



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

FORM
BRDI-1(S) (12-28-2016)

2016 BUSINESS R&D AND INNOVATION SURVEY

DUE DATE:

**Need help or have questions
about filling out the form?**

Visit

<https://econhelp.census.gov/brdscr>
Here, you can access helpful
tools, get question-by-question
detailed instructions and learn
more about the survey.

Call 1-800-772-7851, between
8:00 a.m. and 4:45 p.m. EST,
Monday through Friday. Choose
option '1' for English, then
option '5' to speak with a survey
specialist.

**Please file your form
electronically** (see details
below).

**Or mail your completed
form to:**

U.S. CENSUS BUREAU
1201 East 10th Street
Jeffersonville, IN 47132-0001

**INFORMATION COPY
DO NOT USE TO REPORT**

(Please correct any errors in this mailing address)

**INTERNET REPORTING OPTION AVAILABLE – We encourage you to complete
this survey online at: <https://econhelp.census.gov/brdscr>**

User ID:

Password:

YOUR RESPONSE IS REQUIRED BY LAW. The survey is conducted under the authority of Title 13, United States Code, Sections 8(b), 131, and 182, and Title 42, United States Code, Sections 1861-76 (National Science Foundation Act of 1950, as amended). Title 13, United States Code, Sections 224 and 225 requires businesses and other organizations that receive this questionnaire to answer the questions and return the report to the U.S. Census Bureau.

YOUR RESPONSE IS CONFIDENTIAL BY LAW. Title 13, United States Code, Section 9 requires that your response be seen only by persons sworn to uphold the confidentiality of Census Bureau information and may be used only for statistical purposes. The law also provides that copies retained in your company's files are immune from legal process.

THIS COLLECTION HAS BEEN APPROVED by the Office of Management and Budget (OMB). The eight-digit OMB approval number is 0607-0912 and appears at the upper right of this page. Without this approval, we could not conduct this survey.

We estimate this survey will take 35 minutes, on average, to complete. On the back of this form you will find the full burden estimate statement.

THANK YOU – YOUR RESPONSE IS IMPORTANT. Accurate and timely statistical information could not be produced without your continued cooperation and goodwill. Thank you.

~ This survey is jointly conducted by the U.S. Census Bureau and the National Science Foundation ~



What is Research and Development (R&D)?

Research and development (R&D) comprise creative and systematic work undertaken in order to increase the stock of knowledge and to devise new applications of available knowledge. This includes a) activities aimed at acquiring new knowledge or understanding without specific immediate commercial applications or uses (basic research); b) activities aimed at solving a specific problem or meeting a specific commercial objective (applied research); and c) systematic work, drawing on research and practical experience and resulting in additional knowledge, which is directed to producing new products or processes or to improving existing products or processes (development). R&D includes both direct costs such as salaries of researchers as well as administrative and overhead costs clearly associated with the company's R&D.

The term R&D does NOT include expenditures for:

- Costs for routine product testing, quality control, and technical services unless they are an integral part of an R&D project
- Market research
- Efficiency surveys or management studies
- Literary, artistic, or historical projects, such as films, music, or books and other publications
- Prospecting or exploration for natural resources

Does R&D include development of software and Internet applications?

Only development of software and Internet applications that include an element of uncertainty and that are intended to close gaps and meet scientific and technological needs should be reported as R&D on this survey.

R&D activity in software INCLUDES:

- Software development or improvement activities that expand scientific or technological knowledge
- Construction of new theories and algorithms in the field of computer science

R&D activity in software EXCLUDES:

- Software development that does not depend on a scientific or technological advance, such as
 - supporting or adapting existing systems
 - adding functionality to existing application programs, and
 - routine debugging of existing systems and software
- Creation of new software based on known methods and applications
- Conversion or translation of existing software and software languages
- Adaptation of a product to a specific client, unless knowledge that significantly improved the base program was added in that process

Reporting unit

The reporting unit is your company, including all subsidiaries and divisions. Include subsidiary companies where there is more than 50 percent ownership.

Reporting period

Report data for the calendar year 2016, if possible, or for your company's fiscal year ending between April 2016 and March 2017.

Estimates are acceptable

Please report all items to the best of your ability.

To speak with a survey specialist, call 1-800-772-7851, option '1' for English, then option '5'.

Survey specialists are available 8 a.m. to 4:45 p.m., EST, M-F to help with any questions you may have.

For further instructions, please visit: <https://econhelp.census.gov/brdscr>



Company Information

1 Was your company a majority-owned subsidiary of a foreign company in 2016?

Yes → **Please provide the following information and then skip to Question 3:**

Name of parent company

REPORTING INSTRUCTIONS FOR FOREIGN-OWNED COMPANIES:

If you are owned by a foreign parent, the reporting unit for the survey is your U.S.-located company, including all your majority-owned subsidiaries and divisions regardless of location. For reporting purposes, your foreign parent and any foreign affiliates your company does not own should be treated the same as any business partner, customer, or supplier you do not own.

If you pay your foreign parent for R&D services, those costs should be included in your response to Question 11.

If your foreign parent pays or reimburses your company for R&D services, the costs for this R&D should be included in your response to Question 17, line a.

No

2 Did another U.S. company other than a holding company own more than 50 percent of the voting interest in your company during 2016?

Yes → **Please provide the following information:**

Name of parent company

EIN of parent company (9 digits)

Date parent company purchased your company

(MM) (DD) (YYYY)

REPORTING INSTRUCTIONS FOR U.S.-OWNED COMPANIES:

If your company was purchased between April 1, 2016 and December 31, 2016, report only for the period January 1, 2016 to the date of purchase. If your company was purchased before April 1, 2016, return this form to the Census Bureau – you are not required to complete the rest of this survey unless your owner instructs you to complete this survey.

No

3 Has your company ceased operations?

Yes → **Please provide the following information:**

(MM) (DD) (YYYY)

Date your company ceased operations

REPORTING INSTRUCTIONS:

If your company ceased operations between April 1, 2016 and December 31, 2016, report only for the period January 1, 2016 to the date your company ceased operations. If your company ceased operations before April 1, 2016, return this form to the Census Bureau – you are not required to complete the rest of this survey.

No



4 Please provide the name and phone number of the person completing this survey.

Name

Telephone

Area code Number

Extension

E-mail address

5 Please describe your company's primary business activity during 2016.

6 What was the amount of your company's worldwide sales and revenues during 2016?

Include:

- Sales and operating revenues for discontinued operations

\$Bil.

Mil.

Thou.

7 How much of the amount reported in Question 6 was attributable to or originated from domestic operations?

Include:

- Sales and operating revenues to foreign customers, including foreign subsidiaries

Example: U.S. Manufacturing Corporation sells parts to customers around the world. However, because all its operations are located inside the United States it reports 100% of its sales in this question.

\$Bil.

Mil.

Thou.

Product (good or service) innovation

A product innovation is the market introduction of a **new** or **significantly** improved good or service with respect to its capabilities, user friendliness, components, or sub-systems.

- Product innovations (new or improved) must be new to your company, but they do not need to be new to your market.
- Product innovations could have been originally developed by your company or by other companies.

8 During the three years 2014 to 2016, did your company introduce:

- a. New or significantly improved goods (Exclude the simple resale of new goods purchased from other companies and changes of a solely aesthetic nature)? Yes No
- b. New or significantly improved services? Yes No



9 Please give the percentage of your total sales in 2016 from:

- a. New or significantly improved goods and services introduced during 2014 to 2016 that were **new to your market** %
- Your company introduced a new or significantly improved good or service to your market before your competitors. (It may have been available in other markets.)
- b. New or significantly improved goods and services introduced during 2014 to 2016 that were **new only to your company** %
- Your company introduced a new or significantly improved good or service that was already available from your competitors in your market.
- c. Goods and services that were **unchanged or only marginally modified** during 2014 to 2016 (include the resale of new goods or services purchased from other companies) %
- d. **Total sales in 2016** %

Process innovation

A process innovation is the implementation of a **new** or **significantly** improved production process, distribution method, or support activity for your goods or services.

- Process innovations must be new to your company, but they do not need to be new to your market.
- The innovation could have been originally developed by your company or by other companies.
- Exclude purely organizational innovations.

10 During the three years 2014 to 2016, did your company introduce:

- a. New or significantly improved methods of manufacturing or producing goods or services? Yes No
- b. New or significantly improved logistics, delivery or distribution methods for your inputs, goods, or services? Yes No
- c. New or significantly improved supporting activities for your processes, such as maintenance systems or operations for purchasing, accounting, or computing? Yes No

R&D paid for by your company**11 What was the total worldwide R&D expense for your company in 2016?**

If your company is publicly traded, this amount is equivalent to that disclosed on SEC Form 10-K as defined in FASB ASC Topic 730, Research and Development.

If your company is foreign-owned, refer to the instructions on page 3. Additional guidance, such as for **privately owned companies**, is available online at <https://econhelp.census.gov/brdscr>.

\$Bil. Mil. Thou.

12 Is the amount entered in Question 11 greater than zero?

- Yes → **Continue with Question 13**
- No → **Skip to Question 17 on page 6**



13 Does the amount reported in Question 11 include any of the following costs?

- a. Collaborative R&D that was reimbursed by business partners, such as through cost-sharing agreements Yes No
- b. R&D paid for by government or private foundation grants Yes No
- c. Technical services not an integral part of an R&D project (such as product support provided by R&D employees) Yes No
- d. Bid and proposal costs Yes No
- e. Expense your company claimed resulting from the acquisition of another company with unfinished R&D projects (in-process R&D) Yes No
- f. Phase IV clinical trials Yes No

14 If you answered "Yes" to any of the costs in Question 13, what was the amount of these costs that was included in your response to Question 11?

| \$Bil. | Mil. | Thou. |
|----------------------|----------------------|----------------------|
| <input type="text"/> | <input type="text"/> | <input type="text"/> |

15 Subtract Question 14 from Question 11 and enter the result here. This is the total R&D paid for by your company in 2016.

| \$Bil. | Mil. | Thou. |
|----------------------|----------------------|----------------------|
| <input type="text"/> | <input type="text"/> | <input type="text"/> |

16 Of the total R&D paid for by your company reported in Question 15, how much was for the following categories?

- a. Basic research— activities aimed at acquiring new knowledge or understanding without specific immediate commercial applications or uses \$Bil. Mil. Thou.
- b. Applied research— activities aimed at solving a specific problem or meeting a specific commercial objective \$Bil. Mil. Thou.
- c. Development— systematic work, drawing on research and practical experience and resulting in additional knowledge, which is directed to producing new products or processes or to improving existing products or processes. \$Bil. Mil. Thou.

Total equals Question 15

R&D paid for by others

17 What were your company's total worldwide costs (both direct and indirect) in 2016 for the following that were funded, paid for, or reimbursed by others not owned by your company?

Exclude:

- Costs that were paid for by your company, such as those reported in Question 15
- Payments in excess of the actual cost of the work performed (such as profit or fees)

- a. R&D that was reimbursed by your company's foreign parent (if you are owned by a foreign parent) \$Bil. Mil. Thou.
- b. Collaborative R&D that was reimbursed by business partners, such as through cost-sharing agreements. \$Bil. Mil. Thou.
- c. R&D paid for by government or private foundation grants \$Bil. Mil. Thou.

Question continues on next page



17 Continued

| | \$Bil. | Mil. | Thou. |
|---|--------|-------|-------|
| d. Defense R&D goods or services, provided as a prime or as a sub, to the government and/or government contractors. | □ □ | □ □ □ | □ □ □ |
| Exclude: | | | |
| <ul style="list-style-type: none"> Costs for projects that have achieved technical feasibility, such as low-rate initial production. Additional guidance is available online at https://econhelp.census.gov/brdscr. | | | |
| e. Medical clinical trial Phase I-III services provided to others not owned by your company (include pass-through costs) . . | □ □ | □ □ □ | □ □ □ |
| f. All other contract R&D services paid for by customers | □ □ | □ □ □ | □ □ □ |
| g. Total. | □ □ | □ □ □ | □ □ □ |

18 Of the total R&D paid for by others reported in Question 17, line g, how much was for the following categories?

| | \$Bil. | Mil. | Thou. |
|---|--------|-------|-------|
| a. <u>Basic research</u> – activities aimed at acquiring new knowledge or understanding without specific immediate commercial applications or uses | □ □ | □ □ □ | □ □ □ |
| b. <u>Applied research</u> – activities aimed at solving a specific problem or meeting a specific commercial objective | □ □ | □ □ □ | □ □ □ |
| c. <u>Development</u> – systematic work, drawing on research and practical experience and resulting in additional knowledge, which is directed to producing new products or processes or to improving existing products or processes. | □ □ | □ □ □ | □ □ □ |

Total equals Question 17, line g

Employees

19 What was the total number of worldwide employees working at your company for the pay period that included March 12, 2016?

| | |
|---|---|
| <p>Include:</p> <ul style="list-style-type: none"> Full- and part-time employees <p>Exclude:</p> <ul style="list-style-type: none"> Leased or temporary employees and consultants | <p>Number</p> <p style="text-align: center;">□ □ □ □ □ □</p> |
|---|---|

20 How many of the employees reported in Question 19 were employees of your company’s domestic operations and foreign operations?

Domestic operations employees include all employees whose payroll was reported on the first quarter filing of IRS Form 941, Employer’s Quarterly Tax Return.

| | (1) Domestic operations | (2) Foreign operations | (3) Total employees |
|---------------------|-------------------------------|------------------------------|---------------------------|
| Employees | □ □ □ □ □ □ □ | □ □ □ □ □ □ □ | □ □ □ □ □ □ □ |

Total equals Question 19



21 How many employees reported in Question 20 were R&D employees and how many were all other employees?

R&D employees include all employees who work on R&D or who provide direct support to R&D, such as researchers, R&D managers, technicians, clerical staff, and others assigned to R&D groups. **Exclude** employees who provide only indirect support to R&D, such as corporate personnel, security guards, and cafeteria workers.

| | (1) Domestic operations | (2) Foreign operations | (3) Total employees |
|-----------------------------------|---|---|---|
| a. R&D employees | <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> | <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> | <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> |
| b. All other employees . . . | <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> | <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> | <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> |
| c. Total employees | <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> | <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> | <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> |

Total line equals Question 20

22 Of the domestic R&D employees reported in Question 21, column 1, line a, what was the number of full-time equivalent (FTE) R&D employees working at your company for the pay period that included March 12, 2016?

Full-time equivalent (FTE) R&D employees are an estimate of the manpower devoted to R&D activities. Count each full-time R&D employee as 1 FTE and all other employees based on the fraction of their time devoted to R&D. These amounts may be less than those reported in Question 21, column 1, line a.

(1)
Domestic
operations

FTE R&D employees

23 Approximately how long did it take to complete this survey?

Hours Minutes

:

Remarks (Please use the space below for any explanations that may help us understand your reported data.)

Thank You – Your Response is Important

Accurate and timely statistical information could not be produced without your continued cooperation and goodwill. Thank you.

We estimate this survey will take 35 minutes, on average, to complete, including the time for reviewing instructions, researching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to: ECON Survey Comments 0607-0912, U.S. Census Bureau, 4600 Silver Hill Road, Room 6H128, Washington, DC 20233. You may e-mail comments to erd.survey.comments@census.gov. Be sure to use ERD Survey Comments 0607-0912 as the subject.

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