



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

FORM  
**BRD-1** (02-14-2019)

## 2018 BUSINESS RESEARCH AND DEVELOPMENT SURVEY

OMB No. 0607-0912: Approval Expires 02/29/2020

### DUE DATE:

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

Visit <https://www.census.gov/programs-surveys/brds/information.html>

Here, you can access question-by-question detailed instructions and learn more about the survey.

Call toll-free 1-800-772-7851, between 8:00 a.m. and 5:00 p.m. Eastern time, Monday through Friday.

#### 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

*(Please correct any errors in this mailing address)*

**INTERNET REPORTING OPTION AVAILABLE**  
Please complete this survey online at: <https://portal.census.gov>

#### Authentication Code:

**YOUR RESPONSE IS REQUIRED BY LAW.** 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) authorize this collection. Title 13, United States Code, Sections 224 and 225 require your response. The U.S. Census Bureau is required by Section 9 of the same law to keep your information **CONFIDENTIAL** and can use your responses only to produce statistics. The Census Bureau is not permitted to publicly release your responses in a way that could identify your business, organization, or institution. Per the Federal Cybersecurity Enhancement Act of 2015, your data are protected from cybersecurity risks through screening of the systems that transmit your data.

**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 corner of this page. Without this approval, we could not conduct this survey.

We estimate this survey will take an average of 3.3 hours to complete. More information about this estimate and an address where you may write with comments is on the back of this form.

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

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

# Table of Contents

This survey is divided into seven sections based on subject matter. You may need to collaborate with colleagues in different departments to complete all sections. The following table of contents summarizes the subject matter covered by each section and what is required to complete them.

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Topics include company ownership, business activities, revenues, and employees.	
<b>Section 2: R&amp;D Paid For by Your Company</b> . . . . .	p.8
Topics include geographic location and accounting details related to R&D expenses.	
<b>Section 3: Costs Paid For by Others</b> . . . . .	p.19
Topics include customer-sponsored work and activities funded through grants and/or reimbursements.	
<b>Section 4: Capital Expenditures</b> . . . . .	p.34
Topics include company expenditures for property, plant, and equipment including capitalized software.	
<b>Section 5: Management and Strategy of R&amp;D</b> . . . . .	p.35
Topics include characteristics of R&D reported in Sections 2 and 3. Requires familiarity with the technical and strategic aspects of your company's R&D.	
<b>Section 6: Human Resources</b> . . . . .	p.40
Topics include your company's employees, focusing on those who work on R&D activities.	
<b>Section 7: Intellectual Property and Technology Transfer</b> . . . . .	p.47
Topics include patenting, licensing, and other technology transfer activities.	

## Changes from the 2017 survey

Questions related to R&D on artificial intelligence were added to Section 5 (Management and Strategy of R&D). Questions asking for location of employees and R&D employees were added to Section 6 (Human Resources). A question asking for count of temporary and leased employees working on R&D was added to Section 6 (Human Resources). For a list of specific changes, go to <https://www.census.gov/programs-surveys/brds/about/faq.html>.

## Electronic materials

Electronic versions of the questionnaire and related information are available at <https://www.census.gov/programs-surveys/brds/information.html>.

Available materials include:

- PDF copy of the questionnaire
- Excel worksheets for each section that can be completed and uploaded
- Question-by-question instructions, definitions, and examples that provide clarification
- Answers to frequently asked questions, including how the data will be used

## Filing electronically

You may submit your survey online via a secure website. Online submission allows you to save the data as you go, so you can exit and resume later where you left off. It also allows you to save an electronic copy of your completed survey. To submit online, follow the instructions at <https://www.census.gov/programs-surveys/brds/information.html>.

## 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?

Research and development activity in software and Internet applications refers only to activities with an element of uncertainty and that are intended to close knowledge gaps and meet scientific and technological needs. Report in this survey all software R&D as defined here regardless of the eventual user (internal or external).

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 regardless of location. Include only subsidiary companies where there is more than 50 percent ownership. 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.

## Reporting period

Report data for the calendar year 2018, if possible, or for your company's fiscal year ending between April 2018 and March 2019.

## Estimates are acceptable

Please report all items to the best of your ability.

## To speak with a survey specialist, call 1-800-772-7851.

Survey specialists are available Monday through Friday, from 8:00 a.m. to 5:00 p.m. Eastern time, to help with any questions you may have.



**1-4 Was your company a majority-owned subsidiary of a foreign company in 2018?**

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

Name of parent company

[Grid of 25 empty boxes for name entry]

**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 responses in Section 2 as "costs for purchased R&D services."

If your foreign parent pays or reimburses your company for R&D services, the costs for this R&D should be included in your responses in Section 3 as "costs funded, paid for, or reimbursed by others."

Report your survey data using U.S. Generally Accepted Accounting Principles (U.S. GAAP) as recognized by the Financial Accounting Standard Board (FASB). If your company follows International Financial Reporting Standards (IFRS), we request that you estimate any adjustments that would be required to conform to U.S. GAAP.

No

**1-5 Did your company own more than 50 percent of any company operations or subsidiaries outside the 50 United States and D.C. during 2018?**

Yes → **Include data for these operations/subsidiaries in your survey responses**

No

**1-6 Did your company have discontinued operations in 2018?**

Yes → **Include data for these operations in your survey responses**

No

**1-7 Who is the survey coordinator?**

The survey coordinator is the person at your company responsible for gathering all requested information, ensuring instructions are followed, and submitting the completed survey. The survey coordinator may not be able to personally complete the entire survey and may need to request information from other knowledgeable resources concerning your company's R&D, accounting, human resources, and legal matters.

Name

[Grid of 25 empty boxes for name entry]

Title

[Grid of 10 empty boxes for title entry]

Telephone

Area code

Number

Extension

[Grid of 10 empty boxes for telephone area code and number entry]

[Grid of 4 empty boxes for telephone extension entry]

E-mail address

[Grid of 25 empty boxes for email address entry]

**1-8 What was the total number of worldwide employees working at your company for the pay period that included March 12, 2018?**

**Include:**

- Full- and part-time employees

**Exclude:**

- Leased or temporary employees and consultants

**Number**

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**1-9 How many of the employees reported in Question 1-8 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 .....	<table border="1" style="width: 100%; height: 20px;"> <tr> <td style="width: 20px;"></td> </tr> </table>							<table border="1" style="width: 100%; height: 20px;"> <tr> <td style="width: 20px;"></td> </tr> </table>							<table border="1" style="width: 100%; height: 20px;"> <tr> <td style="width: 20px;"></td> </tr> </table>						

*Total equals Question 1-8*

**TIP** If the amount reported in Question 1-9, column 1, was less than 10, return this form to the Census Bureau – you are not required to complete the rest of this survey.

**Business Codes**

**1-10 Please describe your company's primary business activity during 2018.**

**1-11 List all applicable business codes in which your company operated worldwide in 2018.**

**NOTE:** These codes will be used to describe both business activities and R&D activities and may differ from industry codes used by other government surveys and reports. Tools to help you search for appropriate business codes are available at <https://www.census.gov/programs-surveys/brds/information/brdshelp/business-codes.html>.

Business code (see pages 49-50)	Description

**1-12 What was the amount of your company's worldwide sales and revenues during 2018?**

**Include:**

- Sales and operating revenues from discontinued operations

\$Bil.	Mil.	Thou.
<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"/>

**1-13 How much of the amount reported in Question 1-12 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.
<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"/>

**1-14 How much of the 2018 sales and operating revenue amounts was for each business code listed or amended in Question 1-11:**

- (1) Worldwide sales and operating revenues reported in Question 1-12  
 (2) Sales and operating revenues from domestic operations reported in Question 1-13

Business code	(1) Worldwide sales and operating revenues			(2) Sales and operating revenues from domestic operations		
	\$Bil.	Mil.	Thou.	\$Bil.	Mil.	Thou.
a.	<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.	<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.	<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"/>
d.	<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"/>
e.	<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"/>
f.	<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"/>
g.	<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"/>
h.	<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"/>
i. Less eliminations – the sales and revenues that are eliminated in order to consolidate the business codes. . . .	( <input type="text"/> <input type="text"/> <input type="text"/> )			( <input type="text"/> <input type="text"/> <input type="text"/> )		
j. <b>Total</b> . . . . .	<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 equals Question 1-12

Total equals Question 1-13

## SECTION 2

### R&D Paid For by Your Company

#### Who should answer this section?

Persons familiar with accounting concepts and with access to financial records related to your company's R&D activities should complete this section.

#### What does this section cover?

This section requests information about your company's R&D at multiple levels of detail: for your worldwide consolidated enterprise, for units or parts of your company defined by geography (countries, states, specific location), and for parts of your company defined by business code.

#### 2-1 What was the worldwide R&D expense (both direct and indirect) for your company in 2018?

**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 5. Additional guidance, such as for **privately owned companies**, is available online at <https://www.census.gov/programs-surveys/brds/information/brdshelp.html#q2-1>

**NOTE:** Report your company's R&D expense even if the amount is not considered material for your company's financial statements.

\$Bil.      Mil.      Thou.

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#### 2-2 Does the amount reported in Question 2-1 include any of the following costs?

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

#### 2-3 If you answered "Yes" to any of the costs in Question 2-2, what was the amount of these costs that was included in your response to Question 2-1?

\$Bil.      Mil.      Thou.

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#### 2-4 Subtract Question 2-3 from Question 2-1 and enter the result here. This is the total R&D paid for by your company in 2018.

\$Bil.      Mil.      Thou.

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Is the amount entered in Question 2-4:

\$0 → **Skip to Section 3 on page 19.**

Less than \$1 Million → **Skip to Section 2 Worksheet on page 18 and then continue with Section 3 on page 19.**

\$1 Million or greater → **Continue with Question 2-5.**

**Indirect R&D charges**

**2-5** How much of the amount reported in Question 2-4 was for R&D costs your company plans to recoup through indirect charges on U.S. federal government contracts (IR&D or independent R&D)?

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

**R&D paid for by your company**

**2-6** Of the amount reported in Question 2-4, what were the costs for each business code listed or amended in Question 1-11?

Allocate R&D costs that are applicable to more than one business code on a reasonable basis. Allocation in proportion to operating revenues is acceptable unless some alternative allocation basis is more appropriate.

Business code	\$Bil.	Mil.	Thou.
a. <input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
b. <input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
c. <input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
d. <input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
e. <input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
f. <input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
g. <input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
h. <input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
i. <b>Total</b> (equals Question 2-4)	<input type="text"/>	<input type="text"/>	<input type="text"/>

**2-7** Of the amount reported in Question 2-4, what costs were incurred by your company in the following locations?

	\$Bil.	Mil.	Thou.
a. Domestic United States (50 states and D.C.) [Include R&D performed by domestic operations that is paid for by foreign subsidiaries]	<input type="text"/>	<input type="text"/>	<input type="text"/>
b. All other countries (also, Puerto Rico) [Include R&D performed by foreign subsidiaries that is paid for by domestic operations]	<input type="text"/>	<input type="text"/>	<input type="text"/>
c. <b>Total</b> (equals Question 2-4)	<input type="text"/>	<input type="text"/>	<input type="text"/>

**2-8 How much of the (1) domestic, (2) foreign, and (3) worldwide R&D paid for by your company in 2018 was for each of the following types of costs?**

	(1) Domestic			(2) Foreign			(3) Worldwide		
	\$Bil.	Mil.	Thou.	\$Bil.	Mil.	Thou.	\$Bil.	Mil.	Thou.
a. Salaries, wages, and fringe benefits	<input type="text"/>								
b. Stock-based compensation	<input type="text"/>								
c. Leased employees and temporary staffing, including on-site consultants, working on R&D	<input type="text"/>								
d. Expensed equipment (not capitalized)	<input type="text"/>								
e. Materials and supplies	<input type="text"/>								
f. Leased facilities and equipment	<input type="text"/>								
g. Depreciation and amortization on R&D property, plant, equipment, and intangible assets	<input type="text"/>								
h. Royalties and licensing fees (including payments made to others for the use of patents and other forms of intellectual property used in your company's R&D)	<input type="text"/>								
i. Collaborative R&D payments (include joint development agreements)	<input type="text"/>								
j. Contract R&D (include payments to your company's foreign parent for R&D)	<input type="text"/>								
k. Other purchased services	<input type="text"/>								
l. All other costs (including administrative and overhead costs <b>clearly associated with your company's R&amp;D</b> )	<input type="text"/>								

Question continues on next page

**2-8 (Continued)**

	(1) Domestic			(2) Foreign			(3) Worldwide		
	\$Bil.	Mil.	Thou.	\$Bil.	Mil.	Thou.	\$Bil.	Mil.	Thou.
<b>m. Total</b>									
	Total equals Question 2-7, line a			Total equals Question 2-7, line b			Total equals Question 2-4		

**2-9 Add 2-8, lines i and j for each column, and enter the result here. This is R&D performed by others.**

	(1) Domestic			(2) Foreign			(3) Worldwide		
	\$Bil.	Mil.	Thou.	\$Bil.	Mil.	Thou.	\$Bil.	Mil.	Thou.

**2-10 Subtract 2-9 from 2-8, line m, for each column and enter the result here. This is R&D performed by your company.**

	(1) Domestic			(2) Foreign			(3) Worldwide		
	\$Bil.	Mil.	Thou.	\$Bil.	Mil.	Thou.	\$Bil.	Mil.	Thou.

**2-11 Of the amount reported in Question 2-10, column 2, how much R&D was performed in the following locations?** For full list of countries in each region see Question by Question Guidance at <https://www.census.gov/programs-surveys/brds/information/brdshelp.html#q2-11>.

	\$Bil.	Mil.	Thou.	\$Bil.	Mil.	Thou.	\$Bil.	Mil.	Thou.
Canada . . . . .									
Puerto Rico . . . . .									
<b>Europe</b>	\$Bil.	Mil.	Thou.						
Austria . . . . .									
Belgium . . . . .									
Czech Rep . . . . .									
Denmark . . . . .									
Finland . . . . .									
France . . . . .									
Germany . . . . .									
Hungary . . . . .									
Ireland . . . . .									
Italy . . . . .									
Luxembourg . . . . .									
Netherlands . . . . .									
Norway . . . . .									
Poland . . . . .									
Russia . . . . .									

Question continues on next page

**2-11 (Continued)**

Spain . . . . .	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
Sweden . . . . .	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
Switzerland . . . . .	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
Turkey . . . . .	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
United Kingdom . . . . .	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
Other Europe . . . . .	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>

**Latin America/  
Other Western  
Hemisphere**

\$Bil.      Mil.      Thou.

Argentina . . . . .	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
Brazil . . . . .	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
Chile . . . . .	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
Mexico . . . . .	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
Other Latin America/OWH . . . . .	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>

**Asia and Pacific**

\$Bil.      Mil.      Thou.

Australia . . . . .	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
China . . . . .	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
Hong Kong . . . . .	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
India . . . . .	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
Indonesia . . . . .	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
Japan . . . . .	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>

Malaysia . . . . .	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
New Zealand . . . . .	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
Singapore . . . . .	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
South Korea . . . . .	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
Taiwan . . . . .	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
Thailand . . . . .	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
Other Asia/ Pacific . . . . .	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>

**Middle East**

\$Bil.      Mil.      Thou.

Israel . . . . .	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
Other Middle East . . . . .	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>

**Africa**

\$Bil.      Mil.      Thou.

South Africa . . . . .	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
Other Africa . . . . .	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>

**Total** (equals Question 2-10, column 2). . . . .

<input type="text"/>				
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**2-12** How much of the amount reported in Question 2-10, column 1, was performed in each state (including D.C.) in 2018?

	\$Bil.	Mil.	Thou.		\$Bil.	Mil.	Thou.
Alabama . . . . .				Maine . . . . .			
Alaska . . . . .				Maryland . . . . .			
Arizona . . . . .				Massachusetts . . . . .			
Arkansas . . . . .				Michigan . . . . .			
California . . . . .				Minnesota . . . . .			
Colorado . . . . .				Mississippi . . . . .			
Connecticut . . . . .				Missouri . . . . .			
Delaware . . . . .				Montana . . . . .			
District of Columbia . . . . .				Nebraska . . . . .			
Florida . . . . .				Nevada . . . . .			
Georgia . . . . .				New Hampshire . . . . .			
Hawaii . . . . .				New Jersey . . . . .			
Idaho . . . . .				New Mexico . . . . .			
Illinois . . . . .				New York . . . . .			
Indiana . . . . .				North Carolina . . . . .			
Iowa . . . . .				North Dakota . . . . .			
Kansas . . . . .				Ohio . . . . .			
Kentucky . . . . .				Oklahoma . . . . .			
Louisiana . . . . .				Oregon . . . . .			

Question continues on next page

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**2-12 (Continued)**

	\$Bil.	Mil.	Thou.		\$Bil.	Mil.	Thou.
Pennsylvania . . .	<input type="text"/>	<input type="text"/>	<input type="text"/>	Vermont . . . . .	<input type="text"/>	<input type="text"/>	<input type="text"/>
Rhode Island . . .	<input type="text"/>	<input type="text"/>	<input type="text"/>	Virginia . . . . .	<input type="text"/>	<input type="text"/>	<input type="text"/>
South Carolina . .	<input type="text"/>	<input type="text"/>	<input type="text"/>	Washington . . . .	<input type="text"/>	<input type="text"/>	<input type="text"/>
South Dakota . . .	<input type="text"/>	<input type="text"/>	<input type="text"/>	West Virginia . . .	<input type="text"/>	<input type="text"/>	<input type="text"/>
Tennessee . . . . .	<input type="text"/>	<input type="text"/>	<input type="text"/>	Wisconsin . . . . .	<input type="text"/>	<input type="text"/>	<input type="text"/>
Texas . . . . .	<input type="text"/>	<input type="text"/>	<input type="text"/>	Wyoming . . . . .	<input type="text"/>	<input type="text"/>	<input type="text"/>
Utah . . . . .	<input type="text"/>	<input type="text"/>	<input type="text"/>	<b>Total</b> (equals Question 2-10, column 1) . . . . .	<input type="text"/>	<input type="text"/>	<input type="text"/>

**2-13 At what domestic location did your company perform the largest dollar amount of R&D in 2018?**

**Address 1**

**Address 2**

**City**  **State**  **ZIP**

**2-14 How much of the amount reported in Question 2-10, column 1, was from the location identified in Question 2-13?**

\$Bil.  Mil.  Thou.



**R&D transactions between legal entities under common ownership**

**2-18 How much of the domestic R&D performed by your company reported in Question 2-10, column 1, was paid for by your company's foreign subsidiaries through inter-company transactions?**

**Example:** Company Y owns a subsidiary in France. In order to complete the development of a product in 2018, the French subsidiary paid for R&D performed at Company Y's U.S. R&D center. The cost of the U.S. R&D that was paid for by the French subsidiary would be included in this item.

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

**2-19 How much of the foreign R&D performed by your company reported in Question 2-10, column 2, was paid for by your company's domestic subsidiaries through inter-company transactions?**

**Example:** Company Z owns a subsidiary in France. In order to complete the development of a product in 2018, the domestic operations paid for R&D performed at its subsidiary's R&D center in France. The cost of the French subsidiary's R&D that was paid for by the domestic operations would be included in this item.

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

**R&D performed by others**

**2-20 How much of the domestic R&D performed by others reported in Question 2-9, column 1, was performed by the following types of organizations?**

	\$Bil.	Mil.	Thou.
a. Companies located <u>inside</u> the United States . . . . .	<input type="text"/>	<input type="text"/>	<input type="text"/>
b. Your company's foreign parent (if you are owned by a foreign parent). . . . .	<input type="text"/>	<input type="text"/>	<input type="text"/>
c. Other companies located <u>outside</u> the United States . . . . .	<input type="text"/>	<input type="text"/>	<input type="text"/>
d. U.S. federal government agencies or laboratories. . . . .	<input type="text"/>	<input type="text"/>	<input type="text"/>
e. U.S. state and local government agencies or laboratories. . .	<input type="text"/>	<input type="text"/>	<input type="text"/>
f. Universities, colleges, and academic researchers (including principal investigators) located <u>inside</u> the United States . . . .	<input type="text"/>	<input type="text"/>	<input type="text"/>
g. All other organizations <u>inside</u> the United States . . . . .	<input type="text"/>	<input type="text"/>	<input type="text"/>
h. All other organizations <u>outside</u> the United States . . . . .	<input type="text"/>	<input type="text"/>	<input type="text"/>
i. <b>Total domestic R&amp;D paid for by your company that was performed by others</b> (equals Question 2-9, column 1). . . . .	<input type="text"/>	<input type="text"/>	<input type="text"/>

**Activities with academia**

**2-21** In addition to the amount reported in Question 2-20, line f, did your company make monetary gifts to U.S. universities or colleges in 2018 that included support for R&D?

Yes → Continue with Question 2-22

No → Skip to Question 2-23

**2-22** What was the amount of monetary gifts made by your company to U.S. universities or colleges in 2018 that was for R&D?

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

**Projected R&D for 2019**

**2-23** What are your company's projected 2019 costs for (1) domestic, (2) foreign, and (3) worldwide R&D paid for by your company?

**NOTE:** These amounts are the 2019 projections for the amounts reported in Question 2-8, line m.

(1) Domestic			(2) Foreign			(3) Worldwide		
\$Bil.	Mil.	Thou.	\$Bil.	Mil.	Thou.	\$Bil.	Mil.	Thou.
<input type="text"/>								

**2-24** How much of the amount reported in Question 2-23, column 1, is for projected contract R&D services and projected payments to business partners for collaborative R&D?

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

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# SECTION 2 WORKSHEET

Complete if amount reported in Question 2-4 is less than \$1 Million

**1 Of the total R&D paid for by your company reported in Question 2-4, what costs were incurred in the following locations?**

	\$Mil.	Thou.
a. Domestic United States (50 states and D.C.) [Include R&D performed by domestic operations that is paid for by foreign subsidiaries] . . . . .	[ ] [ ] [ ]	[ ] [ ] [ ]
b. All other countries (also, Puerto Rico) [Include R&D performed by foreign subsidiaries that is paid for by domestic operations] . . . . .	[ ] [ ] [ ]	[ ] [ ] [ ]
c. <b>Total</b> . . . . .	[ ] [ ] [ ]	[ ] [ ] [ ]

**2 How much of the amount reported in Question 1, line a, was for each of the following types of costs?**

	\$Mil.	Thou.
a. Salaries, wages, and fringe benefits. . . . .	[ ] [ ] [ ]	[ ] [ ] [ ]
b. Collaborative R&D payments (include joint development agreements) . . . . .	[ ] [ ] [ ]	[ ] [ ] [ ]
c. Contract R&D (include payments to your company's foreign parent for R&D) . . . . .	[ ] [ ] [ ]	[ ] [ ] [ ]
d. All other costs (including administrative and overhead costs clearly associated with your company's R&D) . . . . .	[ ] [ ] [ ]	[ ] [ ] [ ]
e. <b>Total</b> (equals Question 1, line a) . . . . .	[ ] [ ] [ ]	[ ] [ ] [ ]

**3 Add Question 2, lines a and d, and enter the result here. This is the domestic R&D paid for and performed by your company in 2018.**

	\$Mil.	Thou.
	[ ] [ ] [ ]	[ ] [ ] [ ]

**4 Of the domestic R&D paid for and performed by your company reported in Question 3, how much was for the following categories?**

	\$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 . . . . .	[ ] [ ] [ ]	[ ] [ ] [ ]
d. <b>Total</b> (equals Question 3) . . . . .	[ ] [ ] [ ]	[ ] [ ] [ ]

# SECTION 3

## Costs Paid For by Others

**Who should answer this section?**

Persons familiar with accounting concepts and with access to financial records related to your company's activities paid for by others should complete this section.

**What does this section cover?**

Topics include customer-sponsored work and activities funded through grants, contracts, and/or reimbursements. Costs for these activities are requested at multiple levels of detail: for your worldwide consolidated enterprise, for units or parts of your company defined by geography (countries, states), and for parts of your company defined by business code.

**3-1 What were your company's worldwide costs (both direct and indirect) in 2018 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 2-4
- Payments in excess of the actual cost of the work performed (such as profit or fees)

	\$Bil.	Mil.	Thou.
a. R&D reimbursed by your company's foreign parent (if you are owned by a foreign parent).....			
b. Collaborative R&D reimbursed by business partners, such as through cost-sharing agreements .....			
c. R&D paid for by grants (government or private foundations).....			
d. Defense R&D goods or services provided as a prime or as a sub, to the government and/or government contractors. ....			

**Exclude:**

- Costs for projects that have achieved technical feasibility, such as low-rate initial production. Additional guidance is available online at <https://www.census.gov/programs-surveys/brds/information.html>

e. Medical clinical trial Phase I-III services provided to others not owned by your company (include pass-through costs) ..			
f. Medical R&D services, other than clinical trials, provided to others not owned by your company .....			
g. Nondefense custom software development and/or computer systems designed for others not owned by your company.....			

**Exclude:**

- Software development that does not depend on a scientific or technological advance, such as adding functionality to existing application programs, debugging systems, and adapting existing software

h. Prototype development, production, and testing for customer's products prior to their introduction to the market (excluding defense-related prototyping reported in line d) .....			
i. All other R&D services provided to the Federal Government or to others not owned by your company .....			
j. <b>Total</b> .....			

SECTION 3

**3-1 (Continued)**

The amount entered in Question 3-1, line j is the total R&D paid for by others in 2018. Is this amount:

\$0 →  **If Question 2-4 was also \$0, then you have completed this survey, otherwise skip to Section 4 on page 34.**

Less than \$1 Million →  **Skip to Section 3 Worksheet on page 33 and then continue with Section 4 on page 34.**

\$1 Million or greater → **Continue with Question 3-2.**

**R&D paid for by others**

**3-2 Of the amount reported in Question 3-1, line j, what costs were incurred by your company in the following locations?**

	\$Bil.	Mil.	Thou.
a. Domestic United States (50 states and D.C.) .....	<input type="text"/>	<input type="text"/>	<input type="text"/>
b. All other countries (also, Puerto Rico) .....	<input type="text"/>	<input type="text"/>	<input type="text"/>
c. <b>Total</b> (equals Question 3-1, line j) .....	<input type="text"/>	<input type="text"/>	<input type="text"/>

**3-3 How much of the (1) domestic, (2) foreign, and (3) worldwide R&D paid for by others in 2018 was for each of the following types of costs?**

	(1) Domestic			(2) Foreign			(3) Worldwide		
	\$Bil.	Mil.	Thou.	\$Bil.	Mil.	Thou.	\$Bil.	Mil.	Thou.
a. Salaries, wages, and fringe benefits	<input type="text"/>								
b. Stock-based compensation	<input type="text"/>								
c. Leased employees and temporary staffing, including on-site consultants, working on R&D	<input type="text"/>								
d. Expensed equipment (not capitalized)	<input type="text"/>								
e. Materials and supplies	<input type="text"/>								
f. Leased facilities and equipment	<input type="text"/>								

Question continues on next page

**3-3 (Continued)**

	(1) Domestic			(2) Foreign			(3) Worldwide		
	\$Bil.	Mil.	Thou.	\$Bil.	Mil.	Thou.	\$Bil.	Mil.	Thou.
g. Depreciation and amortization on R&D property, plant, equipment, and intangible assets									
h. Royalties and licensing fees (including payments made to others for the use of patents and other forms of intellectual property used in your company's R&D)									
i. Collaborative R&D payments (include joint development agreements)									
j. Contract R&D (include payments to your company's foreign parent for R&D)									
k. Other purchased services									
l. All other costs (including administrative and overhead costs clearly associated with your company's R&D)									
m. <b>Total</b>									
	<i>Total equals Question 3-2, line a</i>			<i>Total equals Question 3-2, line b</i>			<i>Total equals Question 3-1, line j</i>		

**3-4 Add 3-3, lines i and j for each column, and enter the result here. This is R&D performed by others (e.g., subcontracted/passed-through R&D costs).**

	(1) Domestic			(2) Foreign			(3) Worldwide		
	\$Bil.	Mil.	Thou.	\$Bil.	Mil.	Thou.	\$Bil.	Mil.	Thou.

**3-5 Subtract 3-4 from 3-3, line m, for each column and enter the result here. This is R&D performed by your company that was paid for by others.**

	(1) Domestic			(2) Foreign			(3) Worldwide		
	\$Bil.	Mil.	Thou.	\$Bil.	Mil.	Thou.	\$Bil.	Mil.	Thou.

3-6

**Of the amount reported in Question 3-5, column 2, how much R&D was performed in the following locations?** For full list of countries in each region see Question by Question Guidance at <https://www.census.gov/programs-surveys/brds/information/brdshelp.html#q3-6>.

	\$Bil.	Mil.	Thou.		\$Bil.	Mil.	Thou.
Canada . . . . .	<input type="text"/>	<input type="text"/>	<input type="text"/>	Switzerland . . . . .	<input type="text"/>	<input type="text"/>	<input type="text"/>
Puerto Rico . . . . .	<input type="text"/>	<input type="text"/>	<input type="text"/>	Turkey . . . . .	<input type="text"/>	<input type="text"/>	<input type="text"/>
<b>Europe</b>	\$Bil.	Mil.	Thou.	United Kingdom . . . . .	<input type="text"/>	<input type="text"/>	<input type="text"/>
Austria . . . . .	<input type="text"/>	<input type="text"/>	<input type="text"/>	Other Europe . . . . .	<input type="text"/>	<input type="text"/>	<input type="text"/>
Belgium . . . . .	<input type="text"/>	<input type="text"/>	<input type="text"/>	<b>Latin America/ Other Western Hemisphere</b>	\$Bil.	Mil.	Thou.
Czech Rep . . . . .	<input type="text"/>	<input type="text"/>	<input type="text"/>	Argentina . . . . .	<input type="text"/>	<input type="text"/>	<input type="text"/>
Denmark . . . . .	<input type="text"/>	<input type="text"/>	<input type="text"/>	Brazil . . . . .	<input type="text"/>	<input type="text"/>	<input type="text"/>
Finland . . . . .	<input type="text"/>	<input type="text"/>	<input type="text"/>	Chile . . . . .	<input type="text"/>	<input type="text"/>	<input type="text"/>
France . . . . .	<input type="text"/>	<input type="text"/>	<input type="text"/>	Mexico . . . . .	<input type="text"/>	<input type="text"/>	<input type="text"/>
Germany . . . . .	<input type="text"/>	<input type="text"/>	<input type="text"/>	Other Latin America/OWH . . . . .	<input type="text"/>	<input type="text"/>	<input type="text"/>
Hungary . . . . .	<input type="text"/>	<input type="text"/>	<input type="text"/>	<b>Asia and Pacific</b>	\$Bil.	Mil.	Thou.
Ireland . . . . .	<input type="text"/>	<input type="text"/>	<input type="text"/>	Australia . . . . .	<input type="text"/>	<input type="text"/>	<input type="text"/>
Italy . . . . .	<input type="text"/>	<input type="text"/>	<input type="text"/>	China . . . . .	<input type="text"/>	<input type="text"/>	<input type="text"/>
Luxembourg . . . . .	<input type="text"/>	<input type="text"/>	<input type="text"/>	Hong Kong . . . . .	<input type="text"/>	<input type="text"/>	<input type="text"/>
Netherlands . . . . .	<input type="text"/>	<input type="text"/>	<input type="text"/>	India . . . . .	<input type="text"/>	<input type="text"/>	<input type="text"/>
Norway . . . . .	<input type="text"/>	<input type="text"/>	<input type="text"/>	Indonesia . . . . .	<input type="text"/>	<input type="text"/>	<input type="text"/>
Poland . . . . .	<input type="text"/>	<input type="text"/>	<input type="text"/>	Japan . . . . .	<input type="text"/>	<input type="text"/>	<input type="text"/>
Russia . . . . .	<input type="text"/>	<input type="text"/>	<input type="text"/>	Malaysia . . . . .	<input type="text"/>	<input type="text"/>	<input type="text"/>
Spain . . . . .	<input type="text"/>	<input type="text"/>	<input type="text"/>	New Zealand . . . . .	<input type="text"/>	<input type="text"/>	<input type="text"/>
Sweden . . . . .	<input type="text"/>	<input type="text"/>	<input type="text"/>	Singapore . . . . .	<input type="text"/>	<input type="text"/>	<input type="text"/>

Question continues on next page

SECTION 3

**3-6 (Continued)**

	\$Bil.	Mil.	Thou.
South Korea . . .	<input type="text"/>	<input type="text"/>	<input type="text"/>
Taiwan . . . . .	<input type="text"/>	<input type="text"/>	<input type="text"/>
Thailand . . . . .	<input type="text"/>	<input type="text"/>	<input type="text"/>
Other Asia/ Pacific . . . . .	<input type="text"/>	<input type="text"/>	<input type="text"/>

<b>Middle East</b>	\$Bil.	Mil.	Thou.
Israel . . . . .	<input type="text"/>	<input type="text"/>	<input type="text"/>
Other Middle East . . . .	<input type="text"/>	<input type="text"/>	<input type="text"/>

<b>Africa</b>	\$Bil.	Mil.	Thou.
South Africa . . .	<input type="text"/>	<input type="text"/>	<input type="text"/>
Other Africa . . .	<input type="text"/>	<input type="text"/>	<input type="text"/>
<b>Total</b> (equals Question 3-5, column 2). . . . .	<input type="text"/>	<input type="text"/>	<input type="text"/>

**3-7 How much of the domestic R&D performed by your company that was paid for by others reported in Question 3-5, column 1, was for each business code listed or amended in Question 1-11?**

**Allocate R&D that is applicable to more than one business code** on a reasonable basis. Allocation in proportion to operating revenues is acceptable unless some alternative allocation basis is more appropriate.

<b>Business code</b>	\$Bil.	Mil.	Thou.
a. <input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
b. <input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
c. <input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
d. <input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
e. <input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
f. <input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
g. <input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
h. <input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
i. <b>Total</b> (equals Question 3-5, column 1) . . . . .	<input type="text"/>	<input type="text"/>	<input type="text"/>

**3-8 How much of the amount reported in Question 3-5, column 1, was paid for by each of the following?**

**If your company is a subcontractor or subgrantee, report the original source of funds.**

**Example:** Company Sub Inc. performs custom software development for a large defense company as a subcontractor on a contract with the U.S. Dept. of Defense. Even though Sub Inc. is working directly for the defense company, it reports the cost of this development in line d because the Dept. of Defense was the original source of funds.

	\$Bil.	Mil.	Thou.
a. Other companies located <u>inside</u> the United States . . . . .	<input type="text"/>	<input type="text"/>	<input type="text"/>
b. Your company's foreign parent (if you are owned by a foreign parent) . . . . .	<input type="text"/>	<input type="text"/>	<input type="text"/>
c. Other companies located <u>outside</u> the United States . . . . .	<input type="text"/>	<input type="text"/>	<input type="text"/>
d. U.S. federal government agencies or laboratories . . . . .	<input type="text"/>	<input type="text"/>	<input type="text"/>
e. U.S. state and local government agencies or laboratories . . . . .	<input type="text"/>	<input type="text"/>	<input type="text"/>
f. Foreign government agencies or laboratories . . . . .	<input type="text"/>	<input type="text"/>	<input type="text"/>
g. Universities, colleges, and academic researchers (including principal investigators) located <u>inside</u> the United States . . . . .	<input type="text"/>	<input type="text"/>	<input type="text"/>
h. Universities and colleges located <u>outside</u> the United States . . . . .	<input type="text"/>	<input type="text"/>	<input type="text"/>
i. All other organizations <u>inside</u> the United States . . . . .	<input type="text"/>	<input type="text"/>	<input type="text"/>
j. All other organizations <u>outside</u> the United States . . . . .	<input type="text"/>	<input type="text"/>	<input type="text"/>
k. <b>Total</b> (equals Question 3-5, column 1) . . . . .	<input type="text"/>	<input type="text"/>	<input type="text"/>

**3-9 Add Question 3-8, lines a, b, and c, and enter the result here. This is the domestic R&D performed by your company that was paid for by other companies.**

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

**3-10**

**Using the list of business codes printed below, allocate the amount reported in Question 3-9 based on the industries of the companies that paid for the R&D. As needed, enter additional codes from pages 49-50 in the spaces provided.**

	Business code	Description	\$Bil.	Mil.	Thou.
a.	3 2 5 4 3	Biotechnology-based pharmaceutical and biological products (except diagnostics) .....			
b.	3 2 5 4 1	Pharmaceutical, medicinal, and botanical products manufacturing .....			
c.	3 3 5 0 0	Electrical equipment, appliances, and components manufacturing .....			
d.	3 3 4 4 0	Semiconductor and other electronic components manufacturing .....			
e.	3 3 9 1 0	Medical equipment and supplies manufacturing .....			
f.	3 3 6 1 0	Motor vehicles manufacturing .....			
g.		.....			
h.		.....			
i.		.....			
j.	<b>Total</b> (equals Question 3-9) .....				

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SECTION 3

**3-11 How much of the amount reported in Question 3-8, line d, was paid for by the following agencies?**

	\$Bil.	Mil.	Thou.
a. Department of Defense . . . . .	<input type="text"/>	<input type="text"/>	<input type="text"/>
b. Department of Energy . . . . .	<input type="text"/>	<input type="text"/>	<input type="text"/>
c. National Aeronautics and Space Administration . . . . .	<input type="text"/>	<input type="text"/>	<input type="text"/>
d. National Institutes of Health . . . . .	<input type="text"/>	<input type="text"/>	<input type="text"/>
e. Department of Homeland Security . . . . .	<input type="text"/>	<input type="text"/>	<input type="text"/>
f. Department of Transportation . . . . .	<input type="text"/>	<input type="text"/>	<input type="text"/>
g. Environmental Protection Agency . . . . .	<input type="text"/>	<input type="text"/>	<input type="text"/>
h. National Science Foundation . . . . .	<input type="text"/>	<input type="text"/>	<input type="text"/>
i. All other, please specify: <input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
j. <b>Total</b> (equals Question 3-8, line d) . . . . .	<input type="text"/>	<input type="text"/>	<input type="text"/>

**3-12 How much of the amount reported in Question 3-8, line d, was performed under the following types of agreements?**

	\$Bil.	Mil.	Thou.
a. Contracts (include direct or prime contracts and subcontracts) . . . . .	<input type="text"/>	<input type="text"/>	<input type="text"/>
b. Grants, reimbursements, and all other agreements . . . . .	<input type="text"/>	<input type="text"/>	<input type="text"/>
c. <b>Total</b> (equals Question 3-8, line d) . . . . .	<input type="text"/>	<input type="text"/>	<input type="text"/>

**3-13 Subtract Question 3-8, line d, from Question 3-8, line k, and enter the result here. This is the domestic R&D performed by your company that was paid for by nonfederal sources.**

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

**3-14** How much of the following three amounts was performed in each state (including D.C.):

- (1) Domestic R&D paid for by the U.S. federal government reported in Question 3-8, line d
- (2) Domestic R&D paid for by nonfederal sources reported in Question 3-13
- (3) Total domestic R&D performed by your company that was paid for by others reported in Question 3-5, column 1

	(1) Federal			(2) Nonfederal			(3) Total		
	\$Bil.	Mil.	Thou.	\$Bil.	Mil.	Thou.	\$Bil.	Mil.	Thou.
Alabama	<input type="text"/>								
Alaska	<input type="text"/>								
Arizona	<input type="text"/>								
Arkansas	<input type="text"/>								
California	<input type="text"/>								
Colorado	<input type="text"/>								
Connecticut	<input type="text"/>								
Delaware	<input type="text"/>								
District of Columbia	<input type="text"/>								
Florida	<input type="text"/>								
Georgia	<input type="text"/>								
Hawaii	<input type="text"/>								

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**3-14 (Continued)**

	(1) Federal			(2) Nonfederal			(3) Total		
	\$Bil.	Mil.	Thou.	\$Bil.	Mil.	Thou.	\$Bil.	Mil.	Thou.
Idaho	<input type="text"/>								
Illinois	<input type="text"/>								
Indiana	<input type="text"/>								
Iowa	<input type="text"/>								
Kansas	<input type="text"/>								
Kentucky	<input type="text"/>								
Louisiana	<input type="text"/>								
Maine	<input type="text"/>								
Maryland	<input type="text"/>								
Massachusetts	<input type="text"/>								
Michigan	<input type="text"/>								
Minnesota	<input type="text"/>								
Mississippi	<input type="text"/>								

Question continues on next page

**3-14 (Continued)**

	(1) Federal			(2) Nonfederal			(3) Total		
	\$Bil.	Mil.	Thou.	\$Bil.	Mil.	Thou.	\$Bil.	Mil.	Thou.
Missouri	<input type="text"/>								
Montana	<input type="text"/>								
Nebraska	<input type="text"/>								
Nevada	<input type="text"/>								
New Hampshire	<input type="text"/>								
New Jersey	<input type="text"/>								
New Mexico	<input type="text"/>								
New York	<input type="text"/>								
North Carolina	<input type="text"/>								
North Dakota	<input type="text"/>								
Ohio	<input type="text"/>								
Oklahoma	<input type="text"/>								
Oregon	<input type="text"/>								

Question continues on next page

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**3-14 (Continued)**

	(1) Federal			(2) Nonfederal			(3) Total		
	\$Bil.	Mil.	Thou.	\$Bil.	Mil.	Thou.	\$Bil.	Mil.	Thou.
Pennsylvania	<input type="text"/>								
Rhode Island	<input type="text"/>								
South Carolina	<input type="text"/>								
South Dakota	<input type="text"/>								
Tennessee	<input type="text"/>								
Texas	<input type="text"/>								
Utah	<input type="text"/>								
Vermont	<input type="text"/>								
Virginia	<input type="text"/>								
Washington	<input type="text"/>								
West Virginia	<input type="text"/>								
Wisconsin	<input type="text"/>								
Wyoming	<input type="text"/>								

Question continues on next page



**R&D performed by others**

**3-19** Of the domestic R&D performed by others reported in Question 3-4, column 1, how much was paid for by U.S. federal government agencies or laboratories?

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

**Projected R&D paid for by others in 2019**

**3-20** What are your company's projected 2019 costs for R&D that will be paid for by others?

**NOTE:** This amount is the 2019 projection for what is reported in Question 3-1, line j.

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

**3-21** How much of the projected costs in 2019 for R&D that will be paid for by others reported in Question 3-20 will be performed by your company in the United States?

**NOTE:** This amount is the 2019 projection for what is reported in Question 3-5, column 1.

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

**3-22** How much of the projected costs in 2019 for domestic R&D performed by your company reported in Question 3-21 will be paid for by the U.S. federal government?

**NOTE:** This amount is the 2019 projection for what is reported in Question 3-8, line d.

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

SECTION 3

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# SECTION 3 WORKSHEET

Complete if amount reported in Question 3-1, line j, is less than \$1 Million

**1** Of the total R&D paid for by others reported in Question 3-1, line j, what costs were incurred in the following locations?

	\$Mil.	Thou.
a. Domestic United States (50 states and D.C.) .....	[ ] [ ] [ ]	[ ] [ ] [ ]
b. All other countries (also, Puerto Rico) .....	[ ] [ ] [ ]	[ ] [ ] [ ]
c. <b>Total</b> .....	[ ] [ ] [ ]	[ ] [ ] [ ]

**2** How much of the amount reported in Question 1, line a, was for each of the following types of costs?

	\$Mil.	Thou.
a. Salaries, wages, and fringe benefits .....	[ ] [ ] [ ]	[ ] [ ] [ ]
b. Collaborative R&D payments (include joint development agreements) .....	[ ] [ ] [ ]	[ ] [ ] [ ]
c. Contract R&D (include payments to your company's foreign parent for R&D) .....	[ ] [ ] [ ]	[ ] [ ] [ ]
d. All other costs (including administrative and overhead costs clearly associated with your company's R&D) .....	[ ] [ ] [ ]	[ ] [ ] [ ]
e. <b>Total</b> (equals Question 1, line a) .....	[ ] [ ] [ ]	[ ] [ ] [ ]

**3** Add Question 2, lines a and d, and enter the result here. This is the domestic R&D performed by your company that was paid for by others in 2018.

	\$Mil.	Thou.
	[ ] [ ] [ ]	[ ] [ ] [ ]

**4** Of the domestic R&D performed by your company that was paid for by others reported in Question 3, how much was for the following categories?

	\$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 .....	[ ] [ ] [ ]	[ ] [ ] [ ]
d. <b>Total</b> (equals Question 3) .....	[ ] [ ] [ ]	[ ] [ ] [ ]

SECTION 3

# SECTION 4

## Capital Expenditures

**Who should answer this section?**

Persons familiar with your company's accounting for capital expenditures and with access to records related to those expenditures should complete this section.

**What does this section cover?**

This section requests financial information about your company's capital expenditures, specifically those for R&D operations.

**4-1 What was the amount of your company's capital expenditures in the domestic United States in 2018?**

\$Bil.	Mil.	Thou.

**4-2 How much of the amount reported in Question 4-1 was for R&D operations?**

\$Bil.	Mil.	Thou.

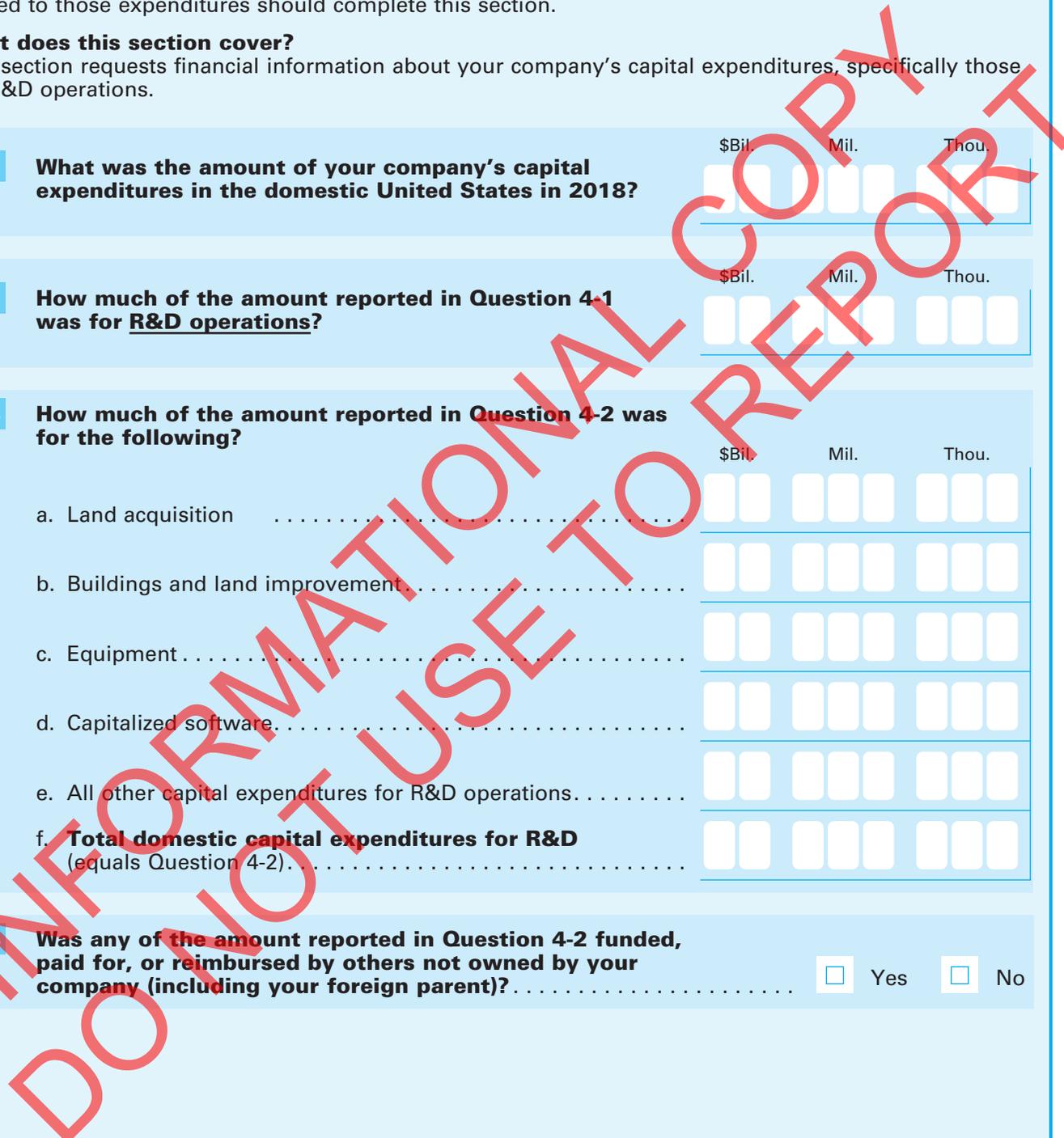
**4-3 How much of the amount reported in Question 4-2 was for the following?**

	\$Bil.	Mil.	Thou.
a. Land acquisition .....			
b. Buildings and land improvement.....			
c. Equipment .....			
d. Capitalized software.....			
e. All other capital expenditures for R&D operations.....			
f. <b>Total domestic capital expenditures for R&amp;D</b> (equals Question 4-2).....			

**4-4 Was any of the amount reported in Question 4-2 funded, paid for, or reimbursed by others not owned by your company (including your foreign parent)?.....**

Yes     No

SECTION 4





## Areas of application for domestic R&D paid for and performed by your company

**NOTE: You may report the same R&D in multiple areas for Questions 5-5 to 5-9.**

**5-5** What percentage of the amount reported in Question 5-2 had energy applications, including energy production, distribution, storage, and efficiency (excluding exploration and prospecting)?

**Example:** Company B is a semiconductor manufacturer. Its products are not designed specifically for energy applications. In 2018, 10% of the domestic R&D performed by the company was focused on improving the energy efficiency of its products. Based on this, Company B reports "10%" for this question.

%

**5-6** What percentage of the amount reported in Question 5-2 had environmental protection applications, including pollution abatement?

%

**5-7** What percentage of the amount reported in Question 5-2 had defense applications, including military applications and homeland security-related R&D?

%

**5-8** What percentage of the amount reported in Question 5-2 had health or medical applications?

%

**5-9** What percentage of the amount reported in Question 5-2 had agricultural applications?

%

## Technology focus of domestic R&D paid for and performed by your company

**NOTE: You may report the same R&D in multiple areas for Questions 5-10 to 5-13.**

**5-10** What percentage of the amount reported in Question 5-2 was for software products or software embedded in other projects or products?

%

**5-11** What percentage of the amount reported in Question 5-2 was for biotechnology? For list-based definition see Question by Question Guidance at <https://www.census.gov/programs-surveys/brds/information/brdshelp.html#q5-11>

**Biotechnology** – The application of science and technology to living organisms, as well as parts, products and models thereof, to alter living or non-living materials for the production of knowledge, goods and services.

%

**5-12** What percentage of the amount reported in Question 5-2 was for nanotechnology? For list-based definition see Question by Question Guidance at <https://www.census.gov/programs-surveys/brds/information/brdshelp.html#q5-12>

**Nanotechnology** – The application of science and technology to organisms, organic and inorganic materials, as well as parts, products, and models thereof, at the nanometer-scale (but not exclusively below 1000 nanometers).

%

**5-13** What percentage of the amount reported in Question 5-2 was for artificial intelligence (AI)? For a detailed definition see Question by Question Guidance at <https://www.census.gov/programs-surveys/brds/information/brdshelp.html#q5-13>

**Artificial Intelligence (AI)** – A branch of computer science and engineering devoted to making machines intelligent. Intelligence is that quality that enables an entity to perceive, analyze, determine response, and act appropriately in its environment.

%

**Characteristics of foreign R&D paid for and performed by your company**

**5-14** Copy the amount from Question 2-10, column 2. This is the foreign R&D paid for and performed by your company.

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

**5-15** How much of the foreign R&D paid for and performed by your company reported in Question 5-14 was for the following categories?

- a. Research—planned, systematic pursuit of new knowledge or understanding. . . . .
- b. 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. . . . .
- c. **Total** (equals Question 5-14). . . . .

\$Bil.	Mil.	Thou.
<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"/>

**Domestic R&D performed by your company that was paid for by others**

**TIP** If the amount reported in Question 3-1, line j was less than \$1 Million, skip to Section 6 on page 40.

**5-16** Copy the amount from Question 3-5, column 1. This is the domestic R&D performed by your company that was paid for by others.

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

**5-17** How much of the amount reported in Question 5-16 was for the following categories?

- a. Research—planned, systematic pursuit of new knowledge or understanding. . . . .
- b. 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. . . . .
- c. **Total** (equals Question 5-16). . . . .

\$Bil.	Mil.	Thou.
<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"/>

**5-18** If you reported any research in Question 5-17, line a, how much of that research was for the following categories?

- a. Applied research—activities aimed at solving a specific problem or meeting a specific commercial objective. . . . .
- b. Basic research—activities aimed at acquiring new knowledge or understanding without specific immediate commercial applications or uses . . . . .
- c. **Total** (equals Question 5-17, line a). . . . .

\$Bil.	Mil.	Thou.
<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"/>

SECTION 5

**NOTE: You may report the same R&D in multiple areas for Questions 5-19 to 5-23.**

**5-19** What percentage of the amount reported in Question 5-16 had energy applications, including energy production, distribution, storage, and efficiency (excluding exploration and prospecting)?  %

**5-20** What percentage of the amount reported in Question 5-16 had environmental protection applications, including pollution abatement?  %

**5-21** What percentage of the amount reported in Question 5-16 had defense applications, including military applications and homeland security-related R&D?  %

**5-22** What percentage of the amount reported in Question 5-16 had health or medical applications?  %

**5-23** What percentage of the amount reported in Question 5-16 had agricultural applications?  %

**Technology focus of domestic R&D performed by your company that was paid for by others**

**NOTE: You may report the same R&D in multiple areas for Questions 5-24 to 5-27.**

**5-24** What percentage of the amount reported in Question 5-16 was for software products or software embedded in other projects or products?  %

**5-25** What percentage of the amount reported in Question 5-16 was for biotechnology? For list-based definition see Question by Question Guidance at <https://www.census.gov/programs-surveys/brds/information/brdshelp.html#q5-25>  
**Biotechnology** – The application of science and technology to living organisms, as well as parts, products and models thereof, to alter living or non-living materials for the production of knowledge, goods and services.  %

**5-26** What percentage of the amount reported in Question 5-16 was for nanotechnology? For list-based definition see Question by Question Guidance at <https://www.census.gov/programs-surveys/brds/information/brdshelp.html#q5-26>  
**Nanotechnology** – The application of science and technology to organisms, organic and inorganic materials, as well as parts, products, and models thereof, at the nanometer-scale (but not exclusively below 1000 nanometers).  %

**5-27** What percentage of the amount reported in Question 5-16 was for artificial intelligence (AI)? For a detailed definition see Question by Question Guidance at <https://www.census.gov/programs-surveys/brds/information/brdshelp.html#q5-27>  
**Artificial Intelligence (AI)** – A branch of computer science and engineering devoted to making machines intelligent. Intelligence is that quality that enables an entity to perceive, analyze, determine response, and act appropriately in its environment.  %

**Domestic R&D performed by your company that was paid for by the U.S. federal government**

**5-28** Copy the amount from Question 3-8, line d. This is the domestic R&D performed by your company that was paid for by the U.S. federal government.

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

**5-29** How much of the amount reported in Question 5-28 was for the following categories?

- a. Research—planned, systematic pursuit of new knowledge or understanding. . . . .
- b. 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 . . . . .
- c. **Total** (equals Question 5-28). . . . .

\$Bil.	Mil.	Thou.
<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"/>

**5-30** If you reported any research in Question 5-29, line a, how much was for the following categories?

- a. Applied research—activities aimed at solving a specific problem or meeting a specific commercial objective. . . . .
- b. Basic research—activities aimed at acquiring new knowledge or understanding without specific immediate commercial applications or uses . . . . .
- c. **Total** (equals Question 5-29, line a). . . . .

\$Bil.	Mil.	Thou.
<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"/>

**5-31** What percentage of the amount reported in Question 5-28 was for software products or software embedded in other projects or products?  %

**Characteristics of foreign R&D performed by your company that was paid for by others**

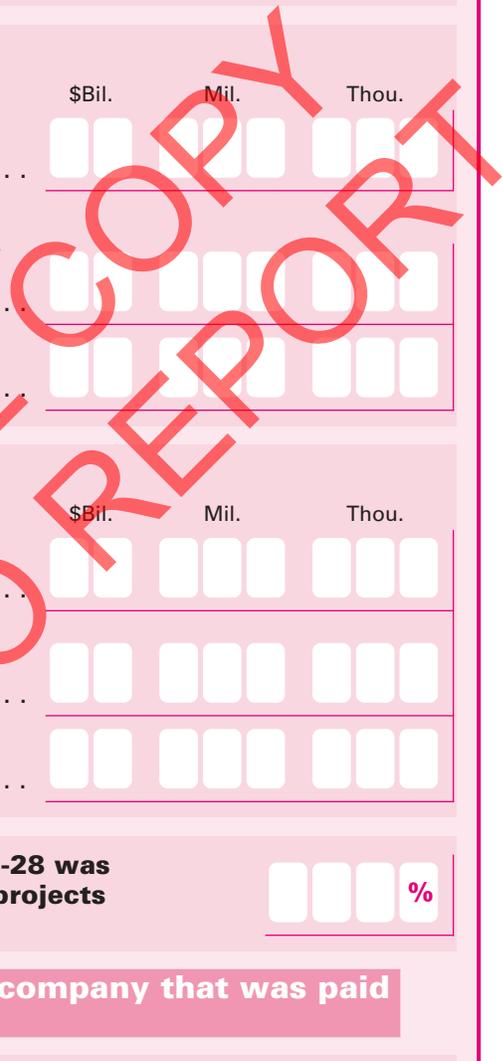
**5-32** Copy the amount from Question 3-5, column 2. This is the foreign R&D performed by your company and paid for by others.

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

**5-33** How much of the amount reported in Question 5-32 was for the following categories?

- a. Research—planned, systematic pursuit of new knowledge or understanding. . . . .
- b. 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 . . . . .
- c. **Total** (equals Question 5-32). . . . .

\$Bil.	Mil.	Thou.
<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"/>





6-2

(Continued)

(1) R&D employees	(2) Total employees
Georgia	
Hawaii	
Idaho	
Illinois	
Indiana	
Iowa	
Kansas	
Kentucky	
Louisiana	
Maine	
Maryland	
Massachusetts	
Michigan	

(1) R&D employees	(2) Total employees
Minnesota	
Mississippi	
Missouri	
Montana	
Nebraska	
Nevada	
New Hampshire	
New Jersey	
New Mexico	
New York	
North Carolina	
North Dakota	
Ohio	

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Question continues on next page

SECTION 6

6-2

(Continued)

(1) R&D employees	(2) Total employees	(1) R&D employees	(2) Total employees
Oklahoma		Utah	
Oregon		Vermont	
Pennsylvania		Virginia	
Rhode Island		Washington	
South Carolina		West Virginia	
South Dakota		Wisconsin	
Tennessee		Wyoming	
Texas		<b>Total</b>	

6-3

How many of the employees reported in Question 6-1, column 2, were employed in each location (including Puerto Rico)?

(1) R&D employees	(2) Total employees	(1) R&D employees	(2) Total employees
Canada		Czech Rep	
Puerto Rico		Denmark	
<b>Europe</b>		Finland	
Austria		France	
Belgium			

Question continues on next page

SECTION 6

6-3

(Continued)

(1)  
R&D employees

(2)  
Total employees

(1)  
R&D employees

(2)  
Total employees

Germany

United Kingdom

Hungary

Other Europe

Ireland

**Latin America/Other Western Hemisphere**

Argentina

Italy

Brazil

Luxembourg

Chile

Netherlands

Mexico

Norway

Other Latin America/OWH

Poland

**Asia and Pacific**

Australia

Russia

China

Spain

Hong Kong

Sweden

India

Switzerland

Indonesia

Turkey

Question continues on next page

6-3

(Continued)

	(1) R&D employees	(2) Total employees	(1) R&D employees	(2) Total employees
Japan	<input type="text"/>	<input type="text"/>	<b>Middle East</b>	
Malaysia	<input type="text"/>	<input type="text"/>	Israel	<input type="text"/>
New Zealand	<input type="text"/>	<input type="text"/>	Other Middle East	<input type="text"/>
Singapore	<input type="text"/>	<input type="text"/>	<b>Africa</b>	
South Korea	<input type="text"/>	<input type="text"/>	South Africa	<input type="text"/>
Taiwan	<input type="text"/>	<input type="text"/>	Other Africa	<input type="text"/>
Thailand	<input type="text"/>	<input type="text"/>	<b>Total</b>	<input type="text"/>
Other Asia/Pacific	<input type="text"/>	<input type="text"/>		<input type="text"/>

**R&D employees**

6-4 How many of the R&D employees reported in Question 6-1, line a, were female employees and male employees?

	(1) Domestic Operations	(2) Foreign Operations	(3) Total R&D employees
a. Female R&D employees	<input type="text"/>	<input type="text"/>	<input type="text"/>
b. Male R&D employees . .	<input type="text"/>	<input type="text"/>	<input type="text"/>
c. <b>Total R&amp;D employees</b>	<input type="text"/>	<input type="text"/>	<input type="text"/>

Total line equals Question 6-1, line a

SECTION 6

**6-5 How many of the R&D employees reported in Question 6-1, line a, worked in the occupations listed below?**

	(1) Domestic Operations	(2) Foreign Operations	(3) Total R&D employees
a. Researchers (including R&D scientists, engineers, and their managers) . . . . .	<input type="text"/>	<input type="text"/>	<input type="text"/>
b. R&D technicians and equivalent staff . . . . .	<input type="text"/>	<input type="text"/>	<input type="text"/>
c. R&D support staff (clerical and other) . . . . .	<input type="text"/>	<input type="text"/>	<input type="text"/>
d. <b>Total R&amp;D employees</b>	<input type="text"/>	<input type="text"/>	<input type="text"/>

Total line equals Question 6-1, line a

**6-6 How many of the researchers reported in Question 6-5, line a, had the following level of education?**

	(1) Domestic Operations	(2) Foreign Operations	(3) Total
PhD (excluding MD, JD, and EdD) . . . . .	<input type="text"/>	<input type="text"/>	<input type="text"/>

**Domestic full-time equivalents (FTEs)**

**6-7 Of the domestic R&D employees reported in Question 6-1, line a, column 1, what was the number of full-time equivalents (FTEs) for R&D activity for full-time R&D employees, other full-time employees not working solely on R&D, and part-time employees?**

	Number
a. FTEs for full-time R&D employees Count the number of full-time employees who work only on R&D. . . . .	<input type="text"/>
<b>Example:</b> 50 full-time R&D employees worked only on R&D = 50 FTEs	
b. FTEs for other full-time employees not working solely on R&D Use the share of the time they work on R&D to calculate the number of FTEs. . . . .	<input type="text"/>
<b>Example:</b> 60 full-time employees averaged one-fourth of their time on R&D = 15 FTEs	
c. FTEs for part-time employees working on R&D Use the share of a full-time week (such as 40 hours) that they work on R&D to calculate the FTEs. . . . .	<input type="text"/>
<b>Example:</b> 20 part-time employees averaged 20 hours a week on R&D activities = 10 FTEs	
d. <b>Total FTEs</b> . . . . .	<input type="text"/>

Total FTEs should not exceed Question 6-1, line a, column 1.

6-8

**Of the domestic researchers reported in Question 6-5, line a, column 1, what was the number of full-time equivalents (FTEs) for R&D activity for full-time R&D employees, other full-time employees not working solely on R&D, and part-time employees?**

a. FTEs for full-time researchers Number  
 Count the number of full-time employees who work only on R&D. . . .

**Example:**  
 50 full-time R&D scientists worked only on R&D = 50 FTEs

b. FTEs for other full-time researchers not working solely on R&D  
 Use the share of the time they work on R&D to calculate the number of FTEs . . . . .

**Example:**  
 60 full-time managers averaged one-fourth of their time on R&D = 15 FTEs

c. FTEs for part-time researchers working on R&D  
 Use the share of a full-time week (such as 40 hours) that they work on R&D to calculate the FTEs. . . . .

**Example:**  
 20 part-time employees averaged 20 hours a week on R&D activities = 10 FTEs

d. **Total FTEs** . . . . .        
*Total FTEs should not exceed Question 6-5, line a, column 1.*

6-9

**How many of the domestic researchers reported in Question 6-5, line a, column 1, were non-U.S. citizens employed in the United States under a temporary visa, such as H-1B or L-1?**

(1)  
 Domestic Operations

Researchers employed under a temporary visa . . . . .

6-10

**In addition to the R&D employees reported in Question 6-1, line a, how many leased employees and temporary staff, including on-site consultants, worked in the occupations listed below?**

	(1) Domestic Operations	(2) Foreign Operations	(3) Total leased and temporary employees working on R&D
a. Researchers (including R&D scientists, engineers, and their managers) . . . . .	<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. R&D technicians and equivalent staff . . . . .	<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. R&D support staff (clerical and other) . . . . .	<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"/>
d. <b>Total leased and temporary employees working on R&amp;D</b> . . . . .	<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"/>

SECTION 6

# SECTION 7

## Intellectual Property and Technology Transfer

**Who should answer this section?**

Persons with an understanding of your company's general business strategy and knowledge of its patenting, licensing, and other activities related to intellectual property should complete this section.

**What does this section cover?**

This section requests information about your company's worldwide intellectual property and technology transfer activities such as: patents, patent licensing, protection of intellectual property, and transfer of intellectual property.

**Are responses to this survey confidential?**

Yes. Your responses are completely confidential under Title 13, United States Code, Section 9, and can only be used to produce statistics. The Census Bureau is not permitted to publicly release your responses in a way that could identify your business. The law also provides that copies of reports retained in your files are immune from legal process. In addition, reported data are exempt from requests made under the Freedom of Information Act.

**Total patents and utility patents**

<b>7-1</b>	<b>How many total patents did your company apply for in 2018 from the U.S. Patent and Trademark Office (USPTO)?</b>	Number □ □ □ □
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<b>7-2</b>	<b>Of the patent applications reported in Question 7-1, what was the number of <u>nonprovisional utility patent</u> applications?</b>	Number □ □ □ □
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<b>7-3</b>	<b>What percentage of the <u>nonprovisional utility patent</u> applications reported in Question 7-2 has your company applied for or plans to apply for in foreign jurisdictions?</b>	□ □ □ %
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<b>7-4</b>	<b>What percentage of the <u>nonprovisional utility patent</u> applications reported in Question 7-2 was for inventions that originated within your company's organized R&amp;D activities?</b>	□ □ □ %
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<b>7-5</b>	<b>What percentage of your company's inventions considered for patenting in 2018 resulted in nonprovisional utility patent applications?</b>	□ □ □ %
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<b>7-6</b>	<b>How many <u>utility patents</u> were <u>issued</u> to your company in 2018 by the USPTO?</b>	Number □ □ □ □
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**Utility patent sales and licensing to others**

<b>7-7</b>	<b>How much revenue did your company receive in 2018 from the sale of utility patents?</b>	\$Bil.	Mil.	Thou.
		□ □	□ □ □	□ □ □

<b>7-8</b>	<b>How much revenue did your company receive in 2018 from utility patent licensing?</b>	\$Bil.	Mil.	Thou.
		□ □	□ □ □	□ □ □

<b>7-9</b>	<b>Was any of the revenue reported in Questions 7-7 or 7-8 received from companies or organizations located outside the United States?.....</b>	<input type="checkbox"/> Yes <input type="checkbox"/> No
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**Utility patent purchases and licensing from others**

**7-10 How much did your company pay others in 2018 to purchase utility patents?**

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

**7-11 How much did your company pay others in 2018 to license utility patents?**

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

**7-12 Were any of the payments reported in Questions 7-10 or 7-11 made to companies or organizations located outside the United States?**

Yes  No

**Intellectual property transfer activities**

**7-13 Did your company perform the following activities in 2018?**

- a. Transferred intellectual property (IP) to others not owned by your company through participation in technical assistance or "know how" agreements  Yes  No
- b. Received IP from others not owned by your company through participation in technical assistance or "know how" agreements  Yes  No
- c. Transferred IP to a spin-off or spin-out of your company.  Yes  No
- d. Received IP from a parent company as part of a spin-off or spin-out.  Yes  No
- e. Acquired more than 50% ownership in another company for the primary purpose of acquiring their IP.  Yes  No
- f. Acquired any financial interest in another company in order to gain access to their IP  Yes  No
- g. Participated in cross-licensing agreements—the agreements in which two or more parties grant a license to each other for the use of the subject matter claimed in one or more of the patents owned by each party  Yes  No
- h. Allowed free use of patents or other IP owned by your company (for example, open source software)  Yes  No
- i. Made use of open source patents or other freely available IP not owned by your company  Yes  No

**Intellectual property protection**

**7-14 During 2018, how important to your company were the following types of intellectual property protection?**

- |   | Very important           | Somewhat important       | Not important            |
|---|--------------------------|--------------------------|--------------------------|
| a. Utility patents (patents for invention)                      | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| b. Design patents (patents for appearance)                      | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| c. Trademarks   | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| d. Copyrights   | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| e. Trade secrets  | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| f. Mask works (copyright protection for semiconductor products) | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

**Research and experimentation tax credit**

**7-15 Did your company file for the tax credit for increasing research activities (IRS Form 6765) in 2018?**

Yes  No

**Business codes**

(used in Sections 1, 2, and 3)

**Aerospace and Defense**

- 33642 Aircraft engine and engine parts manufacturing
- 33641 Aircraft manufacturing
- 33644 Guided missiles, space vehicles, and parts manufacturing
- 33692 Military armored vehicle, tank, and tank components manufacturing
- 33452 Search, detection, navigation, guidance, aeronautical, and nautical system and instruments manufacturing
- 33660 Ship and boat building
- 33643 Other aircraft parts and auxiliary equipment manufacturing

**Automobiles, Motorcycles, and Components**

- 33620 Motor vehicle body and trailer manufacturing
- 33630 Motor vehicle parts manufacturing
- 33610 Motor vehicles manufacturing
- 33691 Motorcycle, bicycle, and parts manufacturing
- 33651 Railroad rolling stock manufacturing
- 33660 Ship and boat building
- 33699 All other transportation equipment manufacturing

**Capital Equipment**

- 33311 Agricultural machinery and equipment manufacturing
- 33332 Commercial, service industry, temperature control, and airflow control machinery manufacturing
- 33312 Construction machinery manufacturing
- 33500 Electrical equipment, appliances, and components manufacturing
- 33360 Engine, turbine, and power transmission equipment manufacturing
- 33322 Industrial machinery manufacturing, except semiconductor machinery
- 33390 Metalworking and other general purpose machinery manufacturing
- 33319 Mining, oil, and gas field machinery and equipment manufacturing
- 33331 Photographic and photocopying equipment manufacturing

**Chemicals and Materials**

- 32402 Asphalt paving, roofing, and saturated materials manufacturing
- 32510 Basic chemicals manufacturing
- 32790 Cement, concrete, lime, gypsum, and other nonmetallic mineral product manufacturing
- 32710 Clay and glass products manufacturing
- 21200 Mining
- 32592 Paint, adhesive, and other chemical manufacturing
- 32200 Paper manufacturing
- 32530 Pesticide, fertilizer, and other agricultural chemical manufacturing
- 32600 Plastics and rubber products manufacturing
- 33100 Primary metal manufacturing
- 32520 Resin, synthetic rubber, and artificial synthetic fibers and filaments manufacturing
- 32591 Soap, cleaning compound, and toilet preparations manufacturing
- 32100 Wood products manufacturing
- 32403 Other petroleum and coal products manufacturing, including motor oil, hydraulic fluid, and charcoal

**Consumer Goods**

- 33333 Digital cameras manufacturing
- 33430 Audio and video equipment manufacturing
- 31210 Beverage manufacturing
- 33200 Fabricated metal products manufacturing
- 31100 Food manufacturing
- 33700 Furniture and related products manufacturing
- 32300 Printing and related support activities
- 32591 Soap, cleaning compound, and toilet preparations manufacturing
- 31990 Textile, apparel, and leather products manufacturing
- 31220 Tobacco manufacturing
- 33990 Miscellaneous manufacturing not listed elsewhere (games, office supplies, slot machines, etc.)

**Energy and Mining**

- 33360 Engine, turbine, and power transmission equipment manufacturing
- 21200 Mining
- 33319 Mining, oil, and gas field machinery and equipment manufacturing
- 21100 Oil and gas extraction
- 32401 Petroleum refineries
- 21300 Support activities for mining, including oil and gas

**Finance, Insurance, and Real Estate**

- 52200 Finance: banking and credit intermediation
- 52400 Insurance carriers and related activities
- 53100 Real estate
- 52310 Securities, commodity contracts, and other financial investments and related activities (including funds and trusts)

**Healthcare**

- 32543 Biotechnology-based pharmaceutical and biological products (except diagnostics)
- 33451 Electromedical, electrotherapeutic, and irradiation apparatus manufacturing
- 62200 Hospitals and nursing care facilities
- 32542 In vitro diagnostic substances manufacturing
- 62150 Medical and diagnostic laboratories
- 33910 Medical equipment and supplies manufacturing
- 62110 Offices of physicians
- 32541 Pharmaceutical, medicinal, and botanical products manufacturing
- 54173 Research and development services in biotechnology
- 54174 Research and development services in physical, engineering, and life sciences (except biotechnology)
- 62199 Other ambulatory health care services (ambulance, dental, home health care)

**Information Technology - Goods and Services**

33333 Digital cameras manufacturing  
51801 Cloud computing applications and internet based software services  
54150 Computer systems design and related services  
33412 Computers and peripheral equipment manufacturing, including magnetic and optical media  
51800 Data processing, hosting, and related services  
33500 Electrical equipment, appliances, and components manufacturing  
45411 Electronic shopping and electronic auctions  
33459 Measuring and control instruments manufacturing (not listed elsewhere)  
33422 Radio, television, and wireless communication equipment manufacturing  
33440 Semiconductor and other electronic components manufacturing  
33321 Semiconductor machinery manufacturing  
51120 Software publishers (except Internet)  
33421 Telephone apparatus manufacturing including routers, modems, and gateways  
42500 Wholesale electronic markets and agents and brokers (business to business)  
33429 Other communication equipment manufacturing (except radio, television, and wireless communication equipment)  
51910 Other information services, including Internet publishing, broadcasting, and web search portals

**Professional, Scientific, and Technical Services**

54180 Advertising and related services  
54130 Architectural, engineering, and related services  
54150 Computer systems design and related services  
54111 Legal, accounting, tax preparation, bookkeeping and payroll services  
54160 Management, scientific, and technical consulting services  
54190 Professional, scientific, and technical services (not listed elsewhere)  
54173 Research and development services in biotechnology  
54174 Research and development services in physical, engineering, and life sciences (except biotechnology)  
54172 Research and development services in social sciences and humanities  
54140 Specialized design services

**Telecommunications and Utilities**

51500 Broadcasting (except Internet)  
51740 Satellite telecommunications  
22100 Utilities  
56200 Waste management and remediation services  
51710 Wired telecommunications carriers  
51720 Wireless telecommunications carriers (except satellite)  
51790 Other telecommunications (not listed elsewhere)

**Other Services**

72000 Accommodation and food services  
56100 Administrative and support services  
71000 Arts, entertainment, and recreation  
23000 Construction  
49200 Couriers, messengers, and express delivery services  
53300 Lessors of nonfinancial intangible assets (including patent licensing)  
55100 Management of companies and enterprises  
42300 Merchant wholesalers, durable goods  
42400 Merchant wholesalers, nondurable goods  
51200 Motion picture and sound recording (except Internet)  
51110 Newspaper, periodical, book, and directory publishers (except Internet)  
53200 Rental and leasing services  
44000 Retail trade, except electronic shopping and electronic auctions  
62400 Social assistance services  
21300 Support activities for mining, including oil and gas  
48000 Transportation  
49300 Warehousing and storage  
81000 Other services (not listed elsewhere)

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

Hours	Minutes
<input type="text"/>	<input type="text"/>

**Remarks** (Please use this space below for any explanations that may be essential in understanding your reported data.)

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NOT USE TO REPORT

**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 an average of 3.3 hours to complete, including the time for reviewing instructions, searching 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:

ERD Survey Comments 0607-0912  
U.S. Census Bureau  
4600 Silver Hill Road  
Room ERD-6H128  
Washington, DC 20233

You may email comments to [erd.survey.comments@census.gov](mailto:erd.survey.comments@census.gov). Be sure to use "ERD Survey Comments 0607-0912" as the subject.