

## **Executive Summary**

This Supplement to the President's Fiscal Year (FY) 2008 Budget provides a technical summary of the budget request for the Networking and Information Technology Research and Development (NITRD) Program, as required by the High-Performance Computing Act of 1991 (P.L. 102-194) and the Next Generation Internet Research Act of 1998 (P.L. 105-305). The NITRD Program, now in its 16th year, provides a framework and mechanisms for coordination among the many Federal agencies that support R&D in networking and information technology. The NITRD enterprise is an Administration interagency R&D budget priority for FY 2008.

The Supplement describes current technical and coordination activities and FY 2008 plans of the 14 Federal agencies in the NITRD budget crosscut as well as other agencies that are not part of the formal crosscut but participate in NITRD activities. Since the publication of the FY 2007 Supplement, the NITRD Subcommittee has welcomed the National Archives and Records Administration (NARA) as a NITRD member agency.

In the NITRD Program, the term "agency" may refer to a department, a major departmental subdivision, or a research office or laboratory. NITRD activities and plans are coordinated in eight Program Component Areas (PCAs): high-end computing infrastructure and applications; high-end computing research and development; cyber security and information assurance; human computer interaction and information management; large-scale networking; high-confidence software and systems; social, economic, and workforce implications of IT and IT workforce development; and software design and productivity. Agency program managers in each PCA meet monthly in an Interagency Working Group (IWG) or a Coordinating Group (CG) to exchange information and coordinate technical plans and activities such as workshops and solicitations. Overall NITRD Program coordination is carried out by the Subcommittee on Networking and Information Technology Research and Development, under the aegis of the Committee on Technology of the National Science and Technology Council (NSTC).

For each PCA, the NITRD Budget Supplement presents strategic priorities underlying the FY 2008 budget request, highlights of the request, ongoing and anticipated interagency planning and coordination activities, and additional technical activities, by agency. Agencies that are engaged in cited activities as funders, performers, in-kind contributors, and participants are identified, with funders and performers listed first and, following the word "with," the in-kind contributors and participants. When applicable, lead agencies are listed first. Some large-scale activities may be listed 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.

Details of the NITRD budget, including 2007 estimates and 2008 requests by agency and by PCA, are presented in the budget table on page 20 and discussed in the budget analysis beginning on page 21.

NOTE: Abbreviations and acronyms are used throughout the Supplement to maintain brevity. A glossary, beginning on page 27, is provided for reference.