

Table 1. R&D by Agency in FY 2001 Appropriations (FINAL)

Table 1. Total R&D by Agency
R&D in FY 2001 Appropriations (FINAL)
(budget authority in millions of dollars)

	FY 2000 Estimate	FY 2001 Request	Final FY 2001 Appropriations				
			FY 2001 FINAL	Chg. from Request Amount	Percent	Chg. from FY 2000 Amount	Percent
Defense (military)	39,282	38,576	41,846	3,270	8.5%	2,564	6.5%
("S&T" 6.1,6.2,6.3 + Medical)	8,667	7,609	9,363	1,754	23.1%	696	8.0%
(All Other DOD R&D)	30,615	30,967	32,482	1,516	4.9%	1,868	6.1%
National Aeronautics & Space Admin.	9,777	10,040	10,298	258	2.6%	521	5.3%
Energy	7,117	7,639	7,994	355	4.7%	878	12.3%
Health and Human Services	18,082	19,168	20,829	1,661	8.7%	2,747	15.2%
(National Institutes of Health)	17,102	18,094	19,597	1,503	8.3%	2,495	14.6%
National Science Foundation	2,863	3,431	3,240	-190	-5.5%	377	13.2%
Agriculture	1,763	1,824	1,953	129	7.1%	190	10.8%
Interior	573	590	597	7	1.2%	24	4.2%
Transportation	606	778	701	-78	-10.0%	94	15.5%
Environmental Protection Agency	647	673	686	13	2.0%	39	6.0%
Commerce	1,073	1,148	1,111	-37	-3.3%	38	3.5%
(NOAA)	591	594	638	44	7.5%	47	8.0%
(NIST)	458	497	419	-78	-15.7%	-39	-8.5%
Education	233	271	263	-8	-2.9%	30	13.0%
Agency for Int'l Development	122	98	124	26	26.6%	2	1.7%
Department of Veterans Affairs	655	655	684	29	4.5%	29	4.5%
Nuclear Regulatory Commission	53	53	53	0	-0.2%	0	-0.2%
Smithsonian	113	122	119	-3	-2.3%	6	5.5%
All Other	376	362	393	31	8.7%	17	4.6%
Total R&D	83,334	85,427	90,891	5,464	6.4%	7,557	9.1%
Defense R&D	42,583	41,981	45,543	3,562	8.5%	2,960	7.0%
Nondefense R&D	40,751	43,446	45,348	1,901	4.4%	4,597	11.3%
Nondefense R&D minus NIH	23,650	25,353	25,751	398	1.6%	2,101	8.9%
Basic Research	18,965	20,259	21,207	948	4.7%	2,242	11.8%
Applied Research	17,577	18,355	20,024	1,669	9.1%	2,446	13.9%
Total Research	36,542	38,613	41,231	2,618	6.8%	4,689	12.8%
"21st Century Research Fund"	40,028	42,918	44,861	1,943	4.5%	4,833	12.1%

AAAS estimates of R&D in FY 2001 appropriations bills. Includes conduct of R&D and R&D facilities.

All figures are rounded to the nearest million. Changes calculated from unrounded figures.

December 19, 2000 - Final FY 2001 appropriations funding levels.

All figures are adjusted to reflect rescissions and across-the-board cuts.

Table 2. Basic and Applied Research in FY 2001 Appropriations (FINAL)

**Table 2. Estimated Research by Agency
R&D in FY 2001 Appropriations (FINAL)
(budget authority in millions of dollars)**

	FY 2000 Estimate	FY 2001 Request	Final FY 2001 Appropriations				
			FY 2001 FINAL	Chg. from Request Amount	Chg. from Request Percent	Chg. from FY 2000 Amount	Chg. from FY 2000 Percent
Basic Research:							
Health and Human Services	9,834	10,399	11,255	856	8.2%	1,422	14.5%
<i>National Institutes of Health</i>	9,832	10,397	11,252	855	8.2%	1,421	14.5%
National Science Foundation	2,492	2,987	2,831	-156	-5.2%	339	13.6%
Department of Defense	1,161	1,217	1,310	93	7.6%	149	12.8%
Department of Energy	2,237	2,376	2,412	37	1.6%	176	7.9%
National Aeronautics & Space Admin.	1,947	1,895	1,981	87	4.6%	35	1.8%
Department of Agriculture	692	740	756	16	2.1%	64	9.2%
Department of the Interior	61	63	64	1	2.0%	4	5.8%
Smithsonian	102	108	105	-3	-2.5%	3	3.2%
Environmental Protection Agency	58	58	62	5	8.0%	4	7.3%
Department of Commerce	41	53	51	-2	-4.6%	10	25.1%
All Other	342	363	378	15	4.3%	36	10.7%
Total Est. Basic Research	18,965	20,259	21,207	948	4.7%	2,242	11.8%
RESEARCH (basic and applied):							
Health and Human Services	15,608	16,522	17,947	1,425	8.6%	2,338	15.0%
<i>National Institutes of Health</i>	14,687	15,513	16,811	1,298	8.4%	2,123	14.5%
National Science Foundation	2,656	3,180	3,013	-167	-5.2%	358	13.5%
Department of Defense	4,841	4,428	5,397	969	21.9%	555	11.5%
Department of Energy	4,145	4,517	4,681	164	3.6%	536	12.9%
National Aeronautics & Space Admin.	4,332	4,713	4,886	172	3.7%	553	12.8%
Department of Agriculture	1,499	1,561	1,597	36	2.3%	98	6.5%
Department of the Interior	543	550	564	15	2.7%	22	4.0%
Environmental Protection Agency	445	440	478	38	8.6%	32	7.3%
Department of Commerce	821	895	882	-13	-1.5%	61	7.4%
NOAA	534	535	575	40	7.4%	41	7.6%
NIST	281	350	301	-49	-14.0%	20	7.2%
Department of Transportation	444	581	515	-66	-11.4%	71	16.0%
Department of Veterans Affairs	638	638	666	28	4.5%	28	4.5%
Department of Education	152	167	162	-5	-2.9%	10	6.7%
All Other	418	422	443	21	5.0%	25	6.0%
TOTAL EST. RESEARCH	36,542	38,613	41,231	2,618	6.8%	4,689	12.8%

AAAS estimates of basic and applied research in FY 2001 appropriations bills.

All figures are rounded to the nearest million. Changes calculated from unrounded figures.

December 19, 2000 - Final FY 2001 appropriations funding levels.

All figures are adjusted to reflect rescissions and across-the-board cuts.

Table 3. Major Functional Categories of R&D in FY 2001 Appropriations (FINAL)

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R&D in FY 2001 Appropriations (FINAL)
(budget authority in millions of dollars)**

	FY 2000 Estimate	FY 2001 Request	Final FY 2001 Appropriations				
			FY 2001 FINAL	Chg. from Request Amount	Chg. from Request Percent	Chg. from FY 2000 Amount	Chg. from FY 2000 Percent
Defense ¹	42,583	41,981	45,543	3,562	8.5%	2,960	7.0%
Nondefense ²	40,751	43,446	45,348	1,901	4.4%	4,597	11.3%
Space	8,746	9,106	9,324	218	2.4%	578	6.6%
Health	18,663	19,742	21,422	1,680	8.5%	2,759	14.8%
Energy	1,264	1,350	1,381	31	2.3%	117	9.3%
General Science	5,501	6,400	6,241	-159	-2.5%	740	13.5%
Natural Resources & Environ.	2,076	2,136	2,199	63	2.9%	123	5.9%
Agriculture	1,552	1,587	1,716	129	8.1%	164	10.6%
Transportation	1,637	1,712	1,675	-38	-2.2%	37	2.3%
Commerce	481	553	471	-82	-14.8%	-10	-2.0%
International	142	114	140	26	22.9%	-2	-1.3%
All Other	690	746	779	33	4.5%	89	12.9%
Total R&D	83,334	85,427	90,891	5,464	6.4%	7,557	9.1%

AAAS estimates of R&D in FY 2001 appropriations bills. Includes conduct of R&D and R&D facilities.

All figures are rounded to the nearest million. Changes calculated from unrounded figures.

Classifications generally follow the government's budget function categories except health (which here includes health R&D in HHS and VA).

¹ Includes DOD R&D and atomic energy defense R&D in DOE.

² Includes all R&D not in defense (domestic and international discretionary programs).

December 19, 2000 - Final FY 2001 appropriations funding levels.

All figures are adjusted to reflect rescissions and across-the-board cuts.

Table 4. "21st Century Research Fund" in FY 2001 Appropriations (FINAL)

**Table 4. "21st Century Research Fund" by Agency
R&D in FY 2001 Appropriations (FINAL)
(budget authority in millions of dollars)**

	FY 2000 Estimate	FY 2001 Request	Final FY 2001 Appropriations				
			FY 2001 FINAL	Chg. from Request Amount	Chg. from Request Percent	Chg. from FY 2000 Amount	Chg. from FY 2000 Percent
Health and Human Services	17,813	18,813	20,376	1,563	8.3%	2,563	14.4%
<i>(National Institutes of Health)</i>	<i>17,813</i>	<i>18,813</i>	<i>20,376</i>	<i>1,563</i>	<i>8.3%</i>	<i>2,563</i>	<i>14.4%</i>
National Science Foundation	3,897	4,572	4,416	-156	-3.4%	519	13.3%
Department of Energy	3,688	4,220	4,178	-42	-1.0%	490	13.3%
National Aeronautics & Space Admin.	4,896	5,165	5,369	204	3.9%	473	9.7%
Department of Defense	4,571	4,362	4,983	621	14.2%	411	9.0%
<i>(Basic Research)</i>	<i>1,161</i>	<i>1,217</i>	<i>1,310</i>	<i>93</i>	<i>7.6%</i>	<i>149</i>	<i>12.8%</i>
<i>(Applied Research)</i>	<i>3,410</i>	<i>3,144</i>	<i>3,673</i>	<i>528</i>	<i>16.8%</i>	<i>262</i>	<i>7.7%</i>
Agriculture	1,568	1,641	1,698	57	3.5%	130	8.3%
Commerce	832	894	815	-79	-8.8%	-18	-2.1%
Interior	813	895	883	-13	-1.4%	69	8.5%
Environmental Protection Agency	664	758	699	-59	-7.8%	35	5.3%
Veterans Affairs	321	321	350	29	9.1%	29	9.1%
Education	319	379	363	-16	-4.2%	44	13.9%
Transportation	646	899	732	-167	-18.6%	85	13.2%
Total "21st Century Fund"	40,028	42,918	44,861	1,943	4.5%	4,833	12.1%

Definitions for the 21st Century Research Fund do not correspond to definitions of R&D.

The Fund contains both R&D and non-R&D programs.

AAAS estimates of FY 2001 appropriations bills.

All figures are rounded to the nearest million. Changes calculated from unrounded figures.

December 19, 2000 - Final FY 2001 appropriations funding levels.

All figures are adjusted to reflect rescissions and across-the-board cuts.

Table 5. Total U.S. R&D, 1998-2000

Table 5. Total U.S. R&D, 1998-2000
(expenditures in millions of dollars)

(calendar years)	1998 Actual	1999 Preliminary	2000 Preliminary	% Change 1999-2000	% Share of Total ('00)
U.S. R&D by funding source:					
Federal Government	66,522	69,494	71,162	2.4%	26.9%
Industry	147,829	162,280	178,959	10.3%	67.7%
Universities and Colleges	5,166	5,534	5,951	7.5%	2.3%
Nonprofits	5,006	5,376	5,770	7.3%	2.2%
Nonfederal Government	1,993	2,143	2,322	8.4%	0.9%
Total U.S. R&D	226,515	244,828	264,165	7.9%	100.0%
U.S. R&D by performer:					
Federal Government	17,403	18,114	17,777	-1.9%	6.7%
Industry	167,102	182,017	199,170	9.4%	75.4%
Universities and Colleges	26,547	28,255	30,090	6.5%	11.4%
FFRDCs *	8,264	8,671	8,954	3.3%	3.4%
Nonprofits	7,198	7,772	8,174	5.2%	3.1%
Total U.S. R&D	226,515	244,828	264,165	7.9%	100.0%
U.S. R&D by character of work:					
Basic Research	40,892	42,515	45,471	7.0%	17.2%
<i>(from federal sources)</i>	20,289	21,361	22,441	5.1%	8.5%
<i>(from industry sources)</i>	13,366	13,436	14,777	10.0%	5.6%
Applied Research	45,866	52,269	56,704	8.5%	21.5%
Development	139,757	150,043	161,990	8.0%	61.3%
Total U.S. R&D	226,515	244,828	264,165	7.9%	100.0%
U.S. GDP** (billions of dollars)	8,760	9,255	9,708	4.9%	
U.S. R&D / GDP	2.59%	2.65%	2.72%		

Source: National Science Foundation, *National Patterns of R&D Resources, 2000*.

The complete data are available at <http://www.nsf.gov/sbe/srs/stats.htm>.

* Federally Funded Research and Development Centers.

** Gross Domestic Product.

These data are based on performer surveys of expenditures for calendar years, and thus differ from data presented elsewhere in this report (agency budget authority data by fiscal year). These data also exclude R&D facilities.