

TABLE A-4. Unit response rates and percentage of companies performing R&D, by industry and type of survey form: 2006

Industry and company size	NAICS codes	All companies			
		Companies receiving a questionnaire	Companies responding to the survey	% of companies responding to the survey	% of responding companies reporting R&D
All industries	21-23, 31-33, 42, 44-81	31,913	24,748	77.5	37.9
Manufacturing industries	31-33	14,621	11,488	78.6	54.2
Food	311	821	666	81.1	49.7
Beverage and tobacco products	312	206	152	73.8	19.7
Textiles, apparel, and leather	313-16	631	467	74.0	35.3
Wood products	321	482	373	77.4	20.6
Paper, printing, and support activities	322, 323	683	537	78.6	29.4
Petroleum and coal products	324	172	120	69.8	44.2
Chemicals	325	1,446	1,158	80.1	72.6
Basic chemicals	3251	258	207	80.2	72.0
Resin, synthetic rubber, fibers, and filament	3252	163	129	79.1	65.9
Pharmaceuticals and medicines	3254	328	260	79.3	83.8
Other chemicals	other 325	697	562	80.6	69.2
Plastics and rubber products	326	875	704	80.5	60.2
Nonmetallic mineral products	327	464	367	79.1	34.9
Primary metals	331	379	308	81.3	42.2
Fabricated metal products	332	1,288	1,046	81.2	46.1
Machinery	333	1,524	1,240	81.4	65.4
Computer and electronic products	334	1,951	1,458	74.7	75.5
Computers and peripheral equipment	3341	275	208	75.6	76.0
Communications equipment	3342	348	265	76.1	81.5
Semiconductor and other electronic components	3344	563	414	73.5	65.7
Navigational, measuring, electromedical, and control instruments	3345	567	437	77.1	84.4
Other computer and electronic products	other 334	198	134	67.7	64.2
Electrical equipment, appliances, and components	335	665	519	78.0	70.9
Transportation equipment	336	951	736	77.4	52.7
Motor vehicles, trailers, and parts	3361-63	529	415	78.4	55.9
Aerospace products and parts	3364	174	134	77.0	51.5
Other transportation equipment	other 336	248	187	75.4	46.5
Furniture and related products	337	640	507	79.2	29.4
Miscellaneous manufacturing	339	1,346	1,085	80.6	53.9
Medical equipment and supplies	3391	625	503	80.5	67.2
Other miscellaneous manufacturing	other 339	721	582	80.7	42.4
Unclassified manufacturing	-	97	45	46.4	0.0

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Industry and company size	NAICS codes	All companies			
		Companies receiving a questionnaire	Companies responding to the survey	% of companies responding to the survey	% of responding companies reporting R&D
Nonmanufacturing industries	21–23, 42, 44–81	17,292	13,260	76.7	23.9
Mining, extraction, and support activities	21	357	290	81.2	10.0
Utilities	22	137	116	84.7	31.9
Construction	23	1,380	1,103	79.9	4.0
Wholesale trade	42	1,745	1,352	77.5	30.0
Retail trade	44, 45	1,321	1,028	77.8	4.9
Transportation and warehousing	48, 49	415	316	76.1	8.2
Information	51	2,311	1,687	73.0	43.4
Publishing	511	1,052	773	73.5	60.8
Newspaper, periodical, book, and directory	5111	299	230	76.9	13.0
Software	5112	753	543	72.1	81.0
Telecommunications	517	332	233	70.2	20.6
Wired and wireless (except satellite)					
telecommunications carriers	5171, 5172	177	129	72.9	19.4
Satellite telecommunications	5174	70	43	61.4	14.0
Other telecommunications	other 517	85	61	71.8	27.9
Internet service providers, Web search portals, and data-processing services	518	585	417	71.3	41.5
Internet service providers and Web search portals	5181	181	125	69.1	25.6
Data-processing, hosting, and related services	5182	404	292	72.3	48.3
Other information	other 51	342	264	77.2	15.5
Finance, insurance, and real estate	52, 53	988	805	81.5	7.8
Professional, scientific, and technical services	54	4,347	3,354	77.2	46.0
Architectural, engineering, and related services	5413	773	625	80.9	28.3
Computer systems design and related services	5415	1,421	1,027	72.3	56.4
Scientific R&D services	5417	1,239	977	78.9	72.9
Other professional, scientific, and technical services	other 54	914	725	79.3	10.3
Health care services	621–23	1,269	1,050	82.7	9.2
Other nonmanufacturing ^a	55, 56, 61, 624, 71, 72, 81	2,758	2,019	73.2	6.7
Unclassified nonmanufacturing	-	264	140	53.0	0.0

TABLE A-4. Unit response rates and percentage of companies performing R&D, by industry and type of survey form: 2006

Industry and company size	NAICS codes	All companies			
		Companies receiving a questionnaire	Companies responding to the survey	% of companies responding to the survey	% of responding companies reporting R&D
Company size (employees)					
All companies	-	31,913	24,748	77.5	37.9
5-24	-	10,484	8,031	76.6	13.5
25-49	-	4,774	3,763	78.8	33.5
50-99	-	4,636	3,615	78.0	45.0
100-249	-	5,385	4,188	77.8	52.1
250-499	-	2,645	1,997	75.5	58.8
500-999	-	1,591	1,244	78.2	60.2
1,000-4,999	-	1,739	1,362	78.3	66.8
5,000-9,999	-	295	242	82.0	72.3
10,000-24,999	-	203	171	84.2	76.6
25,000 or more	-	161	135	83.9	68.1

TABLE A-4. Unit response rates and percentage of companies performing R&D, by industry and type of survey form: 2006

Industry and company size	NAICS codes	Top 500 R&D-performing companies			
		Companies receiving a questionnaire	Companies responding to the survey	% of companies responding to the survey	% of responding companies reporting R&D
All industries	21-23, 31-33, 42, 44-81	500	446	89.2	98.7
Manufacturing industries	31-33	354	313	88.4	98.4
Food	311	15	15	100.0	100.0
Beverage and tobacco products	312	1	0	0.0	-
Textiles, apparel, and leather	313-16	1	1	100.0	100.0
Wood products	321	0	0	-	-
Paper, printing, and support activities	322, 323	7	7	100.0	100.0
Petroleum and coal products	324	4	4	100.0	100.0
Chemicals	325	99	90	90.9	98.9
Basic chemicals	3251	11	11	100.0	100.0
Resin, synthetic rubber, fibers, and filament	3252	2	2	100.0	100.0
Pharmaceuticals and medicines	3254	72	63	87.5	100.0
Other chemicals	other 325	14	14	100.0	92.9
Plastics and rubber products	326	4	4	100.0	100.0
Nonmetallic mineral products	327	4	4	100.0	100.0
Primary metals	331	2	2	100.0	100.0
Fabricated metal products	332	2	2	100.0	100.0
Machinery	333	25	21	84.0	100.0
Computer and electronic products	334	121	100	82.6	96.0
Computers and peripheral equipment	3341	18	16	88.9	100.0
Communications equipment	3342	20	16	80.0	93.8
Semiconductor and other electronic components	3344	44	33	75.0	100.0
Navigational, measuring, electromedical, and control instruments	3345	34	31	91.2	93.5
Other computer and electronic products	other 334	5	4	80.0	75.0
Electrical equipment, appliances, and components	335	6	6	100.0	100.0
Transportation equipment	336	47	42	89.4	100.0
Motor vehicles, trailers, and parts	3361-63	31	27	87.1	100.0
Aerospace products and parts	3364	11	10	90.9	100.0
Other transportation equipment	other 336	5	5	100.0	100.0
Furniture and related products	337	0	0	-	-
Miscellaneous manufacturing	339	16	15	93.8	100.0
Medical equipment and supplies	3391	13	12	92.3	100.0
Other miscellaneous manufacturing	other 339	3	3	100.0	100.0
Unclassified manufacturing	-	0	0	-	-

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Industry and company size	NAICS codes	Top 500 R&D-performing companies			
		Companies receiving a questionnaire	Companies responding to the survey	% of companies responding to the survey	% of responding companies reporting R&D
Nonmanufacturing industries	21–23, 42, 44–81	146	133	91.1	99.2
Mining, extraction, and support activities	21	3	3	100.0	100.0
Utilities	22	0	0	–	–
Construction	23	2	2	100.0	100.0
Wholesale trade	42	0	0	–	–
Retail trade	44, 45	4	3	75.0	100.0
Transportation and warehousing	48, 49	1	1	100.0	100.0
Information	51	58	48	82.8	97.9
Publishing	511	41	33	80.5	97.0
Newspaper, periodical, book, and directory	5111	3	2	66.7	100.0
Software	5112	38	31	81.6	96.8
Telecommunications	517	10	8	80.0	100.0
Wired and wireless (except satellite)					
telecommunications carriers	5171, 5172	7	5	71.4	100.0
Satellite telecommunications	5174	0	0	–	–
Other telecommunications	other 517	3	3	100.0	100.0
Internet service providers, Web search portals, and data-processing services	518	6	6	100.0	100.0
Internet service providers and Web search portals	5181	2	2	100.0	100.0
Data-processing, hosting, and related services	5182	4	4	100.0	100.0
Other information	other 51	1	1	100.0	100.0
Finance, insurance, and real estate	52, 53	7	6	85.7	100.0
Professional, scientific, and technical services	54	66	65	98.5	100.0
Architectural, engineering, and related services	5413	12	12	100.0	100.0
Computer systems design and related services	5415	18	17	94.4	100.0
Scientific R&D services	5417	34	34	100.0	100.0
Other professional, scientific, and technical services	other 54	2	2	100.0	100.0
Health care services	621–23	3	3	100.0	100.0
Other nonmanufacturing ^a	55, 56, 61, 624, 71, 72, 81	2	2	100.0	100.0
Unclassified nonmanufacturing	-	0	0	–	–

TABLE A-4. Unit response rates and percentage of companies performing R&D, by industry and type of survey form: 2006

Industry and company size	NAICS codes	Top 500 R&D-performing companies			
		Companies receiving a questionnaire	Companies responding to the survey	% of companies responding to the survey	% of responding companies reporting R&D
Company size (employees)					
All companies	-	500	446	89.2	98.7
5-24	-	0	0	-	-
25-49	-	1	1	100.0	100.0
50-99	-	0	0	-	-
100-249	-	17	17	100.0	100.0
250-499	-	23	22	95.7	100.0
500-999	-	61	46	75.4	100.0
1,000-4,999	-	180	159	88.3	98.1
5,000-9,999	-	64	58	90.6	98.3
10,000-24,999	-	78	74	94.9	98.6
25,000 or more	-	76	69	90.8	98.6

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Industry and company size	NAICS codes	All companies			
		Companies receiving a questionnaire	Companies responding to the survey	% of companies responding to the survey	% of responding companies reporting R&D
Form RD-1					
All industries	21-23, 31-33, 42, 44-81	3,537	2,945	83.3	91.7
Manufacturing industries	31-33	1,972	1,672	84.8	94.9
Food	311	65	61	93.8	98.4
Beverage and tobacco products	312	10	9	90.0	100.0
Textiles, apparel, and leather	313-16	35	32	91.4	87.5
Wood products	321	10	8	80.0	100.0
Paper, printing, and support activities	322, 323	46	42	91.3	95.2
Petroleum and coal products	324	11	7	63.6	85.7
Chemicals	325	342	300	87.7	97.0
Basic chemicals	3251	62	54	87.1	100.0
Resin, synthetic rubber, fibers, and filament	3252	26	23	88.5	95.7
Pharmaceuticals and medicines	3254	179	149	83.2	96.0
Other chemicals	other 325	75	74	98.7	97.3
Plastics and rubber products	326	95	83	87.4	95.2
Nonmetallic mineral products	327	29	26	89.7	92.3
Primary metals	331	32	29	90.6	89.7
Fabricated metal products	332	72	58	80.6	91.4
Machinery	333	200	174	87.0	93.7
Computer and electronic products	334	582	465	79.9	94.8
Computers and peripheral equipment	3341	72	64	88.9	96.9
Communications equipment	3342	143	110	76.9	91.8
Semiconductor and other electronic components	3344	162	125	77.2	96.8
Navigational, measuring, electromedical, and control instruments	3345	178	147	82.6	94.6
Other computer and electronic products	other 334	27	19	70.4	94.7
Electrical equipment, appliances, and components	335	100	83	83.0	92.8
Transportation equipment	336	174	151	86.8	92.7
Motor vehicles, trailers, and parts	3361-63	116	103	88.8	92.2
Aerospace products and parts	3364	36	30	83.3	93.3
Other transportation equipment	other 336	22	18	81.8	94.4
Furniture and related products	337	17	16	94.1	100.0
Miscellaneous manufacturing	339	152	128	84.2	97.7
Medical equipment and supplies	3391	114	93	81.6	98.9
Other miscellaneous manufacturing	other 339	38	35	92.1	94.3
Unclassified manufacturing	-	0	0	-	-

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Industry and company size	NAICS codes	All companies			
		Companies receiving a questionnaire	Companies responding to the survey	% of companies responding to the survey	% of responding companies reporting R&D
Nonmanufacturing industries	21–23, 42, 44–81	1,565	1,273	81.3	87.5
Mining, extraction, and support activities	21	22	18	81.8	83.3
Utilities	22	21	19	90.5	73.7
Construction	23	15	15	100.0	73.3
Wholesale trade	42	108	83	76.9	81.9
Retail trade	44, 45	23	16	69.6	68.8
Transportation and warehousing	48, 49	13	12	92.3	66.7
Information	51	365	284	77.8	89.4
Publishing	511	267	209	78.3	90.4
Newspaper, periodical, book, and directory	5111	19	15	78.9	93.3
Software	5112	248	194	78.2	90.2
Telecommunications	517	29	20	69.0	75.0
Wired and wireless (except satellite)					
telecommunications carriers	5171, 5172	18	12	66.7	75.0
Satellite telecommunications	5174	2	1	50.0	0.0
Other telecommunications	other 517	9	7	77.8	85.7
Internet service providers, Web search portals, and data-processing services	518	54	42	77.8	88.1
Internet service providers and Web search portals	5181	7	6	85.7	66.7
Data-processing, hosting, and related services	5182	47	36	76.6	91.7
Other information	other 51	15	13	86.7	100.0
Finance, insurance, and real estate	52, 53	71	55	77.5	65.5
Professional, scientific, and technical services	54	850	710	83.5	91.3
Architectural, engineering, and related services	5413	81	65	80.2	95.4
Computer systems design and related services	5415	248	195	78.6	90.8
Scientific R&D services	5417	472	406	86.0	92.6
Other professional, scientific, and technical services	other 54	49	44	89.8	75.0
Health care services	621–23	17	14	82.4	71.4
Other nonmanufacturing ^a	55, 56, 61, 624, 71, 72, 81	60	47	78.3	83.0
Unclassified nonmanufacturing	-	0	0	-	-

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Industry and company size	NAICS codes	All companies			
		Companies receiving a questionnaire	Companies responding to the survey	% of companies responding to the survey	% of responding companies reporting R&D
Company size (employees)					
All companies	-	3,537	2,945	83.3	91.7
5-24	-	82	61	74.4	70.5
25-49	-	238	188	79.0	92.6
50-99	-	362	292	80.7	89.4
100-249	-	698	573	82.1	89.7
250-499	-	477	397	83.2	93.7
500-999	-	475	398	83.8	93.5
1,000-4,999	-	784	661	84.3	92.7
5,000-9,999	-	172	151	87.8	94.0
10,000-24,999	-	142	128	90.1	95.3
25,000 or more	-	107	96	89.7	90.6

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Industry and company size	NAICS codes	All companies			
		Companies receiving a questionnaire	Companies responding to the survey	% of companies responding to the survey	% of responding companies reporting R&D
Form RD-1A					
All industries	21-23, 31-33, 42, 44-81	28,376	21,803	76.8	30.7
Manufacturing industries	31-33	12,649	9,816	77.6	47.2
Food	311	756	605	80.0	44.8
Beverage and tobacco products	312	196	143	73.0	14.7
Textiles, apparel, and leather	313-16	596	435	73.0	31.5
Wood products	321	472	365	77.3	18.9
Paper, printing, and support activities	322, 323	637	495	77.7	23.8
Petroleum and coal products	324	161	113	70.2	41.6
Chemicals	325	1,104	858	77.7	64.1
Basic chemicals	3251	196	153	78.1	62.1
Resin, synthetic rubber, fibers, and filament	3252	137	106	77.4	59.4
Pharmaceuticals and medicines	3254	149	111	74.5	67.6
Other chemicals	other 325	622	488	78.5	65.0
Plastics and rubber products	326	780	621	79.6	55.6
Nonmetallic mineral products	327	435	341	78.4	30.5
Primary metals	331	347	279	80.4	37.3
Fabricated metal products	332	1,216	988	81.3	43.4
Machinery	333	1,324	1,066	80.5	60.8
Computer and electronic products	334	1,369	993	72.5	66.5
Computers and peripheral equipment	3341	203	144	70.9	66.7
Communications equipment	3342	205	155	75.6	74.2
Semiconductor and other electronic components	3344	401	289	72.1	52.2
Navigational, measuring, electromedical, and control instruments	3345	389	290	74.6	79.3
Other computer and electronic products	other 334	171	115	67.3	59.1
Electrical equipment, appliances, and components	335	565	436	77.2	66.7
Transportation equipment	336	777	585	75.3	42.4
Motor vehicles, trailers, and parts	3361-63	413	312	75.5	43.9
Aerospace products and parts	3364	138	104	75.4	39.4
Other transportation equipment	other 336	226	169	74.8	41.4
Furniture and related products	337	623	491	78.8	27.1
Miscellaneous manufacturing	339	1,194	957	80.2	48.1
Medical equipment and supplies	3391	511	410	80.2	60.0
Other miscellaneous manufacturing	other 339	683	547	80.1	39.1
Unclassified manufacturing	-	97	45	46.4	0.0

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Industry and company size	NAICS codes	All companies			
		Companies receiving a questionnaire	Companies responding to the survey	% of companies responding to the survey	% of responding companies reporting R&D
Nonmanufacturing industries	21–23, 42, 44–81	15,727	11,987	76.2	17.1
Mining, extraction, and support activities	21	335	272	81.2	5.1
Utilities	22	116	97	83.6	23.7
Construction	23	1,365	1,088	79.7	3.0
Wholesale trade	42	1,637	1,269	77.5	26.6
Retail trade	44, 45	1,298	1,012	78.0	3.9
Transportation and warehousing	48, 49	402	304	75.6	5.9
Information	51	1,946	1,403	72.1	34.1
Publishing	511	785	564	71.8	49.8
Newspaper, periodical, book, and directory	5111	280	215	76.8	7.4
Software	5112	505	349	69.1	75.9
Telecommunications	517	303	213	70.3	15.5
Wired and wireless (except satellite)					
telecommunications carriers	5171, 5172	159	117	73.6	13.7
Satellite telecommunications	5174	68	42	61.8	14.3
Other telecommunications	other 517	76	54	71.1	20.4
Internet service providers, Web search portals, and data-processing services	518	531	375	70.6	36.3
Internet service providers and Web search portals	5181	174	119	68.4	23.5
Data-processing, hosting, and related services	5182	357	256	71.7	42.2
Other information	other 51	327	251	76.8	11.2
Finance, insurance, and real estate	52, 53	917	750	81.8	3.6
Professional, scientific, and technical services	54	3,497	2,644	75.6	33.9
Architectural, engineering, and related services	5413	692	560	80.9	20.5
Computer systems design and related services	5415	1,173	832	70.9	48.3
Scientific R&D services	5417	767	571	74.4	58.8
Other professional, scientific, and technical services	other 54	865	681	78.7	6.2
Health care services	621–23	1,252	1,036	82.7	8.4
Other nonmanufacturing ^a	55, 56, 61, 624, 71, 72, 81	2,698	1,972	73.1	4.9
Unclassified nonmanufacturing	-	264	140	53.0	0.0

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Industry and company size	NAICS codes	All companies			
		Companies receiving a questionnaire	Companies responding to the survey	% of companies responding to the survey	% of responding companies reporting R&D
Company size (employees)					
All companies	-	28,376	21,803	76.8	30.7
5-24	-	10,402	7,970	76.6	13.1
25-49	-	4,536	3,575	78.8	30.3
50-99	-	4,274	3,323	77.7	41.1
100-249	-	4,687	3,615	77.1	46.1
250-499	-	2,168	1,600	73.8	50.1
500-999	-	1,116	846	75.8	44.6
1,000-4,999	-	955	701	73.4	42.4
5,000-9,999	-	123	91	74.0	36.3
10,000-24,999	-	61	43	70.5	20.9
25,000 or more	-	54	39	72.2	12.8

- = not applicable.

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

NOTES: The method used to assign industry classifications has changed; industry-specific estimates are not directly comparable with those for years prior to 2004. The calculation of the percent of companies responding to the survey was based on all companies responding to the survey. It excludes companies for which total R&D expenditure data were imputed. Mathematically, the percentage was calculated by dividing the number of companies that received a questionnaire (indicated in the previous column) into the number of companies that returned a response or questionnaire regardless of the data or information supplied in the response or on the questionnaire. Companies that were missing or had an incomplete North American Classification System (NAICS) code at the time of sampling were assigned to an "unclassified" industry category temporarily. If an unclassified company reported R&D expenditures, its primary industrial activity was investigated and a NAICS code was assigned during statistical processing. The total "number of companies receiving a questionnaire" may be smaller than the number of "companies selected for the sample" in table A-1 because some companies selected for the survey went out of business or were merged with other companies between sample selection and survey mail-out; that is, the sample was updated before actual mail-out took place. 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.