



ANNUAL PROCUREMENT REPORT

Fiscal Year 2016



INTRODUCTION

This report presents summary data on all NASA procurement actions and detailed information on contracts, grants, cooperative agreements and other procurements awarded by NASA during Fiscal Year 2016 using appropriated funds. All data was pulled from the Federal Procurement Data System (FPDS)* with the exception of awards made through other Government agencies, which was obtained from NASA's financial system.

"Procurement action," as used in this report, means a contractual action to obtain supplies, services or construction that increases or decreases funds. A procurement action, thus, may be a new procurement or a modification such as a supplemental agreement, change order or termination to an existing contract that changes the total amount of funds obligated. An obligation is a contractual commitment to pay for supplies or services that are specified in the contract. (See Glossary for more information.)

The Annual Procurement Report is available via the internet on the Procurement homepage. The address is <http://www.hq.nasa.gov/office/procurement/>. The report was prepared by the Analysis Division, Office of Procurement, NASA Headquarters. Inquiries should be addressed in writing to:

National Aeronautics and Space Administration
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Washington, DC 20546

*Data as of December 2016

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I. TOTAL PROCUREMENTS

Fiscal Year 2016 – NASA’s procurements totaled \$18,687.9 million. The number of procurement actions totaled 40,914.

TRENDS IN
PROCUREMENT OBLIGATIONS VS. TOTAL NASA OBLIGATIONS*
FISCAL YEARS 2012-2016
(MILLIONS OF DOLLARS)

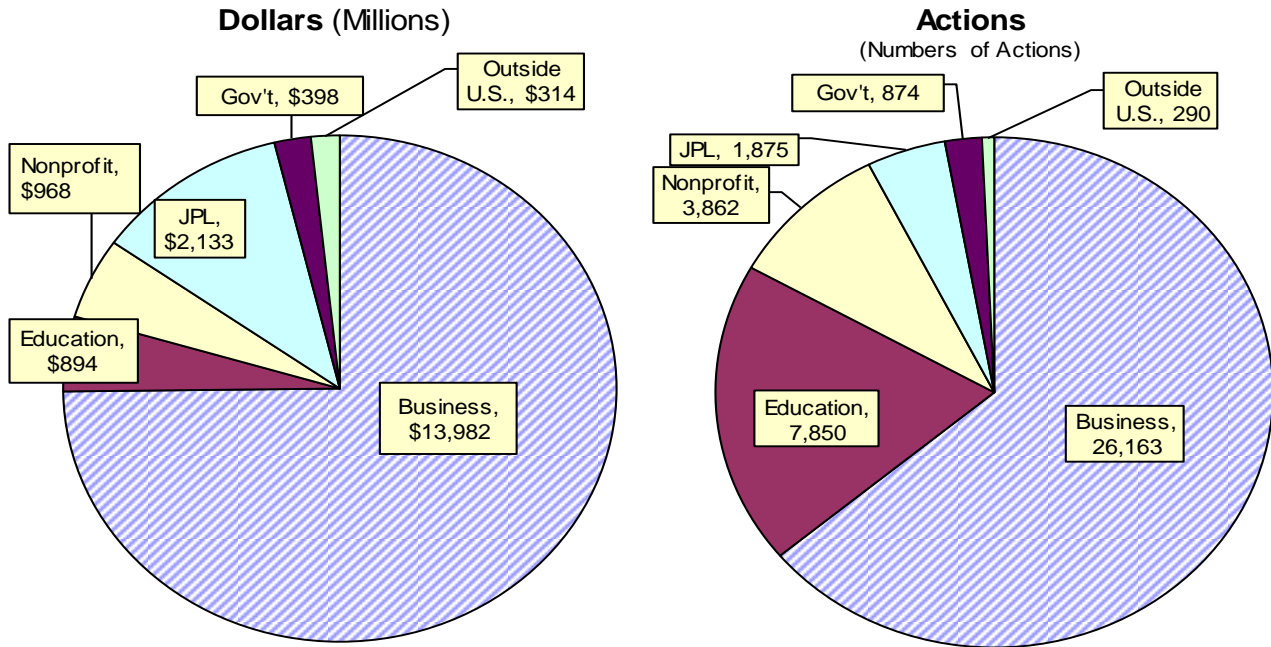
Fiscal Year	Total NASA Obligations	Procurement Obligations	
		Amount	% of Total Obligations
2016	\$22,527.0	\$18,687.9	83.0%
2015	\$21,070.5	\$17,191.5	81.6%
2014	\$20,353.2	\$16,004.1	78.6%
2013	\$19,711.5	\$15,571.8	79.0%
2012	\$20,685.5	\$16,570.4	80.1%

*Total NASA obligations include salaries, benefits, and travel of NASA employees, as well as 113,967 purchase card transactions in the amount of \$69.2 million. Procurement obligations exclude Funded Space Act Agreements which are done outside of the procurement office and are not discussed in this document. Funded Space Act Agreement values are not included in any of the figures.

II. AWARDS BY TYPE OF CONTRACTOR

Fiscal Year 2016 – The distribution of NASA’s procurement dollars obligated and the number of actions is shown in Figure 1.

AWARDS BY TYPE OF CONTRACTOR FISCAL YEAR 2016



Category	Value (Millions)	Percent of Total	Actions (Number of)	Percent of Total
Business Firms	\$13,981.7	74.8%	26,163	63.9%
Educational Institutions	\$893.6	4.8%	7,850	19.2%
Nonprofit Organizations	\$967.9	5.2%	3,862	9.4%
JPL	\$2,133.3	11.4%	1,875	4.6%
Gov't Agencies	\$397.5	2.1%	874	2.1%
Outside U.S.	\$313.9	1.7%	290	0.7%
Total:	\$18,687.9	100.0%	40,914	100.0%

Figure 1

TRENDS IN AWARDS BY TYPE OF CONTRACTOR
FISCAL YEARS 2012-2016

PROCUREMENT DOLLARS (IN MILLIONS)

	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>
BUSINESS FIRMS	\$11,908	\$11,431	\$12,086	\$12,703	\$13,982
EDUCATIONAL	1,101	968	1,024	906	894
NONPROFIT	1,140	644	661	878	968
JPL	1,240	1,708	1,708	1,847	2,133
GOV'T AGENCIES	513	473	161	340	397
OUTSIDE U.S.	670	347	364	517	314
TOTAL	<u>\$16,570</u>	<u>\$15,571</u>	<u>\$16,004</u>	<u>\$17,191</u>	<u>\$18,688</u>

PERCENT OF TOTAL DOLLARS

	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>
BUSINESS FIRMS	71.9%	73.4%	75.5%	73.9%	74.8%
EDUCATIONAL	6.6%	6.2%	6.4%	5.3%	4.8%
NONPROFIT	6.9%	4.1%	4.1%	5.1%	5.2%
JPL	7.5%	11.0%	10.7%	10.7%	11.4%
GOV'T AGENCIES	3.1%	3.1%	1.0%	2.0%	2.1%
OUTSIDE U.S.	4.0%	2.2%	2.3%	3.0%	1.7%
TOTAL	<u>100%</u>	<u>100%</u>	<u>100%</u>	<u>100%</u>	<u>100%</u>

Appendix I shows the distribution of NASA procurements by type of contractor for all Fiscal Years beginning with 1961.

III. COMPETITION IN NASA AWARDS

A. Competition in Contracting Act

The Competition in Contracting Act (P.L. 98-369), with limited exceptions, requires full and open competition within the Federal Government. Full and open competition means that all responsible sources are permitted to submit sealed bids or competitive proposals on a given procurement.

Contracting without providing for full and open competition is allowable under certain circumstances. Written justification is required to award a procurement on an other than full and open competition basis.

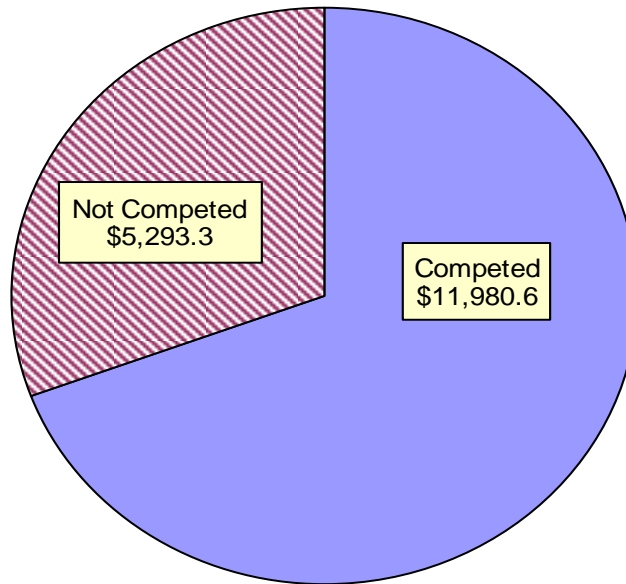
B. Reporting of Competition

NASA developed a competition advocacy program to enhance and promote competition and to eliminate barriers to full and open competition. NASA has appointed an agency competition advocate to oversee the program and each NASA Center has a designated competition advocate. Federal agencies are required to prepare and submit an annual report to the agency Senior Procurement Executive and the Chief Acquisition Officer in accordance with agency procedures.

C. Competition during Fiscal Year 2016

Appendix II shows Competition to Business Firms for all Fiscal Years beginning with 1961.

COMPETITION IN NASA AWARDS TO BUSINESS FIRMS FISCAL YEAR 2016



<u>Total Competition</u>	<u>Value (Millions)</u>	<u>Percent of Total</u>
Competed	\$ 11,980.6	69.4%
Not Competed*	5,293.3	30.6%
Total:	\$ 17,273.9	100%

*Not Competed includes dollars for awards where only one responsible source is available, as well as for unusual or compelling urgency, industrial mobilization, international agreement, authorized or required by statute, national security, public interest, awards not available for competition, and follow-on awards. This data is pulled from the standard government-wide FPDS Competition Report and does not include grants, cooperative agreements and other items NASA includes in FPDS that other agencies do not.

Figure 2

Shown below are trends in the extent of competition in awards to business firms for Fiscal Years 2012-2016.

TRENDS IN AWARDS BY EXTENT OF COMPETITION
FISCAL YEARS 2012-2016

TYPE OF ACTION	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016
Net Value of Awards (Millions)					
<u>Total</u>	<u>\$15,133.9</u>	<u>\$14,210.4</u>	<u>\$14,950.3</u>	<u>\$15,902.8</u>	<u>\$ 17,273.9</u>
<u>Competed</u>	\$9,331.4	\$9,261.4	\$10,066.9	\$10,787.8	\$ 11,980.6
<u>Not Competed</u>	\$5,802.5	\$4,949.0	\$4,883.4	\$5,114.9	\$ 5,293.3
Percent of Total					
<u>Total</u>	<u>100</u>	<u>100</u>	<u>100</u>	<u>100</u>	<u>100</u>
<u>Competed</u>	61.7	65.2	67.3	67.8	69.4
<u>Not Competed</u>	38.3	34.8	32.7	32.2	30.6

IV. AWARDS TO BUSINESS FIRMS

A. Awards by Contract Type

Fiscal Year 2016 – The table below depicts the trends in awards to business firms by contract type. Figure 3, on the following page, categorizes Fiscal Year 2016 awards of new contracts and modifications to existing contracts. In Fiscal Year 2016, for the second year in a row, the percentage of Award Fee contract dollars was below 50 percent of the total dollars to business firms. Firm Fixed Price contract dollars continue to increase, with the percentage of Firm Fixed Price dollars at 35 percent, almost double the 18 percent from 10 years ago. Over 70 percent of the contract actions were Firm Fixed Price actions.

TRENDS IN AWARDS TO BUSINESS FIRMS BY CONTRACT TYPE*
FISCAL YEARS 2012-2016

PROCUREMENT DOLLARS (IN MILLIONS)

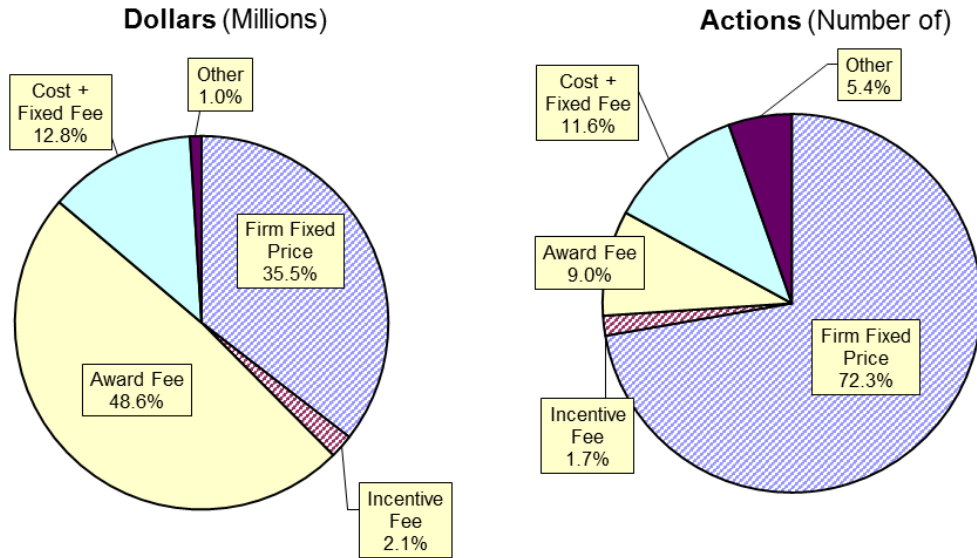
	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>
Firm Fixed Price	\$3,357	\$3,067	\$3,827	\$4,489	\$5,062
Incentive Fee	637	605	353	369	295
Award Fee	7,151	6,532	6,558	6,464	6,939
Cost Plus Fixed Fee	1,098	1,335	1,526	1,695	1,828
Other	329	220	179	183	142
TOTAL BUSINESS	\$12,572	\$11,759	\$12,443	\$13,201	\$14,267

PERCENT OF TOTAL DOLLARS

	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>
Firm Fixed Price	27%	26%	31%	34%	35%
Incentive Fee	5%	5%	3%	3%	2%
Award Fee	57%	56%	53%	49%	49%
Cost Plus Fixed Fee	9%	11%	12%	13%	13%
Other	2%	2%	1%	1%	1%
TOTAL BUSINESS	100%	100%	100%	100%	100%

*Includes contract awards with the place of performance outside the US. Excludes Intragovernmental Awards.

AWARDS BY CONTRACT TYPES TO BUSINESS FIRMS FISCAL YEAR 2016



Category	Amount (Millions)	Percent of Total	Actions (Number of)	Percent of Total
Firm Fixed Price	\$5,049.8	35.4%	19,070	72.2%
FP Level of Effort	12.4	0.1%	18	0.1%
Subtotal FFP	\$5,062.2	35.5%	19,088	72.3%
Incentive Fee:				
Fixed Price Incentive Fee	29.8	0.2%	43	0.1%
Cost Plus Incentive Fee	265.3	1.9%	406	1.5%
Subtotal Incentive Fee	\$295.1	2.1%	449	1.6%
Cost Plus Award Fee	6906.6	48.4%	2,296	8.7%
Fixed Price Award Fee	32.6	0.2%	79	0.3%
Subtotal Award Fee	\$6,939.1	48.6%	2,375	9.0%
Cost Plus Fixed Fee	\$1,828.2	12.8%	3,076	11.6%
Other:				
Fixed Price Redetermination	-	0.0%	-	0.0%
Economic Price Adj.	8.7	0.1%	136	0.5%
Cost No Fee	24.4	0.2%	43	0.2%
Cost Sharing	7.3	0.1%	20	0.1%
Labor Hour	-0.1	0.0%	18	0.1%
Time & Material	49.0	0.3%	651	2.5%
Order Dependent	7.3	0.1%	127	0.5%
Combination	8.6	0.1%	34	0.1%
Other	-0.3	0.0%	24	0.1%
Blank*	37.2	0.3%	374	1.4%
Subtotal Other:	\$142	1.0%	1,427	5.4%
Total	\$14,266.6	100.0%	26,415	100%

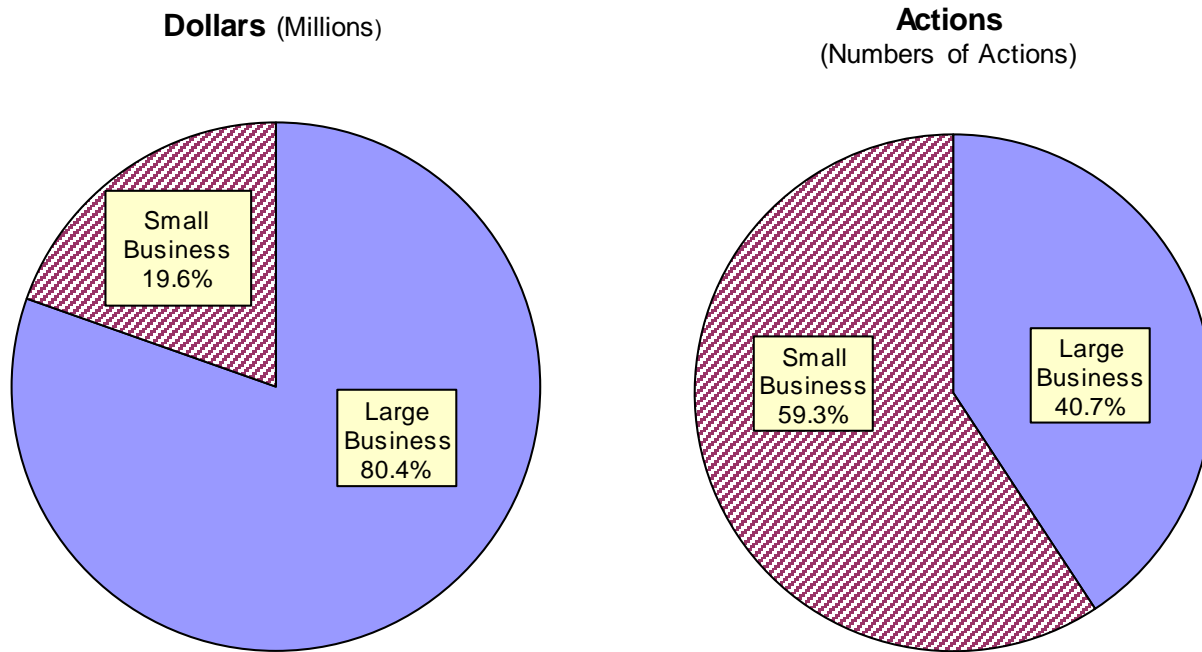
*Contract type not required on BPA Calls, Grants or Cooperative Agreements

Figure 3

B. Small Business Participation

Total Small Business – During Fiscal Year 2016, NASA awards to small business firms totaled \$2,739.4 million (see Figure 4). The number of actions going to small business represents 59.3 percent of all business actions and 20 percent of all business dollars. In addition, the \$2,739.4 million includes \$603 million in new awards. New awards to small business firms represented 55.7 percent of NASA’s total new contract awards of \$1,083.7 million to all business firms during Fiscal Year 2016.

SMALL BUSINESS PARTICIPATION FISCAL YEAR 2016



Category	Amount (\$ Millions)	Percent of Total	Actions (Number of)	Percent of Total
Large Business	\$ 11,242.3	80.4%	10,661	40.7%
Small Business	2739.4 *	19.6%	15,502	59.3%
Total:	\$ 13,981.7	100.0%	26,163	100.0%

*Includes \$620.9 million awarded to small disadvantaged firms under Authority of Section 8(a) of the Small Business Act. Also includes \$201.4 million awarded to small businesses through the Small Business Innovation Research and Small Business Technology Programs.

Excludes awards with Place of Performance outside the United States.

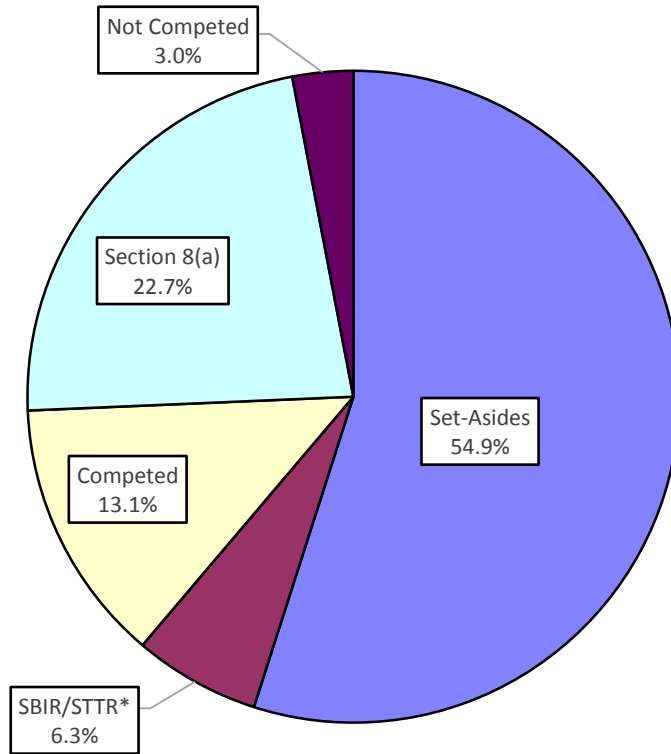
Figure 4

Small Business Programs & Categories

- (1) **Small Business Set-Asides** – Small business set-asides are defined as competitive awards that are limited only to small businesses. The small business set-aside program continues to exert a strong influence on the capability of small business firms to participate in the space program. In Fiscal Year 2016, these set-asides amounted to \$1,505 million.
- (2) **Section 8(a) Business Development Program Awards** – NASA awards contracts under the SBA’s 8(a) program to eligible firms (typically small disadvantaged businesses). Awards are made on either a competitive or sole source basis. In FY 2016, 8(a) awards totaled \$620.9 million.
- (3) **Small Business Innovation Research (SBIR)** – The Small Business Innovation Research (SBIR) program is a highly competitive program that encourages domestic small businesses to engage in Federal Research/Research and Development (R/R&D) that has the potential for commercialization. During Fiscal Year 2016, NASA awarded 453 new SBIR contracts totaling \$126 million. Of this amount, 341 were Phase I awards totaling \$42 million and 112 were Phase II awards totaling \$84 million. Also in Fiscal Year 2016, NASA funded on-going Phase I and II contracts totaling \$5.9 million. Included in the total SBIR awards of \$131.8 million, 89 actions, or \$17.9 million, were to small disadvantaged business firms, and 67 actions, or \$12.3 million, were to women-owned firms.
- (4) **Small Business Technology Transfer (STTR)** – The Small Business Technology Transfer (STTR) program expands public/private sector partnerships including joint venture opportunities for small businesses and nonprofit research institutions. STTR's most important role is to bridge the gap between performance of basic science and commercialization of resulting innovations. During Fiscal Year 2016, NASA awarded 98 new STTR contracts totaling \$38.6 million. Of this amount, 57 were Phase I awards totaling \$7.1 million, and 41 were Phase II awards totaling \$31.5 million. Also in Fiscal Year 2016, NASA funded on-going Phase I and II STTR contracts totaling \$1.1 million. Included in the total STTR awards of \$39.8 million are 15 actions for \$4 million to small disadvantaged business firms, and 16 actions amounting to \$3.9 million to women-owned firms.
- (5) **Women-Owned Small Business Participation** – In accordance with Executive Order 12138, Women’s Business Enterprise, NASA extends a particular effort to ensure that business firms owned and controlled by women have an equitable opportunity to participate in NASA’s procurement program. In Fiscal Year 2016, Women-Owned Small Business firms received prime contract awards totaling \$643 million. Of this amount, \$313.7 million was awarded to Women-Owned Small Disadvantaged Businesses.
- (6) **HUBZone Small Business Awards** – NASA awarded \$80.7 million to HUBZone Small Business concerns in Fiscal Year 2016.
- (7) **Veteran-Owned Small Business Awards** – In Fiscal Year 2016, NASA awarded \$310.4 million to Veteran Owned Small Businesses. Of this amount, \$138 million was awarded to Service Disabled Veteran Owned Small Businesses.

C. Extent of Competition in Small Business Awards

**COMPETITION TO SMALL BUSINESS FIRMS
FISCAL YEAR 2016**



Category	Amount (Millions)	Percent of Total
Set-Asides	\$1,505.0	54.9%
SBIR/STTR*	171.6	6.3%
Competed	359.4	13.1%
Section 8(a)	620.9	22.7%
Not Competed	82.4	3.0%
Total	\$2,739.4	100.0%

*Includes Phase III SBIR/STTR obligations (\$29.8 million).

Figure 5

D. Small Disadvantaged Business Participation

NASA's prime contract awards to small disadvantaged business firms during Fiscal Year 2016 totaled \$1,870.3 million. The tabulation shown below indicates that NASA has made continuing efforts to increase disadvantaged business participation in NASA's procurements through direct awards and awards placed under the provisions of Section 8(a) of the Small Business Act.

TRENDS IN SMALL AND SMALL DISADVANTAGED
BUSINESS AWARDS
FISCAL YEARS 2012-2016
(MILLIONS OF DOLLARS)

TYPE OF AWARD	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016
Section 8(a)	\$522.3	\$545.9	\$548.0	\$551.4	\$620.9
Other Small Disadv. Business	<u>236.9</u>	<u>372.4</u>	<u>605.2</u>	<u>678.0</u>	<u>649.3</u>
Total	<u>\$759.2</u>	<u>\$918.3</u>	<u>\$1,153.2</u>	<u>\$1,229.4</u>	<u>\$1,270.2</u>

Appendix III shows NASA awards to small business firms starting with Fiscal Year 1961.

E. One Hundred Principal Contractors (Business Firms)

The 100 contractors that received the largest dollar value of NASA direct awards to business firms during Fiscal Year 2016 are shown below. The awards to these contractors accounted for 90.1 percent of the direct awards to business firms during the year. The smallest aggregate award to any contractor was in excess of \$10 million. Of the top 100 contractors, half (50) were small business firms and of these 28 were disadvantaged firms at the time of award.

ONE HUNDRED CONTRACTORS (BUSINESS FIRMS) LISTED
ACCORDING TO TOTAL AWARDS RECEIVED
FISCAL YEAR 2016
(S=Small Business/D=Disadvantaged Business)

<u>TOTAL AWARDS TO BUSINESS FIRMS</u>		\$14,266,559,659	100%
1.	BOEING CO	\$2,117,331,105	14.84
2.	LOCKHEED MARTIN CORP	\$1,631,411,655	11.44
3.	SPACE EXPLORATION TECHNOLOGIES CORP	\$954,345,937	6.69
4.	ORBITAL SCIENCES CORP	\$752,540,403	5.27
5.	JACOBS TECHNOLOGY	\$618,436,201	4.33
6.	EXELIS	\$419,538,555	2.94
7.	UNITED LAUNCH SVCS	\$379,756,587	2.66
8.	RAYTHEON CO	\$340,526,883	2.39
9.	SGT	\$326,339,084	2.29
10.	NORTHROP GRUMMAN SPACE & MISSION SYSTS CORP	\$312,361,519	2.19
11.	SCIENCE APPLICATIONS INTERNATIONAL CORP	\$295,309,050	2.07
12.	ATK LAUNCH SYSTS	\$261,232,007	1.83
13.	AEROJET ROCKETDYNE	\$256,791,220	1.80
14.	RUSSIA SPACE AGENCY	\$235,823,638	1.65
15.	BALL AEROSPACE & TECHNOLOGIES CORP	\$226,959,901	1.59
16.	WYLE LABORATORIES	\$157,145,773	1.10
17.	SYNCOM SPACE SERVICES	\$148,496,855	1.04
18.	QINETIQ NORTH AMERICA	\$146,348,385	1.02
19.	URS FED SVCS	\$146,182,090	1.02
20.	AS & D	(S) (D) \$126,187,870	0.88
21.	NORTHROP GRUMMAN SYSTS CORP	\$113,394,029	0.79
22.	HONEYWELL TECHNOLOGY SOLUTIONS	\$111,094,312	0.78
23.	HP ENTERPRISE SVCS	\$110,028,452	0.77
24.	SCIENCE SYSTS & APPLICATIONS	(S) \$103,133,658	0.72
25.	GENERAL DYNAMICS C4 SYSTS	\$97,385,385	0.68
26.	INUTEQ	(S) (D) \$95,918,718	0.67
27.	HAMILTON SUNDSTRAND SPACE SYSTS INTERNATIONAL	\$92,217,771	0.65
28.	MILLENNIUM ENGINEERING & INTEGRATION CO	(S) \$89,963,007	0.63
29.	SIERRA NEVADA CORP	\$81,281,945	0.57
30.	ATA AEROSPACE	(S) \$80,320,046	0.56
31.	TRAX INTERNATIONAL CORP	\$73,582,770	0.51

ONE HUNDRED CONTRACTORS (BUSINESS FIRMS) LISTED
 ACCORDING TO TOTAL AWARDS RECEIVED
 FISCAL YEAR 2016
 (S=Small Business/D=Disadvantaged Business)

32.	ANALYTICAL MECHANICS ASSOCS	(S)		\$69,201,323	0.49
33.	COMPUTER SCIENCES CORP			\$69,127,603	0.48
34.	SIERRA LOBO	(S)	(D)	\$67,154,213	0.47
35.	TELEDYNE BROWN ENGINEERING			\$65,075,991	0.46
36.	AERIE AEROSPACE	(S)	(D)	\$61,251,440	0.43
37.	ARCTIC SLOPE TECHNICAL SVCS	(S)	(D)	\$60,831,741	0.43
38.	ABACUS TECHNOLOGY CORP	(S)		\$57,736,897	0.40
39.	LJT & ASSOCS	(S)	(D)	\$55,101,262	0.39
40.	PAE APPLIED TECHNOLOGIES			\$53,112,297	0.37
41.	ADNET SYSTS	(S)		\$48,956,286	0.34
42.	DYNETICS TECHNICAL SVCS	(S)		\$46,538,623	0.33
43.	HX5 SIERRA	(S)	(D)	\$45,970,422	0.32
44.	ASRC RESEARCH & TECHNOLOGY SOLUTIONS	(S)	(D)	\$42,876,336	0.30
45.	ALCYON TECHNICAL SERVICES	(S)	(D)	\$41,602,817	0.29
46.	BARRIOS TECHNOLOGY	(S)		\$40,943,377	0.29
47.	CHENEGA SECURITY & SUPPORT SOLUTIONS	(S)	(D)	\$40,080,239	0.28
48.	VANTAGE PARTNERS	(S)		\$39,656,899	0.28
49.	ARES TECHNICAL SVCS CORP	(S)		\$36,110,294	0.25
50.	DYNCORP INTERNATIONAL			\$32,994,014	0.23
51.	J P DONOVAN CONSTRUCTION	(S)		\$31,708,882	0.22
52.	COLSA CORP	(S)		\$31,408,240	0.22
53.	AI SOLUTIONS	(S)		\$31,227,857	0.22
54.	GENERAL DYNAMICS ADVANCED INFORMATION SYSTS			\$31,195,295	0.22
55.	DIGITAL MANAGEMENT	(S)	(D)	\$30,699,782	0.21
56.	MANUFACTURING TECHNICAL SOLUTIONS	(S)		\$30,625,138	0.21
57.	CHUGACH FED SOLUTIONS	(S)	(D)	\$28,906,771	0.20
58.	BASTION TECHNOLOGIES	(S)	(D)	\$27,630,617	0.19
59.	CSC GOVERNMENT SOLUTIONS			\$27,160,924	0.19
60.	PTSI MANAGED SVCS			\$26,610,792	0.19
61.	BOOZ ALLEN HAMILTON			\$26,207,759	0.18
62.	TASC			\$25,968,787	0.18
63.	MILLENNIUM ENGINEERING & INTEGRATION SVCS	(S)	(D)	\$25,024,431	0.17
64.	L-3 COMMUNICATIONS VERTEX AEROSPACE			\$24,702,132	0.17
65.	PEERLESS TECHNOLOGIES CORP	(S)	(D)	\$23,360,035	0.16
66.	UNITED SPACE ALLIANCE			\$23,285,318	0.16
67.	ZIN TECHNOLOGIES	(S)		\$22,999,661	0.16
68.	MORI ASSOCIATES	(S)		\$22,582,011	0.16
69.	RAYTHEON TECHNICAL SVCS CO			\$21,646,323	0.15
70.	AMERICAN-PARAGON PROTECTIVE SVCS	(S)		\$21,403,836	0.15
71.	OMITRON	(S)		\$20,787,789	0.14

ONE HUNDRED CONTRACTORS (BUSINESS FIRMS) LISTED
 ACCORDING TO TOTAL AWARDS RECEIVED
 FISCAL YEAR 2016
 (S=Small Business/D=Disadvantaged Business)

72.	GENTECH PARTNERS	(S)	(D)	\$20,648,273	0.14
73.	DB CONSULTING GROUP	(S)	(D)	\$20,271,821	0.14
74.	WICHITA TRIBAL ENTERPRISES	(S)	(D)	\$19,868,620	0.14
75.	TRIDENT VANTAGE SYSTS	(S)	(D)	\$18,771,000	0.13
76.	LAGAN CONSTRUCTION			\$18,716,643	0.13
77.	INTEGRATED MISSION SUPPORT SERVICES COMMONWEALTH SCIENTIFIC & INDUSTRIAL RESEARCH ORGANISATION	(S)	(D)	\$18,112,946	0.13
78.				\$18,000,775	0.13
79.	CORNELL TECHNICAL SVCS	(S)		\$17,344,574	0.12
80.	MILLENNIUM SPACE SYSTS	(S)		\$16,363,050	0.11
81.	COLUMBUS TECHNOLOGIES & SVCS	(S)	(D)	\$16,321,366	0.11
82.	MAINTHIA TECHNOLOGIES	(S)	(D)	\$15,533,991	0.11
83.	VALADOR			\$15,385,527	0.11
84.	PRIMUS SOLUTIONS	(S)	(D)	\$14,958,930	0.10
85.	CH2M HILL CONSTRUCTORS			\$14,821,729	0.10
86.	L-3 NATIONAL SECURITY SOLUTIONS			\$13,976,616	0.10
87.	CH2M HILL			\$13,563,341	0.09
88.	WOLF CREEK FED SVCS	(S)	(D)	\$13,320,070	0.09
89.	POTOMAC ELECTRIC POWER CO			\$13,305,272	0.09
90.	PRIORITY 1 AVIATION	(S)	(D)	\$12,900,000	0.09
91.	ALUTIIQ PACIFIC	(S)	(D)	\$12,814,390	0.09
92.	AIR PRODUCTS & CHEMICALS			\$12,456,982	0.09
93.	FLORIDA POWER & LIGHT CO			\$12,423,738	0.09
94.	VICTORY SOLUTIONS	(S)	(D)	\$11,903,973	0.08
95.	HEALTHION	(S)	(D)	\$11,715,116	0.08
96.	AECOM TECHNICAL SVCS			\$11,203,790	0.08
97.	PRECISION FABRICATING & CLEANING CO	(S)		\$11,173,935	0.08
98.	PINNACLE SOLUTIONS	(S)		\$10,989,120	0.07
99.	REI SYSTS			\$10,965,739	0.07
100.	LEIDOS			\$10,633,417	0.07
	OTHER			\$1,407,245,651	9.86

V. CONTRACT FOR OPERATION OF THE JET PROPULSION LABORATORY

The Jet Propulsion Laboratory (JPL) is a federally funded research and development center operated for NASA by the California Institute of Technology. The Laboratory implements programs in planetary exploration, Earth science, space-based astronomy and technology development, while applying its capabilities to technical and scientific problems of national significance. The primary emphasis of the Laboratory's effort is to conduct robotic exploration of the solar system.

Total awards during Fiscal Year 2016 amounted to \$2,133.3 million. Of this amount, JPL awarded \$733.2 million as subcontracts with business firms.

VI. AWARDS TO EDUCATIONAL AND OTHER NONPROFIT INSTITUTIONS

A. Distribution by Type of Institution and Award

During Fiscal Year 2016, NASA awarded \$1,861.5 million to educational and other nonprofit institutions. Of this amount, \$893.6 million was awarded to educational institutions and \$967.9 million to other nonprofit organizations. A breakout of these awards between contracts, grants and cooperative agreements is shown below.

AWARDS TO EDUCATIONAL INSTITUTIONS AND NONPROFIT ORGANIZATIONS*

Type of Award	Total (Millions)	Educational Institutions (Millions)	Nonprofit Organizations (Millions)
Contracts	\$576.2	\$219	\$357.2
Grants	602.7	485	117.7
Cooperative Agreements	371.5	178	193.5
Purchase/Delivery Orders	<u>311</u>	<u>11.6</u>	<u>299.5</u>
Total	\$1,861.5	\$893.6	\$967.9

* Excludes JPL and awards with a Place of Performance outside of the United States.

In addition to the \$602.7 million in grant awards to educational and nonprofit firms, NASA also awarded \$27.1 million in grants to business firms bringing the total grant awards to \$629.8 million. Cooperative Agreements were \$381.6 million when awards to business firms of \$10.1 million were included.

B. One Hundred Principal Educational & Nonprofit Institutions

The 100 educational and nonprofit institutions that received the largest dollar value of NASA awards during Fiscal Year 2016 are shown below.*

The awards to these institutions accounted for 90.48 percent of the total awards to educational and nonprofit institutions during the period. Of the top 100, 67 were educational institutions; 33 were nonprofit organizations.

*Excludes JPL

ONE HUNDRED EDUCATIONAL AND NONPROFIT INSTITUTIONS
LISTED ACCORDING TO TOTAL AWARDS RECEIVED
FISCAL YEAR 2016
(NP=Nonprofit Institution)

<u>TOTAL AWARDS TO EDUCATIONAL & NONPROFIT</u>			\$1,890,563,177	100%
1.	JOHNS HOPKINS UNIVERSITY APPLIED PHYSICS LABORATORY	NP	\$214,295,899	11.34
2.	ASSOCIATION OF UNIVERSITIES FOR RESEARCH IN ASTRONOMY	NP	\$151,174,391	8.00
3.	UNIVERSITIES SPACE RESEARCH ASSOCIATION	NP	\$134,993,041	7.14
4.	UNIVERSITY OF CALIFORNIA		\$112,384,749	5.95
5.	UNIVERSITY OF COLORADO		\$79,398,455	4.20
6.	SMITHSONIAN INSTITUTION	NP	\$75,980,842	4.02
7.	SOUTHWEST RESEARCH INSTITUTE	NP	\$68,347,093	3.62
8.	UNIVERSITY OF MARYLAND		\$63,450,231	3.36
9.	AEROSPACE CORP	NP	\$35,001,807	1.85
10.	NATIONAL INSTITUTE OF AEROSPACE ASSOCIATES	NP	\$29,846,862	1.58
11.	MASSACHUSETTS INSTITUTE OF TECHNOLOGY		\$29,340,831	1.55
12.	UNIVERSITY OF ARIZONA		\$29,252,630	1.55
13.	UNIVERSITY OF MICHIGAN		\$29,231,432	1.55
14.	UNIVERSITY OF ALABAMA		\$24,539,923	1.30
15.	JOHNS HOPKINS UNIVERSITY		\$23,524,743	1.24
16.	UNIVERSITY OF HAWAII		\$23,054,621	1.22
17.	INSTITUTO NACIONAL DE TECNICA AEROESPACIAL	NP	\$22,399,592	1.18
18.	BAY AREA ENVIRONMENTAL RESEARCH INSTITUTE	NP	\$21,369,189	1.13
19.	BAYLOR COLLEGE OF MEDICINE		\$19,614,550	1.04
20.	COLUMBIA UNIVERSITY		\$19,415,563	1.03
21.	UNIVERSITY OF ALASKA		\$18,956,459	1.00
22.	UNIVERSITY OF CENTRAL FLORIDA		\$18,934,887	1.00
23.	SETI INSTITUTE	NP	\$18,892,463	1.00
24.	ARIZONA STATE UNIVERSITY		\$18,574,402	0.98
25.	SAN JOSE STATE UNIVERSITY RESEARCH FOUNDATION	NP	\$17,861,891	0.94
26.	UNIVERSITY OF WASHINGTON		\$17,177,877	0.91
27.	CENTER FOR THE ADVANCEMENT OF SCIENCE IN SPACE	NP	\$15,000,000	0.79
28.	CALIFORNIA INSTITUTE OF TECHNOLOGY		\$14,226,778	0.75
29.	UNIVERSITY OF TEXAS		\$13,952,428	0.74
30.	STANFORD UNIVERSITY		\$12,829,009	0.68

ONE HUNDRED EDUCATIONAL AND NONPROFIT INSTITUTIONS
LISTED ACCORDING TO TOTAL AWARDS RECEIVED
FISCAL YEAR 2016
(NP=Nonprofit Institution)

31.	GEORGIA TECH RESEARCH CORP	NP	\$11,851,806	0.63
32.	UNIVERSITY CORP FOR ATMOSPHERIC RESEARCH	NP	\$11,492,573	0.61
33.	PENNSYLVANIA STATE UNIVERSITY		\$11,069,359	0.59
34.	TEXAS A & M UNIVERSITY		\$10,420,912	0.55
35.	UNIVERSITY OF WISCONSIN		\$9,916,823	0.52
36.	COLORADO STATE UNIVERSITY		\$8,646,304	0.46
37.	NATIONAL ACADEMY OF SCIENCES	NP	\$8,615,414	0.46
38.	UNIVERSITY OF ILLINOIS		\$8,522,122	0.45
39.	CATHOLIC UNIVERSITY OF AMERICA		\$8,448,754	0.45
40.	CORNELL UNIVERSITY		\$8,385,099	0.44
41.	WOODS HOLE OCEANOGRAPHIC INSTITUTION	NP	\$7,585,685	0.40
42.	UNIVERSITY OF NEW HAMPSHIRE		\$7,442,936	0.39
43.	OREGON STATE UNIVERSITY		\$7,121,627	0.38
44.	UNIVERSITY OF MINNESOTA		\$6,856,177	0.36
45.	HARVARD COLLEGE		\$6,735,417	0.36
46.	WASHINGTON UNIVERSITY		\$6,668,257	0.35
47.	WEST VIRGINIA UNIVERSITY RESEARCH CORP	NP	\$6,652,022	0.35
48.	BREVARD ACHIEVEMENT CENTER	NP	\$6,593,143	0.35
49.	PLANETARY SCIENCE INSTITUTE	NP	\$6,587,615	0.35
50.	PRINCETON UNIVERSITY		\$6,445,514	0.34
51.	PURDUE UNIVERSITY		\$6,126,164	0.32
52.	OHIO STATE UNIVERSITY		\$5,821,049	0.31
53.	LOGISTICS MANAGEMENT INSTITUTE	NP	\$5,720,846	0.30
54.	HAMPTON UNIVERSITY		\$5,297,675	0.28
55.	UNIVERSITY OF MASSACHUSETTS		\$5,296,782	0.28
56.	MELWOOD HORTICULTURAL TRAINING CENTER	NP	\$5,290,189	0.28
57.	CHARLES STARK DRAPER LABORATORY	NP	\$4,858,846	0.26
58.	RESEARCH FOUNDATION STATE UNIVERSITY OF NEW YORK	NP	\$4,722,645	0.25
59.	CITY OF HAMPTON	NP	\$4,593,794	0.24
60.	MONTANA STATE UNIVERSITY		\$4,537,447	0.24
61.	BROWN UNIVERSITY		\$4,338,499	0.23
62.	UNIVERSITY OF IOWA		\$4,140,058	0.22
63.	GEORGE MASON UNIVERSITY		\$4,017,131	0.21
64.	CALIFORNIA ASSOCIATION FOR RESEARCH IN ASTRONOMY	NP	\$3,918,000	0.21
65.	UNIVERSITY OF CHICAGO		\$3,870,466	0.20
66.	NORTHWESTERN UNIVERSITY		\$3,826,567	0.20
67.	BOSTON UNIVERSITY		\$3,770,386	0.20
68.	AERO INSTITUTE	NP	\$3,723,179	0.20
69.	UNIVERSITY OF MIAMI		\$3,591,017	0.19
70.	UNIVERSITY OF FLORIDA		\$3,534,220	0.19

ONE HUNDRED EDUCATIONAL AND NONPROFIT INSTITUTIONS
LISTED ACCORDING TO TOTAL AWARDS RECEIVED
FISCAL YEAR 2016
(NP=Nonprofit Institution)

71.	UNIVERSITY OF OKLAHOMA		\$3,512,797	0.19
72.	UNIVERSITY OF PENNSYLVANIA		\$3,485,483	0.18
73.	SOUTH DAKOTA STATE UNIVERSITY		\$3,319,093	0.18
74.	UNIVERSITY OF SOUTHERN CALIFORNIA		\$3,294,769	0.17
75.	UNIVERSITY OF MONTANA		\$3,288,797	0.17
76.	SPACE SCIENCE INSTITUTE	NP	\$3,196,365	0.17
77.	UNIVERSITY OF UTAH		\$2,940,982	0.16
78.	UNIVERSITY OF KANSAS CENTER FOR RESEARCH	NP	\$2,925,872	0.15
79.	ALABAMA SPACE SCIENCE EXHIBIT COMMISSION	NP	\$2,895,000	0.15
80.	SOUTHERN RESEARCH INSTITUTE	NP	\$2,855,526	0.15
81.	UNIVERSITY OF IDAHO		\$2,807,869	0.15
82.	UNIVERSITY OF SOUTH FLORIDA		\$2,754,635	0.15
83.	UNIVERSITY OF NORTH DAKOTA		\$2,602,353	0.14
84.	OLD DOMINION UNIVERSITY RESEARCH FOUNDATION	NP	\$2,598,490	0.14
85.	DUKE UNIVERSITY		\$2,545,301	0.13
86.	UNIVERSITY OF DELAWARE		\$2,529,237	0.13
87.	NEW MEXICO STATE UNIVERSITY		\$2,518,474	0.13
88.	UNIVERSITY OF HOUSTON		\$2,479,605	0.13
89.	UNIVERSITY OF NEBRASKA		\$2,479,011	0.13
90.	NEVADA SYSTEM OF HIGHER EDUCATION		\$2,470,061	0.13
91.	UNIVERSITY OF TEXAS SOUTHWESTERN MEDICAL CENTER		\$2,423,928	0.13
92.	CARNEGIE INSTITUTION OF WASHINGTON	NP	\$2,345,474	0.12
93.	UNIVERSITY OF KENTUCKY		\$2,332,016	0.12
94.	NORTH CAROLINA STATE UNIVERSITY		\$2,322,973	0.12
95.	UNIVERSITY OF MISSOURI		\$2,290,051	0.12
96.	SOUTHERN ILLINOIS UNIVERSITY		\$2,278,749	0.12
97.	IOWA STATE UNIVERSITY OF SCIENCE & TECHNOLOGY		\$2,259,877	0.12
98.	WILLIAM MARSH RICE UNIVERSITY		\$2,257,058	0.12
99.	CARNEGIE MELLON UNIVERSITY		\$2,254,122	0.12
100.	ANTHONY WAYNE REHABILITATION CENTER FOR HANDICAPPED & BLIND	NP	\$2,229,203	0.12
	OTHER		\$179,994,845	9.52

VII. AWARDS BY TYPE OF EFFORT

During Fiscal Year 2016, \$18,289 million was awarded in categories of research and development, services and supplies and equipment. A breakout of these awards by category is shown below. Not included are intragovernmental awards and purchases less than \$3,500.

<u>Category</u>	<u>Total (Millions)</u>	<u>Number of Actions</u>
<u>Total</u>	<u>\$ 18,289</u>	<u>38,882</u>
<u>Research & Development</u>	<u>\$ 10,394.5</u>	<u>16,522</u>
Space Science & Applications	3,769.3	11,477
Space Flight	1,909.6	269
Aeronautics & Space Technology	1,706.6	2,756
Space Station	469.1	141
Space Operations	430.0	166
Commercial Programs	0.03	3
Other Space R&D	220.9	143
Other R&D	1,889.0	1,567
<u>Services</u>	<u>\$ 6,150.5</u>	<u>14,681</u>
Professional, Admin. & Mgmt. Support	2,091.9	5,161
Transportation, Travel & Relocation Svc.	1,731.2	263
Information Technology & Telecommunications	859.8	2,357
Utilities & Housekeeping	398.4	1,023
Operation of Structures/Facilities	331.0	339
Maint., Repair or Alteration Real Property	184.8	573
Construction of Structures & Facilities	161.8	817
Special Studies & Analyses-Not R&D	133.0	357
Architect & Engineering Services	85.8	616
Maint., Repair & Rebuilding of Equipment	68.6	660
Education & Training Services	37.6	1,530
Other Services	66.6	985
<u>Supplies & Equipment</u>	<u>\$ 1,743.9</u>	<u>7,679</u>
Space Vehicles	1,361.6	396
Instruments & Laboratory Equipment	86.8	1,575
Information Technology Equipment (Incl. Firmware), Software, Supplies & Support Equipment	83.1	2,900
Fire Control Equipment	43.5	26
Fuels, Lubricants, Oils & Waxes	24.6	381
Aircraft & Airframe Structural Components	20.4	47
Aircraft Launching Landing & Handling	20.0	32
Aircraft Components & Accessories	17.8	197
Engines, Turbines & Components	12.7	28
Chemicals & Chemical Products	10.8	141
Other Supplies & Equipment	62.6	1,956

VIII. AWARDS THROUGH OTHER GOVERNMENT AGENCIES

During Fiscal Year 2016, \$397.5 million was awarded through other Government agencies. The following table shows the distribution of these awards by agency.

AWARDS THROUGH OTHER GOVERNMENT AGENCIES FISCAL YEAR 2016

<u>Agency</u>	<u>Total (Millions)</u>	<u>Percent of Total</u>
	<u>\$397.5</u>	<u>100</u>
General Services Administration	132.8	33.4
Army	60.3	15.2
Department of Defense	49.8	12.5
Air Force	42.3	10.7
Energy	35.9	9.0
Navy	31.2	7.9
Interior	22.4	5.6
Commerce	10.2	2.6
National Science Foundation	4.9	1.2
Health & Human Services	3.3	0.8
Other Government Agencies	4.4	1.1

IX. U.S. GEOGRAPHICAL DISTRIBUTION OF AWARDS

In Fiscal Year 2016, 50 states and the District of Columbia participated in NASA's direct awards. The distribution of awards is also shown by region. (See Page 23).

The categorization of NASA procurements by state is based on the location where the items are to be produced or supplied from stock, where the services will be performed or, with respect to construction contracts, the construction site. This table excludes awards to other Government agencies and awards outside the United States.

US GEOGRAPHICAL DISTRIBUTION OF NASA PRIME CONTRACT AWARDS
FISCAL YEAR 2016

STATE	TOTAL	BUSINESS	EDUCATIONAL & NONPROFIT
TOTAL	\$13,856,598,298	\$12,034,022,979	\$1,822,575,319
ALABAMA	\$1,469,462,163	\$1,442,445,576	\$27,016,587
ALASKA	\$11,058,145	\$1,991,354	\$9,066,790
ARIZONA	\$99,838,527	\$42,659,594	\$57,178,933
ARKANSAS	\$1,909,183	\$975,164	\$934,019
CALIFORNIA	\$3,967,592,835	\$3,682,068,547	\$285,524,287
COLORADO	\$1,840,631,989	\$1,736,850,199	\$103,781,790
CONNECTICUT	\$26,094,324	\$22,073,490	\$4,020,834
DELAWARE	\$7,683,937	\$3,798,785	\$3,885,152
DIST COLUMBIA	\$113,030,430	\$77,069,680	\$35,960,750
FLORIDA	\$806,713,291	\$753,274,602	\$53,438,689
GEORGIA	\$24,889,796	\$7,570,000	\$17,319,796
HAWAII	\$24,277,007	\$1,399,165	\$22,877,842
IDAHO	\$4,945,113	\$450,555	\$4,494,558
ILLINOIS	\$31,348,525	\$11,646,240	\$19,702,285
INDIANA	\$210,762,944	\$203,124,561	\$7,638,383
IOWA	\$7,604,904	\$1,617,556	\$5,987,349
KANSAS	\$8,142,102	\$2,211,655	\$5,930,448
KENTUCKY	\$5,845,450	\$869,591	\$4,975,859
LOUISIANA	\$11,167,531	\$7,933,460	\$3,234,071
MAINE	\$7,539,101	\$1,188,200	\$6,350,901
MARYLAND	\$1,937,513,879	\$1,399,595,701	\$537,918,179
MASSACHUSETTS	\$173,172,753	\$34,602,560	\$138,570,193
MICHIGAN	\$46,280,628	\$12,018,345	\$34,262,283
MINNESOTA	\$13,745,980	\$4,331,776	\$9,414,203
MISSISSIPPI	\$357,283,142	\$353,665,976	\$3,617,166
MISSOURI	\$22,004,532	\$12,997,219	\$9,007,314
MONTANA	\$11,254,937	\$2,858,088	\$8,396,850
NEBRASKA	\$2,716,172	\$237,160	\$2,479,011
NEVADA	\$5,331,268	\$2,721,243	\$2,610,025
NEW HAMPSHIRE	\$25,532,614	\$14,589,396	\$10,943,219
NEW JERSEY	\$22,146,471	\$10,015,322	\$12,131,150
NEW MEXICO	\$30,933,095	\$25,574,383	\$5,358,712
NEW YORK	\$98,584,518	\$58,402,684	\$40,181,834
NORTH CAROLINA	\$11,105,272	\$2,300,973	\$8,804,299
NORTH DAKOTA	\$2,757,897	\$8,000	\$2,749,897
OHIO	\$197,886,621	\$171,463,508	\$26,423,113
OKLAHOMA	\$6,325,769	\$1,240,221	\$5,085,549
OREGON	\$15,523,711	\$7,103,458	\$8,420,253
PENNSYLVANIA	\$36,286,785	\$17,396,838	\$18,889,947
RHODE ISLAND	\$5,090,299	\$288,467	\$4,801,832
SOUTH CAROLINA	\$3,621,366	\$209,714	\$3,411,652
SOUTH DAKOTA	\$7,593,800	\$2,444,877	\$5,148,923
TENNESSEE	\$8,089,504	\$4,942,984	\$3,146,520
TEXAS	\$1,111,793,251	\$983,363,064	\$128,430,187

US GEOGRAPHICAL DISTRIBUTION
OF NASA PRIME CONTRACT AWARDS
FISCAL YEAR 2016

STATE	TOTAL	BUSINESS	EDUCATIONAL & NONPROFIT
UTAH	\$268,008,015	\$263,088,144	\$4,919,871
VERMONT	\$2,794,109	\$906,671	\$1,887,437
VIRGINIA	\$610,579,179	\$547,253,736	\$63,325,443
WASHINGTON	\$76,033,265	\$55,797,930	\$20,235,335
WEST VIRGINIA	\$38,603,959	\$31,009,341	\$7,594,618
WISCONSIN	\$25,223,767	\$12,265,209	\$12,958,558
WYOMING	\$2,244,442	\$112,020	\$2,132,422

U.S. GEOGRAPHICAL DISTRIBUTION
OF NASA PRIME CONTRACT AWARDS
Fiscal Year 2016

GRAND TOTAL **\$13,856,598,298**

Region & State	Total	Region & State	Total
NEW ENGLAND	\$240,223,200	PLAINS	\$64,565,388
Connecticut	26,094,324	Iowa	7,604,904
Maine	7,539,101	Kansas	8,142,102
Massachusetts	173,172,753	Minnesota	13,745,980
New Hampshire	25,532,614	Missouri	22,004,532
Rhode Island	5,090,299	Nebraska	2,716,172
Vermont	2,794,109	North Dakota	2,757,897
		South Dakota	7,593,800
MID ATLANTIC	\$2,215,246,021	SOUTHWEST	\$1,248,890,642
Delaware	7,683,937	Arizona	99,838,527
Dist Columbia	113,030,430	New Mexico	30,933,095
Maryland	1,937,513,879	Oklahoma	6,325,769
New Jersey	22,146,471	Texas	1,111,793,251
New York	98,584,518		
Pennsylvania	36,286,785	ROCKY MOUNTAIN	\$2,127,084,497
SOUTHEAST	\$3,349,269,836	Colorado	1,840,631,989
Alabama	1,469,462,163	Idaho	4,945,113
Arkansas	1,909,183	Montana	11,254,937
Florida	806,713,291	Utah	268,008,015
Georgia	24,889,796	Wyoming	2,244,442
Kentucky	5,845,450		
Louisiana	11,167,531	FAR WEST	\$4,064,481,079
Mississippi	357,283,142	California	3,967,592,835
North Carolina	11,105,272	Nevada	5,331,268
South Carolina	3,621,366	Oregon	15,523,711
Tennessee	8,089,504	Washington	76,033,265
Virginia	610,579,179		
West Virginia	38,603,959	ALASKA & HAWAII	\$35,335,151
GREAT LAKES	\$511,502,484	Alaska	11,058,145
Illinois	31,348,525	Hawaii	24,277,007
Indiana	210,762,944		
Michigan	46,280,628		
Ohio	197,886,621		
Wisconsin	25,223,767		

X. AWARDS PLACED OUTSIDE THE UNITED STATES

During Fiscal Year 2016, NASA placed \$313.9 million in awards that are being performed outside of the United States. These awards are being performed in 30 countries*.

Place of Performance

<u>Direct NASA Awards</u>	<u>\$313,879,708</u>
Australia	18,000,775
Belgium	53,191
Bermuda	4,721,782
Brazil	174,080
Canada	2,104,376
China	36,369
Denmark	78,660
Egypt	3,700
France	742,052
Germany	463,592
Hungary	15,096
Ireland	10,683
Israel	406,800
Italy	500,000
Japan	4,595,320
Korea (Republic of)	126,000
Luxembourg	17,300
Malaysia	5,646
Mexico	4,978
Morocco	3,865
Netherlands	7,828,870
Norway	6,326,753
Peru	170,000
Russia	243,851,634
Spain	22,415,454
Sweden	73,910
Switzerland	139,693
Taiwan	34,395
Ukraine	37,732
United Kingdom	937,002

* Does not include obligations of \$1,503,214 to Puerto Rico, \$731,031 to the Virgin Islands, or \$176,411 to Guam, all of which are U.S. territories.

XI. PROCUREMENT ACTIVITY BY INSTALLATION

Most of NASA's purchases and contracts are made by the procurement offices of its field installations.

<u>Installation</u>	<u>Total (Millions)</u>	<u>Percent of Total</u>
<u>Total</u>	<u>\$18,290.4</u>	100%
Johnson Space Center	3,904.6	21%
Goddard Space Flight Center	3,803.9	21%
Kennedy Space Center	2,482.0	14%
NASA Management Office*	2,388.4	13%
Marshall Space Flight Center	2,127.5	12%
NASA Shared Services Center	1,487.4	8%
Ames Research Center	587.4	3%
Langley Research Center	483.3	3%
Glenn Research Center	407.8	2%
Headquarters	246.1	1%
Stennis Space Center	213.1	1%
Armstrong Flight Research Center	159.1	1%

*Includes both the Jet Propulsion Laboratory & the Applied Physics Laboratory.
Does not include Intragovernmentals.

GLOSSARY

The data contained in this publication were compiled on the basis of the definitions given below:

1. Sealed Bids – Procurement actions resulting from acceptance of bids made by contractors in response to invitations for bid.
2. Award – See procurement action.
3. Coverage
 - a. Summary data are provided in terms of obligations on all procurement actions (see item 8). The obligation data are obtained from the Federal Procurement Data System (FPDS-NG).
 - b. Detailed data – Information on procurements includes all contracts, grants and cooperative agreements. Wherever exclusions apply, a generalized footnote is provided.
4. Intragovernmental – Procurement actions placed through other Government agencies, except orders placed under Federal Supply Schedule contracts and awards to small disadvantaged business through the Small Business Administration under Section 8(a) of the Small Business Act.
5. Modifications – Any written alteration in the specifications, delivery point, contract period, price, quantity or other contract requirement of an existing contract, whether accomplished by unilateral action in accordance with a contract clause or by mutual agreement of the parties to the contract. It includes (a) bilateral actions, such as supplemental agreements, and (b) unilateral actions, such as change orders, notices of termination and notices of the exercise of an option.
6. Competitive – Procurements where offers are solicited from more than one responsible offeror capable of satisfying the Government's requirements wholly or partially, and the award or awards were made on the basis of price, design or technical competition.
7. Other than Competitive – Procurements where an offer was solicited and received from only one responsible offeror capable of satisfying the Government's requirements wholly or partially. (Includes contracts resulting from unsolicited proposals.)
8. Procurement Action (Award) – Any contractual action to obtain supplies, services or construction that increases or decreases funds, including:
 - a. Letter contracts or other preliminary notices of negotiated awards.
 - b. Definitive contracts, including purchase orders.
 - c. Orders under GSA Federal Supply Schedule contracts and basic ordering agreements and against indefinite delivery type contracts.
 - d. Intragovernmental orders.
 - e. Grants.
 - f. Cooperative Agreements.
 - g. Supplemental agreements, change orders, administrative changes and terminations to existing procurements.
9. Small Business – For purposes of Government procurement, a small business is a profit making concern, including its affiliates, which is independently owned and operated, is not dominant in its field and further qualifies under the size standards criteria of the Small Business Administration (SBA). These criteria are published under Title 13 of the Code of Federal Regulations, Section 121.3-8, and in the Federal Acquisition Regulation, Part 19, Subpart 19.1. For service industries, the size standard generally is based on average annual receipts over a three year period, depending on the service to be procured. Generally, in the case of agricultural or manufactured products, the size standards are determined on the basis of number of employees. The applicable size standard is prescribed in each NASA solicitation.

APPENDICES

DISTRIBUTION OF DIRECT NASA PROCUREMENTS
FISCAL YEARS 1961 - 1970

Type	FY 1961	FY 1962	FY 1963	FY 1964	FY 1965	FY 1966	FY 1967	FY 1968	FY 1969	FY 1970
	Net Value of Awards (Millions)									
<u>Total</u>	<u>\$755.5</u>	<u>\$1,550.6</u>	<u>\$3,230.5</u>	<u>\$4,593.9</u>	<u>\$5,187.4</u>	<u>\$5,031.6</u>	<u>\$4,650.9</u>	<u>\$4,132.7</u>	<u>\$3,652.0</u>	<u>\$3,405.6</u>
Business Firms	423.3	1,030.1	2,261.7	3,521.1	4,141.4	4,087.7	3,864.1	3,446.7	3,022.3	2,759.2
Educational	24.5***	50.2***	86.9	112.9	139.5	150.0	132.9	131.5	131.3	134.3
Nonprofit			15.3	29.1	25.3	27.7	39.6	33.6	32.3	33.0
JPL	86.0	148.5	230.2	226.2	247.2	230.3	222.2	207.2	156.3	179.8
Government	221.7	321.8	628.5	692.6	622.8	512.5	366.9	287.0	279.0	265.8
Outside U.S.	*	*	7.9	12.0	11.2	23.4	25.2	26.7	30.8	33.5
	Percent of Total									
<u>Total</u>	<u>100</u>	<u>100</u>	<u>100</u>	<u>100</u>	<u>100</u>	<u>100</u>	<u>100</u>	<u>100</u>	<u>100</u>	<u>100</u>
Business Firms	56	66	70	77	79	81	83	83	83	81
Educational	3***	3***	3	2	3	3	3	3	4	4
Nonprofit			**	1	1	1	1	1	1	1
JPL	12	10	7	5	5	5	5	5	4	5
Government	29	21	20	15	12	10	8	7	7	8
Outside U.S.	*	*	**	**	**	**	**	1	1	1

*Included in Government.

**Less than 0.5 percent.

***Combined total of Educational and Nonprofit values.

DISTRIBUTION OF DIRECT NASA PROCUREMENTS
FISCAL YEARS 1971 - 1979

Type	FY 1971	FY 1972	FY 1973	FY 1974	FY 1975	FY 1976	FY 197T**	FY 1977	FY 1978	FY 1979
	Net Value of Awards (Millions)									
<u>Total</u>	<u>\$2,858.2</u>	<u>\$2,737.8</u>	<u>\$2,673.4</u>	<u>\$2,713.6</u>	<u>\$2,866.4</u>	<u>\$3,204.6</u>	<u>\$829.8</u>	<u>\$3,532.3</u>	<u>\$3,659.6</u>	<u>\$4,211.8</u>
Business Firms	2,279.5	2,143.3	2,063.8	2,118.6	2,255.0	2,536.1	663.2	2,838.1	2,953.8	3,416.4
Educational	133.9	118.8	111.7	97.8	111.4	123.0	27.7	125.5	137.2	147.2
Nonprofit	29.3	28.0	26.4	39.3	33.0	32.0	7.6	32.0	42.8	50.8
JPL	173.3	210.8	202.3	215.2	234.5	263.7	63.6	289.0	283.8	338.6
Government	212.5	207.8	235.2	208.6	198.3	222.4	63.9	223.2	216.0	221.4
Outside U.S.	29.7	29.1	34.0	34.1	34.2	27.4	3.8	24.5	26.0	37.4
	Percent of Total									
<u>Total</u>	<u>100</u>	<u>100</u>	<u>100</u>	<u>100</u>	<u>100</u>	<u>100</u>	<u>100</u>	<u>100</u>	<u>100</u>	<u>100</u>
Business Firms	80	78	77	78	79	79	80	80	81	81
Educational	5	4	4	4	4	4	3	4	4	4
Nonprofit	1	1	1	1	1	1	1	1	1	1
JPL	6	8	8	8	8	8	8	8	8	8
Government	7	8	9	8	7	7	8	6	5	5
Outside U.S.	1	1	1	1	1	1	*	1	1	1

*Less than 0.5 percent.

**FY197T represents the transition from a June-July Fiscal Year to the October-September Fiscal Year.

DISTRIBUTION OF DIRECT NASA PROCUREMENTS
FISCAL YEARS 1980 - 1989

Type	FY 1980	FY 1981	FY 1982	FY 1983	FY 1984	FY 1985	FY 1986	FY 1987	FY 1988	FY 1989
	Net Value of Awards (Millions)									
<u>Total</u>	<u>\$4,842.6</u>	<u>\$5,408.3</u>	<u>\$5,883.7</u>	<u>\$6,796.8</u>	<u>\$7,354.1</u>	<u>\$8,298.0</u>	<u>\$8,179.7</u>	<u>\$8,609.8</u>	<u>\$9,545.1</u>	<u>\$10,876.4</u>
Business Firms	3,868.3	4,272.8	4,805.6	5,586.0	5,967.4	6,652.9	6,356.0	6,540.5	7,274.9	8,567.6
Educational	177.0	192.5	187.0	211.3	222.6	256.9	276.6	315.4	370.3	464.2
Nonprofit	82.2	155.1	108.8	102.5	98.6	103.1	119.0	119.1	129.5	180.0
JPL	397.2	410.8	426.3	454.9	533.1	724.6	891.3	1,005.6	979.9	1,058.1
Government	271.8	321.9	308.1	394.2	494.3	525.1	489.7	594.9	734.6	543.2
Outside U.S.	46.1	55.2	47.9	47.9	38.1	35.4	47.1	34.3	55.9	63.3
	Percent of Total									
<u>Total</u>	<u>100</u>	<u>100</u>	<u>100</u>	<u>100</u>	<u>100</u>	<u>100</u>	<u>100</u>	<u>100</u>	<u>100</u>	<u>100</u>
Business Firms	80	79	82	82	81	80	78	76	76	79
Educational	3	3	3	3	3	3	3	4	4	4
Nonprofit	2	3	2	1	1	1	1	1	1	2
JPL	8	8	7	7	7	9	11	12	10	10
Government	6	6	5	6	7	6	6	7	8	5
Outside U.S.	1	1	1	1	1	1	1	*	1	*

*Less than 0.5 percent.

DISTRIBUTION OF DIRECT NASA PROCUREMENTS
FISCAL YEARS 1990 - 1999

Type	FY 1990	FY 1991	FY 1992	FY 1993	FY 1994	FY 1995	FY 1996	FY 1997	FY 1998	FY 1999
	Net Value of Awards (Millions)									
<u>Total</u>	<u>\$12,565.2</u>	<u>\$13,159.0</u>	<u>\$13,478.2</u>	<u>\$13,160.4</u>	<u>\$12,913.1</u>	<u>\$13,341.4</u>	<u>\$12,699.2</u>	<u>\$12,789.5</u>	<u>\$12,561.2</u>	<u>\$12,674.6</u>
Business Firms	10,071.5	10,417.3	10,716.7	10,497.9	9,965.7	10,311.5	9,800.8	9,817.2	9,550.5	9,386.5
Educational	513.6	592.0	659.3	707.8	730.9	814.4	745.7	807.7	898.1	1,019.0
Nonprofit	200.6	244.0	297.8	336.6	311.0	311.1	287.9	383.4	406.3	431.2
JPL	1,106.8	1,139.6	1,229.6	1,029.8	1,093.4	1,135.0	1,188.3	1,126.2	1,171.3	1,294.6
Government	610.4	693.4	498.6	508.4	642.6	562.7	484.7	464.3	407.7	389.6
Outside U.S.	62.3	72.7	76.2	79.9	169.5	206.7	191.8	190.7	127.3	153.7
	Percent of Total									
<u>Total</u>	<u>100</u>	<u>100</u>	<u>100</u>	<u>100</u>	<u>100</u>	<u>100</u>	<u>100</u>	<u>100</u>	<u>100</u>	<u>100</u>
Business Firms	80	79	79	80	77	77	77	77	76	74
Educational	4	4	5	5	6	6	6	6	7	8
Nonprofit	2	2	2	3	2	2	2	3	3	4
JPL	9	9	9	8	9	9	9	9	9	10
Government	5	5	4	4	5	4	4	4	4	3
Outside U.S.	*	1	1	*	1	2	2	1	1	1

*Less than 0.5 percent.

DISTRIBUTION OF DIRECT NASA PROCUREMENTS
FISCAL YEARS 2000 - 2009

Type	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009
	Net Value of Awards (Millions)									
<u>Total</u>	<u>\$12,504.7</u>	<u>\$12,748.1</u>	<u>\$13,302.5</u>	<u>\$13,273.7</u>	<u>\$13,472.4</u>	<u>\$15,342.0</u>	<u>\$15,846.3</u>	<u>\$14,363.3</u>	<u>\$16,785.4</u>	<u>\$16,727.0</u>
Business Firms	9,272.8	9,209.7	9,568.9	9,510.4	9,025.6	10,358.0	11,467.4	10,548.3	12,371.8	12,305.2
Educational	995.1	1,083.9	1,194.0	1,224.6	1,144.5	1,480.0	1,167.7	853.0	1,085.2	1,124.0
Nonprofit	465.8	523.4	582.5	575.5	614.6	740.0	671.3	467.4	587.1	619.9
JPL	1,291.3	1,451.7	1,404.1	1,290.4	1,963.7	1,771.0	1,700.2	1,730.8	1,767.8	1,707.5
Government	382.4	382.0	486.1	601.1	634.1	830.0	659.9	556.4	665.2	504.2
Outside U.S.	97.3	97.4	66.9	71.6	89.9	163.0	179.8	207.4	308.3	466.1
	Percent of Total									
<u>Total</u>	<u>100</u>	<u>100</u>	<u>100</u>	<u>100</u>	<u>100</u>	<u>100</u>	<u>100</u>	<u>100</u>	<u>100</u>	<u>100</u>
Business Firms	74	72	72	69	67	68	72	74	74	73
Educational	8	9	9	13	8	10	8	6	6	7
Nonprofit	4	4	4	5	4	5	4	3	3	4
JPL	10	11	11	8	15	11	11	12	11	10
Government	3	3	3	5	5	5	4	4	4	3
Outside U.S.	0	1	1	0	1	1	1	1	2	3

DISTRIBUTION OF DIRECT NASA PROCUREMENTS
FISCAL YEARS 2010 - 2016

Type	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016			
	Net Value of Awards (Millions)									
<u>Total</u>	<u>\$17,417.4</u>	<u>\$16,699.4</u>	<u>\$16,570.4</u>	<u>\$15,571.8</u>	<u>\$16,004.1</u>	<u>\$17,191.5</u>	<u>\$18,687.9</u>			
Business Firms	13,186.4	12,529.6	11,908.3	11,431.5	12,086.5	12,703.0	13,981.7			
Educational	1,035.3	941.4	1,100.5	968.2	1,024.0	906.5	893.6			
Nonprofit	660.1	601.7	1,139.9	643.6	661.0	878.1	967.9			
JPL	1,618.7	1,604.5	1,239.5	1,708.3	1,708.2	1,847.2	2,133.3			
Government	490.0	526.5	512.7	473.1	160.8	339.8	397.5			
Outside U.S.	426.9	495.7	669.5	347.1	363.6	517.0	313.9			
	Percent of Total									
<u>Total</u>	<u>100</u>	<u>100</u>	<u>100</u>	<u>100</u>	<u>100</u>	<u>100</u>	<u>100</u>			
Business Firms	76	75	72	73	76	74	74			
Educational	6	6	7	6	5	5	5			
Nonprofit	4	4	7	5	5	5	5			
JPL	9	9	7	11	11	11	11			
Government	3	3	3	3	1	2	2			
Outside U.S.	2	3	4	2	2	3	3			

COMPETITION IN NASA AWARDS TO BUSINESS FIRMS
FISCAL YEARS 1961 - 1970

Type of Action	FY 1961	FY 1962	FY 1963	FY 1964	FY 1965	FY 1966	FY 1967	FY 1968	FY 1969	FY 1970
	Net Value of Awards (Millions)									
<u>Total Business</u>	<u>\$423.3</u>	<u>\$1,030.1</u>	<u>\$2,261.7</u>	<u>\$3,521.1</u>	<u>\$4,141.4</u>	<u>\$4,087.7</u>	<u>\$3,864.1</u>	<u>\$3,446.7</u>	<u>\$3,022.3</u>	<u>\$2,759.2</u>
New Awards*	**	322.6	758.6	685.4	629.2	536.4	694.7	483.7	496.5	619.7
Modifications	**	707.5	1,503.1	2,835.7	3,512.2	3,551.3	3,169.4	2,963.0	2,525.8	2,139.5
<u>Competitive</u>	<u>276.8</u>	<u>565.8</u>	<u>1,302.0</u>	<u>2,119.5</u>	<u>2,630.1</u>	<u>2,692.5</u>	<u>2,698.4</u>	<u>2,185.1</u>	<u>1,632.7</u>	<u>1,628.7</u>
New Awards*	**	167.1	427.1	375.9	334.5	304.2	325.2	271.9	186.7	277.5
Modifications	**	398.7	874.9	1,743.6	2,295.6	2,388.3	2,373.2	1,913.2	1,446.0	1,351.2
<u>Noncompetitive</u>	<u>146.5</u>	<u>464.3</u>	<u>959.7</u>	<u>1,401.6</u>	<u>1,511.3</u>	<u>1,395.2</u>	<u>1,165.7</u>	<u>1,261.6</u>	<u>1,389.6</u>	<u>1,130.5</u>
New Awards*	**	155.5	331.5	309.5	294.7	232.2	369.5	211.8	309.8	342.2
Modifications	**	308.8	628.2	1,092.1	1,216.6	1,163.0	796.2	1,049.8	1,079.8	788.3
	Percent of Total									
<u>Total Business</u>	<u>100</u>	<u>100</u>	<u>100</u>	<u>100</u>	<u>100</u>	<u>100</u>	<u>100</u>	<u>100</u>	<u>100</u>	<u>100</u>
New Awards*	**	31	34	20	15	13	18	14	16	22
Modifications	**	69	66	80	85	87	82	86	84	78
<u>Competitive</u>	<u>65</u>	<u>55</u>	<u>58</u>	<u>60</u>	<u>63</u>	<u>66</u>	<u>70</u>	<u>63</u>	<u>54</u>	<u>59</u>
New Awards*	**	16	19	11	8	7	8	8	6	10
Modifications	**	39	39	49	55	59	62	55	48	49
<u>Noncompetitive</u>	<u>35</u>	<u>45</u>	<u>42</u>	<u>40</u>	<u>37</u>	<u>34</u>	<u>30</u>	<u>37</u>	<u>46</u>	<u>41</u>
New Awards*	**	15	15	9	7	6	10	6	10	12
Modifications	**	30	27	31	30	28	20	31	36	29

*Data on new contracts are restricted to contracts of \$10,000 and over.

**Data not compiled.

COMPETITION IN NASA AWARDS TO BUSINESS FIRMS
FISCAL YEARS 1971 - 1979

Type of Action	FY 1971	FY 1972	FY 1973	FY 1974	FY 1975	FY 1976	FY 197T**	FY 1977	FY 1978	FY 1979
	Net Value of Awards (Millions)									
<u>Total Business</u>	<u>\$2,279.5</u>	<u>\$2,143.3</u>	<u>\$2,063.8</u>	<u>\$2,118.6</u>	<u>\$2,255.0</u>	<u>\$2,536.1</u>	<u>\$663.2</u>	<u>\$2,838.1</u>	<u>\$2,953.8</u>	<u>\$3,416.4</u>
New Awards*	563.0	462.5	489.5	552.4	452.0	486.3	76.4	552.5	633.1	516.6
Modifications	1,716.5	1,680.8	1,574.3	1,566.2	1,803.0	2,049.8	586.8	2,285.6	2,320.7	2,899.8
<u>Competitive</u>	<u>1,331.8</u>	<u>1,311.8</u>	<u>1,275.6</u>	<u>1,394.9</u>	<u>1,554.6</u>	<u>1,879.5</u>	<u>490.9</u>	<u>2,060.4</u>	<u>2,111.5</u>	<u>2,541.1</u>
New Awards*	306.6	257.0	308.1	279.5	223.9	291.3	46.8	301.7	362.1	304.0
Modifications	1,025.2	1,054.8	967.5	1,115.4	1,330.7	1,588.2	444.1	1,758.7	1,749.4	2,237.1
<u>Noncompetitive</u>	<u>947.7</u>	<u>831.5</u>	<u>788.2</u>	<u>723.7</u>	<u>700.4</u>	<u>656.6</u>	<u>172.3</u>	<u>777.7</u>	<u>842.3</u>	<u>875.3</u>
New Awards*	256.4	205.5	181.4	272.9	228.1	195.0	29.6	250.8	271.0	212.6
Modifications	691.3	626.0	606.8	450.8	472.3	461.6	142.7	526.9	571.3	662.7
	Percent of Total									
<u>Total Business</u>	<u>100</u>	<u>100</u>	<u>100</u>	<u>100</u>	<u>100</u>	<u>100</u>	<u>100</u>	<u>100</u>	<u>100</u>	<u>100</u>
New Awards*	24	22	24	26	20	19	11	20	22	15
Modifications	76	78	76	74	80	81	89	80	78	85
<u>Competitive</u>	<u>58</u>	<u>61</u>	<u>62</u>	<u>66</u>	<u>69</u>	<u>74</u>	<u>74</u>	<u>73</u>	<u>72</u>	<u>74</u>
New Awards*	13	12	15	13	10	11	7	11	13	9
Modifications	45	49	47	53	59	63	67	62	59	65
<u>Noncompetitive</u>	<u>42</u>	<u>39</u>	<u>38</u>	<u>34</u>	<u>31</u>	<u>26</u>	<u>26</u>	<u>27</u>	<u>28</u>	<u>26</u>
New Awards*	11	10	9	13	10	8	4	9	9	6
Modifications	31	29	29	21	21	18	22	18	19	20

*Data on new contracts are restricted to contracts of \$10,000 and over.

**FY 197T represents the transition from a June-July Fiscal Year to the October-September Fiscal Year.

COMPETITION IN NASA AWARDS TO BUSINESS FIRMS
FISCAL YEARS 1980 - 1985**

Type of Action	FY 1980	FY 1981	FY 1982	FY 1983	FY 1984	FY 1985
Net Value of Awards (Millions)						
<u>Total Business</u>	<u>\$3,820.4</u>	<u>\$4,208.2</u>	<u>\$4,724.5</u>	<u>\$5,501.2</u>	<u>\$5,859.3</u>	<u>\$6,525.9</u>
New Awards*	634.3	479.3	717.6	761.0	716.6	775.9
Modifications	3,186.1	3,728.9	4,006.9	4,740.2	5,142.7	5,750.0
<u>Competitive</u>	<u>2,858.1</u>	<u>3,127.7</u>	<u>3,436.5</u>	<u>3,845.3</u>	<u>4,286.6</u>	<u>5,030.2</u>
New Awards*	382.5	257.8	351.9	446.2	426.0	533.5
Modifications	2,475.6	2,869.9	3,084.6	3,399.1	3,860.6	4,496.7
<u>Other Than</u>						
<u>Competitive</u>	<u>962.3</u>	<u>1,080.5</u>	<u>1,288.0</u>	<u>1,655.9</u>	<u>1,572.7</u>	<u>1,495.7</u>
New Awards*	251.8	221.5	365.7	314.8	290.6	242.4
Modifications	710.5	859.0	922.3	1,341.1	1,282.1	1,253.3
Percent of Total						
<u>Total Business</u>	<u>100</u>	<u>100</u>	<u>100</u>	<u>100</u>	<u>100</u>	<u>100</u>
New Awards*	17	11	15	14	12	12
Modifications	83	89	85	86	88	88
<u>Competitive</u>	<u>75</u>	<u>74</u>	<u>72</u>	<u>70</u>	<u>73</u>	<u>77</u>
New Awards*	10	6	7	8	7	8
Modifications	65	68	65	62	66	69
<u>Other Than</u>						
<u>Competitive</u>	<u>25</u>	<u>26</u>	<u>28</u>	<u>30</u>	<u>27</u>	<u>23</u>
New Awards*	7	5	8	6	5	4
Modifications	18	21	20	24	22	19

*Data on new contracts are restricted to contracts of \$10,000 and over.

**Excludes 8(a) awards.

COMPETITION IN NASA AWARDS TO BUSINESS FIRMS
FISCAL YEARS 1986 - 1995

Type of Action	FY 1986	FY 1987	FY 1988	FY 1989	FY 1990	FY 1991	FY 1992	FY 1993	FY 1994	FY 1995
	Net Value of Awards (Millions)									
<u>Total Available</u>	<u>\$7,310.3</u>	<u>\$6,575.3</u>	<u>\$7,350.4</u>	<u>\$8,705.5</u>	<u>\$10,202.3</u>	<u>\$10,562.7</u>	<u>\$10,877.3</u>	<u>\$10,649.1</u>	<u>\$10,138.4</u>	<u>\$10,525.6</u>
<u>Competed</u>	<u>4,950.1</u>	<u>5,031.7</u>	<u>5,890.3</u>	<u>6,995.8</u>	<u>8,318.4</u>	<u>8,169.8</u>	<u>8,660.9</u>	<u>8,635.6</u>	<u>7,202.3</u>	<u>6,944.6</u>
New Awards	772.5	827.3	1,091.0	891.7	1,059.6	679.5	699.1	766.7	1,155.9	874.2
Modifications	4,177.6	4,204.4	4,799.3	6,104.1	7,258.8	7,490.3	7,961.8	7,868.9	6,046.4	6,070.4
<u>Not Competed</u>	<u>2,143.1</u>	<u>1,445.7</u>	<u>1,279.4</u>	<u>1,376.3</u>	<u>1,338.5</u>	<u>782.8</u>	<u>780.2</u>	<u>699.0</u>	<u>1,790.2</u>	<u>2,532.2</u>
New Awards	289.4	404.5	193.0	214.7	244.5	123.6	161.8	241.4	1,267.9	456.5
Modifications	1,853.7	1,041.2	1,086.4	1,161.6	1,094.0	659.2	618.4	457.6	522.3	2,075.7
<u>Follow-On</u>	<u>217.1</u>	<u>97.9</u>	<u>180.7</u>	<u>333.4</u>	<u>545.4</u>	<u>1,610.1</u>	<u>1,436.2</u>	<u>1,314.5</u>	<u>1,145.9</u>	<u>1,048.8</u>
New Awards	15.1	0.5	160.1	1.2	138.4	595.5	6.8	0.5	9.9	106.5
Modifications	202.0	97.4	20.6	332.2	407.0	1,014.6	1,429.4	1,314.0	1,136.0	942.3
	Percent of Total									
<u>Total Available</u>	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>
<u>Competed</u>	<u>67.7</u>	<u>76.5</u>	<u>80.1</u>	<u>80.4</u>	<u>81.5</u>	<u>77.3</u>	<u>79.6</u>	<u>81.1</u>	<u>71.0</u>	<u>66.0</u>
New Awards	10.6	12.6	14.8	10.3	10.4	6.4	6.4	7.2	11.4	8.3
Modifications	57.1	63.9	65.3	70.1	71.1	70.9	73.2	73.9	59.6	57.7
<u>Not Competed</u>	<u>29.3</u>	<u>22.0</u>	<u>17.4</u>	<u>15.8</u>	<u>13.1</u>	<u>7.4</u>	<u>7.2</u>	<u>6.6</u>	<u>17.7</u>	<u>24.0</u>
New Awards	3.9	6.2	2.6	2.5	2.4	1.2	1.5	2.3	12.5	4.3
Modifications	25.4	15.8	14.8	13.3	10.7	6.2	5.7	4.3	5.2	19.7
<u>Follow-On</u>	<u>3.0</u>	<u>1.5</u>	<u>2.5</u>	<u>3.8</u>	<u>5.4</u>	<u>15.3</u>	<u>13.2</u>	<u>12.3</u>	<u>11.3</u>	<u>10.0</u>
New Awards	0.2	*	2.2	*	1.4	5.7	0.1	*	0.1	1.0
Modifications	2.8	1.5	0.3	3.8	4.0	9.6	13.1	12.3	11.2	9.0

*Less than 0.5 percent.

COMPETITION IN NASA AWARDS TO BUSINESS FIRMS
FISCAL YEARS 1996 - 2005

Type of Action	FY 1996	FY 1997	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005
	Net Value of Awards (Millions)									
<u>Total Available</u>	<u>\$10,064.4</u>	<u>\$10,004.8</u>	<u>\$9,696.2</u>	<u>\$9,635.0</u>	<u>\$9,626.9</u>	<u>\$9,690.6</u>	<u>\$10,124.5</u>	<u>\$10,393.3</u>	<u>\$9,630.8</u>	<u>\$12,201.9</u>
<u>Competed</u>	<u>6,486.7</u>	<u>5,399.4</u>	<u>5,255.3</u>	<u>5,459.6</u>	<u>5,384.4</u>	<u>5,743.9</u>	<u>5,763.5</u>	<u>5,979.0</u>	<u>5,653.5</u>	<u>5,998.7</u>
New Awards	951.1	750.2	792.6	803.4	1,065.2	1,041.6	752.1	861.5	1,198.8	*
Modifications	5,535.6	4,649.2	4,462.7	4,656.2	4,319.2	4,702.3	5,011.4	5,117.5	4,454.7	*
<u>Not Competed</u>	<u>2,661.2</u>	<u>3,816.1</u>	<u>3,643.1</u>	<u>3,325.3</u>	<u>3,512.4</u>	<u>3,482.7</u>	<u>3,858.8</u>	<u>3,857.6</u>	<u>3,426.9</u>	<u>6,088.5</u>
New Awards	283.5	177.8	182.5	128.2	312.1	140.4	387.3	405.8	159.4	*
Modifications	2,377.7	3,638.3	3,460.6	3,197.1	3,200.3	3,342.3	3,471.5	3,451.8	3,267.5	*
<u>Follow-On</u>	<u>916.4</u>	<u>789.3</u>	<u>797.8</u>	<u>850.1</u>	<u>730.1</u>	<u>464.0</u>	<u>502.2</u>	<u>556.7</u>	<u>550.4</u>	<u>114.8</u>
New Awards	0.5	12.3	65.0	208.1	299.8	6.4	1.9	81.1	6.4	*
Modifications	915.9	777.0	732.8	642.0	430.3	457.6	500.3	475.6	544.0	*
	Percent of Total									
<u>Total Available</u>	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>
<u>Competed</u>	<u>64.5</u>	<u>54.0</u>	<u>54.2</u>	<u>56.7</u>	<u>56.0</u>	<u>59.3</u>	<u>56.9</u>	<u>57.5</u>	<u>58.7</u>	<u>49.2</u>
New Awards	9.5	7.5	8.2	8.4	11.1	10.8	7.4	8.3	12.5	*
Modifications	55.0	46.5	46.0	48.3	44.9	48.5	49.5	49.2	46.2	*
<u>Not Competed</u>	<u>26.4</u>	<u>38.1</u>	<u>37.6</u>	<u>34.5</u>	<u>36.5</u>	<u>35.9</u>	<u>38.1</u>	<u>37.1</u>	<u>35.5</u>	<u>49.9</u>
New Awards	2.8	1.7	1.9	1.3	3.3	1.4	3.8	3.9	1.6	*
Modifications	23.6	36.4	35.7	33.2	33.2	34.5	34.3	33.2	33.9	*
<u>Follow-On</u>	<u>9.1</u>	<u>7.9</u>	<u>8.2</u>	<u>8.8</u>	<u>7.5</u>	<u>4.8</u>	<u>5.0</u>	<u>5.4</u>	<u>5.7</u>	<u>0.9</u>
New Awards	0.0	0.1	0.7	2.1	3.1	0.1	0.1	0.8	0.1	*
Modifications	9.1	7.8	7.5	6.7	4.4	4.7	4.9	4.6	5.6	*

*FY 2005 data is obtained from the FPDS-NG system. Breakout between New Awards & Modifications is not available.

COMPETITION IN NASA AWARDS TO BUSINESS FIRMS
FISCAL YEARS 2006 - 2015

Type of Action	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015
	Net Value of Awards (Millions)									
<u>Total Available</u>	<u>\$10,678.3</u>	<u>\$12,707.6</u>	<u>\$14,666.8</u>	<u>\$15,150.2</u>	<u>\$16,016.5</u>	<u>\$15,355.8</u>	<u>\$15,133.9</u>	<u>\$14,210.7</u>	<u>\$14,950.5</u>	<u>\$15,902.8</u>
<u>Competed</u>	<u>6,356.4</u>	<u>6,253.4</u>	<u>7,645.7</u>	<u>8,121.4</u>	<u>8,865.3</u>	<u>8,806.9</u>	<u>9,331.4</u>	<u>9,261.4</u>	<u>10,066.9</u>	<u>10,787.8</u>
New Awards	*	*	*	*	*	*	*	*	*	*
Modifications	*	*	*	*	*	*	*	*	*	*
<u>Not Competed**</u>	<u>4,235.1</u>	<u>4,603.4</u>	<u>5,537.4</u>	<u>5,487.1</u>	<u>5,343.3</u>	<u>6,548.9</u>	<u>5,802.5</u>	<u>4,949.0</u>	<u>4,883.4</u>	<u>5,114.9</u>
New Awards	*	*	*	*	*	*	*	*	*	*
Modifications	*	*	*	*	*	*	*	*	*	*
<u>Follow-On***</u>	<u>86.8</u>	<u>1,850.8</u>	<u>1,783.9</u>	<u>1,541.7</u>	<u>1,807.9</u>	<u>***</u>	<u>***</u>	<u>***</u>	<u>***</u>	<u>***</u>
New Awards	*	*	*	*	*					
Modifications	*	*	*	*	*					
	Percent of Total									
<u>Total Available</u>	<u>100</u>	<u>100</u>	<u>100</u>	<u>100</u>	<u>100</u>	<u>100</u>	<u>100</u>	<u>100</u>	<u>100</u>	<u>100</u>
<u>Competed</u>	<u>49.2</u>	<u>49.1</u>	<u>52.1</u>	<u>53.6</u>	<u>55.3</u>	<u>57.4</u>	<u>61.7</u>	<u>65.2</u>	<u>67.3</u>	<u>67.8</u>
New Awards	*	*	*	*	*	*	*	*	*	*
Modifications	*	*	*	*	*	*	*	*	*	*
<u>Not Competed</u>	<u>49.9</u>	<u>36.3</u>	<u>35.7</u>	<u>36.2</u>	<u>33.4</u>	<u>42.6</u>	<u>38.3</u>	<u>34.8</u>	<u>32.7</u>	<u>32.2</u>
New Awards	*	*	*	*	*	*	*	*	*	*
Modifications	*	*	*	*	*	*	*	*	*	*
<u>Follow-On***</u>	<u>0.9</u>	<u>14.6</u>	<u>12.2</u>	<u>10.2</u>	<u>11.3</u>	<u>***</u>	<u>***</u>	<u>***</u>	<u>***</u>	<u>***</u>
New Awards	*	*	*	*	*					
Modifications	*	*	*	*	*					

*Beginning in FY 2006, data is obtained from the FPDS-NG system. Breakout between New Awards & Modifications is not available.

**Beginning in FY 2008 Not Competed dollars include Not Available for Competition dollars.

***Beginning in FY 2011, Not Competed dollars include Follow-Ons.

COMPETITION IN NASA AWARDS TO BUSINESS FIRMS
FISCAL YEARS 2016 - 2016

Type of Action	FY 2016									
Net Value of Awards (Millions)										
<u>Total Available</u>	<u>\$17,273.9</u>									
<u>Competed</u>	<u>11,980.6</u>									
<u>Not Competed**</u>	<u>5,293.3</u>									
Percent of Total										
<u>Total Available</u>	<u>100</u>									
<u>Competed</u>	<u>69.4</u>									
<u>Not Competed</u>	<u>30.6</u>									

SMALL BUSINESS PARTICIPATION IN NASA PROCUREMENTS
FISCAL YEARS 1961 - 1990
(Millions of Dollars)

	FY 1961	FY 1962	FY 1963	FY 1964	FY 1965	FY 1966	FY 1967	FY 1968	FY 1969	FY 1970
<u>Total Business</u>	<u>\$423.3*</u>	<u>\$1,030.1</u>	<u>\$2,261.7</u>	<u>\$3,521.1</u>	<u>\$4,141.4</u>	<u>\$4,087.7</u>	<u>\$3,864.1</u>	<u>\$3,446.1</u>	<u>\$3,022.3</u>	<u>\$2,759.2</u>
<u>Small Business</u>	<u>63.5</u>	<u>123.6</u>	<u>191.3</u>	<u>240.3</u>	<u>286.3</u>	<u>255.9</u>	<u>216.9</u>	<u>189.6</u>	<u>162.8</u>	<u>161.2</u>
% of Total	15.0	12.0	8.5	6.8	6.9	6.3	5.6	5.5	5.4	5.8
<u>Set-Asides</u>	<u>6.0</u>	<u>14.0</u>	<u>26.0</u>	<u>39.5</u>	<u>67.4</u>	<u>50.6</u>	<u>45.7</u>	<u>34.0</u>	<u>31.4</u>	<u>35.7</u>
% of Total	1.4	1.3	1.1	1.1	1.6	1.2	1.2	1.0	1.0	1.3
% of Small	9.4	11.3	13.6	16.4	23.5	19.8	21.1	17.9	19.3	22.1
	FY 1971	FY 1972	FY 1973	FY 1974	FY 1975	FY 1977	FY 1977	FY 1978	FY 1979	FY 1980
<u>Total Business</u>	<u>\$2,279.5</u>	<u>\$2,143.3</u>	<u>\$2,063.8</u>	<u>\$2,118.6</u>	<u>\$2,255.0</u>	<u>\$2,536.1</u>	<u>\$2,838.1</u>	<u>\$2,953.8</u>	<u>\$3,416.4</u>	<u>\$3,868.3</u>
<u>Small Business</u>	<u>178.1</u>	<u>160.9</u>	<u>155.3</u>	<u>181.2</u>	<u>216.0</u>	<u>218.3</u>	<u>255.0</u>	<u>281.5</u>	<u>325.4</u>	<u>384.6</u>
% of Total	7.8	7.5	7.5	8.6	9.6	8.6	9.0	9.5	9.5	9.9
<u>Set-Asides</u>	<u>41.1</u>	<u>45.1</u>	<u>47.3</u>	<u>61.5</u>	<u>62.6</u>	<u>66.8</u>	<u>83.7</u>	<u>92.5</u>	<u>99.4</u>	<u>175.2</u>
% of Total	1.9	2.1	2.3	3.0	2.8	2.6	3.0	3.1	3.0	4.5
% of Small	23.1	28.0	30.5	33.9	29.0	30.6	32.8	32.9	30.5	45.6
	FY 1981	FY 1982	FY 1983	FY 1984	FY 1985	FY 1988	FY 1987	FY 1988	FY 1989	FY 1990
<u>Total Business</u>	<u>\$4,272.8</u>	<u>\$4,805.6</u>	<u>\$5,586.0</u>	<u>\$5,967.4</u>	<u>\$6,652.9</u>	<u>\$6,356.0</u>	<u>\$6,540.5</u>	<u>\$7,274.9</u>	<u>\$8,567.6</u>	<u>\$10,071.5</u>
<u>Small Business</u>	<u>409.4</u>	<u>430.1</u>	<u>482.3</u>	<u>556.2</u>	<u>644.7</u>	<u>671.3</u>	<u>786.3</u>	<u>801.4</u>	<u>857.3</u>	<u>924.3</u>
% of Total	9.6	8.9	8.6	9.3	9.7	10.6	12.0	11.0	10.0	9.2
<u>Set-Asides</u>	<u>195.8</u>	<u>209.3</u>	<u>212.0</u>	<u>222.5</u>	<u>270.0</u>	<u>260.9</u>	<u>297.2</u>	<u>326.1</u>	<u>322.5</u>	<u>307.3</u>
% of Total	4.6	4.4	3.8	3.7	4.1	4.1	4.5	4.5	3.8	3.1
% of Small	47.8	48.6	43.9	40.0	41.9	38.9	37.8	40.7	37.6	33.2

*Excludes procurements placed under General Services Administration contracts.

SMALL BUSINESS PARTICIPATION IN NASA PROCUREMENTS
FISCAL YEARS 1991 - 2016
(Millions of Dollars)

	FY 1991	FY 1992	FY 1993	FY 1994	FY 1995	FY 1996	FY 1997	FY 1998	FY 1999	FY 2000
<u>Total Business</u>	<u>\$10,417.3</u>	<u>\$10,716.7</u>	<u>\$10,497.9</u>	<u>\$9,965.7</u>	<u>\$10,311.5</u>	<u>\$9,800.8</u>	<u>\$9,817.2</u>	<u>\$9,550.5</u>	<u>\$9,386.5</u>	<u>\$9,272.8</u>
<u>Small Business</u>	<u>968.3</u>	<u>1,010.6</u>	<u>1,060.7</u>	<u>1,150.2</u>	<u>1,171.2</u>	<u>1,162.5</u>	<u>1,244.2</u>	<u>1,218.3</u>	<u>1,287.0</u>	<u>1,485.5</u>
% of Total	9.3	9.4	10.1	11.5	11.4	11.9	12.7	12.8	13.7	16.0
<u>Set-Asides</u>	<u>324.3</u>	<u>274.9</u>	<u>315.1</u>	<u>330.4</u>	<u>366.7</u>	<u>348.5</u>	<u>429.4</u>	<u>457.2</u>	<u>530.4</u>	<u>565.1</u>
% of Total	3.1	2.6	3.0	3.3	3.6	3.6	4.4	4.8	5.6	6.1
% of Small	33.5	27.2	29.7	28.7	31.3	30.0	34.5	37.5	41.2	38.1
	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	FY 2007	FY 2007	FY 2008	FY 2009	FY 2010
<u>Total Business</u>	<u>\$9,209.7</u>	<u>\$9,568.9</u>	<u>\$9,510.4</u>	<u>\$9,025.6</u>	<u>\$10,357.8</u>	<u>\$11,467.4</u>	<u>\$10,756.2</u>	<u>\$12,371.7</u>	<u>\$12,305.2</u>	<u>\$13,186.5</u>
<u>Small Business</u>	<u>1,609.9</u>	<u>1,680.0</u>	<u>1,600.1</u>	<u>1,755.5</u>	<u>1,818.9</u>	<u>1,938.1</u>	<u>2,002.7</u>	<u>2,270.7</u>	<u>2,271.8</u>	<u>2,286.0</u>
% of Total	17.5	17.6	16.8	19.5	17.6	16.9	18.6	18.4	18.5	17.3
<u>Set-Asides</u>	<u>568.1</u>	<u>582.4</u>	<u>477.9</u>	<u>552.1</u>	<u>620.2</u>	<u>665.8</u>	<u>747.5</u>	<u>898.1</u>	<u>901.4</u>	<u>926.5</u>
% of Total	6.2	6.1	5.0	6.1	6.0	5.8	6.9	7.3	7.3	7.0
% of Small	35.3	34.6	29.8	31.4	34.1	34.3	37.3	39.6	39.7	40.5
	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016				
<u>Total Business</u>	<u>\$12,529.6</u>	<u>\$11,908.3</u>	<u>\$11,431.5</u>	<u>\$12,086.5</u>	<u>\$12,703</u>	<u>\$13,981.7</u>				
<u>Small Business</u>	<u>2,510.7</u>	<u>2,630.8</u>	<u>2,761.3</u>	<u>2,524.0</u>	<u>2,541.3</u>	<u>2,739.4</u>				
% of Total	20.0	22.1	24.2	20.9	20.0	19.6				
<u>Set-Asides</u>	<u>1,073.1</u>	<u>1,114.6</u>	<u>1,141.5</u>	<u>1,177.8</u>	<u>1,232.1</u>	<u>1,505.0</u>				
% of Total	8.6	9.4	10.0	9.7	9.7	10.8				
% of Small	42.7	42.4	41.3	46.7	48.5	54.9				