

TABLE 43

## Domestic R&amp;D paid for by the U.S. federal government and performed by the company, by type of R&amp;D, industry, and company size: 2017

(Millions of U.S. dollars)

Industry and company size	NAICS code	Total	Basic research	Applied research	Development
All industries	21-23, 31-33, 42-81	24,277 i	1,783 i	5,037 i	17,457 i
Manufacturing industries	31-33	18,889 i	1,404 i	2,675 i	14,810 i
Food	311	1	*	*	1
Beverage and tobacco products	312	0	0	0	0
Textile, apparel, and leather products	313-16	* i	0	* i	* i
Wood products	321	* i	0	* i	0
Printing and related support activities	323	0 - 2 i	0 - 2 i	0 - 1 i	* i
Chemicals	325	205	15	28	162
Pharmaceuticals and medicines	3254	186	10	22	154
Other chemicals	other 325	19	5 i	6	8
Plastics and rubber products	326	1	*	*	1
Nonmetallic mineral products	327	2 i	* i	1 i	2
Primary metals	331	5 i	* i	* i	5 i
Fabricated metal products	332	59 i	* i	10 i	49 i
Machinery	333	170	5	11 i	154
Computer and electronic products	334	3,937	255 i	599	3,084
Semiconductor and other electronic components	3344	80	1 i	23	56 i
Navigational, measuring, electromedical, and control instruments	3345	2,963	75	393	2,495
Other computer and electronic products	other 334	894 i	179 i	182 i	532 i
Electrical equipment, appliances, and components	335	38	* i	1 i	37
Transportation equipment	336	14,433 i	1,125 i	2,015 i	11,293 i
Aerospace products and parts	3364	11,260 - 13,070 i	967 - 1,126 i	286 - 1,937 i	10,007 i
Other transportation equipment	other 336	1,363 - 3,172	0 - 158	78 - 1,729	1,286
Furniture and related products	337	1 i	0	* i	1 i
Miscellaneous manufacturing	322, 324, 339	28 - 42	0 - 7	3 - 14	24
Nonmanufacturing industries	21-23, 42-81	5,388	379	2,362	2,647
Information	51	98	5	12 i	81
Publishing	511	62	4	7	51
Telecommunications	517	0 - 3 i	0	0 - 3 i	0
Data processing, hosting, and related services	518	35	1 i	4 i	29
Other information	other 51	0 - 3 i	0	0 - 3 i	0
Professional, scientific, and technical services	54	5,256	373	2,349	2,535
Architectural, engineering, and related services	5413	788	48	479	261
Computer systems design and related services	5415	995	10	288	698
Scientific research and development services	5417	3,200	291 i	1,505 i	1,405
Biotechnology research and development	541711	113	3 i	64	45

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Industry and company size	NAICS code	Total	Basic research	Applied research	Development
Physical, engineering, and life sciences (except biotechnology) research and development	541712	2,258	222	881	1,155
Social sciences and humanities research and development	541720	830	66	560	204
Other professional, scientific, and technical services	other 54	272	24	77	171
Other nonmanufacturing	21-23, 42-49, 52, 53, 55-81	35	2	2	31
All companies (number of domestic employees)	-	24,277	1,783	5,037	17,457
Small companies					
10-19 <sup>a</sup>	-	485	35	94	356
20-49	-	605	39	187	379
Medium companies					
50-99	-	659	34	261	364
100-249	-	1,241	143	393	704
Large companies					
250-499	-	592	52	118	422
500-999	-	221	31	60	130
1,000-4,999	-	1,461	37	564	860
5,000-9,999	-	1,525	191	538	796
10,000-24,999	-	3,514	281	479	2,755
25,000 or more	-	13,976	941	2,343	10,692

\* = amount &lt; \$500,000; i = &gt; 50% of the estimate is a combination of imputation and reweighting to account for nonresponse.

NAICS = 2012 North American Industry Classification System.

<sup>a</sup> Business Research and Development Survey does not include companies with fewer than 10 domestic employees.**Note(s)**

Detail may not add to total because of rounding. Industry classification is based on the dominant business code for domestic R&D performance, where available. For companies that did not report business codes, the classification used for sampling was assigned. Statistics are representative of companies located in the United States that performed or funded R&D. An estimate range may be displayed in place of a single estimate to avoid disclosing operations of individual companies.

**Source(s)**

National Center for Science and Engineering Statistics and U.S. Census Bureau, Business Research and Development Survey, 2017.