

Table RD-3

U.S. R&D expenditures, by performing sector, source of funds, and type of R&D: 2019

(Millions of dollars)

Performing sector and type of R&D	Total	Business	Federal government	Nonfederal government	Higher education	Nonprofit organizations	Percent by performer
R&D	666,875	481,799	133,807	4,929	21,562	24,778	100.0
Business	498,175	474,442	22,653	169	**	911	74.7
Federal government	62,802	179	62,408	49	**	166	9.4
Federal intramural	39,870	0	39,870	0	0	0	6.0
FFRDCs	22,932	179	22,538	49	**	166	3.4
Nonfederal government	675	23	290	347	4	12	0.1
Higher education	78,176	4,808	39,556	4,364	21,559	7,889	11.7
Nonprofit organizations	27,048	2,347	8,900	***	***	15,800	4.1
Percent by funding source	100.0	72.2	20.1	0.7	3.2	3.7	-
Basic research	102,874	33,745	42,199	2,618	13,594	10,719	100.0
Business	32,582	30,132	2,349	15	**	86	31.7
Federal government	11,932	36	11,853	10	**	33	11.6
Federal intramural	7,352	0	7,352	0	0	0	7.1
FFRDCs	4,580	36	4,501	10	**	33	4.5
Nonfederal government	120	4	52	62	1	2	0.1
Higher education	49,126	2,729	25,358	2,531	13,594	4,916	47.8
Nonprofit organizations	9,113	844	2,588	***	***	5,681	8.9
Percent by funding source	100.0	32.8	41.0	2.5	13.2	10.4	-
Applied research	132,021	73,277	41,849	1,675	5,766	9,454	100.0
Business	76,176	70,679	5,246	42	**	209	57.7
Federal government	20,522	83	20,339	23	**	77	15.5
Federal intramural	11,264	0	11,264	0	0	0	8.5
FFRDCs	9,258	83	9,075	23	**	77	7.0
Nonfederal government	524	18	225	269	3	9	0.4
Higher education	21,793	1,449	11,144	1,341	5,763	2,097	16.5
Nonprofit organizations	13,006	1,049	4,895	***	***	7,062	9.9
Percent by funding source	100.0	55.5	31.7	1.3	4.4	7.2	-
Experimental development	431,980	374,777	49,758	636	2,202	4,607	100.0
Business	389,418	373,631	15,058	112	**	617	90.1
Federal government	30,347	60	30,215	17	**	56	7.0
Federal intramural	21,253	0	21,253	0	0	0	4.9
FFRDCs	9,093	60	8,962	17	**	56	2.1
Nonfederal government	31	1	13	16	*	1	0.0
Higher education	7,257	631	3,055	492	2,202	877	1.7
Nonprofit organizations	4,928	454	1,417	***	***	3,057	1.1
Percent by funding source	100.0	86.8	11.5	0.1	0.5	1.1	-

* = amount < \$0.5 million; ** = small to negligible amount, included as part of the funding provided by nonprofit organizations; *** = small to negligible amount, included as part of the funding provided by other sectors.

FFRDC = federally funded research and development center.

Note(s):

Some components of R&D performance and funding by nonprofit organizations are estimated and may later be revised.

Source(s):

National Center for Science and Engineering Statistics, National Patterns of R&D Resources (2019–20 edition).