

Table 6-2. Domestic R&D costs, by selected industry and type of cost, for companies with 1–4 employees: 2023

(Thousands of U.S. dollars)

Industry	NAICS code	Total	Salaries, wages, and fringe benefits	Expensed machinery and equipment	Materials and supplies	Payments to others for R&D	Depreciation on R&D property and equipment	All other costs
All selected industries	31–33, 42, 51, 5413, 5415, 5417	3,312,783	1,808,677	88,902	268,839	510,057	21,983	614,325
Manufacturing industries	31–33	242,475	102,525	11,519	28,483	28,598	1,379	69,971
Food, beverage, and tobacco products	311–12	1,875	260	0	47	1,337 r	0	231
Textile, apparel, and leather products	313–16	131	88	0	44	0	0	0
Wood products	321	9,573 r	4,893 r	0	0	0	0	4,680 r
Paper	322	0	0	0	0	0	0	0
Printing and related support activities	323	91	61	0	30	0	0	0
Petroleum and coal products	324	0	0	0	0	0	0	0
Chemicals	325	41,939	18,215	2,990	3,864	7,686	582	8,603
Pharmaceuticals and medicines	3254	16,477	6,269	758 r	1,403	6,200	249	1,597
Chemicals, excluding pharmaceuticals	other 325	25,462	11,946	2,232	2,460	1,485	332	7,006
Plastics and rubber products	326	809 r	426 r	238 r	60 r	0	3	82 r
Nonmetallic mineral products	327	2,086	1,195	513 r	276 r	0	0	103
Primary metals	331	806	386	25	25	371	0	0
Fabricated metal products	332	0	0	0	0	0	0	0
Machinery	333	12,253	5,706	607 r	803	398	64	4,675
Computer and electronic products	334	122,812	46,967	3,281	13,431	12,093 r	455	46,585 r
Semiconductor and other electronic components	3344	44,724	20,851	587 r	4,308	8,875 r	172	9,931
Navigational, measuring, electromedical, and control instruments	3345	69,575 r	19,400	2,213	8,453 r	3,070 r	233	36,206 r
Other computer and electronic products	other 334	8,512	6,716	481 r	670	147	50 r	448 r
Electrical equipment, appliances, and components	335	7,704	2,739	1,113 r	1,121	1,406 r	137 r	1,187
Transportation equipment	336	5,114	1,546	823 r	570	1,061 r	120 r	995
Aerospace products and parts	3364	4,655	1,546	823 r	570	601 r	120 r	995
Other transportation equipment	other 336	460 r	0	0	0	460 r	0	0
Furniture and related products	337	0	0	0	0	0	0	0
Miscellaneous manufacturing	339	37,283	20,045	1,929 r	8,214	4,247	17	2,831
Selected nonmanufacturing industries	42, 51, 5413, 5415, 5417	3,070,308	1,706,152	77,384	240,356	481,459	20,604	544,354
Wholesale trade	42	91,446	52,941	1,580 r	12,224	7,914	1,233 r	15,555 r
Information	51	383,189	310,534	5,639	4,175	16,277	1,220	45,345
Software publishers	5112	322,593	268,689	3,600	2,205	10,374 r	609	37,116
Information, excluding software publishers	51 less 5112	60,596	41,846	2,040	1,970	5,902 r	611 r	8,228
Architectural, engineering, and related services	5413	305,024	145,834	19,281	77,487 r	17,690	3,072	41,661
Computer systems design and related services	5415	849,647	633,703	17,858	35,728	16,033	2,964	143,361
Scientific research and development services	5417	1,441,001	563,140	33,026	110,741	423,546	12,115	298,434
Research and development in nanotechnology	541713	71,513	32,464	4,675 r	6,359	13,254	1,307	13,455
Research and development in biotechnology (except nanobiotechnology)	541714	620,076	216,017	10,585	45,294	217,086	5,129	125,966

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Research and development in the physical, engineering, and life sciences (except nanotechnology and biotechnology)	541715	745,365	312,406		17,737	59,015		192,942		5,680	157,585	
Social sciences and humanities research and development	541720	4,047	2,253	r	28	75		263	r	0	1,428	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.