



2004 SURVEY OF INDUSTRIAL RESEARCH AND DEVELOPMENT

OMB No. : Approval Expires

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

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.

~~RD-1A~~

DRAFT
9/23/04

(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, lines A and B; 4, line D, columns 1 and 2; and ~~3~~.

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, 2004?

Yes - See instructions to determine if you should complete this questionnaire.

No - Go to **2**.

HOW TO REPORT DOLLAR FIGURES	Dollar figures should be rounded to thousands of dollars. If a figure is \$1,025,628.79: Report →	2004		
		\$ Billions	Millions	Thousands
				1 0 2 6

2 A. 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

	2004		
	\$ Billions	Millions	Thousands
102			

Amount reported in 2003

B. 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

	Number		
112			

Amount reported in 2003

3 What was the number of full-time equivalent (FTE) scientists and engineers employed by your company as of January 1, 2005 who worked on the following types of R&D during 2004?

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

January 1, 2005

Number of FTEs

204

A. Federally funded R&D Mark "X" if None

Number of FTEs reported as of January 1, 2004

205

B. Company and other nonfederally funded R&D Mark "X" if None

Number of FTEs reported as of January 1, 2004

206

C. TOTAL (Add lines A and B.) Mark "X" if None

Number of FTEs reported as of January 1, 2004

4 What was the cost of R&D performed within your company in the 50 United States and D.C. during 2004?

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

2004

A. Basic research (Research for the advancement of scientific knowledge without specific immediate commercial objectives.)

Mark "X" if no basic research

~~Amount reported in 2003~~

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		

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

Mark "X" if no applied research . . .

~~Amount reported in 2003~~

(1) Federal funds			(2) Company and other nonfederal funds			(3) Total funds Columns 1 + 2		
\$ Billions	Millions	Thousands	\$ Billions	Millions	Thousands	\$ Billions	Millions	Thousands
314			315			316		

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

Mark "X" if no development

~~Amount reported in 2003~~

(1) Federal funds			(2) Company and other nonfederal funds			(3) Total funds Columns 1 + 2		
\$ Billions	Millions	Thousands	\$ Billions	Millions	Thousands	\$ Billions	Millions	Thousands
324			325			326		

D. TOTAL (Add lines A through C.)

Mark "X" if no R&D

~~Amount reported in 2003~~

(1) Federal funds			(2) Company and other nonfederal funds			(3) Total funds Columns 1 + 2		
\$ Billions	Millions	Thousands	\$ Billions	Millions	Thousands	\$ Billions	Millions	Thousands
344			345			346		

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

5 For 2005 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 2004 figure reported in 4, line D, column 2.)
 Mark "X" if no R&D is planned for next year

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
000			000			401		

6 A. What was the cost of R&D performed by others for your company in the 50 United States and D.C. during 2004?
 (Please report R&D performed for each source of funding.)
 Mark "X" if no R&D was performed by others

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		

Amount reported in 2003

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 during 2004?

2004		
Company and other nonfederal funds		
\$ Billions	Millions	Thousands
811		
000		
000		
821		
831		
841		

1. For-profit companies Mark "X" if None

Amount reported in 2003

2. Federal agencies or laboratories Mark "X" if None

Amount reported in 2003

3. State government agencies or laboratories Mark "X" if None

Amount reported in 2003

4. Universities or colleges Mark "X" if None

Amount reported in 2003

5. Other nonprofit organizations Mark "X" if None

Amount reported in 2003

6. TOTAL (Add lines 1 through 5. The sum should equal the total reported in line A, column 2.) Mark "X" if None

Amount reported in 2003

7 A. What was the cost of your company-funded R&D performed outside of the 50 United States and D.C. by subsidiaries, affiliates, branches, or by other organizations in which your company owns the following percentages of voting stock or equivalent interest during 2004?

2004		
Company and other nonfederal funds		
\$ Billions	Millions	Thousands
Amount reported in 2003		
Amount reported in 2003		
Amount reported in 2003		
Amount reported in 2003		
Amount reported in 2003		

1. 0% - No ownership 363

Mark "X" if None

Amount reported in 2003

2. More than 0% but less than 10% ownership. 364

Amount reported in 2003

3. 10%-50% ownership 365

Amount reported in 2003

4. More than 50% ownership 366

Amount reported in 2003

5. **TOTAL** (Add lines 1 through 4.) 369

Amount reported in 2003

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 during 2004?

1206		
Amount reported in 2003		
1201		
Amount reported in 2003		
0000		
Amount reported in 2003		
1203		
Amount reported in 2003		
1202		
Amount reported in 2003		
0000		
Amount reported in 2003		

1. Puerto Rico Mark "X" if None

Amount reported in 2003

2. Canada Mark "X" if None

Amount reported in 2003

3. China Mark "X" if None

Amount reported in 2003

4. France. Mark "X" if None

Amount reported in 2003

5. Germany Mark "X" if None

Amount reported in 2003

6. India Mark "X" if None

Amount reported in 2003

CONTINUE WITH **7 B** ON PAGE 5

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

7 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 during 2004? - Continued

- 7. Ireland Mark "X" if None
 Amount reported in 2003
- 8. Isreal Mark "X" if None
 Amount reported in 2003
- 9. Italy Mark "X" if None
 Amount reported in 2003
- 10. Japan Mark "X" if None
 Amount reported in 2003
- 11. Singapore Mark "X" if None
 Amount reported in 2003
- 12. Sweden Mark "X" if None
 Amount reported in 2003
- 13. United Kingdom Mark "X" if None
 Amount reported in 2003
- 14. Other - Specify
 1209
 Amount reported in 2003
- 0000
 Amount reported in 2003
- 0000
 Amount reported in 2003
- 15. **TOTAL** (Add lines 1 through 14. The sum should equal the amount reported in line A4.) Mark "X" if None
 Amount reported in 2003

2004		
Company and other nonfederal funds		
\$ Billions	Millions	Thousands
0000		
0000		
0000		
1204		
0000		
0000		
1205		
1207		
0000		
0000		
1210		

3 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 during 2004?		2004		
		Company and other nonfederal funds		
		\$ Billions	Millions	Thousands
A. Department of Defense (DoD) . . . <i>Mark "X" if None</i> <input type="checkbox"/>		511		
Amount reported in 2003				
B. National Aeronautics and Space Administration (NASA) <i>Mark "X" if None</i> <input type="checkbox"/>		521		
Amount reported in 2003				
C. Department of Energy (DOE) . . . <i>Mark "X" if None</i> <input type="checkbox"/>		531		
Amount reported in 2003				
D. Other Federal agencies <i>Mark "X" if None</i> <input type="checkbox"/>		541		
Amount reported in 2003				
E. TOTAL (Add lines A through D. The sum should equal the total reported in 4 , line D, column 1.) <i>Mark "X" if None</i> <input type="checkbox"/>		551		
Amount reported in 2003				

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

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 during 2004?

2004		
Total funds		
\$ Billions	Millions	Thousands
611		
621		
631		
641		
651		
661		

A. Wages and salaries of R&D personnel
(Include scientists and engineers, technicians, secretaries, and other personnel.) Mark "X" if None

Amount reported in 2003

B. Fringe benefits of R&D personnel
(Include taxable and nontaxable benefits, 401K plans, employers' contribution to health plans.) Mark "X" if None

Amount reported in 2003

C. Materials and supplies consumed
(Include the cost of all purchased materials consumed.) Mark "X" if None

Amount reported in 2003

D. Depreciation on R&D property and equipment
(Include depreciation and amortization costs for property and equipment used for R&D during the year.) Mark "X" if None

Amount reported in 2003

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.) Mark "X" if None

Amount reported in 2003

F. TOTAL (Add lines A through E. The sum should equal the total reported in **4**, line D, column 3.) Mark "X" if None

Amount reported in 2003

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 during 2004?

2004		
Total funds		
\$ Billions	Millions	Thousands
7111		
Amount reported in 2003		
7211		
Amount reported in 2003		
7311		
Amount reported in 2003		
7411		
Amount reported in 2003		
7511		
Amount reported in 2003		

1. Biotechnology (The use of scientific and engineering data and techniques for the study and solution of problems concerning living organisms.) *Mark "X" if None*

~~Amount reported in 2003~~

2. Software development (The formulation of programs, applications, routines, etc., for computers, excluding those used exclusively for internal company operations.) *Mark "X" if None*

~~Amount reported in 2003~~

3. 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*

~~Amount reported in 2003~~

4. Other areas *Mark "X" if None*

~~Amount reported in 2003~~

5. TOTAL (Add lines 1 through 4. The sum should equal the total reported in **4**, line D, column 3.) *Mark "X" if None*

~~Amount reported in 2003~~

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

10 B. What percentage of the R&D costs reported in **10A** are attributable to nanotechnology for each of the following types of technologies during 2004? (*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 Mark "X" if None

~~Amount reported in 2003~~

2. Software development Mark "X" if None

~~Amount reported in 2003~~

3. Materials synthesis and process Mark "X" if None

~~Amount reported in 2003~~

4. Other areas Mark "X" if None

~~Amount reported in 2003~~

2004	
Whole percents	
7112	%
	%
7212	%
	%
7312	%
	%
7412	%
	%

11 What was the cost of the R&D your company performed in each of the 50 United States and D.C during 2004? (*Please report Federally funded and total R&D performed.*)

Line No.	State	2004					
		(1) Federal funds			(2) Total funds		
		\$ Billions	Millions	Thousands	\$ Billions	Millions	Thousands
1	Alabama	9011			9012		
	Amount reported in 2003						
2	Alaska	9021			9022		
	Amount reported in 2003						
3	Arizona	9031			9032		
	Amount reported in 2003						
4	Arkansas	9041			9042		
	Amount reported in 2003						
5	California	9051			9052		
	Amount reported in 2003						

CONTINUE WITH **11** ON PAGE 10

11 What was the cost of the R&D your company performed in each of the 50 United States and D.C during 2004?
 (Please report R&D performed for each source of funding.) - Continued

Line No.	State	2004					
		(1) Federal funds			(2) Total funds		
		\$ Billions	Millions	Thousands	\$ Billions	Millions	Thousands
6	Colorado	9061			9062		
	Amount reported in 2003						
7	Connecticut	9071			9072		
	Amount reported in 2003						
8	Delaware	9081			9082		
	Amount reported in 2003						
9	District of Columbia . . .	9091			9092		
	Amount reported in 2003						
10	Florida	9101			9102		
	Amount reported in 2003						
11	Georgia	9111			9112		
	Amount reported in 2003						
12	Hawaii	9121			9122		
	Amount reported in 2003						
13	Idaho	9131			9132		
	Amount reported in 2003						
14	Illinois	9141			9142		
	Amount reported in 2003						
15	Indiana	9151			9152		
	Amount reported in 2003						

CONTINUE WITH **11** ON PAGE 11

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

11 What was the cost of the R&D your company performed in each of the 50 United States and D.C during 2004?
 (Please report R&D performed for each source of funding.) - Continued

Line No.	State	2004					
		(1) Federal funds			(2) Total funds		
		\$ Billions	Millions	Thousands	\$ Billions	Millions	Thousands
16	Iowa	9161			9162		
	Amount reported in 2003						
17	Kansas	9171			9172		
	Amount reported in 2003						
18	Kentucky	9181			9182		
	Amount reported in 2003						
19	Louisiana	9191			9192		
	Amount reported in 2003						
20	Maine	9201			9202		
	Amount reported in 2003						
21	Maryland	9211			9212		
	Amount reported in 2003						
22	Massachusetts	9221			9222		
	Amount reported in 2003						
23	Michigan	9231			9232		
	Amount reported in 2003						
24	Minnesota	9241			9242		
	Amount reported in 2003						
25	Mississippi	9251			9252		
	Amount reported in 2003						

CONTINUE WITH **11** ON PAGE 12

11 What was the cost of the R&D your company performed in each of the 50 United States and D.C during 2004?
 (Please report R&D performed for each source of funding.) - Continued

Line No.	State	2004					
		(1) Federal funds			(2) Total funds		
		\$ Billions	Millions	Thousands	\$ Billions	Millions	Thousands
26	Missouri	9261			9262		
	Amount reported in 2003						
27	Montana	9271			9272		
	Amount reported in 2003						
28	Nebraska	9281			9282		
	Amount reported in 2003						
29	Nevada	9291			9292		
	Amount reported in 2003						
30	New Hampshire	9301			9302		
	Amount reported in 2003						
31	New Jersey	9311			9312		
	Amount reported in 2003						
32	New Mexico	9321			9322		
	Amount reported in 2003						
33	New York	9331			9332		
	Amount reported in 2003						
34	North Carolina	9341			9342		
	Amount reported in 2003						
35	North Dakota	9351			9352		
	Amount reported in 2003						

CONTINUE WITH **11** ON PAGE 13

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

11 What was the cost of the R&D your company performed in each of the 50 United States and D.C during 2004?
 (Please report R&D performed for each source of funding.) - Continued

Line No.	State	2004					
		(1) Federal funds			(2) Total funds		
		\$ Billions	Millions	Thousands	\$ Billions	Millions	Thousands
36	Ohio	9361			9362		
	Amount reported in 2003						
37	Oklahoma.	9371			9372		
	Amount reported in 2003						
38	Oregon	9381			9382		
	Amount reported in 2003						
39	Pennsylvania	9391			9392		
	Amount reported in 2003						
40	Rhode Island	9401			9402		
	Amount reported in 2003						
41	South Carolina	9411			9412		
	Amount reported in 2003						
42	South Dakota	9421			9422		
	Amount reported in 2003						
43	Tennessee	9431			9432		
	Amount reported in 2003						
44	Texas.	9441			9442		
	Amount reported in 2003						
45	Utah	9451			9452		
	Amount reported in 2003						

CONTINUE WITH **11** ON PAGE 14

11 What was the cost of the R&D your company performed in each of the 50 United States and D.C during 2004?
 (Please report R&D performed for each source of funding.) - Continued

Line No.	State	2004					
		(1) Federal funds			(2) Total funds		
		\$ Billions	Millions	Thousands	\$ Billions	Millions	Thousands
46	Vermont	9461			9462		
	Amount reported in 2003						
47	Virginia	9471			9472		
	Amount reported in 2003						
48	Washington	9481			9482		
	Amount reported in 2003						
49	West Virginia	9491			9492		
	Amount reported in 2003						
50	Wisconsin	9501			9502		
	Amount reported in 2003						
51	Wyoming	9511			9512		
	Amount reported in 2003						
	TOTAL (Add lines 1 through 51. The sum should equal the totals reported in 4 , line D, columns 1 and 3.)	9541			9542		
	Amount reported in 2003						

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

12 What was the cost of the energy-related R&D your company performed in the 50 United States and D.C. during 2004?

(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. Fossil fuels *Mark "X" if no fossil fuel R&D was performed*

Amount reported in 2003

B. Geothermal and solar *Mark "X" if no geothermal or solar R&D was performed*

Amount reported in 2003

C. Nuclear *Mark "X" no nuclear R&D was performed*

Amount reported in 2003

D. All other energy sources *Mark "X" if no energy R&D was performed*

Amount reported in 2003

E. TOTAL (Add lines A through D.) . . . *Mark "X" if None*

Amount reported in 2003

2004					
(1) Federal funds			(2) Total funds		
\$ Billions	Millions	Thousands	\$ Billions	Millions	Thousands
10211			10212		
10311			10312		
10111			10112		
10411			10412		
10511			10512		

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 during 2004?
 (These expenditures should also be included as part of the information reported in 4, line D, column 2.)

2004		
Company and other nonfederal funds		
\$ Billions	Millions	Thousands
1101		
Amount reported in 2003		
1102		
Amount reported in 2003		
0000		
Amount reported in 2003		
1103		
Amount reported in 2003		
1104		
Amount reported in 2003		
1110		
Amount reported in 2003		

A. For-profit companies *Mark "X" if None*

Amount reported in 2003

B. Federal agencies or laboratories . . *Mark "X" if None*

Amount reported in 2003

C. State government agencies or laboratories *Mark "X" if None*

Amount reported in 2003

D. Universities or colleges *Mark "X" if None*

Amount reported in 2003

E. Other nonprofit organizations . . . *Mark "X" if None*

Amount reported in 2003

F. TOTAL (Add lines A through E.) . . *Mark "X" if None*

Amount reported in 2003

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

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

0000 No - Please explain in 16.

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

1302 Publicly owned

0000 Privately owned

0000 Other - Please describe 7

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

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% - No ownership

1312 More than 0% but less than 10% ownership

1313 10%-50% ownership

1314 More than 50% ownership

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% ownership

1316 More than 0% but less than 10% ownership

1317 10%-50% ownership

1318 More than 50% ownership

15 REPORTING PERIOD AND CONTACT INFORMATION

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

0078 Yes

0079 No - Enter time period covered →

FROM 0070

Month	Year

TO 0071

Month	Year

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

0000 Yes

0000 No - How many locations? →

--

C. Did more than one person complete this form?

0000 Yes

0000 No - How many? →

--

0072 Name of person to contact regarding this report

0073 Title

Area code	Number		Extension
		-	

Telephone 0074

Area code	Number	
		-

Fax 0075

0076 Internet e-mail address

Date completed 0069

Month	Day	Year

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

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

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