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House Boosts NOAA and NIST R&D

AAAS R&D Funding Update on Commerce R&D in FY 2008 House Appropriations

Highlights

- **The House has now joined the Senate in boosting the Department of Commerce's R&D programs in 2008 appropriations with a dramatic 17.7 percent increase of $185 million to $1.2 billion (see Table), slightly less than the Senate increase, with** large increases for both the National Oceanic and Atmospheric Administration (NOAA) and the National Institute of Standards and Technology (NIST).

- Both chambers have now agreed to proposed increases for NIST's intramural research in the second year of the President's American Competitiveness Initiative. NIST's Scientific and Technical Research Services (STRS) would see its R&D funding increase 12.8 percent to $420 million. The House would add $35 million to an already-substantial requested increase for the normally intramural Construction of Research Facilities (CRF) account, to fund competitively awarded extramural construction grants. CRF R&D would more than double to $129 million in the House.

- **Both the House and the Senate would reject proposed cuts in NIST's extramural programs.** Instead of eliminating NIST's **extramural Advanced Technology Program (ATP) as requested, the House would give it $93 million, 18 percent more than this year.** The House would join the Senate in rejecting a proposal to slash funding for the non-R&D Hollings Manufacturing Extension Partnership (MEP) program by half, and instead give it $109 million, a $4 million increase.

- **R&D in the National Oceanic and Atmospheric Administration (NOAA) would climb 9.9 percent to $585 million in the House instead of a slight requested cut (see Table).** The largest increases would go to oceans and climate research in NOAA's Oceanic and Atmospheric Research (OAR). OAR R&D would climb 23 percent to $346 million; the Senate would provide even more for these programs. The House would also establish a Climate Change Study Committee at the National Academy of Sciences.

Commerce R&D in FY 2008 House Appropriations

On July 12, the House Appropriations Committee approved its version of the FY 2008 Commerce-Justice-Science appropriations bill (HR 3093) providing funding for the National Science Foundation (NSF), the National Aeronautics and Space Administration (NASA), and the Department of Commerce. The full House is expected to debate and approve the bill by the end of July. The Senate Appropriations Committee has already drafted its own version (S 1745). The House bill contains nearly $54 billion in 2008 discretionary spending for its programs, $3.2 billion more than the current year and $2.3 billion more than the President's request.

Nearly all the Department of Commerce's R&D portfolio comes from two very different science-oriented agencies, the National Oceanic and Atmospheric Administration (NOAA) and the National Institute of Standards and Technology (NIST). Commerce's February budget for 2008 proposed large increases for NIST's intramural programs, but sharp cuts in NIST extramural funding and a small cut in NOAA R&D. NIST's intramural programs would benefit from the President's American Competitiveness Initiative (ACI) that was first previewed in the 2006 State of the Union address in response to a growing wave of concern about the state of U.S. innovation. The ACI proposes to double funding for three key physical sciences agencies over the next decade. NIST in Commerce is one of the three favored agencies (the others are the DOE Office of Science, and the National Science Foundation), and received a substantial increase in 2007 with another large increase proposed in 2008 after years of flat or declining funding, but only for

its intramural programs. The Administration has continued to propose steep cuts in NIST's extramural programs, and in tough budgetary times has generally proposed declining funding for NOAA R&D, whose portfolio is oriented toward environmental R&D rather than the physical sciences. (For details of the President's request for Commerce R&D in FY 2008, see the March 21 AAAS R&D Funding Update or Chapter 12 of *AAAS Report XXXII: R&D FY 2008*. For details of Senate appropriations for Commerce R&D, see the July 5 R&D Funding Update.)

The House, following the Senate's earlier actions, would give increases to the entire range of Commerce R&D, both the intramural and extramural parts of the NIST portfolio and also NOAA. **The House would give Commerce $1.2 billion for its R&D portfolio in 2008, an increase of $185 million or 17.7 percent that would be slightly less than the Senate's even more generous increase (see Table).** Unlike past years, when the House would generally match the President's request, this year the House would join the Senate in endorsing the requested increases for NIST's intramural programs but also in rejecting proposed cuts in its extramural programs, and adding millions of dollars to NOAA.

NIST intramural research would climb 12.8 percent to $420 million within the Scientific and Technical Research and Services (STRS) account in the House plan as requested, while construction funding for NIST research facilities would more than double to $129 million. On the construction side, the large increase would allow for major renovations at NIST's Boulder (CO) site, repair for aging facilities, and continuing construction of NIST's Center for Neutron Research. But in a break from tradition, the House would add $35 million to the normally intramural construction account specifically for new extramural laboratory facilities grants, to be awarded on a competitive basis to universities and other nonprofit research institutions performing R&D related to NIST activities. The Senate bill does not contain this provision, but would instead add $53 million to the construction account for non-R&D extramural earmarked projects for specific performers.

In a radical departure from the request and from past House appropriations, the House would boost funding for both of NIST's extramural programs, one proposed for elimination and the other for near-elimination. The Bush Administration once again proposes to eliminate NIST's extramural Advanced Technology Program (ATP), as it has in the past several budget requests, and in a repeat of past years the Senate would save it. But although past Republican-controlled Houses have agreed to ATP's elimination, the Democratic-controlled House would join the Senate in saving it. ATP has announced that it will award new grants in 2007 for the first time in years, and if the House and Senate prevail then there could be even more new awards in 2008. The House would give ATP $93 million in 2008, 18 percent more than this year; the Senate would give the program $100 million. Congress is also considering separate legislation that would authorize ATP, make some policy changes, and rename it the Technology Innovation Program (TIP). In another repeat of previous requests, the budget would cut the non-R&D Hollings Manufacturing Extension Partnership (MEP) by 56 percent down to $46 million, but the House, after agreeing with proposed cuts in past budget seasons, would this time join the Senate in sustaining funding, at $109 million for 2008 for a $4 million increase. MEP is a program to operate a nationwide network of extension centers to disseminate better manufacturing technologies to small- and medium-sized manufacturers on a cost-shared basis with state governments and with users.

The across-the-board House increases for NIST would bring the total NIST budget to $831 million in 2008, a 23 percent increase over the current year (see Table). NIST R&D funding would total $619 million in the House plan, a remarkable 26 percent or $128 million increase that would be $105 million more than the increase NIST itself requested.

On the NOAA side of Commerce R&D, the House would dramatically boost climate change research to bring the NOAA R&D portfolio to $585 million in 2008, an increase of 9.9 percent (see Table). The House's action is consistent with a broader push to expand climate change research in 2008 appropriations; other House bills would create new climate change research programs at the U.S. Geological Survey (USGS) and the Environmental Protection Agency (EPA), and elsewhere in the Commerce-Justice-Science bill there would be large additions to NASA's support of earth satellites, which provide crucial data and support for climate change studies. Nearly all of the additional House dollars would go to the Climate

Research program in NOAA's Office of Atmospheric Research (OAR); the House would add $44 million to the request to bring total funding to $236 million, with most of the additional funding going to competitively awarded research grants. Competitive research grants for climate change research would total $172 million, up from $126 million this year. In all, OAR R&D would climb 23 percent to $346 million. Among ocean-related programs, the National Sea Grant College Program would hit $58 million in the House plan, after hovering near $54 million for the last several years.

The House bill contains an unusual provision setting aside $6 million of the NOAA appropriations specifically for the National Academy of Sciences (NAS) to establish a Climate Change Study Committee to investigate issues related to global climate change and to make recommendations on policy responses within two years of the committee's formation. Although congressionally requested NAS studies are far from unusual, it is unusual for such a study to be funded explicitly in a bill's legal text with a specific amount.

Although the Senate takes NOAA to task for failing to fund many of the recommendations of the Pew Ocean Commission and the U.S. Commission on Ocean Policy, two high-level commissions of recent years which called for a comprehensive U.S. ocean policy, the House bill is mostly silent on ocean-related research. And although the Senate would boost funding in oceans-related programs, the House bill would stay closer to requested funding levels.

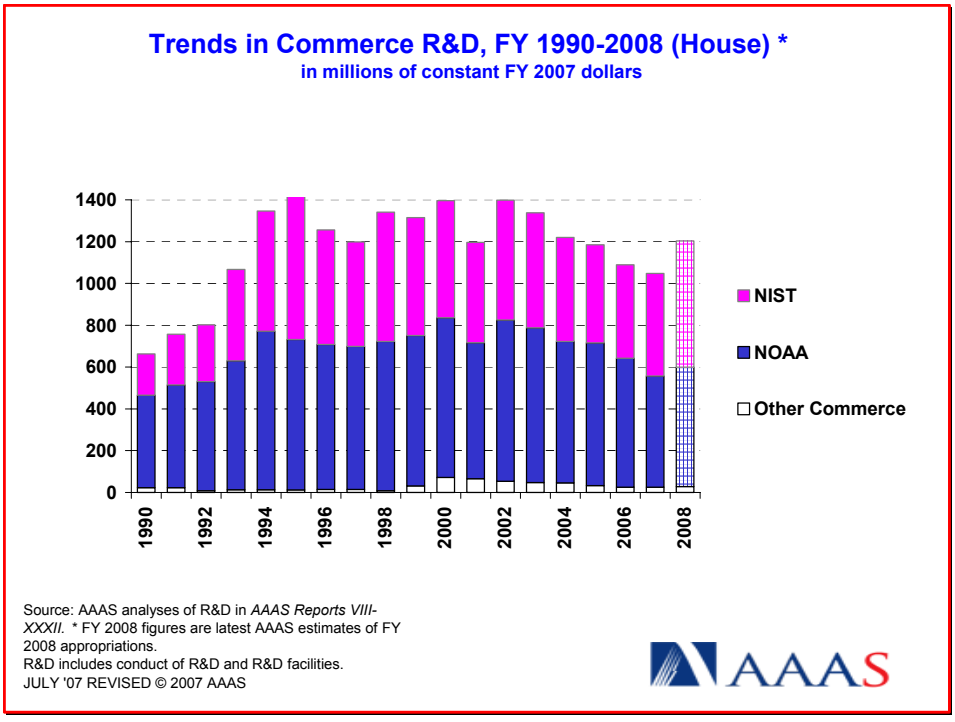

Figure 1. (click on the image for PDF)

Impacts of Commerce R&D

The House's generous proposed appropriations for NIST and NOAA's R&D programs would result in a sharp turnaround from the steady fall in Commerce R&D for most of this decade (see Figure 1). Since 2002, the Commerce R&D budget has declined in real terms every year; while the House and Senate appropriations would both be big boosts, they would only bring Commerce R&D back to the 2004 funding level in real terms.

Outlook and Next Steps

The full House is expected to debate and approve the Commerce-Justice-Science bill within the next week, although final approval may be delayed by a crowded House floor schedule. The Senate Appropriations Committee has drafted its own version, but has not scheduled time to debate it. Congress will try to send a final version of the bill to President Bush before the October 1 start of FY 2008. The President has threatened to veto any 2008 appropriations bill that exceeds his request, as the House version does by $2.3 billion, so the bill may have to go through several rewrites and revotes before it can become law.

> (This analysis is one of a series of AAAS R&D Funding Updates on FY 2008 congressional appropriations. The complete series of AAAS R&D Funding Updates, including continually updated analyses of R&D in FY 2008 appropriations, is available on the AAAS R&D Web Site (http://www.aaas.org/spp/rd) in the "FY 2008 R&D" or the "What's New" sections.)

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Table. Department of Commerce
House Appropriations Committee Action on R&D in the FY 2008 Budget
(budget authority in millions of dollars)

				Action by House				
	FY 2007 Estimate	FY 2008 Request	FY 2008 Senate	**FY 2008 House**	Chg. from Request Amount	Chg. from Request Percent	Chg. from FY 2007 Amount	Chg. from FY 2007 Percent
National Oceanic and Atmospheric Administration (NOAA):								
National Ocean Service	65	36	51	**37**	1	2.0%	-28	-42.7%
National Marine Fisheries Service	42	42	45	**41**	0	-0.4%	0	-1.1%
Office of Atmospheric Research	281	300	371	**346**	46	15.2%	64	22.9%
National Weather Service	24	23	23	**23**	0	0.5%	-1	-5.7%
National Env. Satellite and Data Info.	24	27	27	**27**	0	0.0%	3	12.7%
All Other NOAA R&D	95	100	111	**110**	11	10.8%	15	15.9%
TOTAL NOAA R&D	532	528	628	**585**	57	10.8%	53	9.9%
National Institute of Standards and Technology (NIST):								
Scientific & Technical Research	372	420	421	**420**	0	0.0%	47	12.8%
Advanced Technology Program R&D	60	0	76	**70**	70	- -	11	17.8%
Construction *	59	94	98	**129**	35	37.3%	70	119.7%
TOTAL NIST R&D	491	514	595	**619**	105	20.5%	128	26.2%
STRS Non-R&D Activities	*60*	*81*	*81*	***81***	*0*	*0.0%*	*20*	*33.6%*
ATP Non-R&D Activities	*19*	*0*	*24*	***23***	*23*	*- -*	*3*	*17.8%*
Non-R&D Construction	*0*	*0*	*53*	***0***	*0*	*- -*	*0*	*- -*
Manufacturing Extension Partnership	*105*	*46*	*110*	***109***	*62*	*134.7%*	*4*	*3.9%*
Total NIST Budget	*675*	*641*	*863*	***831***	*190*	*29.7%*	*156*	*23.1%*
Departmental Administration	1	1	1	**1**	0	0.0%	0	0.0%
Bureau of the Census	22	26	26	**26**	0	0.0%	4	18.2%
National Telecomm. and Info. Admin.	2	2	2	**2**	0	0.0%	0	0.0%
Total Commerce R&D	1,048	1,070	1,252	**1,233**	162	15.2%	185	17.7%

AAAS estimates based on FY 2008 appropriations bills. Includes conduct of R&D and R&D facilities.
FY 2007 and FY 2008 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.
These figures have been revised since the publication of *AAAS Report XXXII: R&D FY 2008.*

July 20, 2007 - AAAS estimates of House Appropriations Committee-approved appropriations.
These figures may be amended or rejected by the full House.