

Congress Approves Large Increase for DOT R&D

(The complete series of AAAS R&D Funding Updates, including continually updated analyses of R&D by agency in FY 2000 appropriations, is available on the AAAS R&D Web Site (<http://www.aaas.org/spp/R&D>) in the "FY 2000 R&D" or the "What's New" sections.)

On October 4, Congress sent President Clinton a final FY 2000 Transportation appropriations bill (HR 2084) for the Department of Transportation (DOT). In a year of looming budget cuts because of tight spending caps, the Transportation bill stands out for its generous increases. Most of its spending is exempt from the budget caps that threaten to squeeze other domestic programs. The bill provides **\$645 million for DOT's R&D in FY 2000, an increase of \$43 million or 7.1 percent** (see Table). This increase is well below the President's request for \$836 million. DOT's R&D grows faster than the DOT budget as a whole, which totals \$50.1 billion, an increase of \$2.3 billion or 4.8 percent.

Although Congress faces the politically unpleasant task of making deep cuts to total discretionary spending in order to stay under budget caps, much of the spending in the Transportation bill is exempt from the caps because of two new categories of discretionary spending created in last year's Transportation Equity Act for the 21st Century (**TEA-21**). TEA-21, a six-year reauthorization bill for most highway and transit programs, dedicates all highway and transit trust fund receipts for transportation and creates two new categories of discretionary spending (highways and transit programs) for that purpose. Spending in these two categories is determined by receipts from transportation taxes and not by legislative limits. (Previously, Congress had diverted a substantial portion of transportation receipts to other discretionary programs, which had the effect of limiting transportation spending.)

Because transportation revenues have been rising and all these revenues are required to be spent on transportation, the Transportation bill is especially generous toward the two primary beneficiaries of TEA-21 spending, the Federal Highway Administration (FHWA; \$28.9 billion, up 5.7 percent) and the Federal Transit Administration (FTA; \$5.8 billion, up 7.5 percent). Most other DOT agencies, which are funded primarily or partially from general discretionary funds and are thus subject to the discretionary caps, see flat or shrinking budgets.

FHWA's R&D programs receive \$288 million, a gain of \$30 million or 11.7 percent over FY 1999, mostly because of the guaranteed funding in TEA-21. The Administration's request was for \$459 million, nearly double the FY 1999 level. In the budget request, DOT had proposed to reallocate a portion of unexpected additional revenues from the highway trust fund toward uses not specified in TEA-21, including a significant diversion of funds to R&D. The House, Senate, and final bills all rejected this proposal, and distributed all the additional revenue to the states according to the TEA-21 distribution formula. This keeps FHWA R&D closer to FY 1999 levels. The FHWA total includes \$47 million for R&D in the **Intelligent Transportation Systems (ITS)** program, down from the \$97 million request but up from last year. There are increases for most other FHWA R&D programs, though not as significant as those proposed by the Administration.

The **Federal Aviation Administration (FAA)** receives \$246 million for R&D activities, an increase of 8.9 percent. The House would have awarded an increase of 16.2 percent, but the conference report comes closer to the Senate total of \$241 million. The increase for R&D is due to a new \$16 million appropriation for the Safety Flight 2000 project, a project to develop new traffic-control and aircraft navigation technologies to improve the efficiency of commercial aviation. There are also increases for many other FAA R&D projects, including research on aircraft safety technologies and aging aircraft.

The **National Highway Traffic Safety Administration (NHTSA)** receives \$50 million for R&D in FY 2000, the same as FY 1999. Most of NHTSA's R&D involves highway safety research and the development of new safety-related technologies. R&D in the Federal Transit Administration (FTA) declines to \$13 million from \$17 million because Congress denies funds for a fuel cell bus R&D program.

The majority of DOT's R&D is performed by intramural laboratories and industrial performers. Universities and colleges perform about a tenth of DOT's R&D, and a similar proportion is performed by state and local governments.

Nearly two-thirds of DOT's research (excluding development and R&D facilities) is in the engineering sciences, particularly in civil engineering, but DOT also is a key federal funding source for research in psychology and physics (see Figure 1). DOT is only the fifth-largest supporter of engineering research despite its importance in the DOT portfolio, funding 5 percent of all federal support for engineering. The major sponsors of engineering research are the Department of Defense and the National Aeronautics and Space Administration, with about a third each of total federal support, followed by the Department of Energy and National Science Foundation. FAA funds 5 percent of total federal support for psychology, mostly into the role of human factors in aviation safety.

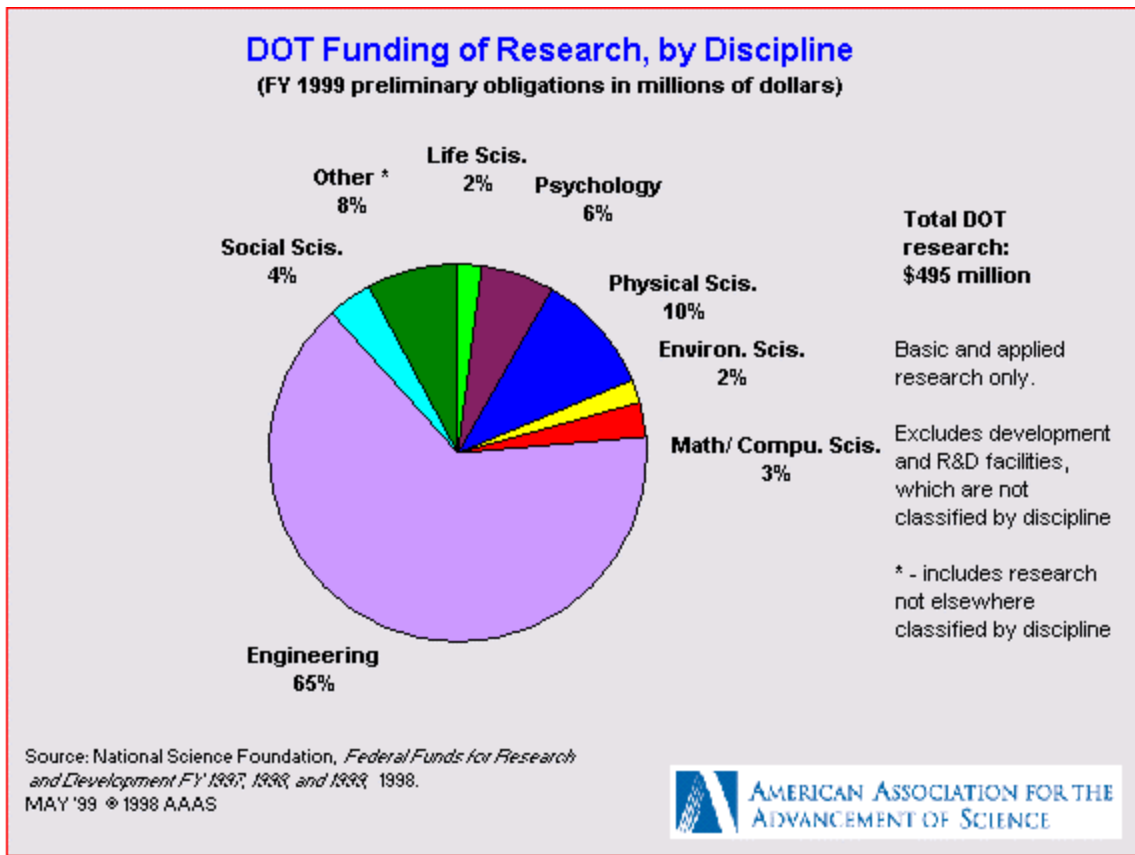


Figure 1.

Although DOT wins an increase in FY 2000, its support of R&D is still well below the levels of the early 1990s in inflation-adjusted terms, as shown in Figure 2. DOT's R&D peaked in FY 1995 and then suffered a steep decline, particularly in the FAA, as a result of efforts to bring the federal budget into surplus. There was a slight increase last year, and this year's 7.1 percent increase amounts to a 5.1 percent real increase after adjusting for inflation.

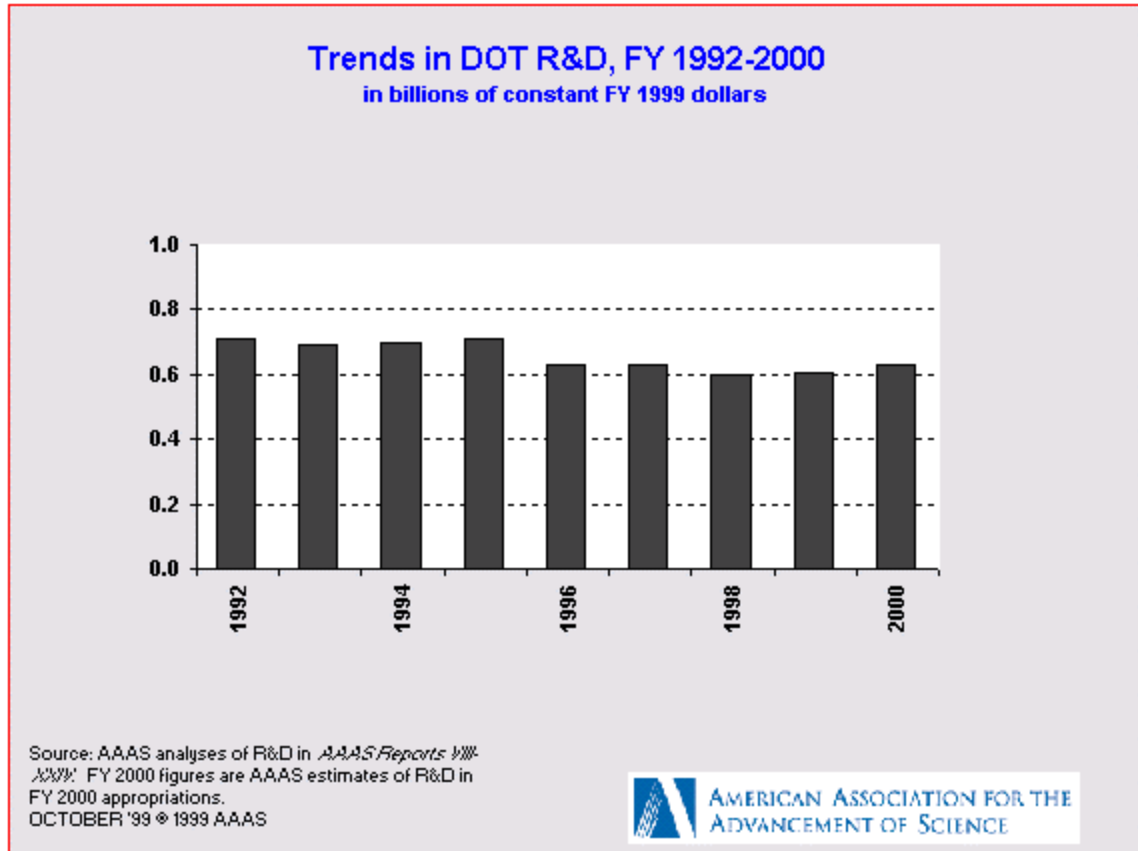


Figure 2.

President Clinton is expected to sign the Transportation bill this week, making it the fifth out of 13 appropriations bills to be signed into law.

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**Table. Department of Transportation
House-Senate Conference on R&D in the FY 2000 Budget
(budget authority in millions of dollars)***

	FY 1999 Estimate	FY 2000 Request	House-Senate Conference				
			FY 2000 CONF.	Chg. from Request Amount	Percent	Chg. from FY 1999 Amount	Percent
Federal Aviation Administration	226	246	246	-1	-0.4%	20	8.9%
Federal Highway Administration	258	459	288	-172	-37.4%	30	11.7%
Federal Transit Administration	17	19	13	-6	-30.6%	-3	-20.1%
Nat'l Highway Traffic Safety Admin.	50	59	50	-8	-14.2%	0	0.0%
Federal Railroad Administration	22	24	25	1	2.7%	3	12.1%
Coast Guard	15	15	14	-2	-12.5%	-1	-6.7%
Research and Special Programs	7	8	7	0	-3.9%	0	6.2%
Office of Secretary	9	4	2	-2	-47.4%	-6	-73.2%
Total DOT R&D	603	836	645	-191	-22.8%	43	7.1%
DOT Budget (includes R&D components): ¹							
Federal Aviation Administration	9,814	10,131	10,051	-80	-0.8%	238	2.4%
Federal Highway Administration	27,367	28,599	28,938	339	1.2%	1,571	5.7%
Federal Transit Administration	5,390	6,088	5,797	-291	-4.8%	407	7.5%
Coast Guard	4,284	4,135	4,024	-111	-2.7%	-260	-6.1%
Federal Railroad Administration	778	658	735	77	11.7%	-43	-5.5%
All Other ²	182	600	570	-30	-5.0%	388	212.8%
Total DOT Budget	47,815	50,212	50,116	-96	-0.2%	2,301	4.8%

*Authors' estimates. Includes conduct of R&D and R&D facilities.

¹ Includes budget authority from appropriations, limitation on obligations from trust funds, and other budgetary resources. Figures are rounded to the nearest million. Percentage changes calculated from unrounded figures.

² Includes Office of Secretary, NHTSA, RSPA, Maritime Administration, Bureau of Transportation Statistics, and others. The Maritime Administration (not included) is funded through the Commerce-Justice appropriations bill.

House-Senate conference funding levels.

These figures are final unless additional appropriations are made in an omnibus appropriations bill.