



AMERICAN ASSOCIATION FOR THE
ADVANCEMENT OF SCIENCE

An Overview of Federal Funding for Networking & IT Research in FY 2004

Kei Koizumi, AAAS

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For the Federal Networking and IT Research
Opportunities conference

See <http://www.aaas.org/spp/rd> for more

(see the “What’s New” section for the latest AAAS R&D analyses; see
“Seminars and Presentations” section for copies of these charts)

Science & Policy Programs

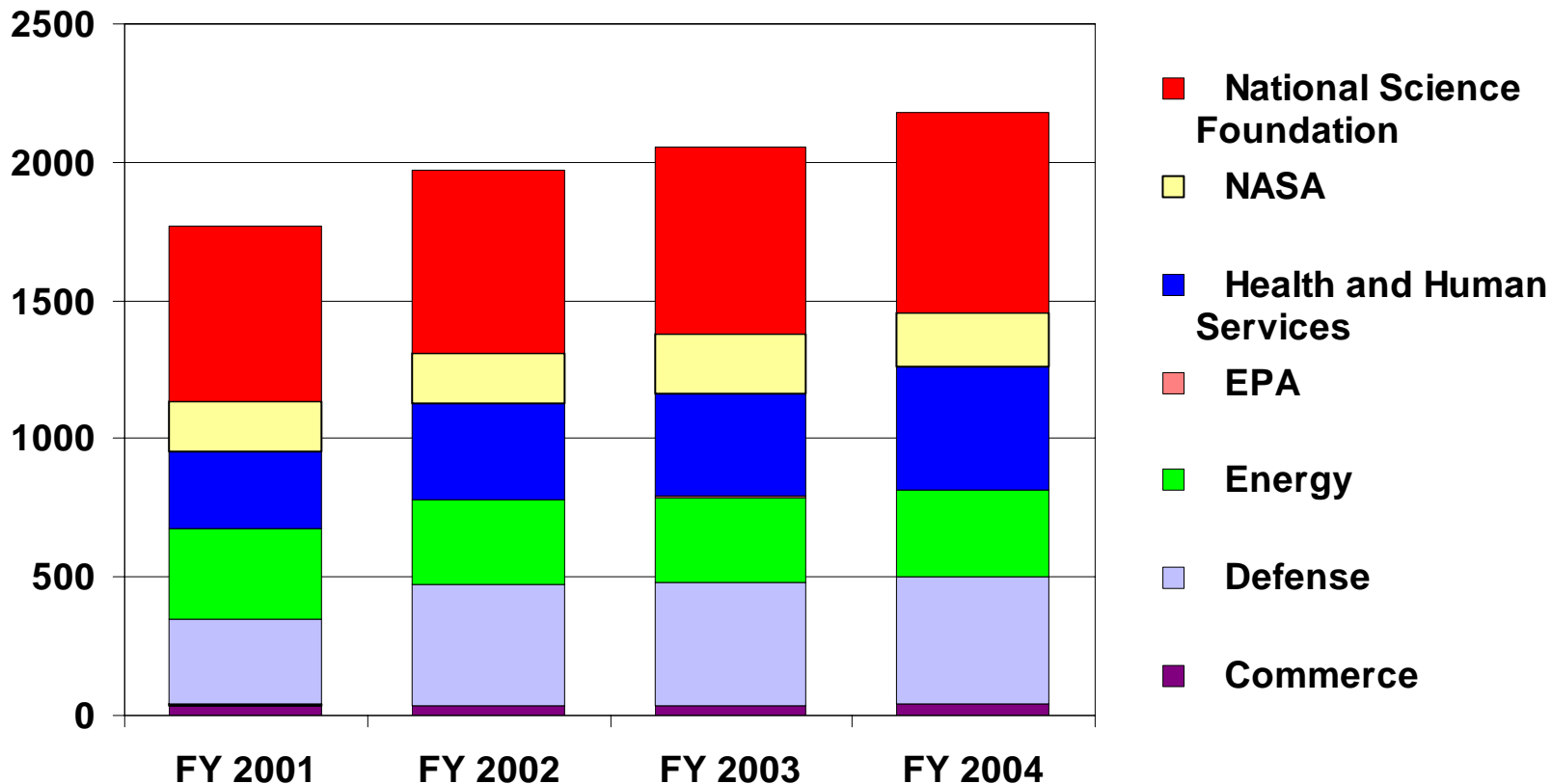


Networking and IT Research in the FY 2004 Budget

- **Multi-agency effort dates back many years, to HPCC in 1991.**
- **Multi-agency NITRD grew out of recommendations in 1999 by the President's Information Technology Advisory Committee (PITAC)**
- **Initiative focus is on long-term fundamental IT research; federal government also funds more traditional IT research**
- **NITRD is coordinated by a working group of the National Science and Technology Council (NSTC).**
- **NITRD funding has grown in recent years, and would grow 5.9 percent to \$2.2 billion in the FY 2004 budget proposal.**
- **Seven federal departments collaborate on NITRD.**

Federal Networking and Information Technology R&D, by Agency

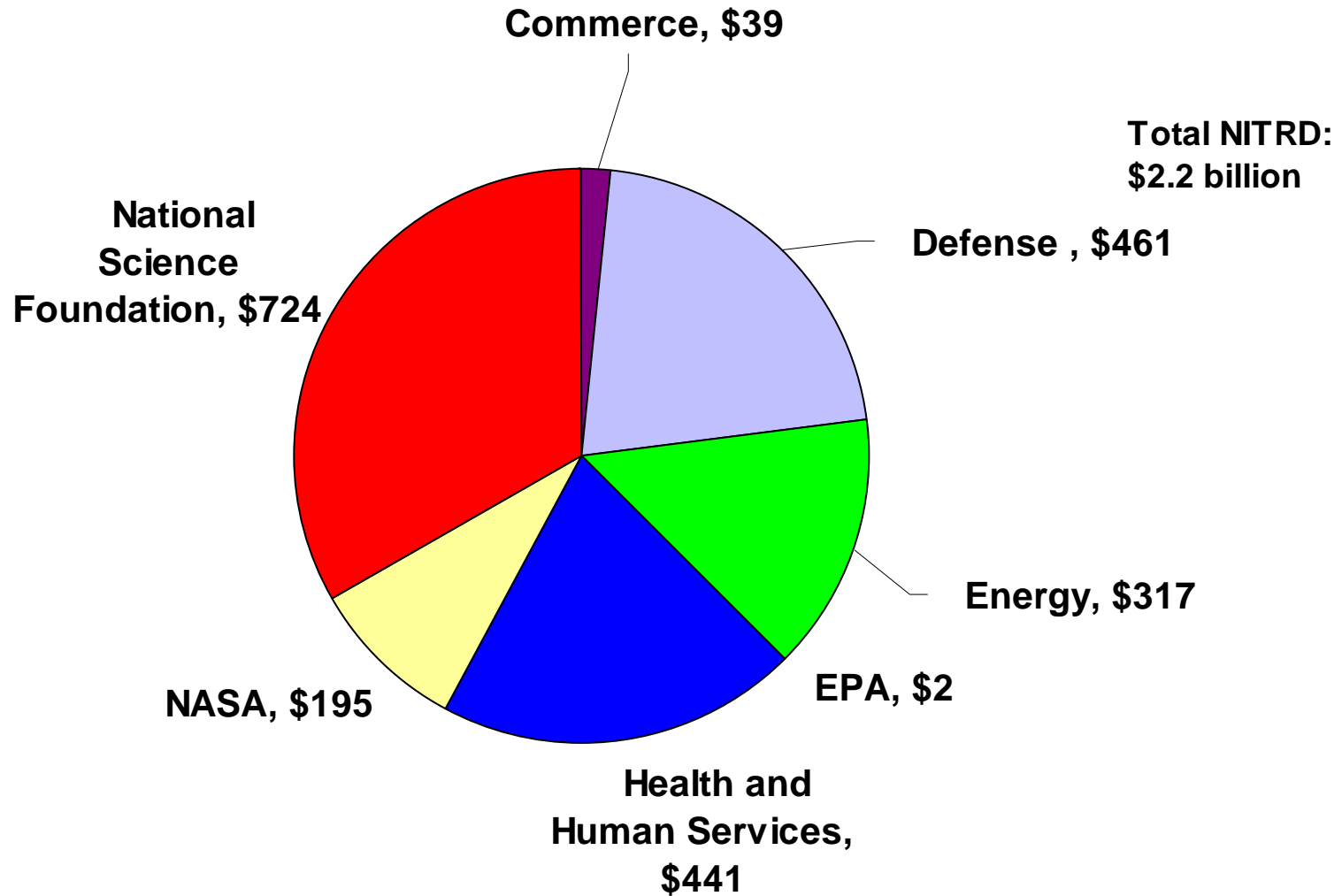
(budget authority in millions of dollars, FY 2002-2004)



Source: Office of Management and Budget.
FY 2004 figures represent President's request.
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FY 2004 Federal Networking and IT R&D, by Agency

(requested budget authority in millions of dollars)



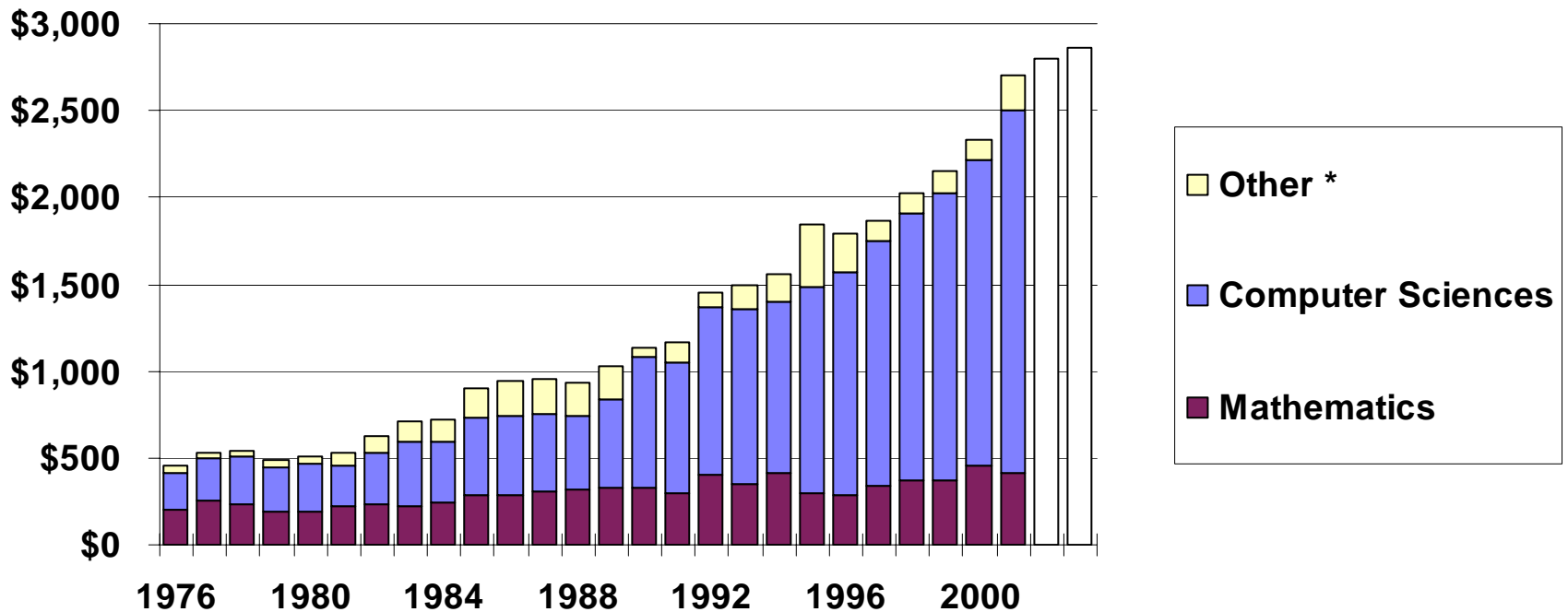


Budget Context for FY 2004

- Congress is midway through the FY 2004 appropriations process.
- The House, Senate, and the President have agreed to limit appropriations to \$785 billion, a modest increase over FY 2003, but the delays are in the details.
- Only DOD, DHS, and Congress have final budgets.
- The U.S. is headed for record budget deficits, a continuing and expensive deployment in Iraq, and a major expansion of entitlement spending (a Medicare drug benefit).
- NITRD funding is not immune from budget pressures: requested increases may be trimmed in the final budget bills.

Federal Support of Mathematics / Computer Sciences Research, 1976-2003 :

obligations in millions of constant FY 2003 \$



Source: National Science Foundation, *Federal Funds for Research and Development FY 2001, 2002, and 2003, 2003.*

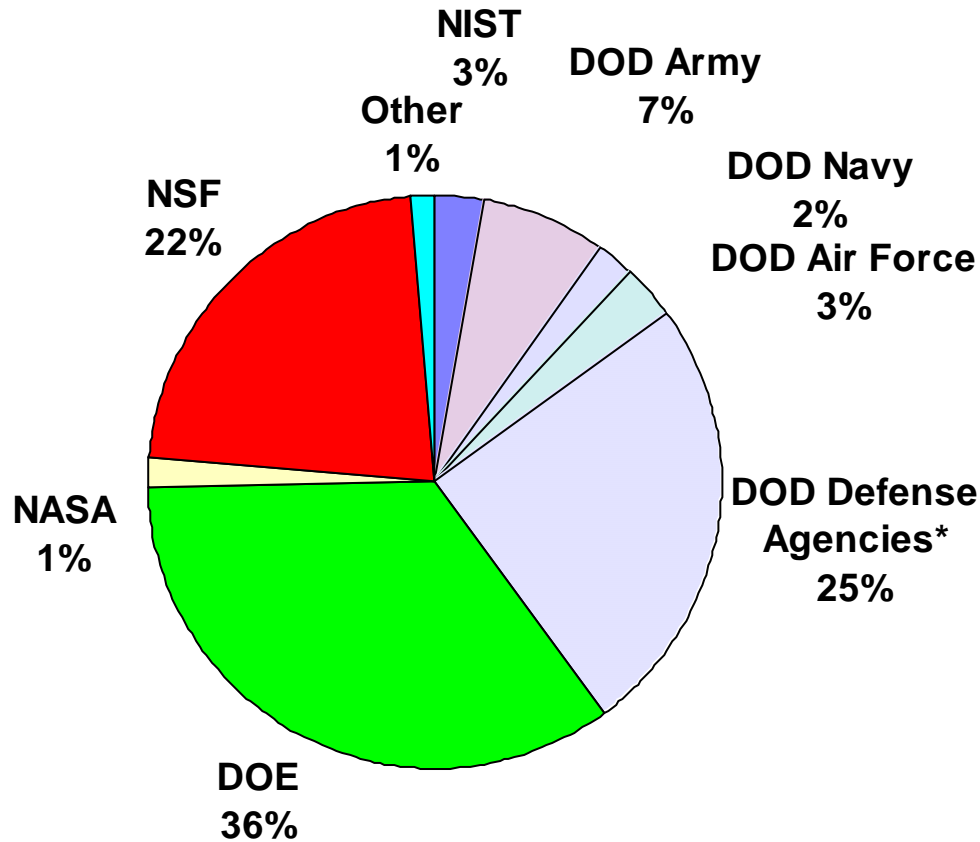
* Other includes math/comp scis. research not elsewhere classified.

Excludes development and R&D facilities.

2002 and 2003 data are preliminary and not classified by subdiscipline.

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Computer Sciences Research in the FY 2001 Budget (obligations)



Total Computer Sciences Research: \$2.0 billion (includes basic research and applied research)

* - Defense Advanced Research Projects Agency = 22% of total

Source: National Science Foundation, *Federal Funds for Research and Development FY 2001, 2002, and 2003, 2003*. Data exclude development and R&D facilities.

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Other Federal Networking and IT R&D

- Federal funding continues to support non-NITRD investments in IT, networking, and computer sciences.
- Increasing focus on cybersecurity R&D in the past two years, including federal legislation to expand cybersecurity investments (Dec. 2002) at NSF and NIST.
- There are potential and real controversies: last week, Congress approved legislation to shut down DARPA's Information Awareness Office and eliminate the Total Information Awareness program.



R&D in the Dept. of Homeland Security

- DHS began operations in March, but it will take years to become fully operational.
- DHS has a \$1.05 billion R&D portfolio in FY 2004, mostly in the Directorate of Science and Technology.
- Directorate of Information Analysis and Infrastructure Protection will be focus for IT and cybersecurity activities in DHS.
- From \$177 million in FY 2003, IIIP has a budget of \$839 million in FY 2004. \$99 million goes specifically to cybersecurity.
- IIIP will rely mostly on other organizations for its R&D needs: NSF, NIST, and the S&T Directorate within DHS.



What's Next?

- PITAC will meet again soon, re-assess the federal investment in NITRD.
- FY 2004 budgets for other agencies may be settled in October; until then, funding is at last year's levels.
- DHS will be focused on rapidly building its capabilities in S&T and cybersecurity, and drawing on the expertise of other agencies.
- The funding situation is expected to get much tighter in FY 2005 and beyond: because of deficits, Iraq, Medicare, and other higher priorities, domestic spending will be restrained.