FORM APPROVED OMB No. 3145-0100 Expiration Date: 08/31/22



NATIONAL SCIENCE FOUNDATION ALEXANDRIA, VA 22314

FFRDC RESEARCH AND DEVELOPMENT SURVEY FY 2020

Please submit your survey data by January 29, 2021.

Your participation in this survey provides important information on the national level of R&D activity. The National Science Foundation (NSF) is authorized to collect this information under the National Science Foundation Act of 1950, as amended. Your organization's response is entirely voluntary.

Response to this survey is estimated to require 11 hours. If you wish to comment on the time required to complete this survey, please contact Suzanne H. Plimpton of NSF at (703) 292-7556, or e-mail splimpto@nsf.gov.

The Web address for submitting your data:

http://www.ffrdcsurvey.org

Or mail this form to:

ICF 530 Gaither Road, Suite 500 Rockville, MD 20850

Questions?

Technical support:

Support@FFRDCsurvey.org (866) 936-9376

General survey questions:

Michael Gibbons National Center for Science and Engineering Statistics National Science Foundation mgibbons@nsf.gov (703) 292-4590

Thank you for your participation.

What's New for FY 2020

New Question

• There were no changes to this questionnaire from the FY 2019 version.

Survey Definitions and Instructions

This survey collects data on research and development (R&D) activities at Federally Funded R&D Centers (FFRDCs). Please report R&D activities and expenditures for your organization's **2020** fiscal year.

Fiscal Year (FY)

Please report data for your organization's 2020 fiscal year.

Research and Development (R&D)

R&D activity is creative and systematic work undertaken in order to increase the stock of knowledge — including knowledge of humankind, culture, and society — and to devise new applications of available knowledge. R&D covers three activities defined below — basic research, applied research, and experimental development.

- **Basic research** is experimental or theoretical work undertaken primarily to acquire new knowledge of the underlying foundations of phenomena and observable facts, without any particular application or use in view.
- **Applied research** is original investigation undertaken in order to acquire new knowledge. It is directed primarily towards a specific, practical aim or objective.
- **Experimental development** is systematic work, drawing on knowledge gained from research and practical experience and producing additional knowledge, which is directed to producing new products or processes or to improving existing products or processes.

R&D Expenditures

Please include all current operating expenditures for activities specifically organized to produce R&D outcomes. This includes basic research, applied research, and experimental development funded by external sponsors or separately budgeted and accounted for by your organization using internal funds.

R&D <i>includes:</i>	R&D does <i>not</i> include:
 Sponsored research (including federal and nonfederal sponsors) Indirect costs associated with R&D projects R&D equipment and software R&D subcontract expenditures Clinical trials Research training grants 	 Outreach or training programs R&D conducted by staff at outside institutions that is not accounted for in your financial records Capital projects (i.e., construction or renovation of research facilities) Routine testing Non-R&D program implementation or management Policy development

Ques	tion 1.	How much of your total expenditures for separately budgeted researed development (R&D) came from the following sources in FY 2020? (See definition of R&D on the previous page.)	earch and	
		Report the original source of funds, when possible. For example, if you federal funds from another organization, report that amount under "U.S. government."		
		Please do not report capital construction costs.		
So	urce of fu	nds	R&D expenditures (Dollars in thousands) (for example, report \$25,342 a	
a.	U.S. fede	eral government		
		ncy of the United States government. ederal funds passed through from another organization.	\$	
b.		d local government	es. \$	
		e, county, municipality, or other local government entity in the United State state health agencies.	es, •	
c.		-	¢	
		or foreign for-profit organizations. (Report funds from a company's foundation in row d.)	\$	
d.	-	it organizations	¢	
		or foreign nonprofit foundations and organizations, except universities ges. Funds from other universities and colleges should be reported in row	\$ w e.	
e.	All other	sources		
		urces not reported above, such as funds from foreign governments, gn or U.S. universities.	\$	
f.	Total ¹		\$ <u>TOTAL</u>	
¹ Coli	imn totals a	re automatically generated on the Web survey		

Question 2. Of the federally funded R&D expenditures reported in Question 1, how much came from the following agencies?		Of the federally funded R&D expenditures reported in Question 1, row a, how much came from the following agencies?		
		Report the agency that was the original source of funds, when possible.		
		A list of federal departments, agencies and subagencies is included as a link on the web survey question.		
Fui	nding age	ncy	R&D expenditures (Dollars in thousands)	
a.	a. Department of Defense \$			
b.	b. Department of Energy \$			
c.	c. Department of Health and Human Services (including the National Institutes of Health) \$			
d.	d. Department of Homeland Security			
е.	e. Department of Transportation			
f.	f. National Aeronautics and Space Administration			
g.	g. National Science Foundation			
h.	Other fee	deral agencies	\$	
i.	i. Total ¹ (should match total from Question 1, row a) \$ TOTAL			
¹ Colu	mn totals a	re automatically generated on the Web survey.		

Question 3	n 3. Of the amount reported for Other federal sources in Question 2 (row h), which agencies funded this R&D and how much of the reported amount was from each agency?			
	If your institution reported \$0 in Question 2, row h, skip this question and go to Question 4.			
	Use rows a–j to list up to 10 agencies that funded the largest R&D exp k to report any remaining amount.	enditures. Use row		
	Report the agency that was the original source of funds, when possible	3.		
	A list of federal departments, agencies and subagencies is included as survey question.	a link on the web		
Federal	agencies (list up to 10)	R&D expenditures (Dollars in thousands)		
a.		\$		
b.		\$		
C.		\$		
d.		\$		
e.		\$		
f.		\$		
g.		\$		
h.		\$		
i.		\$		
j.		\$		
k.	Other agencies included in Question 2, row h, but not listed above	\$		
I.	I. Total (should match Question 2, row h) ¹ $\$ TOTAL$			
¹ The column total is automatically generated on the Web survey.				

Question 4. What amounts of your FY 2020 R&D expenditures were for basic research, applied research, and experimental development?				
	If possible, these categories defining the type of R&D should be coded at the individual project level by the principal investigator or project director. Estimates are acceptable if necessary.			
	See the table below this question for examples.			
			R&D expenditures Dollars in thousand	
		(1) Federal	(2) Nonfederal	(3) Total ¹
a. Basic re	search			
new kno	ental or theoretical work undertaken primarily to acquire wledge of the underlying foundations of phenomena and ole facts, without any particular application or use in view.	\$	\$	\$ <u>TOTAL</u>
b. Applied	research			
	investigation undertaken in order to acquire new ge. It is directed primarily towards a specific, practical bjective.	\$	\$	\$ <u>TOTAL</u>
c. Experim	iental development			
Systema and prac which is	tic work, drawing on knowledge gained from research stical experience and producing additional knowledge, directed to producing new products or processes or to g existing products or processes.	\$	\$	\$ <u>TOTAL</u>
d. Total ¹				
	1 total should match Question 1, row a. 3 total should match Question 1, row f.	\$ <u>TOTAL</u>	\$ <u>TOTAL</u>	\$ <u>TOTAL</u>
¹ Row and colum	nn totals are automatically generated on the Web survey.			

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.	

Question 5. Of the total R&D expenditures reported in Question 1, what were the amounts for following types of costs?		unts for the	
		Please report only direct costs in rows a-e. Indirect costs should be reported	in row f.
			R&D expenditures (Dollars in thousands)
		from all sources	
а.		wages, and fringe benefits	
	temporar	ompensation for all R&D personnel whether full-time or part-time, y or permanent. Include salaries, wages, and fringe benefits paid rnal funds and from external support.	\$
b.	Software	e purchases	
		ents for software. Include both purchases of software packages se fees for systems.	\$
c.	Equipme	ent	
	Payment	s for movable equipment. Include ancillary costs such as delivery and setup.	\$
d.	Subcont	racts	
		s to subcontractors or subrecipients for services on R&D projects.	\$
e.	Other di	rect costs	
		sts that do not fit into one of the above categories, including imited to) travel, computer usage fees, and supplies.	\$
Inc	lirect cost	s	
f.	Indirect		
	Include a	Il indirect costs (overhead) associated with R&D projects.	\$
g.	Total ¹		
5		natch total from Question 1, row f)	\$ <u>TOTAL</u>
¹ Colu	umn totals a	re automatically generated on the Web survey.	

Question 6.	Question 6. What was the total executed operating budget of your FFRDC in FY 2020, excluding capital construction costs?		
		(Dollars in thousands)	
Total op	erating budget	\$	

Qu	es	sti	0	n	7.
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Primary Contact Information	. Please complete the contact information for the person responsible for the survey.
Name	
Job Title	
Institution name	
Office/Department	
Mailing address (line 1)	
Mailing address (line 2)	
City, state, and ZIP Code	
Phone number	E-mail address
	List individuals who should be copied on all e-mails about the survey or can create a login ide information about office/department as appropriate (e.g., Office of Finance Director).
Other Contact 1	
Name	
Job Title	
Phone Number	E-mail address
Other Contact 2	
Name	
Job Title	
Phone Number	E-mail address
Other Contact 3	
Name	
Job Title	
Phone Number	E-mail address