

Table 32. Total capital expenditures for R&D operations, by type of cost and selected industry, for companies with 1–9 employees: 2023

(Thousands of U.S. dollars)

Industry	NAICS code	Total		Land acquisition	Buildings and land improvement	Machinery and equipment	Capitalized software	Other intellectual property	All other costs
All selected industries	31–33, 42, 51, 5413, 5415, 5417	472,195		644	21,184	149,031	84,365	58,895	158,075
Manufacturing industries	31–33	52,015		0	1,627	23,748	1,997	1,815	22,829
Food, beverage, and tobacco products	311–12	419	r	0	210	210	0	0	0
Textile, apparel, and leather products	313–16	75	r	0	0	0	0	0	75
Wood products	321	4,627	r	0	0	0	0	0	4,627
Paper	322	0		0	0	0	0	0	0
Printing and related support activities	323	0		0	0	0	0	0	0
Petroleum and coal products	324	0		0	0	0	0	0	0
Chemicals	325	11,378		0	177	7,695	1,023	262	2,220
Pharmaceuticals and medicines	3254	3,072		0	118	1,360	944	193	457
Chemicals, excluding pharmaceuticals	other 325	8,305		0	58	6,335	79	69	1,764
Plastics and rubber products	326	4,940	r	0	0	12	0	0	4,928
Nonmetallic mineral products	327	900	r	0	256	304	0	0	339
Primary metals	331	0		0	0	0	0	0	0
Fabricated metal products	332	2,507	r	0	0	2,437	0	70	0
Machinery	333	480		0	12	315	16	0	136
Computer and electronic products	334	19,300		0	295	9,398	609	849	8,150
Semiconductor and other electronic components	3344	5,968		0	115	3,823	66	522	1,441
Navigational, measuring, electromedical, and control instruments	3345	6,086		0	166	3,831	359	319	1,411
Other computer and electronic products	other 334	7,247	r	0	14	1,744	184	7	5,298
Electrical equipment, appliances, and components	335	1,640		0	41	1,148	168	204	78
Transportation equipment	336	2,130		0	488	914	112	22	593
Aerospace products and parts	3364	1,250		0	0	730	71	0	449
Other transportation equipment	other 336	879		0	488	185	41	22	144
Furniture and related products	337	0		0	0	0	0	0	0
Miscellaneous manufacturing	339	3,621		0	147	1,315	68	408	1,682
Selected nonmanufacturing industries	42, 51, 5413, 5415, 5417	420,180		644	19,557	125,283	82,369	57,080	135,247
Wholesale trade	42	20,338	r	0	2,833	3,564	240	11,911	1,790
Information	51	58,950		0	97	9,678	33,144	5,280	10,751
Software publishers	5112	47,148		0	97	7,720	28,494	2,122	8,715
Information, excluding software publishers	51 less 5112	11,802		0	0	1,958	4,650	3,158	2,036
Architectural, engineering, and related services	5413	31,361		0	1,040	14,023	5,024	1,543	9,731
Computer systems design and related services	5415	164,208		0	12,711	36,021	38,223	27,772	49,482
Scientific research and development services	5417	145,324		644	2,876	61,997	5,739	10,575	63,493
Research and development in nanotechnology	541713	12,321		0	0	4,017	75	434	7,795
Research and development in biotechnology (except nanobiotechnology)	541714	47,676		0	810	24,396	275	2,484	19,712
Research and development in the physical, engineering, and life sciences (except nanotechnology and biotechnology)	541715	82,888		644	2,058	33,545	3,313	7,657	35,671

Table 32. Total capital expenditures for R&D operations, by type of cost and selected industry, for companies with 1–9 employees: 2023

(Thousands of U.S. dollars)

Industry	NAICS code	Total	Land acquisition	Buildings and land improvement	Machinery and equipment	Capitalized software	Other intellectual property	All other costs
Social sciences and humanities research and development	541720	2,439 r	0	8 r	39 r	2,076 r	0	315 r

r = relative standard error > 50%.

NAICS = 2022 North American Industry Classification System.

Note(s):
Detail may not add to total because of rounding or unavailable NAICS detail for select records beyond the 4-digit industry classification. Industry classification is based on dominant establishment payroll. Statistics are representative of companies located in the United States that performed or funded R&D.

Source(s):
National Center for Science and Engineering Statistics and Census Bureau, 2024 Annual Business Survey: Data Year 2023.