

TABLE 11

Domestic R&D costs, by selected industry and type of cost, for companies with 1–9 employees: 2019

(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	6,316,312	3,494,058	169,003	512,106	1,097,401	73,745	969,999
Manufacturing industries	31–33	832,065	325,090	35,162	93,560	209,845	11,001	157,407
Food, beverage, and tobacco products	311–12	6,197	2,264 r	1,464 r	1,406 r	301	42 r	719 r
Textile, apparel, and leather products	313–16	236 r	226 r	0	0	0	10 r	0
Wood products	321	4,065 r	1,626 r	488 r	813 r	0	569 r	569 r
Paper	322	0	0	0	0	0	0	0
Printing and related support activities	323	555	555	0	0	0	0	0
Petroleum and coal products	324	0	0	0	0	0	0	0
Chemicals	325	334,289	89,770	7,626	25,634	156,120	4,899	50,240
Pharmaceuticals and medicines	3254	250,109	54,107	4,275	15,333	132,601 r	4,426	39,367
Chemicals, excluding pharmaceuticals	other 325	84,180	35,663	3,351	10,302	23,519	473	10,873
Plastics and rubber products	326	6,397	4,785	4	572	136	0	899
Nonmetallic mineral products	327	11,733 r	3,219 r	624 r	1,067 r	5,873 r	0	951 r
Primary metals	331	2,568 r	1,532 r	21 r	173 r	215 r	0	627 r
Fabricated metal products	332	20,594 r	11,610 r	298 r	8,314 r	76 r	29 r	267 r
Machinery	333	23,685	12,876	2,661	1,786	1,628 r	301 r	4,434
Computer and electronic products	334	249,740	119,103	15,397	28,837	22,583	2,287	61,534
Semiconductor and other electronic components	3344	40,200	21,395	5,808 r	5,799	1,895	313 r	4,990 r
Navigational, measuring, electromedical, and control instruments	3345	180,968	78,437	8,030	21,260	19,595	1,535	52,111 r
Other computer and electronic products	other 334	28,572	19,270	1,559	1,778	1,093	439 r	4,433 r
Electrical equipment, appliances, and components	335	9,977	5,688	1,647 r	983	385	23 r	1,249
Transportation equipment	336	29,712	10,699	1,005	7,751 r	5,134	1,465 r	3,657 r
Aerospace products and parts	3364	14,572	7,366	817 r	2,221	2,714 r	480 r	975
Other transportation equipment	other 336	15,139 r	3,333	188 r	5,529 r	2,421 r	985 r	2,683 r
Furniture and related products	337	0	0	0	0	0	0	0
Miscellaneous manufacturing	339	132,316	61,135	3,927 r	16,225	17,394 r	1,376	32,259
Selected nonmanufacturing industries	42, 51, 5413, 5415, 5417	5,484,247	3,168,968	133,841	418,545	887,556	62,744	812,592
Wholesale trade	42	350,239	143,046	14,649	26,402	124,426 r	2,704	39,012
Information	51	615,346	475,021	12,777	16,215	16,662	10,125	84,547
Software publishers	5112	336,298	286,630	4,148	6,429	8,377	463	30,251
Information, excluding software publishers	51 less 5112	279,048	188,391	8,629 r	9,786	8,285	9,662	54,296
Architectural, engineering, and related services	5413	479,734	324,187	20,505	42,265	24,822	4,114	63,843
Computer systems design and related services	5415	1,469,862	1,122,814	25,022	68,920	34,702	10,412	207,991

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Scientific research and development services	5417	2,569,066	1,103,900	60,888	264,744	686,944	35,389	417,200
Research and development in nanotechnology	541713	206,455	108,137	4,917	15,018	30,815	2,427	45,140
Research and development in biotechnology (except nanobiotechnology)	541714	1,049,044	344,673	19,778	104,125	403,158	11,934	165,377
Research and development in the physical, engineering, and life sciences (except nanotechnology and biotechnology)	541715	1,276,681	625,272	36,087	144,763	249,770	20,953	199,835
Social sciences and humanities research and development	541720	34,665	23,939	106 r	742	3,202	76	6,601

r = relative standard error > 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 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, 2020 Annual Business Survey: Data Year 2019.