

Table 24. Foreign R&D paid for by the company and others and performed by the company, by type of R&D, selected industry, and location: 2024

(Millions of U.S. dollars)

Industry and location	NAICS code	Total foreign R&D performance	Research (basic and applied)	Development
All locations				
All industries	21–23, 31–33, 42–81	164,727	26,058	138,669
Manufacturing industries	31–33	90,435	14,015	76,420
Chemicals	325	26,941	5,953	20,987
Pharmaceuticals and medicines	3254	24,122	5,212	18,910
Computer and electronic products	334	37,633	4,159	33,474
Semiconductor and other electronic components	3344	21,742	2,315	19,427
Nonmanufacturing industries	21–23, 42–81	74,292	12,043	62,249
Information	51	46,361	3,968	42,393
Software publishers	5112	16,904	1,322	15,582
Professional, scientific, and technical services	54	20,377	6,001	14,376
Scientific research and development services	5417	13,219	4,356	8,863
Africa				
All industries	21–23, 31–33, 42–81	616	147	469
Manufacturing industries	31–33	130	24	106 i
Chemicals	325	68	15	53 i
Pharmaceuticals and medicines	3254	61	13	48 i
Computer and electronic products	334	8	1	7 i
Semiconductor and other electronic components	3344	*	*	* i
Nonmanufacturing industries	21–23, 42–81	486	123	363
Information	51	154	12	143
Software publishers	5112	D	D	47
Professional, scientific, and technical services	54	285	92	193
Scientific research and development services	5417	260	88	171
Asia and Pacific				
All industries	21–23, 31–33, 42–81	57,655	7,775	49,880
Manufacturing industries	31–33	32,945	4,275	28,670
Chemicals	325	5,189	1,101	4,088
Pharmaceuticals and medicines	3254	4,457	910	3,547
Computer and electronic products	334	19,379	2,056	17,323
Semiconductor and other electronic components	3344	13,163	1,286 i	11,877
Nonmanufacturing industries	21–23, 42–81	24,709	3,499	21,210
Information	51	15,631	1,250	14,381
Software publishers	5112	7,298	492	6,806
Professional, scientific, and technical services	54	5,933	1,410 i	4,524
Scientific research and development services	5417	3,937	1,019	2,918 i
Canada				
All industries	21–23, 31–33, 42–81	13,227	2,603	10,625
Manufacturing industries	31–33	5,792	1,007	4,785
Chemicals	325	1,009	213	796 i
Pharmaceuticals and medicines	3254	954	202	751 i
Computer and electronic products	334	2,795	339	2,456
Semiconductor and other electronic components	3344	1,542	125	1,417
Nonmanufacturing industries	21–23, 42–81	7,436	1,596	5,840
Information	51	4,543	407	4,136
Software publishers	5112	2,106	183	1,923
Professional, scientific, and technical services	54	2,013	1,015	998
Scientific research and development services	5417	881	578	303
Europe				
All industries	21–23, 31–33, 42–81	75,964	13,106	62,857

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Industry and location	NAICS code	Total foreign R&D performance	Research (basic and applied)	Development
Manufacturing industries	31–33	41,131	7,362	33,769
Chemicals	325	18,849	4,217	14,633
Pharmaceuticals and medicines	3254	17,123	3,768	13,355
Computer and electronic products	334	10,035	1,161	8,874
Semiconductor and other electronic components	3344	3,807	494	3,314
Nonmanufacturing industries	21–23, 42–81	34,832	5,744	29,088
Information	51	21,359	1,680	19,679
Software publishers	5112	6,106	528	5,578
Professional, scientific, and technical services	54	10,543	3,164	7,378
Scientific research and development services	5417	7,385	2,499	4,885
Latin America and other Western Hemisphere ^a				
All industries	21–23, 31–33, 42–81	6,353	934	5,419
Manufacturing industries	31–33	4,204	619	3,585
Chemicals	325	1,146	234	912
Pharmaceuticals and medicines	3254	920	184	736
Computer and electronic products	334	1,027	173	854
Semiconductor and other electronic components	3344	364	54	310
Nonmanufacturing industries	21–23, 42–81	2,149	315	1,834
Information	51	1,067	80	987
Software publishers	5112	D	D	D
Professional, scientific, and technical services	54	862	188	674
Scientific research and development services	5417	638	142	496
Middle East				
All industries	21–23, 31–33, 42–81	10,436	1,370	9,066
Manufacturing industries	31–33	5,831	615	5,217
Chemicals	325	480	96	385
Pharmaceuticals and medicines	3254	446	89	357
Computer and electronic products	334	4,377	427	3,950
Semiconductor and other electronic components	3344	2,863	356	2,507
Nonmanufacturing industries	21–23, 42–81	4,605	755	3,850
Information	51	3,569	535	3,035
Software publishers	5112	1,053	85	968
Professional, scientific, and technical services	54	711	127	583
Scientific research and development services	5417	114	28	86
Puerto Rico ^b				
All industries	21–23, 31–33, 42–81	321	76	245
Manufacturing industries	31–33	314	75	239
Chemicals	325	172	69	103
Pharmaceuticals and medicines	3254	D	D	D
Computer and electronic products	334	8	*	7
Semiconductor and other electronic components	3344	D	0	D
Nonmanufacturing industries	21–23, 42–81	7	1	6
Information	51	3	1	3
Software publishers	5112	2	1	2
Professional, scientific, and technical services	54	4	*	3
Scientific research and development services	5417	4	*	3

* = amount < \$500,000; D = data withheld to avoid disclosing operations of individual companies; i = more than 50% of the estimate is a combination of imputation and reweighting to account for nonresponse.

NAICS = 2017 North American Industry Classification System.

^a Other Western Hemisphere is defined as Argentina, Brazil, Chile, Mexico, and other Latin America.

^b Puerto Rico is not included in the U.S. total due to its classification as a U.S. territory.

Note(s):

Detail within a select location may not add to total because of rounding. Sum of locations does not equal all locations due to the undistributed portion not being published. 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 \$50,000 or more of R&D.

Source(s):

National Center for Science and Engineering Statistics and Census Bureau, Business Enterprise Research and Development Survey, 2024.