NATIONAL CENTER FOR SCIENCE AND ENGINEERING STATISTICS

# Federal Facilities Research and Development (FFRD) Survey
# Fiscal Year (FY) 2025
# Department of Defense (DOD) Facilities Form

**Please submit your survey data by *March 31, 2026*.**

The FY 2025 FFRD Survey collects information on research and experimental development (R&D) performed at federal facilities. Your data are critical to collecting high-quality information on R&D activity within federal facilities. NSF will use the collected information to produce national estimates of spending on R&D and will make the facility level data from this survey available to the public through data tables and other resources on our website.

NSF is authorized to collect this information under Sections 1861-1876 of the National Science Foundation Act of 1950, as amended, and Section 505 of the America COMPETES Reauthorization Act of 2010.

**To submit your data online:**

https://www.dod.nsf-ffrd.org

The web survey is the **recommended method** for submitting the questionnaire. It includes several automated features for your convenience. However, if you are responding for multiple facilities, please use the multifacility Excel spreadsheet. If you are responding for a single facility but are unable to use the web survey, you may use the single facility Excel spreadsheet or this PDF and email your completed survey to Survey Support.

**Survey Support**

ncses-ffrdsurvey@nsf.gov

(888) 882-0021

**Thank you for your participation.**

# Survey Instructions and Definitions

## What's new in the FY 2025 survey?

### Specific Changes from the FY 2024 Survey

- Question 3 asks for the same information as FY 2024 but has been reformatted and expanded to ask what types of costs your facility has and whether they are included in your facility's reported FY 2025 R&D expenditures.
- Question 4a is new in FY 2025 and asks if any funding for FY 2025 R&D expenditures came from nonfederal sources (e.g., state or local governments, businesses, higher education, nonprofit organizations, or foreign sources). If the answer to Question 4a is no, you will not need to respond to Question 4b or the nonfederal column in Question 5.
- Questions 4b and 5 have been reordered for the FY 2025 survey; you will first answer the source of funds question (Question 4b), followed by the type of R&D question (Question 5).
- Instructions and definitions have been clarified on questions 1, 2, 4b, 9, and 10. Reminders to cross check totals have also been added to questions 2, 4b, 5, 6, 8, and 10.

## General Instructions

This form is intended to serve as a worksheet for use offline but can be used to submit your response if completing the web survey is not possible. This form works best in Adobe Acrobat.

- Report expenditures and personnel for your facility's 2025 fiscal year (October 1, 2024 through September 30, 2025). Include all 2025 fiscal year expenditures, regardless of the fiscal year of the appropriation.
- The questions in this survey are divided into several sections. Some sections may require assistance from other offices or individuals within your facility or agency or may be best completed by a different individual than yourself.
- If exact information is unknown, estimates are acceptable. *We encourage you to have each section completed by the staff member with access to the most complete data.*
- Please share relevant information about your responses in the comment boxes below each question, such as:
  - How you calculated your response.
  - Any assumptions you made coming up with your response.
  - Which offices were involved in preparing the response.
  - If applicable, an explanation for why you cannot answer a particular question.

## Definitions and Questions About Key Terms

**What is a Research & Development (R&D) facility?**

For this survey, a **facility** is a unit in your agency that is responsible for performing R&D, generally with its own distinct budget and leadership. This may be a division, branch, center, lab, or other entity. The staff who work within the facility, and the facility itself, may be located in more than one physical location.

Please note that the 42 officially designated Federally Funded R&D Centers (FFRDCs) are not included in this definition; they are surveyed separately.

**What is research and development (R&D)?** [Source: Office of Management and Budget (OMB) Circular A11; Frascati Manual, 2015]

R&D comprises creative and systematic work undertaken in order to increase the stock of knowledge—including knowledge of people, culture, and society—and to devise new applications using available knowledge.

R&D has five major features:

- Novel: Advances current knowledge or creates new knowledge
- Creative: Focuses on original concepts and hypotheses
- Uncertain: Outcomes are not completely determined at the outset of a project
- Systematic: Projects are planned and budgeted
- Transferable/Reproducible: Methodology and results are transferable to or reproducible in other situations and locations

R&D also has three major types:

- **Basic research** is experimental or theoretical work undertaken primarily to acquire new knowledge of the underlying foundations of phenomena and observable facts. Basic research may include activities with broad or general applications in mind, such as the study of how plant genomes change, but should exclude research directed toward a specific application or requirement, such as the optimization of the genome of a specific crop species.
- **Applied research** is original investigation undertaken to acquire new knowledge. It is directed primarily toward a specific, practical aim or objective.
- **Experimental development** is systematic work, drawing on knowledge gained from research and practical experience, which is directed at producing new products or processes, or improving existing products or processes. Like research, experimental development will result in gaining additional knowledge.

  *For DOD facilities, experimental development includes:*

  - Advanced technology development (ATD) (budget activity 3)
  - Major systems development (budget activities 4–6), consisting of:
    - Advanced component development and prototypes (ACD&P) (budget activity 4)
    - System development and demonstration (SDD) (budget activity 5)
    - Research, development, testing, and evaluation (RDT&E) management support (budget activity 6)

**What are research, development, testing, and evaluation (RDT&E) activities?**

**RDT&E** consists of all the activities described above for R&D conduct plus:

Operational system development (budget activity 7)—pre-production development of non-experimental work on a product or system before it goes into full production, including activities such as tooling and development of production facilities.

Software and digital technology pilot programs (budget activity 8)—software, electronic tools, systems, applications, resources, acquisition of services, business process re-engineering activities, functional requirements development, technical evaluations, and other activities in direct support of acquiring, developing, deploying, sustaining, enhancing, and modernizing Software Digital Technology Pilot Programs.

> *For DOD facilities, definitions are established by Department of Defense Instruction 5000.02 "Operation of the Defense Acquisition System." For more information, see RDT&E Budget Activities 1 through 8 in the DOD Financial Management Regulation (FMR), Volume 2B, Chapter 5, at: https://comptroller.defense.gov/portals/45/documents/fmr/current/02b/02b_05.pdf.*

## QUESTIONNAIRE SECTION 1—Total RDT&E/R&D Expenditures

**What should I include in my answer for Question 1?**

Question 1 requests a total for all RDT&E activities (budget activities 1-8), the remainder of the questionnaire focuses only on R&D activities (budget activities 1–6).

Please report your facility's FY 2025 **expenditures** for RDT&E, meaning the money that was spent in FY 2025 for RDT&E projects **both within and outside your facility**. These costs are sometimes also referred to as outlays.

Note the survey is not collecting appropriation or obligation totals, only final FY expenditures/outlays for RDT&E performed within and outside the facility.

*Include:*

- Labor costs for RDT&E projects
- Non-capital purchases of materials, supplies, equipment, and services to support RDT&E performance
- General administration costs in support of RDT&E activities
- Expenditures for funding provided to others to conduct RDT&E outside your facility, including to FFRDCs

**What should I include in my answers for Question 2?**

Please report your facility's FY 2025 **expenditures** for R&D only (budget activities 1-6) both within **and** outside your facility.

## QUESTIONNAIRE SECTION 2—Expenditures for R&D Performed Within Your Facility

**What should I include in my answers for questions 3–8?**

Please report your facility's FY 2025 **expenditures** for R&D (budget activities 1-6) performed within your facility **only**. This excludes work performed in your agency's FFRDCs.

## QUESTIONNAIRE SECTION 3—R&D Personnel

**What should I include in my answers for questions 9 and 10?**

Please include all employees who work on R&D or provide direct support to R&D, such as researchers, R&D managers, technicians, support staff, and others assigned to R&D groups or projects within your facility. Personnel may include federal employees, military personnel (civilian and enlisted), contractors, consultants, or volunteers.

*Include:*

- All R&D personnel, whether full-time or part-time, temporary or permanent. Employees may perform scientific and technical work for an R&D project (e.g., designing experiments, building prototypes), plan and manage R&D projects, or provide *direct* support for administration of the financial and personnel aspects of R&D.

*Do not include:*

- Employees who provide general support services to the facility, such as services provided by personnel in central finance, computing, printing, maintenance, security, or similar departments in your agency that provide services to both R&D and non-R&D projects.

# Contact Information

Please provide the contact information for the person responsible for the survey and an alternate contact.

**Primary Contact Information**

First name, last name: _____ _____

Job title: _____

Email address: _____

Phone number: _____ Ext: _____

**Alternate Contact Information**

First name, last name: _____ _____

Job title: _____

Email address: _____

Phone number: _____ Ext: _____

**Other Contact Information**

List individuals who should be copied on all emails about the survey or can create a login account.

- Check “All email” if this person should be copied on all emails.
- Check “Can log in” if this person can create a login account. Leave this check box blank if you are **not** using the Web survey.

First name, last name: _____ _____

Job title: _____

Email address: _____

Phone number: _____ Ext: _____

All email ☐ Can log in ☐

First name, last name: _____ _____

Job title: _____

Email address: _____

Phone number: _____ Ext: _____

All email ☐ Can log in ☐

First name, last name: _____ _____

Job title: _____

Email address: _____

Phone number: _____ Ext: _____

All email ☐ Can log in ☐

## Facility Information

What is the name and address of the facility being reported?

Facility Name: _____

Address: _____

City, State, ZIP code: _____ _____ _____

NOTE: For reporting R&D conducted across locations, please list all additional states in the space below, separated by commas.

Additional state(s): _____

## Expenditure Acknowledgment

The focus of this survey is to collect expenditures or outlays and not obligations or appropriations. Please confirm below that you are reporting expenditures.

Are you able to report FY 2025 expenditures or outlays for questions 1-8?

☐ Yes ☐ No

→ Thank you for letting us know. We will consider the data you report in questions 1-8 as estimates for your facility's expenditures/outlays.

# Section 1: Total RDT&E/R&D Expenditures

1. What were your facility's total FY 2025 expenditures for RDT&E, by budget activity?

*Include:*

- All of your facility's RDT&E expenditures, regardless of whether the funding was from direct appropriations, interagency agreements, reimbursable funds, or non-federal sources. Expenditures are often referred to as outlays.
- All of your facility's RDT&E expenditures for fiscal year 2025 regardless of the fiscal year of the appropriation.
- Expenditures for RDT&E performed by your facility's employees.
- Expenditures for RDT&E performed within **and** outside your facility by contractors or other entities.

*Remember:*

- For this survey, we are interested in expenditures, not obligations or appropriations.

| **RDT&E by budget activity** | **RDT&E Expenditures (Dollars)** *If no expenditures, write in $0. If the information is unknown, leave blank and explain why in the comment box below.* |
|---|---|
| **a. R&D *(budget activities 1-6)*** | $ .00 |
| **b. Operational system development and software and digital technology pilot programs *(budget activities 7-8)*** | $ .00 |
| **c. Total RDT&E** | $ 0 .00 |

**Please provide any comments or additional information below.** *(Some examples include how you calculated your response, any assumptions you made coming up with your response, or which offices were involved in preparing the response.)*

If applicable, please explain why you cannot answer this question.

2. What were your facility's total FY 2025 expenditures for R&D (Question 1, row a) by the following types of costs?

**Do not include expenditures for** operational system development and software and digital technology pilot programs (budget activities 7–8).

| **R&D by types of costs** | **R&D Expenditures (Dollars)** *If no expenditures, write in $0. If the information is unknown, leave blank and explain why in the comment box below.* |
|---|---|
| **a. R&D expenditures for onsite contractors** Include expenditures for contract personnel hired to work on R&D within your facility in coordination with federal or military personnel. Report contract work conducted outside the facility in row d. *Note: If you are unable to separate onsite from offsite contractor costs, please leave this row blank, include all contractor costs in row d, and note this in the comment box below.* | $ .00 |
| **b. All other costs for R&D performed within your facility** Include expenditures for R&D projects performed within your facility including labor costs for federal employees, military personnel, trainees, or fellows; non-capital purchases of materials, supplies, equipment, and services to support R&D performance; and general administration costs in support of R&D activities. *Do not include Federally Funded R&D Center (FFRDC) expenditures.* | $ .00 |
| **c. Total R&D expenditures within your facility (rows a+b)** | $ 0 .00 |
| **d. R&D expenditures for work performed outside your facility** Include funds paid by your facility for R&D activities performed by others ***outside*** the facility (i.e. funding such as contracts, grants or inter-agency agreements provided to external recipients including Federally Funded R&D Centers (FFRDCs)). | $ .00 |
| **e. Total R&D expenditures** | $ 0 .00 |

***Cross check: Total in row e should match the total reported in Q1.a.***

**Please provide any comments or additional information below.** *(Some examples include how you calculated your response, any assumptions you made coming up with your response, or which offices were involved in preparing the response.)*

If applicable, please explain why you cannot answer this question.

# Section 2: Expenditures for R&D Performed Within Your Facility

**The questions in this section ask about expenditures for research and development (R&D) performed at your facility. Please think about your facility when answering all questions in this instrument.**

3. Please indicate whether your facility has each of the following types of costs. For each cost your facility has, please also indicate whether the cost is included in the total R&D expenditures within your facility that you reported in Question 2, row c.

   If your facility cannot provide an answer in columns 1 and/or 2 for one or more of these costs, please explain in the comment box below.

| **Type of cost** | **(1)** Does your facility have this type of cost? ***If yes, go to column 2*** | **(2)** Is this cost included in the total reported in Question 2, row c? ***Answer if yes in column 1*** |
|---|---|---|
| Salaries and fringe benefits of… | | |
| Federal R&D personnel, trainees, and fellows | ☐ Yes → ☐ No | ☐ Included ☐ Not included |
| Onsite contractors working on R&D | ☐ Yes → ☐ No | ☐ Included ☐ Not included |
| Military R&D personnel | ☐ Yes → ☐ No | ☐ Included ☐ Not included |
| Indirect costs associated with R&D activities | ☐ Yes → ☐ No | ☐ Included ☐ Not included |
| Costs for equipment, materials, and supplies necessary for the R&D activities | ☐ Yes → ☐ No | ☐ Included ☐ Not included |
| Other, please specify: ☐ | ☐ Yes → ☐ No | ☐ Included ☐ Not included |

**Please provide any comments or additional information below.** *(Some examples include how you calculated your response, any assumptions you made coming up with your response, or which offices were involved in preparing the response.)*

If applicable, please explain why you cannot answer this question.

4a. Of the FY 2025 R&D expenditures you reported in Question 2, row c, did any of the funding for these expenditures come from nonfederal sources (e.g., state or local governments, businesses, higher education, nonprofit organizations, or foreign sources)?

☐ Yes

☐ No

**If you answered Yes to Question 4a, please respond to Question 4b. Otherwise please go to Question 5 (page 11).**

4b. Of the FY 2025 R&D expenditures you reported in Question 2, row c, how much came from the following sources?

- Do **not** include operational system development and software and digital technology pilot programs (budget activities 7–8).
- This question is asking for the originating source of the dollars reported in Question 2, row c. Do not report funding your facility sent to external recipients here.
- Report the **original source** of funds, when possible. For example, if you received federal funds from another organization, report that amount under "U.S. federal government."

| Source of funds | R&D expenditures (Dollars)<br>*If no expenditures, write in $0. If the information is unknown, leave blank and explain why in the comment box below.* |
|---|---|
| **a. U.S. federal government**<br>Any agency of the United States government. Include federal funds passed through from another organization. | $ .00 |
| **b. State and local government**<br>State, county, municipality, or other local government entity in the United States. Do not include state and local universities and colleges or agricultural experiment stations; report these in row e. | $ .00 |
| **c. Businesses**<br>Domestic or foreign for-profit businesses or industrial firms. Report funds from a company's nonprofit foundation in row d. | $ .00 |
| **d. Nonprofit organizations**<br>Domestic or foreign nonprofit foundations and organizations, except universities and colleges. Funds from universities and colleges should be reported in row e. | $ .00 |
| **e. All other sources**<br>Other sources not reported above, such as funds from foreign governments, foreign or U.S. universities, or user fees. | $ .00 |
| **f. Total** | $ 0 .00 |

***Cross check: Total in row f should match the total reported in Q2.c.***

**Please provide any comments or additional information below.** *(Some examples include how you calculated your response, any assumptions you made coming up with your response, or which offices were involved in preparing the response.)*

If applicable, please explain why you cannot answer this question.

**If you answered No to Question 4a, please only complete columns 1 and 3 in Question 5.**

5. Of the FY 2025 expenditures you reported in Question 2, row c, what were your expenditures for each type of work?
   - R&D type examples can be found below.
   - Report expenditures funded by any agency of the United States government under the **Federal** column. Include federal funds passed through from another organization.
   - Report expenditures funded by state or local governments, businesses, higher education, nonprofit organizations, or foreign sources under the **Nonfederal** column.
   - If possible, the type of R&D should be coded at the individual project level by the researcher or project director. Please communicate with other colleagues to gather necessary information.

| Type of R&D | R&D expenditures (Dollars)<br>*If no expenditures, write in $0. If the information is unknown, leave blank and explain why in the comment box below.*<br>(1) Federal | (2) Nonfederal<br>*Only answer if yes in Q4a* | (3) Total |
|---|---|---|---|
| **a. Basic research** ***(including budget activity 1)***<br>Experimental or theoretical work undertaken primarily to acquire new knowledge of the underlying foundations of phenomena and observable facts. Basic research may include activities with broad or general applications in mind, such as the study of how plant genomes change, but should exclude research directed toward a specific application or requirement, such as the optimization of the genome of a specific crop species. | $ .00 | $ .00 | $ 0 .00 |
| **b. Applied research** ***(including budget activity 2)***<br>Original investigation undertaken to acquire new knowledge. It is directed primarily toward a specific, practical aim or objective. | $ .00 | $ .00 | $ 0 .00 |
| **c. Experimental development** ***(including budget activities 3-6)***<br>Systematic work, drawing on knowledge gained from research and practical experience, which is directed at producing new products or processes, or improving existing products or processes. Like research, experimental development will result in gaining additional knowledge.<br><br>For DOD agencies, experimental development includes advanced technology development (ATD) (budget activity 3), advanced component development and prototypes (ACD&P) (budget activity 4), system development and demonstration (SDD) (budget activity 5), and research, development, testing, and evaluation (RDT&E) management support (budget activity 6). | $ .00 | $ .00 | $ 0 .00 |
| **d. Total R&D** | $ 0 .00 | $ 0 .00 | $ 0 .00 |
| ***Cross check: Totals in row d should match the following values:*** | ***Q4b.a*** | ***Q4b.b. + Q4b.c. + Q4b.d. + Q4b.e.*** | ***Q2.c.*** |

**Please provide any comments or additional information below.** *(Some examples include how you calculated your response, any assumptions you made coming up with your response, or which offices were involved in preparing the response.)*

If applicable, please explain why you cannot answer this question.

_____

_____

_____

_____

**R&D Type Examples**

| Basic research | Applied research | Experimental development |
|---|---|---|
| A researcher is studying the properties of human blood to determine what affects coagulation. | A researcher is conducting research on how a new chicken pox vaccine affects blood coagulation. | A researcher is conducting clinical trials to test a newly developed chicken pox vaccine for young children. |
| A researcher is studying the properties of molecules under various heat and cold conditions. | A researcher is investigating the properties of particular substances under various heat and cold conditions with the objective of finding longer-lasting components for highway pavement. | A researcher is working with state transportation officials to conduct tests of a newly developed highway pavement under various types of heat and cold conditions. |
| A researcher is investigating the effect of different types of manipulatives on the way first graders learn mathematical strategy by changing manipulatives and then measuring what students have learned through standardized instruments. | A researcher is studying the implementation of a specific math curriculum to determine what teachers needed to know to implement the curriculum successfully. | A researcher is developing and testing software and support tools, based on fieldwork, to improve mathematics cognition for student special education. |

**If you reported any federally funded expenditures (Question 5, row d, column 1), please respond to Question 6. Otherwise please go to Question 7 (page 14).**

6. Of the federally funded FY 2025 R&D expenditures you reported in Question 5, row d, column 1, which agencies funded this R&D and how much of the reported amount was from each agency?
   - Do **not** include operational system development and software and digital technology pilot programs (budget activities 7–8).
   - Report the agency that was the **original source** of funds, when possible.
   - Use rows l–n to list up to 3 other agencies that funded the largest R&D expenditures. Use row o to report any remaining amount.
   - A list of federal departments, agencies, and subagencies is included as a link on the web survey question.

| Funding agency | R&D expenditures (Dollars) *If no expenditures, write in $0. If the information is unknown, leave blank and explain why in the comment box below.* |
|---|---|
| a. **Department of Agriculture** | $ .00 |
| b. **Department of Commerce** | $ .00 |
| c. **Department of Defense** | $ .00 |
| d. **Department of Energy** | $ .00 |
| e. **Department of Health and Human Services (including the National Institutes of Health)** | $ .00 |
| f. **Department of Homeland Security** | $ .00 |
| g. **Department of the Interior** | $ .00 |
| h. **Department of Transportation** | $ .00 |
| i. **Department of Veterans Affairs** | $ .00 |
| j. **Environmental Protection Agency** | $ .00 |
| k. **National Aeronautics and Space Administration** | $ .00 |
| l. | $ .00 |
| m. | $ .00 |
| n. | $ .00 |
| o. **Other federal agencies** | $ .00 |
| p. **Total** | $ 0 .00 |

***Cross check: Total in row p should match the total reported in Q5.d.(1).***

**Please provide any comments or additional information below.** *(Some examples include how you calculated your response, any assumptions you made coming up with your response, or which offices were involved in preparing the response.)*
If applicable, please explain why you cannot answer this question.

7. Were any of your facility's FY 2025 R&D projects funded through public-private partnerships?
   - Public-private partnerships are those in which the government and private companies share R&D costs.

☐ Yes
☐ No

8. Of the total FY 2025 R&D expenditures within your facility you reported in Question 2, row c, what were your expenditures in each field below?
   - Examples of the fields and disciplines can be found in the supplemental list at the end of the survey.
   - Do **not** include operational system development and software and digital technology pilot programs (budget activities 7–8).

| R&D fields | R&D expenditures (Dollars) *If not a source of funds, write in $0. If the information is unknown, leave blank and explain why in the comment box below.* |
|---|---|
| **a. Agricultural sciences and natural resources and conservation:** e.g., agricultural sciences; animal sciences; applied horticulture; fishing and fisheries science; food science and technology; forestry; natural resources and conservation; plant sciences; soil sciences; or veterinary sciences | $ .00 |
| **b. Biological, biomedical, and health sciences:** e.g., biochemistry, biophysics, molecular biology; biotechnology; botany; cell biology; epidemiology; genetics; medicine; neuroscience; public health; or zoology | $ .00 |
| **c. Computer and information sciences** | $ .00 |
| **d. Geosciences, atmospheric sciences, and ocean sciences:** e.g., atmospheric sciences and meteorology; geological and earth sciences; or ocean and marine sciences | $ .00 |
| **e. Mathematics and statistics** | $ .00 |
| **f. Physical sciences:** e.g., astronomy and astrophysics; chemistry; materials science; or physics | $ .00 |
| **g. Psychology** | $ .00 |
| **h. Social sciences:** e.g., anthropology; archaeology; criminology; economics; geography; linguistics; political science and government; public policy analysis; or sociology, demography, and population studies | $ .00 |
| **i. Engineering:** e.g., aerospace, aeronautical, and astronautical engineering; bioengineering and biomedical engineering; chemical and petroleum engineering; civil and environmental engineering; electrical and computer engineering; industrial and systems engineering; mechanical engineering; or materials and geological engineering | $ .00 |
| **j. Other fields:** e.g., business, management, marketing and related; city, urban, community, and regional planning; communication and communications technologies; education research; humanities; law; public administration and social work; or visual and performing arts | $ .00 |
| **k. Total** | $ 0 .00 |

***Cross check: Total in row k should match the total reported in Q2.c.***

**Please provide any comments or additional information below.** *(Some examples include how you calculated your response, any assumptions you made coming up with your response, or which offices were involved in preparing the response.)*

If applicable, please explain why you cannot answer this question.

# Section 3: R&D Personnel

**Questions in this section ask about personnel who work on R&D. You may have to reach out to your HR department to help get answers.**

9. How many of your facility's total R&D personnel (headcount) worked in the job categories listed below in FY 2025?
   - Count each person only once. A description of each R&D function can be found below.
   - *Do **not** include:*
     - Personnel who provide general support services to both R&D and non-R&D projects, such as central finance, computing, printing, maintenance, security, or similar departments.
     - Personnel working on R&D activities outside your facility.
     - Personnel working only on operational system development and software and digital technology pilot programs (budget activities 7–8).

| Job category | (1) Researchers | (2) R&D technicians | (3) R&D support staff | (4) Total |
|---|---|---|---|---|
| | *If none, write in 0. If the information is unknown, leave blank and explain why in the comment box below.* | | | |
| **a. Federal employees and military personnel** Do not include contractors, consultants, or volunteers. | | | | |
| **b. Contractors** Personnel hired under a contract to work on R&D within your facility. | | | | |
| **c. All other R&D personnel** For example, trainees, volunteers, or fellows who are not federal employees or contractors. | | | | |
| **d. Total** | | | | |

☐ **Check here if you know the number of personnel but are unable to separate them by job category.** *If checked, please write in the total personnel in the Total column, Total row (d) box above and leave the other boxes blank.*

**Please provide any comments or additional information below.** *(Some examples include how you calculated your response, any assumptions you made coming up with your response, or which offices were involved in preparing the response.)*

If applicable, please explain why you cannot answer this question.

## Description of R&D Functions

| Researchers | R&D technicians | R&D support staff |
|---|---|---|
| Professionals engaged in the conception or creation of new knowledge, products, processes, methods, and systems and also in the management of the projects concerned. Include R&D managers in this category. | Persons whose main tasks require technical knowledge and experience in one or more fields of science or engineering, but who contribute to R&D by performing technical tasks such as computer programming, data analysis, ensuring accurate testing, operating lab equipment, and preparing and processing samples under the supervision of researchers. | Not directly involved with the conduct of a research project, but support the researchers and technicians. These employees might include clerical staff, financial and personnel administrators, report writers, patent agents, safety trainers, equipment specialists, and other related employees. |
| **Researcher versus R&D technician**<br>Researchers contribute more to the creative aspects of R&D whereas technicians provide technical support. For example, a researcher would design an experiment, and a technician would run the experiment and assist in analyzing results. | | |

10. How many federal full-time equivalents (FTEs) worked in the functions listed below in FY 2025?

- A description of each R&D function can be found above.
- An individual cannot be more than 1.0 FTE. FTE R&D personnel are calculated as the total working effort spent on R&D during a specific period divided by the total effort representing a full-time schedule within the same period.

*Include:*

- Federal employees and military personnel only (all personnel counted in Question 9, row a).

*Do **not** include:*

- Personnel who provide general support services to both R&D and non-R&D projects, such as central finance, computing, printing, maintenance, security, or similar departments.
- Personnel working on R&D activities outside your facility.
- Personnel working only on operational system development and software and digital technology pilot programs (budget activities 7–8).

*Example:*
The following examples of FTE calculations assume a 40-hour work week and 12-month year (52 weeks). However, you should use the hours per week and weeks per year that typically represent a full-time employee at your facility.

- 2 R&D support staff who each work on R&D full-time for 32 weeks: 2 * (32/52) = 1.2 FTES
- 1 researcher who works on R&D 50% of the time for 52 weeks: (50% * 52)/ 52 = 0.5 FTEs

| R&D function | **FTEs (round to 1 decimal place)** *If no FTEs, write in 0. If the information is unknown, leave blank and explain why in the comment box below.* |
|---|---|
| **a. Researchers** | |
| **b. R&D technicians** | |
| **c. R&D support staff** | |
| **d. Total** | |

***Cross check: Total in row d should not exceed total reported in Q9.a.(4).***

☐ **Check here if you know the number of FTEs but are unable to separate them by R&D function.**
*If checked, please write in the total FTEs in the Total box above and leave the other boxes blank.*

**Please provide any comments or additional information below.** *(Some examples include how you calculated your response, any assumptions you made coming up with your response, or which offices were involved in preparing the response.)*

If applicable, please explain why you cannot answer this question.

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**Thank you for your participation!**

## Supplemental List of R&D Fields and Example Disciplines

### A. Agricultural sciences and natural resources and conservation

**1. Agricultural, animal, plant, veterinary science and related fields**
Agricultural business and management
Agricultural chemistry
Agricultural engineering—report in Engineering
Agricultural production operations
Animal sciences
Applied horticulture and horticultural business services
Aquaculture
Food science and technology
International agriculture
Plant sciences
Soil sciences
Veterinary biomedical and clinical sciences
Veterinary medicine
Wood science

**2. Natural resources and conservation**
Fishing and fisheries sciences and management
Forestry
Natural resources conservation and research
Natural resources economics
Natural resources management and policy
Renewable natural resources
Wildlife and wildlands science and management

### B. Biological, biomedical, and health sciences

**1. Biological and biomedical sciences**
Allergies and immunology
Biochemistry, biophysics, and molecular biology
Biogeography
Biology and biomedical sciences, general
Biomathematics, bioinformatics, and computational biology
Biotechnology
Botany and plant biology
Cell, cellular biology, and anatomical sciences
Epidemiology, ecology and population biology
Genetics
Microbiological sciences and immunology
Molecular medicine
Neurobiology and neuroscience
Pharmacology and toxicology
Physiology, pathology and related sciences
Zoology, animal biology

**2. Health sciences**
Advanced, graduate dentistry and oral sciences
Allied health and medical assisting services
Bioethics, medical ethics
Clinical medicine research
Clinical/medical laboratory science/research and allied professions
Communication disorders sciences and services
Dentistry
Dietetics and clinical nutrition services
Health and medical administrative services
Health, medical preparatory programs
Gerontology, health sciences
Kinesiology and exercise science
Medical clinical science, graduate medical studies
Medical illustration and informatics
Medicine
Mental health
Nursing
Optometry
Osteopathic medicine, osteopathy
Pharmacy, pharmaceutical sciences, and administration
Podiatric medicine, podiatry
Public health
Radiological science
Registered nursing, nursing administration, nursing research and clinical nursing
Rehabilitation and therapeutic professions
Zoology medicine

### C. Computer and information sciences

Artificial intelligence
Computer and information technology administration and management
Computer science
Computer software and media applications
Computer systems analysis
Computer systems networking and telecommunications
Information sciences, studies
Information technology

### D. Geosciences, atmospheric sciences, and ocean sciences

**1. Atmospheric science and meteorology**
Aeronomy
Atmospheric chemistry and climatology
Atmospheric physics and dynamics
Extraterrestrial atmospheres
Meteorology
Solar
Weather modification

**2. Geological and earth sciences**
Earth and planetary sciences
Geochemistry
Geodesy and gravity
Geology
Geomagnetism
Geophysics and seismology
Hydrology and water resources
Minerology and petrology
Paleomagnetism
Paleontology
Physical geography
Stratigraphy and sedimentation
Surveying technology, surveying

**3. Ocean sciences and marine sciences**
Biological oceanography
Geological oceanography
Marine biology
Marine oceanography
Marine sciences
Oceanography, chemical and physical

### E. Mathematics and statistics

Applied mathematics
Mathematics
Statistics

### F. Physical sciences

**1. Astronomy and astrophysics**
Astronomy
Astrophysics
Planetary astronomy and science

**2. Chemistry (except Biochemistry—report in Biological and Biomedical Sciences)**
Analytical chemistry
Chemical physics
Environmental chemistry
Forensic chemistry
Inorganic chemistry
Organic chemistry
Organo-metallic chemistry
Physical chemistry
Polymer chemistry
Theoretical chemistry

**3. Materials science**
Materials chemistry
Materials science

**4. Physics**
Acoustics
Atomic, molecular physics
Condensed matter and materials physics
Elementary particle physics
Nuclear physics
Optics, optical sciences
Plasma, high-temperature physics

**5. Theoretical and mathematical physics**
Data processing and data processing technology
Mathematical physics
Theoretical physics

### G. Psychology

Animal behavior and ethology
Clinical psychology
Comparative psychology
Counseling psychology
Educational psychology
Experimental psychology
Human development and personality
Industrial and organization psychology
Personality psychology
Social psychology

## H. Social sciences

**1. Anthropology**
Cultural anthropology
Medical anthropology
Physical and biological anthropology

**2. Economics**
Agricultural economics
Applied economics
Business development
Development economics and international development
Econometrics and quantitative economics
Industrial economics
International economics
Labor economics
Managerial economics
Public finance

**3. Political science and government**
Comparative government
Legal systems
Political economy
Political science and government
Political theory

**4. Sociology, demography, and population studies**
Comparative and historical sociology
Complex organizations
Cultural and social structure
Demography and population studies
Group interactions
Rural sociology
Social problems and welfare theory
Sociology

**5. Other social sciences**
Archaeology
Area, ethnic, cultural, gender, and group studies
Cartography
Criminal science
Criminology
Geography
Gerontology, social sciences
International relations and national security studies
Linguistics
Public policy analysis
Regional studies
Urban studies, affairs

## I. Engineering

**1. Aerospace, aeronautical, and astronautical engineering**
Aerodynamics
Aerospace engineering
Space technology

**2. Bioengineering and biomedical engineering**
Biological and biosystems engineering
Biomaterials engineering
Biomedical technology
Medical engineering

**3. Chemical and petroleum engineering**
Biochemical engineering
Chemical and biomolecular engineering
Engineering chemistry
Paper science
Petroleum engineering
Polymer, plastics engineering

**4. Civil and environmental engineering**
Architectural engineering
Construction engineering
Environmental, environmental health engineering
Geotechnical and geoenvironmental engineering
Sanitary engineering
Structural engineering
Surveying engineering
Transportation and highway engineering
Water resources engineering

**5. Electrical and computer engineering**
Communications engineering
Computer engineering
Computer hardware engineering
Computer software engineering
Electrical and electronics engineering
Laser and optical engineering
Telecommunications engineering

**6. Industrial and systems engineering**
Industrial engineering
Manufacturing engineering
Operations research
Systems engineering

**7. Mechanical engineering**
Electromechanical engineering
Mechatronics, robotics, and automation engineering

**8. Materials and geological engineering**
Ceramic sciences and engineering
Geophysical, geological engineering
Materials engineering
Metallurgical engineering
Mining and mineral engineering
Textile sciences and engineering
Welding engineering

**9. Other engineering**
Agricultural engineering
Engineering design
Engineering management, administration
Engineering mechanics, physics, and science
Engineering physics
Engineering science
Forest engineering
Nanotechnology
Naval architecture and marine engineering
Nuclear engineering
Ocean engineering
Power plant engineering

## J. Other fields

**1. Business, management, marketing, and related**
Business administration
Business management
Business, managerial economics
Management information systems and services
Marketing management and research

**2. Communication and communications technologies**
Communication and media studies
Communications technologies
Journalism
Radio, television, and digital communication

**3. Education research**
Education administration and supervision
Education research
Teacher education, specific levels and methods

**4. Humanities**
English language and literature, letters
Foreign languages and literatures
History, including history and philosophy of science and technology
Humanities, general
Liberal arts and sciences
Philosophy and religious studies
Theology and religious vocations

**5. Law**
Law
Legal studies

**6. Public administration and social services**
Public administration
Public affairs
Human services
Social work

**7. Visual and performing arts**
Drama, theatre arts and stagecraft
Film, video, and photographic arts
Fine and studio arts
Music

**8. All other fields**
Architecture
City, urban, community and regional planning
Family, consumer sciences and human sciences
Foods, nutrition, and wellness studies
Landscape architecture
Library science
Parks, sports, recreation, leisure and fitness

Also, use the all other fields category for R&D that involves multiple fields if it is impossible to report multidisciplinary or interdisciplinary R&D expenditures in specific fields.