



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

FORM  
**RD-1** (02-13-2004)

# 2003 SURVEY OF INDUSTRIAL RESEARCH AND DEVELOPMENT

OMB No. 3145-0027: Approval Expires 01/31/2005

<b>Mail your completed form to</b>	<b>U.S. CENSUS BUREAU</b> 1201 East 10th Street Jeffersonville, IN 47132-0001
<p><b>Please read</b> the accompanying instructions before answering the questions.</p> <p><b>Need help or have questions about filling out this form?</b> Visit our Web site at <a href="http://www.census.gov/econhelp/rd">www.census.gov/econhelp/rd</a></p> <p><b>To speak with an analyst, call</b> 1-800-851-2014, option "0" between 8:00 a.m. and 5:00 p.m., Eastern time, Monday through Friday.</p> <p style="text-align: center;">- OR -</p> <p><b>Write</b> to the address above. Include your 11-digit Identification Number (ID) printed in the mailing address.</p> <p><b>YOUR RESPONSE IS REQUIRED BY LAW.</b> 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, <b>YOUR CENSUS REPORT IS CONFIDENTIAL.</b> 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.</p> <p>You will satisfy the mandatory reporting requirements for this survey if you answer 2, lines A and B; 4, line D, columns (1) and (3); and 1, columns (1) and (2).</p> <p>Name of person who supplied 2002 data</p>	

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(Please correct any errors in this mailing address.)

**Except as noted, this report covers your entire consolidated domestic enterprise, including all U.S. subsidiaries, affiliates, and branches.**  
Reasonable estimates are acceptable.

**1** Was this company owned or controlled by another company on December 31, 2003?

001  Yes - See instructions.       No - Go to 2.

<b>HOW TO REPORT DOLLAR FIGURES</b>	<b>Dollar figures should be rounded to thousands of dollars.</b>	<b>2003</b>		
		\$ Bil.	Mil.	Thou.
	If a figure is <b>\$1,025,628.79:</b>		<b>Report</b> →	1 0 2 6

**2**

**A.** What was the amount of your company's domestic sales, shipments, operating receipts, or revenues, net of returns and allowances? (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.) . . . . . 102

**B.** How many employees worked in the United States for your company on March 12, 2003? (Include number of full- and part-time employees whose payroll was reported on Internal Revenue Service Form 941, Employer's Quarterly Federal Tax Return.) . . . . . 112

2003			2002
\$ Bil.	Mil.	Thou.	\$ Thou.
Number			Number

**3** What was the number of full-time equivalent (FTE) scientists and engineers employed by your company as of January 1, 2004 who worked on the following types of R&D?  
 (See instructions for the definition of FTE scientists and engineers.)

January 1, 2004	January 1, 2003
Number of FTEs	Number of FTEs

- A.** Federally-funded R&D . . . . . 204
- B.** Nonfederal R&D funded by your company and other nonfederal sources . . . . . 205
- C. TOTAL** (Sum lines A and B) . . . . . 206

**4** What was the cost of R&D performed within your company in the 50 United States and D.C.?  
 (Please report R&D performed for each source of funding.)

	2003									2002		
	Federal funds			Company and other			Total (Columns (1)+(2))			Federal funds	Company and other	Total (Columns (4)+(5))
	(1)			(2)			(3)			(4)	(5)	(6)
	\$ Bil.	Mil.	Thou.	\$ Bil.	Mil.	Thou.	\$ Bil.	Mil.	Thou.	\$ Thou.	\$ Thou.	\$ Thou.
<b>A.</b> Basic research (Research for the advancement of scientific knowledge without specific immediate commercial objectives.) . . . . .	304			305			306					
<b>B.</b> Applied research (Research directed primarily towards a specific commercial or practical objective.) . . . . .	314			315			316					
<b>C.</b> Development (Activity translating research into new or improved goods, services or processes.) . . . . .	324			325			326					
<b>D. TOTAL</b> (Sum lines A through C) . . . . .	344			345			346					

**5** For 2004 what is your projected cost for company-funded R&D performed by your company in the 50 United States and D.C.?  
 (Comparable to the 2003 figure reported in **4**, line D, column (2).) . . . . . 401

2004		
\$ Bil.	Mil.	Thou.

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**6** A. What was the cost of R&D performed by others for your company in the 50 United States and D.C.?

2003									2002		
Federal funds (1)			Company and other (2)			Total (Columns (1)+(2)) (3)			Federal funds (4)	Company and other (5)	Total (Columns (4)+(5)) (6)
\$ Bil.	Mil.	Thou.	\$ Bil.	Mil.	Thou.	\$ Bil.	Mil.	Thou.	\$ Thou.	\$ Thou.	\$ Thou.
354			355			356					

*(Please report R&D performed for each source of funding.) . . . . .*

B. What was the cost of company-funded R&D performed by others for your company in the 50 United States and D.C. by the following types of organizations?

- 1. For-profit companies . . . . .
- 2. Universities or colleges . . . . .
- 3. Other nonprofit organizations . . . . .
- 4. **TOTAL** (Sum lines 1 through 3. The sum should equal the total reported in line A, column (2).) . . . . .

Key code	2003 (1)			2002 (2)
	\$ Bil.	Mil.	Thou.	\$ Thou.
8				
11				
21				
31				
41				

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**7 A.** What was the cost of your company-funded R&D performed outside of the 50 United States and D.C. by your subsidiaries, affiliates, or branches, or by other organizations in which your company owns the following percentages of voting stock or equivalent interest?

- 1. 0% . . . . . 363
- 2. More than 0% but less than 10%. . . . . 364
- 3. 10%-50%. . . . . 365
- 4. More than 50%. . . . . 366
- 5. **TOTAL** (Sum lines 1 through 4.). . . . . 369

2003			2002
Company and other (2)			Company and other (5)
\$ Bil.	Mil.	Thou.	\$ Thou.

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**B.** What was the cost of your company-funded R&D that was performed outside the 50 United States and D.C. by your subsidiaries, affiliates, or branches, or by other organizations in which your company owns more than 50% of the voting stock or equivalent interest in the following countries and Puerto Rico?

- 1. Canada . . . . . 01
- 2. Germany . . . . . 02
- 3. France . . . . . 03
- 4. Japan . . . . . 04
- 5. United Kingdom . . . . . 05
- 6. Puerto Rico. . . . . 06
- 7. Other - Specify ↴  
 1209  . . . . . 07
- 8. **TOTAL** (Sum lines 1 through 7. The sum should equal the amount reported in line A4.). . . . . 10

Key code	2003 (1)			2002 (2)
	\$ Bil.	Mil.	Thou.	\$ Thou.
12				
01				
02				
03				
04				
05				
06				
07				
10				

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

**8** What was the cost of the Federally-funded R&D your company performed in the 50 United States and D.C. for each of these Federal agencies?

Key code	2003 (1)			2002 (2)
	\$ Bil.	Mil.	Thou.	\$ Thou.
5				
A. Department of Defense (DoD) . . . . .	11			
B. National Aeronautics and Space Administration (NASA) . . . . .	21			
C. Department of Energy (DOE) . . . . .	31			
D. Other Federal agencies . . . . .	41			
E. <b>TOTAL</b> (Sum lines A through D. The sum should equal the total reported in 4, line D, column (1).) . . . . .	51			

**9** What was the cost relating to the total R&D performed within your company in the 50 United States and D.C. for the following types of expenses?

Key code	2003 (1)			2002 (2)
	\$ Bil.	Mil.	Thou.	\$ Thou.
6				
A. Wages and salaries of R&D personnel (Include scientists and engineers, technicians, secretaries, and other personnel.) . . . . .	11			
B. Fringe benefits of R&D personnel (Include taxable and nontaxable benefits, 401K plans, employers' contribution to health plans.) . . . . .	21			
C. Materials and supplies consumed (Include the cost of all purchased materials consumed.) . . . . .	31			
D. Depreciation on R&D property and equipment (Include depreciation and amortization costs for property and equipment used for R&D during the year.) . . . . .	41			
E. All other R&D expenses (Include R&Ds share of company overhead and other expenses such as utilities, books and periodicals, and property and other taxes.) . . . . .	51			
F. <b>TOTAL</b> (Sum lines A through E. The sum should equal the total reported in 4, line D, column (3).) . . . . .	61			

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**10 A.** What was the cost relating to total R&D performed within your company in the 50 United States and D.C. for the following types of technologies?

- 1. Biotechnology (The use of scientific and engineering data and techniques for the study and solution of problems concerning living organisms.) . . . . .
- 2. Software development (The formulation of programs, applications, routines, etc., for computers, excluding those used exclusively for internal company operations.) . . . . .
- 3. Materials synthesis and processing (The use of scientific and engineering data and techniques for the formulation and manipulation of new materials.) . . . . .
- 4. Other areas . . . . .
- 5. **TOTAL** (Sum lines 1 through 4. The sum should equal the total reported in **4**, line D, column (3).) . . . . .

Key code	2003 (1)			2002 (3)
	\$ Bil.	Mil.	Thou.	\$ Thou.
7				
11				
21				
31				
41				
51				

**B.** What percentage of the R&D costs reported in **10A** are attributable to nanotechnology for each of the following types of technologies?

*(Nanotechnology is defined as the creation and utilization of materials, devices, and systems through the control of matter on the nanometer scale, at the level of atoms and molecules in the range of 1 to 100 nanometers.)*

- 1. Biotechnology (The use of scientific and engineering data and techniques for the study and solution of problems concerning living organisms.) . . . . .
- 2. Software development (The formulation of programs, applications, routines, etc., for computers, excluding those used exclusively for internal company operations.) . . . . .
- 3. Materials synthesis and processing (The use of scientific and engineering data and techniques for the formulation and manipulation of new materials.) . . . . .
- 4. Other areas . . . . .

Key code	2003 (2)		2002 (4)	
	Whole percents		Whole percents	
7				
11		%		%
21		%		%
31		%		%
41		%		%

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**11** What was the cost of the R&D your company performed in each of the fifty States and the District of Columbia?

(Please report R&D performed for each source of funding.) - Continued

9 Key code	State	2003						2002				9 Key code	State	2003						2002			
		Federal funds (1)			Total funds (2)			Federal funds (3)		Total funds (4)				Federal funds (1)			Total funds (2)			Federal funds (3)		Total funds (4)	
		\$ Bil.	Mil.	Thou.	\$ Bil.	Mil.	Thou.	\$ Thou.		\$ Thou.				\$ Bil.	Mil.	Thou.	\$ Bil.	Mil.	Thou.	\$ Thou.		\$ Thou.	
37	OK									45	UT												
38	OR									46	VT												
39	PA									47	VA												
40	RI									48	WA												
41	SC									49	WV												
42	SD									50	WI												
43	TN									51	WY												
44	TX																						
<b>TOTAL</b> (Sum of lines 1 through 51. The sum should equal the totals reported in 4, line D, columns (1) and (3).)											954												

**12** What was the cost of the energy-related R&D your company performed in the 50 United States and D.C. during 2003?

(Include the portion of project cost incurred for the purpose of increasing energy resources or capabilities for each source of funding. These expenditures should also be included as part of the information reported in 4, line D, columns (1) and (3).)

- A. Nuclear . . . . .
- B. Fossil fuels . . . . .
- C. Geothermal and solar . . . . .
- D. All other energy sources . . . . .
- E. **TOTAL** (Sum lines A through D) . . . . .

Key code	2003						2002			
	Federal funds (1)			Total funds (2)			Federal funds (3)		Total funds (4)	
	\$ Bil.	Mil.	Thou.	\$ Bil.	Mil.	Thou.	\$ Thou.		\$ Thou.	
10										
11										
21										
31										
41										
51										

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**13** What was the cost of the R&D performed by your company in the 50 United States and D.C. company-funded in collaboration with the type of R&D partner listed below?  
*(These expenditures should also be included as part of the information reported in 4, line D, column (2).)*

Key code	2003			2002
	(1)			(2)
11	\$ Bil.	Mil.	Thou.	\$ Thou.
A. For-profit companies . . . . .	01			
B. Federal laboratories . . . . .	02			
C. Universities or colleges. . . . .	03			
D. Other nonprofit organizations. . . . .	04			
<b>E. TOTAL (Sum lines A through D) . . . . .</b>	10			

**14** **A.** Do the R&D expenditures reported on this form cover the entire fully consolidated enterprise, including all subsidiaries, affiliates, or branches located in the 50 United States and D.C.? *(Mark "X" only ONE box.)*

- 1301  Yes
- No - Please explain in the "REMARKS" section.

**B.** Was your company publicly or privately owned? *(Mark "X" only ONE box.)*

- 1302  Publicly owned
- Privately owned

**C.** Other than the parent company, how many subsidiaries, affiliates, or branches located in the 50 United States and D.C. owned or controlled by your company (by means of voting stock or other equivalent interest) are included in this report? *(Mark "X" only ONE box.)*

- 1303  None
- 1304  1
- 1305  2-5
- 1306  More than 5

**D.** Other than the parent company, how many subsidiaries, affiliates, or branches located outside the 50 United States and D.C. owned or controlled by your company (by means of voting stock or other equivalent interest) are included in this report? *(Mark "X" only ONE box.)*

- 1307  None
- 1308  1
- 1309  2-5
- 1310  More than 5

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**14 E.** What percent of your company was owned or controlled (by means of voting stock or other equivalent interest) by one or more companies located in the 50 United States and D.C.? (Mark "X" only ONE box.)

- 1311  0%
- 1312  More than 0% but less than 10%
- 1313  10%-50%
- 1314  More than 50%

**F.** What percent of your company was owned or controlled (by means of voting stock or other equivalent interest) by one or more companies located outside the 50 United States and D.C.? (Mark "X" only ONE box.)

- 1315  0%
- 1316  More than 0% but less than 10%
- 1317  10%-50%
- 1318  More than 50%

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**15 CONTACT INFORMATION**

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

0078  Yes

0079  No - Enter time period covered →

	FROM 0070		TO 0071		
	Month	Year		Month	Year

0072 Name of person to contact regarding this report

0073 Title

	Area code	Number	Extension		Area code	Number	
Telephone 0074		-		Fax 0075		-	

0076 Internet e-mail address

	Date completed 0069	Month	Day	Year

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

**Thank you for completing your 2003 SURVEY OF INDUSTRIAL RESEARCH AND DEVELOPMENT form.**

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