



FORM APPROVED  
OMB No. 3145-0100  
Expiration Date: TBD

**NATIONAL SCIENCE FOUNDATION**  
ARLINGTON, VA 22230  
**HIGHER EDUCATION RESEARCH AND DEVELOPMENT SURVEY**  
**FY 2010**

**Please submit your survey data by February 25, 2011.**

This survey collects data on research and development (R&D) activities at higher education institutions. Please report R&D activities and expenditures for your institution's **2010** fiscal year.

The survey was previously known as the Survey of Research and Development Expenditures at Universities and Colleges. The next two pages summarize the changes from the FY 2009 survey and present updated instructions and definitions.

Your participation in this survey provides important information on the national level of R&D activity. NSF is authorized to collect this information under the National Science Foundation Act of 1950, as amended. Your institution's response is entirely voluntary.

**QUESTIONS?**

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Response to this survey is estimated to require 48 hours. If you wish to comment on this burden, please contact Suzanne H. Plimpton of NSF at (703) 292-7556, or e-mail [splimpto@nsf.gov](mailto:splimpto@nsf.gov).

The web address for submitting your data:

TBD

Or mail this form to:

TBD

**Thank you for your participation.**

## What's New

The Higher Education Research & Development Survey, formerly the Survey of Research and Development Expenditures at Universities and Colleges, has undergone a redesign in consultation with experts, data users, and university representatives. This page briefly describes the changes and additions.

### Include all fields of R&D in all survey questions

All fields of R&D should now be included in your institution's total R&D expenditures, both science and engineering (S&E) fields and non-science and engineering (non-S&E) fields such as humanities, education, law, and the arts.

All survey questions should include R&D in all fields, beginning with Question 1 and continuing throughout the questionnaire. Question 9 has a listing of examples for all R&D fields. **Please note:** There are no changes to the fields of R&D or to the listings of examples for each field.

### Other general changes

- Two alternative listings show the discipline examples for each R&D field:
  - 1) Alphabetical listing of disciplines by field (see Question 9).
  - 2) U.S. Department of Education's CIP code listing by field (see the Main Menu on the survey website).
- Clinical trials and research training grants are now explicitly included in the definition of R&D.
- Each institution campus headed by a campus-level president or chancellor is asked to complete a separate survey rather than combine their response with other campuses in their university system.

### Changes to questions

- Sources of funds: Separate categories have been created for nonprofit organizations and for institutional cost sharing. The "Industry" category has been renamed "Business." (Question 1)
- Expenditures by field and source: Information is requested by field of R&D for all sources of funds.
  - o Question 9 asks for federally funded expenditures by agency and field.
  - o Question 12 asks for nonfederally funded expenditures by field for each nonfederal source.

### New questions

For these new questions: If you do not have data available for one or more of the cells, please leave them blank instead of entering zero(s).

- Question 2. Foreign funding for R&D
- Question 3. Contracts and grants
- Question 4. R&D at medical schools
- Question 5. Clinical trial R&D
- Question 6. Basic research, applied research, and development
- Question 10. Other federal agency sources
- Question 11. R&D funded by the American Recovery and Reinvestment Act (ARRA)
- Question 13. Cost elements of R&D
- Question 14. Capitalization thresholds
- Question 16. Headcount of R&D personnel
- Question 17. Headcount of R&D postdocs

## Survey Definitions and Instructions

### Fiscal year (FY)

Please report data for your institution's 2010 fiscal year.

**Research and development (R&D)** is creative work conducted systematically to increase the stock of knowledge (research) and to use this stock of knowledge to devise new applications (development). R&D covers three activities defined below – basic research, applied research, and development.

**Basic research** is undertaken primarily to acquire new knowledge without any particular application or use in mind.

**Applied research** is conducted to gain the knowledge or understanding to meet a specific, recognized need.

**Development** is the systematic use of the knowledge or understanding gained from research directed toward the production of useful materials, devices, systems, or methods, including the design and development of prototypes and processes.

### R&D expenditures

R&D for purposes of this survey includes “organized research” as defined by **2 CFR 220 (OMB Circular A-21)**. It includes all R&D expenditures from your institution's current operating funds that are separately budgeted and accounted for.

R&D <i>includes</i> :	R&D does <i>not</i> include:
<ul style="list-style-type: none"> <li>Sponsored research (including federal and nonfederal sponsors)</li> <li>University research (institutional funds that are separately budgeted for individual R&amp;D projects)</li> <li>Recovered and unrecovered indirect costs (see definitions in Question 1)</li> <li>Equipment purchased from R&amp;D project accounts</li> <li>R&amp;D funds passed through to a subrecipient organization, educational or other</li> <li>Clinical trials, phases I, II, or III (see definition in Question 5)</li> <li>Research training grants funding work on organized research projects</li> </ul>	<ul style="list-style-type: none"> <li>Public service grants or outreach programs</li> <li>Curriculum development (unless included as part of an overall research project)</li> <li>Departmental research that is not separately budgeted</li> <li>R&amp;D conducted by university faculty or staff at outside institutions that is not accounted for in your financial records</li> <li>Capital projects (i.e., construction or renovation of research facilities)</li> <li>Non-research training grants</li> </ul>

Please <i>include</i> these components of your institution:	Please do <i>not</i> include:
<ul style="list-style-type: none"> <li>All units of your institution included in or with your financial statements, such as: <ul style="list-style-type: none"> <li>Agricultural experiment stations</li> <li>Branch campuses</li> <li>Medical schools</li> <li>Hospitals or clinics</li> <li>Research centers and facilities</li> <li>A university 501(c)3 foundation established to handle R&amp;D awards</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>Federally Funded R&amp;D Centers (FFRDCs). This information is collected separately. See the list of FFRDCs: <a href="http://www.nsf.gov/statistics/ffrdc/">http://www.nsf.gov/statistics/ffrdc/</a>.</li> <li>Other organizations or institutions, such as teaching hospitals or research institutes, with which your institution has an affiliation or relationship, but which are <u>not</u> components of your institution.</li> <li>Other campuses headed by their own presidents or chancellors within your university system. Each campus is asked to respond separately.</li> </ul>



**Question 1. How much of your total expenditures for separately budgeted research and development (R&D) came from the following sources in FY 2010? (See definition of R&D on the previous page.)**

- In rows a, b, c, d, and f: Include both **direct** and **recovered indirect costs** (reimbursement of Facilities and Administrative (F&A) costs from external sponsors).
- Report the **original source** of funds, when possible.
- Include **all** fields of R&D: sciences, engineering, humanities, education, law, arts, etc. See full listing in Question 9.

SOURCE OF FUNDS	R&D expenditures (Dollars in thousands) (for example, report \$25,342 as \$25)
<b>a. U.S. federal government</b> Any agency of the United States government. Include federal funds passed through from another institution.	\$ <input type="text"/>
<b>b. State and local government</b> Any state, county, municipality, or other local government entity in the United States, including state health agencies. Include state funds that support R&D at agricultural and other experiment stations. <i>Public institutions</i> should report state appropriations restricted for R&D activities here rather than in Institutional funds.	\$ <input type="text"/>
<b>c. Business</b> Domestic or foreign for-profit organizations. (Report funds from a company's nonprofit foundation in row d.)	\$ <input type="text"/>
<b>d. Nonprofit organizations</b> Domestic or foreign nonprofit foundations and organizations.	\$ <input type="text"/>
<b>e. Institutional funds</b>	
1. Institutionally financed organized research Include expenditures of university funds from unrestricted sources that are separately budgeted for organized research.	\$ <input type="text"/> (Confidential <sup>1</sup> )
2. Cost sharing Include committed cost sharing other than unrecovered indirect costs. Report unrecovered indirect costs in row e3.	\$ <input type="text"/> (Confidential <sup>1</sup> )
3. Unrecovered indirect costs You may calculate this amount as follows for your externally funded R&D (preferably on a project-specific basis) using the appropriate cost rate—on-campus, off-campus, etc. <ul style="list-style-type: none"> <li>• First, multiply the <u>negotiated</u> rate by the corresponding base.</li> <li>• Second, subtract recovered indirect costs.</li> </ul>	\$ <input type="text"/> (Confidential <sup>1</sup> )
4. Total institutional funds <sup>2</sup>	\$ <b>TOTAL</b> <input type="text"/>
<b>f. All other sources</b> Other sources not reported above, such as funds from foreign governments.	\$ <input type="text"/>
<b>g. Total</b> <sup>2</sup>	\$ <b>TOTAL</b> <input type="text"/>

<sup>1</sup> Information from confidential items is NOT published or released for individual institutions; only aggregate totals will appear in publications. In accordance with the National Science Foundation Act of 1950, as amended, and other applicable federal laws, your responses will not be disclosed in identifiable form to anyone other than agency employees or authorized persons.

<sup>2</sup> Totals for rows e4 and g are automatically generated on the web survey.

**Question 2. How much of the total R&D expenditures reported in Question 1 came from foreign sources?**

- Include foreign governments, businesses, universities, nonprofit organizations, and any other entity sending funds to the U.S. from a location outside the U.S. and its territories.
- Projects sponsored by a U.S. location of a foreign company are NOT considered foreign.
- Include international governmental organizations located in the U.S., such as the United Nations, the World Bank, and the International Monetary Fund.

**R&D expenditures  
(Dollars in thousands)**

**Total R&D expenditures from foreign sources**

\$ \_\_\_\_\_

**Question 3. Of the total R&D expenditures that were externally funded (all sources other than the institutional funds reported in Question 1, row e4), how much was received under each of the following types of agreements?**

**R&D expenditures  
(Dollars in thousands)**

**a. Contracts** (including direct or prime contracts and subcontracts)

Contracts are legal commitments in which a good or service is provided by your institution that benefits the sponsor. The sponsor specifies the deliverables and gains the rights to results.

\$ \_\_\_\_\_

**b. Grants, reimbursements, and all other agreements**

Include all other agreements in which payments are received but no good or service other than periodic reporting is required in exchange.

\$ \_\_\_\_\_

**c. Total** <sup>1</sup>

(should match Question 1, row g minus Question 1, row e4)

\$ TOTAL

<sup>1</sup> The column total is automatically generated on the web survey.

**Question 4. Of the total R&D expenditures reported in Question 1, row g, how much was expended for R&D projects in your medical school?**

Include projects that are assigned to the medical school or to research centers that are organizationally part of the medical school.

If your institution does **not** have a medical school (that is, a school that awards the M.D. or D.O. degree), check here and go to Question 5.

**R&D expenditures  
(Dollars in thousands)**

**Total R&D expenditures in the university's medical school**

\$ \_\_\_\_\_

**Question 5. Of the total R&D expenditures reported in Question 1, row g, how much was expended for Phase I, Phase II, and Phase III clinical trials with human patients?**

**Clinical trials** are research studies designed to answer specific questions about the effects of drugs, vaccines, medical devices, tests, treatments, and other therapies for patients. Clinical trials are used to determine safety and effectiveness.

For reference, the National Institutes of Health (NIH) categorizes human clinical trials into the following four phases.

Please **include**:

- Phase I uses a small group of human patients (20-80) to evaluate safety and identify side effects.
- Phase II uses a larger group (100-300) to test effectiveness and further evaluate safety.
- Phase III uses a large group (1,000 to 3,000) to confirm effectiveness, monitor side effects, compare to commonly used treatments, and collect safety information.

Please **exclude**:

- Phase IV is a post-market study that collects more information on risks, benefits, and optimal use.

If your institution did **not** conduct any clinical trials in FY 2010, check here ☐ and go to Question 5.1.

	R&D expenditures (Dollars in thousands)		
	(1) Federal	(2) Nonfederal	(3) Total <sup>1</sup>
<b>Human clinical trials</b>			
Trials with human patients	\$ <input type="text"/>	\$ <input type="text"/>	\$ <u>TOTAL</u>

<sup>1</sup> The row total is automatically generated on the web survey.

**Question 5.1. Did you include R&D expenditures for clinical trials in your FY 2009 (previous year's) survey response?**

	(1) Included	(2) Not included
(Check one for each row.)		
<b>a. Federal</b>	<input type="checkbox"/>	<input type="checkbox"/>
<b>b. Nonfederal</b>	<input type="checkbox"/>	<input type="checkbox"/>

No FY 2009 tri



**Question 6. What amounts of your FY 2010 R&D expenditures were for basic research, applied research, and development?**

If possible, these categories defining the character of work should be coded at the individual project level by the principal investigator. Estimates are acceptable if necessary.

See the box below this question for examples.

	R&D expenditures (Dollars in thousands)		
	(1) Federal	(2) Nonfederal	(3) Total <sup>1</sup>
<b>a. Basic research</b> Research undertaken primarily to acquire new knowledge without any particular application or use in mind.	\$ _____	\$ _____	\$ <u>TOTAL</u>
<b>b. Applied research</b> Research conducted to gain the knowledge or understanding to meet a specific, recognized need.	\$ _____	\$ _____	\$ <u>TOTAL</u>
<b>c. Development</b> The systematic use of the knowledge or understanding gained from research directed toward the production of useful materials, devices, systems, or methods, including the design and development of prototypes and processes.	\$ _____	\$ _____	\$ <u>TOTAL</u>
<b>d. Total <sup>1</sup></b> Column 1 total should match Question 1, row a Column 3 total should match Question 1, row g	\$ <u>TOTAL</u>	\$ <u>TOTAL</u>	\$ <u>TOTAL</u>

<sup>1</sup>Row and column totals are automatically generated on the web survey.

Examples		
Basic research	Applied research	Development
A researcher is studying the properties of human blood to determine what affects coagulation.	A researcher is conducting research on how a new chicken pox vaccine affects blood coagulation.	A researcher is conducting clinical trials to test a newly developed chicken pox vaccine for young children.
A researcher is studying the properties of molecules under various heat and cold conditions.	A researcher is investigating the properties of particular substances under various heat and cold conditions with the objective of finding longer lasting components for highway pavement.	A researcher is working with state transportation officials to conduct tests of a newly developed highway pavement under various types of heat and cold conditions.
A researcher is studying the heart chambers of various fish species.	A researcher is examining various levels of a toxic substance to determine the maximum safe level for fish in a stream.	A researcher has a contract with the U.S. government to design a new stream monitoring system that will incorporate the latest research findings on toxicity levels for fish.

**Question 7. How much of your R&D expenditures reported in Question 1 did your institution receive as a subrecipient?**

The **subrecipient** for an award carries out the work but receives the funds from a pass-through entity rather than directly from the original funding source. See OMB Circular A-133, Section 105 for the federal definition. Subrecipients tend to be the co-authors of publications, writers of technical reports discussing findings, inventors, etc. Do **not** include vendor relationships. A vendor receives payment for goods and services provided. See OMB Circular A-133, Section 210.

Source of funds	R&D expenditures (Dollars in thousands)		
	(1)	(2)	(3)
	Federal	Nonfederal	Total <sup>1</sup>
<b>a. From higher education institutions</b>			
Colleges and universities and units owned, operated, and controlled by such institutions.	\$ _____	\$ _____	\$ <u>TOTAL</u>
	\$ _____	\$ _____	\$ <u>TOTAL</u>
<b>b. From other sources</b>			
	\$ _____	\$ _____	\$ <u>TOTAL</u>
<b>c. Total <sup>1</sup></b>	\$ <u>TOTAL</u>	\$ <u>TOTAL</u>	\$ <u>TOTAL</u>

<sup>1</sup> Row and column totals are automatically generated on the web survey.

**Question 8. How much of your R&D expenditures reported in Question 1 were passed through by your institution to subrecipients?**

Do **not** include vendor relationships. A vendor receives payment for goods and services provided. See OMB Circular A-133, Section 210.

Type of recipient	R&D expenditures (Dollars in thousands)		
	(1)	(2)	(3)
	Federal	Nonfederal	Total <sup>1</sup>
<b>a. To higher education institutions</b>			
Colleges and universities and units owned, operated, and controlled by such institutions.	\$ _____	\$ _____	\$ <u>TOTAL</u>
	\$ _____	\$ _____	\$ <u>TOTAL</u>
<b>b. To other organizations</b>			
	\$ _____	\$ _____	\$ <u>TOTAL</u>
<b>c. Total <sup>1</sup></b>	\$ <u>TOTAL</u>	\$ <u>TOTAL</u>	\$ <u>TOTAL</u>

<sup>1</sup> Row and column totals are automatically generated on the web survey.

**Question 9A. What were your FY 2010 R&D expenditures in engineering funded by the federal agency sources<sup>1</sup> below? (R&D expenditures from nonfederal sources will be reported in Question 12.)**

- Question 9 total (page 14, row K, column h) should match Question 1, row a.
- If an individual project involves more than one of the 36 fields of R&D, please prorate expenditures when possible and report the amount for each field involved.
- For subrecipient funding, report the agency that sponsored the original award.

**R&D expenditures from federal sources <sup>2</sup>**  
(Dollars in thousands)

<b>R&amp;D Fields</b> (Examples listed below)	<b>(a)</b> <b>USDA</b>	<b>(b)</b> <b>DoD</b>	<b>(c)</b> <b>Energy</b>	<b>(d)</b> <b>HHS, includes NIH</b>	<b>(e)</b> <b>NASA</b>	<b>(f)</b> <b>NSF</b>	<b>(g)</b> <b>Other</b>	<b>(h)</b> <b>TOTAL <sup>3</sup></b>
<b>A. ENGINEERING</b>								
1. Aeronautical/ Astronautical	\$ _____	\$ _____	\$ _____	\$ _____	\$ _____	\$ _____	\$ _____	\$ <u>TOTAL</u>
2. Bioengineering/ Biomedical eng.	\$ _____	\$ _____	\$ _____	\$ _____	\$ _____	\$ _____	\$ _____	\$ <u>TOTAL</u>
3. Chemical	\$ _____	\$ _____	\$ _____	\$ _____	\$ _____	\$ _____	\$ _____	\$ <u>TOTAL</u>
4. Civil	\$ _____	\$ _____	\$ _____	\$ _____	\$ _____	\$ _____	\$ _____	\$ <u>TOTAL</u>
5. Electrical	\$ _____	\$ _____	\$ _____	\$ _____	\$ _____	\$ _____	\$ _____	\$ <u>TOTAL</u>
6. Mechanical	\$ _____	\$ _____	\$ _____	\$ _____	\$ _____	\$ _____	\$ _____	\$ <u>TOTAL</u>
7. Metallurgical/ Materials	\$ _____	\$ _____	\$ _____	\$ _____	\$ _____	\$ _____	\$ _____	\$ <u>TOTAL</u>
8. Other engineering	\$ _____	\$ _____	\$ _____	\$ _____	\$ _____	\$ _____	\$ _____	\$ <u>TOTAL</u>
9. <b>TOTAL <sup>3</sup></b>	\$ <u>TOTAL</u>	\$ <u>TOTAL</u>	\$ <u>TOTAL</u>	\$ <u>TOTAL</u>	\$ <u>TOTAL</u>	\$ <u>TOTAL</u>	\$ <u>TOTAL</u>	\$ <u>TOTAL</u>

<sup>1</sup> View a list of federal agencies and their sub-agencies: <https://nsfherdsdemo.westat.com/pdf/FederalAgenciesfundingRandD.pdf>

<sup>2</sup> **KEY:** USDA, Department of Agriculture; DoD, Department of Defense; Energy, Department of Energy; HHS, Department of Health and Human Services; NASA, National Aeronautics and Space Administration; NIH, National Institutes of Health; NSF, National Science Foundation. "Other" includes all other federal agencies.

<sup>3</sup> Row and column totals are automatically generated on the web survey.

**Examples of Disciplines: Engineering Fields of R&D**

<b>A. ENGINEERING</b>			
<b>1. Aeronautical/astronautical</b> Aerodynamics Aerospace engineering Space technology  <b>2. Bioengineering/biomedical engineering</b> Biomaterials Medical engineering  <b>3. Chemical</b> Petroleum Petroleum refining process Plastics Polymer	<b>4. Civil</b> Architectural Architecture Environmental Environmental health Geotechnical Hydraulic Hydrologic Sanitary Structural Transportation	<b>5. Electrical</b> Communications Computer Electronics Power  <b>6. Mechanical</b> Engineering mechanics  <b>7. Metallurgical/materials</b> Ceramic Materials science Metallurgy Mining and mineral Textile	<b>8. Other engineering</b> Agricultural Engineering design Engineering physics Engineering science Marine Naval architecture Nuclear Ocean Systems Other engineering fields not listed separately above

Wood science		Welding	
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Question 9 continues on next page.

**Question 9B. What were your FY 2010 R&D expenditures in the physical sciences funded by the federal agency sources<sup>1</sup> below? (R&D expenditures from nonfederal sources will be reported in Question 12.)**

**R&D expenditures from federal sources <sup>2</sup>**  
(Dollars in thousands)

<b>R&amp;D Fields</b> (Examples listed below)	<b>(a)</b> <b>USDA</b>	<b>(b)</b> <b>DoD</b>	<b>(c)</b> <b>Energy</b>	<b>(d)</b> <b>HHS,</b> <b>includes</b> <b>NIH</b>	<b>(e)</b> <b>NASA</b>	<b>(f)</b> <b>NSF</b>	<b>(g)</b> <b>Other</b>	<b>(h)</b> <b>TOTAL <sup>3</sup></b>
<b>B. PHYSICAL SCIENCES</b>								
1. Astronomy	\$ _____	\$ _____	\$ _____	\$ _____	\$ _____	\$ _____	\$ _____	\$ <u>TOTAL</u>
2. Chemistry	\$ _____	\$ _____	\$ _____	\$ _____	\$ _____	\$ _____	\$ _____	\$ <u>TOTAL</u>
3. Physics	\$ _____	\$ _____	\$ _____	\$ _____	\$ _____	\$ _____	\$ _____	\$ <u>TOTAL</u>
4. Other physical sciences	\$ _____	\$ _____	\$ _____	\$ _____	\$ _____	\$ _____	\$ _____	\$ <u>TOTAL</u>
5. <b>TOTAL <sup>3</sup></b>	\$ <u>TOTAL</u>	\$ <u>TOTAL</u>	\$ <u>TOTAL</u>	\$ <u>TOTAL</u>	\$ <u>TOTAL</u>	\$ <u>TOTAL</u>	\$ <u>TOTAL</u>	\$ <u>TOTAL</u>

<sup>1</sup> View a list of federal agencies and their sub-agencies: <https://nsfherdsdemo.westat.com/pdf/FederalAgenciesfundingRandD.pdf>

<sup>2</sup> **KEY:** USDA, Department of Agriculture; DoD, Department of Defense; Energy, Department of Energy; HHS, Department of Health and Human Services; NASA, National Aeronautics and Space Administration; NIH, National Institutes of Health; NSF, National Science Foundation. "Other" includes all other federal agencies.

<sup>3</sup> Row and column totals are automatically generated on the web survey.

**Examples of Disciplines: Physical Sciences Fields of R&D**

<b>B. PHYSICAL SCIENCES</b>			
<b>1. Astronomy</b> Astrophysics Gamma-ray astronomy Neutrino astronomy Optical astronomy Radio astronomy X-ray astronomy	<b>2. Chemistry</b> (except biochemistry—see Biological sciences) Analytical chemistry Inorganic chemistry Organic chemistry Organo-metallic chemistry Pharmaceutical chemistry Physical chemistry Polymer sciences	<b>3. Physics</b> Acoustics Atomic physics Chemical physics Condensed matter physics Elementary particle physics Mathematical physics Molecular physics Nuclear structure Optics Plasma physics Theoretical physics	<b>4. Other physical sciences</b> Other physical sciences not listed separately above

**Question 9C-E. What were your FY 2010 R&D expenditures in the environmental, mathematical, and computer sciences funded by the federal agency sources<sup>1</sup> below? (R&D expenditures from nonfederal sources will be reported in Question 12.)**

**R&D expenditures from federal sources<sup>2</sup>**  
(Dollars in thousands)

R&D Fields (Examples listed below)	(a) USDA	(b) DoD	(c) Energy	(d) HHS, includes NIH	(e) NASA	(f) NSF	(g) Other	(h) TOTAL <sup>3</sup>
<b>C. ENVIRONMENTAL SCIENCES</b>								
1. Atmospheric	\$ _____	\$ _____	\$ _____	\$ _____	\$ _____	\$ _____	\$ _____	\$ TOTAL
2. Earth sciences	\$ _____	\$ _____	\$ _____	\$ _____	\$ _____	\$ _____	\$ _____	\$ TOTAL
3. Oceanography	\$ _____	\$ _____	\$ _____	\$ _____	\$ _____	\$ _____	\$ _____	\$ TOTAL
4. Other environmental sciences	\$ _____	\$ _____	\$ _____	\$ _____	\$ _____	\$ _____	\$ _____	\$ TOTAL
5. TOTAL <sup>3</sup>	\$ TOTAL	\$ TOTAL	\$ TOTAL	\$ TOTAL	\$ TOTAL	\$ TOTAL	\$ TOTAL	\$ TOTAL
<b>D. MATHEMATICAL SCIENCES</b>	\$ _____	\$ _____	\$ _____	\$ _____	\$ _____	\$ _____	\$ _____	\$ TOTAL
<b>E. COMPUTER SCIENCES</b>	\$ _____	\$ _____	\$ _____	\$ _____	\$ _____	\$ _____	\$ _____	\$ TOTAL

<sup>1</sup> View a list of federal agencies and their sub-agencies: <https://nsfherdsdemo.westat.com/pdf/FederalAgenciesfundingRandD.pdf>

<sup>2</sup> **KEY:** USDA, Department of Agriculture; DoD, Department of Defense; Energy, Department of Energy; HHS, Department of Health and Human Services; NASA, National Aeronautics and Space Administration; NIH, National Institutes of Health; NSF, National Science Foundation. "Other" includes all other federal agencies.

<sup>3</sup> Row and column totals are automatically generated on the web survey.

**Examples of Disciplines: Environmental Sciences, Mathematical Sciences, and Computer Sciences Fields of R&D**

<b>C. ENVIRONMENTAL SCIENCES</b>  <b>1. Atmospheric sciences</b> Aeronomy Extraterrestrial atmospheres Meteorology Solar Weather modification	<b>C. ENVIRONMENTAL SCIENCES (CONTINUED)</b>  <b>2. Earth sciences</b> Cartography Earth and planetary sciences Geochemistry Geodesy and gravity Geology Geomagnetism Geophysics Hydrology Paleomagnetism Paleontology Physical geography Seismology Surveying	<b>C. ENVIRONMENTAL SCIENCES (CONTINUED)</b>  <b>3. Oceanography</b> Biological oceanography Chemical oceanography Geological oceanography Marine biology Marine oceanography Physical oceanography  <b>4. Other environmental sciences</b> Other environmental sciences not listed separately above	<b>D. MATHEMATICAL SCIENCES</b> Algebra Analysis Applied mathematics Foundations and logic Geometry Numerical analysis Operations research Statistics Topology  <b>E. COMPUTER SCIENCES</b> Computer systems analysis Data processing Information sciences Information technology Management information systems
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**Question 9F. What were your FY 2010 R&D expenditures in the life sciences funded by the federal agency sources<sup>1</sup> below? (R&D expenditures from nonfederal sources will be reported in Question 12.)**

**R&D expenditures from federal sources <sup>2</sup>**  
(Dollars in thousands)

R&D Fields (Examples listed below)	(a) USDA	(b) DoD	(c) Energy	(d) HHS, includes NIH	(e) NASA	(f) NSF	(g) Other	(h) TOTAL <sup>3</sup>
<b>F. LIFE SCIENCES</b>								
1. Agricultural	\$ _____	\$ _____	\$ _____	\$ _____	\$ _____	\$ _____	\$ _____	\$ <u>TOTAL</u>
2. Biological	\$ _____	\$ _____	\$ _____	\$ _____	\$ _____	\$ _____	\$ _____	\$ <u>TOTAL</u>
3. Medical	\$ _____	\$ _____	\$ _____	\$ _____	\$ _____	\$ _____	\$ _____	\$ <u>TOTAL</u>
4. Other life sciences	\$ _____	\$ _____	\$ _____	\$ _____	\$ _____	\$ _____	\$ _____	\$ <u>TOTAL</u>
5. <b>TOTAL <sup>3</sup></b>	\$ <u>TOTAL</u>	\$ <u>TOTAL</u>	\$ <u>TOTAL</u>	\$ <u>TOTAL</u>	\$ <u>TOTAL</u>	\$ <u>TOTAL</u>	\$ <u>TOTAL</u>	\$ <u>TOTAL</u>

<sup>1</sup> View a list of federal agencies and their sub-agencies: <https://nsfherdsdemo.westat.com/pdf/FederalAgenciesfundingRandD.pdf>

<sup>2</sup> **KEY:** USDA, Department of Agriculture; DoD, Department of Defense; Energy, Department of Energy; HHS, Department of Health and Human Services; NASA, National Aeronautics and Space Administration; NIH, National Institutes of Health; NSF, National Science Foundation. "Other" includes all other federal agencies.

<sup>3</sup> Row and column totals are automatically generated on the web survey.

**Examples of Disciplines: Life Sciences Fields of R&D**

<b>F. LIFE SCIENCES</b>			
<b>1. Agricultural sciences</b> Agricultural chemistry Agricultural economics — see Social sciences, Economics Agricultural engineering — see Engineering Agricultural production Agronomy Animal science Aquaculture Conservation Fish and wildlife Forestry Horticulture International agriculture Landscape architecture Plant sciences Renewable natural resources Soil sciences	<b>2. Biological sciences</b> (Continued) Botany Cellular biology Ecology Entomology Epidemiology Foods and nutrition studies Genetics, plant and animal Immunology Medical microbiology Microbiology Molecular biology Nutritional sciences Parasitology Pathology, human and animal Pharmacology, human and animal Physical anthropology Physiology, human and animal Toxicology Virology Zoology	<b>3. Medical sciences</b> (Continued) Dermatology Family medicine Gastroenterology General surgery Geriatric medicine Gynecology Hematology Internal medicine Mental Health Neonatal-perinatal medicine Neurological surgery Neurology Neurosciences Nuclear medicine Nuclear radiology Obstetrics Oncology Ophthalmology Optometry Oral surgery Orthopedic surgery Orthopedics Osteopathic medicine Otorhinolaryngology Pediatrics Pharmacology Pharmacy Physical and rehabilitative medicine Plastic surgery Podiatry	<b>3. Medical sciences</b> (Continued) Preventive medicine Psychiatric nursing Psychiatry Public health Radiation biology/ Radiobiology Thoracic surgery Urology Veterinary medicine — see note below
<b>2. Biological sciences</b> Allergies and immunology Anatomy Bacteriology Biochemistry Biogeography Biology, general Biometrics Biophysics Biostatistics Biotechnology	<b>3. Medical sciences</b> Anesthesiology Cardiology Colon and rectal surgery Dental surgery Dentistry		<b>4. Other life sciences</b> Clinical/medical laboratory technologies Communication disorders sciences and services Gerontology Health and medical administrative services Health professions and related services, other Nursing Occupational therapy Physical therapy Rehabilitation services Therapeutic services Other life sciences not listed separately above

Note: Please report veterinary R&D expenditures using agricultural sciences, medical sciences, and biological sciences, as appropriate.

Question 9 continues on next page.



**Question 9G-I. What were your FY 2010 R&D expenditures in psychology, social sciences, and other sciences funded by the federal agency sources<sup>1</sup> below? (R&D expenditures from nonfederal sources will be reported in Question 12.)**

**R&D expenditures from federal sources <sup>2</sup>**  
(Dollars in thousands)

R&D Fields (Examples listed below)	(a) USDA	(b) DoD	(c) Energy	(d) HHS, includes NIH	(e) NASA	(f) NSF	(g) Other	(h) TOTAL <sup>3</sup>
<b>G. PSYCHOLOGY</b>	\$ _____	\$ _____	\$ _____	\$ _____	\$ _____	\$ _____	\$ _____	\$ <u>TOTAL</u>
<b>H. SOCIAL SCIENCES</b>								
1. Economics	\$ _____	\$ _____	\$ _____	\$ _____	\$ _____	\$ _____	\$ _____	\$ <u>TOTAL</u>
2. Political science	\$ _____	\$ _____	\$ _____	\$ _____	\$ _____	\$ _____	\$ _____	\$ <u>TOTAL</u>
3. Sociology	\$ _____	\$ _____	\$ _____	\$ _____	\$ _____	\$ _____	\$ _____	\$ <u>TOTAL</u>
4. Other social sciences	\$ _____	\$ _____	\$ _____	\$ _____	\$ _____	\$ _____	\$ _____	\$ <u>TOTAL</u>
5. TOTAL <sup>3</sup>	\$ <u>TOTAL</u>	\$ <u>TOTAL</u>	\$ <u>TOTAL</u>	\$ <u>TOTAL</u>	\$ <u>TOTAL</u>	\$ <u>TOTAL</u>	\$ <u>TOTAL</u>	\$ <u>TOTAL</u>
<b>I. OTHER SCIENCES</b>	\$ _____	\$ _____	\$ _____	\$ _____	\$ _____	\$ _____	\$ _____	\$ <u>TOTAL</u>

<sup>1</sup> View a list of federal agencies and their sub-agencies: <https://nsfherdsdemo.westat.com/pdf/FederalAgenciesfundingRandD.pdf>

<sup>2</sup> **KEY:** USDA, Department of Agriculture; DoD, Department of Defense; Energy, Department of Energy; HHS, Department of Health and Human Services; NASA, National Aeronautics and Space Administration; NIH, National Institutes of Health; NSF, National Science Foundation. "Other" includes all other federal agencies.

<sup>3</sup> Row and column totals are automatically generated on the web survey.

**Examples of Disciplines: Psychology and Social Sciences Fields of R&D**

G. PSYCHOLOGY	H. SOCIAL SCIENCES (CONTINUED)	H. SOCIAL SCIENCES (CONTINUED)	I. OTHER SCIENCES
Animal behavior Art therapy Clinical psychology Educational psychology Experimental psychology Human development and personality School psychology Social psychology	<b>2. Political science</b> Comparative government Government International relations and affairs Legal systems Political theory Public administration Public policy analysis Regional studies	<b>4. Other social sciences</b> Archaeology Area and ethnic studies City and community planning Community services Corrections Criminal justice Geography History of science Linguistics Urban and regional planning Urban affairs Urban studies	Use this category for R&D that involves at least one S&E field (rows A to H) if it is impossible to report multidisciplinary or interdisciplinary R&D expenditures in specific fields.
H. SOCIAL SCIENCES	3. Sociology		
<b>1. Economics</b> Agricultural economics Applied economics Business development Econometrics Industrial economics International economics Labor economics Managerial economics Public finance and fiscal policy Quantitative economics Resource economics	Anthropology (social and cultural only) Comparative and historical sociology Complex organizations Cultural and social structure Demography Group interactions Population studies Social problems and welfare theory		

Question 9 continues on next page.

**Question 9J-K. What were your FY 2010 R&D expenditures in the non-science and engineering (non-S&E) fields funded by the federal agency sources<sup>1</sup> below? (R&D expenditures from nonfederal sources will be reported in Question 12.)**

**R&D expenditures from federal sources<sup>2</sup>**  
(Dollars in thousands)

R&D Fields (Examples listed below)	(a) USDA	(b) DoD	(c) Energy	(d) HHS, includes NIH	(e) NASA	(f) NSF	(g) Other	(h) TOTAL <sup>3</sup>
<b>J. NON-S&amp;E FIELDS</b>								
1. Education	\$ _____	\$ _____	\$ _____	\$ _____	\$ _____	\$ _____	\$ _____	\$ <u>TOTAL</u>
2. Law	\$ _____	\$ _____	\$ _____	\$ _____	\$ _____	\$ _____	\$ _____	\$ <u>TOTAL</u>
3. Humanities	\$ _____	\$ _____	\$ _____	\$ _____	\$ _____	\$ _____	\$ _____	\$ <u>TOTAL</u>
4. Visual and performing arts	\$ _____	\$ _____	\$ _____	\$ _____	\$ _____	\$ _____	\$ _____	\$ <u>TOTAL</u>
5. Business and management	\$ _____	\$ _____	\$ _____	\$ _____	\$ _____	\$ _____	\$ _____	\$ <u>TOTAL</u>
6. Communication, journalism, and library science	\$ _____	\$ _____	\$ _____	\$ _____	\$ _____	\$ _____	\$ _____	\$ <u>TOTAL</u>
7. Social work	\$ _____	\$ _____	\$ _____	\$ _____	\$ _____	\$ _____	\$ _____	\$ <u>TOTAL</u>
8. Other non-S&E fields	\$ _____	\$ _____	\$ _____	\$ _____	\$ _____	\$ _____	\$ _____	\$ <u>TOTAL</u>
9. TOTAL <sup>3</sup>	\$ <u>TOTAL</u>	\$ <u>TOTAL</u>	\$ <u>TOTAL</u>	\$ <u>TOTAL</u>	\$ <u>TOTAL</u>	\$ <u>TOTAL</u>	\$ <u>TOTAL</u>	\$ <u>TOTAL</u>
<b>K. TOTAL FOR ALL FIELDS OF R&amp;D<sup>3</sup></b>	\$ <u>TOTAL</u>	\$ <u>TOTAL</u>	\$ <u>TOTAL</u>	\$ <u>TOTAL</u>	\$ <u>TOTAL</u>	\$ <u>TOTAL</u>	\$ <u>TOTAL</u>	\$ <u>TOTAL</u>

**Total for row K, column h should equal Total for Question 1, row a.**

<sup>1</sup> View a list of federal agencies and their sub-agencies: <https://nsfherdsdemo.westat.com/pdf/FederalAgenciesfundingRandD.pdf>

<sup>2</sup> **KEY:** USDA, Department of Agriculture; DoD, Department of Defense; Energy, Department of Energy; HHS, Department of Health and Human Services; NASA, National Aeronautics and Space Administration; NIH, National Institutes of Health; NSF, National Science Foundation. "Other" includes all other federal agencies.

<sup>3</sup> Row and column totals are automatically generated on the web survey.

**Examples of Disciplines: Non-Science & Engineering (Non-S&E) Fields of R&D**

<b>J. NON-S&amp;E</b>  <b>1. Education</b> (no specific examples)  <b>2. Law</b> Legal studies  <b>3. Humanities</b> English language and literature Foreign languages and literature General studies and humanities History (except history of science—see Other social sciences) Letters	<b>3. Humanities (CONTINUED)</b> Liberal arts and sciences Philosophy and religion Theological studies and religious vocations  <b>4. Visual and performing arts</b> (no specific examples)  <b>5. Business and management</b> Business management and administrative services Marketing distribution Marketing operations	<b>6. Communication, journalism, and library science</b> Communication Communications technologies Library science  <b>7. Social work</b> (no specific examples)	<b>8. Other non-S&amp;E fields</b> Military technologies Parks, recreation, leisure and fitness studies Other non-S&E fields not listed separately above  Also, use this category for R&D that involves multiple non-S&E fields if it is impossible to report multidisciplinary or interdisciplinary R&D expenditures in specific fields
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**Question 10. Of the amount reported for “other” federal sources reported in Question 9 (row K, column g), which agencies funded this R&D and how much of the reported amount was from each agency?**

If your institution reported \$0 in Question 9, row K, column g, check here ☐ and go to Question 11.

- Use rows a-j to list up to 10 agencies that funded the highest R&D expenditures.
- Use row k to report any remaining amount.
- For subrecipient funding in this question, list the sponsor of the original award.
- View a list of federal agencies and their sub-agencies:

<https://nsfherdsdemo.westat.com/pdf/FederalAgenciesfundingRandD.pdf>

**Federal agencies (List up to 10)**

**R&D expenditures  
(Dollars in thousands)**

a.	<input type="text"/>	\$ <input type="text"/>
b.	<input type="text"/>	\$ <input type="text"/>
c.	<input type="text"/>	\$ <input type="text"/>
d.	<input type="text"/>	\$ <input type="text"/>
e.	<input type="text"/>	\$ <input type="text"/>
f.	<input type="text"/>	\$ <input type="text"/>
g.	<input type="text"/>	\$ <input type="text"/>
h.	<input type="text"/>	\$ <input type="text"/>
i.	<input type="text"/>	\$ <input type="text"/>
j.	<input type="text"/>	\$ <input type="text"/>
k.	Other agencies included in Question 9, column g, but not listed above	\$ <input type="text"/>
l.	<b>Total (should match Question 9, row K, column g.)</b> <sup>1</sup>	\$ <u>TOTAL</u>

<sup>1</sup> The column total is automatically generated on the web survey.

**Question 11. How much of the federal R&D expenditures reported in Question 1, row a, was funded by the American Recovery and Reinvestment Act (ARRA)?**

<b>Total R&amp;D expenditures from ARRA funds</b>	<b>R&amp;D expenditures (Dollars in thousands)</b>
	\$ <input type="text"/>

**Question 12A-B. What were your FY 2010 R&D expenditures in the engineering and physical sciences fields funded by the nonfederal sources below?**

- The totals in row K, page 18, should match corresponding sources in Question 1, rows b-f.
- If an individual project involves more than one of the 36 fields of R&D, please prorate expenditures when possible and report the amount for each field involved.

**R&D expenditures from nonfederal sources**  
(Dollars in thousands)

<b>R&amp;D Fields</b> (See Question 9, pp. 9-10)	<b>(a)</b> State and local government	<b>(b)</b> Business	<b>(c)</b> Nonprofit organizations	<b>(d)</b> Institutional funds	<b>(e)</b> Other nonfederal sources	<b>(f)</b> TOTAL <sup>1</sup>
<b>A. ENGINEERING</b>						
1. Aeronautical/ Astronautical	\$ _____	\$ _____	\$ _____	\$ _____	\$ _____	\$ <u>TOTAL</u>
2. Bioengineering/ Biomedical eng.	\$ _____	\$ _____	\$ _____	\$ _____	\$ _____	\$ <u>TOTAL</u>
3. Chemical	\$ _____	\$ _____	\$ _____	\$ _____	\$ _____	\$ <u>TOTAL</u>
4. Civil	\$ _____	\$ _____	\$ _____	\$ _____	\$ _____	\$ <u>TOTAL</u>
5. Electrical	\$ _____	\$ _____	\$ _____	\$ _____	\$ _____	\$ <u>TOTAL</u>
6. Mechanical	\$ _____	\$ _____	\$ _____	\$ _____	\$ _____	\$ <u>TOTAL</u>
7. Metallurgical/Materials	\$ _____	\$ _____	\$ _____	\$ _____	\$ _____	\$ <u>TOTAL</u>
8. Other engineering	\$ _____	\$ _____	\$ _____	\$ _____	\$ _____	\$ <u>TOTAL</u>
9. TOTAL <sup>1</sup>	\$ <u>TOTAL</u>	\$ <u>TOTAL</u>	\$ <u>TOTAL</u>	\$ <u>TOTAL</u>	\$ <u>TOTAL</u>	\$ <u>TOTAL</u>
<b>B. PHYSICAL SCIENCES</b>						
1. Astronomy	\$ _____	\$ _____	\$ _____	\$ _____	\$ _____	\$ <u>TOTAL</u>
2. Chemistry	\$ _____	\$ _____	\$ _____	\$ _____	\$ _____	\$ <u>TOTAL</u>
3. Physics	\$ _____	\$ _____	\$ _____	\$ _____	\$ _____	\$ <u>TOTAL</u>
4. Other physical sciences	\$ _____	\$ _____	\$ _____	\$ _____	\$ _____	\$ <u>TOTAL</u>
5. TOTAL <sup>1</sup>	\$ <u>TOTAL</u>	\$ <u>TOTAL</u>	\$ <u>TOTAL</u>	\$ <u>TOTAL</u>	\$ <u>TOTAL</u>	\$ <u>TOTAL</u>

<sup>1</sup> Row and column totals are automatically generated on the web survey.

**Examples of disciplines for engineering and physical sciences fields of R&D are listed on page 9-10.**

**Question 12C-I. What were your FY 2010 R&D expenditures in the R&D fields listed below funded by the nonfederal sources below?**

R&D expenditures from nonfederal sources (Dollars in thousands)						
R&D Fields (See Question 9, pp. 11-13)	(a) State and local government	(b) Business	(c) Nonprofit organizations	(d) Institutional funds	(e) Other nonfederal sources	(f) TOTAL <sup>1</sup>
<b>C. ENVIRONMENTAL SCIENCES</b>						
1. Atmospheric	\$ _____	\$ _____	\$ _____	\$ _____	\$ _____	\$ <u>TOTAL</u>
2. Earth sciences	\$ _____	\$ _____	\$ _____	\$ _____	\$ _____	\$ <u>TOTAL</u>
3. Oceanography	\$ _____	\$ _____	\$ _____	\$ _____	\$ _____	\$ <u>TOTAL</u>
4. Other environmental sciences	\$ _____	\$ _____	\$ _____	\$ _____	\$ _____	\$ <u>TOTAL</u>
5. TOTAL <sup>1</sup>	\$ <u>TOTAL</u>	\$ <u>TOTAL</u>	\$ <u>TOTAL</u>	\$ <u>TOTAL</u>	\$ <u>TOTAL</u>	\$ <u>TOTAL</u>
<b>D. MATHEMATICAL SCIENCES</b>						
	\$ _____	\$ _____	\$ _____	\$ _____	\$ _____	\$ <u>TOTAL</u>
<b>E. COMPUTER SCIENCES</b>						
	\$ _____	\$ _____	\$ _____	\$ _____	\$ _____	\$ <u>TOTAL</u>
<b>F. LIFE SCIENCES</b>						
1. Agricultural	\$ _____	\$ _____	\$ _____	\$ _____	\$ _____	\$ <u>TOTAL</u>
2. Biological	\$ _____	\$ _____	\$ _____	\$ _____	\$ _____	\$ <u>TOTAL</u>
3. Medical	\$ _____	\$ _____	\$ _____	\$ _____	\$ _____	\$ <u>TOTAL</u>
4. Other life sciences	\$ _____	\$ _____	\$ _____	\$ _____	\$ _____	\$ <u>TOTAL</u>
5. TOTAL <sup>1</sup>	\$ <u>TOTAL</u>	\$ <u>TOTAL</u>	\$ <u>TOTAL</u>	\$ <u>TOTAL</u>	\$ <u>TOTAL</u>	\$ <u>TOTAL</u>
<b>G. PSYCHOLOGY</b>						
	\$ _____	\$ _____	\$ _____	\$ _____	\$ _____	\$ <u>TOTAL</u>
<b>H. SOCIAL SCIENCES</b>						
1. Economics	\$ _____	\$ _____	\$ _____	\$ _____	\$ _____	\$ <u>TOTAL</u>
2. Political science	\$ _____	\$ _____	\$ _____	\$ _____	\$ _____	\$ <u>TOTAL</u>
3. Sociology	\$ _____	\$ _____	\$ _____	\$ _____	\$ _____	\$ <u>TOTAL</u>
4. Other social sciences	\$ _____	\$ _____	\$ _____	\$ _____	\$ _____	\$ <u>TOTAL</u>
5. TOTAL <sup>1</sup>	\$ <u>TOTAL</u>	\$ <u>TOTAL</u>	\$ <u>TOTAL</u>	\$ <u>TOTAL</u>	\$ <u>TOTAL</u>	\$ <u>TOTAL</u>
<b>I. OTHER SCIENCES</b>						
	\$ _____	\$ _____	\$ _____	\$ _____	\$ _____	\$ <u>TOTAL</u>

<sup>1</sup> Row and column totals are automatically generated on the web survey.

Examples of disciplines for the above fields of R&D are listed on pages 11-13.

**Question 12J-K. What were your FY 2010 R&D expenditures in the non-science and engineering (non-S&E) fields funded by the nonfederal sources below?**

**R&D expenditures from nonfederal sources**  
(Dollars in thousands)

<b>R&amp;D Fields</b> (See Question 9, p. 14)	<b>(a)</b> State and local government	<b>(b)</b> Business	<b>(c)</b> Nonprofit organizations	<b>(d)</b> Institutional funds	<b>(e)</b> Other nonfederal sources	<b>(f)</b> TOTAL <sup>1</sup>
<b>J. NON-S&amp;E FIELDS</b>						
1. Education	\$ _____	\$ _____	\$ _____	\$ _____	\$ _____	\$ <u>TOTAL</u>
2. Law	\$ _____	\$ _____	\$ _____	\$ _____	\$ _____	\$ <u>TOTAL</u>
3. Humanities	\$ _____	\$ _____	\$ _____	\$ _____	\$ _____	\$ <u>TOTAL</u>
4. Visual and performing arts	\$ _____	\$ _____	\$ _____	\$ _____	\$ _____	\$ <u>TOTAL</u>
5. Business and management	\$ _____	\$ _____	\$ _____	\$ _____	\$ _____	\$ <u>TOTAL</u>
6. Communication, journalism, and library science	\$ _____	\$ _____	\$ _____	\$ _____	\$ _____	\$ <u>TOTAL</u>
7. Social work	\$ _____	\$ _____	\$ _____	\$ _____	\$ _____	\$ <u>TOTAL</u>
8. Other non-S&E fields	\$ _____	\$ _____	\$ _____	\$ _____	\$ _____	\$ <u>TOTAL</u>
9. TOTAL <sup>1</sup>	\$ <u>TOTAL</u>	\$ <u>TOTAL</u>	\$ <u>TOTAL</u>	\$ <u>TOTAL</u>	\$ <u>TOTAL</u>	\$ <u>TOTAL</u>
<b>K. TOTAL FOR ALL FIELDS OF R&amp;D <sup>1</sup></b>	\$ <u>TOTAL</u>	\$ <u>TOTAL</u>	\$ <u>TOTAL</u>	\$ <u>TOTAL</u>	\$ <u>TOTAL</u>	\$ <u>TOTAL</u>

**Totals in row K, columns a-e should match corresponding sources in Question 1, rows b-f.**

<sup>1</sup> Row and column totals are automatically generated on the web survey.

**Examples of disciplines for non-S&E fields of R&D are listed on page 14.**



**Question 13. Of the total amount of R&D expenditures reported in Question 1, row g, what were the amounts for the following types of costs?**

Please report only **direct costs** (including cost sharing) in rows a to e.  
Recovered and unrecovered **indirect costs** should be reported in rows f and g.

**DIRECT COSTS FROM ALL SOURCES**

**R&D expenditures**  
(Dollars in thousands)

**a. Salaries, wages, and fringe benefits**

Include compensation for all R&D personnel whether full-time or part-time, temporary or permanent. Include salaries, wages, and fringe benefits paid from your institution's funds and from external support.

\$

**b. Software purchases**

All payments for software. Include both purchases of software packages and license fees for systems.

**1. Noncapitalized software**

\$

**2. Capitalized software** (If you are unable to distinguish capitalized software from capitalized equipment, report both in row c.)

\$

**c. Capitalized equipment**

Payments for movable equipment exceeding your institution's capitalization threshold. Include ancillary costs such as delivery and set-up.

\$

**d. Pass-throughs to other universities or organizations**

(should match the total in Question 8, row c, column 3)

\$

**e. Other direct costs**

Other costs that do not fit into one of the above categories, including (but not limited to) travel, tuition waivers, services such as consulting, computer usage fees, and supplies.

\$

**INDIRECT COSTS**

**f. Recovered indirect costs**

Reimbursement of Facilities and Administrative (F&A) costs from external sponsors.

\$

(Confidential<sup>1</sup>)

**g. Unrecovered indirect costs**

(should equal Question 1, row e3)

\$

(Confidential<sup>1</sup>)

**h. Total <sup>2</sup>**

(should match total from Question 1, row g)

\$ **TOTAL**

<sup>1</sup> Information from confidential items is NOT published or released for individual institutions; only aggregate totals will appear in publications. In accordance with the National Science Foundation Act of 1950, as amended, and other applicable federal laws, your responses will not be disclosed in identifiable form to anyone other than agency employees or authorized persons.

<sup>2</sup> The column total is automatically generated on the web survey.

**Question 14. At the end of FY 2010, what were your institution's dollar capitalization thresholds (in thousands) for software and equipment?**

Dollars in thousands	
(1)	(2)
Software	Equipment
<input type="text"/>	<input type="text"/>

Capitalization thresholds	\$ _____	\$ _____
---------------------------	----------	----------

**Question 15A-C. For the R&D fields below, what portion of your FY 2010 R&D expenditures went for the purchase of capitalized R&D equipment?**

The total for Question 15 entered on row K, column c, should match Question 13, row c (capitalized equipment other than software).

R&D Fields (See Question 9, pp. 9-11)	R&D equipment expenditures (Dollars in thousands)		
	(a) Federal	(b) Nonfederal	(c) Total <sup>1</sup>
<b>A. ENGINEERING</b>			
1. Aeronautical/Astronautical	\$ <input type="text"/>	\$ <input type="text"/>	\$ <u>TOTAL</u>
2. Bioengineering/Biomedical engineering	\$ <input type="text"/>	\$ <input type="text"/>	\$ <u>TOTAL</u>
3. Chemical	\$ <input type="text"/>	\$ <input type="text"/>	\$ <u>TOTAL</u>
4. Civil	\$ <input type="text"/>	\$ <input type="text"/>	\$ <u>TOTAL</u>
5. Electrical	\$ <input type="text"/>	\$ <input type="text"/>	\$ <u>TOTAL</u>
6. Mechanical	\$ <input type="text"/>	\$ <input type="text"/>	\$ <u>TOTAL</u>
7. Metallurgical/Materials	\$ <input type="text"/>	\$ <input type="text"/>	\$ <u>TOTAL</u>
8. Other engineering	\$ <input type="text"/>	\$ <input type="text"/>	\$ <u>TOTAL</u>
9. <b>TOTAL</b> <sup>1</sup>	\$ <u>TOTAL</u>	\$ <u>TOTAL</u>	\$ <u>TOTAL</u>
<b>B. PHYSICAL SCIENCES</b>			
1. Astronomy	\$ <input type="text"/>	\$ <input type="text"/>	\$ <u>TOTAL</u>
2. Chemistry	\$ <input type="text"/>	\$ <input type="text"/>	\$ <u>TOTAL</u>
3. Physics	\$ <input type="text"/>	\$ <input type="text"/>	\$ <u>TOTAL</u>
4. Other physical sciences	\$ <input type="text"/>	\$ <input type="text"/>	\$ <u>TOTAL</u>
5. <b>TOTAL</b> <sup>1</sup>	\$ <u>TOTAL</u>	\$ <u>TOTAL</u>	\$ <u>TOTAL</u>
<b>C. ENVIRONMENTAL SCIENCES</b>			
1. Atmospheric	\$ <input type="text"/>	\$ <input type="text"/>	\$ <u>TOTAL</u>
2. Earth sciences	\$ <input type="text"/>	\$ <input type="text"/>	\$ <u>TOTAL</u>
3. Oceanography	\$ <input type="text"/>	\$ <input type="text"/>	\$ <u>TOTAL</u>
4. Other environmental sciences	\$ <input type="text"/>	\$ <input type="text"/>	\$ <u>TOTAL</u>
5. <b>TOTAL</b> <sup>1</sup>	\$ <u>TOTAL</u>	\$ <u>TOTAL</u>	\$ <u>TOTAL</u>

<sup>1</sup> Row and column totals are automatically generated on the web survey.

**Examples of disciplines for the above fields of R&D are listed on pages 9-11.**

Question 15 continues on next page.

**Question 15D-I.** For the R&D fields below, what portion of your FY 2010 R&D expenditures went for the purchase of capitalized R&D equipment?

R&D Fields (See Question 9, pp. 11-13)	R&D equipment expenditures (Dollars in thousands)		
	(a) Federal	(b) Nonfederal	(c) Total <sup>1</sup>
<b>D. MATHEMATICAL SCIENCES</b>	\$ _____	\$ _____	\$ <u>TOTAL</u>
<b>E. COMPUTER SCIENCES</b>	\$ _____	\$ _____	\$ <u>TOTAL</u>
<b>F. LIFE SCIENCES</b>			
1. Agricultural	\$ _____	\$ _____	\$ <u>TOTAL</u>
2. Biological	\$ _____	\$ _____	\$ <u>TOTAL</u>
3. Medical	\$ _____	\$ _____	\$ <u>TOTAL</u>
4. Other life sciences	\$ _____	\$ _____	\$ <u>TOTAL</u>
5. <b>TOTAL</b> <sup>1</sup>	\$ <u>TOTAL</u>	\$ <u>TOTAL</u>	\$ <u>TOTAL</u>
<b>G. PSYCHOLOGY</b>	\$ _____	\$ _____	\$ <u>TOTAL</u>
<b>H. SOCIAL SCIENCES</b>			
1. Economics	\$ _____	\$ _____	\$ <u>TOTAL</u>
2. Political science	\$ _____	\$ _____	\$ <u>TOTAL</u>
3. Sociology	\$ _____	\$ _____	\$ <u>TOTAL</u>
4. Other social sciences	\$ _____	\$ _____	\$ <u>TOTAL</u>
5. <b>TOTAL</b> <sup>1</sup>	\$ <u>TOTAL</u>	\$ <u>TOTAL</u>	\$ <u>TOTAL</u>
<b>I. OTHER SCIENCES</b>	\$ _____	\$ _____	\$ <u>TOTAL</u>

<sup>1</sup>Row and column totals are automatically generated on the web survey.

Examples of disciplines for the above fields of R&D are listed on pages 11-13.

**Question 15J-K.** For the non-science and engineering (non-S&E) R&D fields below, what portion of your FY 2010 R&D expenditures went for the purchase of capitalized R&D equipment?

R&D Fields (See Question 9, p. 14)	R&D equipment expenditures (Dollars in thousands)		
	(a) Federal	(b) Nonfederal	(c) Total <sup>1</sup>
<b>J. NON-S&amp;E FIELDS</b>			
1. Education	\$ <input type="text"/>	\$ <input type="text"/>	\$ <u>TOTAL</u>
2. Law	\$ <input type="text"/>	\$ <input type="text"/>	\$ <u>TOTAL</u>
3. Humanities	\$ <input type="text"/>	\$ <input type="text"/>	\$ <u>TOTAL</u>
4. Visual and performing arts	\$ <input type="text"/>	\$ <input type="text"/>	\$ <u>TOTAL</u>
5. Business and management	\$ <input type="text"/>	\$ <input type="text"/>	\$ <u>TOTAL</u>
6. Communication, journalism, and library science	\$ <input type="text"/>	\$ <input type="text"/>	\$ <u>TOTAL</u>
7. Social work	\$ <input type="text"/>	\$ <input type="text"/>	\$ <u>TOTAL</u>
8. Other non-S&E fields	\$ <input type="text"/>	\$ <input type="text"/>	\$ <u>TOTAL</u>
9. TOTAL <sup>1</sup>	\$ <input type="text"/>	\$ <input type="text"/>	\$ <u>TOTAL</u>
<b>K. TOTAL FOR ALL FIELDS OF R&amp;D <sup>1</sup></b>	\$ <u>TOTAL</u>	\$ <u>TOTAL</u>	\$ <u>TOTAL</u>

Total for row K, column c, should match Question 13, row c (capitalized equipment other than software).

<sup>1</sup> Row and column totals are automatically generated on the web survey.

Examples of disciplines for non-S&E fields of R&D are listed on page 14.

**Question 16. How many principal investigators and other personnel (headcount) were paid from the R&D salaries, wages, and fringe benefits you reported in Question 13, row a?**

- A **principal investigator (PI)** is designated by your institution to direct the R&D project or program and be responsible for the scientific and technical direction of the project. Co-investigators (co-PIs) may be designated for this role and should also be included in column 1.
- Count each person only once.
- If a person serves as a PI or co-PI on one project and “other personnel” on another project, count that person as a PI.
- Include all personnel and students paid from R&D accounts regardless of how much they received.

	(1) Principal investigators	(2) All other personnel	(3) Total <sup>1</sup>
Number of people (headcount)	<input type="text"/>	<input type="text"/>	<u>TOTAL</u>

<sup>1</sup> The row total is automatically generated on the web survey.

**Question 17. Of the headcount reported in Question 16, column 3, how many are categorized as postdocs?**

NSF defines postdocs as meeting both of the following qualifications:

- (1) Holds a recent doctoral degree, generally awarded within the last 5 years
  - PhD or equivalent such as an ScD or DEng **or**
  - First professional degree in a medical or related field (MD, DDS, DO, DVM) **or**
  - Foreign equivalent to a U.S. doctoral degree
- (2) Has a limited-term appointment, generally no more than 5–7 years
  - Primarily for training in research or scholarship and
  - Working under the supervision of a senior scholar in a unit affiliated with **your** institution

Number of postdocs (headcount)

**Question 18.**

**A. Contact information:** Please complete the contact information for the person responsible for the survey and an alternate contact.

	Primary contact	Alternate contact
Name	<input type="text"/>	<input type="text"/>
Title	<input type="text"/>	<input type="text"/>
Building/Department	<input type="text"/>	<input type="text"/>
Street address	<input type="text"/>	<input type="text"/>
City, state, and zip code	<input type="text"/>	<input type="text"/>
Phone number	<input type="text"/>	<input type="text"/>
Fax number	<input type="text"/>	<input type="text"/>
Email address	<input type="text"/>	<input type="text"/>

**B. Fiscal year:** In what month did your institution's 2010 fiscal year end?

**C. Survey completion time:** Considering all offices involved, approximately how long did it take to complete this survey?

 hours

**D. Additional comments:**



# Web Survey Help

## Key Points

- Be sure to use one of the “Save” buttons at the bottom of each question before leaving the page to avoid losing data.
- Using your browser’s Back button or the Main Menu, Question List, or Logout buttons on the banner without saving will cause you to lose data.
- You can find links to survey instructions and resources on the Main Menu page.
- For questions that are new to the survey this year: If you do not have data available for one or more of the cells, please leave them blank instead of entering zero(s).

## Navigating the Web Survey

### Question List

You can complete the questions in any order. Navigate by selecting a question from the Question List page. This page will show one of the following statuses for each question:

- ➔ **Not started** indicates that you have not entered and saved any data on the question.
- ? **Needs your review** means that you have entered data and have one or more data checks to review. You may return to these questions to add or modify data.
- ✓ **Ready to submit** means that the question has no data checks that need to be resolved before submitting.

### Automatic Totals

Many questions have gray total boxes; totals are calculated automatically as you move from cell to cell. To recalculate totals and stay on the same question, click the middle Save button at the bottom of the page.

Save

### Navigation to Another Question

When you finish entering your data on each question page, you have the following options:

Save and  
Return to Question List

Save and  
Go to Next Question

**Reminder:** If you use your browser’s Back button or click the Main Menu, Question List, or Logout button under the banner without saving, you will lose any unsaved data on that question.

### Comment Box

All questions have a comment box. You may use a comment box to explain changes from previous year’s reporting. You may also use the box to explain difficulties such as retrieving information or estimating answers, especially for new questions.

## Data checks

When you save a question, a yellow box will appear at the top of the page if you have data checks to resolve. You can choose the option of when to view the data checks:

- Review now: Review a list of data checks and any blanks in a box at the top of the page
- Review later: Review data checks later (when you return to that question or click the “Review Your Data” button)

There are 3 types of data checks:

- Data inconsistencies that must be corrected before you can successfully submit the survey
- Warnings that indicate potential data issues (you will be able to submit the survey)
- Blank cells that require you to enter a “0” if applicable, or provide a comment to explain the blank(s)

## Logging Out and Returning Later

If you need to log out before completing the entire survey, save the data on your current question and then click the Logout link at the top of the page. All data entered to that point will be saved. When you log in again, you will start at the Main Menu page.

## Reviewing Your Response

When you are ready to review your response, click the “Review Your Data” button at the top of the Question List page. If there are items to be resolved, a new window will open and show you:

- A printable list of data checks that you must correct before you can successfully submit the survey
- A form asking you to indicate which of the following applies for each question with remaining blank cells:
  - o Data are not available for the blank cell(s)
  - o The value is zero for the blank cell(s)

You can use the Question List page to navigate to questions and complete them, correct them, or enter comments.

If you have corrected all data checks, you will see the message “Your survey answers are ready to submit.”

## Submitting Your Response

After you have resolved all data checks, click the “Submit Your Data” button. Click “Cancel” to return to the survey. Click “OK” to submit your survey. Once you submit your survey, you will no longer be able to edit the data, but you may still print copies of your responses. If you need to make revisions after submitting your survey, please contact us at [\[email to be determined\]](#).

## Printing Your Response

Click the “Print Your FY 2010 survey answers” link to download a copy of your completed survey.