

NEW BUSINESS R&D AND INNOVATION SURVEY TO BE INTRODUCED BY NATIONAL SCIENCE FOUNDATION

A new NSF Survey of Business R&D and Innovation will be mailed to 40,000 U.S. firms in January 2009. NSF undertook this initiative after commissioning a study by the Panel on R&D Statistics of the National Research Council in 2003. Their report, "Measuring R&D Expenditures in the U.S. Economy," emphasized that understanding the major changes taking place in business R&D and innovation was critical to the future of the U.S. economy and national well-being, confirming that it was time to implement a major redesign of the annual Survey of Industrial R&D, which NSF had conducted for over 50 years.

Additional recommendations included learning more about R&D record keeping in industry, collecting reliable data on industry R&D by line of business, building the capacity to collect innovation-related data for integration with the R&D Survey, and creating a panel of R&D experts to provide guidance on trends and issues

Industry representatives advised the panel that they would use the survey for benchmarking if the data were disaggregated by line of business and made available sooner, which would improve their reporting efforts.

Last week a letter from Dr. Norman Augustine, former CEO of Lockheed Martin, was sent to several thousand CEOs requesting their support in providing full and accurate responses by their firms. This action will enable better measures of business R&D efforts in keeping America competitive and assist our nation's leaders in making sound policy decisions. Letters also went to past survey respondents to determine whether or not they are still the best person to serve as coordinator to gather all information requested in the new survey.

Responding to the NRC report, NSF initiated an R&D Record Keeping study in 2005, with visits to numerous firms that conduct research and development. In 2006, NSF created an Industry Expert Panel to describe the future drivers of R&D investment and innovation and indicate how the survey could be made more useful to industry. During 2007 NSF redesigned and expanded the survey based on these inputs and many others. The name was also changed to Business Research & Development Survey.

A new Business R&D Expert Panel was convened by NSF in 2008 to review changes in the survey and to offer advice on how to introduce it to the recipients for maximum response. A key recommendation was to place more focus on innovation, prompting NSF to change the name to Business R&D and Innovation Survey (BRDIS).

A major effort is underway to make businesses aware of the importance of providing the full and accurate responses called for by Dr. Augustine. Special emphasis is placed on the mandatory and confidential nature of these responses and the ability to respond electronically.

The new survey will request a wide array of data covering R&D and innovation activities of firms operating in the United States. New or expanded areas of the survey are listed below:

R&D Financial Measures

- **Detail on domestic R&D, including by "business segment" (i.e., below the company level)**
- **Detail on worldwide R&D activity, including by foreign location**
- **Capital expenditures for R&D (buildings, software, equipment)**

R&D Management and Strategy

- **Share of R&D devoted to new business areas, to social sciences, and to specific application areas (health, defense, energy, etc.)**
- **R&D partnerships by sector (universities, companies, government) and by type of organization (customer, vendor, competitor)**

R&D Funded or Paid for by Others

- **Worldwide and domestic R&D activity funded by others**
- **R&D funded by others by "business segment" (i.e., below the company level) and by foreign vs. domestic organization**

R&D Human Resources

- **R&D employee headcounts by occupational category, gender and level of educational attainment**
- **Number of U.S. R&D employees working under a visa (H-1B, L-1, etc.)**

Intellectual Property, Technology Transfer and Innovation

- **Participation in activities to introduce new or improved goods, services, methods of manufacturing, distribution, or support systems**
- **Patent-related data**
- **Licensing to outside parties**
- **Participation in specific technology transfer activities**

For further information, contact Raymond M. Wolfe, Research and Development Statistics Program, Division of Science Resources Statistics, National Science Foundation, 4201 Wilson Boulevard, Suite 965, Arlington, VA 22230; rwolfe@nsf.gov
