

TABLE 27. R&D funds per full-time equivalent R&D scientist or engineer spent by companies performing industrial R&D in the United States, by industry, by company size: 2006

(Dollars)

| Industry   | NAICS codes             | Company size (employees) |           |           |           |           |         |           |             |             |               |           |
|--|-------------------------|--------------------------|-----------|-----------|-----------|-----------|---------|-----------|-------------|-------------|---------------|-----------|
|  |                         | All companies            | 5-24      | 25-49     | 50-99     | 100-249   | 250-499 | 500-999   | 1,000-4,999 | 5,000-9,999 | 10,000-24,999 | 25,000 +  |
| All industries   | 21-23, 31-33, 42, 44-81 | 235,208                  | 159,349   | 211,863   | 188,690   | 205,521   | 197,858 | 225,174   | 225,470     | 199,249     | 216,962       | 295,972   |
| Manufacturing industries   | 31-33                   | 254,891                  | 182,841   | 198,955   | 168,808   | 177,277   | 198,273 | 229,106   | 225,651     | 221,890 i   | 230,787 i     | 322,291   |
| Food   | 311                     | 248,783                  | 66,239 i  | 86,549 i  | 146,322   | 200,967   | 184,269 | 159,690   | 158,042     | 235,441     | 299,201       | 326,059   |
| Beverage and tobacco products                                    | 312                     | 116,550 i                | 70,251 i  | 104,274 i | 10,227 i  | 252,512 i | D       | D         | 129,398     | D           | D             | 0         |
| Textiles, apparel, and leather                                   | 313-16                  | 105,811                  | 59,928 i  | 118,964   | 39,846    | 142,846   | 164,479 | 189,861 i | 68,474 i    | D           | D             | D         |
| Wood products  | 321                     | 135,946 i                | 50,000 i  | 93,529    | 28,619 i  | 138,666   | 126,035 | 144,925   | 191,990     | 130,711 i   | D             | 0         |
| Paper, printing, and support activities                          | 322, 323                | 309,420 i                | 58,948    | 40,812 i  | 86,669 i  | 214,381 i | 151,139 | 195,461   | 149,010     | 355,084 i   | 161,913 i     | 502,311 i |
| Petroleum and coal products                                      | 324                     | 330,728 i                | 134,924   | 139,613   | 84,202    | 95,311 i  | D       | D         | 489,522 i   | 0           | D             | D         |
| Chemicals  | 325                     | 385,179                  | 333,870   | 308,196   | 286,174   | 344,805   | 319,537 | 332,661   | 328,640     | 286,663 i   | 406,943       | 470,710 i |
| Basic chemicals  | 3251                    | 233,351                  | 210,581   | 113,935   | 185,135   | 163,647   | 165,148 | 322,777   | 272,737 i   | 166,380 i   | D             | 0         |
| Resin, synthetic rubber, fibers, and filament                    | 3252                    | 243,304                  | 139,860   | 191,096   | 138,442   | 176,331   | 132,133 | 223,349   | 227,273 i   | 0           | D             | D         |
| Pharmaceuticals and medicines                                    | 3254                    | 462,279 i                | D         | 616,435   | 716,639   | 495,824   | 419,210 | 348,620   | 484,906 i   | 464,314     | 432,794 i     | 514,481 i |
| Other chemicals  | other 325               | 175,682                  | 75,474    | 109,644   | 103,858   | 147,663   | 175,906 | 149,591   | 132,815     | 188,313 i   | 265,195       | D         |
| Plastics and rubber products                                     | 326                     | 194,762                  | 152,018 i | 85,667 i  | 268,218   | 139,073   | 199,744 | 168,675   | 248,711     | 149,490     | D             | D         |
| Nonmetallic mineral products                                     | 327                     | 156,153 i                | 71,917 i  | 273,979   | 190,218   | 109,729   | 146,710 | 163,192 i | 151,000     | D           | 160,830 i     | 0         |
| Primary metals   | 331                     | 204,051 i                | 262,934   | 172,658   | 233,497   | 87,402    | 235,556 | 130,274   | 245,435 i   | 129,111 i   | 194,431       | D         |
| Fabricated metal products  | 332                     | 82,960                   | 141,003 i | 93,923    | 103,230 i | 69,031 i  | 125,184 | 92,882    | 45,186      | 141,284     | 282,194       | D         |
| Machinery  | 333                     | 164,676                  | 159,542 i | 182,975   | 128,462   | 145,797   | 168,410 | 149,886   | 185,824     | 242,004     | 105,977       | 174,829 i |
| Computer and electronic products                                 | 334                     | 230,291                  | 195,239   | 199,118   | 171,959   | 172,167   | 184,599 | 232,408   | 244,018     | 248,953 i   | 168,802 i     | 254,502   |
| Computers and peripheral equipment                               | 3341                    | 228,244                  | 106,365 i | 150,202   | 219,525   | 172,650   | 182,462 | 225,222   | 239,547     | 412,340     | D             | D         |
| Communications equipment   | 3342                    | 224,116                  | 310,867 i | 220,336   | 175,082   | 204,279   | 190,177 | 215,181   | 228,438     | D           | 0             | D         |
| Semiconductor and other electronic components                    | 3344                    | 226,684                  | 251,906   | 188,511   | 148,831   | 173,065   | 197,534 | 261,853   | 273,099     | 268,716 i   | D             | 196,166   |
| Navigational, measuring, electromedical, and control instruments | 3345                    | 240,372 i                | 166,170   | 215,263   | 168,751   | 153,410   | 182,302 | 207,750   | 230,195     | 182,996 i   | 125,978 i     | 382,687 i |
| Other computer and electronic products                           | other 334               | 211,829 i                | 176,665   | 195,765   | 199,570   | 125,119   | 93,627  | 218,250   | 195,530 i   | D           | D             | 0         |
| Electrical equipment, appliances, and components                 | 335                     | 151,666                  | 130,252   | 135,123   | 80,035    | 132,295   | 174,506 | 163,388   | 177,005     | 117,519 i   | 145,443       | 0         |
| Transportation equipment   | 336                     | 282,222                  | 220,124   | 159,962   | 179,784   | 169,603   | 210,935 | 329,323   | 198,874     | 116,704 i   | 100,652 i     | 375,341   |
| Motor vehicles, trailers, and parts                              | 3361-63                 | 193,853 i                | D         | 233,817   | 135,373   | 151,409   | 206,443 | 264,673   | 209,606     | 94,597 i    | 61,077 i      | 279,144   |
| Aerospace products and parts                                     | 3364                    | 419,381 i                | D         | 110,544   | 300,222   | 229,457   | 364,831 | 800,209 i | 201,249     | D           | D             | 427,248 i |
| Other transportation equipment                                   | other 336               | 596,719                  | 98,150 i  | D         | 190,363   | 133,486   | 132,315 | 176,027   | 131,557     | D           | D             | D         |
| Furniture and related products                                   | 337                     | 117,681                  | 150,903 i | 68,824 i  | 135,393 i | 129,686   | 98,312  | 105,398 i | 62,359 i    | 201,438     | 122,000 i     | D         |
| Miscellaneous manufacturing                                      | 339                     | 239,121                  | 283,008   | 260,584   | 189,721   | 161,249   | 205,992 | 225,545   | 238,394     | 308,260 i   | 254,420       | 0         |
| Medical equipment and supplies                                   | 3391                    | 267,132                  | 363,086   | 295,308 i | 231,625   | 167,217   | 226,996 | 249,951   | 303,227 i   | D           | 254,420       | 0         |
| Other miscellaneous manufacturing                                | other 339               | 169,753                  | 184,256   | 161,350   | 122,991   | 137,052   | 167,231 | 151,966   | 154,399     | D           | 0             | 0         |

TABLE 27. R&D funds per full-time equivalent R&D scientist or engineer spent by companies performing industrial R&D in the United States, by industry, by company size: 2006

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|  |                  | All companies            | 5-24      | 25-49     | 50-99     | 100-249   | 250-499   | 500-999   | 1,000-4,999 | 5,000-9,999 | 10,000-24,999 | 25,000 +  |
| Nonmanufacturing industries  | 21-23, 42, 44-81 | 200,193                  | 152,423   | 217,591   | 196,178   | 223,675   | 197,296   | 217,244   | 224,977     | 161,250     | 175,673       | 220,374   |
| Mining, extraction, and support activities                                   | 21               | 299,958                  | 500,000 i | D         | 553,468   | D         | 272,643   | D         | 253,039 i   | 279,393 i   | D             | D         |
| Utilities  | 22               | 222,859                  | 23,583 i  | 104,111   | D         | 0         | D         | D         | 201,207     | 165,836 i   | 331,768 i     | D         |
| Construction   | 23               | 118,055                  | 58,222    | 115,362 i | D         | 206,319   | 389,510   | 82,793    | 242,813     | D           | D             | 0         |
| Wholesale trade  | 42               | 131,178                  | 22,202    | 182,870   | 121,347   | 164,781   | 185,788   | 232,947   | 171,982     | 0           | 0             | 0         |
| Retail trade   | 44, 45           | 238,522                  | D         | 201,470   | D         | 133,573   | D         | 300,049 i | 167,311     | D           | 263,825       | 197,300   |
| Transportation and warehousing   | 48, 49           | 284,706 i                | D         | 0         | D         | D         | D         | D         | D           | D           | D             | D         |
| Information  | 51               | 201,371                  | 162,595   | 181,860   | 133,594   | 163,364   | 203,691   | 196,975   | 217,185     | 228,787     | 246,819       | 189,837   |
| Publishing   | 511              | 201,588                  | 160,561   | 179,209   | 151,711   | 151,056   | 210,833 i | 205,232   | 224,602     | 191,987     | D             | D         |
| Newspaper, periodical, book, and directory                                   | 5111             | 177,187                  | 93,047 i  | 100,000   | D         | 104,508 i | 93,858 i  | D         | D           | D           | D             | D         |
| Software   | 5112             | 203,050                  | 178,874   | 180,046   | 150,702   | 153,886   | 217,525 i | 209,138   | 229,035     | 188,049     | D             | D         |
| Telecommunications   | 517              | 255,463 i                | 232,864   | 83,599    | 233,240 i | 224,148 i | 174,596 i | D         | D           | D           | D             | 321,368 i |
| Wired and wireless (except satellite) telecommunications carriers            | 5171, 5172       | 258,689                  | D         | 82,431    | D         | 244,774 i | 342,193 i | D         | D           | D           | D             | 328,566 i |
| Satellite telecommunications   | 5174             | D                        | D         | D         | D         | 0         | 0         | 0         | D           | 0           | 0             | 0         |
| Other telecommunications   | other 517        | 243,299 i                | 14,000    | D         | 151,542 i | D         | D         | D         | D           | 0           | D             | D         |
| Internet service providers, Web search portals, and data-processing services | 518              | 183,995                  | 162,296   | 179,003   | 90,501    | 186,428   | 198,332   | 173,782   | 206,622     | 321,296     | D             | D         |
| Internet service providers and Web search portals                            | 5181             | 330,987                  | 124,442 i | D         | 18,831    | D         | D         | D         | 0           | D           | 0             | 0         |
| Data-processing, hosting, and related services                               | 5182             | 144,936                  | 191,863   | 188,274   | 104,478   | 184,102   | 207,013   | 181,434   | 206,622     | D           | D             | D         |
| Other information  | other 51         | 178,263                  | 112,627   | 266,847 i | D         | 187,257 i | D         | 158,363   | D           | 0           | D             | D         |
| Finance, insurance, and real estate  | 52, 53           | 98,279                   | 200,000   | D         | 137,849   | 183,053 i | D         | 168,187 i | 128,312 i   | D           | 47,295 i      | 59,974    |
| Professional, scientific, and technical services                             | 54               | 222,459                  | 192,608   | 237,088   | 247,102   | 253,149   | 198,898   | 246,655   | 254,598     | 50,796      | 102,380 i     | 318,634   |
| Architectural, engineering, and related services                             | 5413             | 170,805                  | 207,863   | 270,678   | 329,143   | 194,375 i | 194,162   | 208,472   | 280,732     | D           | D             | D         |
| Computer systems design and related services                                 | 5415             | 183,437                  | 172,388   | 153,931   | 113,962   | 197,434   | 140,859   | 198,934   | 146,746     | D           | D             | D         |
| Scientific R&D services  | 5417             | 347,970                  | 226,143   | 329,378   | 356,907   | 336,876   | 252,049   | 384,524   | 337,986     | D           | 0             | D         |

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|  |                             | All companies            | 5-24     | 25-49    | 50-99     | 100-249   | 250-499 | 500-999   | 1,000-4,999 | 5,000-9,999 | 10,000-24,999 | 25,000 + |
| Other professional, scientific, and technical services | other 54                    | 213,109                  | 153,758  | 56,615   | 251,778   | 311,989 i | 158,489 | D         | 224,056     | D           | D             | D        |
| Health care services                                   | 621-23                      | 183,926                  | 88,993   | 14,579 i | 108,719 i | 167,592 i | 116,693 | D         | D           | D           | D             | D        |
| Other nonmanufacturing <sup>a</sup>                    | 55-56, 61<br>624, 71-72, 81 | 150,292                  | 60,766 i | 123,560  | 55,912 i  | 182,299 i | 112,415 | 142,678 i | 132,915     | 88,318      | D             | D        |

D = suppressed to avoid disclosure of confidential data; i = more than 50% of the value is imputed.

<sup>a</sup> Estimates for management of companies and enterprises (NAICS 55), formerly shown separately, now are included in other nonmanufacturing.

NOTES: The method used to assign industry classifications has changed; industry-specific estimates for 2004 are not directly comparable with those for previous years. Excludes federally funded research and development centers. R&D scientist and engineer data recorded in January represent employment for the previous year; the number of full-time-equivalent R&D scientists or engineers used to estimate the cost per R&D scientist or engineer is the arithmetic mean of the numbers of R&D scientists and engineers reported for January 2006 and January 2007. This number is then divided into the total R&D expenditures for 2006, and the ratio is attributed to 2006. For definitions and more information about year-to-year comparability of the statistics, see technical notes and survey methodology.

SOURCE: National Science Foundation/Division of Science Resources Statistics, Survey of Industrial Research and Development: 2006.