3 Agency Investments in the NITRD PCAs

The yearly Supplement to the President's Budget for the NITRD Program is designed to present a succinct, high-level summary of the research activities planned and coordinated through NITRD in a given Federal budget cycle, as required by law.

The NITRD Supplement includes an annual budget table, a requested budget table, and a budget analysis section, organized by PCA and by agency, to facilitate budgetary and programmatic comparisons from year to year.

NITRD agencies engaged in R&D and coordination activities cited in the Supplement are listed in alphabetic order, followed by the participating agencies. Agencies listed after the word "with" are in-kind contributors rather than funders or performers. Some large-scale activities may be cited in more than one PCA because they involve R&D efforts in a variety of technologies. In such cases, agencies report the portion of program funding in each relevant PCA.

3.1 FY 2011 Budget Actuals (Dollars in Millions)

Agency	HEC I&A	HEC R&D	CSIA	HCI &IM	LSN	HCSS	SDP	SEW	Total[1]
NSF	357.0	103.4	76.5	283.3	128.1	78.0	54.7	108.4	**1,189.4**
DoD[2]	274.0	32.0	141.4	95.0	142.4	41.8	23.3		**749.9**
NIH	221.0	18.0		215.0	12.0	10.0	53.0	22.0	**551.0**
DOE[3]	310.1	81.5	33.5		49.8	1.3	7.0	6.0	**489.2**
DARPA		80.0	127.0	156.0	73.0				**436.0**
NIST	14.0	7.3	25.7	15.0	5.0	5.5	5.2	0.6	**78.3**
NASA	62.6			14.9	0.8	10.2	5.8		**94.3**
DHS			41.0		3.0		3.0		**47.0**
AHRQ				27.1	0.5				**27.6**
NOAA	20.9	0.2		0.5	4.0		0.7		**26.3**
DOE/NNSA	10.0	15.0			1.0	4.0			**30.0**
EPA	3.0			3.0					**6.0**
NARA				2.0					**2.0**
DOT									**0.0**
Total 2011 Actuals	**1,272.6**	**337.4**	**445.1**	**811.8**	**419.6**	**150.8**	**152.7**	**137.0**	**3,727.0**

Table 5. FY 2011 Budget Actuals

[1] Totals may not sum correctly due to rounding
[2] DoD budget includes funding from OSD, NSA, and the DoD service research organizations
[3] DOE budget includes funding from DOE's Offices of Science, Electricity Delivery and Energy Reliability, and Energy Transformation Acceleration Fund

3.2 FY 2012 Budget Estimates (Dollars in Millions)

Agency	HEC I&A	HEC R&D	CSIA	HCI &IM	LSN	HCSS	SDP	SEW	Total[1]
NSF	250.0	103.0	98.5	292.0	121.8	84.7	78.3	110.2	**1,138.3**
DoD[2]	211.1	49.0	144.6	111.3	111.7	36.4	30.0		**694.1**
NIH	222.0	18.0		215.0	12.0	10.0	54.0	22.0	**553.0**
DOE[3]	316.8	92.4	33.5		73.8	4.0	16.0	6.0	**542.5**
DARPA		75.0	223.0	138.0	53.0				**489.0**
NIST	14.3	5.0	47.2	15.0	8.1	5.8	4.4	0.4	**100.2**
NASA	61.2			13.8	0.8	17.5	9.4		**102.6**
DHS			43.0		1.0		3.0		**47.0**
AHRQ				25.1	0.5				**25.6**
NOAA	19.4				1.9		0.7		**22.0**
DOE/NNSA	9.0	5.0						4.0	**18.0**
EPA	3.0			3.0					**6.0**
NARA				1.0					**1.0**
DOT									**0.0**
Total 2012 Estimates	**1,106.7**	**347.4**	**589.8**	**814.2**	**384.5**	**158.4**	**195.8**	**142.6**	**3,739.4**

Table 6. FY 2012 Budget Estimates

3.3 FY 2013 Budget Requests (Dollars in Millions)

Agency	HEC I&A	HEC R&D	CSIA	HCI &IM	LSN	HCSS	SDP	SEW	Total[1]
NSF	255.6	109.9	114.1	297.2	131.4	97.6	83.7	117.7	**1,207.2**
DoD[2]	196.2	27.4	156.6	107.8	105.3	35.5	25.3		**654.0**
NIH	221.0	18.0		215.0	12.0	10.0	53.0	22.0	**551.0**
DOE[3]	328.3	92.1	33.5		82.6	6.0	20.0	6.0	**568.5**
DARPA		79.0	247.0	87.0	49.0				**462.0**
NIST	16.0	5.0	55.2	15.8	12.1	7.8	4.4	0.4	**116.7**
NASA	60.0			13.0	1.0	16.8	9.6		**100.4**
DHS			61.0		3.0				**64.0**
AHRQ				25.1	0.5				**25.6**
NOAA	20.6	0.2		0.5	3.6		0.7		**25.6**
DOE/NNSA	10.0	11.0						4.0	**25.0**
EPA	3.0			3.0					**6.0**
NARA				1.0					**1.0**
DOT						1.0			**1.0**
Total 2013 Requests	**1,110.7**	**342.5**	**667.4**	**765.4**	**400.5**	**174.7**	**196.6**	**150.1**	**3,807.9**

Table 7. FY 2013 Budget Requests

[1] Totals may not sum correctly due to rounding
[2] DoD budget includes funding from OSD, NSA, and the DoD service research organizations
[3] DOE budget includes funding from DOE's Offices of Science, Electricity Delivery and Energy Reliability, and Energy Transformation Acceleration Fund

3.4 NITRD Program Budget Analysis

Fiscal Year Overview for 2012-2013

Differences between the President's Budget request for a given year and estimated spending for that year reflect revisions to program budgets due to evolving priorities, as well as Congressional actions and appropriations. In addition, the NITRD agencies have continued to work collectively on improving the PCA definitions, as reflected by changes in the definitions outlined in OMB Circular A-11, and individually on improving the classification of investments within the PCAs, resulting in changes in NITRD Program budgets.

Summary

The President's 2013 budget request for the NITRD Program is $3.808 billion, an increase of $69 million, approximately 1.85 percent, more than the $3.739 billion 2012 estimate. The overall change is due to both increases and decreases in individual agency NITRD budgets, which are described below.

3.5 NITRD Program Budget Analysis by Agency

This section describes changes greater than $10 million between 2012 estimated spending and 2013 requests. Smaller changes are discussed only if they represent shifts in funding focus. Budget numbers in these descriptions are rounded from initial agency numbers with three decimals to the nearest whole number.

3.5.1 NSF

Comparison of 2012 estimate ($1,138 million) and 2013 request ($1,207 million): The increase of $69 million is primarily due to $15 million in CSIA for enhanced support for Secure and Trustworthy Cyberspace (SaTC); $9 million in LSN for additional funding for research in new wireless communications and spectrum sharing architectures and services as part of EARS and a slight decrease due to termination of the Network Science and Engineering (NetSE) cross-cutting program; $13 million in HCSS for Cyber-Physical Systems and the National Robotics Initiative, both of which are part of the CEMMSS effort; and smaller increases in other PCAs. CSIA funding includes $57 million for CNCI (CISE, OCI, SBE).

3.5.2 DoD

Comparison of 2012 estimate ($694 million) and 2013 request ($654 million): The $40 million decrease is primarily due to decreases of $15 million in HEC I&A and $22 million in HEC R&D, with smaller decreases in other PCAs, partially offset by $12 million increase in CSIA.

3.5.3 DOE

Comparison of 2012 estimate ($543 million) and 2013 request ($569 million): The $26 million increase results primarily from an $11 million increase in DOE/SC funding in HEC I&A to support new research efforts to address the challenges of data-intensive science with emphasis on the unique needs of the Department of Energy scientific user facilities and large-scale scientific collaborations, with smaller increases and decreases in other PCAs.

3.5.4 DARPA

Comparison of 2012 estimate ($489 million) and 2013 request ($462 million): The $27 million decrease largely results from a $51 million decrease in HCI&IM as Machine Reading and Reasoning programs complete, offset by an increase of $24 million in CSIA programs, a high priority of the DoD, with smaller decreases and increases in other PCAs.

3.5.5 NIST

Comparison of 2012 estimate ($100 million) and 2013 request ($117 million): The increase of $17 million includes $8 million in CSIA for the National Strategy for Trusted Identities in Cyberspace initiative; $4 million in LSN for the Advanced Communications initiative; $2 million in HEC I&A and HCI&IM for the Advanced Materials for Industry initiative; and $2 million in HCSS for the Smart Manufacturing initiative.

3.5.6 DHS

Comparison of 2012 estimate ($47 million) and 2013 request ($64 million): The $17 million increase results primarily from an $18 million increase in CSIA for increased spending across all S&T CSD projects to compensate for the across-the-board cuts necessitated by the FY 2012 decrease, with smaller increases and decreases in other PCAs.

3.6 NITRD Program Budget Analysis by PCA

Using the information presented above, this section provides an analysis of the NITRD Program budget by PCA, summarizing the more substantial differences between 2012 estimated spending and 2013 requests. The changes are described below.

3.6.1 CSIA

Comparison of 2012 estimate ($590 million) and 2013 request ($667 million): The $77 million increase is largely due to increases of $15 million at NSF, $12 million at DoD, $24 million at DARPA, $18 million at DHS, and smaller increases at other agencies.

3.6.2 HCI&IM

Comparison of 2012 estimate ($814 million) and 2013 request ($765 million): The $49 million decrease is largely due to a decrease of $51 million at DARPA, with smaller decreases and increases at other agencies.

3.6.3 HCSS

Comparison of 2012 estimate ($158 million) and 2013 request ($175 million): The $17 million increase is largely due to an increase of $13 million at NSF, with smaller increases and decreases at other agencies.