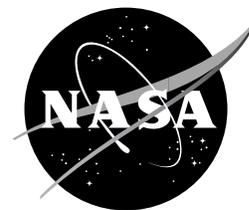


Fact Sheet



National Aeronautics and
Space Administration

Langley Research Center
Hampton, Virginia 23681-2199

FS-2000-06-50-LaRC

Economic Impact Summary for Fiscal Year 1999

NASA Langley Research Center is an important national resource serving inherent government functions such as safety, national defense, environment 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 and universities to being a solid financial contributor to the local, state and national economy.

Annual Budget (\$M)

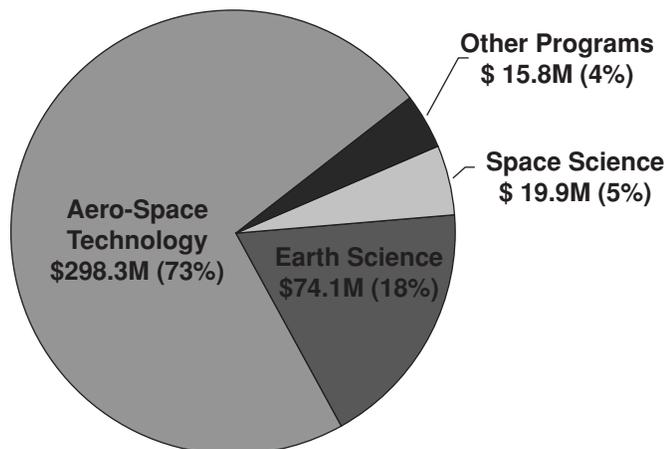
| <u>FY</u> | <u>NASA-wide</u> | <u>Langley*</u> |
|-----------|------------------|-----------------|
| 1997 | 13,708.7 | 689.5 |
| 1998 | 13,638.0 | 686.0 |
| 1999 | 13,653.0 | 631.8 |

*Includes Langley programs from other centers

Economic Contributions

| | |
|------------------------------|-----------------|
| National Economy | \$421.1M |
| Awards to businesses | 355.5M |
| Non-Profit institutions | 17.8M |
| Educational institutions | 47.8M |
| Virginia Economy | \$227.9M |
| Awards to businesses | 191.3M |
| Non-Profit institutions | 21.7M |
| Educational institutions | 14.9M |
| Hampton Roads Economy | \$197.2M |
| Awards to businesses | 178.3M |
| Non-Profit institutions | 9.5M |
| Educational institutions | 9.4M |

FY 99 R&D Budget - \$408M



Technology Transfer

| | |
|-----------------------|-----|
| Invention Disclosures | 128 |
| Patent Applications | 27 |
| Patents Granted | 28 |
| Licenses Executed | 8 |
| Space Act Agreements | 33 |

Physical Statistics

- 788 acres (West Area) + 20 acres "permitted" by LAFB
- 220 buildings (not including power stations or trailers)
- \$733M original investment value
- \$4B replacement value on today's market

Civil Service Residential Distribution

| | |
|----------------|--------------|
| Hampton | 544 |
| York County | 539 |
| Newport News | 384 |
| Poquoson | 234 |
| Williamsburg | 156 |
| Gloucester | 125 |
| Norfolk | 41 |
| Virginia Beach | 37 |
| Chesapeake | 35 |
| Suffolk | 28 |
| Portsmouth | 15 |
| Other | 153 |
| Total | 2,291 |

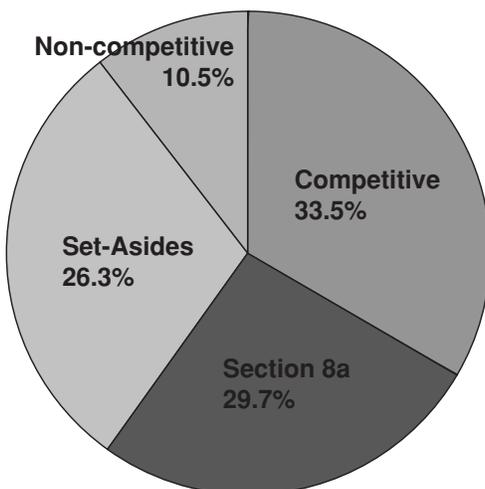
Civil Service Educational Mix

| | |
|------------------------|--------------|
| Highest degree earned | |
| Doctoral | 307 |
| Master | 573 |
| Bachelor | 590 |
| Associate | 375 |
| Some college | 285 |
| H.S. diploma | 157 |
| Less than H.S. diploma | 4 |
| Total | 2,291 |

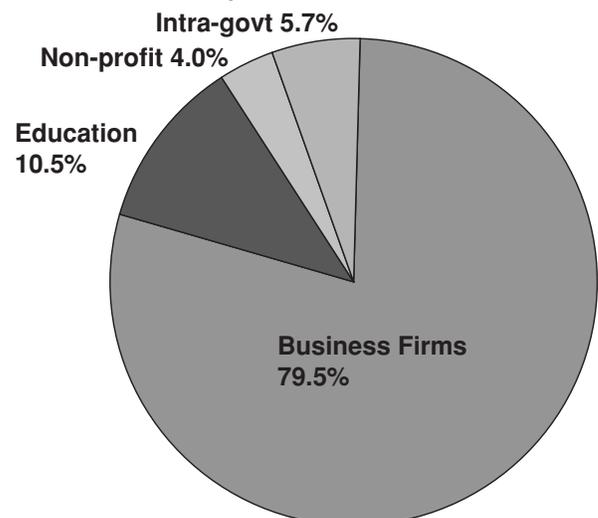
Civil Service Skill Mix

| | |
|------------------------|--------------|
| Scientific/engineering | 1,199 |
| Administrative | 317 |
| Tech/craft/production | 611 |
| Clerical | 116 |
| Total | 2,291 |

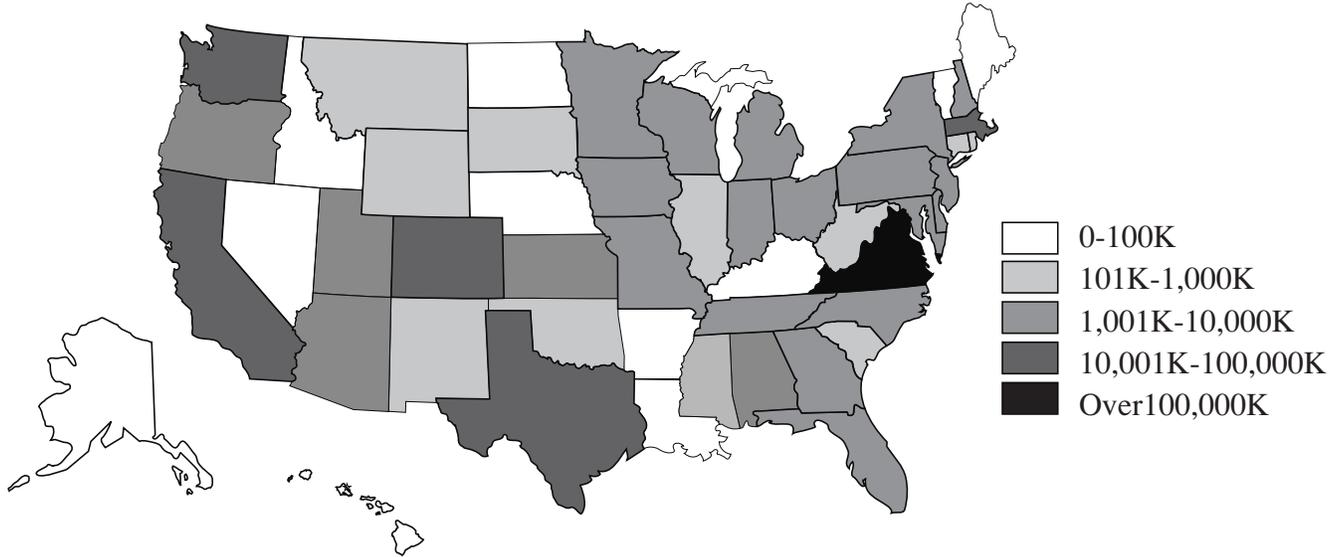
Small Business Awards \$106M



FY 1999 Procurements \$447.3M



Total Obligations by State



Top 20 Contractors

| Contractor | FY 99 Obligations |
|--------------------------------------|-------------------|
| Boeing Commercial | \$42,881,097 |
| Computer Sciences Corp | \$32,932,439 |
| Science Applications | \$23,799,964 |
| McDonnell Douglas Corp. | \$21,086,468 |
| E G G Langley | \$19,635,582 |
| Government Micro Resources | \$15,239,179 |
| Lockheed Martin Engineering. | \$14,745,919 |
| NYMA | \$13,910,763 |
| NCI Information System | \$13,571,266 |
| Virginia Power | \$11,249,262 |
| Ball Aerospace | \$10,951,886 |
| Wyle Laboratories | \$ 8,764,513 |
| Lockheed Martin | \$ 7,209,635 |
| Honeywell Inc | \$ 6,384,457 |
| Unisys Corp | \$ 4,806,202 |
| TRW | \$ 3,433,320 |
| GASL | \$ 3,236,124 |
| Sverdrup Technology | \$ 2,954,606 |
| Technology Appl Inc | \$ 2,753,671 |
| Diversified Technology | \$ 2,260,603 |

Top 20 Nonprofit Institutions

| Institution | FY 99 Obligations |
|---------------------------------------|-------------------|
| Research Triangle Inst. | \$4,125,880 |
| Hampton University | \$3,679,059 |
| Utah State University. | \$3,466,313 |
| Aerospace Corporation | \$3,367,819 |
| Hampton City (N). | \$3,298,774 |
| Harvard University | \$3,067,268 |
| University of Virginia | \$3,067,196 |
| Universities Space Research | \$2,883,872 |
| ODU Research Foundation | \$2,466,049 |
| VPI&SU | \$1,927,191 |
| University of Pittsburgh | \$1,650,000 |
| Georgia Tech Research Corp. | \$1,450,372 |
| George Washington Univ. | \$1,428,037 |
| MIT | \$1,333,100 |
| North Carolina A&T | \$1,265,153 |
| Florida A&M | \$1,115,498 |
| Norfolk State University | \$1,026,770 |
| Embry Riddle Aeronautical | \$ 994,000 |
| Logistics Management Inst. | \$ 958,629 |
| North Carolina State Univ | \$ 917,805 |

Spending Impact of Langley

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. Indirect impact refers to the effect of spending and employment on other sectors of the economy through the multiplied impact of spending and job creation. Total spending is calculated by sector and the appropriate multiplier is applied to measure both direct and indirect economic impacts. As indicated, the total outlay of \$632,716,000 has a combined impact of almost \$2 billion.¹

| Sector | Direct Spending | Multiplier | Indirect impact |
|--|----------------------|------------|------------------------|
| Engineering, business, & professional services | \$241,942,000 | 2.143 | \$518,482,000 |
| Payroll/household earnings | 184,800,000 | 1.689 | 312,127,000 |
| Data processing/equipment services | 49,302,000 | 2.816 | 138,834,000 |
| Colleges, universities, schools | 42,587,000 | 2.472 | 105,275,000 |
| Miscellaneous services | 41,476,000 | 2.419 | 100,330,000 |
| Construction: New & repair | 28,437,000 | 2.516 | 71,547,000 |
| Fabricated products (metals) | 14,998,000 | 1.318 | 34,765,000 |
| Utilities services | 12,504,00 | 2.896 | 23,708,000 |
| Instruments and related products | 5,873,00 | 2.168 | 12,733,000 |
| Transportation/travel | 5,484,000 | 2.512 | 13,776,000 |
| Electronic and electrical equipment | 2,931,000 | 2.715 | 7,958,000 |
| Communications | 1,312,000 | 2.106 | 2,763,000 |
| Machinery, non-electrical | 616,000 | 2.486 | 1,531,000 |
| Health-related services | 454,000 | 2.341 | 1,063,000 |
| Total indirect and direct | \$632,716,000 | | \$1,344,892,000 |
| Total impact | | | \$1,977,608,000 |

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