

Senate Cuts DOT R&D Funding

(This analysis is part of a series of AAAS R&D Funding Updates on the FY 2003 congressional appropriations process. This analysis includes information on R&D in Senate-approved FY 2003 appropriations for the Department of Transportation (DOT). The complete series of AAAS R&D Funding Updates, including continually updated analyses of R&D by agency in FY 2003 appropriations, is available on the AAAS R&D Web Site (<http://www.aaas.org/spp/rd>) in the "FY 2003 R&D" or the "What's New" sections.)

On July 25, as part of a rush to draft all 13 FY 2003 appropriations bills before a month-long August recess, the Senate Appropriations Committee drafted an FY 2003 Transportation appropriations bill (S. 2808) that would cut R&D funding in the Department of Transportation (DOT). The Senate Transportation bill **would provide \$697 million for DOT R&D in FY 2003, \$94 million or 11.9 percent less than the FY 2002 funding level**, though the final total may be higher at the discretion of the new Transportation Security Administration (TSA; see Table). The total DOT budget would fall by \$2.8 billion or 4.2 percent to \$64.9 billion, mostly because the FY 2002 total is inflated with billions of dollars in emergency appropriations to respond to the terrorist attacks on September 11 and to start up the TSA. Both TSA and the Coast Guard may be moved out of DOT and into a proposed Department of Homeland Security before the FY 2003 appropriations process is complete.

A major factor in the DOT budget this year and next year is the **Transportation Security Administration (TSA)**, which was created last fall in the aftermath of the September 11 hijackings to federalize control over airport security. TSA has received \$3.9 billion in federal funds in FY 2002 as it gradually implements federal control over airport security; nearly all of this funding was approved just last week (August 2) in the FY 2002 supplemental appropriations bill. The Senate Transportation bill would provide \$2.2 billion in FY 2003 appropriations for the new agency, up \$150 million from the initial Administration request in February. The total FY 2003 TSA budget would be \$4.95 billion in FY 2003 in the Senate bill; the remainder of the TSA budget would come from user fees, including the recently imposed September 11 security fee on airline tickets.

TSA, once it is up and running, would take over most aviation security functions currently performed by the Federal Aviation Administration (FAA). This is supposed to include \$97 million in aviation security research funded by FAA in FY 2002, of which \$50 million is emergency funds. The Aviation and Transportation Security Act (ATSA) of last November 19 which created TSA authorizes TSA to award extramural grants for R&D on technologies that enhance aviation security. These include explosive detection technologies; screening technologies for carry-on items; and technologies for reducing the vulnerability of aircraft to terrorist attack. TSA would also fund R&D in DOT laboratories. TSA received \$14 million for FY 2002 aviation security research in the FY 2002 supplemental bill; unfortunately, precise figures for TSA R&D in FY 2003 are not available because of the sketchy and rapidly evolving nature of TSA's activities and budgets. In the absence of documentation, the FY 2003 request figure for TSA R&D (\$47 million; see Table) assumes that TSA would take over FAA's current non-emergency R&D activities at the current funding level. The Senate bill provides a minimum of \$25 million for TSA R&D in FY 2003, but would not allocate a specific amount until TSA's budget requirements for FY 2003 become clearer.

As if this uncertainty were not enough, the new TSA may barely have time to make its home in DOT before it is moved to a proposed new Department of Homeland Security (DHS). Under proposed legislation currently before the House and the Senate, **both TSA and the Coast Guard would be transferred to DHS** as soon as the end of this year. (For more information on the proposed DHS, please see the AAAS special analysis of R&D in the Department of Homeland Security.) Under the Senate plan, at least \$48 million in R&D funding would make the move to DHS from DOT.

Another major factor in the DOT budget is the perennial issue of the transportation trust funds. Much of the spending in the Transportation bill is exempt from limits on discretionary spending set out in spending caps

and the annual budget resolution because of three new categories of discretionary spending created in the Transportation Equity Act for the 21st Century (**TEA-21**) of 1998 and the Aviation Investment and Reform Act for the 21st Century (**AIR21**) of 2000. TEA-21, a six-year reauthorization bill for most highway and transit programs, dedicates all highway and transit trust fund receipts to transportation and creates two new categories of discretionary spending (highways and transit programs) for that purpose. AIR21 provided TEA21-like guarantees of increased funding for many FAA programs beginning in FY 2001.

For the past few years, transportation revenues rose faster than expected and all these revenues were required to be spent on transportation, so DOT spending went up. But since gasoline tax revenues have fallen recently because of a slowing economy leading to lower gasoline consumption and lower vehicle sales, TEA-21 provides for automatic spending cuts in FY 2003. The Bush Administration's proposed DOT budget followed the TEA-21-mandated cuts and thus totaled \$54.8 billion in FY 2003, a sharp decline from \$61.1 billion in FY 2002. The Senate, however, would pump in general discretionary funds and would borrow from balances in the Highway Trust Fund to prevent the automatic cuts from taking place. Thus, the Senate would provide \$64.9 billion for DOT in FY 2003, an increase of \$3.7 billion or 6.1 percent over FY 2002. The Federal Highway Administration (FHWA), the primary beneficiary of TEA-21 spending would keep its budget even at \$33.3 billion instead of declining to \$24.1 billion, thus sparing states from steep cuts in highway funding.

The infusion of extra highway funds would also help FHWA R&D, which would rise 6.3 percent to \$293 million under the Senate plan instead of declining in the Administration plan. The FHWA total would include \$51 million for R&D in the **Intelligent Transportation Systems (ITS)** program and \$90 million for surface transportation research. The largest share of FHWA R&D funds goes to state governments for their transportation research projects. There would be increases for most FHWA R&D programs.

The **Federal Aviation Administration (FAA)** would receive \$223 million for R&D activities, a sharp decline of \$136 million or 37.9 percent. Most of the decline is due to the inclusion in FY 2002 of \$50 million in emergency aviation security R&D funds and \$47 million in programs that would be transferred to TSA in FY 2003. FAA's R&D addresses a number of aviation-related topics, including weather research, aircraft safety technology, human factors research, and development of 'free flight' technologies to improve aviation system capacity.

The **National Highway Traffic Safety Administration (NHTSA)** would receive \$59 million for R&D in FY 2003, up slightly from this year. Most of NHTSA's R&D involves highway safety research and the development of new safety-related technologies, including biomechanical research, tire safety research, and heavy vehicle research. While the Senate would more than double the request for the Federal Railroad Administration (FRA) to \$1.4 billion in order to bail out Amtrak, FRA's R&D portfolio would stay basically unchanged at \$23 million.

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.

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. 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.

The Senate Transportation bill did not see floor debate and approval before a month-long August congressional recess, so full Senate consideration has been delayed until September. The House will not draft its version of the bill until September, at the earliest, and possibly not until October.

- August 8, 2002

AAAS R&D Budget and Policy Program
1200 New York Ave, NW
Washington, DC 20005
(202) 326-6607; -6600
fax (202) 289 4950
science_policy@aaas.org
www.aaas.org/spp/rd (Note: New URL)

**Table. Department of Transportation
Senate Appropriations Committee Action on R&D in the FY 2003 Budget
(budget authority in millions of dollars)**

	FY 2002 Estimate*	FY 2003 Request	FY 2003 Senate	Action by Senate			
				Chg. from Request Amount	Percent	Chg. from FY 2002 Amount	Percent
Federal Aviation Administration	359	222	223	1	0.2%	-136	-37.9%
Transportation Security Administration ¹	14	47	25	-22	-46.9%	11	78.6%
Federal Highway Administration	275	266	293	27	10.2%	17	6.3%
Federal Transit Administration	7	4	4	0	-0.3%	-3	-40.2%
Nat'l Highway Traffic Safety Admin.	59	59	59	0	0.1%	0	0.6%
Federal Railroad Administration	32	31	32	1	3.2%	0	0.9%
Coast Guard	20	23	23	0	0.0%	3	14.2%
Research and Special Programs	10	14	10	-5	-31.7%	0	-1.1%
Fed. Motor Carrier Safety Admin.	3	6	6	0	0.0%	3	119.2%
Office of Secretary	12	11	21	10	93.8%	9	81.1%
Total DOT R&D	791	685	697	12	1.8%	-94	-11.9%
DOT Budget (includes R&D components): ²							
Federal Aviation Administration	13,744	13,582	13,586	4	0.0%	-158	-1.1%
Transportation Security Administration ¹	3,945	2,026	2,176	150	7.4%	-1,769	-44.8%
Federal Highway Administration	33,174	24,062	33,253	9,191	38.2%	79	0.2%
Federal Transit Administration	8,671	7,226	7,326	100	1.4%	-1,345	-15.5%
Coast Guard	5,768	5,893	5,772	-121	-2.1%	4	0.1%
Federal Railroad Administration	1,045	652	1,423	770	118.1%	378	36.2%
All Other ³	1,376	1,340	1,338	-2	-0.1%	-37	-2.7%
Total DOT Budget	67,722	54,781	64,874	10,093	18.4%	-2,848	-4.2%

AAAS estimates based on FY 2003 appropriations bills. Includes conduct of R&D and R&D facilities.

FY 2002 and FY 2003 request figures based on OMB R&D data and supplemental agency budget data.

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

* FY 2002 figures adjusted to reflect rescissions and supplementals in the FY 2002 supplemental bill (Public Law 107-206).

All figures adjusted to exclude President's proposal to fully fund federal retiree costs, and therefore differ slightly from figures presented in *AAAS Report XXVII*.

¹ New DOT agency for airport security; In FY 2002, TSA begins to take over aviation security functions (including R&D) formerly funded by FAA. Preliminary estimates of TSA R&D.

² 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.

³ Includes Office of Secretary, NHTSA, Maritime Admin., RSPA, Bureau of Transportation Statistics, and others.

August 6, 2002 - Senate Appropriations Committee-approved funding levels.

These funding levels may be amended or rejected on the Senate floor.