

Table 71. Companies that collaborated with nonprofit organizations, by industry and type of collaboration: 2023

(Percent)

Industry	NAICS code	All companies (number)		All companies with any kind of collaboration with nonprofit organizations (number)		All companies with any kind of collaboration with nonprofit organizations		Performed collaborative research between business and nonprofit researchers		Funded research at nonprofit organizations		Licensed or purchased IP from a nonprofit organization		Signed nondisclosure agreements, material transfer agreements, or other agreements with nonprofit organizations governing usage of IP		Engaged in formal or informal personnel exchanges with nonprofit organizations	
All industries	11, 21–23, 31–33, 42–81	5,033,879		68,303		1.4		38.8		16.9		6.9		25.3		61.0	
Manufacturing industries	31–33	207,352		3,015		1.5		35.7		13.4		6.2		32.7		61.4	
Food	311	18,929		284		1.5		20.8		7.4		7.7		13.4		78.2	
Beverage and tobacco products	312	9,236		451		4.9		36.6		10.6		0.0		10.2	r	65.2	
Textile, apparel, and leather products	313–16	9,223		118		1.3		67.8		2.5		0.0		22.0	r	44.1	r
Wood products	321	9,572		75	r	0.8	r	4.0		5.3		4.0		9.3	r	84.0	r
Paper	322	2,042		7		0.3		85.7		0.0		0.0		57.1		57.1	
Printing and related support activities	323	18,767		121		0.6		23.1	r	6.6	r	7.4	r	68.6		8.3	
Petroleum and coal products	324	222		3		1.4		100.0		100.0		100.0		100.0		33.3	
Chemicals	325	7,878		282		3.6		46.5		27.3		7.8		37.6		60.3	
Pesticide, fertilizer, and other agricultural chemicals	3253	499		8		1.6		100.0	r	62.5		0.0		25.0	r	12.5	r
Pharmaceuticals and medicines	3254	1,702		115		6.8		53.9	r	30.4		13.9		51.3	r	50.4	r
Soap, cleaning compound, and toilet preparation	3256	1,817		73	r	4.0	r	4.1		11.0		4.1		4.1		89.0	
Other chemicals	other 325	3,860		87		2.3		66.7		34.5	r	3.4		48.3		52.9	r
Plastics and rubber products	326	6,787		99	r	1.5	r	20.2		7.1		0.0		59.6	r	31.3	r
Nonmetallic mineral products	327	7,659		46		0.6		30.4	r	13.0		0.0		30.4	r	47.8	r
Primary metals	331	1,933		8		0.4		37.5		37.5		0.0		12.5	r	25.0	
Fabricated metal products	332	47,168		286		0.6		9.4		26.2	r	1.0		38.5	r	77.3	
Machinery	333	17,417		382	r	2.2	r	59.4		5.0		16.0	r	42.1	r	59.9	
Computer and electronic products	334	8,108		331		4.1		36.9		13.3	r	13.6	r	42.9	r	55.3	
Communications equipment	3342	973		11		1.1		81.8		0.0		0.0		54.5		27.3	
Semiconductor and other electronic components	3344	2,583		62		2.4	r	66.1	r	4.8		1.6		30.6	r	80.6	
Navigational, measuring, electromedical, and control instruments	3345	3,674		244		6.6		27.9		16.0	r	17.2	r	42.6	r	52.9	
Other computer and electronic products	other 334	878		14		1.6		35.7		21.4		21.4		92.9	r	7.1	r
Electrical equipment, appliances, and components	335	4,012		146		3.6		35.6	r	1.4	r	2.1		23.3	r	87.0	
Transportation equipment	336	7,200		80		1.1		31.3	r	21.3	r	5.0	r	27.5	r	72.5	
Automobiles, bodies, trailers, and parts	3361–63	4,517		51		1.1	r	13.7		13.7		2.0	r	19.6	r	74.5	
Aerospace products and parts	3364	907		16		1.8		50.0	r	25.0	r	18.8	r	62.5	r	68.8	r
Other transportation	other 336	1,776		13		0.7		76.9	r	38.5	r	0.0		23.1		69.2	r
Furniture and related products	337	11,432		23		0.2		30.4	r	39.1	r	30.4	r	17.4	r	56.5	r
Miscellaneous	339	19,766		273		1.4		38.8	r	21.2	r	1.8	r	46.9		55.3	
Medical equipment and supplies	3391	7,071		71	r	1.0	r	77.5		21.1	r	2.8	r	14.1	r	22.5	r
Other miscellaneous manufacturing	3399	12,695		202		1.6		25.2	r	21.3	r	1.5		58.4		66.8	

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Nonmanufacturing industries	11, 21–23, 42–81	4,826,527	65,287	1.4	38.9	17.1	7.0	24.9	61.0
Agriculture, forestry, fishing, and hunting	11	18,408	447	2.4	47.4	17.4	0.0	8.9	50.1
Mining, extraction, and support activities	21	14,212	89	0.6	84.3	12.4	3.4	9.0	18.0
Utilities	22	3,367	47	1.4	55.3	31.9	6.4	31.9	55.3
Construction	23	697,532	2,742	0.4	35.7	28.2	6.3	13.6	60.1
Wholesale trade	42	236,689	2,187	0.9	32.1	23.1	7.8	25.2	59.0
Retail trade	44–45	542,047	4,588	0.8	39.0	23.7	17.6	21.0	63.7
Transportation and warehousing	48–49	184,207	781	0.4	35.6	22.9	26.2	27.1	49.2
Information	51	67,109	2,323	3.5	44.9	14.2	13.9	37.6	40.5
Publishing	511	19,008	876	4.6	50.8	10.8	15.6	26.3	36.4
Newspaper, periodical, book, and directory publishers	5111	8,557	232	2.7	26.7	22.8	17.7	5.6	53.0
Software publishers	5112	10,451	645	6.2	59.4	6.5	14.9	33.6	30.4
Telecommunications	517	6,886	77	1.1	45.5	11.7	0.0	14.3	46.8
Data processing, hosting, and related services	518	8,312	392	4.7	63.3	19.1	21.4	63.0	41.1
Other information	other 51	32,903	978	3.0	32.2	15.3	10.4	39.4	43.4
Finance and insurance	52	195,489	1,847	0.9	27.7	16.7	6.4	24.9	59.0
Real estate and rental and leasing	53	282,087	2,276	0.8	24.3	21.2	6.1	6.0	71.4
Lessors of nonfinancial intangible assets (except copyrighted works)	533	1,783	0	0.0	0.0	0.0	0.0	0.0	0.0
Other real estate and rental and leasing	other 53	280,304	2,276	0.8	24.3	21.2	6.1	6.0	71.4
Professional, scientific, and technical services	54	730,285	23,969	3.3	43.4	12.6	4.9	35.8	58.2
Legal services	5411	153,500	1,708	1.1	28.2	21.1	1.3	12.9	71.0
Accounting, tax preparation, bookkeeping, and payroll services	5412	108,031	819	0.8	18.6	15.5	0.0	15.1	74.4
Architectural, engineering, and related services	5413	88,454	2,650	3.0	38.4	7.0	2.4	29.8	65.4
Specialized design services	5414	28,137	1,163	4.1	29.1	17.3	0.1	18.1	63.7
Computer systems design and related services	5415	99,385	3,404	3.4	38.9	11.7	7.9	55.5	49.0
Management, scientific, and technical consulting services	5416	156,771	9,031	5.8	51.7	10.6	5.4	39.9	56.9
Scientific research and development services	5417	11,544	1,850	16.0	65.2	20.8	10.6	51.0	49.9
Advertising, public relations, and related services	5418	27,216	1,441	5.3	33.3	7.1	1.0	36.0	51.7
Other professional, scientific, and technical services	5419	57,246	1,904	3.3	38.9	15.3	6.0	15.2	61.1
Management of companies and enterprises	55	2,682	148	5.5	0.0	49.3	0.0	0.0	50.0
Administrative and support and waste management and remediation services	56	305,400	3,169	1.0	39.0	17.6	6.7	16.5	74.4
Educational services	61	61,684	2,493	4.0	38.6	11.0	7.1	30.7	67.0
Health care and social assistance	62	549,826	8,714	1.6	46.3	16.5	4.0	13.7	62.9

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Health care services	621–23	482,098		7,075		1.5		46.7		17.7		3.5		15.9		63.8	
Social assistance	624	67,728		1,639		2.4		44.5		11.8		6.3		4.6	r	58.8	
Arts, entertainment, and recreation	71	97,837		2,581		2.6		28.8		19.1		5.7	r	30.7		52.4	
Accommodation and food services	72	492,801		4,490		0.9		28.6		22.3		9.3		8.2		71.3	
Other services	81	344,866		2,395		0.7		23.1		22.6		5.6	r	16.5		65.4	

r = relative standard error > 50%.

IP = intellectual property; 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.

Source(s):
National Center for Science and Engineering Statistics and Census Bureau, 2024 Annual Business Survey: Data Year 2023.