



December 8, 2004 –
Final FY 2005 DOT Appropriations

DOT R&D Sees Modest Increase in 2005

Highlights

- **Department of Transportation (DOT) R&D funding inches up 1.5 percent to \$718 million in FY 2005 (see Table).**

- Congress rejected a large increase in highway R&D proposed by the Bush Administration, but boosted funding for aviation R&D.

DOT R&D in Final FY 2005 Appropriations

On November 20, Congress came to an agreement on an FY 2005 omnibus appropriations bill (HR 4818), which incorporates the final version of the FY 2005 Transportation-Treasury appropriations bill. President Bush signed the bill into law on December 8. The omnibus bill keeps funding for domestic programs flat in FY 2005; the Department of Transportation (DOT) R&D portfolio does slightly better than the average for domestic programs, even after factoring in a 0.80 percent across-the-board cut for most domestic programs. (All figures in this analysis reflect the across-the-board cut.) **The omnibus bill gives all of DOT a total budget of \$58.4 billion in FY 2005, off slightly from last year's funding level (see Table).** R&D is a relatively small part of the DOT budget and totals \$718 million in FY 2005, a modest increase of 1.5 percent or \$10 million (see Table). (For details of the DOT request, see Chapter 13 of *AAAS Report XXIX: R&D FY 2005* or the February 25 AAAS R&D Funding Update).

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 as a result of a stagnant economy, and thus total DOT funding has leveled off. In addition, the Transportation Security Administration (TSA) and the Coast Guard transferred to the new Department of Homeland Security (DHS) in March 2003, bringing the DOT budget down to its current level of \$58.4 billion.

In FY 2005, President Bush's budget proposal would have reduced DOT spending by 0.3 percent down to \$58.4 billion, and Congress approved a similar amount in the omnibus budget bill. Within a declining FHWA budget, however, the Bush Administration budget requested an increase for FHWA R&D of 23.7 percent for a total of \$394 million. The Administration proposed a reshuffling of the FHWA accounts to allow for more spending on highway R&D at the expense of funds to state and local governments. In the past, Congress rejected similar proposals and maximized state and local funding, and this year is no exception: the omnibus bill rejects the proposed shifts to leave FHWA R&D nearly flat at \$319 million. The FHWA total includes \$73 million for R&D in the **Intelligent Transportation Systems (ITS)** program, roughly the same as last year. The largest portion of FHWA R&D funding goes to state and local

governments for their transportation-related research projects; this funding increases slightly to \$150 million.

The **Federal Aviation Administration (FAA)** receives \$262 million for its R&D programs, a boost of 5.6 percent in contrast to a requested cut. 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 Transportation Security Administration (TSA), now housed within the Department of Homeland Security (DHS). FAA investments in aircraft safety technology and aviation advanced technology development increase in the omnibus bill.

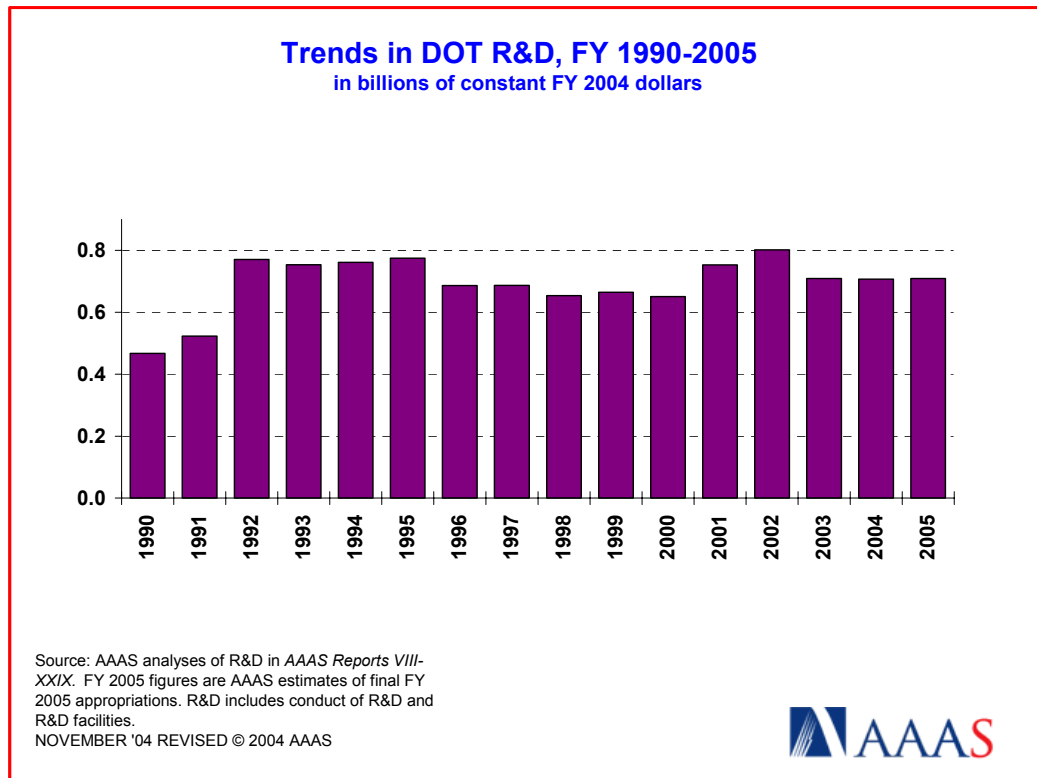


Figure 1. (click on the image for PDF)

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. DOT's R&D crested 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 (see Figure 1). FAA and FHWA R&D then increased in the late 1990s, and with the help of emergency R&D funds for aviation security R&D in the aftermath of September 11 rose to the FY 2002 peak. But with the transfer of aviation security R&D to the TSA, now in 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 has held steady since then.

The majority of DOT's R&D is performed by intramural laboratories and industrial performers, with about a third each of the total portfolio (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 is performed by state and local governments (in "Other" in Figure 2). Most of this money comes from the FHWA under formula grants determined by the highway authorization bill.

More than three-quarters 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 less than 4 percent of all federal support for engineering. The major sponsors of engineering research are DOD and NASA, with about a third each of total federal support, followed by the Department of Energy and National Science Foundation.

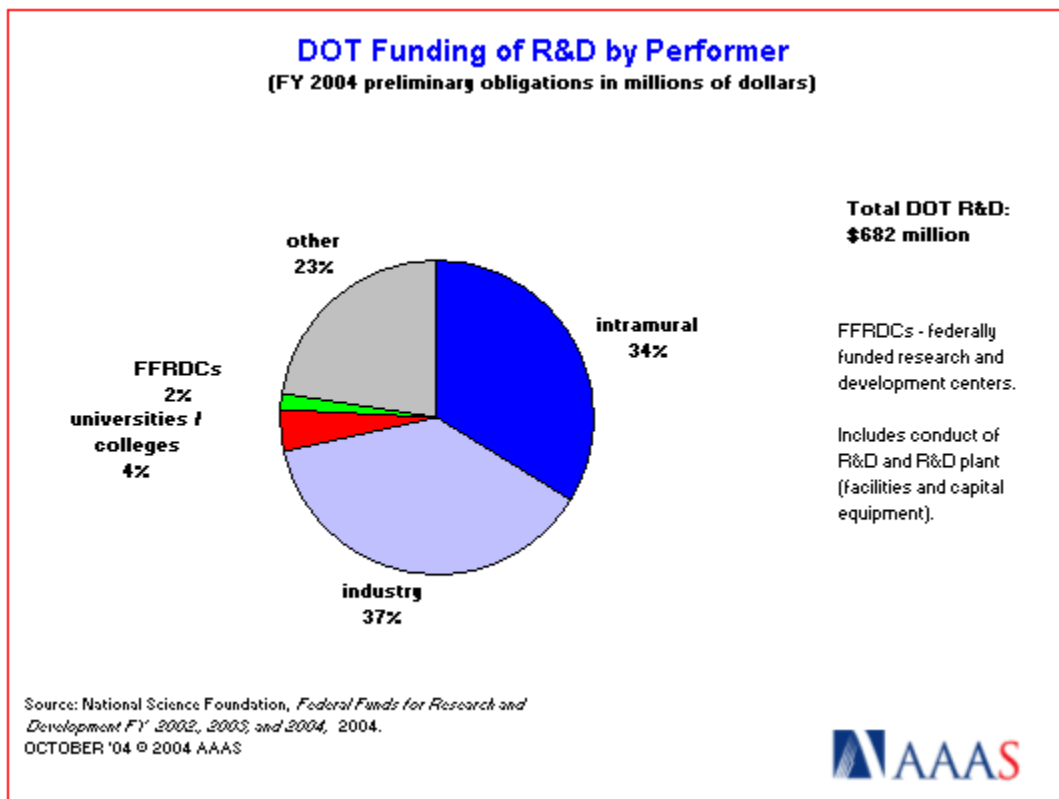


Figure 2. (click on the image for PDF)

Next Steps

President Bush signed the omnibus bill into law on December 8, thus finalizing the FY 2005 DOT budget. Congress is expected to try once again to pass a comprehensive transportation authorization in 2005; the current temporary extension expires on May 31. A new authorization could bring large changes in DOT R&D priorities and funding levels.

(This analysis is one of a series of AAAS R&D Funding Updates on the FY 2005 congressional appropriations process. The complete series of AAAS R&D Funding Updates is available on the AAAS R&D Web Site (<http://www.aaas.org/spp/rd>.)

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Table. Dept. of Transportation R&D in FY 2005 Final Appropriations

**Table. Department of Transportation
Final Congressional Action on R&D in the FY 2005 Budget
(budget authority in millions of dollars)**

| | FY 2004 Estimate | FY 2005 Request | FY 2005 Approved | House-Senate Conference | | | |
|--|---------------------|--------------------|----------------------------|-------------------------|--------------|-------------------|--------------|
| | | | | Chg. from Request | | Chg. from FY 2004 | |
| | | | | Amount | Percent | Amount | Percent |
| Federal Aviation Administration | 248 | 222 | 262 | 40 | 17.9% | 14 | 5.6% |
| Federal Highway Administration | 318 | 394 | 319 | -75 | -18.9% | 1 | 0.3% |
| Federal Transit Administration | 5 | 3 | 3 | 0 | -0.9% | -2 | -44.6% |
| Nat'l Highway Traffic Safety Admin. | 63 | 68 | 62 | -6 | -8.9% | -1 | -2.4% |
| Federal Railroad Administration | 32 | 33 | 32 | 0 | -0.9% | 1 | 2.7% |
| Research and Special Programs | 14 | 15 | 12 | -3 | -19.8% | -2 | -13.5% |
| Fed. Motor Carrier Safety Admin. | 7 | 9 | 7 | -2 | -21.9% | 1 | 10.3% |
| Office of Secretary | 20 | 11 | 20 | 9 | 83.7% | -1 | -2.9% |
| Total DOT R&D | 707 | 755 | 718 | -37 | -4.9% | 10 | 1.5% |
| DOT Budget (includes R&D components): ¹ | | | | | | | |
| Federal Aviation Administration | 13,850 | 13,966 | 13,522 | -444 | -3.2% | -328 | -2.4% |
| Federal Highway Administration | 34,545 | 34,178 | 34,582 | 404 | 1.2% | 37 | 0.1% |
| Federal Transit Administration | 7,266 | 7,266 | 7,646 | 380 | 5.2% | 380 | 5.2% |
| Federal Railroad Administration | 1,447 | 1,088 | 1,432 | 343 | 31.6% | -15 | -1.0% |
| All Other ² | 1,399 | 1,933 | 1,263 | -670 | -34.7% | -137 | -9.8% |
| Total DOT Budget | 58,507 | 58,431 | 58,445 | 14 | 0.0% | -62 | -0.1% |

AAAS estimates based on FY 2005 appropriations bills. Includes conduct of R&D and R&D facilities.

FY 2004 and FY 2005 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.

Note: Transportation Security Administration and Coast Guard are now part of the Department of Homeland Security.

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, Maritime Admin., RSPA, Bureau of Transportation Statistics, and others.

FY 2005 Approved figures adjusted to reflect across-the-board reductions in the FY 2005 omnibus bill.

November 24, 2004 - AAAS estimates of final FY 2005 appropriations bills.