



U.S. DEPARTMENT OF COMMERCE  
Economics and Statistics Administration  
U.S. CENSUS BUREAU

FORM  
**RD-1A** (01-28-2005)

# 2004 SURVEY OF INDUSTRIAL RESEARCH AND DEVELOPMENT

OMB No. 0607-0912: Approval Expires 12/31/2007

**INFORMATION COPY  
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**Mail** your completed form to:  
**U.S. CENSUS BUREAU**  
**1201 East 10th Street**  
**Jeffersonville, IN 47132-0001**

Please **read** the accompanying instructions before answering the questions.

Need help or have questions about filling out this form?

**Visit** our Web site at [www.census.gov/econhelp/rd](http://www.census.gov/econhelp/rd)

To **speak** with an analyst, call 1-800-851-2014, option "0" between 8:00 a.m. and 5:00 p.m., Eastern time, Monday through Friday.

- OR -

**Write** to the address above, include your 11-digit Identification Number (ID) printed in the mailing address.

This survey is conducted jointly with the National Science Foundation.

(Please correct any errors in this mailing address.)

**YOUR RESPONSE IS REQUIRED BY LAW.** Title 13, United States Code, requires businesses and other organizations that receive this questionnaire to answer the questions and return the report to the U.S. Census Bureau. By the same law, **YOUR CENSUS REPORT IS CONFIDENTIAL.** It may be seen only by persons sworn to uphold the confidentiality of Census Bureau information and may be used only for statistical purposes. Further, copies retained in respondents' files are immune from legal process. You will satisfy the mandatory requirements for this survey if you answer **2**, **3**, and **5**, line D, columns 1 and 3. Except as noted, this report should cover your entire consolidated domestic enterprise, **including all U.S. subsidiaries.** Reasonable estimates are acceptable.

## RESEARCH AND DEVELOPMENT (R&D)

R&D includes basic and applied research in the sciences and engineering. It also includes design and development of new products and processes and enhancement of existing products and processes.

R&D includes activities carried on by persons trained, either formally or by experience, in the physical sciences such as chemistry and physics, the biological sciences such as medicine, and engineering and computer science. R&D includes these activities if the purpose is to do one or more of the following things:

1. Pursue a planned search for **new scientific knowledge** or understanding that does not have specific immediate commercial objectives, although it may be in fields of present or potential commercial interest. (Basic research)
2. Apply the findings of basic research or other **existing knowledge** toward discovering **new scientific knowledge** that has specific commercial objectives, including work required to evaluate possible uses, with respect to new products, services, processes, or methods. (Applied research)

**3.** Systematically use the knowledge or understanding gained from research and **practical experience** in the production or **significant improvement** of products, services, processes, or methods, including the design and development of prototypes, materials, devices, and systems. (Development)

Research and development includes the activities described above whether assigned to separate R&D organizational units of the company or carried out by company laboratories and technical groups not part of an R&D organization. Reporting the R&D activities of such latter groups may require the use of estimates for some of your responses.

Activities to be **excluded** from R&D are as follows: research in social sciences or psychology, routine product testing, geological and geophysical exploration activities and technical services.

See instructions for more detail.

**1** Did your company conduct R&D in 2004? (Mark "X" only ONE box.)

201  Yes - Complete form, enter zeros where applicable, and return this form.

203  No - Either call TDE to report (1-800-851-2014) OR mark the 203 box and mail the form.

**NOTE** - After reviewing **1** if you need further assistance please call 1-800-851-2014, option "0".

11001013

Dollar figures should be rounded to thousands of dollars.

If a figure is \$1,025,628.79: Report →

2004		
\$ Billions	Millions	Thousands
	1	026

**2** What was the amount of your company's **sales, shipments, operating receipts, or revenues**, net of returns and allowances attributable to domestic operations in the 50 United States or D.C. during 2004? (EXCLUDE domestic intracompany transfers and sales by foreign subsidiaries. INCLUDE receipts for sales of products and services provided to other companies, individuals, U.S. Government agencies, and foreign countries.) . . . . .

Mark "X" if None 0130

2004		
\$ Billions	Millions	Thousands
102		

**3** How many **employees** worked in the 50 United States or D.C. for your company on March 12, 2004? (INCLUDE number of full- and part-time employees whose payroll was reported on Internal Revenue Service Form 941, Employer's Quarterly Federal Tax Return.) . . . . .

Mark "X" if None 0131

Number
112

**4** What was the number of full-time equivalent (FTE) **scientists and engineers** employed by your company as of January 1, 2005?

(See Instructions for the definition of FTE scientists and engineers.) . . . . .

Mark "X" if None 0134

January 1, 2005	
Number of FTEs	
206	

**5** What was the cost of R&D performed within your company in the 50 United States and D.C. from each of the sources of funding below during 2004?

**A. Basic research** (Activity toward the advancement of scientific knowledge without specific immediate commercial objectives.)

Mark "X" if no basic research 0135

**B. Applied research** (Activity directed primarily towards a specific commercial or practical objective.)

Mark "X" if no applied research. . . . 0136

**C. Development** (Activity translating research into new or improved products, services, or processes.)

Mark "X" if no development 0137

**D. TOTAL** (Add lines A through C.)

Mark "X" if no R&D . . . . . 0138

2004								
(1) Federal funds			(2) Company and other nonfederal funds			(3) Total funds Columns 1 + 2		
\$ Billions	Millions	Thousands	\$ Billions	Millions	Thousands	\$ Billions	Millions	Thousands
304			305			306		
314			315			316		
324			325			326		
344			345			346		

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**If not shown, please enter your 11-digit Identification Number (ID) from the mailing address.**

**6** If your company plans to perform R&D during 2005, what is the estimated projected cost?  
  
*(Comparable to the 2004 figure reported in 5, line D.)*  
  
Mark "X" if no R&D is planned for next year . . . 0139

2005								
(1) Federal funds			(2) Company and other nonfederal funds			(3) Total funds Columns 1 + 2		
\$ Billions	Millions	Thousands	\$ Billions	Millions	Thousands	\$ Billions	Millions	Thousands
403			402			401		

**7** If others outside your R&D funded by you, what were the costs of the R&D performed in the 50 United States and D.C. during 2004?  
  
Mark "X" if no R&D was performed by others . . . . . 0140

2004								
(1) Federal funds			(2) Company and other nonfederal funds			(3) Total funds Columns 1 + 2		
\$ Billions	Millions	Thousands	\$ Billions	Millions	Thousands	\$ Billions	Millions	Thousands
354			355			356		

**8** Not Applicable.

**9** If your company funded R&D performed **outside the 50 United States and D.C.** during 2004, what were the costs? *(Please report costs of R&D performed by subsidiaries, affiliates, or others based on your company's percentage of ownership, if any, of the entity that conducted the R&D. Ownership can be based on voting stock or equivalent interest.)*  
  
Mark "X" if None 0147

**A.** More than 50% ownership (This category INCLUDES wholly owned subsidiaries and locations.) . . . . .

**B.** 10% to 50% ownership . . . . .

**C.** More than 0% but less than 10% ownership . . . . .

**D.** 0% - No company ownership . . . . .

**E. TOTAL** (Add lines A through D.) . . . . .

2004		
Company and other nonfederal funds		
\$ Billions	Millions	Thousands
366		
365		
364		
363		
369		

**10-12** Not Applicable.

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**13** For the total R&D you reported in **5**, line D, column 3, what were the costs for the following areas?

- A.** Biotechnology (The use of scientific and engineering data and techniques for the study and solution of problems concerning living organisms.) . . . . . *Mark "X" if None* 0172
- B.** Software development (The formulation of programs, applications, routines, etc., for computers, excluding those used exclusively for internal company operations.) . . . . . *Mark "X" if None* 0173
- C.** Materials synthesis and processing (The use of scientific and engineering data and techniques for the formulation and manipulation of new materials.) . . . . . *Mark "X" if None* 0174
- D.** All other R&D areas . . . . . *Mark "X" if None* 0175
- E. TOTAL** (Add lines A through D. The sum should equal the total reported in **5**, line D, column 3.) . . . . . *Mark "X" if None* 0176

2004		
Total funds		
\$ Billions	Millions	Thousands
7111		
7211		
7311		
7411		
7511		

**14** If your company used **nanotechnology** for R&D during 2004, what percentage of the R&D costs reported in **13** are attributable to nanotechnology for the following areas? (Nanotechnology is the creation and utilization of materials, devices, and systems sized at the level of atoms and molecules in the range of 1 to 100 nanometers.)

- A.** Biotechnology . . . . . *Mark "X" if None* 0177
- B.** Software development . . . . . *Mark "X" if None* 0178
- C.** Materials synthesis and processing . . . . . *Mark "X" if None* 0179
- D.** All other R&D areas . . . . . *Mark "X" if None* 0180

2004	
Whole percents	
7112	%
7212	%
7312	%
7412	%

**15-17** Not Applicable.

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**If not shown, please enter your 11-digit Identification Number (ID) from the mailing address.**

**18 A.** Does this report cover your entire consolidated domestic enterprise, including all U.S. subsidiaries? (Mark "X" only ONE box.)

1301  Yes

1330  No - Please explain in 20.

**B.** Was this company owned or controlled by another company on December 31, 2004?

001  Yes - Give date acquired at right AND enter new owner name and mailing address below ↴

	Month	Year
0018		

6030 Name of new owner or operator

6031 Mailing address (Number and street, P.O. box, etc.)

6032 City, town, village, etc.

6033 State 6034 ZIP Code

No

**CHECK ITEM** - Please complete the check list below BEFORE returning this form. By checking these items you will reduce the likelihood of our calling you to resolve an error or inconsistency.

**In 2:** Are sales reported in **thousands** of dollars?

Yes

No

**In 3:** Does your answer describe the number of **employees**, NOT company payroll?

Yes

No

**In 5:** Does the **Federal funds** (column 1) plus **Company funds** (column 2) equal **Total funds** (column 3) for each of the following rows?

Basic research (5A), applied research (5B), development (5C), total research and development (5D).

Yes

No

If the answer to any of the above checks is "No," please make the necessary corrections in the appropriate item(s) or provide an explanation in 20.

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**19** Reporting period, location of records, and contact information

**A.** Is the time period covered by this report a calendar year?

0078  Yes

0079  No - Enter time period covered →

FROM

Month	Year
0070	

TO

Month	Year
0071	

**B.** Are all of your company's R&D records and data in a central location?

0080  Yes

0081  No - How many locations? →

0086

--

0085  Other - Please describe →

0087

--

**C.** Did more than one person compile the information for this form?

0082  Yes - How many? →

0084

--

0083  No

**D.** How many hours did it take to complete this form?  
 (INCLUDE time spent for reviewing instructions, searching existing data sources, gathering and maintaining data needed, and completing and reviewing the collection of information.) . . . . .

Number of hours

0090

--

0072 Name of person to contact regarding this report

0073 Title

Telephone 0074

Area code	Number	Extension
	-	

Fax 0075

Area code	Number
	-

0076 Internet e-mail address

Date completed 0069

Month	Day	Year

**20** REMARKS (Please use this space for any explanations that may help us in understanding your reported data.)

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**Thank you for completing your 2004 SURVEY OF INDUSTRIAL RESEARCH AND DEVELOPMENT form.**

**PLEASE PHOTOCOPY THIS FORM FOR YOUR RECORDS AND RETURN THE ORIGINAL.**