

TABLE 24

Domestic and foreign R&D paid for by the company and others and performed by the company, by type of R&D and industry: 2022

(Millions of U.S. dollars)

Industry	NAICS code	Total	Paid for by the company	Paid for by others	Research (basic and applied)			Development					
					Total	Paid for by the company	Paid for by others	Total	Paid for by the company	Paid for by others			
Total domestic R&D performance													
All industries	21-23, 31-33, 42-81	517,413	467,517	49,896	94,743	81,502	13,240	i	422,671	386,015	36,656		
Manufacturing industries	31-33	274,871	245,087	29,784	63,201	56,472	6,729	i	211,669	188,615	23,055		
Chemicals	325	79,229	76,514	2,715	26,783	25,949	833		52,446	50,564	1,881		
Pharmaceuticals and medicines	3254	72,583	70,243	2,341	24,429	D	D		48,155	D	D		
Other chemicals	other 325	6,645	6,271	374	2,354	D	D		4,291	D	D		
Computer and electronic products	334	93,873	90,443	3,430	14,834	14,134	699		79,039	76,309	2,730		
Semiconductor and other electronic components	3344	44,683	44,210	474	6,022	5,924	99	i	38,661	38,286	375	i	
Other computer and electronic products	other 334	49,189	46,233	2,956	8,812	8,211	601		40,378	38,022	2,355		
Nonmanufacturing industries	21-23, 42-81	242,543	222,430	20,112	i 31,541	25,030	6,511	i	211,001	197,400	13,601	i	
Information	51	158,838	158,603	234	12,606	12,567	40	i	146,231	146,036	195		
Software publishers	5112	42,855	42,642	213	3,553	3,516	37	i	39,302	39,127	175		
Other information	other 51	115,982	115,961	22	i 9,053	9,051	2	i	106,929	106,910	19	i	
Professional, scientific, and technical services	54	40,165	20,356	19,810	i 11,434	4,971	6,463	i	28,731	15,384	13,347	i	
Scientific research and development services	5417	i 21,860	2,560	19,300	i 6,922	i 811	i 6,110	i	i 14,939	i 1,749	i 13,190	i	
Other professional, scientific, and technical services	other 54	18,305	17,795	510	4,512	4,160	352		13,793	13,635	157		
Total foreign R&D performance													
All industries	21-23, 31-33, 42-81	149,584	135,009	14,575	i 25,331	21,019	4,312	i	124,254	113,991	10,263	i	
Manufacturing industries	31-33	84,419	82,730	1,690	15,462	15,194	268		68,957	67,536	1,421		
Chemicals	325	25,061	24,757	304	7,484	7,408	76		17,577	17,349	228		
Pharmaceuticals and medicines	3254	22,266	22,003	263	6,803	D	D		15,463	D	D		
Other chemicals	other 325	2,795	2,755	41	681	D	D		2,114	D	D		
Computer and electronic products	334	35,536	35,392	144	4,680	4,658	22		30,856	30,734	122		
Semiconductor and other electronic components	3344	21,784	21,698	85	2,372	2,368	4	i	19,411	19,330	81	i	
Other computer and electronic products	other 334	13,753	13,694	59	2,308	2,291	17		11,445	11,403	41		
Nonmanufacturing industries	21-23, 42-81	65,165	52,279	12,886	i 9,868	i 5,825	4,044	i	55,297	46,455	8,842	i	
Information	51	36,948	36,784	164	3,550	3,505	46	i	33,398	33,280	118		
Software publishers	5112	12,330	12,182	149	1,176	1,133	42	i	11,155	11,048	106		
Other information	other 51	24,618	24,603	16	2,375	2,371	3		22,244	22,231	12		
Professional, scientific, and technical services	54	i 19,028	6,372	12,656	i 5,240	i 1,264	3,975	i	i 13,788	i 5,108	8,681	i	
Scientific research and development services	5417	i 13,571	961	12,610	i 4,089	i 125	i 3,964	i	i 9,481	i 836	i 8,646	i	
Other professional, scientific, and technical services	other 54	5,457	5,411	46	1,150	1,139	11		4,307	4,272	35		

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.

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 \$50,000 or more of R&D and are not comparable with estimates published for years prior to 2018.

Source(s):

National Center for Science and Engineering Statistics and Census Bureau, Business Enterprise Research and Development Survey, 2022.