## Air Force Research Laboratory

#### Overview

Air Force Research Laboratory (AFRL) is a global technical enterprise, leading the discovery, development, and integration of affordable warfighting technologies for our air, space, and cyberspace force. With a workforce across nine technical directorates and 40 other operations across the globe, AFRL provides a diverse portfolio of science and technology that range from fundamental to advanced research and technology development.

AFRL's technical directorates include Sensors, Space Vehicles, Information, Aerospace Systems, Information, Materials & Manufacturing, Directed Energy, Munitions, the 711<sup>th</sup> Human Performance Wing, and the Air Force Office of Scientific Research.

## **Spend Analysis**

The following pages highlight the areas where money was spent over the three year period of FY18 – FY20 within AFRL. All data is publically available via the Federal Procurement Data System (FPDS).

## Overall Spend

The following table shows the overall spend at AFRL from FY18 – FY20, broken down by the portion that was awarded to other than small businesses vs. small businesses.

	FY18 Total	FY19 Total	FY20 Total
Other Than Small Business	\$2,085,183,761.37	\$2,063,082,692.48	\$2,136,439,454.47
Small Business	\$1,574,312,632.16	\$2,135,066,475.93	\$2,189,738,156.93
Total	\$3,659,496,393.53	\$4,198,149,168.41	\$4,326,177,611.40

#### Center-wide Top 50 NAICS to Small Business (FY18 – FY20)

The following table shows the top 50 NAICS codes procured across all AFRL locations during the years FY18 – FY20. This data is for Small Business contractors only.

NAICS	Description	FY20 Spend	# FY20	FY19 Spend	# FY19	FY18 Spend	#FY18
541715	RESEARCH AND	\$1,627,501,416	3472	\$1,310,049,468	2691	\$489,244,180	976
	DEVELOPMENT IN THE						
	PHYSICAL, ENGINEERING,						
	AND LIFE SCIENCES (EXCEPT						
	NANOTECHNOLOGY AND						
	BIOTECHNOLOGY)						
541712	RESEARCH AND	\$305,641,772	1290	\$548,645,696	1749	\$796,431,669	2827
	DEVELOPMENT IN THE						
	PHYSICAL, ENGINEERING,						
	AND LIFE SCIENCES (EXCEPT						
	BIOTECHNOLOGY)						

541330	ENGINEERING SERVICES	\$127,971,227	262	\$104,488,831	209	\$106,586,238	226
541990	ALL OTHER PROFESSIONAL, SCIENTIFIC, AND TECHNICAL SERVICES	\$35,496,789	271	\$31,085,721	217	\$31,959,225	271
541519	OTHER COMPUTER RELATED SERVICES	\$13,774,122	119	\$2,118,071	42	\$2,675,753	24
561210	FACILITIES SUPPORT SERVICES	\$12,477,489	41	\$11,859,901	26	\$10,476,012	33
517110	WIRED TELECOMMUNICATIONS CARRIERS	\$9,727,264	23	\$10,303,780	27	\$4,603,995	18
541711	RESEARCH AND DEVELOPMENT IN BIOTECHNOLOGY	\$9,445,247	20	\$12,269,078	18	\$13,668,932	34
541511	CUSTOM COMPUTER PROGRAMMING SERVICES	\$8,063,354	22	\$809,999	5	\$664,815	7
561110	OFFICE ADMINISTRATIVE SERVICES	\$6,609,764	70	\$6,871,819	74	\$6,939,961	111
541513	COMPUTER FACILITIES MANAGEMENT SERVICES	\$5,099,655	25	\$23,172	1	\$16,762	1
238220	PLUMBING, HEATING, AND AIR-CONDITIONING CONTRACTORS	\$3,064,850	6	\$63,705	3	\$0	0
611512	FLIGHT TRAINING	\$2,701,660	1	\$2,645,529	2	\$2,613,617	1
334111	ELECTRONIC COMPUTER MANUFACTURING	\$2,568,685	42	\$877,102	12	\$2,552,194	32
541690	OTHER SCIENTIFIC AND TECHNICAL CONSULTING SERVICES	\$1,768,228	6	\$2,969,438	11	\$2,875,882	9
334210	TELEPHONE APPARATUS MANUFACTURING	\$1,750,216	21	\$55,119,601	160	\$78,452,327	245
541512	COMPUTER SYSTEMS DESIGN SERVICES	\$1,687,677	14	\$6,001,730	8	\$10,794,458	15
541713	RESEARCH AND DEVELOPMENT IN NANOTECHNOLOGY	\$1,500,000	5	\$701,603	5	\$562,459	6
334515	INSTRUMENT MANUFACTURING FOR MEASURING AND TESTING ELECTRICITY AND ELECTRICAL SIGNALS	\$1,297,283	18	\$1,783,609	13	\$450,020	6
721110	HOTELS (EXCEPT CASINO HOTELS) AND MOTELS	\$1,288,268	8	\$0	0	\$0	0
236220	COMMERCIAL AND INSTITUTIONAL BUILDING CONSTRUCTION	\$1,273,836	22	\$13,350,476	12	\$959,128	23
334516	ANALYTICAL LABORATORY INSTRUMENT MANUFACTURING	\$1,229,007	9	\$409,422	7	\$369,854	11
511210	SOFTWARE PUBLISHERS	\$964,324	14	\$41,734	3	\$304,600	5
811212	COMPUTER AND OFFICE MACHINE REPAIR AND MAINTENANCE	\$920,709	19	\$103,083	7	\$171,602	16
334310	AUDIO AND VIDEO EQUIPMENT MANUFACTURING	\$596,041	1	\$125,691	2	\$0	0

238210	ELECTRICAL CONTRACTORS AND OTHER WIRING INSTALLATION CONTRACTORS	\$571,880	3	-\$65,001	7	\$1,590,066	14
519120	LIBRARIES AND ARCHIVES	\$499,545	6	\$535,988	7	\$164,564	2
561790	OTHER SERVICES TO BUILDINGS AND DWELLINGS	\$375,582	6	\$353,377	3	\$347,837	2
333517	MACHINE TOOL MANUFACTURING	\$358,026	3	\$0	0	\$0	0
334413	SEMICONDUCTOR AND RELATED DEVICE MANUFACTURING	\$357,749	6	\$129,530	4	\$159,900	1
334220	RADIO AND TELEVISION BROADCASTING AND WIRELESS COMMUNICATIONS EQUIPMENT MANUFACTURING	\$302,691	9	\$102,234	6	\$1,336,084	3
561621	SECURITY SYSTEMS SERVICES (EXCEPT LOCKSMITHS)	\$249,402	9	\$186,504	12	\$150,554	9
333314	OPTICAL INSTRUMENT AND LENS MANUFACTURING	\$234,358	5	\$343,229	9	\$176,638	10
237310	HIGHWAY, STREET, AND BRIDGE CONSTRUCTION	\$201,766	5	\$291,958	3	\$206,315	7
325998	ALL OTHER MISCELLANEOUS CHEMICAL PRODUCT AND PREPARATION MANUFACTURING	\$192,930	2	\$0	0	\$0	0
335314	RELAY AND INDUSTRIAL CONTROL MANUFACTURING	\$175,340	1	\$0	0	\$0	0
337127	INSTITUTIONAL FURNITURE MANUFACTURING	\$173,889	2	\$50,190	2	\$97,606	2
334517	IRRADIATION APPARATUS MANUFACTURING	\$164,790	3	\$334,691	1	\$0	0
811219	OTHER ELECTRONIC AND PRECISION EQUIPMENT REPAIR AND MAINTENANCE	\$162,100	2	\$1,097,839	4	\$66,867	2
336212	TRUCK TRAILER MANUFACTURING	\$156,420	1	\$0	0	\$0	0
541612	OTHER COMPUTER RELATED SERVICES	\$144,000	4	\$497,000	4	\$0	0
562111	SOLID WASTE COLLECTION	\$100,621	1	\$74,105	3	\$74,147	3
336411	AIRCRAFT MANUFACTURING	\$99,500	1	\$0	0	\$0	0
337122	NONUPHOLSTERED WOOD HOUSEHOLD FURNITURE MANUFACTURING	\$91,002	4	\$0	0	\$0	0
561730	LANDSCAPING SERVICES	\$76,650	3	\$76,450	2	\$55,100	2
325992	PHOTOGRAPHIC FILM, PAPER, PLATE, AND CHEMICAL MANUFACTURING	\$66,239	1	\$0	0	\$9,518	2

561499	ALL OTHER BUSINESS	\$58,500	1	\$0	0	\$0	0
	SUPPORT SERVICES						
492110	COURIERS AND EXPRESS	\$47,812	1	\$0	0	\$0	0
	DELIVERY SERVICES						
333912	AIR AND GAS COMPRESSOR	\$42,416	2	\$0	0	\$0	0
	MANUFACTURING						
337214	OFFICE FURNITURE (EXCEPT	\$39,036	1	\$132,934	7	\$60,939	2
	WOOD) MANUFACTURING						

# Center-wide Top 50 PSC Codes to Small Business (FY18 – FY20)

The following table shows the top 50 Product and Service codes procured across all AFRL locations during the years FY18 – FY20. This data is for Small Business contractors only.

PCS	Description	FY20 Spend	# FY20	FY19 Spend	# FY19	FY18 Spend	#FY18
AD92	R&D- DEFENSE OTHER: OTHER (APPLIED RESEARCH/EXPLORATORY DEVELOPMENT)	\$606,908,076	2100	\$345,350,454	1189	\$216,064,392	566
AD93	R&D- DEFENSE OTHER: OTHER (ADVANCED DEVELOPMENT)	\$528,140,016	397	\$458,550,498	357	\$306,406,934	445
AC12	R&D- DEFENSE SYSTEM: AIRCRAFT (APPLIED RESEARCH/EXPLORATORY DEVELOPMENT)	\$171,042,224	630	\$234,071,023	661	\$161,892,871	659
AC62	R&D- DEFENSE SYSTEM: ELECTRONICS/COMMUNICATIO N EQUIPMENT (APPLIED RESEARCH/EXPLORATORY DEVELOPMENT)	\$160,094,066	275	\$186,219,680	267	\$135,549,933	296
R499	SUPPORT- PROFESSIONAL: OTHER	\$139,696,440	438	\$118,470,485	339	\$115,853,461	423
AC13	R&D- DEFENSE SYSTEM: AIRCRAFT (ADVANCED DEVELOPMENT)	\$92,566,414	66	\$60,914,787	78	\$19,163,120	69
AC22	R&D- DEFENSE SYSTEM: MISSILE/SPACE SYSTEMS (APPLIED RESEARCH/EXPLORATORY DEVELOPMENT)	\$90,893,034	344	\$170,503,855	371	\$106,852,537	378
AC63	R&D- DEFENSE SYSTEM: ELECTRONICS/COMMUNICATIO N EQUIPMENT (ADVANCED DEVELOPMENT)	\$77,530,938	91	\$97,525,354	112	\$112,928,397	122
AC52	R&D- DEFENSE SYSTEM: WEAPONS (APPLIED RESEARCH/EXPLORATORY DEVELOPMENT)	\$62,911,677	321	\$68,996,072	301	\$50,333,123	361
AC53	R&D- DEFENSE SYSTEM: WEAPONS (ADVANCED DEVELOPMENT)	\$30,664,807	62	\$29,387,767	72	\$11,991,037	65
AZ12	R&D- OTHER RESEARCH AND DEVELOPMENT (APPLIED RESEARCH/EXPLORATORY DEVELOPMENT)	\$16,349,609	54	\$10,927,822	48	\$10,235,940	84

AC23	R&D- DEFENSE SYSTEM: MISSILE/SPACE SYSTEMS (ADVANCED DEVELOPMENT)	\$16,112,493	57	\$16,013,503	42	\$14,415,697	55
R425	SUPPORT- PROFESSIONAL: ENGINEERING/TECHNICAL	\$14,997,144	41	\$12,214,202	39	\$17,961,932	46
D399	IT AND TELECOM- OTHER IT AND TELECOMMUNICATIONS	\$12,856,153	42	\$4,952,313	19	\$662,258	1
AZ13	R&D- OTHER RESEARCH AND DEVELOPMENT (ADVANCED DEVELOPMENT)	\$12,367,172	21	\$10,848,721	13	\$9,959,684	19
R405	SUPPORT- PROFESSIONAL: OPERATIONS RESEARCH/QUANTITATIVE ANALYSIS	\$12,183,521	28	\$10,023,339	33	\$14,246,817	52
R410	SUPPORT- PROFESSIONAL: PROGRAM EVALUATION/REVIEW/DEVELOP MENT	\$10,464,594	43	\$7,400,508	33	\$11,161,209	43
J099	MAINT/REPAIR/REBUILD OF EQUIPMENT- MISCELLANEOUS	\$9,390,917	25	\$9,067,210	15	\$8,765,663	18
AD43	R&D- DEFENSE OTHER: TEXTILES/CLOTHING/EQUIPAGE (ADVANCED DEVELOPMENT)	\$9,062,039	13	\$6,262,802	8	\$2,428,029	8
AC11	R&D- DEFENSE SYSTEM: AIRCRAFT (BASIC RESEARCH)	\$8,597,777	63	\$19,048,984	147	\$19,659,365	138
7010	INFORMATION TECHNOLOGY EQUIPMENT SYSTEM CONFIGURATION	\$8,212,909	62	\$8,548,050	78	\$40,281,698	87
AN92	R&D- MEDICAL: OTHER (APPLIED RESEARCH/EXPLORATORY DEVELOPMENT)	\$7,556,487	20	\$9,380,240	22	\$8,266,742	13
R699	SUPPORT- ADMINISTRATIVE: OTHER	\$7,446,020	69	\$8,277,965	73	\$7,340,450	98
7030	INFORMATION TECHNOLOGY SOFTWARE	\$6,482,077	77	\$21,904,843	69	\$13,669,694	62
7045	INFORMATION TECHNOLOGY SUPPLIES	\$6,257,940	20	\$0	0	\$0	0
AC61	R&D- DEFENSE SYSTEM: ELECTRONICS/COMMUNICATIO N EQUIPMENT (BASIC RESEARCH)	\$5,858,384	32	\$19,068,266	90	\$12,166,887	61
AC92	R&D- DEFENSE SYSTEM: MISCELLANEOUS HARD GOODS (APPLIED RESEARCH/EXPLORATORY DEVELOPMENT)	\$5,251,502	6	\$8,224,503	Q	\$1,634,515	5
AD91	R&D- DEFENSE OTHER: OTHER (BASIC RESEARCH)	\$5,186,143	37	\$29,262,958	170	\$20,902,795	114
AC21	R&D- DEFENSE SYSTEM: MISSILE/SPACE SYSTEMS (BASIC RESEARCH)	\$4,194,327	33	\$17,100,477	184	\$7,912,806	79
AC26	R&D- DEFENSE SYSTEM: MISSILE/SPACE SYSTEMS (MANAGEMENT/SUPPORT)	\$3,372,000	18	\$4,554,159	27	\$2,000,951	10
AJ42	R&D- GENERAL SCIENCE/TECHNOLOGY: ENGINEERING (APPLIED	\$3,324,455	14	\$4,825,853	11	\$2,971,311	6

	RESEARCH/EXPLORATORY DEVELOPMENT)						
Z2AA	REPAIR OR ALTERATION OF OFFICE BUILDINGS	\$3,012,900	2	\$0	0	\$0	0
U099	EDUCATION/TRAINING- OTHER	\$2,701,660	1	\$2,645,529	2	\$2,613,617	1
T099	PHOTO/MAP/PRINT/PUBLICATI ON- OTHER	\$2,201,522	21	\$1,831,888	11	\$1,949,130	12
R706	SUPPORT- MANAGEMENT: LOGISTICS SUPPORT	\$1,969,159	11	\$1,651,346	13	\$531,106	8
AD96	R&D- DEFENSE OTHER: OTHER (MANAGEMENT/SUPPORT)	\$1,746,828	3	\$2,947,038	10	\$2,838,594	8
5895	MISCELLANEOUS COMMUNICATION EQUIPMENT	\$1,657,926	4	\$0	0	\$2,452,992	3
6625	IMAGING EQUIPMENT AND SUPPLIES: MEDICAL, DENTAL, VETERINARY	\$1,611,390	22	\$1,641,173	24	\$499,975	12
AD94	R&D- DEFENSE OTHER: OTHER (ENGINEERING DEVELOPMENT)	\$1,442,289	3	\$2,085,628	6	\$2,111,037	8
AZ11	R&D- OTHER RESEARCH AND DEVELOPMENT (BASIC RESEARCH)	\$1,300,000	1	\$299,582	4	\$298,125	10
AC56	R&D- DEFENSE SYSTEM: WEAPONS (MANAGEMENT/SUPPORT)	\$1,297,062	10	\$0	0	\$0	11
V231	TRANSPORTATION/TRAVEL/REL OCATION- TRAVEL/LODGING/RECRUITME NT: LODGING, HOTEL/MOTEL	\$1,288,268	8	\$0	0	\$0	0
AC64	R&D- DEFENSE SYSTEM: ELECTRONICS/COMMUNICATIO N EQUIPMENT (ENGINEERING DEVELOPMENT)	\$1,283,000	6	\$597,400	2	\$810,000	6
AD52	R&D- DEFENSE OTHER: FUELS/LUBRICANTS (APPLIED RESEARCH/EXPLORATORY DEVELOPMENT)	\$1,230,021	4	\$923,986	6	\$3,759,006	12
AN73	R&D- MEDICAL: SPECIALIZED MEDICAL SERVICES (ADVANCED DEVELOPMENT)	\$1,207,074	2	\$1,713,653	2	\$4,724,068	4
Z2HB	REPAIR OR ALTERATION OF GOVERNMENT-OWNED GOVERNMENT-OPERATED (GOGO) R&D FACILITIES	\$1,065,195	10	\$711,061	12	\$1,526,287	7
7025	INFORMATION TECHNOLOGY INPUT/OUTPUT AND STORAGE DEVICES	\$997,606	17	\$12,475,571	23	\$6,227,677	107
AC67	R&D- DEFENSE SYSTEM: ELECTRONICS/COMMUNICATIO N EQUIPMENT (COMMERCIALIZED)	\$954,420	3	\$749,934	1	\$0	0
6640	LABORATORY EQUIPMENT AND SUPPLIES	\$931,682	8	\$614,738	6	\$277,111	7
AC51	R&D- DEFENSE SYSTEM: WEAPONS (BASIC RESEARCH)	\$872,927	13	\$11,685,669	117	\$6,622,495	102