Table 4
U.S. R&D expenditures, by performing sector, source of funds, and type of R&D: 2021
(Millions of dollars and percent distribution)

Performing sector and type of R&D	Source of funds (\$millions)						
	Total	Business	Federal government	Nonfederal government	Higher education	Nonprofit organizations	Percent distribution by performer
R&D	789,072	591,009	147,531	5,733	23,783	21,017	100.0
Business	608,625	582,664	24,587	392	**	981	77.1
Federal government	66,786	239	66,336	42	**	168	8.5
Federal intramural	41,464	0	41,464	0	0	0	5.3
FFRDCs	25,322	239	24,873	42	**	168	3.2
Nonfederal government	685	16	305	349	3	12	0.1
Higher education	85,787	5,080	44,683	4,621	23,506	7,897	10.9
Nonprofit organizations	27,190	3,010	11,620	328	274	11,958	3.4
Percent distribution by funding source	100.0	74.9	18.7	0.7	3.0	2.7	-
Basic research	118,626	42,642	47,407	2,987	14,970	10,621	100.0
Business	40,845	38,305	2,404	39	**	97	34.4
Federal government	11,688	42	11,610	7	**	29	9.9
Federal intramural	6,604	0	6,604	0	0	0	5.6
FFRDCs	5,084	42	5,006	7	**	29	4.3
Nonfederal government	120	3	53	61	0	2	0.1
Higher education	54,047	2,885	28,693	2,726	14,841	4,902	45.6
Nonprofit organizations	11,926	1,408	4,646	153	128	5,591	10.1
Percent distribution by funding source	100.0	35.9	40.0	2.5	12.6	9.0	-
Applied research	144,037	87,335	42,226	1,922	6,324	6,229	100.0
Business	88,707	84,782	3,491	142	**	292	61.6
Federal government	21,304	118	21,083	21	**	83	14.8
Federal intramural	11,132	0	11,132	0	0	0	7.7
FFRDCs	10,173	118	9,951	21	**	83	7.1
Nonfederal government	521	12	232	266	2	9	0.4
Higher education	23,528	1,476	12,341	1,391	6,236	2,085	16.3
Nonprofit organizations	9,977	947	5,080	103	86	3,761	6.9
Percent distribution by funding source	100.0	60.6	29.3	1.3	4.4	4.3	-
Experimental development	526,408	461,034	57,896	823	2,489	4,165	100.0
Business	479,072	459,578	18,690	211	**	592	91.0
Federal government	33,792	79	33,643	14	**	56	6.4
Federal intramural	23,728	0	23,728	0	0	0	4.5
FFRDCs	10,065	79	9,915	14	**	56	1.9
Nonfederal government	44	1	20	23	*	1	0.0
Higher education	8,213	719	3,650	505	2,429	911	1.6
Nonprofit organizations	5,287	656	1,894	71	60	2,606	1.0
Percent distribution by funding source	100.0	87.6	11.0	0.2	0.5	0.8	-

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

FFRDC = federally funded research and development center.

Note(s):

Some data for 2021 are preliminary and may later be revised.

Source(s)

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