

TABLE 4-3

U.S. R&D expenditures, by performing sector, source of funds, and type of work: 2017

(Millions of dollars)

Performing sector and type of work	Total	Business	Federal government	Nonfederal government	Higher education	Other nonprofit organizations	Percent by performer
R&D	547,886	381,137	120,961	4,582	19,723	21,482	100.0
Business	400,101	374,934	24,277	121	*	769	73.0
Federal government	52,553	194	52,174	33	*	152	9.6
Federal intramural	32,231	0	32,231	0	0	0	5.9
FFRDCs	20,322	194	19,943	33	*	152	3.7
Nonfederal government	641	*	258	383	*	*	0.1
Higher education	71,251	4,276	36,034	4,046	19,723	7,173	13.0
Other nonprofit organizations	23,340	1,734	8,218	*	*	13,389	4.3
Percent by funding source	100.0	69.6	22.1	0.8	3.6	3.9	-
Basic research	91,453	26,318	38,653	2,440	12,231	11,811	100.0
Business	24,829	22,942	1,783	14	*	90	27.1
Federal government	10,388	38	10,313	6	*	30	11.4
Federal intramural	6,259	0	6,259	0	0	0	6.8
FFRDCs	4,128	38	4,054	6	*	30	4.5
Nonfederal government	104.0	*	41.8	62.2	*	*	0.1
Higher education	44,302	2,376	23,082	2,357	12,231	4,257	48.4
Other nonprofit organizations	11,830	963	3,434	*	*	7,434	12.9
Percent by funding source	100.0	28.8	42.3	2.7	13.4	12.9	-
Applied research	108,805	58,701	37,620	1,578	5,328	5,578	100.0
Business	62,133	56,904	5,037	26	*	166	57.1
Federal government	18,165	91	17,992	10	*	72	16.7
Federal intramural	10,124	0	10,124	0	0	0	9.3
FFRDCs	8,041	91	7,868	10	*	72	7.4
Nonfederal government	514.4	*	207.0	307.4	*	*	0.5
Higher education	20,009	1,267	10,232	1,234	5,328	1,948	18.4
Other nonprofit organizations	7,984	439	4,152	*	*	3,393	7.3
Percent by funding source	100.0	54.0	34.6	1.5	4.9	5.1	-
Experimental development	347,622	296,118	44,688	559	2,164	4,093	100.0
Business	313,139	295,089	17,457	81	*	513	90.1
Federal government	23,995	64	23,869	11	*	51	6.9
Federal intramural	15,848	0	15,848	0	0	0	4.6
FFRDCs	8,147	64	8,021	11	*	51	2.3
Nonfederal government	22.1	*	8.9	13.2	*	*	0.0
Higher education	6,941	633	2,721	455	2,164	969	2.0
Other nonprofit organizations	3,526	332	632	*	*	2,562	1.0
Percent by funding source	100.0	85.2	12.9	0.2	0.6	1.2	-

* = small to negligible amount, included as part of the funding provided by other sectors.

FFRDC = federally funded research and development center.

Note(s)

Data for 2017 include some estimates and may later be revised. Some components of R&D performance and funding by other nonprofit organizations are projected and may later be revised.

Source(s)

National Center for Science and Engineering Statistics, National Science Foundation, National Patterns of R&D Resources (annual series).

Science and Engineering Indicators