

TABLE 21. Domestic R&D paid for by the U.S. federal government and performed by the company, by funding agency, industry, and company size: 2008

(Millions of U.S. dollars)

Industry and company size	NAICS code	Total	DOD	DOE	NASA	NIH	All other agencies
All industries	21–23, 31–33, 42–81	36,360	28,314	527	2,136	877	4,506
Manufacturing industries	31–33	31,102	25,130 i	351	1,705	245	3,671
Food	311	2	1	1	0	0	* i
Beverage and tobacco products	312	0	0	0	0	0	0
Textiles, apparel, and leather products	313–316	D	D	0	0	0	0
Wood products	321	0	0	0	0	0	0
Paper	322	D	D	3	0	0	1
Printing and related support activities	323	32	0	0	0	32	0
Petroleum and coal products	324	*	0	*	0	0	0
Chemicals	325	197	59	26	*	96	16
Basic chemicals	3251	33	15	16	0	*	2
Resin, synthetic rubber, fibers, and filaments	3252	12	D	D	0	*	*
Pesticide, fertilizer, and other agricultural chemical	3253	1	1	0	0	0	0
Pharmaceuticals and medicines	3254	137	28	0	*	96	14
Soap, cleaning compound, and toilet preparation	3256	6	6	0	0	0	0
Paint, coating, adhesive, and other chemical	3255, 3259	8	D	D	*	0	*
Plastics and rubber products	326	4	2	0	0	0	2
Nonmetallic mineral products	327	33	11	11	1	8	1
Primary metals	331	9	7	D	0	0	D
Fabricated metal products	332	16	7	8	0	0	*
Machinery	333	62	25	22	*	*	14
Agricultural implement	33311	0	0	0	0	0	0
Semiconductor machinery	333295	32	7	18	*	*	7
Engine, turbine, and power transmission equipment	3336	9	7	2	0	0	0
Other machinery	other 333	21	12	2	*	0	8
Computer and electronic products	334	4,646	2,598	34	120	90	1,805
Communications equipment	3342	D	D	0	2 i	D	D
Semiconductor and other electronic components	3344	D	D	13	3	D	D
Navigational, measuring, electromedical, and control instruments	3345	3,635	1,836	21	115	63	1,599
Electromedical, electrotherapeutic, and irradiation apparatus	334510, 334517	1,098 i	D	7	12 i	D	D
Search, detection, navigation, guidance, aeronautical, and nautical system and instruments	334511	2,410	D	4	103	0	D
Other measuring and controlling instruments	other 3345	127	D	10	*	D	D
Computer and peripheral equipment and other computer and electronic products	3341, 3343, 3346	51	41	*	0	D	D
Electrical equipment, appliances, and components	335	91	54	16	1	6	13 i
Transportation equipment	336	25,941 i	22,314 i	228	1,582	6	1,811
Automobiles, bodies, trailers, and parts	3361–3363	D	D	D	2 i	* i	3
Aerospace products and parts	3364	25,805 i	22,221 i	D	1,579	6	D
Aircraft, aircraft engine, and aircraft parts	336411–336413	D	18,322	D	960	3	D
Guided missile, space vehicle, and related parts	336414, 336415, 336419	D	3,899 i	3 i	619	3 i	D
Military armored vehicle, tank, and tank components	336992	D	D	0	0	0	0
Other transportation	other 336	D	D	* i	2 i	* i	D

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Furniture and related products	337	0	0	0	0	0	0
Miscellaneous manufacturing	339	54	D	D	0	7	D
Medical equipment and supplies	3391	20	14	*	0	5	1
Other miscellaneous manufacturing	3399	34	D	D	0	2	D
Nonmanufacturing industries	21–23, 42–81	5,258	3,184	175	431	633	835
Mining, extraction, and support activities	21	5	D	D	0	0	*
Utilities	22	D	1	D	0	0	0
Construction	23	0	0	0	0	0	0
Wholesale trade	42	46	11	0	0	32	2 i
Retail trade	44, 45	0	0	0	0	0	0
Electronic shopping and mail-order houses	4541	0	0	0	0	0	0
Other retail trade	other 44, 45	0	0	0	0	0	0
Transportation and warehousing	48, 49	*	0	0	0	0	*
Information	51	229	161	1	5	5	57
Publishing	511	176	129	1	3	5	38
Newspaper, periodical, book, and directory publishers	5111	0	0	0	0	0	0
Software publishers	5112	176	129	1	3	5	38
Telecommunications	517	35	31	0	1	0	3
Internet service providers, Web search portals, and data processing services	518	1	1	0	0	0	0
Other information	other 51	17 i	0	0	0	0	17 i
Finance and insurance	52	0	0	0	0	0	0
Real estate and rental and leasing	53	0	0	0	0	0	0
Professional, scientific, and technical services	54	4,844	3,003	86	426	586	743
Architectural, engineering, and related services	5413	928	641	23	228	D	D
Computer systems design and related services	5415	784	545	2	*	158	78
Scientific R&D services	5417	2,115	1,079	43	66	386	541
Other professional, scientific, and technical services	other 54	1,016	738	18	132	D	D
Health care services	621–623	16	5	0	0	10	1
Other nonmanufacturing	55, 56, 61, 624, 71, 72, 81	D	D	56	*	0	31
All companies	21–23, 31–33, 42–81	36,360	28,314	527	2,136	877	4,506
Small companies (number of domestic employees) <sup>a</sup>							
5–499	–	4,117	2,771	126	127	660	433 i
5–99	–	2,667	1,599	92	85	573	319 i
5–49	–	1,972	1,200	51	56	375	290 i
5–24	–	1,086	638	32	20	300	97
25–49	–	886	562	19	37	75	194 i
50–99	–	695	399	40	28	198	29
100–249	–	718	533	25	35	57	68
250–499	–	732	640	9	7	30	46 i
Medium and large companies (number of domestic employees)							
500–999	–	747	473	4	D	66	D

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1,000–4,999	–	2,162 i	951 i	75	112	116	908 i
5,000–9,999	–	1,168	927	34	192	0	16 i
10,000–24,999	–	3,024	2,278	20	D	28 i	D
25,000 or more	–	25,142 i	20,913 i	269	1,070	8	2,882

\* = amount < \$500,000; D = data withheld to avoid disclosing operations of individual companies; i = value > 50% of estimate is a combination of imputation and reweighting to account for nonresponse.

DOD = Department of Defense; DOE = Department of Energy; NAICS = 2002 North American Industry Classification System; NASA = National Aeronautics and Space Administration; NIH = National Institutes of Health.

<sup>a</sup> Upper bound based on U.S. Small Business Administration's definition of small business; Business R&D and Innovation Survey (BRDIS) does not include companies with fewer than five domestic employees. After 2008 BRDIS sample was selected and surveyed, an error was identified that resulted in excluding 226,884 single-establishment companies with five paid employees from sample frame. Most excluded establishments were classified in industries with low R&D intensities, such as construction, retail trade, and service sectors. Based on available information for these small single-establishment companies, their contribution to 2008 R&D estimates is estimated to be negligible.

NOTES: Detail may not add to total because of rounding. Industry classification based on dominant business code for domestic R&D performance where available. For companies that did not report business codes, classification used for sampling was assigned. Statistics are representative of companies located in United States that performed or funded R&D.

SOURCE: National Science Foundation/National Center for Science and Engineering Statistics and U.S. Census Bureau, Business R&D and Innovation Survey, 2008.