



NSF's Division of Science Resources Statistics (SRS): A Federal Statistical Agency in Support of Science Policy

Atlanta Conference on Science and Technology Policy
May 19, 2006

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www.nsf.gov/statistics



SRS's Mission

- SRS is a federal statistical agency.
- The legislative mandate is to:

*..provide a **central clearinghouse** for the collection interpretation, and analysis of data on scientific and engineering resources, and to provide a **source of information for policy formulation** by other agencies of the Federal Government...*



Fulfilling the SRS Mission

- **What SRS Does:**
 - **Collect data and maintain widely accessible databases** on R&D, S&E education, the S&E workforce, and related areas.
 - Provide a global context for U.S. data and enables comparisons and benchmarking through **collaboration with other international and national statistical agencies.**
- **How We Provide Information:**
 - Data tables
 - Online public-use databases and licensed data sets
 - Short reports – “InfoBriefs”
 - Longer special reports
 - Compendium publications – “S&E Indicators”



Key Challenges

- Ensuring that **dynamic changes in the national research and education enterprise and its global context** are reflected in our work.
- Encouraging **international and other national S&T statistical agencies** to collect data of comparable content and quality.
- Developing **new indicators**, new ways to obtain **new types of data** and **innovative approaches to data collection** that raise quality while making efficient use of resources.
- Re-examining and improving the **policy relevance, value and quality of data** being collected as well as **access to and dissemination of data and information**.



R&D Portfolio: Evaluation and Improvement

- Interagency R&D-related activities that facilitate linking data collected across U.S. federal statistical agencies
- Improve data collection:
 - R&D measures in all sectors, with a focus on issues relevant to each
 - Innovation measures - scope and definitions
 - Research infrastructure
- Expand the scope of R&D surveys (e.g. state level data)



Human Resources Portfolio: Evaluation and Improvement

- Methodological improvements:
 - Successful test of feasibility of obtaining data from individuals who received U.S. Ph.Ds and then moved overseas;
 - Develop a comprehensive sampling frame for postdocs, including foreign doctorates.
- Improve data collection:
 - Working to add a question on “field of degree” question to the American Community Survey (ACS), the replacement for the U.S. Decennial Census.
 - Adding a salary question to the Survey of Earned Doctorates to better understand early career employment;
 - New data collections on international collaboration of scientists and engineers.



Other Projects

- Updating the taxonomy on fields of science to understand emerging fields;
- Tracking the development of **research by country**, as well as the growth of **international collaborations**, using citation data as indicators;
- Building a **high-value patents database**, working with U.S. PTO, OECD, European and Japanese Patent Offices and the World International Patent Office.
- Working with OECD, UNESCO, Statistics Canada and others to improve the **international comparability of education, workforce and mobility data**;
- Supporting an OECD/NESTI Blue Sky conference to develop the **next generation of S&T indicators** to better reflect how S&T is conducted in the 21st Century



Science of Science Policy

- Initiative within NSF, with the Directorate of Social, Behavioral and Economic Sciences (SBE) taking a lead role
- Each Division within SBE will be developing new programs to respond to the initiative
- Three invitational workshops will be convened, one within each SBE Division
 - **The Scientific Basis of Individual and Team Innovation and Discovery (May 17-18)**
Division of Behavioral and Cognitive Sciences (BCS)
 - **Advancing Measures of Innovation: Knowledge Flows, Business Metrics and Measurement Strategies (June 6-7)**
Division of Science Resources Statistics (SRS)
 - **The Social Organization of Science and Science Policy (July 13-14)**
Division of Social and Economic Sciences (SES)



SRS Data and Information Resources

Division Home Page:

<http://www.nsf.gov/statistics>

Publication Search Page:

<http://www.nsf.gov/statistics/publication.cfm>

Database Page:

<http://www.nsf.gov/statistics/database.cfm>

Science and Engineering Indicators 2006 Home Page:

<http://www.nsf.gov/statistics/seind06>