2,125	552	-	2,677		TRAD
600216-010	NITTO, INC.	BRINKER, J.	-	-	-	1,397	1,397	363	-	1,760		TRAD
500325-020	PLASSER AMERICAN CORPORATION	EZELL, B.	-	-	-	16,656	16,656	-	-	16,656		TRAD
500332-010	DAVIS INTERIORS LTD.	EZELL, B.	-	-	-	96	96	26	-	122		TRAD
500356-010	ARDX	EZELL, B.	-	-	-	-	-	(1)	-	(1)		TRAD
500363-010	LPR, INC.	EZELL, B.	-	-	-	441	441	115	-	557		TRAD
500364-010	PLASSER AMERICAN CORPORATION	EZELL, B.	-	-	-	1,602	1,602	417	-	2,019		TRAD
500373-010	PLASSER AMERICAN CORPORATION	EZELL, B.	-	-	-	999	999	260	-	1,259		TRAD
500383-010	CHESAPEAKE REGIONAL HEALTHCARE	EZELL, B.	-	-	-	1,639	1,639	426	-	2,065		TRAD
500386-010	LIFENET	EZELL, B.	-	-	-	3,122	3,122	812	-	3,934		TRAD
100694-010	SMALL BUSINESS ADMINISTRATION	FILER, L.	46,717	7,634	-	(0)	54,350	14,131	-	68,481		TRAD
100694-020	SMALL BUSINESS ADMINISTRATION	FILER, L.	65,624	7,115	-	-	72,739	18,912	-	91,651		TRAD
100713-010	* SMALL BUSINESS ADMINISTRATION	FILER, L.	105,726	11,571	-	-	117,297	30,497	-	147,794		TRAD
100713-020	SMALL BUSINESS ADMINISTRATION	FILER, L.	25,157	1,890	-	-	27,047	-	-	27,047		TRAD
200251-010	CRATER PLANNING DISTRICT COMMISSION	FILER, L.	729	(6)	-	-	723	188	-	911		TRAD
200251-011	CRATER PLANNING DISTRICT COMMISSION	FILER, L.	6,749	957	-	-	7,706	2,003	-	9,709		TRAD
200276-010	CRATER PLANNING DISTRICT COMMISSION	FILER, L.	88,555	8,939	-	-	97,494	25,348	-	122,842		TRAD
200276-011	CRATER PLANNING DISTRICT COMMISSION	FILER, L.	17,262	2,591	-	-	19,853	5,162	-	25,015		TRAD
200280-010	GOVERNOR'S OFFICE	FILER, L.	94,100	7,304	-	-	101,404	-	-	101,404		TRAD
400337-010	REINVENT HAMPTON ROADS	FILER, L.	-	-	-	5,590	5,590	-	-	5,590		TRAD
400377-010	COASTAL COMMUNITY RESILIENCE, INC.	FILER, L.	21,665	-	-	-	21,665	-	-	21,665		TRAD
400409-010	REINVENT HAMPTON ROADS	FILER, L.	17,147	-	-	-	17,147	-	-	17,147		TRAD

**SCHEDULE 4**  
**OLD DOMINION UNIVERSITY RESEARCH FOUNDATION**  
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**FOR FISCAL YEAR 2019**

PROJECT NUMBER	SPONSORING AGENCY	PRINCIPAL INVESTIGATOR / PROJECT DIRECTOR	PROJECT DIRECT COST				PROJECT IDC AND FEES			TOTAL PROJECT COSTS	EFFECTIVE INDIRECT COST RATE	CENTER
			PERSONNEL AND FRINGE BENEFITS	SUPPLIES, CONTRACTUAL, GENERAL, & TRAVEL	EQUIPMENT	SUBCONTRACTS, CONSTRUCTION, TUITION & OTHER	TOTAL DIRECT COSTS	REIMBURSED INDIRECT COSTS	TOTAL SPECIAL FEES			
100415-010	SMALL BUSINESS ADMINISTRATION	KASZUBOWSKI, M.	(8,784)	-	-	-	(8,784)	(1,757)	-	(10,541)	TRAD	
200204-020	GOVERNOR'S OFFICE	KASZUBOWSKI, M.	85,825	121,175	-	-	207,000	-	-	207,000	TRAD	
300420-020	VA POLYTECHNIC INSTITUTE AND STATE UNIVERSITY	KASZUBOWSKI, M.	-	12,000	-	-	12,000	3,000	-	15,000	TRAD	
300420-030	VA POLYTECHNIC INSTITUTE AND STATE UNIVERSITY	KASZUBOWSKI, M.	-	8,873	-	-	8,873	2,218	-	11,092	TRAD	
100713-010	* SMALL BUSINESS ADMINISTRATION	SAGESTER, C.	105,726	11,571	-	-	117,297	30,497	-	147,794	TRAD	
			763,774	220,025	-	37,697	1,021,496	153,071	-	1,174,567	14.99%	
<b>Other Miscellaneous Units - Cybersecurity</b>												
100706-010	* NATIONAL SECURITY AGENCY	DRAPER, D.	3,959	2,915	-	-	6,874	3,781	-	10,655	CYBER	
100675-010	NATIONAL SCIENCE FOUNDATION	PAYNE, B.	65,430	7,445	-	56,715	129,590	40,081	-	169,672	CYBER	
100709-010	* NATIONAL SCIENCE FOUNDATION	PAYNE, B.	5,505	1,876	-	15,944	23,325	4,059	-	27,384	CYBER	
100745-010	* NATIONAL SCIENCE FOUNDATION	PAYNE, B.	4,250	300	-	2,236	6,787	2,503	-	9,290	CYBER	
			79,145	12,536	-	74,896	166,577	50,424	-	217,001	30.27%	
<b>Other Miscellaneous Units</b>												
100726-010	* U.S. DEPARTMENT OF HEALTH AND HUMAN SERVICES	BADGER, N.	7,377	1,294	-	-	8,670	2,775	-	11,445	TRAD	
300411-010	* OLD DOMINION UNIVERSITY	DRAPER, D.	-	18	-	660	678	-	-	678	TRAD	
500390-010	* ALEX - ALTERNATIVE EXPERTS, LLC	DRAPER, D.	30,917	104	-	-	31,021	20,164	-	51,185	TRAD	
400370-010	* ARTS MIDWEST	FOWLER, G.	436	1,944	-	-	2,381	619	-	3,000	TRAD	
100726-010	* U.S. DEPARTMENT OF HEALTH AND HUMAN SERVICES	HOLLEY, A.	3,688	647	-	-	4,335	1,387	-	5,722	TRAD	
300350-030	OLD DOMINION UNIVERSITY	HUCKLESS, M.	2,205	-	-	-	2,205	-	-	2,205	TRAD	
300459-010	OLD DOMINION UNIVERSITY	HUCKLESS, M.	2,785	-	-	-	2,785	-	-	2,785	TRAD	
300434-010	OLD DOMINION UNIVERSITY	LOVE, L.	282,272	9,320	-	48,925	340,518	23,327	-	363,845	TRAD	
300411-010	* OLD DOMINION UNIVERSITY	MAYES, N.	-	18	-	660	678	-	-	678	TRAD	
100682-010	* U.S. FISH AND WILDLIFE SERVICES	MCLEOD, G.	5,898	366	-	-	6,263	1,628	-	7,892	TRAD	
300030-014	* UNIVERSITY OF VIRGINIA	MCLEOD, G.	701	490	-	60	1,251	-	-	1,251	TRAD	
500336-010	* SCIENCE SYSTEMS & APPLICATIONS, INC.	MCLEOD, G.	-	-	-	0	0	-	-	0	TRAD	
300411-010	* OLD DOMINION UNIVERSITY	PAYNE, B.	-	19	-	680	699	-	-	699	TRAD	
100723-010	* NATIONAL SCIENCE FOUNDATION	PURWANTO, W.	12,978	-	-	1,201	14,179	7,138	-	21,317	TRAD	
400276-010	* BLUE MOON FUND	STEINHILBER, E.	-	2,859	-	-	2,859	429	-	3,288	TRAD	
300051-060	OLD DOMINION UNIVERSITY	STUDIVANT, P.	-	6	-	-	6	1	-	7	TRAD	
300051-070	OLD DOMINION UNIVERSITY	STUDIVANT, P.	60,516	3,219	-	-	63,736	5,099	-	68,834	TRAD	
300051-080	OLD DOMINION UNIVERSITY	STUDIVANT, P.	209,973	12,706	-	29,167	251,845	17,814	-	269,660	TRAD	
100538-010	* OFFICE OF NAVAL RESEARCH	WATERS, S.	8,393	1,074	-	-	9,466	5,207	-	14,673	TRAD	
200266-010	VA DEPARTMENT OF CRIMINAL JUSTICE SERVICES	WIMBROUGH, A.	-	2,663	-	-	2,663	849	-	3,501	TRAD	
			628,139	36,737	-	81,352	746,229	86,436	-	832,665	11.58%	
<b>TOTAL UNIVERSITY ACTIVITY</b>			<b>\$ 3,501,168</b>	<b>\$ 761,518</b>	<b>\$ 19,742</b>	<b>\$ 1,512,768</b>	<b>\$ 5,795,196</b>	<b>\$ 1,172,958</b>	<b>\$ -</b>	<b>\$ 6,968,154</b>	<b>20.24%</b>	
<b>GRAND TOTAL</b>			<b>\$ 21,118,493</b>	<b>\$ 5,579,623</b>	<b>\$ 1,927,345</b>	<b>\$ 7,494,551</b>	<b>\$ 36,120,011</b>	<b>\$ 8,632,775</b>	<b>\$ -</b>	<b>\$ 44,752,787</b>	<b>23.90%</b>	

**SCHEDULE 4**  
**OLD DOMINION UNIVERSITY RESEARCH FOUNDATION**  
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**FOR FISCAL YEAR 2019**

PROJECT NUMBER	SPONSORING AGENCY	PROJECT DIRECT COST					PROJECT IDC AND FEES				TOTAL PROJECT COSTS	EFFECTIVE INDIRECT COST RATE	VSGC CENTER
		PRINCIPAL INVESTIGATOR / PROJECT DIRECTOR	PERSONNEL AND FRINGE BENEFITS	SUPPLIES, CONTRACTUAL, GENERAL, & TRAVEL	EQUIPMENT	SUBCONTRACTS, CONSTRUCTION, TUITION & OTHER	TOTAL DIRECT COSTS	REIMBURSED INDIRECT COSTS	TOTAL SPECIAL FEES				
<b>AFFILIATED ACTIVITY</b>													
Virginia Space Grant Consortium													
100607-010	NATIONAL SCIENCE FOUNDATION	CARTER, C.	40,558	76,617	-	159,961	277,136	30,466	-	307,602	VSGC		
200268-010	GAR-FIELD HIGH SCHOOL	CARTER, C.	9,687	2,073	-	84	11,844	-	-	11,844	VSGC		
500323-010	MIDLAND GIS SOLUTIONS	CARTER, C.	5,703	-	-	7,730	13,433	1,483	-	14,916	VSGC		
100419-010	FEDERAL AVIATION ADMINISTRATION	SANDY, M.	(0)	-	-	-	(0)	-	-	(0)	VSGC		
100522-010	LANGLEY RESEARCH CENTER	SANDY, M.	15,050	59,542	-	-	74,592	19,394	-	93,986	VSGC		
100527-010	NASA GODDARD SPACEFLIGHT CENTER	SANDY, M.	273,749	29,255	-	309,904	612,908	78,781	-	691,689	VSGC		
100573-010	NASA/HEADQUARTERS	SANDY, M.	0	4,902	-	2,048	6,950	1,275	-	8,225	VSGC		
100595-010	* NASA GODDARD SPACEFLIGHT CENTER	SANDY, M.	-	3,149	-	42,268	45,417	819	-	46,235	VSGC		
100595-011	* NASA GODDARD SPACEFLIGHT CENTER	SANDY, M.	-	3,404	-	-	3,404	-	-	3,404	VSGC		
200005-010	STATE COUNCIL FOR HIGHER EDUCATION IN VA (SCHEV)	SANDY, M.	229,679	82,506	-	141,808	453,994	-	-	453,994	VSGC		
200005-011	STATE COUNCIL FOR HIGHER EDUCATION IN VA (SCHEV)	SANDY, M.	39,913	24,364	-	60,426	124,703	-	-	124,703	VSGC		
200009-010	STATE COUNCIL FOR HIGHER EDUCATION IN VA (SCHEV)	SANDY, M.	-	-	-	168,008	168,008	-	-	168,008	VSGC		
200009-020	STATE COUNCIL FOR HIGHER EDUCATION IN VA (SCHEV)	SANDY, M.	5,581	6,786	-	77,086	89,453	-	-	89,453	VSGC		
200278-010	STATE COUNCIL FOR HIGHER EDUCATION IN VA (SCHEV)	SANDY, M.	5,602	562	-	12,593	18,757	-	-	18,757	VSGC		
300030-010	UNIVERSITY OF VIRGINIA	SANDY, M.	62,018	61,680	-	108,391	232,089	-	-	232,089	VSGC		
300040-010	VA POLYTECHNIC INSTITUTE AND STATE UNIVERSITY	SANDY, M.	244,041	21,432	-	6,172	271,645	-	-	271,645	VSGC		
300125-010	OLD DOMINION UNIVERSITY	SANDY, M.	128,962	118,258	-	48,960	296,181	-	-	296,181	VSGC		
300342-010	HAMPTON UNIVERSITY	SANDY, M.	27,551	20,514	-	-	48,064	12,497	-	60,561	VSGC		
300419-010	VIRGINIA COMMUNITY COLLEGE SYSTEM	SANDY, M.	-	196	-	66,931	67,126	-	-	67,126	VSGC		
300423-020	OLD DOMINION UNIVERSITY	SANDY, M.	-	-	-	(100)	(100)	-	-	(100)	VSGC		
300462-011	OLD DOMINION UNIVERSITY	SANDY, M.	15,391	-	-	40,627	56,019	-	-	56,019	VSGC		
300462-021	OLD DOMINION UNIVERSITY	SANDY, M.	-	-	-	2,980	2,980	-	-	2,980	VSGC		
400204-010	THE NATIONAL ACADEMIES	SANDY, M.	190,421	43,507	-	162,403	396,331	60,821	-	457,152	VSGC		
400367-010	NATIONAL DEFENSE INDUSTRIAL ASSOCIATION (NDIA)	SANDY, M.	5,092	2,643	-	-	7,735	2,011	-	9,746	VSGC		
			1,299,000	561,391	-	1,418,281	3,278,671	207,546	-	3,486,217	6.33%		
<b>Virginia Tidewater Consortium for Higher Education</b>													
100618-010	U.S. DEPARTMENT OF EDUCATION	DOTOLO, L.	423,479	78,482	-	-	501,961	38,752	-	540,713	TRAD		
400252-030	OPPORTUNITY, INC.	DOTOLO, L.	910	157	-	1,131	2,197	107	-	2,304	TRAD		
400252-040	OPPORTUNITY, INC.	DOTOLO, L.	75,546	430	-	35,467	111,443	7,598	-	119,041	TRAD		
			499,934	79,069	-	36,598	615,601	46,456	-	662,057	7.55%		
<b>TOTAL AFFILIATED ACTIVITY</b>			<b>\$ 1,798,934</b>	<b>\$ 640,460</b>	<b>\$ -</b>	<b>\$ 1,454,878</b>	<b>\$ 3,894,272</b>	<b>\$ 254,002</b>	<b>\$ -</b>	<b>\$ 4,148,274</b>	<b>6.52%</b>		
<b>GRAND TOTAL</b>			<b>\$ 22,917,427</b>	<b>\$ 6,220,083</b>	<b>\$ 1,927,345</b>	<b>\$ 8,949,429</b>	<b>\$ 40,014,283</b>	<b>\$ 8,886,777</b>	<b>\$ -</b>	<b>\$ 48,901,061</b>	<b>22.21%</b>		

## **SCHEDULE 5**

**Enterprise Centers Including Projects Reported as  
Activity of an Academic Department  
Fiscal Year 2019**

**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 2019**

PROJECT NUMBER		PRINCIPAL INVESTIGATOR / PROJECT DIRECTOR	DEPT	PROJECT DIRECT COST				PROJECT IDC AND FEES		TOTAL PROJECT COSTS	EFFECTIVE INDIRECT COST RATE	CENTER	
				PERSONNEL AND FRINGE BENEFITS	SUPPLIES, CONTRACTUAL, GENERAL, & TRAVEL	EQUIPMENT	SUBCONTRACTS, CONSTRUCTION, TUITION & OTHER	TOTAL DIRECT COSTS	REIMBURSED INDIRECT COSTS	TOTAL SPECIAL FEES			
<b>APPLIED RESEARCH CENTER</b>													
300311-010	ROCHESTER INSTITUTE OF TECHNOLOGY	BAILEY, C.	4054.1	6,199	-	-	-	6,199	3,285	9,484	ARC		
300409-010	* UNIVERSITY OF VIRGINIA	BAUMGART, H.	4054.1	-	(34)	-	-	(34)	-	(34)	ARC		
500121-010	MICROACT, INC.	BAUMGART, H.	4054.1	-	-	-	(15,115)	(15,115)	(3,930)	(19,045)	ARC		
100567-020	LANGLEY RESEARCH CENTER	ELSAYED-ALI, H.	4054.1	9,443	245	-	-	9,688	2,519	12,207	ARC		
100567-020	LANGLEY RESEARCH CENTER	ELSAYED-ALI, H.	4054.1	9,240	-	-	-	9,240	2,402	11,643	ARC		
100674-010	NATIONAL SCIENCE FOUNDATION	ELSAYED-ALI, H.	4054.1	31,079	2,088	-	-	33,167	18,242	51,408	ARC		
100674-010	NATIONAL SCIENCE FOUNDATION	ELSAYED-ALI, H.	4054.1	17,544	252	2,701	584	21,081	9,788	30,869	ARC		
200272-010	* CENTER FOR INNOVATIVE TECHNOLOGY	ELSAYED-ALI, H.	4054.1	21,212	5,906	-	-	27,117	8,135	35,253	ARC		
200272-010	* CENTER FOR INNOVATIVE TECHNOLOGY	ELSAYED-ALI, H.	4054.1	4,688	5,759	-	-	10,446	3,134	13,580	ARC		
300409-010	* UNIVERSITY OF VIRGINIA	ELSAYED-ALI, H.	4054.1	-	(80)	-	-	(80)	-	(80)	ARC		
300430-010	UNIVERSITY OF VIRGINIA	ELSAYED-ALI, H.	4054.1	4,040	2,672	-	135	6,847	-	6,847	ARC		
300467-010	UNIVERSITY OF VIRGINIA	ELSAYED-ALI, H.	4054.1	7,866	409	-	-	8,275	-	8,275	ARC		
400125-020	EMBODY	ELSAYED-ALI, H.	4054.1	-	-	-	1,076	1,076	591	1,667	ARC		
400125-020	EMBODY	ELSAYED-ALI, H.	4054.1	-	525	-	-	525	289	814	ARC		
400346-011	JEFFERSON SCIENCE ASSOCIATES, LLC (JEFFERSON LAB)	ELSAYED-ALI, H.	4054.1	14,299	1,070	-	-	15,369	-	15,369	ARC		
400346-011	JEFFERSON SCIENCE ASSOCIATES, LLC (JEFFERSON LAB)	ELSAYED-ALI, H.	4054.1	13,608	950	-	-	14,558	-	14,558	ARC		
400352-010	EMBODY	ELSAYED-ALI, H.	4054.1	-	120	-	124	244	134	378	ARC		
500288-010	FACE CONSTRUCTION TECHNOLOGIES	ELSAYED-ALI, H.	4054.1	-	-	-	244	244	134	379	ARC		
500322-010	AONA CORP (ACCELERATOR DRIVEN NEUTRON APPLICATIONS)	ELSAYED-ALI, H.	4054.1	-	-	-	351	351	-	351	ARC		
500322-010	AONA CORP (ACCELERATOR DRIVEN NEUTRON APPLICATIONS)	ELSAYED-ALI, H.	4054.1	9,539	110	-	-	9,649	-	9,649	ARC		
500345-010	MTEQ MANUFACTURING SERVICES	ELSAYED-ALI, H.	4054.1	-	-	-	1,513	1,513	-	1,513	ARC		
500345-010	MTEQ MANUFACTURING SERVICES	ELSAYED-ALI, H.	4054.1	-	908	-	-	908	-	908	ARC		
500361-010	BLACK LABORATORIES, LLC	ELSAYED-ALI, H.	4054.1	-	1,290	-	-	1,290	710	2,000	ARC		
500369-010	EVERGREEN TECHNOLOGIES, LLC	ELSAYED-ALI, H.	4054.1	-	1,580	-	-	1,580	411	1,991	ARC		
500374-010	II-VI INFARED, INC.	ELSAYED-ALI, H.	4054.1	5,457	-	-	-	5,457	1,419	6,876	ARC		
500378-010	FACE CONSTRUCTION TECHNOLOGIES	ELSAYED-ALI, H.	4054.1	11,714	1,972	-	-	13,686	7,527	21,213	ARC		
500378-010	FACE CONSTRUCTION TECHNOLOGIES	ELSAYED-ALI, H.	4054.1	3,730	1,573	-	-	5,303	2,917	8,220	ARC		
500380-010	MTEQ MANUFACTURING SERVICES	ELSAYED-ALI, H.	4054.1	-	15,596	-	-	15,596	-	15,596	ARC		
500380-010	MTEQ MANUFACTURING SERVICES	ELSAYED-ALI, H.	4054.1	-	2,005	-	-	2,005	-	2,005	ARC		
500385-010	DR. DANIEL P. HENKEL	ELSAYED-ALI, H.	4054.1	-	-	-	-	-	1	1	ARC		
500385-010	DR. DANIEL P. HENKEL	ELSAYED-ALI, H.	4054.1	-	350	-	-	350	193	543	ARC		
100256-010	* NATIONAL SCIENCE FOUNDATION	MARSILLAC, S.	4054.1	-	356	-	13,850	14,206	189	14,394	ARC		
300344-010	UNIVERSITY OF TOLEDO	MARSILLAC, S.	4054.1	-	-	-	15	15	8	23	ARC		
300428-010	COLORADO SCHOOL OF MINES	MARSILLAC, S.	4054.1	27,830	21,285	3,969	-	53,084	27,013	80,097	ARC		
300436-010	COLORADO SCHOOL OF MINES	MARSILLAC, S.	4054.1	16,231	1,276	-	-	17,507	9,629	27,136	ARC		
100256-010	* NATIONAL SCIENCE FOUNDATION	NAMKOONG, G.	4054.1	-	1,138	-	44,320	45,458	603	46,062	ARC		
100527-028	NASA GODDARD SPACEFLIGHT CENTER	NAMKOONG, G.	4054.1	2,385	915	-	-	3,300	-	3,300	ARC		
300392-010	NORFOLK STATE UNIVERSITY	NAMKOONG, G.	4054.1	6,341	-	-	-	6,341	3,487	9,828	ARC		
300465-010	UNIVERSITY OF VIRGINIA	NAMKOONG, G.	4054.1	5,716	5,196	-	717	11,629	-	11,629	ARC		
600211-010	SAMIL TECH COMPANY, LTD	NAMKOONG, G.	4054.1	9,508	36	-	-	9,544	-	9,544	ARC		
200272-010	* CENTER FOR INNOVATIVE TECHNOLOGY	RAMJEE, B.	6082.1	2,357	656	-	-	3,013	904	3,917	ARC		
				240,024	76,124	6,670	47,815	370,633	99,733	-	470,366	26.91%	

## FRANK REIDY RESEARCH CENTER FOR BIOELECTRICS

300427-010	* OLD DOMINION UNIVERSITY	BEEBE, S.	9010.2	37,001	431	-	5,000	42,432	11,230	53,662	CBE
300427-910	* PULSE BIOSCIENCES (ELECTROBLATE)	BEEBE, S.	9010.2	22,153	21,072	10,916	1,312	55,453	12,967	68,420	CBE
300455-020	* UNIVERSITY OF NORTH TEXAS HEALTH SCIENCE CENTER	BEEBE, S.	9010.2	-	168	-	-	168	-	168	CBE
500226-013	* PULSE BIOSCIENCES (ELECTROBLATE)	BEEBE, S.	9010.2	15,457	3,050	-	-	18,507	10,179	28,685	CBE
500314-010	PULSE CENTERS	BEEBE, S.	9010.2	-	159	-	63	221	122	343	CBE
100517-010	* U.S. PUBLIC HEALTH SERVICE (NATIONAL INSTITUTES OF HEALTH-NIH)	BULYSHEVA, A.	4054.2	14,698	8,305	-	-	23,004	12,192	35,195	CBE
300474-010	OLD DOMINION UNIVERSITY	BULYSHEVA, A.	4054.2	14,037	29,715	26,314	473,750	543,817	13,126	556,943	CBE
300487-010	* OLD DOMINION UNIVERSITY	BULYSHEVA, A.	4054.2	20,028	6,047	-	3,750	29,825	7,823	37,648	CBE
500381-010	* LIFENET	BULYSHEVA, A.	4054.2	15,871	9,242	3,223	3,750	32,085	7,534	39,619	CBE
100692-010	U.S. PUBLIC HEALTH SERVICE (NATIONAL INSTITUTES OF HEALTH-NIH)	CATRAVAS, J.	5056.2	104,492	25,329	-	-	129,821	71,402	201,222	CBE
100789-010	U.S. PUBLIC HEALTH SERVICE (NATIONAL INSTITUTES OF HEALTH-NIH)	CATRAVAS, J.	5056.2	82,369	29,973	-	-	112,342	61,788	174,130	CBE
500366-010	* OLYMPUS CORPORATION OF THE AMERICAS	CATRAVAS, J.	5056.2	-	(71)	-	1,174	1,103	(81)	1,022	CBE
600210-010	FERRING PHARMACEUTICALS INC.	CATRAVAS, J.	5056.2	17,912	99	-	6,267	24,278	13,353	37,631	CBE
600186-010	* UNIVERSITY OF SOUTHAMPTON	CHEN, H.	9010.2	28,533	6,327	1,624	-	36,484	18,475	54,959	CBE
100517-010	* U.S. PUBLIC HEALTH SERVICE (NATIONAL INSTITUTES OF HEALTH-NIH)	GUO, S.	5056.2	4,739	3,722	-	-	8,461	4,484	12,945	CBE
100517-010	* U.S. PUBLIC HEALTH SERVICE (NATIONAL INSTITUTES OF HEALTH-NIH)	GUO, S.	9010.2	9,960	4,583	-	-	14,543	7,708	22,251	CBE
100732-010	* U.S. PUBLIC HEALTH SERVICE (NATIONAL INSTITUTES OF HEALTH-NIH)	GUO, S.	9010.2	26,306	14,262	-	-	40,568	22,312	62,880	CBE
300427-010	* OLD DOMINION UNIVERSITY	GUO, S.	9010.2	29,241	127	-	-	29,368	8,810	38,179	CBE
300427-010	* OLD DOMINION UNIVERSITY	GUO, S.	9010.2	7,760	304	-	5,000	13,064	2,419	15,483	CBE
300427-910	* PULSE BIOSCIENCES (ELECTROBLATE)	GUO, S.	9010.2	1,604	5,764	-	-	7,368	2,210	9,579	CBE
500226-009	* PULSE BIOSCIENCES (ELECTROBLATE)	GUO, S.	9010.2	479	1,925	-	-	2,405	1,323	3,727	CBE
500226-011	* PULSE BIOSCIENCES (ELECTROBLATE)	GUO, S.	9010.2	3,326	2,312	-	-	5,637	3,101	8,738	CBE
500226-013	* PULSE BIOSCIENCES (ELECTROBLATE)	GUO, S.	9010.2	15,457	3,050	-	-	18,507	10,179	28,685	CBE
100516-010	U.S. PUBLIC HEALTH SERVICE (NATIONAL INSTITUTES OF HEALTH-NIH)	HELLER, R.	5056.2	160,099	46,745	-	-	206,844	109,627	316,471	CBE
100517-010	* U.S. PUBLIC HEALTH SERVICE (NATIONAL INSTITUTES OF HEALTH-NIH)	HELLER, R.	5056.2	68,592	38,758	-	-	107,350	56,895	164,245	CBE
100579-010	U.S. PUBLIC HEALTH SERVICE (NATIONAL INSTITUTES OF HEALTH-NIH)	HELLER, L.	5056.2	72,283	16,127	-	66,632	155,042	48,625	203,667	CBE
100740-010	* U.S. PUBLIC HEALTH SERVICE (NATIONAL INSTITUTES OF HEALTH-NIH)	HELLER, R.	5056.2	45,969	4,843	-	-	50,812	27,947	78,758	CBE
500226-000	PULSE BIOSCIENCES (ELECTROBLATE)	HELLER, R.	5056.2	-	(34)	-	-	(34)	-	(34)	CBE
500226-013	* PULSE BIOSCIENCES (ELECTROBLATE)	HELLER, R.	5056.2	15,925	3,143	-	-	19,067	10,487	29,555	CBE
100661-010	AIR FORCE RESEARCH LABORATORY	JIANG, C.	4054.2	80,210	11,868	-	-	92,078	50,643	142,721	CBE
100732-010	* U.S. PUBLIC HEALTH SERVICE (NATIONAL INSTITUTES OF HEALTH-NIH)	JIANG, C.	4054.2	11,274	6,112	-	-	17,386	9,562	26,949	CBE
100740-010	* U.S. PUBLIC HEALTH SERVICE (NATIONAL INSTITUTES OF HEALTH-NIH)	JIANG, C.	4054.2	45,969	4,843	-	-	50,812	27,947	78,758	CBE
500328-010	TRANSIENT PLASMA SYSTEMS, INC.	JIANG, C.	4054.2	-	311	-	7,071	7,382	4,232	11,614	CBE
600186-010	* UNIVERSITY OF SOUTHAMPTON	KONG, M.	4054.2	66,576	14,763	3,790	-	85,129	43,109	128,238	CBE
500226-010	* PULSE BIOSCIENCES (ELECTROBLATE)	MURATORI, C.	9010.2	15,315	2,452	-	-	17,767	9,772	27,539	CBE
500226-015	* PULSE BIOSCIENCES (ELECTROBLATE)	MURATORI, C.	9010.2	77,991	21,847	-	-	99,839	54,911	154,750	CBE
500226-017	* PULSE BIOSCIENCES (ELECTROBLATE)	MURATORI, C.	9010.2	7,873	3,024	-	-	10,897	5,993	16,890	CBE
100548-010	* U.S. PUBLIC HEALTH SERVICE (NATIONAL INSTITUTES OF HEALTH-NIH)	PAKHOMOV, A.	5056.2	26,294	2,945	-	-	29,239	16,081	45,320	CBE
300345-010	OLD DOMINION UNIVERSITY	PAKHOMOV, A.	5056.2	168,437	42,705	-	266,914	478,056	116,128	594,185	CBE
300345-013	* OLD DOMINION UNIVERSITY	PAKHOMOV, A.	5056.2	19,200	3,970	-	-	23,169	12,743	35,913	CBE
500226-014	PULSE BIOSCIENCES (ELECTROBLATE)	PAKHOMOV, A.	5056.2	77,697	18,644	-	-	96,340	52,987	149,328	CBE
100548-010	* U.S. PUBLIC HEALTH SERVICE (NATIONAL INSTITUTES OF HEALTH-NIH)	PAKHOMOVA, O.	9010.2	3,287	368	-	-	3,655	2,010	5,665	CBE
300345-012	OLD DOMINION UNIVERSITY	PAKHOMOVA, O.	9010.2	74,552	40,269	-	-	114,821	63,152	177,973	CBE
300345-013	* OLD DOMINION UNIVERSITY	PAKHOMOVA, O.	9010.2	2,363	489	-	-	2,852	1,568	4,420	CBE
500226-010	* PULSE BIOSCIENCES (ELECTROBLATE)	PAKHOMOVA, O.	9010.2	6,564	1,051	-	-	7,614	4,188	11,802	CBE
500226-015	* PULSE BIOSCIENCES (ELECTROBLATE)	PAKHOMOVA, O.	9010.2	19,498	5,462	-	-	24,960	13,728	38,687	CBE
500366-010	* OLYMPUS CORPORATION OF THE AMERICAS	PAKHOMOVA, O.	9010.2	-	(71)	-	1,174	1,103	(81)	1,022	CBE

100548-010	* U.S. PUBLIC HEALTH SERVICE (NATIONAL INSTITUTES OF HEALTH-NIH)	SEMENOV, I.	9010.2	6,574	736	-	-	7,310	4,020	11,330	CBE	
300345-013	* OLD DOMINION UNIVERSITY	SEMENOV, I.	9010.2	1,182	244	-	-	1,426	784	2,210	CBE	
100807-010	NATIONAL SCIENCE FOUNDATION	SLAUGHTER, G.	4054.2	15,404	-	-	-	15,404	8,472	23,877	CBE	
100809-010	NATIONAL SCIENCE FOUNDATION	SLAUGHTER, G.	4054.2	55,798	2,040	-	-	57,837	31,810	89,648	CBE	
400393-010	BREEDEN-ADAMS FOUNDATION	STACEY, M.	9010.2	-	4,506	-	-	4,506	-	4,506	CBE	
100474-010	AIR FORCE OFFICE OF SCIENTIFIC RESEARCH (AFOSR)	VERNIER, P.	9010.2	20,534	1,815	-	-	22,349	11,845	34,195	CBE	
300345-013	* OLD DOMINION UNIVERSITY	VERNIER, P.	9010.2	40,322	6,774	-	-	47,096	25,903	72,999	CBE	
500226-009	* PULSE BIOSCIENCES (ELECTROBLATE)	VERNIER, T.	9010.2	479	1,925	-	-	2,405	1,323	3,727	CBE	
100548-010	* U.S. PUBLIC HEALTH SERVICE (NATIONAL INSTITUTES OF HEALTH-NIH)	XIAO, S.	4054.2	3,287	368	-	-	3,655	2,010	5,665	CBE	
300345-011	OLD DOMINION UNIVERSITY	XIAO, S.	4054.2	62,441	11,702	-	-	74,143	40,779	114,922	CBE	
300345-013	* OLD DOMINION UNIVERSITY	XIAO, S.	4054.2	2,363	489	-	-	2,852	1,568	4,420	CBE	
300479-010	* VIRGINIA COMMONWEALTH UNIVERSITY	XIAO, S.	4054.2	2,098	1,410	-	-	3,508	-	3,508	CBE	
500226-011	* PULSE BIOSCIENCES (ELECTROBLATE)	XIAO, S.	4054.2	18,845	13,100	-	-	31,945	17,570	49,515	CBE	
500226-016	PULSE BIOSCIENCES (ELECTROBLATE)	XIAO, S.	4054.2	10,649	9,655	-	-	20,304	11,167	31,471	CBE	
100548-010	* U.S. PUBLIC HEALTH SERVICE (NATIONAL INSTITUTES OF HEALTH-NIH)	ZEMLIN, C.	4054.2	26,294	2,945	-	-	29,239	16,081	45,320	CBE	
300487-010	* OLD DOMINION UNIVERSITY	ZEMLIN, C.	4054.2	20,028	6,047	-	3,750	29,825	7,823	37,648	CBE	
400333-010	AMERICAN HEART ASSOCIATION	ZEMLIN, C.	4054.2	34,071	2,332	-	-	36,403	-	36,403	CBE	
500226-007	* PULSE BIOSCIENCES (ELECTROBLATE)	ZEMLIN, C.	4054.2	17,749	110	-	-	17,859	9,823	27,682	CBE	
500359-010	ATRICURE, INC	ZEMLIN, C.	4054.2	-	27,754	-	-	27,754	15,265	43,019	CBE	
500381-010	* LIFENET	ZEMLIN, C.	4054.2	15,871	9,242	3,223	3,750	32,085	7,534	39,619	CBE	
				1,891,378	569,721	49,090	849,357	3,359,547	1,258,689	-	4,618,236	37.47%

## SOCIAL SCIENCE RESEARCH CENTER

200221-020	* CITY OF SUFFOLK	VANDECAR-BURDIN, T.	1060	1,665	-	-	-	1,665	433	2,098	SSRC	
200233-010	CITY OF PORTSMOUTH	VANDECAR-BURDIN, T.	1060	-	(37)	-	-	(37)	(10)	(47)	SSRC	
200248-010	* VIRGINIA OFFICE OF THE ATTORNEY GENERAL	VANDECAR-BURDIN, T.	1060	9,018	-	-	-	9,018	2,345	11,362	SSRC	
200254-010	CITY OF VIRGINIA BEACH	VANDECAR-BURDIN, T.	1060	-	-	-	95	95	15	110	SSRC	
200269-010	VIRGINIA BEACH DEPARTMENT OF PUBLIC HEALTH	VANDECAR-BURDIN, T.	1060	2,757	42	-	-	2,798	1,539	4,337	SSRC	
200285-010	CITY OF VIRGINIA BEACH	VANDECAR-BURDIN, T.	1060	1,064	-	-	53	1,117	-	1,117	SSRC	
200295-010	CITY OF CHESAPEAKE	VANDECAR-BURDIN, T.	1060	412	480	-	-	892	491	1,382	SSRC	
300312-010	OLD DOMINION UNIVERSITY	VANDECAR-BURDIN, T.	1060	4,855	(98)	-	-	4,757	238	4,995	SSRC	
300333-010	* OLD DOMINION UNIVERSITY	VANDECAR-BURDIN, T.	1060	-	(15)	-	-	(15)	(1)	(16)	SSRC	
300356-020	* OLD DOMINION UNIVERSITY	VANDECAR-BURDIN, T.	1060	4,850	33	-	-	4,883	391	5,274	SSRC	
300356-040	* OLD DOMINION UNIVERSITY	VANDECAR-BURDIN, T.	1060	229	-	-	-	229	18	247	SSRC	
300432-010	* OLD DOMINION UNIVERSITY	VANDECAR-BURDIN, T.	1060	-	-	-	10,828	10,828	542	11,369	SSRC	
300433-010	OLD DOMINION UNIVERSITY	VANDECAR-BURDIN, T.	1060	-	-	-	564	564	-	564	SSRC	
300450-010	OLD DOMINION UNIVERSITY	VANDECAR-BURDIN, T.	1060	-	-	-	-	-	(0)	(0)	SSRC	
300481-010	OLD DOMINION UNIVERSITY	VANDECAR-BURDIN, T.	1060	21,633	4,813	-	-	26,446	1,322	27,769	SSRC	
300513-010	OLD DOMINION UNIVERSITY	VANDECAR-BURDIN, T.	1060	16,538	13,430	-	-	29,969	1,498	31,467	SSRC	
300519-010	* EASTERN VIRGINIA MEDICAL SCHOOL	VANDECAR-BURDIN, T.	1060	4,199	2,417	-	-	6,615	-	6,615	SSRC	
300521-010	OLD DOMINION UNIVERSITY	VANDECAR-BURDIN, T.	1060	6,580	1,831	-	-	8,411	-	8,411	SSRC	
400371-010	AMERICAN SOCIETY OF BIOMECHANICS	VANDECAR-BURDIN, T.	1060	490	-	-	-	490	269	759	SSRC	
400411-010	VIRGINIA ARTS FESTIVAL	VANDECAR-BURDIN, T.	1060	968	857	-	-	1,825	474	2,299	SSRC	
500372-010	* HOGAN-LOVELLS	VANDECAR-BURDIN, T.	1060	17,307	827	-	-	18,134	9,974	28,108	SSRC	
				92,564	24,579	-	11,540	128,683	19,538	-	148,221	15.18%

## CENTER FOR CYBERSECURITY

100746-010	* NATIONAL SCIENCE FOUNDATION	CHRISOCHOIDES, N.	6093.9	-	-	300,740	-	300,740	-	300,740	CYBER
100799-010	* NATIONAL SECURITY AGENCY	DICE, T.	3040.9	1,818	-	-	-	1,818	1,000	2,818	CYBER
100706-010	* NATIONAL SECURITY AGENCY	DRAPER, D.	9910.9	3,959	2,915	-	-	6,874	3,781	10,655	CYBER
100648-010	* NATIONAL SCIENCE FOUNDATION	HE, W.	2032.9	2,556	6,001	-	22,129	30,686	4,706	35,392	CYBER
100706-010	* NATIONAL SECURITY AGENCY	HE, W.	2032.9	5,939	4,372	-	-	10,311	5,671	15,982	CYBER
100709-010	* NATIONAL SCIENCE FOUNDATION	HE, W.	2032.9	5,505	1,876	-	15,944	23,325	4,059	27,384	CYBER
100746-010	* NATIONAL SCIENCE FOUNDATION	HUANG, J.	4060.9	-	-	300,740	-	300,740	-	300,740	CYBER
100648-010	* NATIONAL SCIENCE FOUNDATION	IFTEKHARUDDIN, K.	4054.9	663	4,044	-	7,052	11,759	2,589	14,348	CYBER
100746-010	* NATIONAL SCIENCE FOUNDATION	IFTEKHARUDDIN, K.	4054.9	-	-	300,740	-	300,740	-	300,740	CYBER
100648-010	* NATIONAL SCIENCE FOUNDATION	LI, J.	4054.9	663	4,044	-	7,052	11,759	2,589	14,348	CYBER
100675-010	NATIONAL SCIENCE FOUNDATION	PAYNE, B.	9910.9	65,430	7,445	-	56,715	129,590	40,081	169,672	CYBER
100709-010	* NATIONAL SCIENCE FOUNDATION	PAYNE, B.	9910.9	5,505	1,876	-	15,944	23,325	4,059	27,384	CYBER
100745-010	* NATIONAL SCIENCE FOUNDATION	PAYNE, B.	9910.9	4,250	300	-	2,236	6,787	2,503	9,290	CYBER
300411-010	* OLD DOMINION UNIVERSITY	PAYNE, B.	9910.9	-	19	-	680	699	-	699	CYBER
100723-010	* NATIONAL SCIENCE FOUNDATION	SOSONKINA, M.	4075.9	11,730	-	-	1,201	12,931	6,452	19,383	CYBER
100746-010	* NATIONAL SCIENCE FOUNDATION	SOSONKINA, M.	4075.9	-	-	300,740	-	300,740	-	300,740	CYBER
100745-010	* NATIONAL SCIENCE FOUNDATION	WANG, C.	6093.9	3,789	-	-	2,236	6,025	2,084	8,109	CYBER
600214-010	HUAWEI TECHNOLOGIES CO. LTD	WANG, C.	6093.9	-	-	-	3,873	3,873	2,129	6,002	CYBER
100745-010	* NATIONAL SCIENCE FOUNDATION	WANG, C.	6093.9	462	300	-	-	762	419	1,181	CYBER
600214-010	HUAWEI TECHNOLOGIES CO. LTD	WANG, C.	6093.9	2,063	1,814	-	-	3,877	2,132	6,010	CYBER
100799-010	* NATIONAL SECURITY AGENCY	WITTOWER, D.	1017.9	1,818	-	-	-	1,818	1,000	2,818	CYBER
100612-010	NATIONAL SCIENCE FOUNDATION	WU, H.	4054.9	41,206	-	-	5,990	47,196	22,663	69,860	CYBER
100612-010	NATIONAL SCIENCE FOUNDATION	WU, H.	4054.9	7,487	6,891	-	-	14,378	7,908	22,286	CYBER
100706-010	* NATIONAL SECURITY AGENCY	WU, H.	4054.9	3,959	2,803	-	-	6,762	3,719	10,482	CYBER
100709-010	* NATIONAL SCIENCE FOUNDATION	WU, H.	4054.9	1,754	-	-	7,999	9,753	965	10,717	CYBER
100723-010	* NATIONAL SCIENCE FOUNDATION	WU, H.	4054.9	1,286	-	-	-	1,286	707	1,993	CYBER
100745-010	* NATIONAL SCIENCE FOUNDATION	WU, H.	4054.9	462	300	-	-	762	419	1,181	CYBER
100791-010	* OFFICE OF NAVAL RESEARCH	WU, H.	4054.9	4,438	-	-	1,460	5,898	2,885	8,783	CYBER
100706-010	* NATIONAL SECURITY AGENCY	WU, H.	4054.9	-	112	-	-	112	61	173	CYBER
100723-010	* NATIONAL SCIENCE FOUNDATION	WU, H.	4054.9	12,086	-	-	1,237	13,323	6,647	19,970	CYBER
100745-010	* NATIONAL SCIENCE FOUNDATION	WU, H.	4054.9	3,789	-	-	2,236	6,025	2,084	8,109	CYBER
100746-010	* NATIONAL SCIENCE FOUNDATION	WU, H.	4054.9	-	-	300,740	-	300,740	-	300,740	CYBER
100791-010	* OFFICE OF NAVAL RESEARCH	WU, H.	4054.9	23,316	289	-	883	24,487	15,343	39,830	CYBER
100799-010	* NATIONAL SECURITY AGENCY	WU, H.	4054.9	1,818	-	-	-	1,818	1,000	2,818	CYBER

100253-010	NATIONAL SCIENCE FOUNDATION	XIN, C.	4054.9	2,540	-	-	-	2,540	1,346	3,887	CYBER	
100648-010	* NATIONAL SCIENCE FOUNDATION	XIN, C.	4054.9	1,893	1,957	-	15,077	18,927	2,117	21,044	CYBER	
100648-010	* NATIONAL SCIENCE FOUNDATION	XIN, C.	4054.9	663	4,044	-	7,052	11,759	2,589	14,348	CYBER	
100680-010	NATIONAL SCIENCE FOUNDATION	XIN, C.	4054.9	5,001	-	-	-	5,001	2,751	7,752	CYBER	
100680-010	NATIONAL SCIENCE FOUNDATION	XIN, C.	4054.9	4,863	299	-	-	5,162	2,839	8,001	CYBER	
100680-020	NATIONAL SCIENCE FOUNDATION	XIN, C.	4054.9	-	-	-	10,000	10,000	-	10,000	CYBER	
100706-010	* NATIONAL SECURITY AGENCY	XIN, C.	4054.9	-	168	-	-	168	92	260	CYBER	
100709-010	* NATIONAL SCIENCE FOUNDATION	XIN, C.	4054.9	7,502	3,752	-	15,890	27,144	6,190	33,334	CYBER	
100745-010	* NATIONAL SCIENCE FOUNDATION	XIN, C.	4054.9	3,789	-	-	2,236	6,025	2,084	8,109	CYBER	
100791-010	* OFFICE OF NAVAL RESEARCH	XIN, C.	4054.9	22,630	280	-	857	23,767	14,892	38,658	CYBER	
100799-010	* NATIONAL SECURITY AGENCY	XIN, C.	4054.9	1,818	-	-	-	1,818	1,000	2,818	CYBER	
100706-010	* NATIONAL SECURITY AGENCY	XIN, C.	4054.9	5,939	4,205	-	-	10,144	5,579	15,722	CYBER	
100709-010	* NATIONAL SCIENCE FOUNDATION	XIN, C.	4054.9	1,754	-	-	7,999	9,753	965	10,717	CYBER	
100745-010	* NATIONAL SCIENCE FOUNDATION	XIN, C.	4054.9	462	300	-	-	762	419	1,181	CYBER	
100791-010	* OFFICE OF NAVAL RESEARCH	XIN, C.	4054.9	4,307	-	-	1,417	5,725	2,800	8,524	CYBER	
100799-010	* NATIONAL SECURITY AGENCY	ZHAO, D.	6093.9	1,818	-	-	-	1,818	1,000	2,818	CYBER	
				282,730	60,406	1,503,701	215,397	2,062,235	196,319	-	2,258,554	9.52%

#### CENTER FOR EDUCATIONAL PARTNERSHIPS

300502-010	* WESTERN WASHINGTON UNIVERSITY	BROBST, J.	3048	11,518	64	-	-	11,582	609	12,191	TCEP	
300503-010	WESTERN WASHINGTON UNIVERSITY	BROBST, J.	3048	16,242	-	-	-	16,242	8,933	25,175	TCEP	
100721-010	* OFFICE OF NAVAL RESEARCH	CHAPPELL, S.	3048	4,688	8,250	-	59,085	72,023	4,658	76,681	TCEP	
200210-010	* NEWPORT NEWS PUBLIC SCHOOLS	CHAPPELL, S.	3048	2,265	-	-	-	2,265	-	2,265	TCEP	
200213-010	* CHESAPEAKE PUBLIC SCHOOLS	CHAPPELL, S.	3048	5,710	-	-	-	5,710	-	5,710	TCEP	
200216-010	VIRGINIA BEACH CITY PUBLIC SCHOOLS	CHAPPELL, S.	3048	(376)	-	-	7,291	6,915	-	6,915	TCEP	
300502-010	* WESTERN WASHINGTON UNIVERSITY	CHAPPELL, S.	3048	11,518	64	-	-	11,582	609	12,191	TCEP	
200009-022	STATE COUNCIL FOR HIGHER EDUCATION IN VA (SCHEV)	GARNER, J.	3048	553	1,666	-	-	2,219	-	2,219	TCEP	
200188-040	* OLD DOMINION UNIVERSITY	GARNER, J.	3048	3,184	4,725	-	9,261	17,170	633	17,803	TCEP	
200210-010	* NEWPORT NEWS PUBLIC SCHOOLS	GARNER, J.	3048	2,265	-	-	-	2,265	-	2,265	TCEP	
200213-010	* CHESAPEAKE PUBLIC SCHOOLS	GARNER, J.	3048	5,710	-	-	-	5,710	-	5,710	TCEP	
200225-010	PRINCE WILLIAM COUNTY PUBLIC SCHOOLS	GARNER, J.	3048	7,789	-	-	-	7,789	4,284	12,073	TCEP	
100721-010	* OFFICE OF NAVAL RESEARCH	GARNER, J.	3048	4,830	8,500	-	60,876	74,205	4,799	79,004	TCEP	
200183-040	* OLD DOMINION UNIVERSITY	GARNER, J.	3048	2,784	5,197	-	4,706	12,687	639	13,326	TCEP	
400354-010	* CHESAPEAKE BAY FOUNDATION	GARNER, J.	3048	-	1,468	-	-	1,468	-	1,468	TCEP	
100721-010	* OFFICE OF NAVAL RESEARCH	LONEY, M.	3048	4,688	8,250	-	59,085	72,023	4,658	76,681	TCEP	
200183-040	* OLD DOMINION UNIVERSITY	LONEY, M.	3048	6,497	12,127	-	10,980	29,603	1,490	31,093	TCEP	
200188-040	* OLD DOMINION UNIVERSITY	LONEY, M.	3048	13,798	20,475	-	40,133	74,405	2,742	77,147	TCEP	
200290-010	* YORK COUNTY SCHOOLS	LONEY, M.	3048	11,324	433	-	-	11,757	588	12,345	TCEP	
400354-010	* CHESAPEAKE BAY FOUNDATION	LONEY, M.	3048	-	2,202	-	-	2,202	-	2,202	TCEP	
200290-010	* YORK COUNTY SCHOOLS	WEBSTER, H.	3048	4,853	186	-	-	5,039	252	5,291	TCEP	
				119,839	73,608	-	251,416	444,863	34,892	-	479,755	7.84%

**MITIGATION & ADAPTION RESEARCH INSTITUTE**

100565-010	U.S. FISH AND WILDLIFE SERVICES	PLAG, H.	6085	15,942	4,037	-	20,046	40,025	-	40,025	MARI	
100678-010	NASA/HEADQUARTERS	PLAG, H.	6085	307	-	-	-	307	80	387	MARI	
<b>VIRGINIA MODELING, ANALYSIS AND SIMULATION CENTER</b>												
100531-001	* NAVAL SEA SYSTEMS COMMAND	BARRACO, A.	9010.3	(1)	-	-	-	(1)	(1)	(1)	VMASC	
600201-010	* UNIVERSITY OF AGDER	BARRACO, A.	9010.3	16,455	5	-	-	16,459	9,053	25,512	VMASC	
300492-010	* OLD DOMINION UNIVERSITY	BEHR, J.	9010.3	8,735	1,155	-	-	9,890	-	9,890	VMASC	
500341-001	* APPLIED RESEARCH ASSOCIATES, INC.	CROLL, M.	9010.3	(6)	-	-	0	(6)	(3)	(9)	VMASC	
500342-001	* WR SYSTEMS, LTD.	CROLL, M.	9010.3	6,598	-	-	877	7,475	4,859	12,334	VMASC	
500362-010	* G2 OPS, INC.	CROLL, M.	9010.3	(0)	-	-	0	(0)	(0)	(0)	VMASC	
100710-010	* NAVAL SPEC WARFARE DEVELOPMENT GROUP	CVIJETIC, B.	9010.3	-	-	-	-	-	(0)	(0)	VMASC	
500376-010	* CAMBER CORPORATION	CVIJETIC, B.	9010.3	8,947	-	-	53	9,000	5,850	14,850	VMASC	
500391-010	* CAMBER CORPORATION	CVIJETIC, B.	9010.3	15,687	-	-	-	15,687	10,197	25,884	VMASC	
500354-010	CAMBER CORPORATION	DIALLO, S.	9010.3	-	-	-	0	0	0	1	VMASC	
500388-010	SIRIUS-BETA CORPORATION	DIALLO, S.	9010.3	2,961	-	-	265	3,226	1,774	5,000	VMASC	
500395-010	KADSCI	DIALLO, S.	9010.3	25,001	-	-	-	25,001	16,250	41,251	VMASC	
500400-010	UNITED NETWORK FOR ORGAN SHARING (UNOS)	DIALLO, S.	9010.3	15,190	319	-	-	15,509	8,530	24,039	VMASC	
300490-010	* OLD DOMINION UNIVERSITY	DIALLO, S.	9010.3	19,016	2,679	-	-	21,695	-	21,695	VMASC	
400351-010	* CENTER FOR MIND AND CULTURE	DIALLO, S.	9010.3	2,248	985	-	-	3,233	485	3,718	VMASC	
500341-001	* APPLIED RESEARCH ASSOCIATES, INC.	DIALLO, S.	9010.3	4,600	-	-	-	4,600	2,530	7,131	VMASC	
500375-001	* CAMBER CORPORATION	DIALLO, S.	9010.3	41,526	-	-	-	41,526	26,992	68,518	VMASC	
500376-010	* CAMBER CORPORATION	DIALLO, S.	9010.3	8,947	-	-	53	9,000	5,850	14,850	VMASC	
500391-010	* CAMBER CORPORATION	DIALLO, S.	9010.3	15,687	-	-	-	15,687	10,197	25,884	VMASC	
600201-010	* UNIVERSITY OF AGDER	DIALLO, S.	9010.3	16,455	5	-	-	16,459	9,053	25,512	VMASC	
200245-010	VIRGINIA DEPARTMENT OF EMERGENCY MANAGEMENT	EZELL, B.	9010.3	-	(2,848)	-	-	-	(2,848)	(1,566)	(4,415)	VMASC
200270-010	VIRGINIA DEPARTMENT OF EMERGENCY MANAGEMENT	EZELL, B.	9010.3	88,296	27,365	-	37,435	153,096	69,192	222,288	VMASC	
200292-010	VA PORT AUTHORITY	EZELL, B.	9010.3	2,764	804	-	-	3,569	928	4,497	VMASC	
200294-010	* VA PORT AUTHORITY	EZELL, B.	9010.3	7,800	1,839	-	-	9,639	2,506	12,145	VMASC	
200297-010	VIRGINIA DEPARTMENT OF EMERGENCY MANAGEMENT	EZELL, B.	9010.3	14,028	1,608	-	-	15,636	8,600	24,236	VMASC	
400364-010	MITRE CORPORATION	EZELL, B.	9010.3	7,259	-	-	(1)	7,258	3,992	11,250	VMASC	
400387-010	FOODBANK OF SOUTHEAST VA AND EASTERN SHORE	EZELL, B.	9010.3	-	1,470	-	-	1,470	382	1,852	VMASC	
500325-020	PLASSER AMERICAN CORPORATION	EZELL, B.	9010.3	-	-	-	16,656	16,656	-	16,656	VMASC	
500332-010	DAVIS INTERIORS LTD.	EZELL, B.	9010.3	-	-	-	96	96	26	122	VMASC	
500356-010	ARDX	EZELL, B.	9010.3	-	-	-	-	-	(1)	(1)	VMASC	
500363-010	LPR, INC.	EZELL, B.	9010.3	-	-	-	441	441	115	557	VMASC	
500364-010	PLASSER AMERICAN CORPORATION	EZELL, B.	9010.3	-	-	-	1,602	1,602	417	2,019	VMASC	
500367-010	LPR, INC.	EZELL, B.	9010.3	444	-	-	-	444	116	560	VMASC	
500373-010	PLASSER AMERICAN CORPORATION	EZELL, B.	9010.3	-	-	-	999	999	260	1,259	VMASC	
500383-010	CHESAPEAKE REGIONAL HEALTHCARE	EZELL, B.	9010.3	-	-	-	1,639	1,639	426	2,065	VMASC	
500386-010	LIFENET	EZELL, B.	9010.3	-	-	-	3,122	3,122	812	3,934	VMASC	
500401-010	* CHESAPEAKE REGIONAL HEALTHCARE	EZELL, B.	9010.3	8,787	2,004	-	-	10,791	2,806	13,597	VMASC	
100800-010	* NAVAL AIR WARFARE CENTER TSD	EZELL, B.	9010.3	149	22	-	-	171	111	282	VMASC	
200252-010	* VIRGINIA DEPARTMENT OF EMERGENCY MANAGEMENT	EZELL, B.	9010.3	(0)	-	-	-	(0)	(0)	(0)	VMASC	
400328-010	* BATTELLE CORPORATION	EZELL, B.	9010.3	2,426	-	-	-	2,426	1,335	3,761	VMASC	
500341-001	* APPLIED RESEARCH ASSOCIATES, INC.	EZELL, B.	9010.3	4,600	-	-	-	4,600	2,530	7,131	VMASC	
500341-002	* APPLIED RESEARCH ASSOCIATES, INC.	EZELL, B.	9010.3	-	-	-	0	0	2	2	VMASC	
500341-003	* APPLIED RESEARCH ASSOCIATES, INC.	EZELL, B.	9010.3	3,409	-	-	-	3,409	1,875	5,284	VMASC	
500362-010	* G2 OPS, INC.	EZELL, B.	9010.3	(0)	-	-	0	(0)	(0)	(0)	VMASC	
500390-010	* ALEX - ALTERNATIVE EXPERTS, LLC	EZELL, B.	9010.3	20,612	69	-	-	20,681	13,443	34,123	VMASC	
500362-010	* G2 OPS, INC.	FLANAGAN, D.	9010.3	(0)	-	-	0	(0)	(0)	(0)	VMASC	
200244-011	* VA PORT AUTHORITY	FOYTIK, P.	9010.3	-	-	-	-	-	0	0	VMASC	
300445-010	* OLD DOMINION UNIVERSITY	FRYDENLUND, E.	9010.3	371	3,565	-	-	3,936	-	3,936	VMASC	

100710-010	* NAVAL SPEC WARFARE DEVELOPMENT GROUP	GARCIA, H.	9010.3	-	-	-	-	-	(0)	(0)	VMASC
500391-010	* CAMBER CORPORATION	GAY, B.	9010.3	15,687	-	-	-	15,687	10,197	25,884	VMASC
300490-010	* OLD DOMINION UNIVERSITY	GILES, B.	9010.3	26,623	3,750	-	-	30,373	-	30,373	VMASC
100790-010	* NAVAL SEA SYSTEMS COMMAND	GORE, R.	9010.3	15,979	1,757	-	-	1,020	18,756	11,528	VMASC
300446-010	* OLD DOMINION UNIVERSITY	GORE, R.	9010.3	(423)	-	-	-	-	(423)	-	(423)
500375-001	* CAMBER CORPORATION	GORE, R.	9010.3	41,526	-	-	-	-	41,526	26,992	68,518
500376-010	* CAMBER CORPORATION	GORE, R.	9010.3	9,218	-	-	-	55	9,273	6,027	15,300
500391-010	* CAMBER CORPORATION	GORE, R.	9010.3	15,687	-	-	-	-	15,687	10,197	25,884
600201-010	* UNIVERSITY OF AGDER	GORE, R.	9010.3	21,940	6	-	-	-	21,946	12,070	34,016
200252-010	* VIRGINIA DEPARTMENT OF EMERGENCY MANAGEMENT	GORE, R.	9010.3	(0)	-	-	-	-	(0)	(0)	(0)
400328-010	* BATTELLE CORPORATION	GORE, R.	9010.3	1,618	-	-	-	-	1,618	890	2,507
500362-010	* G2 OPS, INC.	GORE, R.	9010.3	(0)	-	-	-	0	(0)	(0)	(0)
300490-010	* OLD DOMINION UNIVERSITY	JORDAN, C.	9010.3	22,820	3,214	-	-	-	26,034	-	26,034
100790-010	* NAVAL SEA SYSTEMS COMMAND	LYNCH, C.	9010.3	15,979	1,757	-	-	1,020	18,756	11,528	VMASC
100800-010	* NAVAL AIR WARFARE CENTER TSD	LYNCH, C.	9010.3	2,611	376	-	-	-	2,987	1,941	4,928
400351-010	* CENTER FOR MIND AND CULTURE	LYNCH, C.	9010.3	2,248	985	-	-	-	3,233	485	3,718
100534-010	OFFICE OF NAVAL RESEARCH	MICHAELI, J.	9010.3	5,329	-	-	-	-	5,329	2,824	8,153
100588-010	* OFFICE OF NAVAL RESEARCH	MICHAELI, J.	9010.3	27,496	356	-	-	4,824	32,675	18,103	50,779
100725-010	OFFICE OF NAVAL RESEARCH	MICHAELI, J.	9010.3	35,378	-	-	-	3,414	38,792	19,458	58,250
300463-010	OLD DOMINION UNIVERSITY	MICHAELI, J.	9010.3	394,958	61,765	-	-	145,000	601,723	-	601,723
100552-010	* NATIONAL SCIENCE FOUNDATION	NELSON, M.	6093.3	17,168	1,778	-	-	2,023	20,969	10,042	31,010
100552-010	* NATIONAL SCIENCE FOUNDATION	NELSON, M.	6093.3	18,782	1,484	5,000	1,674	26,941	10,741	37,682	VMASC
100676-010	* NATIONAL ENDOWMENT FOR THE HUMANITIES	NELSON, M.	6093.3	3,024	2,231	-	-	-	5,255	2,890	8,145
300472-010	VA POLYTECHNIC INSTITUTE AND STATE UNIVERSITY	NELSON, M.	6093.3	6,081	-	-	-	-	6,081	3,345	9,426
100519-010	* INSTITUTE OF MUSEUM AND LIBRARY SERVICES	NELSON, M.	6093.3	11,918	-	-	-	15,000	26,918	6,317	33,234
100519-010	* INSTITUTE OF MUSEUM AND LIBRARY SERVICES	NELSON, M.	6093.3	2,345	1,520	-	-	-	3,864	2,048	5,912
100676-010	* NATIONAL ENDOWMENT FOR THE HUMANITIES	NELSON, M.	6093.3	3,192	-	-	-	-	3,192	1,755	4,947
300380-010	* OLD DOMINION UNIVERSITY	NELSON, M.	6093.3	36,021	2,563	-	-	13,657	52,241	-	52,241
300380-010	* OLD DOMINION UNIVERSITY	NELSON, M.	6093.3	22,552	6,871	-	-	16,949	46,372	-	46,372
300328-010	NORFOLK STATE UNIVERSITY	PADILLA, J.	9010.3	106,098	1,719	-	-	8,330	116,148	57,143	173,291
300445-010	* OLD DOMINION UNIVERSITY	PADILLA, J.	9010.3	371	3,565	-	-	-	3,936	-	3,936
500342-001	* WR SYSTEMS, LTD.	PAPELIS, Y.	9010.3	39,589	-	-	-	5,262	44,850	29,153	74,004
100521-010	* AIR FORCE OFFICE OF SCIENTIFIC RESEARCH (AFOSR)	PAPELIS, Y.	9010.3	-	(554)	-	-	-	(554)	(144)	(698)
100601-010	* U.S. DEPARTMENT OF EDUCATION	PAPELIS, Y.	9010.3	61,305	13,556	-	-	10,815	85,675	19,464	105,139
300518-010	* OLD DOMINION UNIVERSITY	PAPELIS, Y.	9010.3	10,372	-	-	-	-	10,372	415	10,787
500341-001	* APPLIED RESEARCH ASSOCIATES, INC.	PAPELIS, Y.	9010.3	(37)	-	-	-	0	(37)	(20)	(57)
500350-010	SIMIS, INC.	PAPELIS, Y.	9010.3	-	27,063	7,202	-	-	34,265	-	34,265
300446-010	* OLD DOMINION UNIVERSITY	PARODI, V.	9010.3	(634)	-	-	-	-	(634)	-	(634)
300490-010	* OLD DOMINION UNIVERSITY	PARODI, V.	9010.3	7,607	1,071	-	-	-	8,678	-	8,678
500368-010	PREVAILANCE, INC.	RECHOWICZ, K.	9010.3	20,532	-	-	-	-	20,532	13,346	33,878
500368-020	PREVAILANCE, INC.	RECHOWICZ, K.	9010.3	11,591	-	-	-	-	11,591	7,534	19,125
100710-010	* NAVAL SPEC WARFARE DEVELOPMENT GROUP	RECHOWICZ, K.	9010.3	-	-	-	-	-	-	(0)	VMASC
100531-001	* NAVAL SEA SYSTEMS COMMAND	ROBINSON, R.	9010.3	(1)	-	-	-	-	(1)	(1)	(1)
200244-011	* VA PORT AUTHORITY	ROBINSON, R.	9010.3	-	-	-	-	-	-	0	VMASC
300258-010	* UNIVERSITY OF MARYLAND	ROBINSON, R.	9010.3	-	623	-	-	-	623	330	953
300462-010	* OLD DOMINION UNIVERSITY	ROBINSON, R.	9010.3	134,472	38,140	-	-	369,045	541,657	-	541,657

100617-010	AIR FORCE MATERIAL COMMAND	SHETTY, S.	4075	21,728	21,115	-	75,000	117,843	23,563	141,406	VMASC	
100728-010	AIR FORCE MATERIAL COMMAND	SHETTY, S.	4075	48,388	61,621	-	32,340	142,349	60,505	202,855	VMASC	
200273-010	CENTER FOR INNOVATIVE TECHNOLOGY	SHETTY, S.	4075	77,366	-	-	614	77,980	23,210	101,190	VMASC	
300388-010	NORFOLK STATE UNIVERSITY	SHETTY, S.	4075	63,106	11,201	-	29,404	103,711	40,869	144,580	VMASC	
300390-010	UNIVERSITY OF ILLINOIS (ALL CAMPUSES)	SHETTY, S.	4075	33,274	49,498	-	29,730	112,502	45,524	158,026	VMASC	
300397-010	UNIVERSITY OF ILLINOIS (ALL CAMPUSES)	SHETTY, S.	4075	2,676	18,361	-	1,923	22,961	11,571	34,531	VMASC	
300514-010	UNIVERSITY OF ILLINOIS (ALL CAMPUSES)	SHETTY, S.	4075	31,281	-	-	-	31,281	8,133	39,414	VMASC	
400358-010	SENTARA HOSPITALS	SHETTY, S.	4075	134,035	56,918	-	-	190,953	105,024	295,977	VMASC	
500391-010	* CAMBER CORPORATION	SHULL, J.	9010.3	15,687	-	-	-	15,687	10,197	25,884	VMASC	
100629-010	NORFOLK NAVAL SHIPYARD	WEISEL, E.	9010.3	-	17,632	-	-	17,632	5,642	23,274	VMASC	
100634-010	NAVSUP FLEET LOGISTICS CENTER NORFOLK	WEISEL, E.	9010.3	4,819	-	-	718,476	723,295	1,735	725,030	VMASC	
100642-010	NAVSUP FLEET LOGISTICS CENTER NORFOLK	WEISEL, E.	9010.3	-	-	-	(116)	(116)	-	(116)	VMASC	
100643-010	NAVSUP FLEET LOGISTICS CENTER NORFOLK	WEISEL, E.	9010.3	-	-	-	-	-	(0)	(0)	VMASC	
100647-010	NAVSUP FLEET LOGISTICS CENTER NORFOLK	WEISEL, E.	9010.3	4,819	55,984	-	-	60,803	21,889	82,692	VMASC	
400193-000	NONE	WEISEL, E.	9010.3	2,094	46,058	-	89	48,241	-	48,241	VMASC	
500339-010	OCEAN BAY, LLC	WEISEL, E.	9010.3	45,099	1,313	-	-	46,413	25,527	71,939	VMASC	
500379-010	D'ANGELO TECHNOLOGIES LLC	WEISEL, E.	9010.3	21,376	-	-	-	21,376	13,894	35,271	VMASC	
				2,041,761	556,346	12,202	1,548,787	4,159,095	913,804	5,072,899	21.97%	
				<b>4,684,545</b>	<b>1,364,822</b>	<b>1,571,663</b>	<b>2,944,359</b>	<b>10,565,389</b>	<b>2,523,055</b>	<b>-</b>	<b>13,088,444</b>	<b>23.88%</b>

## **SCHEDULE 6**

**Sponsored Program Activity**

**Proposals Submitted and Awards Funded**

**Fiscal Year 2019 through Fiscal Year 2015**

**SCHEDULE 6**  
**OLD DOMINION UNIVERSITY RESEARCH FOUNDATION**  
**SUMMARY OF PROPOSAL AND AWARD ACTIVITY**  
**FISCAL YEAR 2019 THROUGH FISCAL YEAR 2015**

	PROPOSALS SUBMITTED					AWARDS FUNDED				
	FY 19	FY 18	FY 17	FY 16	FY 15	FY 19	FY 18	FY 17	FY 16	FY 15
<b>COLLEGE OF ARTS &amp; LETTERS</b>										
Art	\$ 5,000	\$ -	\$ -	\$ -	\$ -	\$ 2,250	\$ -	\$ -	\$ -	\$ -
Communication & Theatre Arts	\$ 383,136	\$ 98,956	\$ 418,145	\$ 43,829	\$ 252,579	-	-	-	\$ 30,340	\$ 22,500
English	-	\$ 4,000	-	\$ 712,206	\$ 125,456	149,094	\$ 146,385	\$ 128,777	1,000	\$ 46,956
Foreign Languages & Literatures	-	-	-	-	\$ 89,078	-	-	-	-	-
History	-	\$ 75,000	\$ 54,630	\$ 6,300	\$ 100,000	-	\$ 75,000	\$ 60,930	-	-
Music	-	-	-	-	\$ 4,600	-	-	-	-	-
Philosophy & Religious Studies	\$ 25,768	\$ 18,680	\$ 19,980	\$ 67,565	\$ 77,305	19,220	-	-	\$ 18,612	-
Political Science & Geography	\$ 3,174,901	\$ 629,132	\$ 3,330,522	\$ 186,390	\$ 836,072	63,475	\$ 100,415	\$ 64,773	\$ 81,285	\$ 17,500
Social Science Research Center	\$ 1,202,714	\$ 281,686	\$ 591,003	\$ 461,893	\$ 3,345,297	200,263	\$ 193,540	\$ 167,967	\$ 206,114	\$ 60,000
Sociology & Criminal Justice	\$ 1,293,575	\$ 1,588,925	\$ 610,177	\$ 3,878,504	\$ 3,127,178	1,079,904	\$ 599,664	\$ 951,946	\$ 442,507	\$ 2,000
Women's Studies	-	-	-	-	-	-	\$ 18,886	-	-	-
Dean's Office	\$ 4,950	\$ 4,950	\$ 96,363	\$ 58,025	-	2,000	-	-	-	-
College Total	\$ 6,090,044	\$ 2,701,328	\$ 5,120,820	\$ 5,414,712	\$ 7,957,564	\$ 1,516,206	\$ 1,133,890	\$ 1,374,393	\$ 779,858	\$ 148,956
% Change from prior year	125.45%	-47.25%	-5.43%	-31.96%	15.45%	33.72%	-17.50%	76.24%	423.55%	-59.62%
Average yearly increase ( decrease)	-2.33%	-	-	-	-	62.21%	-	-	-	-
<b>STROME COLLEGE OF BUSINESS</b>										
Business Administration	\$ -	\$ -	\$ -	\$ 2,500	\$ -	\$ -	\$ -	\$ -	\$ 2,500	\$ -
Economics	\$ 184,407	\$ 131,296	\$ 2,684,711	\$ 473,697	\$ 10,834	153,732	\$ 100,000	\$ 113,137	\$ 83,615	\$ 85,997
Finance, Insurance and Real Estate	-	-	-	-	\$ 614,859	-	-	-	-	-
Information Systems/Decision Science	\$ 1,147,060	\$ 1,644,963	\$ 3,035,573	\$ 2,222,702	\$ 2,783,518	196,604	\$ 338,655	\$ 296,496	\$ 18,612	\$ 186,997
Management	\$ 19,325	-	-	-	-	-	-	-	-	-
Marketing	\$ 569,068	-	\$ 243,271	\$ 286,630	-	-	-	\$ 15,000	\$ 14,999	-
School of Public Service	\$ 354,399	\$ 565,023	\$ 236,694	\$ 569,923	\$ 363,993	40,734	\$ 45,128	\$ 17,425	\$ 77,738	-
College Total	\$ 2,274,258	\$ 2,341,282	\$ 6,200,248	\$ 3,555,452	\$ 3,773,205	\$ 391,070	\$ 483,782	\$ 442,058	\$ 197,464	\$ 272,994
% Change from prior year	-2.86%	-62.24%	74.39%	-5.77%	31.08%	-19.16%	9.44%	123.87%	-27.67%	13.47%
Average yearly increase ( decrease)	-4.20%	-	-	-	-	12.51%	-	-	-	-

**SCHEDULE 6**  
**OLD DOMINION UNIVERSITY RESEARCH FOUNDATION**  
**SUMMARY OF PROPOSAL AND AWARD ACTIVITY**  
**FISCAL YEAR 2019 THROUGH FISCAL YEAR 2015**

	PROPOSALS SUBMITTED					AWARDS FUNDED				
	FY 19	FY 18	FY 17	FY 16	FY 15	FY 19	FY 18	FY 17	FY 16	FY 15
<b>DARDEN COLLEGE OF EDUCATION &amp; PROFESSIONAL STUDIES</b>										
Center for Educ Partnerships	\$ 7,686,923	\$ 22,940,225	\$ 6,650,683	\$ 7,772,693	\$ 4,552,356	\$ 999,240	\$ 39,049	\$ 34,404	\$ 725,198	\$ 296,328
Communication Disorders and Special Education	12,497,236	8,552,305	16,834,358	7,622,526	8,570,881	4,965,604	3,824,280	4,292,759	3,539,575	3,386,586
Counseling and Human Services	1,281,136	1,390,103	1,533,580	645,822	1,754,803	339,269	334,421	369,333	73,835	176,362
Educational Foundations and Leadership	1,785,834	325,492	2,324,355	2,382,606	1,224,373	151,612	395,910	231,430	75,768	153,738
Human Movement Sciences	1,440,098	156,884	877,430	1,927,374	255,247	59,981	24,715	62,765	34,441	82,648
STEM Education and Professional Studies	1,538,044	2,039,326	1,894,113	3,048,362	3,165,398	345,267	358,351	376,911	470,534	251,662
Teaching and Learning	2,895,005	1,657,126	1,259,055	3,040,287	1,799,602	460,392	32,000	245,308	-	790,864
Dean's Office	619,314	702,703	4,183,851	823,334	872,701	291,720	468,185	784,748	776,000	472,536
College Total	\$ 29,743,590	\$ 37,764,164	\$ 35,557,426	\$ 27,263,004	\$ 22,195,361	\$ 7,613,085	\$ 5,476,911	\$ 6,397,658	\$ 5,695,350	\$ 5,610,724
% Change from prior year	-21.24%	6.21%	30.42%	22.83%	-43.06%	39.00%	-14.39%	12.33%	1.51%	-7.43%
Average yearly increase ( decrease)	-4.74%					5.12%				
<b>BATTEN COLLEGE OF ENGINEERING &amp; TECHNOLOGY</b>										
Applied Research Center - ARC	\$ -	\$ -	\$ 197,900	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Center for Advanced Engineering Environments	-	-	-	-	-	-	-	-	-	590,469
Civil & Environmental Engineering	11,204,420	11,070,179	9,811,865	9,094,065	5,166,059	311,001	562,086	1,147,780	1,726,005	-
Electrical & Computer Engineering	22,941,179	18,663,198	15,438,102	13,939,958	17,739,574	4,411,614	3,286,824	2,723,430	2,289,620	2,509,953
Engineering Career Management Center	-	-	-	-	5,619,632	-	-	-	-	-
Engineering Management	5,908,403	8,964,742	10,490,564	2,742,809	-	1,090,196	736,806	446,196	157,466	810,804
Engineering Technology	4,781,795	6,841,175	13,828,359	6,568,428	5,376,504	1,108,725	1,469,064	312,765	1,669,592	383,531
Mechanical & Aerospace Engineering	21,313,788	9,837,146	5,813,200	5,971,306	12,040,934	1,830,812	1,148,510	978,171	1,366,851	1,429,282
Computation Modeling & Simulation Engineering	11,124,615	11,870,761	11,632,827	26,217,111	9,431,733	2,099,288	2,245,758	2,594,582	2,249,559	3,555,337
VA Commercial Space Flight Authority	-	-	-	-	-	-	-	-	-	12,071,426
Dean's Office	3,945,886	2,196,972	4,218,917	996,955	13,677,760	686,868	1,217,236	1,593,522	334,999	50,000
College Total	\$ 81,220,086	\$ 69,444,173	\$ 71,431,734	\$ 65,530,632	\$ 69,052,195	\$ 11,538,505	\$ 10,666,284	\$ 9,796,447	\$ 9,794,091	\$ 21,400,803
% Change from prior year	16.96%	-2.78%	9.01%	-5.10%	11.45%	8.18%	8.88%	0.02%	-54.23%	-18.33%
Average yearly increase ( decrease)	6.22%					-11.19%				

**SCHEDULE 6**  
**OLD DOMINION UNIVERSITY RESEARCH FOUNDATION**  
**SUMMARY OF PROPOSAL AND AWARD ACTIVITY**  
**FISCAL YEAR 2019 THROUGH FISCAL YEAR 2015**

	PROPOSALS SUBMITTED					AWARDS FUNDED				
	FY 19	FY 18	FY 17	FY 16	FY 15	FY 19	FY 18	FY 17	FY 16	FY 15
<b>COLLEGE OF HEALTH SCIENCES</b>										
Community & Environmental Health	\$ 2,320,772	\$ 1,920,808	\$ 2,422,111	\$ 1,552,092	\$ 2,382,036	\$ 195,175	\$ 108,495	\$ 227,814	\$ 106,949	\$ 86,680
Dental Hygiene	378,631	248,698	330,369	1,085,532	680,315	24,580	21,347	21,380	35,322	84,050
Medical Diagnostic & Translation Sciences	8,367,895	7,401,738	14,773,634	3,651,458	12,477,283	2,054,167	1,016,435	879,152	2,147,602	1,461,533
Nursing	4,003,517	741,252	1,949,918	4,407,576	2,524,806	689,031	902,948	1,928,280	1,801,399	1,248,605
School of Rehabilitative Sciences	283,519	2,160,993	3,218,919	1,417,021	634,050	72,727	-	88,183	12,779	209,912
Dean's Office	5,000	34,320	295,366	579,594	1,109,558	35,534	332,822	-	-	15,000
<b>College Total</b>	<b>\$ 15,359,333</b>	<b>\$ 12,507,808</b>	<b>\$ 22,990,316</b>	<b>\$ 12,693,272</b>	<b>\$ 19,808,047</b>	<b>\$ 3,071,213</b>	<b>\$ 2,382,046</b>	<b>\$ 3,144,809</b>	<b>\$ 4,104,051</b>	<b>\$ 3,105,780</b>
% Change from prior year	22.80%	-45.60%	81.12%	-35.92%	2.58%	28.93%	-24.25%	-23.37%	32.14%	107.56%
Average yearly increase ( decrease)	-4.09%					21.05%				
<b>COLLEGE OF SCIENCES</b>										
Biological Sciences	\$ 19,669,550	\$ 20,180,662	\$ 21,225,853	\$ 19,806,536	\$ 20,545,968	\$ 1,614,083	\$ 8,630,596	\$ 2,156,245	\$ 2,372,424	\$ 1,582,361
Center for Coastal Physical Oceanography	491,479	1,505,198	6,905,188	4,265,269	5,606,910	491,878	984,115	483,646	640,905	356,119
Chemistry and Biochemistry	12,899,711	10,074,984	110,099,209	124,085,044	13,398,330	1,260,811	1,755,060	3,142,914	1,935,570	2,827,521
Computer Science	9,285,954	9,280,151	5,577,469	7,474,239	12,097,893	1,009,917	754,950	1,167,987	2,293,408	3,424,949
Mathematics and Statistics	3,621,630	7,666,647	3,261,498	3,494,460	3,722,864	987,478	809,420	607,848	406,255	485,547
Ocean, Earth & Atmospheric Sciences	7,595,972	7,955,365	13,842,728	19,028,932	13,837,812	2,701,640	2,311,194	4,093,621	3,700,789	2,942,012
Physics	5,893,239	9,097,709	10,824,028	14,332,714	6,155,595	4,301,120	3,208,820	2,499,353	3,325,122	3,768,552
Psychology	4,398,299	9,321,721	8,336,627	1,958,008	12,080,538	982,538	1,010,540	1,477,708	1,822,824	865,194
Dean's Office	1,824,722	-	643,150	-	361,500	-	33,600	-	-	-
<b>College Total</b>	<b>\$ 65,680,557</b>	<b>\$ 75,082,437</b>	<b>\$ 180,715,749</b>	<b>\$ 194,445,201</b>	<b>\$ 87,807,410</b>	<b>\$ 13,349,465</b>	<b>\$ 19,498,294</b>	<b>\$ 15,629,323</b>	<b>\$ 16,497,298</b>	<b>\$ 16,252,254</b>
% Change from prior year	-12.52%	-58.45%	-7.06%	121.45%	-59.04%	-31.54%	24.75%	-5.26%	1.51%	28.58%
Average yearly increase ( decrease)	-13.87%					1.12%				

**SCHEDULE 6**  
**OLD DOMINION UNIVERSITY RESEARCH FOUNDATION**  
**SUMMARY OF PROPOSAL AND AWARD ACTIVITY**  
**FISCAL YEAR 2019 THROUGH FISCAL YEAR 2015**

	PROPOSALS SUBMITTED					AWARDS FUNDED				
	FY 19	FY 18	FY 17	FY 16	FY 15	FY 19	FY 18	FY 17	FY 16	FY 15
<b>OFFICE OF RESEARCH AND OTHER UNITS</b>										
Office of Research	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
VMASC: Virginia Modeling, Analysis & Simulation Center	9,764,942	25,179,745	24,853,771	21,340,031	30,809,977	3,429,836	2,530,191	1,107,570	1,524,927	1,506,024
Frank Reidy Research Center for Bioelectrics	8,583,737	17,801,256	21,092,036	24,452,423	26,309,702	3,136,897	2,998,236	2,398,392	3,792,085	2,122,087
Institute for Innovation & Entrepreneurship	3,379,780	2,415,998	918,265	3,086,737	2,912,549	1,034,847	1,024,493	2,122,192	1,826,114	815,531
The Graduate School	3,225,288	1,767,104	-	-	-	139,237	750,568	-	-	-
Miscellaneous Units	4,344,078	3,771,939	5,163,059	6,127,395	983,823	1,429,573	470,002	1,706,003	581,113	506,581
Office of Research and Other Units Total	\$ 29,297,825	\$ 50,936,042	\$ 52,027,131	\$ 55,006,587	\$ 61,016,051	\$ 9,170,390	\$ 7,773,490	\$ 7,334,156	\$ 7,724,240	\$ 4,950,223
% Change from prior year	-42.48%	-2.10%	-5.42%	-9.85%	26.72%	17.97%	5.99%	-5.05%	56.04%	-41.37%
Average yearly increase ( decrease)	-7.83%	-	-	-	-	1.72%	-	-	-	-
<b>TOTAL UNIVERSITY ACTIVITY</b>	<b>\$ 229,665,693</b>	<b>\$ 250,777,234</b>	<b>\$ 374,043,425</b>	<b>\$ 363,908,861</b>	<b>\$ 271,609,834</b>	<b>\$ 46,649,934</b>	<b>\$ 47,414,697</b>	<b>\$ 44,118,845</b>	<b>\$ 44,792,351</b>	<b>\$ 51,741,734</b>
<b>% CHANGE FROM PRIOR YEAR</b>	<b>-8.42%</b>	<b>-32.96%</b>	<b>2.78%</b>	<b>33.98%</b>	<b>-30.81%</b>	<b>-1.61%</b>	<b>7.47%</b>	<b>-1.50%</b>	<b>-13.43%</b>	<b>-6.69%</b>
Average yearly increase ( decrease)	-8.30%	-	-	-	-	-3.18%	-	-	-	-
<b>AFFILIATED UNITS</b>										
VA Tidewater Consortium for Higher Education	\$ 306,369	\$ 125,615	\$ 630,744	\$ 2,390,142	\$ 10,542,015	\$ 661,684	\$ 641,939	\$ 517,182	\$ 605,170	\$ 577,534
VA Space Grant Consortium	3,758,640	4,900,217	2,147,569	4,874,897	6,988,483	1,697,358	2,158,725	4,361,998	1,877,883	3,299,640
Total Affiliated Units	\$ 4,065,009	\$ 5,025,832	\$ 2,778,313	\$ 7,265,039	\$ 17,530,498	\$ 2,359,042	\$ 2,800,664	\$ 4,879,180	\$ 2,483,053	\$ 3,877,174
% Change from prior year	-19.12%	80.90%	-61.76%	-58.56%	369.35%	-15.77%	-42.60%	96.50%	-35.96%	-38.24%
Average yearly increase ( decrease)	1.77%	-	-	-	-	-12.48%	-	-	-	-
<b>GRAND TOTAL</b>	<b>\$ 233,730,702</b>	<b>\$ 255,803,066</b>	<b>\$ 376,821,737</b>	<b>\$ 371,173,899</b>	<b>\$ 289,140,332</b>	<b>\$ 49,008,976</b>	<b>\$ 50,215,361</b>	<b>\$ 48,998,025</b>	<b>\$ 47,275,404</b>	<b>\$ 55,618,908</b>
<b>% CHANGE FROM PRIOR YEAR</b>	<b>-8.63%</b>	<b>-32.12%</b>	<b>1.52%</b>	<b>28.37%</b>	<b>-27.04%</b>	<b>-2.40%</b>	<b>2.48%</b>	<b>3.64%</b>	<b>-15.00%</b>	<b>-9.90%</b>
Average yearly increase ( decrease)	-8.20%	-	-	-	-	-4.12%	-	-	-	-