

DOT Plans Increases in Highway Research

AAAS R&D Funding Update on DOT in the FY 2006 Budget

(This analysis is a preview of the DOT section in the forthcoming *AAAS Report XXX: Research and Development FY 2006*, a comprehensive look at the President's budget for R&D in FY 2006. This analysis contains revised AAAS estimates of DOT R&D, different from figures presented in the AAAS Preliminary Analysis of February 10. More tables and continually updated supplemental materials on R&D in the FY 2006 budget can be found on the AAAS R&D Web site at <http://www.aaas.org/spp/rd>.)

Highlights

- **Department of Transportation (DOT) R&D funding would rise 8.5 percent to \$807 million in FY 2006** (see Table II-15). There would be a big boost in highway R&D, due to a perennial proposal to shift some resources away from state highway grants to highway research; similar proposals have been rejected by Congress in past years.

- R&D in the Federal Aviation Administration (FAA) would decline 11.4 percent to \$233 million, mirroring similar cuts to aeronautics research in NASA and aviation security R&D in the Department of Homeland Security (DHS).

DOT R&D in the FY 2006 Budget: Proposed Increases but Slim Chances of Passage

R&D is a relatively small part of the DOT budget and would total \$807 million in FY 2006, an increase of \$63 million or 8.5 percent, out of a total DOT budget of \$58.8 billion (see Table II-15). Although the DOT R&D increase would be the largest percentage increase among the major R&D funding agencies, the increase is highly unlikely to make it through Congress and reflects a perennial give-and-take between DOT and Congress over transportation spending priorities.

More than half of the DOT budget goes to the Federal Highway Administration (FHWA), mostly for spending out of the highway trust funds for road projects managed by state and local governments. Transportation funding increased dramatically beginning in FY 1999 as a result of the six-year (FY 1998-2003) reauthorization of transportation programs known as the Transportation Equity Act for the 21st Century (TEA-21), which governed spending out of the highway trust funds. The law expired in September 2003, and a series of temporary funding authorizations, the current one lasting through the end of May 2005, have kept transportation funding going until Congress can agree on a new reauthorization law. The old law specified that transportation tax revenues would be devoted exclusively to transportation, and specified formulas for allocating these funds. As a result of burgeoning revenues from transportation taxes, DOT's budget climbed from \$44 billion in FY 1998 all the way to \$67 billion in FY 2001. However, these revenues have dropped off significantly in recent years, and thus total DOT funding has leveled off. In addition, the Transportation Security Administration (TSA) and the Coast Guard transferred to the Department of Homeland Security (DHS) in March 2003, bringing the DOT budget down to its current level of \$60.8 billion.

Nearly all the funds from the transportation authorization bill go to the Federal Highway Administration (FHWA) for funds to state and local governments to finance road projects. Within a declining FHWA budget, however, the Bush Administration budget would increase FHWA R&D by 32.0 percent for a total of \$445 million, but similarly large increases proposed in past years have been denied by Congress (see Table II-15). The Administration once again proposes a reshuffling of the FHWA accounts to allow for

more spending on highway R&D, but in the past Congress has consistently rejected similar proposals and maximized state and local funding instead. FHWA spending on surface transportation research would nearly double to \$166 million, mostly for DOT laboratory-performed research on highway operations, safety, and pavements. The FHWA total includes \$67 million for R&D in the **Intelligent Transportation Systems (ITS)** program, down \$6 million from this year. The largest portion of FHWA R&D funding goes to state and local governments for their transportation-related research projects; this funding would remain flat at \$158 million.

The **Federal Aviation Administration (FAA)** would receive \$233 million for its R&D programs, a steep cut of 11.4 percent that mirrors other agencies' proposed cuts in aviation and aeronautics R&D. At the National Aeronautics and Space Administration (NASA), aeronautics research would fall 6 percent down to \$852 million, while the Department of Homeland Security (DHS) would reduce funding for aviation security R&D from \$178 million down to roughly \$100 million in FY 2006. 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 FAA's R&D portfolio used to be much larger in the \$300 to \$400 million range annually before the September 2001 terrorist attacks, but most of its aviation security R&D portfolio transferred to the Department of Homeland Security (DHS) in 2003. FAA investments in aviation advanced technology development would decline by nearly a third in the FY 2006 proposal.

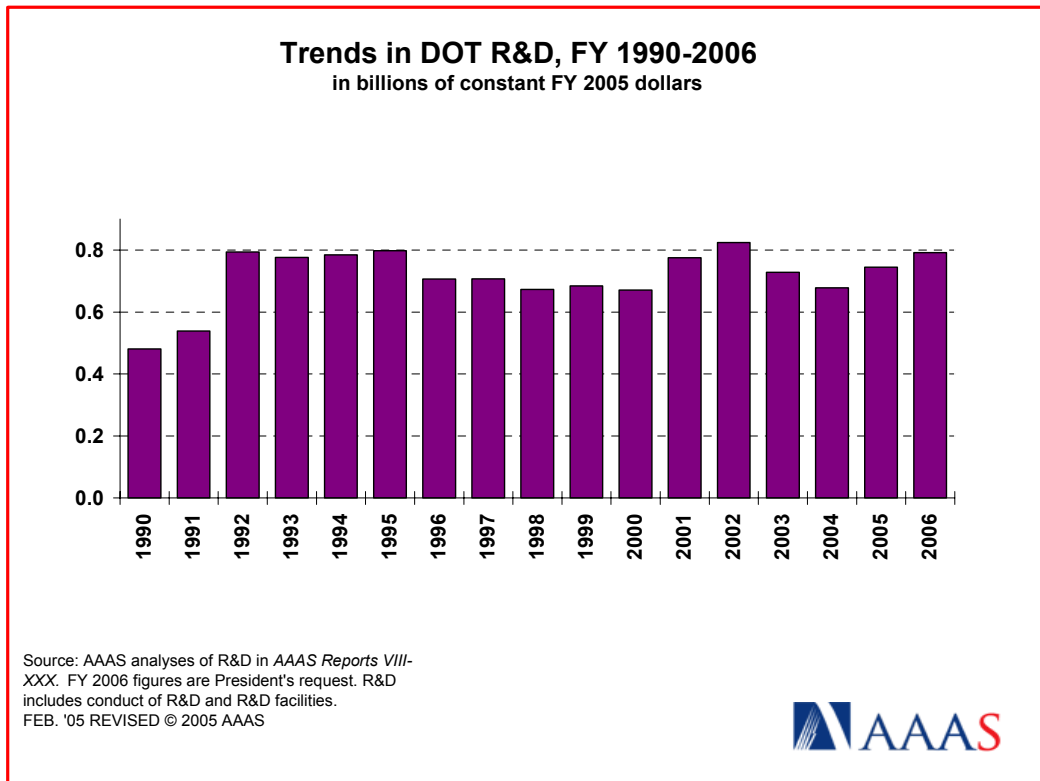


Figure 1. (click on the image for PDF)

Because of large increases for DOT R&D in FY 2001 and FY 2002 responding to the September 11 terrorist attacks on U.S. aviation, DOT's support for R&D reached a peak in FY 2002, after adjusting for inflation (see Figure 1). But with the transfer of aviation security R&D to the DHS, recent reductions in transportation tax revenues, and the transfer of the Coast Guard and its R&D program to DHS, DOT R&D declined sharply in FY 2003 and 2004 before rebounding this year.

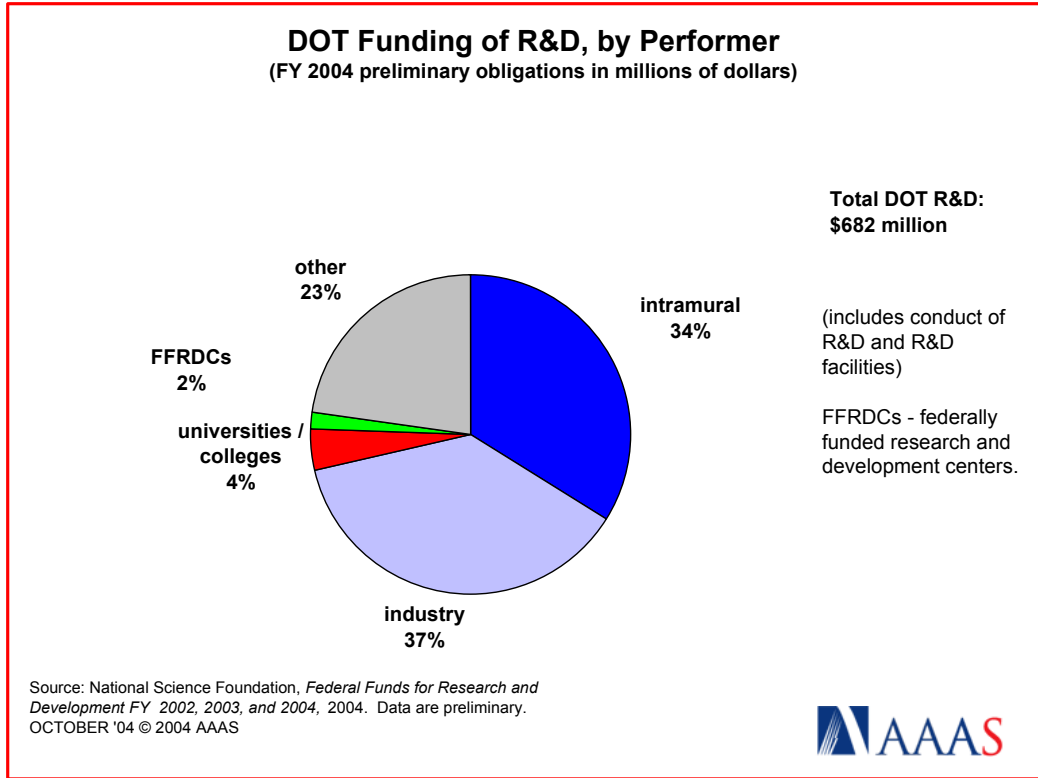


Figure 2. (click on the image for PDF)

The majority of DOT's R&D is performed by DOT laboratories and industry (see Figure 2). Universities and colleges perform just 4 percent DOT's R&D. Unlike the other large R&D funding agencies, a large proportion (most of the 'other' category) is performed by state and local governments. Most of this money comes from the FHWA under formula grants determined by the highway authorization bill.

- March 2, 2005

(More materials on R&D in the FY 2006 budget, historical data and charts, and more information on *AAAS Report XXX: Research and Development FY 2006*, can be found on the AAAS R&D Web site at <http://www.aaas.org/spp/rd>.)

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Table II-15. Department of Transportation R&D

Table II-15. R&D in the Department of Transportation
(budget authority in millions of dollars) *

	FY 2004	FY 2005	FY 2006	Change FY 05-06	
	Actual	Estimate	Budget	Amount	Percent
Federal Aviation Administration	248	263	233	-30	-11.4%
- <i>Research, Eng. & Development</i>	119	130	130	0	0.1%
- <i>Facilities and Equipment</i>	100	103	71	-31	-30.5%
- <i>All Other</i>	30	31	32	1	3.8%
Federal Highway Administration	332	337	445	108	32.0%
- <i>Surface Transportation Res.</i>	84	88	166	78	88.5%
- <i>Intelligent Transportation Sys.</i>	70	73	67	-6	-8.1%
- <i>State Planning and Research</i>	161	158	158	0	0.0%
- <i>All Other</i>	18	19	55	36	193.2%
Federal Transit Administration	5	8	2	-5	-69.3%
Nat'l High. Traffic & Safety Adm.	7	61	62	1	2.1%
Federal Railroad Administration	32	33	30	-2	-7.6%
Office of the Secretary	21	19	9	-10	-53.7%
Pipeline and Hazardous Materials 1/	14	13	12	-1	-5.2%
Research and Innov. Tech. 1/	0	2	4	1	59.7%
Federal Motor Carrier Safety Admin.	6	8	10	1	15.5%
Total DOT R&D	665	744	807	63	8.5%

Source: OMB data for R&D for FY 2006; agency budget justification; agency documents.
All figures are rounded to the nearest million. Changes calculated from unrounded figures.
* - DOT budget includes budget authority, limitations on obligations, and other resources.
1/ Formerly the Research and Special Programs Administration.

DOT Budget (includes R&D components; budget authority in millions): *

	FY 2004	FY 2005	FY 2006	Change FY 05-06	
	Actual	Estimate	Budget	Amount	Percent
Federal Highway Administration	34,945	34,979	34,445	-534	-1.5%
Federal Aviation Administration	14,109	14,059	13,310	-749	-5.3%
Federal Transit Administration	8,286	8,647	8,781	134	1.5%
Federal Railroad Administration	1,446	1,422	548	-874	-61.5%
Nat'l Highway Traffic Safety Admin.	298	454	696	242	53.3%
All Other ¹	1,668	1,673	1,397	-276	-16.5%
Miscellaneous Receipts	-229	-401	-370	31	-7.7%
Total DOT Budget *	60,523	60,833	58,807	-2,026	-3.3%

Source: *Budget of the United States Government FY 2006*.

* - DOT budget includes budget authority, limitations on obligations, and other resources.

¹ Includes Office of Secretary, RITA, Pipeline, Maritime Administration, Bureau of Transportation Statistics, and others.

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For more information on DOT, see Chapter 13.