

Table 25. Domestic R&D paid for and performed by the company, by type of cost, industry, and company size: 2024

(Millions of U.S. dollars)

Industry and company size	NAICS code	Total	Salaries, wages, and fringe benefits	Stock-based compensation	Temporary staffing	Expensed equipment	Materials and supplies	Lease and rental payments	Depreciation	Royalties and licensing fees	Other purchased services (except R&D)	Other
All industries	21–23, 31–33, 42–81	679,371	358,050	91,483	27,961	11,828	37,867	11,808	29,313	3,924	25,386	81,752
Manufacturing industries	31–33	356,431	182,248	28,102	11,606	4,369	32,566	5,623	18,234	2,961	15,345	55,377
Food	311	6,020	3,427	68	302	18	1,041	148	289	8	134	585
Beverage and tobacco products	312	1,459	818	14	32	1	81	5	78	*	178	252
Textile, apparel, and leather products	313–16	783	545	11	20	3	79	8	18	1	21	77
Wood products	321	261	220	*	5	1	22	*	*	*	D	D
Paper	322	1,238	549	1	2	61	499	4	14	1	2	105
Printing and related support activities	323	253	173	1	8	2	16	1	9	*	12	30
Petroleum and coal products	324	1,004	430	1	38	1	59	3	26	30	D	D
Chemicals	325	131,790	56,496	8,337	6,711	1,039	12,162	2,582	4,635	1,138	9,829	28,860
Basic chemicals	3251	2,883	1,630	69	62	18	292	75	185	D	171	D
Resin, synthetic rubber, and artificial synthetic fibers and filaments	3252	D	D	*	D	D	D	21	D	25	67	D
Pesticide, fertilizer, and other agricultural chemicals	3253	D	D	5	D	5	D	D	D	D	52	D
Pharmaceuticals and medicines	3254	122,656	50,743	8,248	6,499	1,006	11,489	2,403	4,160	1,088	9,456	27,565
Soap, cleaning compound, and toilet preparations	3256	2,684	1,684	15	60	D	146	D	80	D	37	D
Paint, coating, adhesive, and other chemicals	3255, 3259	D	1,039	*	D	D	75	D	D	6	47	D
Plastics and rubber products	326	2,767	1,644	6	56	117	324	22	100	6	74	419
Nonmetallic mineral products	327	1,556	1,115	20	22	9	77	14	84	1	64	151
Primary metals	331	1,129	467	4	23	5	434	2	28	5	85	74
Fabricated metal products	332	3,137	2,047	184	83	21	370	32	109	14	124	153
Machinery	333	19,844	11,802	D	877	146	2,324	136	808	77	752	D
Agricultural implement	33311	D	D	D	D	3	D	D	D	*	D	D
Semiconductor machinery	333242	D	D	D	D	33	605	D	D	1	D	D
Engine, turbine, and power transmission equipment	3336	D	2,392	*	487	32	D	D	D	1	228	D
Other machinery	other 333	8,060	5,175	D	274	78	1,179	71	205	75	190	D
Computer and electronic products	334	107,038	57,995	16,053	1,426	2,102	8,005	1,592	7,535	1,260	1,596	9,473
Communications equipment	3342	12,069	6,732	1,514	266	249	221	910	356	13	128	1,680
Semiconductor and other electronic components	3344	48,546	26,181	6,974	690	381	4,672	325	3,983	1,117	715	3,507
Navigational, measuring, electromedical, and control instruments	3345	10,736	6,522	513	176	117	811	81	242	35	451	1,788
Electromedical, electrotherapeutic, and irradiation apparatus	334510, 334517	3,046	1,772	218	37	6	214	35	69	9	174	511
Search, detection, navigation, guidance, aeronautical, and nautical system and instruments	334511	3,190	1,738	201	50	7	179	11	40	18	170	775
Other measuring and controlling devices	other 3345	4,501	3,012	94	89	104	417	35	132	9	107	502
Other computer and electronic products	other 334	35,687	18,560	7,052	294	1,355	2,302	276	2,955	94	302	2,498
Electrical equipment, appliances, and components	335	6,135	3,706	D	200	67	426	187	215	4	147	D
Transportation equipment	336	47,039	26,371	D	1,000	445	4,695	555	3,593	376	988	D

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Motor vehicles, bodies, trailers, and parts	3361–63	D	17,082		1,398		650		330		3,294		433		D		347	D	D		
Aerospace products and parts	3364	15,130	8,096		D		308		91		1,115		D		256		D	470	D		
Aircraft, aircraft engine, and aircraft parts	336411–13	D	D		122		173		51		D		D		D		D	D	D		
Guided missile, space vehicle, and related parts	336414–15, 336419	D	D		D		135		40		D		D		D		D	D	D		
Military armored vehicle, tank, and tank components	336992	23	14		0		*		5		3		0		*		0	D	D		
Other transportation	other 336	D	1,180	i	D		41	i	19		284	i	D		D		D	D	D		
Furniture and related products	337	450	311		2		8		18	i	42		4		9		1	13	42		
Miscellaneous	339	24,528	14,130		938		793		312		1,908		329		684		39	988	4,407		
Medical equipment and supplies	3391	21,840	12,232		882		735		261		1,731		266		638		36	926	4,134		
Other miscellaneous manufacturing	3399	2,688	1,898		56		58		51		177		63		46		3	62	273		
Nonmanufacturing industries	21–23, 42–81	322,940	175,802		63,380		16,355		7,459		5,301		6,185		11,079		964	10,041	26,375		
Mining, quarrying, oil and gas extraction, and support activities	21	1,224	D		9		8		10		257		10		24		3	80	D		
Utilities	22	D	D		*		39		3		14		*		13		*	11	22		
Wholesale trade	42	D	1,125	i	*		96	i	21	i	110	i	10	i	D		3	41	D		
Electronic shopping and electronic auctions	454111–12	7,898	i	5,659	i	1,242	i	46	i	134	i	9	i	32	i	97	i	40	631	i	
Transportation and warehousing	48–49	D	D		1,133		222		352		D		321		D		174	316	D		
Information	51	226,853	113,254		55,334		12,387		5,783		2,195		4,848		7,728		557	8,197	16,571		
Publishing	511	63,085	36,208		12,586		2,538		811		1,430		D		681		85	2,448	D		
Newspaper, periodical, book, and directory publishers	5111	489	i	332	i	0		123	i	0	0		0		*	i	0	15	18	i	
Software publishers	5112	62,597	35,877		12,586		2,415		811		1,430		D		681		85	2,433	D		
Telecommunications	517	D	D		33		D		D		D		D		D		3	D	D		
Data processing, hosting, and related services	518	58,017	32,993		11,711		D		D		526		803		D		366	3,003	D		
Other information	other 51	D	D		31,003		D		4,347		D		3,656		D		103	D	D		
Finance and insurance	52	25,362	19,306		1,463		1,757		458		81		218		1,148		13	175	743		
Real estate and rental and leasing	53	2,750	1,231		1,093		98		42		5		4		47		*	29	201		
Lessors of nonfinancial intangible assets (except copyrighted works)	533	23	14		*	i	*	i	*	i	1		0		4		0	1	2		
Other real estate and rental and leasing	other 53	2,727	1,217		1,093		98		42		4		4		43		*	28	199		
Professional, scientific, and technical services	54	40,134	24,933		2,702		1,422		593		1,507		615		1,068		166	i	995	6,132	
Architectural, engineering, and related services	5413	3,240	2,433		7		113		43		157	i	29		32		3	28	392	i	
Computer systems design and related services	5415	22,353	13,719		1,485		790		247		350		302		551		36	489	4,383		
Scientific research and development services	5417	5,705	3,261		113		145		127		689		247		240		21	316	547		
Research and development in nanotechnology	541713	434	208		13		17		13		89		10		31		1	i	4	48	
Research and development in biotechnology (except nanobiotechnology)	541714	1,204	622		46		31		8		175		79		58		9	52	125		
Research and development in the physical, engineering, and life sciences (except nanotechnology and biotechnology)	541715	4,060	2,425		54		96		106	i	425		158		150		11	260	375		
Research and development in the social sciences and humanities	541720	8	7		*	i	*		*		*		*		1		0	*	i	*	i

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Other professional, scientific, and technical services	other 54	8,835 i	5,520 i	1,097 i	373	175 i	311 i	37	245 i	106 i	162 i	810 i
Health care services	621–23	1,888	969	226	67	34	147	41	D	31	76	D
Other nonmanufacturing	23, 44–45 (excluding 454111–12), 55–56, 624, 71–72, 81	3,579	2,742	177	213	29	D	85	20	12	80	D
All companies (number of domestic employees)	–	679,371	358,050	91,483	27,961	11,828	37,867	11,808	29,313	3,924	25,386	81,752
Small companies												
10–19 ^a	–	3,734	2,489	81	174	25	258	104	64	21	165	352
20–49	–	14,153	7,579	262	479	95	1,197	290	842	95	2,186	1,127
Medium companies												
50–99	–	14,998	9,012	679	559	149	1,340	342	349	83	1,105	1,381
100–249	–	26,548	15,609	1,663	968	272	1,944	735	764	177	1,179	3,238
Large companies												
250–499	–	26,185	14,674	1,946	937	307	1,602	494	788	142	1,160	4,136
500–999	–	40,152	17,158	6,235	1,247	437	2,350	1,893	1,029	266	3,669	5,870
1,000–4,999	–	110,612	59,786	17,433	3,240	1,238	5,433	1,584	3,037	705	4,321	13,835
5,000–9,999	–	55,804	31,975	5,688	1,560	721	3,592	764	2,866	376	1,045	7,215
10,000–24,999	–	120,991	62,738	12,843	4,760	1,779	8,876	1,426	4,918	747 i	5,407	17,496
25,000 or more	–	266,195	137,030	44,653	14,037	6,805	11,276	4,177	14,654	1,312	5,150	27,101

* = 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.

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.