

Table 33. Domestic R&D paid for by others and performed by the company, by industry and company size: 2024

(Millions of U.S. dollars)

Industry	NAICS code	Company size (domestic employees)											
		All companies	10–19 ^a	20–49	50–99	100–249	250–499	500–999	1,000–4,999	5,000–9,999	10,000–24,999	25,000 or more	
All industries	21–23, 31–33, 42–81	85,711		1,056	2,026	2,080	2,777	2,667	4,545	13,201	7,146	19,357	30,855
Manufacturing industries	31–33	48,661		226	635	846	1,083	1,316	1,715	7,306	4,535	7,000	23,998
Food	311	268		0	D	0	4 r	35	24	117	D	1	0
Beverage and tobacco products	312	*		0	*	0	0	0	0	0	0	0	0
Textile, apparel, and leather products	313–16	6		0	0	1	0	5	0	0	0	0	0
Wood products	321	6		0	0	0	0	0	6	0	*	0	0
Paper	322	1		0	0	0	*	1	0	*	0	0	0
Printing and related support activities	323	2		0	* r	*	1	*	*	0	0	0	0
Petroleum and coal products	324	2		0	0	*	0	0	1	0	0	1	0
Chemicals	325	11,954		105 i	199	608	560	536	540	3,058	1,946	4,106	295
Basic chemicals	3251	237		0	*	1	12	6	20	139	0	59	0
Resin, synthetic rubber, and artificial synthetic fibers and filaments	3252	D		D	0	D	D	9	1	D	0	3	0
Pesticide, fertilizer, and other agricultural chemicals	3253	D		0	2	*	0	0	0	D	0	0	0
Pharmaceuticals and medicines	3254	10,971		97 i	196	601	535	518	517	2,496	1,946	3,770	295
Soap, cleaning compound, and toilet preparations	3256	272		0	0	0	4	0	0	7	0	260	0
Paint, coating, adhesive, and other chemicals	3255, 3259	D		D	1	D	D	4	2	D	0	13	0
Plastics and rubber products	326	141		1 r	3 r	1 r	7	9	5	4	0	111	0
Nonmetallic mineral products	327	22		2 r	0	1	12	3	4	0	0	0	0
Primary metals	331	45		D	2	*	0	2	1	34	D	0	0
Fabricated metal products	332	93		5	34 r	9 r	35 r	2	7	1	0	0	0
Machinery	333	2,191		8 r	D	17	60	12	41	107	D	454	78
Agricultural implement	33311	D		*	* r	2 r	11	0	14 r	0	D	D	*
Semiconductor machinery	333242	D		*	4	4 i	D	0	0	0	D	0	0
Engine, turbine, and power transmission equipment	3336	D		3 r	8	0	2 r	1	1	9	D	D	78
Other machinery	other 333	333		5 r	D	11	D	12	27	98	0	D	0
Computer and electronic products	334	8,561		56	153	126	265	619	679	3,208	753 i	276	2,426
Communications equipment	3342	771	i	D	D	*	39	*	D	D	D	0	0
Semiconductor and other electronic components	3344	3,812		D	9	D	51 r	458	598	2,048	411 i	D	0
Navigational, measuring, electromedical, and control instruments	3345	3,347		D	125 r	71	175	D	D	159	D	4	2,426
Electromedical, electrotherapeutic, and irradiation apparatus	334510, 334517	199		18	33 r	2	55	61	18	8	0	4	0
Search, detection, navigation, guidance, aeronautical, and nautical system and instruments	334511	2,971		1	20	34	98	60	D	139	D	0	2,426
Other measuring and controlling devices	other 3345	177		D	73 r	35	21	D	D	12	*	0	0
Other computer and electronic products	other 334	631		D	D	D	0	D	0	D	0	D	0
Electrical equipment, appliances, and components	335	864		D	D	6	32	40	52	70	0	584	50
Transportation equipment	336	24,192		16	34	59	57	40	343	671	459	1,380	21,133
Motor vehicles, bodies, trailers, and parts	3361–63	D		D	18	D	46	9	291	222	211	860	D
Aerospace products and parts	3364	20,774	i	D	16	34	11	17	D	436	244 i	520	19,440 i

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Aircraft, aircraft engine, and aircraft parts	336411–13	D	7 i	D	D	D	17	30	D	244 i	520	D			
Guided missile, space vehicle, and related parts	336414–15, 336419	D	D	D	D	D	0	D	D	0	0	D			
Military armored vehicle, tank, and tank components	336992	10	0	0	D	0	0	D	0	0	0	0			
Other transportation	other 336	D	0	0	D	*	14	0	12	3	0	D			
Furniture and related products	337	0	0	0	0	0	0	0	0	0	0	0			
Miscellaneous	339	312	12	46	17	49	12	11	36	27	88	15			
Medical equipment and supplies	3391	285	12	41	14	46	4	3	36	27	88	15			
Other miscellaneous manufacturing	3399	27	0	5	3	3	8	8	0	0	0	0			
Nonmanufacturing industries	21–23, 42–81	37,050	830	1,391	1,234	1,694	1,351	2,830	5,895 i	2,611	12,358	6,857 i			
Mining, quarrying, oil and gas extraction, and support activities	21	638 i	0	0	3	D	*	598 i	0	D	32 i	0			
Utilities	22	D	0	D	0	0	0	0	*	*	0	0			
Wholesale trade	42	D	3 r	D	9 r	22 i	59 i	0	18 i	0	0	0			
Electronic shopping and electronic auctions	454111–12	0	0	0	0	0	0	0	0	0	0	0			
Transportation and warehousing	48–49	D	0	0	0	0	0	2	0	D	0	0			
Information	51	1,322	20 r	108	28	92	120	369	560	0	0	25			
Publishing	511	511	20 r	10	D	58	37	D	96	0	0	25			
Newspaper, periodical, book, and directory publishers	5111	0	0	0	0	0	0	0	0	0	0	0			
Software publishers	5112	511	20 r	10	D	58	37	D	96	0	0	25			
Telecommunications	517	D	0	D	D	6	0	0	0	0	0	0			
Data processing, hosting, and related services	518	755	0	57	16	28	83	109	463 i	0	0	0			
Other information	other 51	D	0	D	0	0	0	D	0	0	0	0			
Finance and insurance	52	101	*	0	0	0	4	0	0	0	0	97			
Real estate and rental and leasing	53	0	0	0	0	0	0	0	0	0	0	0			
Lessors of nonfinancial intangible assets (except copyrighted works)	533	0	0	0	0	0	0	0	0	0	0	0			
Other real estate and rental and leasing	other 53	0	0	0	0	0	0	0	0	0	0	0			
Professional, scientific, and technical services	54	34,415	D	1,224	1,191	1,556	1,148	1,857	5,313 i	D	12,326	6,666 i			
Architectural, engineering, and related services	5413	654	D	77	143	106	73	70	85	D	*	0			
Computer systems design and related services	5415	4,411	112	123 r	310	185	29	488	198	0	2,269	696			
Scientific research and development services	5417	28,237	542	891	718	1,134	905	1,136	5,028 i	2,308	10,056	5,520 i			
Research and development in nanotechnology	541713	115	18	42	54	0	0	*	0	0	0	0			
Research and development in biotechnology (except nanobiotechnology)	541714	5,547	151	101	125 r	111	127	500	303 i	1,666	552	1,911			
Research and development in the physical, engineering, and life sciences (except nanotechnology and biotechnology)	541715	21,872 i	371	735	539	980	773	635	4,725 i	0	9,504	3,609 i			
Research and development in the social sciences and humanities	541720	704	1	13	0	43	5	0	0	642	0	0			
Other professional, scientific, and technical services	other 54	1,113	74	133	20	130	142	162	2	0	0	450			
Health care services	621–23	131	D	D	2	8	14	4	3	0	0	69			
Other nonmanufacturing	23, 44–45 (excluding 454111–12), 55–56, 624, 71–72, 81	49	0	D	0	D	6	0	0	D	0	0			

* = amount < \$500,000; D = data withheld to avoid disclosing operations of individual companies; i = more than 50% of the estimate is a combination of imputation and reweighting to account for nonresponse; r = relative standard error is more than 50%.

NAICS = 2017 North American Industry Classification System.

^a The Business Enterprise Research and Development Survey does not include companies with fewer than 10 domestic employees.

Note(s):
Detail may not add to total because of rounding. Industry classification is based on the dominant business code for domestic R&D performance, where available. For companies that did not report business codes, the classification used for sampling was assigned. Statistics are representative of companies located in the United States that performed or funded \$50,000 or more of R&D.

Source(s):
National Center for Science and Engineering Statistics and Census Bureau, Business Enterprise Research and Development Survey, 2024.