

TABLE 6. Costs for industrial R&D performed in the United States, by industry and company size, by type of cost: 2006

(Percent distribution)

Industry and company size	NAICS codes	All R&D costs		Wages of R&D personnel	Employer's cost of fringe benefits for R&D personnel	Materials and supplies	R&D depreciation	Other costs
		\$millions	Percent					
All industries	21–23, 31–33, 42, 44–81	247,669	100.0	46.6	10.1 i	12.5 i	4.2	26.5
Manufacturing industries	31–33	171,814	100.0	44.4 i	10.0 i	13.8 i	4.6 i	27.2 i
Food	311	2,720	100.0	41.7	13.7	9.8	4.3	30.5
Beverage and tobacco products	312	547 i	100.0	44.2 i	17.4 i	8.0 i	4.3 i	26.1 i
Textiles, apparel, and leather	313–16	594	100.0	53.4	9.9	10.3	2.5	23.8
Wood products	321	195	100.0	45.8 i	11.5 i	10.3 i	3.0 i	29.4
Paper, printing, and support activities	322, 323	D	100.0	37.7 i	12.5 i	22.6 i	4.6 i	22.6 i
Petroleum and coal products	324	1,432	100.0	35.7 i	13.8 i	9.3	3.6 i	37.6 i
Chemicals	325	46,329	100.0	31.0 i	9.1 i	11.0 i	4.5 i	44.4 i
Basic chemicals	3251	2,152	100.0	41.5	11.3	11.3	4.9	31.0
Resin, synthetic rubber, fibers, and filament	3252	1,975	100.0	46.0	7.1	8.8	10.3	27.7
Pharmaceuticals and medicines	3254	38,901	100.0	28.8 i	8.7 i	11.1 i	3.8 i	47.6 i
Other chemicals	other 325	3,300	100.0	43.0	13.8	10.6	9.0	23.6 i
Plastics and rubber products	326	2,245	100.0	40.2	9.0	29.4	3.6 i	17.7
Nonmetallic mineral products	327	1,014	100.0	35.4	12.8	17.3	5.5	28.9
Primary metals	331	651	100.0	39.2 i	11.4 i	15.3 i	13.0 i	21.1 i
Fabricated metal products	332	1,499	100.0	50.2	12.4	12.6	3.5	21.3
Machinery	333	9,848	100.0	48.8 i	10.9	15.6 i	4.3	20.4
Computer and electronic products	334	56,773	100.0	51.9 i	10.3 i	13.0 i	5.8	19.1 i
Computers and peripheral equipment	3341	D	100.0	53.1 i	10.3 i	9.1 i	7.1 i	20.3 i
Communications equipment	3342	D	100.0	56.2	12.8	6.7 i	6.3	18.0 i
Semiconductor and other electronic components	3344	18,888	100.0	52.8	6.7	11.3	6.9	22.4
Navigational, measuring, electromedical, and control instruments	3345	18,300	100.0	48.0 i	12.4 i	20.1 i	3.9 i	15.7 i
Other computer and electronic products	other 334	D	100.0	48.5 i	9.4 i	12.1 i	5.5 i	24.5 i
Electrical equipment, appliances, and components	335	2,281	100.0	51.9	11.7	11.7	2.3	22.4
Transportation equipment	336	D	100.0	49.6 i	9.3 i	17.3	3.5 i	20.3
Motor vehicles, trailers, and parts	3361–63	D	100.0	49.5 i	10.7 i	18.8	4.3 i	16.7
Aerospace products and parts	3364	16,367	100.0	50.7	7.5 i	16.4	2.5 i	23.0
Other transportation equipment	other 336	D	100.0	45.6 i	11.1 i	15.2 i	4.4 i	23.7
Furniture and related products	337	D	100.0	55.3	7.9	16.5	1.7	18.5
Miscellaneous manufacturing	339	5,150	100.0	42.5	12.5	12.7 i	3.8 i	28.4
Medical equipment and supplies	3391	4,098	100.0	41.2 i	12.3 i	13.4 i	4.1 i	29.0
Other miscellaneous manufacturing	other 339	1,052	100.0	48.4	13.1	10.1	2.5 i	26.0

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		\$millions	Percent					
Nonmanufacturing industries	21–23, 42, 44–81	75,855	100.0	53.0	10.3	9.0 i	3.1	24.6
Mining, extraction, and support activities	21	D	100.0	47.7	10.7	11.8	2.0	27.8
Utilities	22	248	100.0	37.0	8.8	13.3	8.5	32.5
Construction	23	1,379	100.0	11.9 i	2.7 i	79.9 i	1.6 i	4.0 i
Wholesale trade	42	2,072	100.0	48.2	11.0	7.2 i	4.2	29.5 i
Retail trade	44, 45	D	100.0	58.9	12.7	12.4	2.9 i	13.0
Transportation and warehousing	48, 49	D	100.0	54.0 i	22.0 i	6.1 i	2.9 i	15.1 i
Information	51	26,883	100.0	62.0	10.0	3.8 i	2.5	21.7
Publishing	511	D	100.0	61.1	11.0	2.4 i	2.0	23.5
Newspaper, periodical, book, and directory	5111	D	100.0	65.5	11.8	1.9 i	6.8 i	14.0
Software	5112	D	100.0	60.9	10.9	2.4	1.8	24.0
Telecommunications	517	D	100.0	57.6 i	8.8 i	20.1 i	2.0 i	11.6 i
Wired and wireless (except satellite) telecommunications carriers	5171, 5172	D	100.0	59.0	9.0 i	18.1 i	2.0 i	12.0
Satellite telecommunications	5174	D	100.0	-	-	-	-	-
Other telecommunications	other 517	D	100.0	50.7 i	7.8 i	29.9 i	2.1 i	9.5 i
Internet service providers, Web search portals, and data-processing services	518	4,029	100.0	69.9	5.1	2.8	5.4	16.7
Internet service providers and Web search portals	5181	D	100.0	65.0	4.9	4.3	9.1	16.7
Data-processing, hosting, and related services	5182	D	100.0	73.7	5.3	1.6	2.7	16.8
Other information	other 51	732	100.0	54.6	14.6	2.6	2.2	26.1
Finance, insurance, and real estate	52, 53	1,969	100.0	70.0	9.8	4.1	2.5	13.6
Professional, scientific, and technical services	54	38,049	100.0	45.6	10.9	11.1	3.9	28.4
Architectural, engineering, and related services	5413	6,579	100.0	45.4	18.3	16.6 i	2.5	17.2
Computer systems design and related services	5415	14,841	100.0	55.3	9.4	5.5	4.4	25.4
Scientific R&D services	5417	14,525	100.0	36.8 i	9.5	14.3	4.1	35.3
Other professional, scientific, and technical services	other 54	2,105	100.0	54.5	16.4	9.2 i	2.2 i	17.6 i
Health care services	621–23	992	100.0	39.7 i	7.4	3.0	1.0	48.9
Other nonmanufacturing ^a	55, 56, 61, 624, 71, 72, 81	1,479	100.0	59.9	7.7	3.6	1.3	27.5

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		\$millions	Percent					
Company size (employees)								
All companies	-	247,669	100.0	46.6	10.1 i	12.5 i	4.2	26.5
5-24	-	7,207	100.0	36.4	8.0 i	12.1 i	4.2 i	39.3
25-49	-	D	100.0	35.6	8.3	13.2	3.8	39.2
50-99	-	9,064	100.0	41.1	8.5 i	11.1	3.9	35.4
100-249	-	13,306	100.0	43.2	9.8	13.1	4.0	29.9
250-499	-	D	100.0	48.2	10.6	10.9	4.0	26.3
500-999	-	13,360	100.0	43.7	9.0	11.9	4.2	31.1
1,000-4,999	-	37,866	100.0	47.0	11.0	11.6	3.8	26.5
5,000-9,999	-	20,434	100.0	52.2 i	9.8	10.2 i	4.3	23.5
10,000-24,999	-	37,865	100.0	40.1	10.3	12.4 i	4.1	33.1
25,000 or more	-	92,925	100.0	48.9 i	9.9 i	13.6 i	4.5 i	23.1 i

D = suppressed to avoid disclosure of confidential information; i = more than 50% of the value is imputed; - = not applicable.

^a Estimates for management of companies and enterprises (NAICS 55), formerly shown separately, now are included in other nonmanufacturing.

NOTES: Detail does not add to total due to rounding or suppression. The method used to assign industry classifications has changed; industry-specific estimates are not directly comparable with those for years prior to 2004. Excludes federally funded research and development centers. The R&D in this table is the industrial R&D performed within company facilities funded from all sources. The funds are the company's own; funds from outside organizations, such as other companies, research institutions, universities and colleges, nonprofit organizations, and state governments; and funds from the federal government. Excludes R&D performed outside of the company (e.g., R&D performed by other organizations) and R&D performed outside of the 50 U.S. states or DC (e.g., R&D not performed on U.S. soil by foreign subsidiaries or other foreign organizations). Data for R&D by type of expense are collected only on Form RD-1, the questionnaire sent to larger R&D-performing companies. Consequently, the universe of companies may not be represented by the statistics in this table. For definitions and more information about year-to-year comparability of the statistics, see technical notes and survey methodology.

SOURCE: National Science Foundation/Division of Science Resources Statistics, Survey of Industrial Research and Development: 2006.