COMPUTING RESEARCH NEWS

Spending Bills Delayed, but NSF Numbers May Improve

Computing Researchers See Increase in Completed Defense Bill

By Peter Harsha

By the start of the 2005 fiscal year (on October 1, 2004) Congress had completed work on just one of thirteen annual appropriations bills necessary to fund the operations of the federal government. It appeared increasingly likely that work on the remaining bills would not be completed until after the November 2nd federal election—and possibly not until the new Congress is seated in January 2005.

As this issue goes to press in early October, Congress has passed a "continuing resolution" providing stopgap funding for federal agencies left without a FY 2005 appropriation through November 20, 2004—an indication that the Congressional leadership does not believe it is likely that agreements can be reached on the remaining bills until Congress returns to Washington in a "lame duck" session after the election.

As a result, agencies like the National Science Foundation,

Department of Energy, and NASA, whose appropriations bills have not yet passed, will operate at FY 2004 spending levels, with no new program starts or new spending until an agreement is reached.

This result was foreshadowed back in April and May of this year when the House and Senate were unable to agree on a joint budget resolution that would have set caps on FY 2005 appropriations. Without the caps in place, appropriations bills that come to the floors of the respective chambers are open to amendments that could significantly increase funding levels (or cut others) for programs within the bills. This, in turn, would put Members of Congress in the politically awkward position of having to vote up or down on spending increases on any number of individual programs—a prospect neither the Republican nor Democratic leadership relished during an election year.

It is likely that the unfinished appropriations bills will be bundled into a single "omnibus" appropriations bill and passed en masse, either during the lame duck session or perhaps as late as January when the new Congress convenes.

Despite the delay, some progress has occurred on a number of appropriations bills, including a few of particular relevance to computing researchers.

Defense (P.L. 108-287)

The FY 2005 Defense Appropriation has the distinction of being the only appropriations bill that has been signed into law (P.L. 108-287). Researchers fared reasonably well under the bill, with overall research and development at the Department of Defense slated to increase 10.3 percent or $1.2 billion, to $13.3 billion overall in FY 2005.

Aggregate basic research funding at the Department of Defense (DOD), so-called "6.1" research in DOD parlance, will rise to $1.5 billion in FY 2005, an increase of 7.8 percent or $110 million over the

FY 2004 appropriated level. DOD applied research ("6.2") will increase 11.9 percent to $4.9 billion, and advanced technology development ("6.3") will rise 9.8 percent to $6.2 billion in FY 2005.

Of particular importance to computing researchers, the Defense-wide "Computing Systems and Communications Technology" program line, which includes much of the funding for IT R&D at DOD and DARPA, has been split into two program lines. The new "Information and Communications Technology" line will receive $192.7 million in funding in FY 2005, and the new "Cognitive Computing Systems" account will receive $151.2 million in FY 2005. Their combined $344 million represents about $1.2 million more than the President requested for FY 2005 and $5.5 million more than FY 2004.

The "High Performance Computing Modernization Program" also received an increase of $32.7 million

CISE 1994-2004: A Decade in Review

By Peter A. Freeman and Lee Harle

Computing faculty who have recently submitted proposals to CISE have come to understand the increasing demands on CISE's budget. While there has been considerable growth in the budget in recent years, this growth has not kept pace with the escalating number of promising research and education opportunities and challenges in our field. Consequently, proposal success rates in CISE are dropping to new lows. Like you, we are concerned about this. This article seeks to shed some light on CISE budget and funding trends, and a companion article on page 4, "CISE Update: Adjusting to the Increase in Proposals," describes CISE's current plan to adapt to this changing environment.

The CISE budget has grown significantly in the last decade, but most markedly over the past five years as can be seen in Figure 1. A significant change in growth rate can be observed in the 1999-2000 period. Why? In February 1999, the
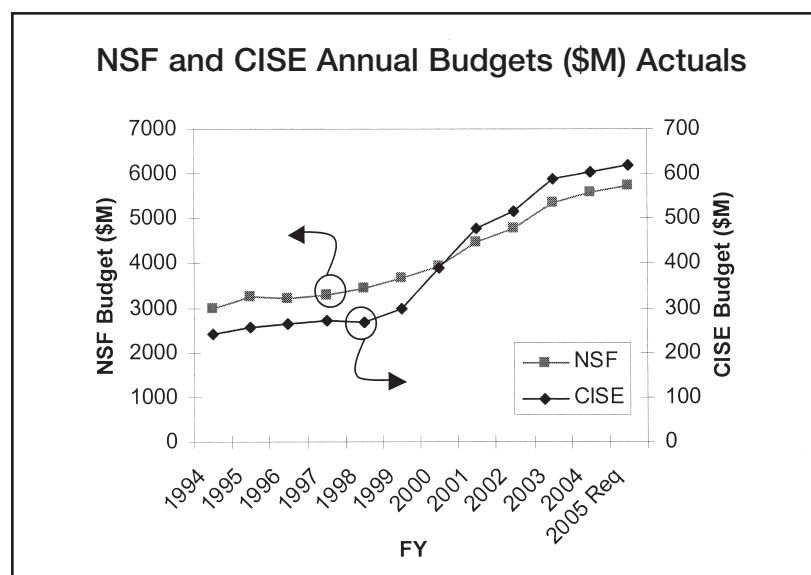

Figure 1: Comparison of NSF and CISE Annual Budget trends for 1994-2004.

President's Information Technology Advisory Committee (PITAC) published a report that asserted that "Federal support for research in information technology is seriously inadequate." In response to PITAC recommendations, NSF deemed

Information Technology Research (ITR) a budget priority area and, indeed, Networking and Information Technology Research and Development (NITRD) became