

Table RD-1

U.S. R&D expenditures, by performing sector and source of funds: 2010–22

(Millions of current and constant 2017 dollars)

Performing sector and source of funds	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021 ^a	2022 ^b
Millions of current dollars													
All performing sectors	406,599	426,214	433,698	454,232	475,938	494,470	521,686	553,612	604,028	665,557	716,870	789,072	885,563
Business	278,977	294,092	302,251	322,528	340,728	355,821	379,529	405,792	445,563	498,175	543,220	608,625	692,748
Federal government	50,798	53,524	52,144	51,086	52,687	52,847	51,187	52,553	58,356	62,802	65,093	66,786	73,338
Federal intramural ^c	31,970	34,950	34,017	33,406	34,783	34,199	31,762	32,231	36,793	39,870	41,227	41,464	46,960
FFRDCs	18,828	18,574	18,128	17,680	17,903	18,649	19,424	20,322	21,563	22,932	23,866	25,322	26,378
Nonfederal government	691	694	665	620	583	595	620	632	643	675	683	685	697
Higher education	58,083	60,087	60,876	61,511	62,318	64,604	67,777	71,115	74,890	78,157	80,823	85,787	91,451
Nonprofit organizations	18,050	17,817	17,762	18,487	19,622	20,604	22,573	23,521	24,576	25,749	27,053	27,190	27,329
All funding sources	406,599	426,214	433,698	454,232	475,938	494,470	521,686	553,612	604,028	665,557	716,870	789,072	885,563
Business	248,126	266,426	275,728	297,188	318,410	333,242	360,290	386,538	426,488	482,227	520,364	591,009	672,868
Federal government	126,617	127,014	123,837	120,131	118,367	119,532	118,174	122,470	131,098	135,779	148,169	147,531	159,833
Nonfederal government	4,303	4,386	4,158	4,244	4,214	4,277	4,995	5,076	5,252	5,474	5,676	5,733	5,902
Higher education	12,262	13,103	14,282	15,341	16,176	17,260	18,729	19,880	20,989	21,885	22,560	23,783	25,514
Nonprofit organizations	15,292	15,284	15,694	17,327	18,771	20,160	19,497	19,648	20,201	20,193	20,102	21,017	21,447
Millions of constant 2017 dollars													
All performing sectors	453,632	465,903	465,418	479,297	493,603	508,109	531,028	553,612	590,500	639,911	680,262	715,953	750,649
Business	311,247	321,478	324,357	340,325	353,375	365,635	386,326	405,792	435,584	478,978	515,480	552,227	587,209
Federal government	56,674	58,508	55,958	53,905	54,642	54,305	52,103	52,553	57,049	60,382	61,769	60,597	62,165
Federal intramural ^c	35,668	38,205	36,504	35,250	36,074	35,142	32,331	32,231	35,969	38,334	39,121	37,621	39,806
FFRDCs	21,006	20,303	19,453	18,656	18,568	19,163	19,772	20,322	21,080	22,048	22,647	22,976	22,359
Nonfederal government	771	758	713	654	605	611	631	632	629	649	648	622	590
Higher education	64,802	65,682	65,328	64,905	64,631	66,386	68,991	71,115	73,212	75,145	76,695	77,838	77,519
Nonprofit organizations	20,138	19,476	19,061	19,507	20,350	21,172	22,977	23,521	24,026	24,757	25,671	24,670	23,165
All funding sources	453,632	465,903	465,418	479,297	493,603	508,109	531,028	553,612	590,500	639,911	680,262	715,953	750,649
Business	276,828	291,237	295,894	313,587	330,228	342,434	366,743	386,538	416,936	463,645	493,791	536,244	570,358
Federal government	141,263	138,842	132,894	126,760	122,760	122,829	120,290	122,470	128,162	130,547	140,602	133,860	135,482
Nonfederal government	4,800	4,795	4,462	4,478	4,370	4,394	5,084	5,076	5,135	5,263	5,386	5,202	5,003
Higher education	13,680	14,323	15,326	16,188	16,776	17,736	19,065	19,880	20,519	21,041	21,408	21,579	21,627
Nonprofit organizations	17,061	16,707	16,841	18,284	19,468	20,716	19,846	19,648	19,748	19,415	19,076	19,069	18,179

FFRDC = federally funded research and development center.

^a Some data for 2021 are preliminary and may be revised later.^b The data for 2022 are estimates and are likely to be revised later.

^c Includes expenditures of federal intramural R&D as well as costs associated with administering extramural R&D.

Note(s):

Data are based on annual reports by performers, except for the nonprofit sector. Expenditure levels for higher education, federal government, and nonfederal government performers are calendar year approximations based on fiscal year data.

Source(s):

National Center for Science and Engineering Statistics, National Patterns of R&D Resources (2021–22 edition).

Science and Engineering Indicators