

Substantial Increases Proposed for Federal R&D in FY 2001

AAAS Preliminary Analysis of R&D in the FY 2001 Budget

(All figures in this analysis are **preliminary** and will be revised in later AAAS releases. This analysis is a preview of the forthcoming *AAAS Report XXV: Research and Development FY 2001*, a comprehensive look at the President's budget for R&D in FY 2001, which will be released at the 25th Anniversary AAAS Colloquium on Science and Technology Policy, April 11-13, 2000, in Washington, DC. More tables and supplemental materials on R&D in the FY 2001 budget can be found on the AAAS R&D Web site at <http://www.aaas.org/spp/R&D>. More information on the report and the Colloquium can be found at the end of this analysis.)

President Clinton released his proposed budget for the coming fiscal year on February 7. The proposed FY 2001 budget projects a string of surpluses well into the next century, and sets forth a plan to pay off the national debt by 2013 while still providing expanded Medicare coverage and real increases over the next decade in discretionary spending, the part of the federal budget out of which nearly all federal support of research and development (R&D) is funded.

R&D in the FY 2001 Budget: More for NSF, Fundamental Research, and Academic R&D; A Call for "Balance" in the Federal Portfolio

Budget requests in the past several years have been constrained because of tight caps on discretionary spending enacted in 1997. Although final appropriations have been generally favorable after Congress and the President figured out how to circumvent the caps, the FY 2001 cap would have required sharp cuts in discretionary programs in the FY 2001 request. The President, however, proposes to repeal the existing caps and replace them with far more generous ones that would allow a 5.2 percent increase in total discretionary spending in FY 2001. As a result, the budget finds room for increases in most R&D programs, including a 19 percent increase for R&D in the National Science Foundation (NSF).

- The request for **total federal R&D** in FY 2001 is \$85.3 billion, \$2.6 billion or 3.1 percent more than FY 2000 (see Table 1).
- For the second year in a row, the budget requests more for nondefense R&D than defense R&D. **Nondefense R&D** would increase by \$2.5 billion or 6.2 percent to \$43.3 billion, or 51 percent of total R&D (see Table 2). In FY 2001, defense R&D would increase slightly by \$66 million to \$42.1 billion (up 0.2 percent).
- The budget places a high priority on a **balanced allocation of resources among science and engineering disciplines**. Although a series of large increases for the National Institutes of Health (NIH) has resulted in an emphasis on biomedical and life sciences research in recent years, the FY 2001 budget proposes a more balanced federal research portfolio through large increases for R&D programs in non-life sciences disciplines. **Every major R&D funding agency would receive an increase except the Department of Defense (DOD)**, although even DOD would receive an increase for its basic research programs. The centerpiece of the request is the National Science Foundation (NSF), the only federal agency responsible for supporting R&D across the breadth of science and engineering disciplines. NSF would receive \$3.5 billion for R&D, an increase of \$561 million or 19.3 percent. There would also be a large increase for the Department of Energy (DOE; up 8.0 percent to \$7.7 billion), a strong supporter of physical sciences research and also the sponsor of major scientific facilities used by a variety of disciplines.

- The FY 2001 budget packages many of the proposed increases in new or existing multi-agency initiatives organized around a common theme. The new **National Nanotechnology Initiative** proposes \$495 million in FY 2001, double the current funding level for existing programs, for fundamental research at the nanoscale level. The budget also includes an Information Technology (IT) R&D initiative which assembles several existing IT R&D programs into a \$2.3 billion package, up from \$1.7 billion in FY 2000. This includes \$823 million for fundamental IT research, up from \$309 million, for the second year of what was called the IT² initiative in last year's request. There is also a new initiative in biobased products and bioenergy, and funding boosts for existing initiatives in climate change technology, global change research, and the Partnership for a New Generation of Vehicles.
- Among mission areas, **R&D in general science, commerce, energy, and health are priorities** in the FY 2001 request (see Table 2). General science R&D would see the largest jump of 16.5 percent or \$916 million to \$6.5 billion because of a 19.3 percent requested increase for R&D in NSF to \$3.5 billion, spread over the entire NSF portfolio of disciplines. There would also be substantial increases in general science R&D in the Department of Energy (DOE; up 13.3 percent to \$3.0 billion), including boosts in funding for IT research and construction of the Spallation Neutron Source (SNS). Energy-related R&D would increase 5.1 percent to \$1.3 billion because of additional funding for renewable energy technologies and energy conservation R&D in DOE. Commerce R&D would increase 15.8 percent because of large requested increases for technology programs and industrial standards research in the National Institute of Standards and Technology (NIST). Health R&D would also increase (up 5.0 percent to \$19.6 billion) because of a nearly \$1 billion requested increase for R&D in the National Institutes of Health (NIH), following a more than \$2 billion increase in FY 2000.
- Basic research across the breadth of science and engineering disciplines is a high priority for the Clinton Administration. **Basic research would total \$20.3 billion, an increase of \$1.3 billion or 6.8 percent**, following an even larger increase of \$1.5 billion in FY 2000 (see Table 3). Unlike in FY 2000 appropriations, however, where the bulk of the increase went to NIH basic research in the life sciences, the FY 2001 request would increase support across the broad range of science and engineering disciplines. NSF, the leading supporter of basic research in most non-life sciences disciplines, would receive \$3.0 billion for support of basic research, an increase of 19.4 percent. Basic research funding would increase significantly at the Department of Defense (\$1.2 billion, up 4.7 percent) and DOE (\$2.4 billion, up 6.1 percent), the primary sponsors of engineering and physical sciences basic research. In the non-biomedical life sciences, the U.S. Department of Agriculture (USDA) is a key sponsor, and would receive \$740 million (up 6.9 percent) for its support of basic research. NIH would remain the largest federal sponsor of basic research with \$10.4 billion (up 5.7 percent), more than half the total federal portfolio.
- Because the majority of federally funded basic research is performed by colleges and universities, the Clinton Administration's emphasis on basic research would result in **significant increases for federal R&D performed by colleges and universities. Total federally funded academic R&D would be \$17.8 billion in FY 2001 (up 7.8 percent; see Table 4)**. NSF, the largest sponsor of academic R&D for most non-life sciences disciplines, would increase its support by \$493 million or 21.2 percent to \$2.8 billion. The largest agency sponsor of academic research would continue to be NIH, with 61 percent of federal support for a total of \$10.9 billion (up 6.1 percent). The National Aeronautics and Space Administration (NASA; up 9.0 percent to \$1.1 billion) and DOE (up 10.2 percent to \$444 million), key sponsors of academic research in the physical sciences and engineering, plan to significantly expand their support.

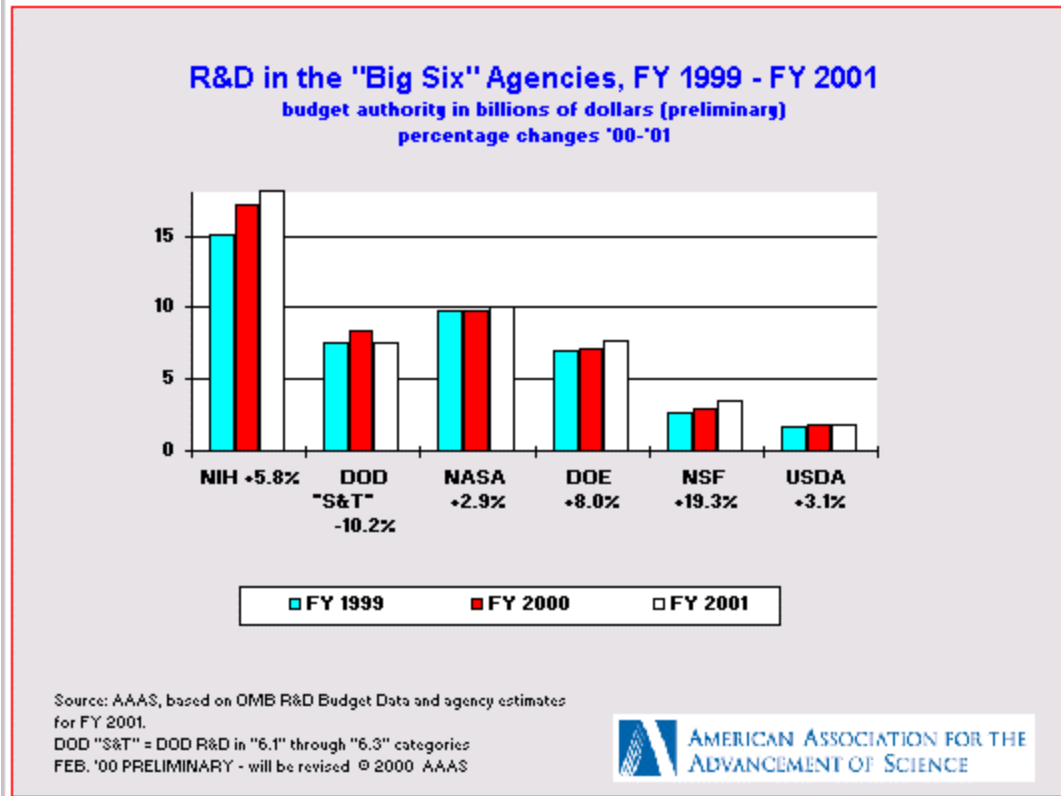


Figure 1.

- The **NIH** budget (including non-R&D components) would increase by \$1 billion or 5.6 percent to \$18.8 billion in FY 2001, less than the \$2.2 billion increase NIH received in FY 2000 (see Figure 1). Most institutes and centers would receive increases between 5 and 6 percent. One of NIH's key priorities is HIV/AIDS research, which would receive a total of \$2.1 billion, up nearly 8 percent. The National Institute of Allergy and Infectious Diseases (NIAID), the leading NIH institute for HIV/AIDS research, would receive an increase of 6.1 percent to \$1.9 billion. The National Human Genome Research Institute (NHGRI), responsible for NIH's contribution to the Human Genome Project, would receive \$358 million (up 6.5 percent).
- The **NSF** budget is the centerpiece of the Clinton Administration R&D request. Not only is it the lead supporter of the Administration's initiatives in nanotechnology research, biocomplexity, and IT research, but it also plays a key role in the Administration's goal of achieving a more balanced research portfolio. The total NSF budget would jump \$675 million or 17.3 percent to \$4.6 billion. NSF's R&D would total \$3.5 billion, up nearly 20 percent from FY 2000. The Directorate for Computer and Information Science and Engineering (CISE) would receive \$190 million for fundamental IT research (up from \$90 million in FY 2000), within a total CISE budget of \$529 million, an increase of 36.2 percent. The other research directorates would all receive increases of approximately 20 percent.
- **DOD's R&D** would fall slightly by 0.2 percent to \$38.6 billion, mostly because of sharp cuts in applied research (down 8.7 percent to \$3.1 billion) and exploratory development across all three services and the Defense Agencies. Although there would be a substantial \$11 billion or 4.0 percent increase in the total FY 2001 DOD budget to \$292 billion, the additional funds would mostly go toward weapons procurement and DOD's day-to-day operations. Among the DOD R&D categories, the "6.1" (basic research) category would receive a \$55 million or 4.8 percent boost to \$1.2 billion following an even larger increase in FY 2000. The Defense Advanced Research Projects Agency (DARPA; \$2.0 billion, up 4.0 percent) would receive large increases in its fundamental IT and biological warfare research

programs. The Ballistic Missile Defense Organization (BMDO) would receive a 15 percent boost in its R&D budget to \$3.9 billion, including \$1.7 billion (up from \$1.0 billion in FY 2000) for national missile defense development.

- The total **NASA** budget (\$14.0 billion) would increase 3.2 percent in FY 2001. NASA's R&D would increase 2.9 percent to \$10.0 billion. The International Space Station project would decline \$209 million or 9.0 percent to \$2.1 billion, but there would be substantial increases for several NASA research programs. Space Science would receive \$2.4 billion, a boost of \$206 million or 9.4 percent. The Life and Microgravity Sciences and Applications program would receive \$302 million (up 10.1 percent), including expanded efforts in biomedical, microgravity, and health research. After several years of cuts, the Aero-Space Technology program would increase 6.1 percent to \$1.2 billion, including a \$107 million boost to \$290 million for development work on reusable launch vehicles.
- **DOE's nondefense R&D** budget of \$4.2 billion (up 11.0 percent) includes \$182 million (up 42.3 percent to \$182 million) for Advanced Scientific Computing Research, renamed from Computational and Technology Research. There is also a large requested increase for Basic Energy Sciences (up 30.3 percent to \$1.0 billion). Most of the increase is for construction of the Spallation Neutron Source (\$262 million, up from \$100 million), but BES research programs would also receive an 11.0 percent increase to \$754 million. Most of DOE's defense R&D programs are now in the National Nuclear Security Administration (NNSA) within DOE. There would be considerable restructuring of the defense R&D programs, but R&D funding would still increase by 4.4 percent to \$3.4 billion.
- The **U.S. Department of Agriculture's (USDA)** R&D budget of \$1.8 billion in FY 2001 would be a 3.1 percent increase from FY 2000. USDA proposes \$150 million for the National Research Initiative extramural competitive grants program, \$31 million more than the current year, and an expansion of its intramural Agricultural Research Service (ARS) R&D program to \$956 million (up 5.5 percent). In both FY 2000 and FY 2001, USDA expects to distribute up to \$120 million a year in competitive research grants under a new mandatory program.
- The other major R&D funding agencies would all receive increases in the FY 2001 budget. The **National Institute of Standards and Technology (NIST)** would see its R&D budget increase 9.4 percent to \$501 million because of increases for both its intramural and extramural (Advanced Technology Program) research programs. The **U.S. Geological Survey (USGS)**, the lead science agency in the Department of the Interior, would receive \$538 million for its R&D activities, an increase of 7.2 percent. After declining last year, the **Environmental Protection Agency (EPA)** hopes for a 4.8 percent increase in its R&D (\$679 million). The **Department of Transportation (DOT)** requests \$733 million for its R&D programs, a 25.3 percent increase. Most of the increase, however, would depend on congressional approval of a proposal to divert transportation tax revenues from state transportation projects to R&D. Congress rejected a similar proposal last year.

The Budgetary Context for FY 2001: Raising the Caps, Paying Off the National Debt

Nearly all federal R&D is funded through the discretionary portion of the budget, the one-third of the budget subject to annual appropriations. **The President proposes \$622 billion in discretionary budget authority for FY 2001.** This represents an increase of \$31 billion or 5.2 percent over the FY 2000 funding level. The increase would be spread over both the defense and nondefense accounts. To stay ahead of Republican calls for dramatically increased defense spending, the budget proposes \$307 billion (up 4.2 percent) for defense, while the budget also proposes increases for many domestic programs, for a total of \$316 billion, up 6.2 percent from FY 2000.

In past years, the Administration was constrained in drafting its discretionary proposals by discretionary spending caps signed into law in 1997. The caps are still law, even though Congress and the President have found ways in the past two years to circumvent them in order to spend far more than the caps, and thus provide increases for R&D programs (see Figure 2).

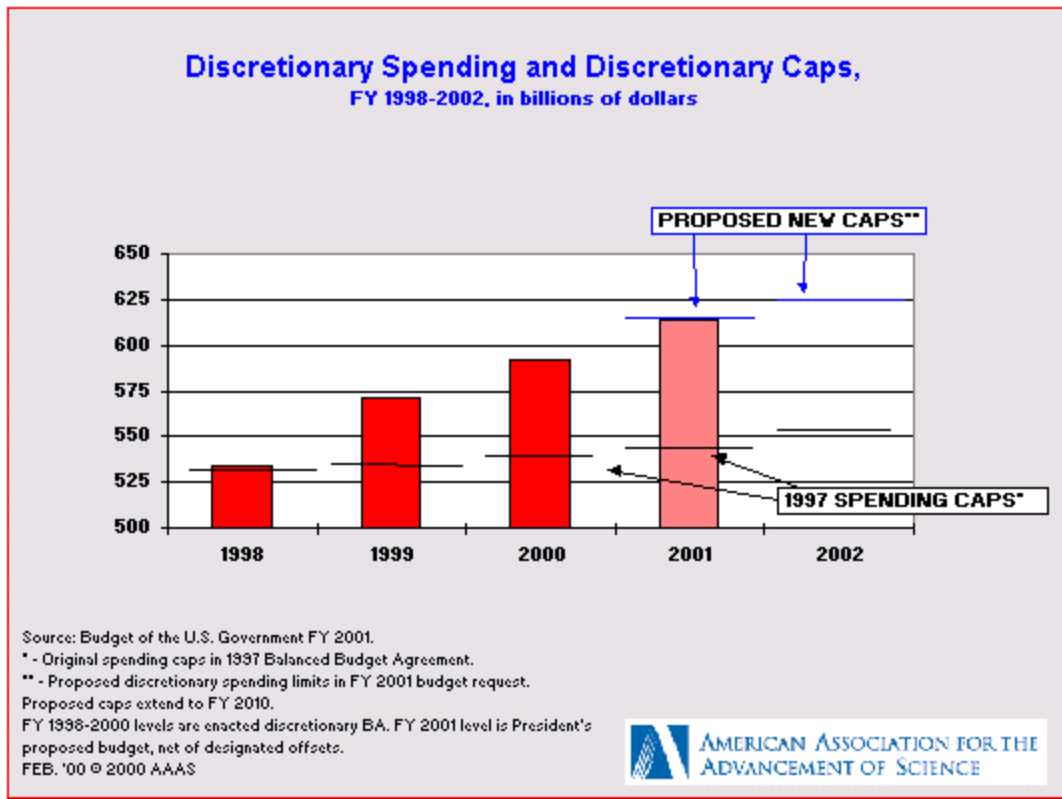


Figure 2.

To comply with the FY 2001 cap, the President would have had to cut discretionary spending by nearly 10 percent below the FY 2000 level. Instead, **the President's budget proposes a new set of caps** for FY 2001, extending to FY 2010. As shown in Figure 2, the new cap for FY 2001 is more than \$70 billion above the existing one, and is high enough to accommodate the President's requested increases for discretionary programs. In future years, the caps rise at the rate of expected inflation and would thus allow for small future increases in R&D and other discretionary programs.

Despite the requested increases for discretionary programs, and despite proposals to dramatically expand the Medicare program to cover prescription drugs while at the same time offering net tax cuts, the **President's budget still projects large and growing budget surpluses** over the next decade. Federal revenues have been growing rapidly in the past few years because of unexpected strength in the U.S. economy. The President's budget assumes that economic growth and thus growth in federal revenues will outpace growth in federal spending over the next decade, which would result in budget surpluses so large that the federal government is expected to record surpluses even without counting large surpluses in the Social Security trust fund (the off-budget surplus). There is bipartisan agreement that all Social Security surpluses should be used to pay down the national debt, leaving the remaining on-budget surpluses to be used for other purposes such as tax cuts, spending, or paying off more debt. The President's budget proposes to use projected on-budget surpluses for a mixture of these three options.

Under the President's budget plan, the surpluses would be so large that **the national debt to the public would be paid off in FY 2013** (see Figure 3). This would make it easier later in the century for the federal government to pay off the government's internal debt, most of which is held by Social Security, and would eliminate net interest on the national debt (\$220 billion in FY 2000) as an expense in the federal budget.

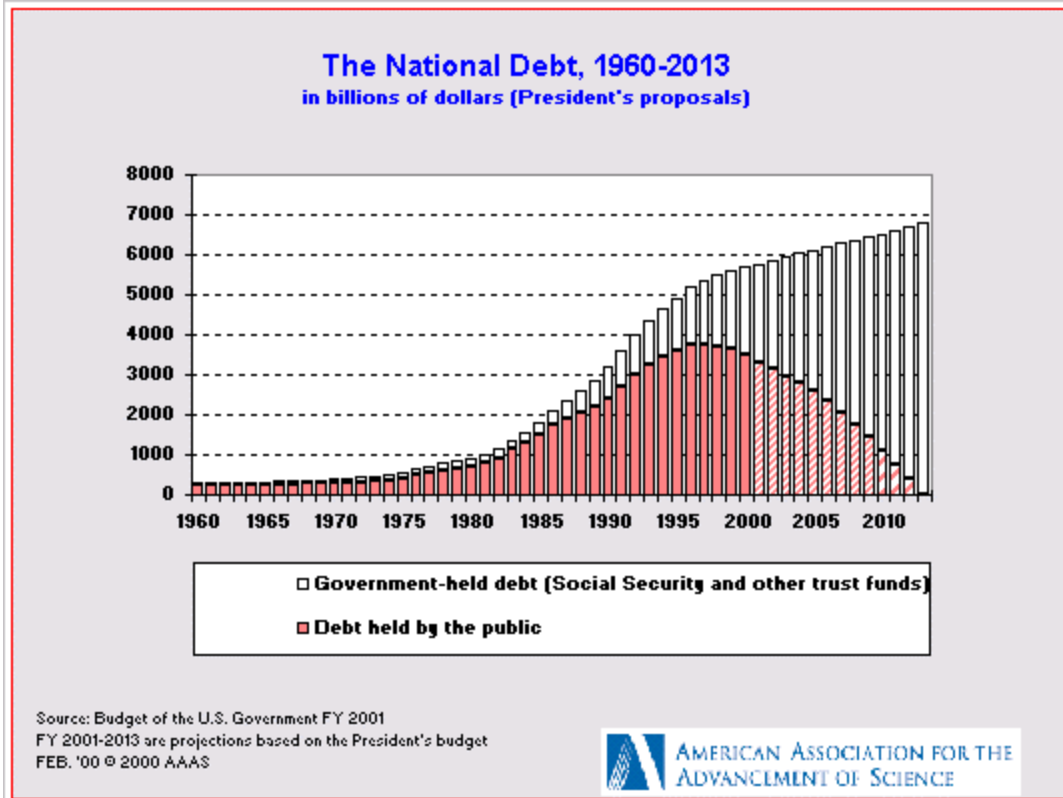


Figure 3.

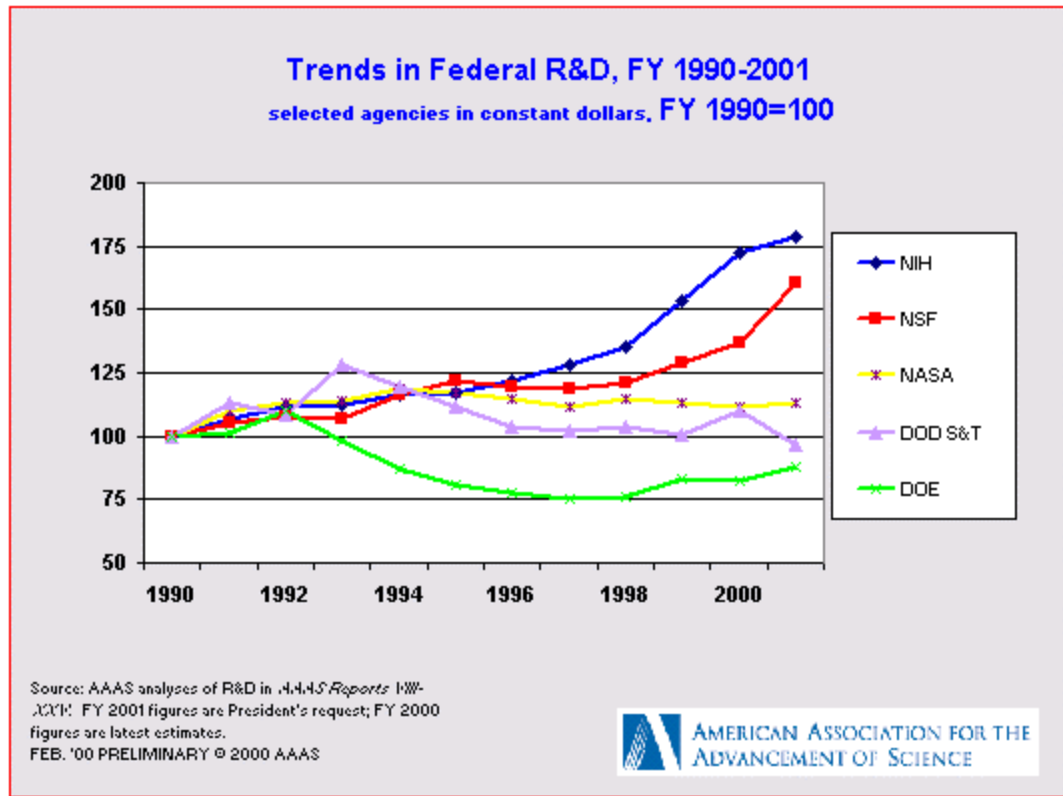


Figure 4.

Recent Historical Trends in Federal R&D

Over the past decade, federal R&D has generally increased, but in the mid-1990s the drive to achieve a balanced budget through cuts in discretionary programs took its toll on the R&D programs of several agencies. As shown in Figure 4, except for NIH the largest federal R&D funding agencies have been through ups and downs in their R&D budgets over the past decade. While NIH has received regular increases every year, and in the past two years received increases of 15 percent or more, NSF endured a period of stagnant funding in the mid-1990s before winning increases the past two years and a sharp requested boost for next year. Similarly, NASA R&D stagnated in the mid-1990s and remains well below the FY 1994 level. DOE R&D bottomed out in FY 1997 as a result of post-Cold War cutbacks on the defense side and Republican hostility to its energy R&D programs on the nondefense side, but its R&D funding has been on the rise for the past few years. DOD's S&T programs would fall below the FY 1990 funding level in the FY 2001 request, despite increasing concern in the defense community that current DOD S&T investments are inadequate to prepare the U.S. military for the warfighting challenges of the coming decades.

Impacts of Funding Trends on the Federal Research Portfolio

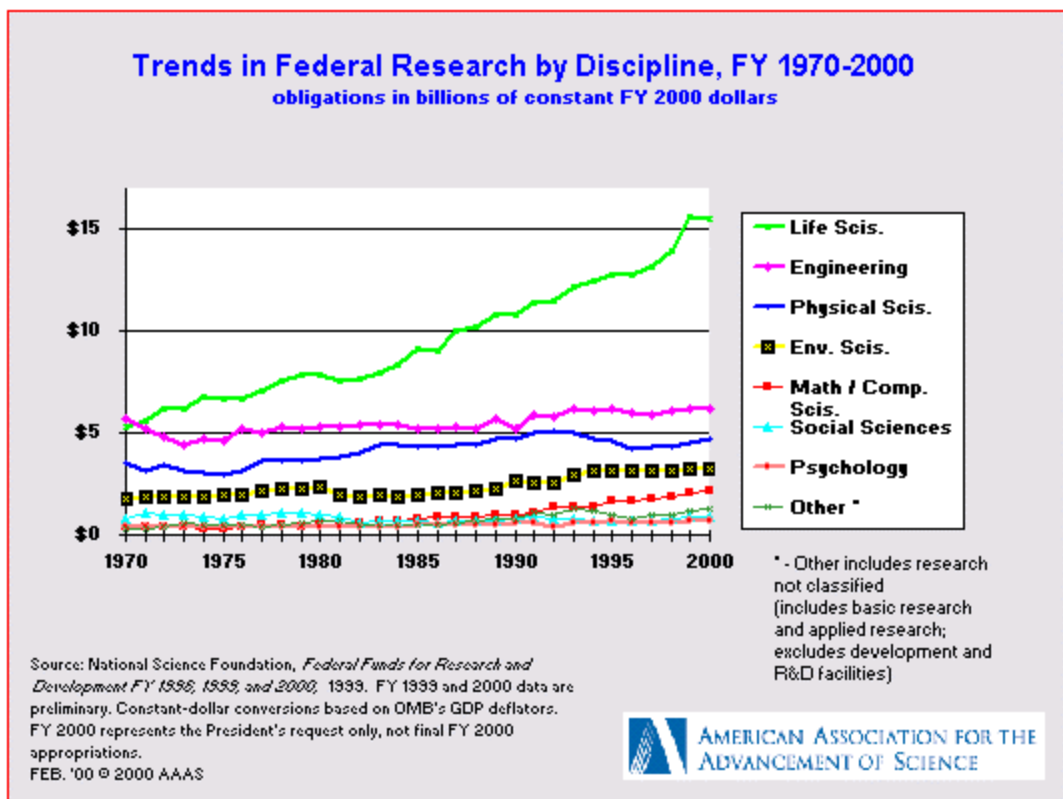


Figure 5.

Increases for NIH over the past few decades have resulted in a dramatic expansion in federal support for life sciences research, nearly three-quarters of which is funded by NIH. Other disciplines, funded by agencies with stagnant or declining budgets, have not fared as well; it is this disparity that the proposed budget's call for a more balanced research portfolio aims to address.

Not surprisingly, the upward trend in federal support for life sciences research (see Figure 5) mirrors the steady growth in the NIH budget over the past three decades. This trend is remarkable when contrasted with how other disciplines have fared during this time period. Federal support for engineering research,

which was greater than life sciences support in FY 1970, has stagnated for three decades. Support for the physical sciences (physics, chemistry, astronomy, etc.) showed slow but steady increases until the early 1990s, but has declined since then due to cuts in DOE and especially DOD.

Of the total federal research portfolio of \$35 billion in FY 2000 (excluding development and R&D facilities), \$16 billion (or nearly 45 percent) goes to life sciences research, compared with less than 30 percent in FY 1970. This dramatic growth for the life sciences combined with flat or declining funding in other agencies' support of non-life sciences disciplines has resulted in increasing concern within the scientific community that the federal portfolio has become unbalanced.

In response to this concern, the FY 2001 budget proposal calls for further increases for NIH, but larger increases to R&D programs in other agencies whose support is key to non-life sciences fields. NSF, as the only federal agency with responsibility for funding nearly all science and engineering disciplines, would receive enough new money to significantly boost funding levels for nearly all the disciplines represented in Figure 5. Other agencies with significant funding roles in the physical sciences (DOE) and environmental sciences (USGS, EPA, NASA) would also receive large funding boosts in their research budgets.

Outlook for the FY 2001 Budget Process

Because of the optimistic economic outlook and bipartisan agreement to increase R&D spending in last year's appropriations process, the outlook for federal R&D in FY 2001 is highly favorable. Congress, of course, will have its own priorities and will alter the President's request, but it seems almost certain that final FY 2001 appropriations for R&D in the aggregate will be similar and maybe even higher than these requested funding levels. Although many Republicans would like to set the new cap for FY 2001 discretionary spending lower than the President's cap, there is nevertheless a near-consensus that it will have to be far higher than the existing one. Within whatever cap is agreed upon, Congress is almost certain to boost NIH and DOD funding above the requested level, and in an election year Congress may decide to spend whatever is necessary to reach agreement with the President on an early end to the appropriations process. With the concern for a balanced research portfolio articulated by no less than President Clinton himself, there is a high probability that programs across the breadth of the federal R&D portfolio will benefit.

-February 10, 2000

(More information on the 25th Anniversary AAAS Colloquium on Science and Technology Policy, supplementary materials on R&D in the FY 2001 budget, historical data and charts, and more information on *AAAS Report XXV: Research and Development FY 2001*, can be found on the AAAS R&D Web site at <http://www.aaas.org/spp/R&D>, or by calling 202-326-6607.)

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AAAS Preliminary Analysis of R&D in the FY 2001 Budget

Table 1. R&D in the FY 2001 Budget by Agency (PRELIMINARY)
(budget authority in millions of dollars)

	FY 1999	FY 2000	FY 2001	Change FY 00-01	
	Actual	Estimate	Budget	Amount	Percent
Total R&D (Conduct and Facilities)					
Defense (military)	38,850	38,719	38,640	-79	-0.2%
S&T (6.1-6.3)	7,574	8,397	7,543	-854	-10.2%
All Other DOD R&D	31,276	30,322	31,097	775	2.6%
Health and Human Services	15,797	18,063	18,998	935	5.2%
Nat'l Institutes of Health	15,008	17,141	18,133	992	5.8%
NASA	9,715	9,753	10,035	282	2.9%
Energy	6,992	7,091	7,655	564	8.0%
Nat'l Science Foundation	2,702	2,903	3,464	561	19.3%
Agriculture	1,645	1,773	1,828	55	3.1%
Commerce	1,084	1,073	1,152	79	7.4%
NOAA	593	591	594	3	0.5%
NIST	465	458	501	43	9.4%
Interior	500	584	590	6	1.0%
Transportation	786	585	733	148	25.3%
Environ. Protection Agency	670	648	679	31	4.8%
All Other	1,601	1,552	1,561	9	0.6%
Total R&D	80,342	82,744	85,335	2,591	3.1%
Defense	42,049	41,994	42,060	66	0.2%
Nondefense	38,293	40,750	43,275	2,525	6.2%
Basic Research	17,468	19,027	20,328	1,301	6.8%
Applied Research	15,915	17,193	18,026	833	4.8%
Development	44,302	44,071	44,323	252	0.6%
R&D Facilities and Equipment	2,657	2,453	2,658	205	8.4%

Source: AAAS, based on OMB data for R&D for FY 2001, agency budget justifications, and information from agency budget offices.

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AAAS Preliminary Analysis of R&D in the FY 2001 Budget

Table 2. Major Functional Categories of R&D¹
(budget authority in millions of dollars)

	FY 1999	FY 2000	FY 2001	Change FY 00-01		% Share of Total ('01)
	Actual	Estimate	Budget	Amount	Percent	
Defense	42,049	41,994	42,060	66	0.2%	49.3%
Nondefense ²	38,293	40,750	43,275	2,525	6.2%	50.7%
Space	8,521	8,722	9,100	378	4.3%	10.7%
Health	16,403	18,644	19,572	928	5.0%	22.9%
Energy ³	1,178	1,242	1,305	63	5.1%	1.5%
General Science	5,397	5,563	6,479	916	16.5%	7.6%
Environment ⁴	2,024	2,088	2,143	55	2.6%	2.5%
Agriculture	1,435	1,562	1,591	29	1.9%	1.9%
Transportation	1,980	1,616	1,668	52	3.2%	2.0%
Commerce	490	481	557	76	15.8%	0.7%
International	190	142	114	-28	-19.7%	0.1%
All Other	675	690	746	56	8.1%	0.9%
Total R&D	80,342	82,744	85,335	2,591	3.1%	100.0%

Source: Authors' estimates based on data from OMB and agency budget justifications.

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

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

¹ Includes conduct of R&D and R&D facilities.

² Includes all R&D not in defense.

³ Does not reflect proposed deferral of Clean Coal Technology resources.

⁴ Includes natural resources R&D.

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AAAS Preliminary Analysis of R&D in the FY 2001 Budget

Table 3. Research in the FY 2001 Budget (PRELIMINARY)
(budget authority in millions of dollars)

	FY 1999	FY 2000	FY 2001	Change FY 00-01	
	Actual	Estimate	Budget	Amount	Percent
BASIC RESEARCH					
Defense (military)	1,082	1,175	1,230	55	4.7%
Health and Human Services	8,642	9,857	10,422	565	5.7%
<i>Nat'l Institutes of Health</i>	<i>8,640</i>	<i>9,855</i>	<i>10,420</i>	565	5.7%
NASA	1,981	1,947	1,895	-52	-2.7%
Energy	2,228	2,242	2,379	137	6.1%
Nat'l Science Foundation	2,330	2,512	3,000	488	19.4%
Agriculture	634	692	740	48	6.9%
Commerce (NIST)	39	39	52	13	33.3%
Interior	50	61	63	2	3.3%
Transportation	42	46	69	23	50.0%
Environ. Protection Agency	57	58	76	18	31.0%
Smithsonian	95	102	108	6	5.9%
Veterans Affairs	263	268	268	0	0.0%
All Other	25	28	26	-2	-7.1%
Total Basic Research	17,468	19,027	20,328	1,301	6.8%
RESEARCH (basic + applied)					
Defense (military)	4,146	4,558	4,317	-241	-5.3%
Health and Human Services	13,640	15,585	16,357	772	5.0%
<i>Nat'l Institutes of Health</i>	<i>12,888</i>	<i>14,722</i>	<i>15,547</i>	825	5.6%
NASA	4,287	4,312	4,712	400	9.3%
Energy	4,038	4,155	4,553	398	9.6%
Nat'l Science Foundation	2,477	2,676	3,193	517	19.3%
Agriculture	1,377	1,499	1,561	62	4.1%
Commerce	838	809	886	77	9.5%
NOAA	536	534	535	1	0.2%
NIST	296	269	341	72	26.8%
Interior	468	543	549	6	1.1%
Transportation	410	430	546	116	27.0%
Environ. Protection Agency	458	445	453	8	1.8%
Veterans Affairs	628	638	638	0	0.0%
Education	143	152	167	15	9.9%
Agency for Int'l Develop.	141	103	83	-20	-19.4%
Smithsonian	95	102	108	6	5.9%
All Other	237	213	231	18	8.5%
Total Research	33,383	36,220	38,354	2,134	5.9%

Source: AAAS, based on OMB data for R&D for FY 2001, agency budget justifications, and information from agency budget offices.

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AAAS Preliminary Analysis of R&D in the FY 2001 Budget

Table 4. Federal Support for Conduct of R&D at Colleges and Universities
(budget authority in millions of dollars)

	FY 1999	FY 2000	FY 2001	Change FY 00-01		% of
	Actual	Estimate	Budget	Amount	Percent	Total ('01)
Health & Human Services	9,181	10,431	11,027	596	5.7%	61.8%
<i>Nat'l Institutes of Health</i>	<i>9,077</i>	<i>10,319</i>	<i>10,948</i>	<i>629</i>	<i>6.1%</i>	<i>61.4%</i>
Nat'l Science Foundation	2,194	2,321	2,814	493	21.2%	15.8%
Defense (Military)	1,304	1,255	1,209	-46	-3.7%	6.8%
NASA	1,031	1,019	1,111	92	9.0%	6.2%
Energy	416	403	444	41	10.2%	2.5%
Agriculture	482	600	615	15	2.5%	3.4%
Environ. Protection Agency	101	107	107	0	0.0%	0.6%
Interior	50	46	47	1	2.2%	0.3%
Transportation	102	106	165	59	55.7%	0.9%
Commerce	80	79	86	7	8.9%	0.5%
NOAA	70	70	70	0	0.0%	0.4%
NIST	10	9	16	7	77.8%	0.1%
Education	131	146	167	21	14.4%	0.9%
Nuclear Reg. Comm.	4	4	4	0	0.0%	0.0%
Postal Service	5	5	5	0	0.0%	0.0%
Social Security	37	25	30	5	20.0%	0.2%
Total Federal R&D at Colleges and Universities	15,118	16,547	17,831	1,284	7.8%	100.0%

Source: AAAS, based on OMB supporting data for R&D, agency budget justifications, and information from agency budget offices.

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