

Table 7**U.S. business R&D expenditures, by type of R&D: 1970–2022**

(Billions of current and constant 2017 dollars and percent)

Type of R&D	1970	1975	1980	1985	1990	1995	2000	2005	2008	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021 ^a	2022 ^b
Current \$billions																						
R&D	10.4	15.8	30.9	58.0	83.2	110.9	186.0	207.8	258.0	248.1	266.4	275.7	297.2	318.4	333.2	360.3	386.5	426.5	482.2	520.4	591.0	672.9
Research	3.0	4.2	8.0	16.1	23.6	31.1	45.4	50.7	56.2	58.6	58.7	63.0	67.2	70.9	74.5	85.4	87.7	93.7	107.4	113.0	130.0	146.8
Experimental development	7.5	11.6	22.9	41.9	59.6	79.7	140.5	157.1	201.8	189.5	207.7	212.7	230.0	247.5	258.8	274.9	298.8	332.8	374.8	407.3	461.0	526.0
Constant 2017 \$billions																						
R&D	51.8	56.9	78.6	114.0	140.3	165.6	255.7	254.8	293.2	276.8	291.2	295.9	313.6	330.2	342.4	366.7	386.5	416.9	463.6	493.8	536.2	570.4
Research	14.7	15.2	20.3	31.7	39.9	46.5	62.5	62.2	63.8	65.4	64.2	67.6	70.9	73.6	76.5	86.9	87.7	91.6	103.3	107.3	117.9	124.5
Experimental development	37.1	41.7	58.3	82.4	100.4	119.1	193.3	192.6	229.3	211.5	227.1	228.3	242.7	256.7	265.9	279.9	298.8	325.3	360.4	386.5	418.3	445.9
Percent distribution																						
R&D	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Research	28.3	26.7	25.8	27.8	28.4	28.1	24.4	24.4	21.8	23.6	22.0	22.9	22.6	22.3	22.4	23.7	22.7	22.0	22.3	21.7	22.0	21.8
Experimental development	71.7	73.3	74.2	72.2	71.6	71.9	75.6	75.6	78.2	76.4	78.0	77.1	77.4	77.7	77.6	76.3	77.3	78.0	77.7	78.3	78.0	78.2

^a Some data for 2021 are preliminary and may later be revised.^b The R&D data for 2022 include estimates and are likely to later be revised.**Source(s):**

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