

**Table 5****Domestic R&D costs, by selected industry and type of cost, for companies with 1–9 employees: 2018**

(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	5,766,729	2,818,156	163,888	425,260	1,239,892	60,036	1,059,498
Manufacturing industries	31–33	655,018	325,923	47,471	74,693	99,342	8,733	98,855
Food, beverage, and tobacco products	311–12	D	D	0	D	D	0	D
Textile, apparel, and leather products	313–16	1,025	770	D	D	D	0	0
Wood products	321	0	0	0	0	0	0	0
Paper	322	0	0	0	0	0	0	0
Printing and related support activities	323	D	D	D	D	D	0	D
Petroleum and coal products	324	D	D	D	D	D	0	D
Chemicals	325	125,099	46,701	11,377	11,951	38,827	962	15,280
Pharmaceuticals and medicines	3254	92,531	29,778	3,233	9,798	37,950	709	11,063
Chemicals, excluding pharmaceuticals	other 325	32,568	16,923	8,144	2,153	877	254	4,217
Plastics and rubber products	326	0	0	0	0	0	0	0
Nonmetallic mineral products	327	5,500	3,170	436	683	341	D	445
Primary metals	331	0	0	0	0	0	0	0
Fabricated metal products	332	2,929	D	D	D	D	D	D
Machinery	333	49,419	25,497	2,247	11,493	6,987	D	2,748
Computer and electronic products	334	331,600	190,494	27,263	33,353	27,889	5,647	46,954
Semiconductor and other electronic components	3344	59,688	43,243	1,665	3,073	2,875	574	8,259
Navigational, measuring, electromedical, and control instruments	3345	223,576	116,839	24,572	24,959	22,872	4,598	29,736
Other computer and electronic products	other 334	48,336	30,412	1,026	5,321	2,142	476	8,959
Electrical equipment, appliances, and components	335	30,428	18,784	1,251	3,645	2,473	447	3,828
Transportation equipment	336	14,405	7,118	1,384	2,071	1,426	335	2,071
Aerospace products and parts	3364	11,150	5,152	1,233	1,558	969	275	1,963
Other transportation equipment	other 336	D	D	D	D	D	D	D
Furniture and related products	337	0	0	0	0	0	0	0
Miscellaneous manufacturing	339	90,544	30,247	2,397	10,432	20,624	434	26,410
Selected nonmanufacturing industries	42, 51, 5413, 5415, 5417	5,111,711	2,492,233	116,416	350,567	1,140,549	51,303	960,643
Wholesale trade	42	227,178	119,051	4,840	8,892	43,646	D	50,052
Information	51	538,573	431,564	9,725	10,431	20,483	1,932	64,438
Software publishers	5112	382,680	314,643	6,801	5,029	14,391	1,276	40,539

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Information, excluding software publishers	51 excluding 5112	155,893	116,921	2,923	5,402	6,092	655 r	23,899
Architectural, engineering, and related services	5413	446,173	229,675	14,068	58,120	34,186	6,525	103,598
Computer systems design and related services	5415	1,122,849	733,908	31,402	46,745	85,268	11,068	214,458
Scientific research and development services	5417	2,776,938	978,035	56,382	226,379	956,966	31,081	528,095
Research and development in nanotechnology	541713	331,590	175,622	11,052	31,125	38,824	6,154	68,812
Research and development in biotechnology (except nanobiotechnology)	541714	1,307,901	318,847	11,996	86,881	651,322	9,217	229,638
Research and development in the physical, engineering, and life sciences (except nanotechnology and biotechnology)	541715	1,102,490	466,911	32,562	105,618	260,793	15,139	221,466
Social sciences and humanities research and development	541720	14,839	8,282	250 r	541	D	D	2,877

D = withheld to avoid disclosing data for individual companies; data are included in higher level totals. r = relative standard error &gt; 50%.

NAICS = 2017 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 four-digit industry classification. Industry classification is based on the dominant establishment payroll. Statistics are representative of companies located in the United States that performed or funded R&amp;D.

**Source(s):**

National Center for Science and Engineering Statistics and Census Bureau, 2019 Annual Business Survey: Data Year 2018.