

Fact Sheet



National Aeronautics and
Space Administration

Langley Research Center
Hampton, Virginia 23681-2199

FS-2002-02-70-LaRC

Economic Impact Summary for Fiscal Year 2001

NASA Langley Research Center is an important national resource serving inherent government functions such as safety, national defense, environmental study, and the air transportation system. The Center develops innovative aerospace technologies that not only contribute to the vitality of our Nation's aerospace program but also improve the quality of life for all Americans. The Center's influence extends beyond its technology contributions to U.S. industry, other governmental agencies, and universities to being a solid financial contributor to the local, state, and national economy. For fiscal year 2001, the total direct and indirect impact was almost \$2 billion.

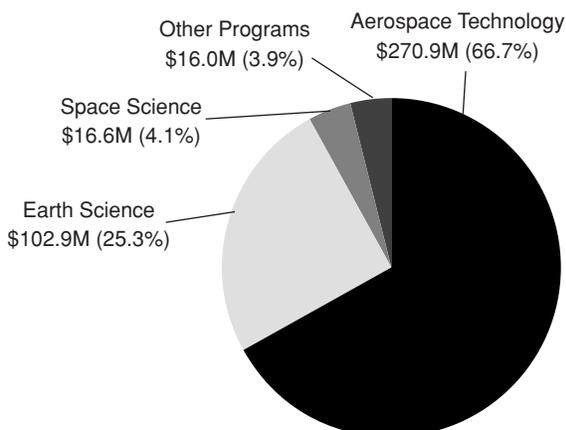
Annual Budget

Fiscal year	NASA, \$M	Langley, \$M	
		¹ NASA Center Sources	² All Sources
1997	13,708.7	689.5	720.6
1998	13,638.0	686.0	712.8
1999	13,653.0	631.8	659.6
2000	13,600.0	606.0	630.5
2001	14,253.2	651.0	668.6

¹Includes Langley Research Center programs funded from other Centers.

²Includes Langley Research Center programs funded from NASA HQ, other NASA Centers, industry, and government.

Fiscal Year 2001 Research and Development Spending



Obligations by Economic Sector

National economy	\$M
Awards to—	
Businesses	340.0
Nonprofit institutions	28.5
Educational institutions	47.5
Total to the Nation ¹	416.0
Virginia economy	
Awards to—	
Businesses	179.4
Nonprofit institutions	25.5
Educational institutions	11.2
Total to Virginia ²	216.1
Hampton Roads economy	
Awards to—	
Businesses	161.6
Nonprofit institutions	18.4
Educational institutions	7.3
Total to Hampton Roads	187.3

¹Intragovernmental or outside of U.S. obligations not included.

²Intragovernmental obligations not included.

Technology Transfer

Invention disclosures	175
Patent applications	15
Patents issued	18
Licenses executed	7
Space Act agreements	22
Interagency agreements	20

Civil Service Residential Distribution

Locality	Number of employees
York County	565
Hampton	503
Newport News	354
Poquoson	237
Williamsburg/James City County	178
Gloucester	108
Norfolk	49
Virginia Beach	36
Suffolk	38
Chesapeake	37
Portsmouth	18
Other	163

Civil Service Skill Mix

Skill	Number of employees
Scientific/Engineering	1,243
Technical/Craft/Production	537
Administrative	354
Clerical	152

Civil Service Educational Mix

Education level	Number of employees
Doctoral	329
Master	587
Bachelor	613
Associate	355
Some college	254
High school diploma	145
Less than high school diploma	3

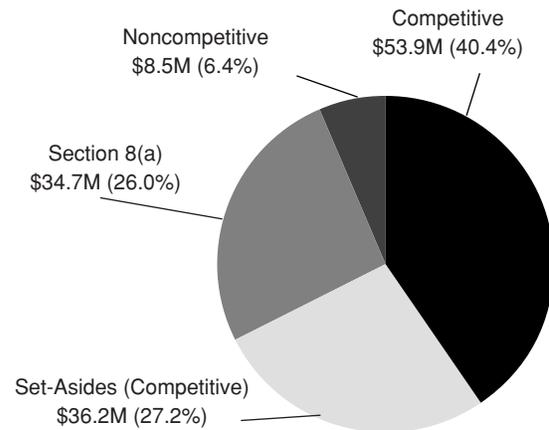
Center Property Information

Area	808 acres ¹
Buildings	220
Original investment value	\$733,000,000
Current replacement value	\$4,112,000,000

¹Includes 20 acres permitted by Langley Air Force Base.

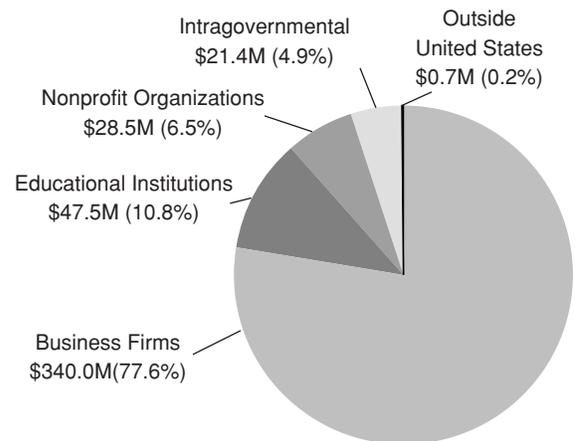
Small Business Awards

Net Value of Obligations

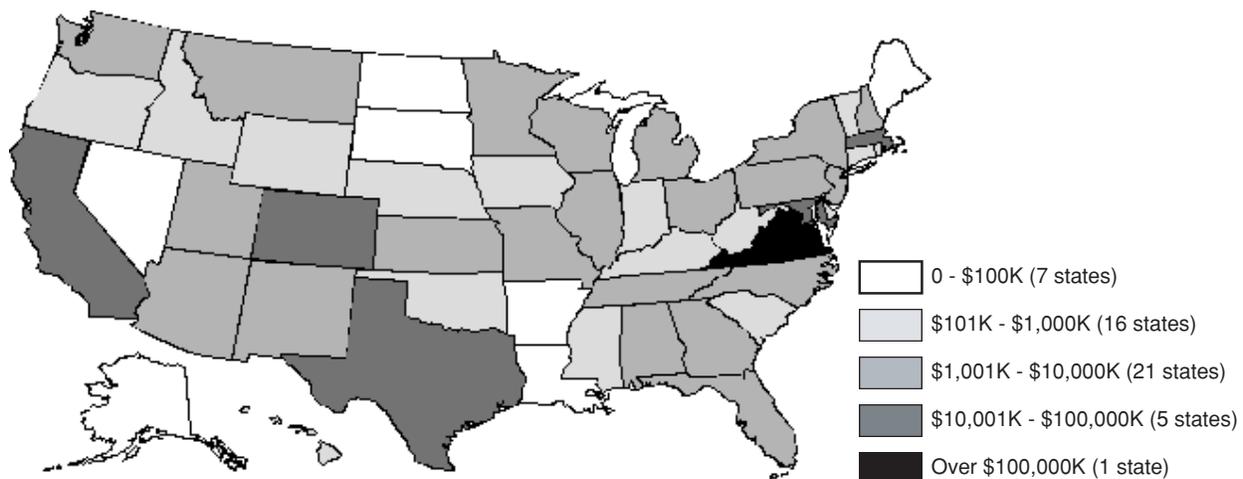


Fiscal Year 2001 Procurements

Net Value of Obligations



Distribution Summary of Obligations



Obligations per State

State	Dollars
Alabama	2,433,269
Alaska	88,000
Arizona	5,539,538
Arkansas	99,968
California	18,295,831
Colorado	29,960,288
Connecticut	948,288
Delaware	879,139
District of Columbia	3,086,076
Florida	7,381,179
Georgia	5,542,927
Hawaii	108,248
Idaho	112,280
Illinois	2,562,647
Indiana	568,638
Iowa	910,252
Kansas	1,528,143
Kentucky	585,553
Louisiana	43,659
Maine	0
Maryland	48,451,255
Massachusetts	14,138,386
Michigan	1,040,362
Minnesota	2,419,823
Mississippi	330,412
Missouri	1,343,535
Montana	1,041,300
Nebraska	128,137
Nevada	50,339
New Hampshire	1,097,235
New Jersey	4,479,016
New Mexico	4,261,340
New York	6,121,909
North Carolina	9,032,966
North Dakota	0
Ohio	2,688,528
Oklahoma	543,873
Oregon	875,083
Pennsylvania	7,017,612
Rhode Island	360,186
South Carolina	249,034
South Dakota	11,321
Tennessee	4,357,469
Texas	12,063,882
Utah	4,716,843
Vermont	221,599
Virginia	218,711,273
Washington	7,635,441
West Virginia	502,482
Wisconsin	3,177,406
Wyoming	101,128
Total	437,245,905

Top Obligations to Educational and Nonprofit Institutions

Institutions	Dollars
Research Triangle Institute ¹	6,610,708
Old Dominion University Research Foundation ¹	4,659,489
Utah State University	4,553,500
Universities Space Research ¹	4,497,226
Hampton University	4,463,902
City of Hampton ¹	2,582,001
University of Wisconsin–Madison	2,540,519
Harvard University	2,406,192
North Carolina A & T State	1,974,341
Virginia Polytechnic Institute	1,952,958
Georgia Tech Research Corporation	1,838,915
Georgia Tech Applied Research ¹	1,553,285
George Washington University	1,334,045
State University of New York	1,290,181
Florida A & M University	1,280,981
Aerospace Corporation ¹	1,153,293
Norfolk State University	1,135,266
Embry Riddle Aeronautical	1,006,800
Syracuse University	992,853
University of Virginia	978,413

¹Nonprofit institution

Top Obligations to Business Contractors

Business	Dollars
Science Application Intl. Corp.	32,541,359
Ball Aerospace	25,011,579
Swales and Associates	23,393,245
Johnson Controls	21,715,689
Intellisource	17,093,958
Raytheon Technology	12,635,790
Dominion Virginia Power	11,809,710
NCI Information Systems	10,805,968
GMR	10,010,982
Wyle Laboratories	9,943,000
Unisys	8,472,063
Computer Sciences Corp.	6,659,121
Boeing Co.	5,984,258
Sverdrup Technology	4,811,310
ASRC Aerospace	4,578,456
Dyncorp	4,491,797
Honeywell	4,300,027
Diversified Technology	3,214,700
Planners Collaborative	3,070,031
Lockheed Martin	3,052,845
Dynamic Engineering Inc.	3,019,133
Hernandez Engineering	2,722,490
GASL Inc.	1,980,560
J.C. Driskill Inc.	1,965,935
Modern Machine and Tool	1,868,085

Economic Impact Study and Analysis for Fiscal Year 2001¹

Economic impact studies measure direct and indirect effects on an area's economy. Direct impact refers to an agency's spending on goods and services, its various sources of income, and employment level. Indirect impact is the effect of the agency's spending and employment level on other sectors of the economy through the multiplied impact of spending and job creation. The indirect impact is an estimate of the impact on various businesses and industries that depend on the respending of income and other expenditures generated by an organization. NASA Langley is a very large economic generator. Its direct impact can therefore best be

analyzed by evaluating its employment level, payroll budget, contract and grant spending, and research and development. The total economic impact is the combined effect of both direct and indirect effects on the local area in terms of total output, earnings, employment, and general economic growth.

As the table indicates, NASA Langley's total direct outlay of \$645,308,000 increases economic output in the region by a total of \$1,346,480,000 for a combined impact of almost \$2 billion.

Output Spending Impact for Fiscal Year 2001

Category	Direct spending, \$K ²	Indirect impact, \$K
Engineering and business services	200,710	426,509
Household (payroll)	212,233	363,343
Construction, new, repair, and maintenance	45,580	101,142
Colleges, universities, and schools	51,616	123,156
Utilities	13,296	26,432
Fabricated metal products	9,372	21,649
Transportation and travel	6,723	16,929
Health services	1,244	2,892
Communication	1,008	2,104
Machinery, nonelectrical	3,015	7,504
Instruments and related products	6,504	14,127
Electronic and electric equipment	8,442	22,414
ADP equipment and services	53,897	144,875
Miscellaneous services	31,667	73,404
Total	645,308	1,346,480
Total impact		1,991,787

¹Prepared for NASA Langley by Dr. Marshall Booker, Christopher Newport University, Newport News, VA.

²Funds from research partners included.