

TABLE 7

U.S. basic research expenditures, by source of funds and performing sector: 1953–2019

(Millions of current and of constant 2012 dollars)

Year	All funding sources		Federal						Nonfederal government					Business					Higher education		NPOs				
	All performers	Total	Federal intramural	FFRDC	Nonfederal government	Business	Higher education	NPO	Total	FFRDC	Nonfederal government	Business	Higher education	Total	FFRDC	Business	Higher education	NPO	Higher education	Total	FFRDC	Business	Higher education	NPO	
Current \$millions																									
1953	460	265	102	36	NA	19	82	27	7	NA	NA	NA	7	154	NA	132	13	9	6	28	NA	NA	16	12	
1954	509	291	96	45	NA	23	97	31	10	NA	NA	NA	10	169	NA	143	15	11	8	31	NA	NA	18	13	
1955	570	318	98	62	NA	7	117	35	14	NA	NA	NA	14	192	NA	162	17	13	12	35	NA	NA	21	14	
1956	718	392	114	89	NA	7	143	41	19	NA	NA	NA	19	251	NA	216	20	15	15	41	NA	NA	24	17	
1957	813	451	124	110	NA	4	167	48	25	NA	NA	NA	25	268	NA	230	23	15	20	50	NA	NA	27	23	
1958	943	537	149	115	NA	14	202	58	31	NA	NA	NA	31	292	NA	252	24	16	24	59	NA	NA	31	28	
1959	1,087	665	165	134	NA	34	263	71	38	NA	NA	NA	38	290	NA	248	24	18	28	66	NA	NA	36	30	
1960	1,286	794	184	150	NA	36	341	84	45	NA	NA	NA	45	343	NA	297	25	21	33	71	NA	NA	41	30	
1961	1,511	972	230	177	NA	30	432	104	54	NA	NA	NA	54	361	NA	314	25	22	40	85	NA	NA	48	37	
1962	1,824	1,218	252	189	NA	104	546	128	64	NA	NA	NA	64	394	NA	345	25	24	48	101	NA	NA	55	46	
1963	2,115	1,446	285	216	NA	109	689	147	75	NA	NA	NA	75	425	NA	375	25	25	58	113	NA	NA	63	50	
1964	2,396	1,693	339	245	NA	123	824	163	84	NA	NA	NA	84	434	NA	384	25	25	70	115	NA	NA	68	47	
1965	2,664	1,900	375	250	NA	157	944	175	94	NA	NA	NA	94	462	NA	406	27	29	86	122	NA	NA	70	52	
1966	2,930	2,075	410	273	NA	142	1,066	184	104	NA	NA	NA	104	512	NA	451	29	32	106	133	NA	NA	75	58	
1967	3,168	2,280	434	301	NA	168	1,188	190	114	NA	NA	NA	114	495	NA	427	34	34	136	144	NA	NA	83	61	
1968	3,376	2,399	482	315	NA	145	1,265	192	131	NA	NA	NA	131	537	NA	462	38	37	156	154	NA	NA	91	63	
1969	3,491	2,457	545	313	NA	123	1,288	188	153	NA	NA	NA	153	541	NA	458	40	43	171	170	NA	NA	103	67	
1970	3,594	2,501	562	304	NA	122	1,323	191	179	NA	NA	NA	179	531	NA	444	43	44	196	187	NA	NA	115	72	
1971	3,720	2,559	581	289	NA	101	1,385	204	194	NA	NA	NA	194	551	NA	456	50	45	214	204	NA	NA	127	77	
1972	3,850	2,656	603	313	NA	91	1,437	213	195	NA	NA	NA	195	565	NA	463	55	47	216	218	NA	NA	134	84	
1973	4,099	2,847	652	382	NA	96	1,489	229	196	NA	NA	NA	196	607	NA	499	59	49	223	227	NA	NA	137	90	
1974	4,511	3,146	715	467	NA	114	1,609	242	204	NA	NA	NA	204	656	NA	536	66	54	250	254	NA	NA	153	102	
1975	4,875	3,415	760	533	NA	104	1,768	251	212	NA	NA	NA	212	704	NA	573	72	59	264	280	NA	NA	164	116	
1976	5,373	3,793	850	629	NA	116	1,924	274	218	NA	NA	NA	218	774	NA	634	75	65	283	305	NA	NA	175	131	
1977	6,008	4,235	943	746	NA	135	2,114	297	232	NA	NA	NA	232	862	NA	701	89	72	334	346	NA	NA	198	148	
1978	6,959	4,950	1,044	1,005	NA	156	2,399	346	260	NA	NA	NA	260	970	NA	785	107	79	398	380	NA	NA	213	168	
1979	7,836	5,558	1,112	1,160	NA	161	2,719	406	286	NA	NA	NA	286	1,107	NA	893	128	87	466	419	NA	NA	229	190	
1980	8,747	6,147	1,212	1,294	NA	170	3,061	411	307	NA	NA	NA	307	1,286	NA	1,035	156	95	544	463	NA	NA	248	215	
1981	9,658	6,591	1,343	1,430	NA	164	3,331	324	338	NA	NA	NA	338	1,600	NA	1,313	183	105	615	512	NA	NA	269	243	
1982	10,651	7,121	1,522	1,503	NA	253	3,475	369	368	NA	NA	NA	368	1,854	NA	1,523	215	115	716	591	NA	NA	317	275	
1983	11,880	7,853	1,733	1,661	NA	346	3,689	426	396	NA	NA	NA	396	2,146	NA	1,760	260	127	816	668	NA	NA	358	311	
1984	13,332	8,651	1,877	1,854	NA	340	4,087	494	436	NA	NA	NA	436	2,584	NA	2,132	313	139	915	746	NA	NA	395	351	
1985	14,748	9,407	1,947	1,936	NA	358	4,606	560	514	NA	NA	NA	514	2,915	NA	2,373	389	153	1,075	837	NA	NA	440	397	

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1986	17,154	10,220	2,026	2,045	NA	434	5,122	594	606	NA	NA	NA	606	4,130	NA	3,496	466	168	1,262	936	NA	NA	488	449	
1987	18,481	11,090	2,047	2,242	NA	598	5,527	675	659	NA	NA	NA	659	4,282	NA	3,583	514	185	1,399	1,052	NA	NA	545	507	
1988	19,787	12,097	2,116	2,633	NA	656	5,937	756	705	NA	NA	NA	705	4,275	NA	3,507	565	203	1,530	1,180	NA	NA	607	573	
1989	21,891	13,392	2,309	2,815	NA	986	6,422	860	766	NA	NA	NA	766	4,692	NA	3,832	637	223	1,714	1,327	NA	NA	680	647	
1990	23,029	14,057	2,319	3,033	NA	869	6,889	947	847	NA	NA	NA	847	4,710	NA	3,760	705	245	1,929	1,486	NA	NA	756	730	
1991	27,140	15,283	2,378	3,195	NA	1,251	7,423	1,036	912	NA	NA	NA	912	7,157	NA	6,125	764	269	2,127	1,660	NA	NA	836	825	
1992	27,604	15,710	2,419	3,408	NA	712	8,058	1,114	941	NA	NA	NA	941	6,925	NA	5,816	814	295	2,203	1,824	NA	NA	893	931	
1993	28,743	16,399	2,621	3,517	NA	466	8,638	1,157	952	NA	NA	NA	952	7,136	NA	5,961	851	324	2,268	1,987	NA	NA	936	1,051	
1994	29,651	16,770	2,547	3,512	NA	436	9,139	1,137	992	NA	NA	NA	992	7,323	NA	6,078	890	356	2,406	2,160	NA	NA	974	1,186	
1995	29,610	16,990	2,689	3,307	NA	190	9,634	1,170	1,070	NA	NA	NA	1,070	6,715	NA	5,379	945	390	2,511	2,326	NA	NA	987	1,338	
1996	32,799	18,063	2,680	3,393	NA	650	10,092	1,248	1,149	NA	NA	NA	1,149	8,309	NA	6,848	1,032	428	2,740	2,539	NA	NA	1,028	1,510	
1997	36,717	19,254	2,746	3,404	NA	1,029	10,758	1,317	1,233	NA	NA	NA	1,233	10,376	NA	8,766	1,161	449	3,150	2,704	NA	NA	1,147	1,557	
1998	34,842	20,473	3,003	3,441	NA	1,002	11,567	1,461	1,292	NA	NA	NA	1,292	6,606	NA	4,851	1,278	477	3,495	2,976	NA	NA	1,259	1,717	
1999	38,282	22,364	3,347	3,719	NA	1,108	12,456	1,734	1,386	NA	NA	NA	1,386	7,429	NA	5,537	1,375	517	3,848	3,255	NA	NA	1,396	1,860	
2000	42,033	24,295	3,765	4,037	NA	925	13,469	2,099	1,501	NA	NA	NA	1,501	8,134	NA	6,115	1,453	566	4,314	3,790	NA	NA	1,553	2,236	
2001	46,843	26,802	4,260	4,404	NA	754	14,919	2,464	1,615	10	NA	NA	1,606	9,400	62	7,299	1,467	571	4,759	4,267	95	NA	1,704	2,467	
2002	50,789	30,141	4,511	5,029	NA	888	17,139	2,575	1,759	14	NA	NA	1,745	8,730	61	6,659	1,456	554	5,311	4,847	123	NA	1,891	2,833	
2003	54,823	32,889	4,664	4,904	NA	1,386	19,220	2,714	1,906	13	NA	NA	1,893	9,002	55	6,944	1,436	567	5,692	5,335	102	NA	1,978	3,256	
2004	56,379	34,139	4,697	4,852	NA	1,072	20,730	2,788	2,011	12	NA	NA	2,000	8,872	48	6,763	1,483	578	5,965	5,391	64	NA	2,067	3,259	
2005	59,904	35,566	4,770	5,000	NA	1,108	21,786	2,902	2,080	12	NA	NA	2,068	9,828	54	7,559	1,600	614	6,568	5,861	70	NA	2,226	3,565	
2006	61,568	36,375	4,716	5,080	16	1,444	22,270	2,849	2,233	12	30	NA	2,191	9,428	67	6,940	1,765	656	7,288	6,244	78	NA	2,431	3,735	
2007	64,603	36,094	4,621	3,298	20	2,780	22,546	2,829	2,448	10	38	NA	2,400	11,199	57	8,488	1,956	698	7,932	6,930	68	NA	2,733	4,130	
2008	68,542	35,917	4,957	3,432	26	1,475	22,954	3,073	2,643	11	47	12	2,573	13,784	65	10,864	2,131	724	8,467	7,731	68	18	3,002	4,643	
2009	72,861	37,737	5,441	4,432	33	1,340	22,993	3,498	2,539	13	57	13	2,456	16,147	58	13,397	1,995	698	8,253	8,185	69	34	3,031	5,051	
2010	76,344	40,032	5,111	6,475	39	1,406	23,586	3,414	2,368	18	63	10	2,276	17,449	67	14,897	1,783	703	8,000	8,496	77	58	2,981	5,381	
2011	73,510	39,148	5,047	6,333	41	677	23,970	3,081	2,339	11	62	21	2,244	14,898	67	12,284	1,803	744	8,487	8,638	64	38	3,034	5,503	
2012	73,807	38,080	5,489	5,530	40	644	23,285	3,092	2,283	14	59	10	2,200	15,301	61	12,611	1,865	764	9,236	8,908	57	29	3,188	5,635	
2013	79,099	36,157	5,330	4,085	38	1,196	22,476	3,031	2,293	12	54	21	2,206	21,043	53	18,203	1,975	813	9,918	9,688	39	88	3,423	6,139	
2014	82,733	36,925	5,705	4,077	42	2,044	21,967	3,090	2,320	6	57	17	2,241	22,755	53	19,757	2,086	859	10,341	10,392	34	119	3,611	6,628	
2015	84,229	37,101	5,890	4,043	42	2,038	22,054	3,034	2,368	4	59	14	2,292	22,761	47	19,621	2,202	891	10,974	11,024	32	120	3,795	7,077	
2016	89,989	37,944	6,119	4,112	38	2,037	22,413	3,224	2,425	5	55	20	2,344	26,153	44	22,879	2,281	949	11,582	11,887	34	117	4,009	7,726	
2017	93,469	38,810	6,259	4,054	42	1,853	23,168	3,434	2,460	6	62	17	2,375	27,087	38	23,644	2,402	1,003	12,241	12,871	30	103	4,337	8,402	
2018	101,123	41,562	6,827	4,188	49	2,536	24,288	3,675	2,526	9	70	12	2,435	30,261	39	26,549	2,587	1,087	12,961	13,813	33	112	4,713	8,956	
2019 ^a	107,838	43,908	7,414	4,500	54	2,811	25,363	3,766	2,607	10	75	14	2,508	33,005	37	29,044	2,760	1,164	13,611	14,707	34	130	5,052	9,492	

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	All performers	Total	Federal intramural	FFRDC	Nonfederal government	Business	Higher education	NPO	Total	FFRDC	Nonfederal government	Business	Higher education	Total	FFRDC	Business	Higher education	NPO	Higher education	Total	FFRDC	Business	Higher education	NPO	
Constant 2012 \$millions																									
1953	3,182	1,835	703	249	NA	132	564	187	45	NA	NA	NA	45	1,067	NA	914	90	62	42	194	NA	NA	111	83	
1954	3,490	1,994	659	305	NA	158	662	209	66	NA	NA	NA	66	1,160	NA	981	103	75	58	213	NA	NA	124	89	
1955	3,846	2,146	658	418	NA	47	786	236	94	NA	NA	NA	94	1,296	NA	1,093	115	88	78	233	NA	NA	138	94	
1956	4,683	2,559	741	581	NA	44	930	264	124	NA	NA	NA	124	1,635	NA	1,409	127	98	101	264	NA	NA	153	111	
1957	5,138	2,852	783	692	NA	25	1,052	300	157	NA	NA	NA	157	1,690	NA	1,453	142	95	125	316	NA	NA	171	145	
1958	5,825	3,317	920	710	NA	84	1,248	355	192	NA	NA	NA	192	1,803	NA	1,556	148	99	148	364	NA	NA	191	173	
1959	6,622	4,054	1,002	813	NA	207	1,599	433	229	NA	NA	NA	229	1,767	NA	1,511	146	110	173	399	NA	NA	216	183	
1960	7,727	4,770	1,103	902	NA	214	2,047	505	271	NA	NA	NA	271	2,059	NA	1,785	147	126	201	427	NA	NA	246	180	
1961	8,986	5,781	1,365	1,053	NA	181	2,566	616	319	NA	NA	NA	319	2,147	NA	1,867	149	131	237	503	NA	NA	282	220	
1962	10,719	7,158	1,481	1,111	NA	612	3,205	749	374	NA	NA	NA	374	2,315	NA	2,027	147	141	281	591	NA	NA	320	270	
1963	12,287	8,398	1,653	1,255	NA	635	4,002	854	435	NA	NA	NA	435	2,466	NA	2,178	142	145	334	653	NA	NA	363	290	
1964	13,708	9,686	1,940	1,402	NA	704	4,712	930	483	NA	NA	NA	483	2,483	NA	2,197	143	143	398	658	NA	NA	389	269	
1965	14,968	10,676	2,104	1,405	NA	882	5,301	983	531	NA	NA	NA	531	2,593	NA	2,281	149	163	483	685	NA	NA	393	292	
1966	16,015	11,342	2,241	1,492	NA	776	5,827	1,006	566	NA	NA	NA	566	2,799	NA	2,465	159	175	582	727	NA	NA	410	317	
1967	16,824	12,107	2,302	1,599	NA	892	6,307	1,007	605	NA	NA	NA	605	2,626	NA	2,268	178	181	720	765	NA	NA	441	324	
1968	17,199	12,219	2,455	1,602	NA	739	6,444	978	666	NA	NA	NA	666	2,733	NA	2,354	191	188	796	785	NA	NA	464	321	
1969	16,953	11,931	2,648	1,520	NA	597	6,253	913	742	NA	NA	NA	742	2,625	NA	2,224	192	209	831	823	NA	NA	498	325	
1970	16,579	11,540	2,592	1,402	NA	563	6,101	881	827	NA	NA	NA	827	2,450	NA	2,048	198	203	903	860	NA	NA	528	332	
1971	16,333	11,234	2,552	1,267	NA	443	6,078	893	850	NA	NA	NA	850	2,417	NA	2,002	217	198	939	893	NA	NA	555	338	
1972	16,203	11,176	2,536	1,315	NA	383	6,048	894	822	NA	NA	NA	822	2,378	NA	1,949	231	198	909	917	NA	NA	564	354	
1973	16,357	11,359	2,601	1,524	NA	383	5,939	912	783	NA	NA	NA	783	2,420	NA	1,991	233	196	890	904	NA	NA	545	359	
1974	16,512	11,517	2,616	1,710	NA	417	5,890	884	746	NA	NA	NA	746	2,401	NA	1,962	242	197	916	932	NA	NA	558	373	
1975	16,331	11,442	2,545	1,784	NA	348	5,923	841	712	NA	NA	NA	712	2,358	NA	1,920	240	199	883	936	NA	NA	549	387	
1976	17,062	12,043	2,699	1,997	NA	368	6,110	869	691	NA	NA	NA	691	2,459	NA	2,013	238	207	900	970	NA	NA	554	415	
1977	17,963	12,661	2,819	2,230	NA	404	6,320	888	693	NA	NA	NA	693	2,576	NA	2,096	266	214	999	1,033	NA	NA	590	443	
1978	19,438	13,827	2,917	2,807	NA	436	6,701	966	726	NA	NA	NA	726	2,710	NA	2,193	297	220	1,112	1,062	NA	NA	594	468	
1979	20,213	14,337	2,869	2,991	NA	415	7,013	1,048	737	NA	NA	NA	737	2,856	NA	2,303	329	224	1,202	1,080	NA	NA	591	489	
1980	20,691	14,542	2,868	3,061	NA	402	7,240	971	726	NA	NA	NA	726	3,043	NA	2,448	369	226	1,287	1,095	NA	NA	587	508	
1981	20,871	14,245	2,902	3,090	NA	354	7,199	700	731	NA	NA	NA	731	3,459	NA	2,838	395	226	1,330	1,107	NA	NA	582	525	
1982	21,678	14,494	3,097	3,059	NA	515	7,072	751	749	NA	NA	NA	749	3,773	NA	3,100	439	234	1,458	1,204	NA	NA	645	559	
1983	23,269	15,382	3,394	3,252	NA	678	7,224	834	775	NA	NA	NA	775	4,204	NA	3,447	509	248	1,599	1,309	NA	NA	701	608	
1984	25,203	16,355	3,548	3,505	NA	643	7,725	934	823	NA	NA	NA	823	4,885	NA	4,030	591	263	1,729	1,410	NA	NA	746	664	
1985	27,026	17,238	3,568	3,548	NA	656	8,439	1,026	943	NA	NA	NA	943	5,341	NA	4,348	713	280	1,971	1,533	NA	NA	806	727	

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1986	30,813	18,358	3,639	3,674	NA	780	9,200	1,066	1,088	NA	NA	NA	1,088	7,418	NA	6,280	837	302	2,267	1,682	NA	NA	876	806	
1987	32,396	19,440	3,589	3,931	NA	1,048	9,688	1,184	1,154	NA	NA	NA	1,154	7,505	NA	6,281	901	323	2,453	1,844	NA	NA	956	888	
1988	33,504	20,484	3,583	4,458	NA	1,111	10,052	1,280	1,194	NA	NA	NA	1,194	7,238	NA	5,938	956	343	2,590	1,998	NA	NA	1,028	970	
1989	35,668	21,821	3,762	4,587	NA	1,607	10,464	1,402	1,248	NA	NA	NA	1,248	7,645	NA	6,244	1,039	363	2,793	2,161	NA	NA	1,108	1,054	
1990	36,169	22,077	3,642	4,764	NA	1,365	10,819	1,487	1,330	NA	NA	NA	1,330	7,397	NA	5,905	1,108	384	3,030	2,335	NA	NA	1,187	1,147	
1991	41,231	23,218	3,613	4,854	NA	1,901	11,277	1,574	1,385	NA	NA	NA	1,385	10,874	NA	9,305	1,160	408	3,232	2,522	NA	NA	1,269	1,253	
1992	41,001	23,335	3,593	5,062	NA	1,058	11,969	1,655	1,398	NA	NA	NA	1,398	10,286	NA	8,639	1,210	438	3,272	2,710	NA	NA	1,327	1,383	
1993	41,704	23,794	3,803	5,103	NA	676	12,533	1,679	1,382	NA	NA	NA	1,382	10,354	NA	8,649	1,235	470	3,291	2,883	NA	NA	1,358	1,525	
1994	42,123	23,823	3,618	4,989	NA	619	12,982	1,615	1,409	NA	NA	NA	1,409	10,404	NA	8,635	1,264	505	3,419	3,069	NA	NA	1,384	1,685	
1995	41,202	23,640	3,742	4,601	NA	264	13,405	1,628	1,488	NA	NA	NA	1,488	9,343	NA	7,485	1,315	543	3,493	3,236	NA	NA	1,374	1,862	
1996	44,818	24,682	3,662	4,636	NA	888	13,790	1,706	1,570	NA	NA	NA	1,570	11,353	NA	9,357	1,410	585	3,744	3,469	NA	NA	1,405	2,064	
1997	49,320	25,862	3,688	4,572	NA	1,382	14,451	1,769	1,657	NA	NA	NA	1,657	13,938	NA	11,775	1,559	603	4,231	3,632	NA	NA	1,541	2,091	
1998	46,281	27,195	3,989	4,571	NA	1,331	15,365	1,940	1,717	NA	NA	NA	1,717	8,774	NA	6,444	1,697	634	4,642	3,953	NA	NA	1,673	2,280	
1999	50,127	29,283	4,382	4,869	NA	1,451	16,310	2,270	1,815	NA	NA	NA	1,815	9,727	NA	7,250	1,801	677	5,039	4,262	NA	NA	1,828	2,435	
2000	53,836	31,116	4,822	5,170	NA	1,185	17,251	2,689	1,923	NA	NA	NA	1,923	10,418	NA	7,832	1,861	725	5,525	4,854	NA	NA	1,990	2,864	
2001	58,707	33,591	5,339	5,520	NA	945	18,698	3,088	2,025	12	NA	NA	2,012	11,781	78	9,148	1,839	716	5,964	5,347	120	NA	2,136	3,092	
2002	62,662	37,188	5,565	6,205	NA	1,096	21,146	3,177	2,171	18	NA	NA	2,153	10,771	75	8,216	1,797	684	6,553	5,980	152	NA	2,333	3,495	
2003	66,407	39,837	5,650	5,940	NA	1,679	23,280	3,288	2,309	16	NA	NA	2,293	10,904	67	8,411	1,739	686	6,894	6,462	123	NA	2,395	3,944	
2004	66,501	40,268	5,540	5,723	NA	1,264	24,452	3,289	2,373	14	NA	NA	2,359	10,465	56	7,977	1,750	682	7,036	6,358	76	NA	2,438	3,845	
2005	68,524	40,684	5,457	5,719	NA	1,267	24,921	3,320	2,380	14	NA	NA	2,365	11,242	62	8,647	1,831	703	7,513	6,704	80	NA	2,546	4,078	
2006	68,359	40,387	5,236	5,641	17	1,603	24,726	3,163	2,479	13	34	NA	2,432	10,468	75	7,705	1,959	729	8,092	6,932	87	NA	2,699	4,147	
2007	69,852	39,027	4,996	3,566	22	3,006	24,378	3,059	2,647	11	41	NA	2,595	12,109	61	9,178	2,115	754	8,576	7,493	73	NA	2,955	4,465	
2008	72,697	38,094	5,257	3,640	28	1,564	24,346	3,260	2,803	11	50	13	2,729	14,620	69	11,522	2,260	768	8,981	8,200	72	19	3,184	4,925	
2009	76,693	39,722	5,727	4,665	35	1,410	24,202	3,682	2,672	13	60	14	2,585	16,997	61	14,101	2,099	735	8,687	8,615	72	36	3,191	5,317	
2010	79,434	41,652	5,317	6,737	41	1,463	24,540	3,553	2,463	19	66	11	2,368	18,155	70	15,499	1,855	731	8,324	8,840	80	61	3,101	5,599	
2011	74,920	39,899	5,144	6,454	41	690	24,429	3,140	2,384	11	64	22	2,287	15,184	69	12,520	1,838	758	8,650	8,804	65	38	3,092	5,608	
2012	73,807	38,080	5,489	5,530	40	644	23,285	3,092	2,283	14	59	10	2,200	15,301	61	12,611	1,865	764	9,236	8,908	57	29	3,188	5,635	
2013	77,734	35,533	5,238	4,015	38	1,175	22,088	2,979	2,253	12	53	20	2,168	20,680	52	17,889	1,940	799	9,747	9,521	38	87	3,364	6,033	
2014	79,829	35,629	5,505	3,934	40	1,972	21,196	2,982	2,239	6	55	16	2,162	21,956	51	19,063	2,013	829	9,978	10,027	32	115	3,484	6,395	
2015	80,506	35,461	5,630	3,864	40	1,948	21,079	2,900	2,264	4	56	13	2,190	21,755	45	18,754	2,105	852	10,489	10,537	30	114	3,627	6,765	
2016	85,118	35,890	5,788	3,889	36	1,927	21,199	3,050	2,293	5	52	19	2,217	24,737	42	21,640	2,158	898	10,955	11,243	33	111	3,792	7,308	
2017	86,778	36,032	5,811	3,764	39	1,720	21,510	3,188	2,284	6	57	16	2,205	25,148	35	21,951	2,230	931	11,365	11,949	28	95	4,026	7,800	
2018	91,684	37,682	6,189	3,797	44	2,299	22,021	3,331	2,290	8	64	11	2,207	27,436	35	24,071	2,345	985	11,751	12,524	30	101	4,273	8,120	
2019 ^a	96,057	39,111	6,604	4,008	48	2,504	22,592	3,354	2,322	9	67	12	2,234	29,399	33	25,871	2,458	1,037	12,124	13,100	30	115	4,500	8,455	

NA = not available.

FFRDC = federally funded research and development center; NPO = nonprofit organization.

^a The data for 2019 are estimates and will later be revised.

Note(s):

This table reaggregates the R&D performer data in table 3 according to major categories of R&D funding: federal government, nonfederal government (state and local), business, higher education, and NPOs. Business sources of R&D funding in this table include the own funds of domestic R&D performing businesses, funds from other domestic businesses, and funds from foreign businesses. For further detail on the R&D performers listed, see table 2, footnotes a–f. Detail may not add to total because of rounding. Constant-dollar estimates are derived from unrounded data. For comparisons, use only the historical data reported in this table because some back-year data may have been revised. Except for the nonprofit sector, data are based on annual reports by performers in the National Center for Science and Engineering Statistics' annual R&D expenditure surveys: Business Research and Development Survey, Annual Business Survey, Higher Education Research and Development Survey, Survey of Federal Funds for Research and Development, FFRDC Research and Development Expenditures Survey, and Survey of State Government Research and Development. R&D expenditures by business performers—and, before 2001, also industry-administered FFRDCs—are collected on a calendar year basis. Expenditures for other performers are calendar year approximations based on fiscal year data. (See also table 3, general notes.) The 1998–2018 data for NPO R&D performance funded by businesses and the nonprofit sector itself are estimated, based on parameters from the 1996–97 Survey of Research and Development Funding and Performance by Nonprofit Organizations. Type-of-R&D data for business R&D in 1998–2007 were revised in response to data quality review considerations and are not directly comparable with the data for 1997 and earlier years. For 2008 and onward, the type-of-R&D splits for other than total, own-funded, and federally funded R&D are estimated. (See also table 2, footnote d.) Type-of-R&D data for FFRDC R&D in 1953–54 include only those of university-administered FFRDCs. Starting in 2001, type-of-R&D data distinguish federally funded from nonfederally funded FFRDC R&D. (See also table 2, footnote b.) The type-of-R&D estimation procedure for higher education R&D was revised in 1998 and again in 2010; hence, these data are not directly comparable with data reported for earlier years. Furthermore, the type-of-R&D splits for other than total and federally funded are estimated. (See also table 2, footnote e.) Type-of-R&D data for R&D by NPOs in 1998 and later years are estimated, except for those that are federally funded. (See also table 2, footnote f.) Type-of-R&D data for state intramural R&D became available in the 2016 Survey of State Government Research and Development. These data prior to 2016 are estimated. (See also table 2, footnote c.)

Source(s):

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