

TABLE 69

Total innovation activity costs, by industry and employment size: 2018

(Thousands of U.S. dollars)

| Industry | NAICS code | All companies | 1–9 employees | 10–49 employees | 50–249 employees | 250 or more employees |
|--|-------------------------|----------------|---------------|-----------------|------------------|-----------------------|
| All industries | 11, 21–23, 31–33, 42–81 | 10,410,721,013 | 3,326,230,291 | 2,241,310,703 | 1,861,490,039 | 2,981,689,980 |
| Manufacturing industries | 31–33 | 950,038,837 | 140,279,527 | 355,906,697 | 56,138,307 | 397,714,305 |
| Food | 311 | 26,166,899 | 1,455,329 | 12,274,963 | 6,473,232 | 5,963,376 |
| Beverage and tobacco products | 312 | 10,567,323 | 3,687,138 | 6,705,244 | 123,507 | 51,435 |
| Textile, apparel, and leather products | 313–16 | 5,418,845 | 4,537,450 | 73,365 | 189,522 | 618,507 |
| Wood products | 321 | 9,794,821 | 1,769,236 | 1,800,327 | 5,567,212 | 658,046 |
| Paper | 322 | 5,619,670 | 17,436 | 122,855 | 254,905 | 5,224,473 |
| Printing and related support activities | 323 | 42,430,316 | 7,232,452 | 2,908,000 | 5,387,083 | 26,902,780 |
| Petroleum and coal products | 324 | 690,395 | 302,934 | 267,998 | 6,229 | 113,234 |
| Chemicals | 325 | 85,246,593 | 1,626,809 | 9,674,074 | 8,590,875 | 65,354,835 |
| Pesticide, fertilizer, and other agricultural chemical manufacturing | 3253 | 451,514 | 13,818 | 219,123 | 104,830 | 113,742 |
| Pharmaceuticals and medicines | 3254 | 43,313,870 | 1,199,513 | 282,709 | 4,293,995 | 37,537,652 |
| Soap, cleaning compound, and toilet preparation manufacturing | 3256 | 3,090,778 | 267,111 | 308,983 | 61,721 | 2,452,963 |
| Other chemicals | other 325 | 38,390,432 | 146,367 | 8,863,258 | 4,130,329 | 25,250,478 |
| Plastics and rubber products | 326 | 26,727,421 | 5,959,625 | 2,576,446 | 889,199 | 17,302,151 |
| Nonmetallic mineral products | 327 | 9,981,429 | 697,932 | 4,997,901 | 306,388 | 3,979,208 |
| Primary metals | 331 | 14,305,756 | 320,599 | 11,076,016 | 147,534 | 2,761,607 |
| Fabricated metal products | 332 | 124,742,723 | 54,894,945 | 59,159,074 | 7,697,137 | 2,991,567 |
| Machinery | 333 | 249,454,593 | 24,517,982 | 188,769,858 | 3,878,075 | 32,288,678 |
| Computer and electronic products | 334 | 58,694,742 | 12,818,610 | 7,857,637 | 6,102,024 | 31,916,471 |
| Communications equipment | 3342 | 7,036,718 | 2,519,425 | 62,016 | 3,543,065 | 912,212 |
| Semiconductor and other electronic components | 3344 | 31,483,799 | 419,104 | 5,135,882 | 1,643,049 | 24,285,764 |
| Navigational, measuring, electromedical, and control instruments | 3345 | 18,224,322 | 9,349,800 | 2,103,105 | 806,952 | 5,964,466 |
| Other computer and electronic products | other 334 | 1,949,903 | 530,282 | 556,633 | 108,958 | 754,030 |
| Electrical equipment, appliances, and components | 335 | 18,949,956 | 7,012,290 | 4,760,664 | 2,987,939 | 4,189,063 |
| Transportation equipment | 336 | 203,739,986 | 4,990,536 | 25,321,311 | 2,826,135 | 170,602,004 |
| Automobiles, bodies, trailers, and parts | 3361–63 | 189,457,462 | 3,549,500 | 24,845,910 | 2,471,036 | 158,591,016 |
| Aerospace products and parts | 3364 | 13,187,515 | 1,369,653 | 316,937 | 265,793 | 11,235,132 |
| Other transportation | other 336 | 1,095,009 | 71,383 | 158,464 | 89,306 | 775,856 |
| Furniture and related products | 337 | 6,845,665 | 1,285,603 | 633,500 | 4,159,882 | 766,681 |
| Miscellaneous | 339 | 50,661,599 | 7,152,515 | 16,927,464 | 551,428 | 26,030,191 |
| Medical equipment and supplies | 3391 | 33,704,720 | 6,755,747 | 1,205,425 | 174,948 | 25,568,600 |
| Other miscellaneous manufacturing | 3399 | 16,956,879 | 396,768 | 15,722,039 | 376,480 | 461,591 |
| Nonmanufacturing industries | 11, 21–23, 42–81 | 9,460,682,176 | 3,185,950,764 | 1,885,404,006 | 1,805,351,732 | 2,583,975,675 |

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|--|------------|---------------|---|---------------|---|-----------------|---|------------------|---|-----------------------|---|
| Agriculture, forestry, fishing, and hunting | 11 | 1,145,527,199 | r | 10,154,686 | r | 1,081,460 | r | 264,403 | r | 1,134,026,651 | r |
| Mining, extraction, and support activities | 21 | 16,507,354 | | 6,257,061 | r | 1,290,134 | | 877,466 | | 8,082,693 | |
| Utilities | 22 | 740,036,775 | r | 1,605,343 | | 237,153 | | 736,655,764 | r | 1,538,515 | |
| Construction | 23 | 832,952,781 | | 342,170,152 | | 394,993,804 | | 92,760,288 | r | 3,028,536 | |
| Wholesale trade | 42 | 746,011,242 | | 349,247,150 | | 135,996,709 | | 167,799,499 | r | 92,967,885 | |
| Retail trade | 44–45 | 517,493,969 | | 189,530,156 | | 229,652,897 | r | 51,898,731 | r | 46,412,186 | |
| Transportation and warehousing | 48–49 | 247,431,425 | | 130,935,545 | | 69,985,408 | r | 8,451,459 | | 38,059,014 | |
| Information | 51 | 737,537,478 | | 130,440,515 | | 25,531,940 | | 14,932,851 | | 566,632,173 | |
| Publishing | 511 | 516,997,164 | | 11,600,821 | | 13,191,674 | r | 1,336,344 | | 490,868,325 | |
| Newspaper, periodical, book, and directory publishers | 5111 | 19,848,831 | | 981,581 | | 1,064,011 | r | 43,018 | | 17,760,222 | |
| Software publishers | 5112 | 497,148,333 | | 10,619,241 | | 12,127,663 | r | 1,293,326 | | 473,108,103 | |
| Telecommunications | 517 | 80,153,644 | | 13,475,812 | r | 3,741,469 | | 4,964,043 | | 57,972,319 | |
| Data processing, hosting, and related services | 518 | 48,729,296 | | 29,197,439 | r | 6,981,008 | | 8,051,373 | r | 4,499,477 | |
| Other information | other 51 | 91,657,374 | r | 76,166,442 | r | 1,617,788 | | 581,092 | | 13,292,052 | |
| Finance and insurance | 52 | 809,192,265 | | 319,732,839 | r | 81,108,945 | r | 321,364,790 | r | 86,985,691 | |
| Real estate and rental and leasing | 53 | 122,514,458 | | 51,771,753 | | 70,318,066 | r | 296,847 | r | 127,792 | |
| Lessors of nonfinancial intangible assets (except copyrighted works) | 533 | 69,355 | | 36,555 | r | 16,827 | r | 0 | | D | |
| Other real estate and rental and leasing | other 53 | 122,445,103 | | 51,735,199 | | 70,301,238 | r | 296,847 | r | 111,819 | |
| Professional, scientific, and technical services | 54 | 1,621,308,104 | | 739,906,557 | | 281,566,717 | | 270,487,109 | r | 329,347,721 | |
| Legal services | 5411 | 129,002,283 | | 61,252,560 | | 2,437,108 | | 31,445,001 | r | 33,867,615 | |
| Accounting, tax preparation, bookkeeping, and payroll services | 5412 | 31,968,606 | | 14,715,645 | | 1,841,956 | r | 2,726,327 | r | 12,684,679 | |
| Architectural, engineering, and related services | 5413 | 484,431,724 | | 65,542,642 | | 159,518,776 | r | 27,584,524 | r | 231,785,782 | |
| Specialized design services | 5414 | 13,146,641 | r | 12,914,145 | r | 230,779 | r | 1,718 | r | 0 | |
| Computer systems design and related services | 5415 | 619,947,900 | | 364,982,314 | | 69,487,803 | r | 164,582,653 | r | 20,895,130 | |
| Management, scientific, and technical consulting services | 5416 | 118,559,666 | | 104,655,204 | | 10,168,482 | r | 2,182,901 | | 1,553,078 | |
| Scientific research and development services | 5417 | 128,486,829 | | 85,729,929 | r | 14,242,432 | | 2,892,217 | | 25,622,251 | |
| Advertising, public relations, and related services | 5418 | 55,015,314 | | 12,188,176 | | 2,666,368 | | 38,992,581 | | 1,168,190 | |
| Other professional, scientific, and technical services | 5419 | 40,749,141 | | 17,925,943 | | 20,973,014 | r | 79,188 | r | 1,770,996 | |
| Management of companies and enterprises | 55 | 2,427,789 | r | 313,784 | r | D | | 139,834 | r | D | |
| Administrative and support and waste management and remediation services | 56 | 371,676,749 | | 154,229,089 | | 177,963,298 | | 14,958,215 | r | 24,526,146 | |
| Educational services | 61 | 27,814,328 | | 14,435,458 | | 12,209,208 | r | 77,937 | | 1,091,725 | |
| Health care and social assistance | 62 | 531,448,526 | | 258,368,247 | | 168,250,438 | | 93,809,987 | r | 11,019,854 | |

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(Thousands of U.S. dollars)

| Industry | NAICS code | All companies | 1–9 employees | 10–49 employees | 50–249 employees | 250 or more employees |
|-------------------------------------|------------|---------------|---------------|-----------------|------------------|-----------------------|
| Health care services | 621–23 | 388,227,856 | 200,551,960 | 152,014,990 | 24,877,126 | 10,783,781 |
| Social assistance | 624 | 143,220,670 | 57,816,287 | 16,235,448 | 68,932,861 | 236,073 |
| Arts, entertainment, and recreation | 71 | 395,015,208 | 261,415,511 | 10,837,776 | 7,057,507 | 115,704,414 |
| Accommodation and food services | 72 | 288,132,127 | 70,437,611 | 93,233,008 | 14,262,428 | 110,199,080 |
| Other services | 81 | 307,654,398 | 154,999,306 | 129,173,704 | 9,256,618 | 14,224,769 |

D = withheld to avoid disclosing data for individual companies; data are included in higher-level totals. r = relative standard error > 50%.

NAICS = 2017 North American Industry Classification System.

Note(s):

Detail may not add to total because of rounding. Statistics are representative of companies located in the United States.

Source(s):

National Center for Science and Engineering Statistics and Census Bureau, 2019 Annual Business Survey: Data Year 2018.