SENIOR NATIONAL SECURITY EXPERTS CALL ON PRESIDENT TO INCLUDE BASIC DEFENSE RESEARCH IN AMERICAN COMPETITIVENESS INITIATIVE


The Task Force on the Future of American Innovation (www.futureofinnovation.org), joined by former House Speaker Newt Gingrich, Rep. Jim Cooper (D-TN), Ambassador David Abshire, President and CEO of the Center for the Study of the Presidency, and Larry Wortzel, Chairman of the U.S.-China Economic and Security Review Commission, today urged President Bush to include funding for basic research performed by the Department of Defense in his American Competitiveness Initiative (ACI) next year.

Speaking at an event today in Washington, DC, the group praised both President Bush and Republicans and Democrats in Congress for their support this year of the ACI—which would double over ten years the federal investment in basic research in the physical sciences and engineering in other key science agencies—while pointing out the importance of the Pentagon’s basic research programs to the nation’s economic competitiveness and national security.

“There is a profound linkage between economic and national security, and nowhere is it made clearer than in the Defense Department’s support for basic research in the physical sciences and engineering,” said Gingrich. “Support for basic research is something that the Administration and both parties in Congress have agreed on this year and in the past, and I hope they will step up support for all areas of basic research over the next two years.”

“As a member of the House Armed Services Committee, I believe we must invest in basic defense research if we are going to develop the most effective weapons technologies and other equipment for our troops, not just now but in the future,” said Cooper. “The President and Congress are on the right track in funding the American Competitiveness Initiative, and adding research performed by the Defense Department is the logical next step.”

The group noted that such technologies as the Internet, radar, lasers, fiber-optic-based communications, satellite and global positioning system (GPS) navigation, and precision guidance technologies were the end results of basic defense research, and that many of these technologies have civilian uses in such areas as manufacturing, transportation, telecommunications, and health care that have benefited the nation’s economy and quality of life.
The innovation task force, a coalition of industry, scientific societies, and higher education associations, today released “Measuring the Moment: Innovation, National Security, and Economic Competitiveness” (http://futureofinnovation.org/2006report/), the group’s second report providing benchmarks to help determine how well the nation is doing in its efforts to retain global economic leadership.

The report provides benchmarks for areas important to innovation and economic competitiveness including education, workforce, patents and publication of scientific papers, and research investment in which other regions and nations, particularly the rapidly developing economies of Asia, are pressing for global leadership.

“We face strong competition from a state-managed science and technology research program in China,” said Wortzel. “That draws American capital, talent, and research efforts out of the U.S. and over to China. If we are going to remain competitive, we need to focus our basic research at home and put more resources into funding it.”

The report notes that federal spending on defense basic research has remained flat for more than three decades. It asserts that “the economic argument for greater federal investment in basic research is matched by the national security imperative. The United States is investing too little for the new global strategic environment. Research in physics, mathematics, computer sciences and engineering is the basis for military transformation. Moreover, it builds the workforce of citizens needed for classified projects.”

The report adds, “A robust research portfolio is a necessary part of a national security strategy that relies on knowledge and technology to keep the United States safe in a dangerous world.”

The original 2005 task force report, entitled “The Knowledge Economy: Is the United States Losing Its Competitive Edge” (http://futureofinnovation.org/PDF/Benchmarks.pdf), was one of the first of a series of reports, including the National Academies of Sciences’ “Rising Above the Gathering Storm,” that convinced many in Congress to support greater federal investments in basic research and led the Administration to propose the ACI.

The ACI proposed to: double, over 10 years, the aggregate funding for basic research at the National Science Foundation (NSF), the Department of Energy's (DOE) Office of Science, and the National Institute of Standards and Technology (NIST) within the Department of Commerce; make permanent the research and development tax credit; strengthen K-12 science and math education; and increase the nation's ability to compete for and retain the best talent from around the world.

While progress has lagged on some elements of the ACI, Congress has, thus far in the appropriations process, provided the full support requested by President Bush for NSF, DOE, and NIST. The process has not yet been completed, however, and it is unclear whether the increased investments for science will survive.

The Administration is expected to include the ACI in its next budget as well, and the speakers at today’s event urged the President to include defense basic research at that time.

“Our World War II experience taught this nation a lesson about the importance of basic research to our national security,” said Abshire, who has served as U.S. Ambassador to NATO,
as Special Counselor to President Reagan, and as an assistant secretary of state. “We learned then, and relearned during the Cold War and since, that investing in basic research produces significant advantages to our military, and it helps to develop the next generation of scientists and engineers. It is important to our national security that the federal government renew its commitment to defense-oriented basic research.”

Benchmarks cited by the report include:

- **Defense basic research** has remained flat over three decades (after inflation) despite rapid growth in overall defense research, development, testing, and evaluation;
- **The federal investment in physical sciences and engineering** has declined substantially since 1970 as a share of GDP;
- **The U.S. share of published papers in science and engineering** – an effective measure of new ideas and discoveries – shrank significantly from 1988 to 2003, and has been bypassed by Western Europe;
- **The U.S. share of global high-tech exports** fell by nearly one-half from 1980 to 2003;
- **U.S. science and engineering degrees as a percentage of all undergraduate degrees** are less than two-thirds the world average, and the U.S. is in the bottom quartile among 42 countries that granted more than 20,000 university degrees in 2002.
- **Asian production of science and engineering Ph.D.s** is on a steep trajectory and has surpassed the number of U.S. Ph.D.s, which has essentially been flat for a decade.

“Measuring the Moment” can be found at [www.futureofinnovation.org](http://www.futureofinnovation.org).

The Task Force on the Future of American Innovation, a coalition of businesses and business organizations, scientific societies, and higher education associations, was founded in 2004 to advocate greater federal investments for basic research in the physical sciences and engineering. The group focuses specifically on the National Science Foundation, the Department of Energy Office of Science, the Department of Defense research budget, and the National Institute of Standards and Technology labs at the Department of Commerce.


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