

Table A-4. Total (Federal plus company and other) funds for industrial R&D performance in the U.S., by industry, by size of company: 2001

Industry	NAICS codes	Size of company (number of employees)										
		Total ¹	5 to	25 to	50 to	100 to	250 to	500 to	1,000 to	5,000 to	10,000 to	25,000
			24	49	99	249	499	999	4,999	9,999	24,999	or more
Millions of dollars												
Distribution by industry:												
All industries	21-23, 31-33, 42, 44-81	198,505	4,828	3,750	8,202	12,916	8,702	10,564	26,748	17,487	27,065	78,244
Manufacturing	31-33	120,705	973	1,123	3,924	4,817	3,345	5,290	15,828	10,918	15,647	58,840
Food	311	1,819	4	28	40	18	57	128	281	55	345	863
Beverage and tobacco products	312	152	0	0	0	0	0	(D)	37	91	(D)	0
Textiles, apparel, and leather	313-16	(D)	26	(D)	6	2	27	19	123	(D)	51	0
Wood products	321	182	56	0	4	1	4	(D)	24	29	(D)	0
Paper, printing and support activities	322, 323	(D)	2	15	35	12	58	(D)	80	93	377	2,016
Petroleum and coal products	324	(D)	0	0	0	0	6	5	7	(D)	2	955
Chemicals	325	17,892	213	427	499	135	146	588	2,627	2,658	4,644	5,955
Basic chemicals	3251	1,876	32	28	144	77	36	221	695	345	299	0
Resin, synthetic rubber, fibers, and filament	3252	(D)	0	0	161	(D)	(D)	105	200	344	(D)	(D)
Pharmaceuticals and medicines	3254	10,137	2	392	115	(D)	(D)	177	983	1,055	3,588	3,780
Other chemicals	325 minus (3251-52, 3254)	(D)	179	7	79	30	83	85	749	915	(D)	(D)
Plastics and rubber products	326	(D)	1	0	25	73	967	228	345	141	126	(D)
Nonmetallic mineral products	327	990	23	28	0	28	515	15	130	59 (S)	190	0
Primary metals	331	485	28	(D)	3	11	9	38	105	40	44	(D)
Fabricated metal products	332	1,599	66	(D)	51	93	56	109	210	172	236	(D)
Machinery	333	6,404	102	68	221	194	250	549	1,490	637	1,674	1,218
Computer and electronic products	334	47,079	287	360	2,908	2,353	826	2,815	7,730	5,148	4,959	19,694
Computers and peripheral equipment	3341	(D)	30	(D)	47	290	163	350	(D)	1,590	472	0
Communications equipment	3342	15,507	82	0	1,419	694	281	1,566	1,165	(D)	(D)	(D)
Semiconductor and other electronic components	3344	14,358	0	270	784	212	191	354	4,724	1,017	2,449	4,358
Navigational, measuring, electromedical, and control instruments	3345	12,947	175	83	635	374	148	503	1,474	1,270	1,724	6,560
Other computer and electronic products	334 minus (3341-42, 3344-45)	(D)	0	(D)	23	784	43	42	(D)	(D)	(D)	(D)
Electrical equipment, appliances, and components	335	4,980	4	96	35	1,564	(D)	211	445	176	765	1,656 (S)
Transportation equipment	336	25,965	42	0	41	13	180	402	631	801	1,195	22,661
Motor vehicles, trailers, and parts	3361-63	(D)	41	0	26	0	102	(D)	487	311	(D)	15,529
Aerospace products and parts	3364	7,868	0	0	15	13	0	(D)	58	367	(D)	(D)
Other transportation equipment	336 minus (3361-64)	(D)	1	0	0	0	77	20	86	122	405 (S)	(D)
Furniture and related products	337	301	0	0	1	14	22	28	46	(D)	83	(D)
Miscellaneous manufacturing	339	6,606	120	91	54	305	194	151	1,517	(D)	872	(D)
Medical equipment and supplies	3391	(D)	103	85	21	241	162	115	1,227	635	(D)	(D)
Other miscellaneous manufacturing	339 minus (3391)	(D)	17	6	33	64	32	36	290	(D)	(D)	(D)
Other manufacturing	31-33 minus (311-16, 321-27, 331-37, 339)	--	--	--	--	--	--	--	--	--	--	--

See explanatory information and SOURCE at end of table.

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Industry	NAICS codes	Total ¹	Size of company [number of employees]									
			5 to 24	25 to 49	50 to 99	100 to 249	250 to 499	500 to 999	1,000 to 4,999	5,000 to 9,999	10,000 to 24,999	25,000 or more
Millions of dollars												
Distribution by industry:												
Nonmanufacturing	21-23, 42, 44-81	77,799	3,855	2,627	4,278	8,099	5,357	5,273	10,919	6,569	11,418	19,404
Mining, extraction, and support activities	21	(D)	0	4	0	0	(D)	13	54	95	(D)	(D)
Utilities	22	133	0	0	0	1	(D)	(D)	28	39	32	(D)
Construction	23	320	81	2	0	4	91 (S)	(D)	(D)	(D)	108	0
Trade	42, 44, 45	24,372	274	52	198	717	236	512	2,715	3,632	6,311	9,725
Transportation and warehousing	48, 49	1,848	1,439	2	(D)	(D)	0	(D)	25	0	(D)	363
Information	51	(D)	207	334	518	808	1,129	1,252	3,926	(D)	2,304	6,656
Publishing	511	13,760	206	272	430	670	(D)	989	3,617	(D)	(D)	(D)
Newspaper, periodical, book, and database	5111	649	24	58	1	0	(D)	0	377	0	36	(D)
Software	5112	13,111	182	214	429	670	903	989	3,240	(D)	(D)	(D)
Broadcasting and telecommunications	513	(D)	2	0	0	0	(D)	115	168	0	(D)	907
Radio and television broadcasting	5131	(D)	0	0	0	0	0	0	(D)	0	24	0
Telecommunications	5133	(D)	2	0	0	0	(D)	115	(D)	0	(D)	907
Other broadcasting and telecommunications	513 minus (5131, 5133)	(D)	0	0	0	0	(D)	0	0	0	0	0
Other information	51 minus (511, 513)	(D)	0	62	88	138	177	148	141	(D)	392	(D)
Finance, insurance, and real estate	52, 53	(D)	12	0	(D)	55	622	18	391	100	587	654
Professional, scientific, and technical services	54	27,704	1,392	2,148	2,954	5,989	3,207	3,333	3,460	2,200	(D)	(D)
Architectural, engineering, and related services	5413	3,386	272	210	522	374	297	(D)	1,206	104	(D)	(D)
Computer systems design and related services	5415	9,154	308	633	1,140	2,041	816	904	1,251	449	(D)	(D)
Scientific R&D services	5417	14,244	522	1,133	1,289	3,429	2,064	1,962	971	(D)	0	(D)
Other professional, scientific, and technical services	54 minus (5413, 5415, 5417)	920	291	173	2	144	30 (S)	(D)	32	(D)	(D)	(D)
Management of companies and enterprises	55	381	60	(D)	138	(D)	0	74	(D)	0	0	0
Health care services	621-23	1,149	315	8	460	3	17	36	40	(D)	(D)	(D)
Other nonmanufacturing	56, 61, 624, 71, 72, 81	1,259	75	(D)	1	507	49	20	174	(D)	39 (S)	280

¹ Beginning with 2001, statistics for total and Federally funded industrial R&D exclude data for Federally Funded Research and Development Centers (FFRDCs).

KEY: (D) = Data have been withheld to avoid disclosing operations of individual companies.

(S) = Indicates imputation of more than 50 percent.

(-) = Indicates data not collected.

NOTE: Starting in 1999, the frame from which the statistical samples were selected was divided into two partitions based on total company employment. In the manufacturing sector, companies with employment of 50 or more were included in the large company partition. In the nonmanufacturing sector, companies with employment of 15 or more were included in the large company partition. Companies in the respective sectors with employment below these values, but with at least 5 employees, were included in the small company partition. The purpose of partitioning the sample this way was to reduce the variability in industry estimates largely attributed to the random year-to-year selection of small companies by industry and the high sampling weights that sometimes were assigned to them. Because of this, in prior reports detailed industry statistics were published only from the large company partition; detailed industry statistics from the small company partition were not. Statistics from the small company partition were included in the manufacturing, nonmanufacturing, and all industries totals, but were aggregated into "small manufacturing" and "small nonmanufacturing" classifications instead of being included in their respective industry classifications. For this report, this practice was evaluated and discontinued because it was determined that the data for small companies are more useful if they are included in their respective industries even given the sampling concerns described above. Consequently, the "small manufacturing" and "small nonmanufacturing" stublines are no longer present.

Statistics for the firms in the small company classifications are not shown separately in this table, but are included in the manufacturing, nonmanufacturing, and all industries totals. For more information, see the technical notes in Survey of Industrial Research and Development Methodology: 2001 at <http://www.nsf.gov/sbe/srs/sird/start.htm>.

SOURCE: National Science Foundation/Division of Science Resources Statistics, Survey of Industrial Research and Development: 2001