

TABLE 9-2

## Total R&amp;D paid to others, for companies with 1–4 employees, by selected industry and type of R&amp;D performer: 2017

(Thousands of U.S. dollars)

Industry	NAICS code	Total	R&D paid for by the company and performed by another U.S. business	R&D paid for by the company and performed by a U.S. university or college	R&D paid for by the company and performed by other organizations
All selected industries	31–33, 42, 51, 5413, 5415, 5417	514,204	285,637	67,082	86,974
Manufacturing industries	31–33	66,159	49,176	7,571	6,145
Food, beverage, and tobacco products	311–12	777	777	0	0
Textile, apparel, and leather products	313–16	112	56	0	56
Wood products	321	0	0	0	0
Paper	322	0	0	0	0
Printing and related support activities	323	0	0	0	0
Petroleum and coal products	324	0	0	0	0
Pharmaceuticals and medicines	3254	10,779	8,776	808	780
Chemicals, excluding pharmaceuticals	325 (excluding 3254)	4,949	2,910	1,566	178
Plastics and rubber products	326	41	S	0	S
Nonmetallic mineral products	327	0	0	0	0
Primary metals	331	270	0	0	270
Fabricated metal products	332	136	S	0	134
Machinery	333	638	474	0	0
Computer and electronic products	334	35,331	28,114	2,935	3,727
Electrical equipment, appliances, and components	335	4,790	1,912	886	208
Transportation equipment	336	591	78	0	483
Furniture and related products	337	0	0	0	0
Miscellaneous manufacturing	339	7,745	6,050	1,376	295
Selected nonmanufacturing industries	42, 51, 5413, 5415, 5417	448,044	236,461	59,510	80,829
Wholesale trade	42	6,885	2,146	4,329	409
Information	51	29,507	19,677	85	5,782
Software publishers	5112	17,796	12,329	60	4,102
Information, excluding software publishers	51 (excluding 5112)	11,711	7,348	25	1,680
Architectural, engineering, and related services	5413	14,188	10,721	970	1,568
Computer systems design and related services	5415	101,087	33,820	2,845	32,640
Scientific research and development services	5417	296,377	170,097	51,282	40,430

r = relative standard error &gt; 50%; S = data withheld to avoid disclosing operations of individual companies.

NAICS = 2017 North American Industry Classification System.

**Note(s):**

Detail may not add to total because of rounding. 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 U.S. Census Bureau, Annual Business Survey, 2017.