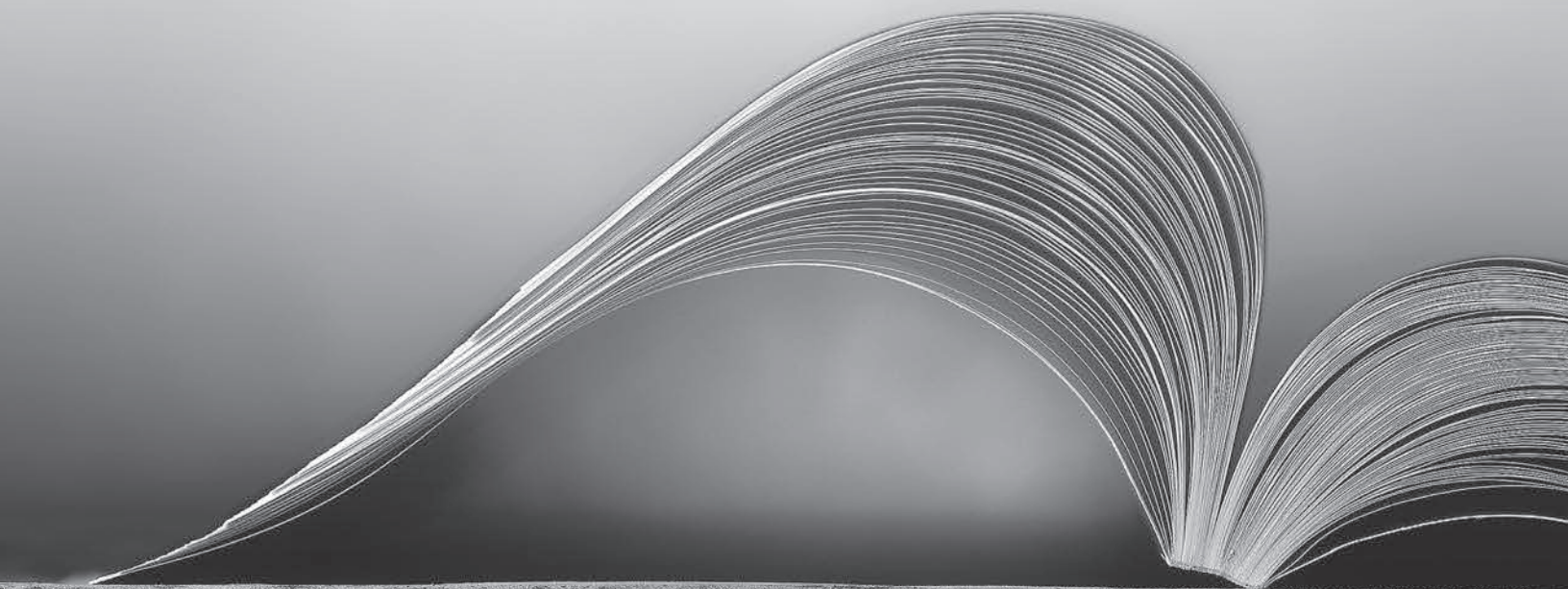


# RESEARCH

- The University System received \$805 million in external contracts and grants in FY2005 to support research, instruction, and service, of which \$623.5 million was for research, \$88.0 million for instruction, and \$93.7 million for public service grants.
- Research universities received \$707 million in external grants and contracts.
- Regional universities received \$12 million in external grants and contracts.
- State universities received \$49 million in external grants and contracts.
- State colleges received \$8 million in external grants and contracts.
- Two-year colleges received \$14 million in external contracts and grants.
- Skidaway Institute of Oceanography and the System Office received \$16 million in external contracts and grants.





## RESEARCH PROGRAMS

---

### Research Universities

Research activities serve to expand the existing body of knowledge, provide learning opportunities for graduate students, and find solutions for problems. The research mission in the University System is concentrated primarily in the four research universities. In addition, Fort Valley State University has an agricultural research mission assigned to it as a result of its designation as an 1890 Land Grant Institution, and it operates an Agricultural Research Station at Fort Valley. Research programs carried out in the universities had total extramural support in FY2005 of \$805 million, of which \$624 million was for research and \$182 million for instruction and public service grants. Georgia Southern University and Valdosta State University have research missions focused on applied topics.

#### GEORGIA INSTITUTE OF TECHNOLOGY

Georgia Tech is a major center for advanced technology in Georgia and the Southeast. The Institute conducts research of national significance, provides services and facilities to faculty, students, industry, and government agencies, and supports the economic and technological growth of the state. Research operations are carried out through a group of schools, centers, and laboratories, each performing research in a particular field of interest. Most of the research is supported by contracts with government organizations and private industry. A significant portion of the total research activity is within the broad fields of electronics, environmental science and technology, manufacturing, biotechnology, materials, microelectronics, transportation, and telecommunications. Signal processing, tribology, acoustics, fusion, combustion, rotary wing aircraft, and work on energy conservation and applications are also important areas, as are domestic and international economic development, computer technology and applications, mechanics, and the fields of biological, physical, chemical, material, earth, atmospheric, and social sciences. To assist with the State's economic development, Georgia Tech maintains field offices in Albany, Augusta, Brunswick, Carrollton, Columbus, Douglas, Dublin, Gainesville, Macon, Madison, Rome, Savannah and Warner Robins. Research is also being conducted at various locations throughout the nation and the world. Extramural support for FY2005 was \$357 million, of which \$333 million was for research.

#### GEORGIA STATE UNIVERSITY

Located in the heart of downtown Atlanta, Georgia State University (GSU) is a leading research university with a wide range of extramural research programs in each of its six colleges. In addition to a broad agenda of programs that have national prominence, a number of the research programs play a significant role in supporting the growth of both the economy and technology of Georgia. Some of the research projects include the development of biotechnology and drug design, brain sciences and health, digital arts, computer design, both biological and policy research of the environment, high angular resolution astronomy, media education, brain-computer interface, and neural communication and computation. Policy research includes water planning and policy, applied research for addressing national and local policy issues, Georgia health policy, evaluation of state and local fiscal and economic policy, and international studies in which GSU faculty work in over 30 foreign countries. Various research programs in the areas of learning and development, teacher education, educational policy, adult learning and community outreach provide a strong link between GSU and the K-12 system in Georgia. Research in the field of business-to-business marketing, development of models related to national, regional and local economies, and international business training and skills development benefit from the long-term relationships that GSU has developed with national and international business communities. Innovative cross-college teacher preparation programs, including the Biobus, serve as national models for education reform. Applied research to reduce health risks includes the study of victim empowerment issues, current substance abuse treatment strategies, the Georgia Fatherhood Program, and the influence of nursing care on patient outcomes in U.S. Army hospitals. Georgia State University extramural support for FY2005 was \$58 million, of which \$41 million was for research.



## RESEARCH PROGRAMS

---

### Research Universities (Continued)

#### MEDICAL COLLEGE OF GEORGIA

Extramurally funded research programs are disease oriented and are carried out in both basic and clinical disciplines in the five schools of Medicine, Dentistry, Nursing, Allied Health Sciences, and Graduate Studies. Institutes which focus on specific research disciplines are the Georgia Institute for Prevention of Human Disease and Accidents, the Institute of Molecular Medicine and Genetics, and the Vascular Biology Center. A special initiative involves the research and development of telecommunications in health care delivery known as Telemedicine. There is an Alzheimer's program to develop and test new drugs and agents for improving memory. A specialized Heart Development Group carries out research on the origin and molecular biology of congenital heart defects. Significant priorities in research are: cancer, neurological disease (e.g., Alzheimer's disease, epilepsy, stem cell research), cardiovascular diseases (stroke, Sickle cell disease, hypertension, heart development), and infection/inflammation research. Much of this research is translation (i.e., bench to bedside). There is considerable focus on research relating to children's diseases and health services research that includes minority and women's health. Applied and basic research places emphasis on the development of new intellectual properties, biotechnology and technology transfer. The latter is focused on the economic growth of the State and involves consortia with other universities including the Georgia Research Alliance (GRA). Sponsored awards for FY2005 were \$74 million, of which \$62 million was for research.

#### UNIVERSITY OF GEORGIA

The University of Georgia is both a land-grant and sea-grant college. All 15 schools/colleges have extensive research programs. The following areas are representative of some of the recognized research strengths. Research in biology and chemistry is conducted in many colleges, departments, and multidisciplinary units, including the Complex Carbohydrate Research Center, the Center for Metalloenzyme Studies, the Center for Plant Cellular and Molecular Biology, the Center for Biological Resource Recovery, and the Center for Computational Quantum Chemistry. Biotechnology research focuses on plant development and production, crop protection, forest science and applications, animal improvement and health, human health, and fermentation applications. Research in the College of Pharmacy focuses on the development of new drugs and toxicology. Agricultural research is conducted at the three major Georgia Agricultural Experiment Stations in Athens, Griffin, and Tifton, and five smaller stations in the state. Research emphasis is on environmentally sound and input-efficient production practices. The Veterinary Medicine Experiment Station and the Poultry Disease Research Center in Athens conduct research on disease problems of agricultural and companion animals. The Veterinary Diagnostic Assistance Laboratories have facilities in Athens and Tifton. Environmental and ecological research is a major emphasis across several colleges, with the recognized activities in the Institute of Ecology and the Savannah River Ecology Laboratory. Marine research is concentrated at the Marine Institute of Sapelo Island, the Marine Extension Center at Brunswick, and the Skidaway Institute of Oceanography. Research strengths in other areas are highlighted in the Institute for Behavioral Research, the Center for East-West Trade Policy, the Humanities Center, the Center for Remote Sensing and Mapping Science, and the Center for Simulation Physics. Ongoing research in math, reading, and science education, as well as learning disorders, is conducted by faculty in the College of Education. Extramural support to the University of Georgia for FY2005 was \$219 million, of which \$161 million was for research.

Source: Research Advisory Committee; Office of Associate Vice Chancellor of Strategic Research and Analysis

## CONTRACTS AND GRANTS

### Received by Universities and Regional Universities, FY1996-FY2005

	DOLLARS IN MILLIONS									
<u>UNIVERSITIES</u>	<u>1996</u>	<u>1997</u>	<u>1998</u>	<u>1999</u>	<u>2000</u>	<u>2001</u>	<u>2002</u>	<u>2003</u>	<u>2004</u>	<u>2005</u>
<b>GEORGIA INSTITUTE OF TECHNOLOGY</b>										
Research Awards	158.3	179.9	176.2	204.4	217.2	217.5	254.8	265.6	316.9	333.2
Instructional and Public Service Awards	15.7	17.4	10.9	12.7	15.2	19.9	24.2	27.1	25.0	23.9
<b>TOTAL AWARDS</b>	<b>\$174.0</b>	<b>\$197.3</b>	<b>\$187.1</b>	<b>\$217.1</b>	<b>\$232.4</b>	<b>\$237.4</b>	<b>\$279.0</b>	<b>\$292.7</b>	<b>\$341.9</b>	<b>\$357.1</b>
<b>GEORGIA STATE UNIVERSITY</b>										
Research Awards	19.4	20.6	37.1	25.2	23.1	27.3	31.5	32.4	45.0	41.2
Instructional and Public Service Awards	12.7	16.5	23.9	14.0	15.6	19.6	25.6	20.4	18.7	16.9
<b>TOTAL AWARDS</b>	<b>\$32.1</b>	<b>\$37.1</b>	<b>\$61.0</b>	<b>\$39.2</b>	<b>\$38.7</b>	<b>\$46.9</b>	<b>\$57.1</b>	<b>\$52.8</b>	<b>\$63.8</b>	<b>\$58.1</b>
<b>MEDICAL COLLEGE OF GEORGIA</b>										
Research Awards	17.3	18.6	19.7	26.3	31.1	42.0	50.3	70.0	64.6	61.6
Instructional and Public Service Awards	9.5	7.8	82.7	97.6	101.9	117.5	126.2	128.0	22.5	12.0
<b>TOTAL AWARDS</b>	<b>\$26.8</b>	<b>\$26.4</b>	<b>\$102.4</b>	<b>\$123.9</b>	<b>\$133.0</b>	<b>\$159.5</b>	<b>\$176.5</b>	<b>\$198.0</b>	<b>\$87.1</b>	<b>\$73.6</b>
<b>UNIVERSITY OF GEORGIA</b>										
Research Awards	95.9	95.5	84.3	86.6	97.3	120.1	139.4	146.8	157.9	160.8
Instructional and Public Service Awards	31.3	30.3	48.4	51.5	57.4	51.5	65.2	80.9	67.9	57.7
<b>TOTAL AWARDS</b>	<b>\$127.2</b>	<b>\$125.8</b>	<b>\$132.7</b>	<b>\$138.1</b>	<b>\$154.7</b>	<b>\$171.5</b>	<b>\$204.5</b>	<b>\$227.7</b>	<b>\$225.8</b>	<b>\$218.5</b>
<b>UNIVERSITIES</b>										
Research Awards	290.9	314.6	317.3	342.6	368.7	406.9	476.0	514.8	584.4	596.7
Instructional and Public Service Awards	69.2	72.0	165.9	175.7	190.1	208.4	241.1	256.4	134.2	110.5
<b>TOTAL AWARDS</b>	<b>\$360.1</b>	<b>\$386.5</b>	<b>\$483.2</b>	<b>\$518.3</b>	<b>\$558.9</b>	<b>\$615.2</b>	<b>\$717.1</b>	<b>\$771.3</b>	<b>\$718.6</b>	<b>\$707.3</b>
<b>GEORGIA SOUTHERN UNIVERSITY</b>										
Research Awards	1.2	2.1	1.1	1.6	1.5	1.7	2.2	1.6	1.7	1.6
Instructional and Public Service Awards	3.3	3.3	3.1	3.6	4.1	2.9	3.9	2.4	3.7	4.4
<b>TOTAL AWARDS</b>	<b>\$4.5</b>	<b>\$5.5</b>	<b>\$4.2</b>	<b>\$5.2</b>	<b>\$5.6</b>	<b>\$4.7</b>	<b>\$6.2</b>	<b>\$4.0</b>	<b>\$5.4</b>	<b>\$6.0</b>
<b>VALDOSTA STATE UNIVERSITY</b>										
Research Awards	1.1	1.7	.7	.3	.4	.3	.3	.3	.2	.7
Instructional and Public Service Awards	2.7	2.7	4.4	3.7	4.1	4.3	4.3	5.2	3.3	4.8
<b>TOTAL AWARDS</b>	<b>\$3.8</b>	<b>\$4.4</b>	<b>\$5.1</b>	<b>\$4.1</b>	<b>\$4.5</b>	<b>\$4.6</b>	<b>\$4.6</b>	<b>\$5.5</b>	<b>\$3.6</b>	<b>\$5.5</b>
<b>REGIONAL UNIVERSITIES</b>										
Research Awards	2.3	3.8	1.8	1.9	1.9	2.0	2.6	1.9	2.0	2.3
Instructional and Public Service Awards	6.0	6.0	7.5	7.3	8.2	7.2	8.2	7.6	7.0	9.2
<b>TOTAL AWARDS</b>	<b>\$8.3</b>	<b>\$9.8</b>	<b>\$9.3</b>	<b>\$9.2</b>	<b>\$10.1</b>	<b>\$9.3</b>	<b>\$10.7</b>	<b>\$9.5</b>	<b>\$9.0</b>	<b>\$11.5</b>

Notes: Totals may not add due to rounding. Student financial aid monies are not included in this table.

Source: Annual Report of Contracts and Grants, Office of Strategic Research and Analysis



## CONTRACTS AND GRANTS

### Received by State Universities, FY2001 - FY2005

	<u>FY2001</u>	<u>FY2002</u>	<u>FY2003</u>	<u>FY2004</u>	<u>FY2005</u>
<b>ALBANY STATE UNIVERSITY</b>					
Research Awards	750,000	1,194,313	1,529,458	4,164,718	3,022,730
Instructional and Public Service Awards	5,635,803	4,259,267	5,510,945	3,180,581	5,506,342
<b>TOTAL AWARDS</b>	<b>\$6,385,803</b>	<b>\$5,453,580</b>	<b>\$7,040,403</b>	<b>\$7,345,299</b>	<b>\$8,529,072</b>
<b>ARMSTRONG ATLANTIC STATE UNIVERSITY</b>					
Research Awards	115,085	49,898	1,310,544	28,000	375,926
Instructional and Public Service Awards	1,534,036	1,589,844	775,868	2,395,616	1,551,208
<b>TOTAL AWARDS</b>	<b>\$1,649,121</b>	<b>\$1,639,742</b>	<b>\$2,086,412</b>	<b>\$2,423,616</b>	<b>\$1,927,134</b>
<b>AUGUSTA STATE UNIVERSITY</b>					
Research Awards	115,014	85,813	51,312	303,366	15,542
Instructional and Public Service Awards	325,143	259,316	1,915,892	389,338	300,999
<b>TOTAL AWARDS</b>	<b>\$440,157</b>	<b>\$345,129</b>	<b>\$1,967,204</b>	<b>\$692,704</b>	<b>\$316,541</b>
<b>CLAYTON STATE UNIVERSITY</b>					
Research Awards			11,420		
Instructional and Public Service Awards	3,111,431	3,425,509	3,806,873	2,346,562	2,180,635
<b>TOTAL AWARDS</b>	<b>\$3,111,431</b>	<b>\$3,425,509</b>	<b>\$3,818,293</b>	<b>\$2,346,562</b>	<b>\$2,180,635</b>
<b>COLUMBUS STATE UNIVERSITY</b>					
Research Awards	105,552	244,177	382,864	360,382	216,337
Instructional and Public Service Awards	3,017,573	1,859,062	919,505	2,389,740	977,790
<b>TOTAL AWARDS</b>	<b>\$3,123,125</b>	<b>\$2,103,239</b>	<b>\$1,302,369</b>	<b>\$2,750,122</b>	<b>\$1,194,127</b>
<b>FORT VALLEY STATE UNIVERSITY</b>					
Research Awards	3,263,311	3,751,233	4,266,975	3,368,803	3,015,323
Instructional and Public Service Awards	9,486,057	13,860,162	9,847,259	9,998,054	6,553,483
<b>TOTAL AWARDS</b>	<b>\$12,749,368</b>	<b>\$17,611,395</b>	<b>\$14,114,234</b>	<b>\$13,366,857</b>	<b>\$9,568,806</b>
<b>GEORGIA COLLEGE &amp; STATE UNIVERSITY</b>					
Research Awards	50,230	62,104	153,068	102,723	313,597
Instructional and Public Service Awards	1,624,099	1,711,364	2,035,211	1,341,630	1,228,850
<b>TOTAL AWARDS</b>	<b>\$1,674,329</b>	<b>\$1,773,468</b>	<b>\$2,188,279</b>	<b>\$1,444,353</b>	<b>\$1,542,447</b>
<b>GEORGIA SOUTHWESTERN STATE UNIVERSITY</b>					
Research Awards	899,218	309,259	358,535	300,128	194,582
Instructional and Public Service Awards	1,293,511	1,884,795	2,011,874	2,660,170	2,125,466
<b>TOTAL AWARDS</b>	<b>\$2,192,729</b>	<b>\$2,194,054</b>	<b>\$2,370,409</b>	<b>\$2,960,298</b>	<b>\$2,320,048</b>
<b>KENNESAW STATE UNIVERSITY</b>					
Research Awards	334,371	152,902	396,668	859,624	932,210
Instructional and Public Service Awards	3,691,506	4,055,727	4,532,775	4,307,395	7,628,971
<b>TOTAL AWARDS</b>	<b>\$4,025,877</b>	<b>\$4,208,629</b>	<b>\$4,929,443</b>	<b>\$5,167,019</b>	<b>\$8,561,181</b>
<b>NORTH GEORGIA COLLEGE &amp; STATE UNIV.</b>					
Research Awards				2,000	168,100
Instructional and Public Service Awards	943,340	994,704	1,004,154	908,735	892,352
<b>TOTAL AWARDS</b>	<b>\$943,340</b>	<b>\$994,704</b>	<b>\$1,004,154</b>	<b>\$910,735</b>	<b>\$1,060,452</b>
<b>SAVANNAH STATE UNIVERSITY</b>					
Research Awards	1,765,362	2,102,948	1,718,738	777,670	2,341,233
Instructional and Public Service Awards	5,289,977	4,608,260	5,517,268	6,336,951	7,415,444
<b>TOTAL AWARDS</b>	<b>\$7,055,339</b>	<b>\$6,711,208</b>	<b>\$7,236,006</b>	<b>\$7,114,621</b>	<b>\$9,756,677</b>
<b>SOUTHERN POLYTECHNIC STATE UNIVERSITY</b>					
Research Awards	271,878	307,457	323,582	72,990	31,459
Instructional and Public Service Awards	559,183	1,194,680	1,019,052	632,124	291,903
<b>TOTAL AWARDS</b>	<b>\$831,061</b>	<b>\$1,502,137</b>	<b>\$1,342,634</b>	<b>\$705,114</b>	<b>\$323,362</b>
<b>UNIVERSITY OF WEST GEORGIA</b>					
Research Awards	1,315,166	1,059,565	639,922	795,814	724,242
Instructional and Public Service Awards	1,246,195	1,902,044	1,292,805	1,033,659	1,332,741
<b>TOTAL AWARDS</b>	<b>\$2,561,361</b>	<b>\$2,961,609</b>	<b>\$1,932,727</b>	<b>\$1,829,473</b>	<b>\$2,056,983</b>
<b>STATE UNIVERSITIES</b>					
Research Awards	8,985,187	9,319,669	11,143,086	11,136,218	11,351,281
Instructional and Public Service Awards	37,757,854	41,604,734	40,189,481	37,920,555	37,986,184
<b>TOTAL AWARDS</b>	<b>\$46,743,041</b>	<b>\$50,924,403</b>	<b>\$51,332,567</b>	<b>\$49,056,773</b>	<b>\$49,337,465</b>

Note: Excludes student financial aid monies, gifts, endowment income and foundation contributions.

Source: Annual Report of Contracts and Grants, Office of Strategic Research and Analysis

## CONTRACTS AND GRANTS

### Total Awards Received by State and Two-Year Colleges, FY2001-FY2005

	DOLLARS IN THOUSANDS				
	<u>FY2001</u>	<u>FY2002</u>	<u>FY2003</u>	<u>FY2004</u>	<u>FY2005</u>
Dalton State College	\$3,054.4	\$2,791.8	\$2,996.1	\$2,930.8	\$2,946.1
Gainesville State College	480.0	763.0	1,115.1	2,933.1	3,279.4
Macon State College	920.0	1,745.5	1,574.1	1,575.4	1,548.1
<b>STATE COLLEGES</b>	<b>\$4,454.4</b>	<b>\$5,300.3</b>	<b>\$5,622.3</b>	<b>\$7,439.3</b>	<b>\$7,773.6</b>
Abraham Baldwin Agric. College	1,318.7	1,695.2	1,763.0	1,976.0	1,922.9
Atlanta Metropolitan College	991.1	1,052.0	1,549.7	1,595.1	1,503.9
Bainbridge College	1,249.1	1,436.6	1,489.8	1,373.4	1,350.2
Coastal Georgia Community College	1,631.3	1,945.0	2,294.1	2,297.7	2,397.6
Darton College	1,197.0	803.4	1,091.4	1,575.8	1,797.0
East Georgia College	1,508.6	1,168.8	1,035.8	944.0	843.0
Georgia Highlands College	699.1	445.7	566.7	817.1	773.3
Georgia Perimeter College	1,353.4	1,072.8	1,100.5	1,179.3	1,472.8
Gordon College	-0-	-0-	24.2	74.5	198.5
Middle Georgia College	215.4	522.8	210.9	485.9	965.1
South Georgia College	234.5	260.7	278.3	268.6	276.6
Waycross College	42.7	26.0	34.6	64.5	292.8
<b>TWO-YEAR COLLEGES</b>	<b>\$10,440.9</b>	<b>\$10,429.0</b>	<b>\$11,439.0</b>	<b>\$12,651.9</b>	<b>\$13,793.7</b>
Skidaway Institute of Oceanography	NA	NA	8.2	6.2	5.5
System Office	NA	NA	3.2	44.1	10.1
<b>SYSTEM TOTAL</b>	<b>\$686,139.5</b>	<b>\$794,474.8</b>	<b>\$860,501.0</b>	<b>\$847,035.7</b>	<b>\$805,362.2</b>

Note: Includes instructional and public service awards.

#### TOTAL AWARDS RECEIVED BY SYSTEM INSTITUTIONS

	DOLLARS IN MILLIONS				
	<u>FY2001</u>	<u>FY2002</u>	<u>FY2003</u>	<u>FY2004</u>	<u>FY2005</u>
Research Universities	\$615.2	\$717.1	\$771.3	\$718.6	\$707.3
Regional Universities	\$9.3	\$10.7	\$9.5	\$9.0	\$11.5
State Universities	\$46.7	\$51.3	\$50.9	\$49.1	\$49.3
State Colleges	\$4.4	\$5.3	\$5.6	\$7.4	\$7.7
Two-Year Colleges	\$10.4	\$10.4	\$11.4	\$12.7	\$13.8

Source: Annual Report of Contracts and Grants, Office of Strategic Research and Analysis



## RESEARCH GRANTS BY FUNDING SOURCE

FY2005

Research Funds to Research Universities  
by Source, FY2005  
(\$585.9 Million)

