

Table RD-2

**U.S. R&D expenditures, by performing sector, source of funds, and type of R&D: 2022**

(Millions of dollars and percent)

Performing sector and type of R&D	Total	Source of funding					Percent by performer
		Business	Federal government	Nonfederal government	Higher education <sup>a</sup>	Nonprofit organizations	
R&D	885,563	672,868	159,833	5,902	25,514	21,447	100.0
Business	692,748	663,968	27,325	413	NA	1,042	78.2
Federal government	73,338	366	72,779	38	NA	155	8.3
Federal intramural	46,960	-	46,960	-	NA	-	5.3
FFRDCs	26,378	366	25,819	38	NA	155	3.0
Nonfederal government	697	NA	311	355	NA	NA	0.1
Higher education	91,451	5,493	47,738	4,766	25,236	8,219	10.3
Nonprofit organizations	27,329	3,026	11,679	NA	NA	12,019	3.1
Percent by funding source	100.0	76.0	18.0	0.7	2.9	2.4	-
Basic research	129,435	48,067	51,286	3,096	16,133	10,853	100.0
Business	46,287	43,466	2,676	41	NA	103	35.8
Federal government	13,202	55	13,118	6	NA	23	10.2
Federal intramural	7,959	-	7,959	-	NA	-	6.1
FFRDCs	5,244	55	5,159	6	NA	23	4.1
Nonfederal government	121	NA	54	62	NA	NA	0.1
Higher education	57,838	3,128	30,768	2,833	16,004	5,105	44.7
Nonprofit organizations	11,987	1,415	4,670	NA	NA	5,620	9.3
Percent by funding source	100.0	37.1	39.6	2.4	12.5	8.4	-
Applied research	159,927	98,768	46,068	1,975	6,744	6,373	100.0
Business	100,334	96,007	3,869	149	NA	310	62.7
Federal government	24,078	214	23,751	22	NA	91	15.1
Federal intramural	13,299	-	13,299	-	NA	0	8.3
FFRDCs	10,779	214	10,452	22	NA	91	6.7
Nonfederal government	536	NA	239	273	NA	NA	0.3
Higher education	24,951	1,583	13,103	1,427	6,656	2,182	15.6
Nonprofit organizations	10,028	952	5,106	NA	NA	3,780	6.3
Percent by funding source	100.0	61.8	28.8	1.2	4.2	4.0	-
Experimental development	596,199	526,035	62,478	831	2,637	4,220	100.0
Business	546,125	524,496	20,779	223	NA	627	91.6
Federal government	36,058	96	35,911	10	NA	41	6.0
Federal intramural	25,703	-	25,703	-	NA	0	4.3
FFRDCs	10,355	96	10,208	10	NA	41	1.7
Nonfederal government	40	NA	18	20	NA	NA	0.0
Higher education	8,663	782	3,867	505	2,576	932	1.5
Nonprofit organizations	5,314	659	1,904	NA	NA	2,619	0.9
Percent by funding source	100.0	88.2	10.5	0.1	0.4	0.7	-

NA = not available; amount not published in source data.

FFRDC = federally funded research and development center.

<sup>a</sup> Higher education totals for R&D, basic research, applied research, and experimental development are not published in the source data.**Note(s):**

The data for 2022 are estimates and are likely to be revised later.

**Source(s):**

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

