

TABLE 6

Domestic R&D costs, by selected industry and type of cost, for companies with 1–9 employees: 2021

(Thousands of U.S. dollars)

| Industry | NAICS code | Total | Salaries, wages, and fringe benefits | Expensed machinery and equipment | Materials and supplies | Payments to others for R&D | Depreciation on R&D property and equipment | All other costs |
|--|---------------------------------|-----------|--------------------------------------|----------------------------------|------------------------|----------------------------|--|-----------------|
| All selected industries | 31–33, 42, 51, 5413, 5415, 5417 | 7,254,217 | 4,036,146 | 199,530 | 573,007 | 1,129,548 | 74,926 | 1,241,060 |
| Manufacturing industries | 31–33 | 920,331 | 425,563 | 27,714 | 128,070 | 173,207 | 9,581 | 156,196 |
| Food, beverage, and tobacco products | 311–12 | 19,097 | 11,185 | 2,710 | 3,718 | 827 | 57 | 600 |
| Textile, apparel, and leather products | 313–16 | 7,096 | 2,523 | 39 | 493 | 0 | 16 | 4,024 |
| Wood products | 321 | 138 | 106 | 14 | 3 | 4 | 0 | 11 |
| Paper | 322 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Printing and related support activities | 323 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Petroleum and coal products | 324 | 739 | 444 | 30 | 148 | 0 | 0 | 118 |
| Chemicals | 325 | 208,440 | 59,578 | 8,664 | 25,060 | 76,185 | 3,357 | 35,595 |
| Pharmaceuticals and medicines | 3254 | 163,546 | 37,379 | 6,958 | 22,124 | 66,881 | 2,717 | 27,488 |
| Chemicals, excluding pharmaceuticals | other 325 | 44,894 | 22,199 | 1,706 | 2,937 | 9,305 | 640 | 8,107 |
| Plastics and rubber products | 326 | 6,486 | 3,001 | 491 | 940 | 59 | 115 | 1,880 |
| Nonmetallic mineral products | 327 | 3,808 | 3,250 | 0 | 327 | 170 | 8 | 52 |
| Primary metals | 331 | 2,240 | 930 | 348 | 253 | 123 | 209 | 376 |
| Fabricated metal products | 332 | 15,819 | 5,495 | 1,130 | 2,569 | 3,836 | 367 | 2,422 |
| Machinery | 333 | 76,360 | 46,830 | 1,091 | 6,670 | 12,252 | 81 | 9,437 |
| Computer and electronic products | 334 | 330,785 | 172,865 | 7,014 | 50,420 | 51,582 | 4,163 | 44,741 |
| Semiconductor and other electronic components | 3344 | 105,362 | 48,223 | 3,199 | 7,767 | 34,082 | 2,006 | 10,084 |
| Navigational, measuring, electromedical, and control instruments | 3345 | 179,628 | 102,953 | 2,865 | 35,825 | 14,829 | 1,141 | 22,014 |
| Other computer and electronic products | other 334 | 45,795 | 21,689 | 950 | 6,828 | 2,672 | 1,016 | 12,642 |
| Electrical equipment, appliances, and components | 335 | 41,714 | 25,638 | 1,707 | 6,881 | 1,682 | 426 | 5,381 |
| Transportation equipment | 336 | 36,042 | 20,951 | 1,703 | 9,961 | 2,131 | 185 | 1,112 |
| Aerospace products and parts | 3364 | 13,903 | 9,043 | 311 | 3,031 | 900 | 45 | 573 |
| Other transportation equipment | other 336 | 22,139 | 11,907 | 1,391 | 6,930 | 1,231 | 139 | 540 |
| Furniture and related products | 337 | 1,471 | 273 | 286 | 54 | 0 | 36 | 821 |
| Miscellaneous manufacturing | 339 | 170,097 | 72,495 | 2,487 | 20,574 | 24,356 | 560 | 49,626 |
| Selected nonmanufacturing industries | 42, 51, 5413, 5415, 5417 | 6,333,886 | 3,610,583 | 171,816 | 444,937 | 956,342 | 65,345 | 1,084,863 |
| Wholesale trade | 42 | 154,712 | 71,006 | 7,676 | 43,108 | 11,649 | 1,159 | 20,114 |
| Information | 51 | 784,850 | 617,001 | 39,065 | 17,102 | 28,193 | 6,171 | 77,319 |
| Software publishers | 5112 | 560,818 | 460,456 | 9,596 | 13,299 | 24,868 | 6,109 | 46,490 |
| Information, excluding software publishers | 51 less 5112 | 224,032 | 156,545 | 29,469 | 3,803 | 3,325 | 61 | 30,829 |
| Architectural, engineering, and related services | 5413 | 647,610 | 447,922 | 27,288 | 59,372 | 41,424 | 7,188 | 64,415 |
| Computer systems design and related services | 5415 | 1,690,254 | 1,226,739 | 27,900 | 40,717 | 74,064 | 5,269 | 315,566 |
| Scientific research and development services | 5417 | 3,056,460 | 1,247,915 | 69,886 | 284,639 | 801,012 | 45,559 | 607,450 |
| Research and development in nanotechnology | 541713 | 201,891 | 111,127 | 5,676 | 17,371 | 29,309 | 2,815 | 35,595 |
| Research and development in biotechnology (except nanobiotechnology) | 541714 | 1,288,461 | 441,338 | 18,479 | 115,229 | 419,881 | 20,267 | 273,267 |

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|--|------------|-----------|--------------------------------------|----------------------------------|------------------------|----------------------------|--|-----------------|
| Research and development in the physical, engineering, and life sciences (except nanotechnology and biotechnology) | 541715 | 1,538,246 | 677,439 | 45,557 | 151,157 | 344,568 | 22,421 | 297,103 |
| Social sciences and humanities research and development | 541720 | 17,262 | 9,856 | 174 | 474 | 5,215 | 56 r | 1,485 |

r = relative standard error > 50%.

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 that performed or funded R&D.

Source(s):

National Center for Science and Engineering Statistics and Census Bureau, 2022 Annual Business Survey: Data Year 2021.