

Appendix table 4-4

U.S. inflation-adjusted R&D expenditures, by performing and funding sectors: 1953–2006

(Millions of constant 2000 dollars)

| Year | Performing sector: | Total | Federal | Industry | | | Industry FFRDCs | U&C ^a | | | | | U&C FFRDCs | Other nonprofit institutions | | | | Nonprofit FFRDCs ^b | |
|-----------|--------------------|---------|---------|----------|----------------------|-----------------------|----------------------|------------------|---------|-------------------------|----------|-------|------------|------------------------------|-------|----------------------|----------|-------------------------------|----------------------|
| | Funding sector: | Total | Federal | Total | Federal ^c | Industry ^d | Federal ^e | Total | Federal | Nonfederal ^e | Industry | U&C | Nonprofit | Federal ^f | Total | Federal ^g | Industry | Nonprofit | Federal ^h |
| 1953..... | | 28,282 | 5,563 | 19,896 | 7,838 | 12,058 | NA | 1,494 | 817 | 217 | 112 | 200 | 148 | 718 | 611 | 315 | 143 | 153 | NA |
| 1954..... | | 30,495 | 5,226 | 22,098 | 9,502 | 12,597 | NA | 1,634 | 893 | 242 | 128 | 214 | 157 | 871 | 665 | 328 | 168 | 168 | NA |
| 1955..... | | 33,508 | 5,189 | 24,096 | 10,973 | 13,123 | 656 | 1,824 | 1,019 | 267 | 144 | 224 | 171 | 998 | 699 | 341 | 187 | 171 | 45 |
| 1956..... | | 43,827 | 5,829 | 32,339 | 15,443 | 16,897 | 1,717 | 2,016 | 1,140 | 291 | 162 | 237 | 186 | 1,119 | 750 | 364 | 191 | 196 | 57 |
| 1957..... | | 49,447 | 6,474 | 36,550 | 19,603 | 16,948 | 2,031 | 2,161 | 1,205 | 319 | 182 | 255 | 200 | 1,330 | 831 | 392 | 185 | 255 | 70 |
| 1958..... | | 53,248 | 7,350 | 39,349 | 21,641 | 17,709 | 1,576 | 2,395 | 1,366 | 351 | 190 | 271 | 217 | 1,539 | 951 | 463 | 185 | 302 | 88 |
| 1959..... | | 60,187 | 8,101 | 44,335 | 25,141 | 19,194 | 2,014 | 2,824 | 1,713 | 388 | 190 | 294 | 239 | 1,682 | 1,125 | 600 | 202 | 323 | 106 |
| 1960..... | | 65,164 | 8,558 | 47,679 | 26,634 | 21,045 | 2,267 | 3,348 | 2,151 | 428 | 190 | 318 | 261 | 1,830 | 1,255 | 703 | 228 | 323 | 228 |
| 1961..... | | 68,450 | 9,340 | 48,657 | 26,719 | 21,939 | 2,608 | 3,917 | 2,615 | 472 | 188 | 350 | 291 | 2,068 | 1,429 | 794 | 230 | 404 | 430 |
| 1962..... | | 72,499 | 10,143 | 51,174 | 27,857 | 23,318 | 1,975 | 4,602 | 3,183 | 519 | 188 | 389 | 322 | 2,318 | 1,683 | 927 | 250 | 505 | 603 |
| 1963..... | | 80,377 | 11,738 | 56,047 | 31,455 | 24,592 | 1,899 | 5,405 | 3,847 | 573 | 186 | 440 | 358 | 2,659 | 1,872 | 1,074 | 252 | 546 | 757 |
| 1964..... | | 86,320 | 13,399 | 58,964 | 32,792 | 26,172 | 2,092 | 6,211 | 4,496 | 621 | 183 | 513 | 398 | 2,842 | 1,884 | 1,130 | 249 | 506 | 926 |
| 1965..... | | 89,872 | 14,006 | 61,293 | 32,692 | 28,601 | 1,655 | 7,076 | 5,179 | 663 | 184 | 604 | 446 | 2,793 | 2,095 | 1,269 | 275 | 550 | 954 |
| 1966..... | | 95,232 | 14,272 | 65,553 | 34,418 | 31,135 | 1,532 | 7,844 | 5,760 | 690 | 194 | 710 | 490 | 2,811 | 2,315 | 1,417 | 302 | 595 | 906 |
| 1967..... | | 97,709 | 14,416 | 66,821 | 33,256 | 33,565 | 1,754 | 8,517 | 6,238 | 703 | 216 | 835 | 525 | 2,913 | 2,348 | 1,431 | 310 | 607 | 942 |
| 1968..... | | 99,009 | 14,037 | 68,293 | 32,694 | 35,600 | 1,666 | 8,779 | 6,366 | 741 | 231 | 885 | 556 | 2,898 | 2,392 | 1,461 | 325 | 606 | 943 |
| 1969..... | | 99,415 | 14,495 | 68,241 | 30,545 | 37,696 | 1,774 | 8,719 | 6,209 | 795 | 231 | 891 | 593 | 2,796 | 2,453 | 1,482 | 356 | 616 | 937 |
| 1970..... | | 95,419 | 15,087 | 63,903 | 26,536 | 37,367 | 1,718 | 8,781 | 6,122 | 861 | 238 | 939 | 621 | 2,639 | 2,457 | 1,487 | 345 | 625 | 835 |
| 1971..... | | 93,225 | 15,250 | 61,670 | 24,818 | 36,852 | 1,698 | 8,872 | 6,086 | 906 | 249 | 1,001 | 630 | 2,541 | 2,451 | 1,475 | 339 | 636 | 744 |
| 1972..... | | 95,275 | 15,500 | 62,999 | 24,760 | 38,239 | 1,817 | 9,140 | 6,265 | 935 | 262 | 1,033 | 645 | 2,602 | 2,554 | 1,563 | 335 | 656 | 663 |
| 1973..... | | 97,184 | 15,186 | 65,008 | 23,863 | 41,145 | 1,711 | 9,272 | 6,306 | 947 | 281 | 1,077 | 661 | 2,641 | 2,769 | 1,777 | 330 | 663 | 597 |
| 1974..... | | 96,065 | 14,780 | 64,042 | 21,805 | 42,237 | 1,866 | 9,260 | 6,220 | 922 | 299 | 1,130 | 688 | 2,667 | 2,845 | 1,839 | 329 | 677 | 605 |
| 1975..... | | 93,870 | 14,635 | 61,735 | 20,731 | 41,004 | 1,913 | 9,393 | 6,316 | 916 | 311 | 1,135 | 716 | 2,808 | 2,793 | 1,776 | 327 | 690 | 592 |
| 1976..... | | 98,104 | 14,653 | 64,948 | 21,571 | 43,377 | 2,214 | 9,699 | 6,515 | 918 | 326 | 1,194 | 745 | 3,148 | 2,833 | 1,769 | 336 | 727 | 610 |
| 1977..... | | 101,372 | 14,529 | 67,514 | 22,275 | 45,238 | 2,250 | 10,166 | 6,766 | 922 | 361 | 1,330 | 787 | 3,432 | 2,838 | 1,732 | 344 | 763 | 643 |
| 1978..... | | 106,474 | 15,216 | 70,420 | 22,089 | 48,332 | 2,365 | 10,918 | 7,274 | 968 | 397 | 1,484 | 794 | 3,872 | 2,958 | 1,814 | 350 | 794 | 727 |
| 1979..... | | 111,769 | 15,079 | 74,801 | 22,915 | 51,885 | 2,349 | 11,533 | 7,766 | 972 | 433 | 1,584 | 778 | 4,062 | 3,157 | 1,988 | 351 | 818 | 787 |
| 1980..... | | 116,990 | 14,490 | 79,989 | 23,596 | 56,393 | 2,363 | 11,944 | 8,021 | 959 | 488 | 1,701 | 775 | 4,267 | 3,069 | 1,882 | 351 | 836 | 867 |
| 1981..... | | 122,282 | 14,555 | 85,294 | 25,367 | 59,927 | 2,343 | 11,984 | 7,898 | 983 | 531 | 1,789 | 783 | 4,202 | 3,018 | 1,818 | 349 | 852 | 886 |
| 1982..... | | 128,733 | 15,147 | 91,137 | 27,200 | 63,938 | 2,366 | 12,120 | 7,778 | 990 | 579 | 1,923 | 851 | 4,055 | 3,053 | 1,800 | 358 | 895 | 854 |
| 1983..... | | 137,944 | 16,608 | 97,663 | 29,284 | 68,379 | 2,431 | 12,654 | 7,990 | 1,009 | 663 | 2,080 | 912 | 4,356 | 3,336 | 2,002 | 374 | 960 | 898 |
| 1984..... | | 151,125 | 17,612 | 107,990 | 32,011 | 75,979 | 2,570 | 13,530 | 8,495 | 1,066 | 765 | 2,238 | 966 | 4,794 | 3,712 | 2,288 | 392 | 1,032 | 917 |
| 1985..... | | 164,486 | 18,781 | 118,162 | 36,338 | 81,824 | 2,672 | 14,785 | 9,163 | 1,196 | 904 | 2,500 | 1,023 | 5,187 | 3,960 | 2,429 | 414 | 1,116 | 939 |
| 1986..... | | 168,770 | 18,954 | 120,607 | 36,491 | 84,115 | 2,654 | 16,197 | 9,863 | 1,360 | 1,046 | 2,833 | 1,095 | 5,576 | 4,024 | 2,366 | 441 | 1,218 | 759 |
| 1987..... | | 172,633 | 18,565 | 123,176 | 39,288 | 83,889 | 2,726 | 17,497 | 10,613 | 1,454 | 1,135 | 3,090 | 1,204 | 5,857 | 4,117 | 2,328 | 467 | 1,321 | 696 |
| 1988..... | | 176,871 | 18,948 | 125,364 | 37,283 | 88,081 | 2,803 | 18,786 | 11,351 | 1,539 | 1,233 | 3,338 | 1,325 | 6,052 | 4,244 | 2,328 | 491 | 1,424 | 673 |
| 1989..... | | 180,618 | 19,388 | 127,117 | 33,554 | 93,564 | 2,794 | 19,899 | 11,857 | 1,622 | 1,350 | 3,630 | 1,440 | 6,054 | 4,670 | 2,625 | 515 | 1,530 | 696 |
| 1990..... | | 186,284 | 19,207 | 131,638 | 31,624 | 100,015 | 2,847 | 20,757 | 12,178 | 1,715 | 1,428 | 3,905 | 1,531 | 5,998 | 5,057 | 2,875 | 540 | 1,643 | 780 |
| 1991..... | | 190,509 | 18,059 | 135,801 | 28,534 | 107,267 | 2,696 | 21,556 | 12,628 | 1,756 | 1,470 | 4,094 | 1,608 | 6,064 | 5,509 | 3,172 | 567 | 1,769 | 824 |

U.S. inflation-adjusted R&D expenditures, by performing and funding sectors: 1953–2006

(Millions of constant 2000 dollars)

| Year | Performing sector: | | Federal | Industry | | | Industry FFRDCs | U&C ^a | | | | | U&C FFRDCs | Other nonprofit institutions | | | | Nonprofit FFRDCs ^b |
|-----------|--------------------|---------|---------|----------|----------------------|-----------------------|-----------------|------------------|---------|-------------------------|----------|-------|------------|------------------------------|----------------------|-------|----------------------|-------------------------------|
| | Total | Federal | | Total | Federal ^c | Industry ^d | | Total | Federal | Nonfederal ^e | Industry | U&C | | Nonprofit | Federal ^f | Total | Federal ^c | |
| 1992..... | 191,408 | 18,352 | 135,159 | 25,895 | 109,265 | 2,724 | 22,440 | 13,341 | 1,765 | 1,527 | 4,130 | 1,676 | 6,088 | 5,780 | 3,248 | 603 | 1,928 | 865 |
| 1993..... | 187,515 | 18,704 | 130,612 | 23,585 | 107,028 | 2,223 | 23,184 | 13,921 | 1,761 | 1,574 | 4,196 | 1,732 | 5,984 | 5,960 | 3,217 | 642 | 2,101 | 848 |
| 1994..... | 187,463 | 18,120 | 130,062 | 22,448 | 107,614 | 2,440 | 23,932 | 14,394 | 1,797 | 1,613 | 4,363 | 1,766 | 5,865 | 6,203 | 3,225 | 683 | 2,294 | 840 |
| 1995..... | 199,355 | 18,352 | 140,957 | 22,993 | 117,964 | 2,468 | 24,548 | 14,751 | 1,901 | 1,680 | 4,462 | 1,754 | 5,827 | 6,326 | 3,091 | 729 | 2,506 | 877 |
| 1996..... | 210,263 | 17,671 | 151,696 | 22,755 | 128,941 | 2,447 | 25,262 | 15,000 | 1,982 | 1,780 | 4,725 | 1,775 | 5,748 | 6,616 | 3,096 | 778 | 2,742 | 822 |
| 1997..... | 222,340 | 17,628 | 162,880 | 22,846 | 140,034 | 2,232 | 26,070 | 15,221 | 2,014 | 1,894 | 5,070 | 1,872 | 5,725 | 6,945 | 3,159 | 848 | 2,938 | 860 |
| 1998..... | 234,737 | 17,997 | 173,213 | 22,894 | 150,320 | 2,154 | 27,126 | 15,721 | 2,043 | 2,020 | 5,351 | 1,991 | 5,763 | 7,610 | 3,401 | 912 | 3,297 | 874 |
| 1999..... | 250,374 | 18,240 | 186,056 | 20,942 | 165,114 | 2,084 | 28,776 | 16,608 | 2,143 | 2,127 | 5,741 | 2,157 | 5,775 | 8,429 | 3,843 | 1,006 | 3,581 | 1,014 |
| 2000..... | 267,556 | 17,917 | 199,961 | 17,117 | 182,844 | 2,001 | 30,688 | 17,714 | 2,246 | 2,174 | 6,230 | 2,325 | 5,742 | 9,782 | 4,447 | 1,118 | 4,217 | 1,465 |
| 2001..... | 271,229 | 19,948 | 197,284 | 16,503 | 180,781 | 1,973 | 32,933 | 19,305 | 2,340 | 2,138 | 6,664 | 2,485 | 6,080 | 10,872 | 5,165 | 1,106 | 4,601 | 2,140 |
| 2002..... | 265,475 | 20,635 | 186,077 | 15,742 | 170,335 | 2,172 | 35,696 | 21,477 | 2,453 | 2,073 | 7,046 | 2,647 | 6,817 | 11,852 | 5,501 | 1,040 | 5,311 | 2,226 |
| 2003..... | 271,630 | 21,383 | 188,644 | 16,727 | 171,917 | 2,310 | 38,022 | 23,595 | 2,575 | 2,001 | 7,188 | 2,662 | 6,861 | 12,066 | 5,344 | 1,051 | 5,671 | 2,344 |
| 2004..... | 274,211 | 21,059 | 190,357 | 18,520 | 171,837 | 2,271 | 39,378 | 24,802 | 2,634 | 2,002 | 7,249 | 2,692 | 6,998 | 11,732 | 5,183 | 1,051 | 5,498 | 2,416 |
| 2005..... | 286,545 | 21,948 | 200,609 | 19,434 | 181,175 | 2,275 | 40,048 | 24,993 | 2,612 | 2,068 | 7,605 | 2,769 | 6,906 | 12,262 | 5,137 | 1,112 | 6,013 | 2,497 |
| 2006..... | 293,254 | 21,025 | 208,576 | 19,434 | 189,142 | 2,090 | 40,178 | 24,592 | 2,634 | 2,113 | 8,009 | 2,832 | 6,650 | 12,294 | 4,928 | 1,163 | 6,202 | 2,441 |

NA = not available

FFRDC = federally funded research and development center; U&C = universities and colleges

^aAdjustments made to university R&D for 1998 on to eliminate double counting of funds passed through from one academic institution to another. Data for 1998 on not directly comparable with data for 1997 and earlier. For FY 1998, \$479 million in passthrough funds reported. For FY 2006, \$1,630 million in passthrough funds estimated.

^bBeginning in 2001, data for nonprofit FFRDCs reported by FFRDCs. In prior years, data collected from federal agencies supporting them.

^cExpenditures of industry FFRDCs for 1953–54 not separated from total federal support to industrial sector; therefore, value for federal support to industry includes support to FFRDCs for those years. Similarly for expenditures of nonprofit FFRDCs, included in federal support for nonprofit institutions in 1953–54.

^dIndustry sources of industry R&D expenditures include all nonfederal sources of industry R&D expenditures.

^eBecause of limitations in survey information, data on nonfederal government funding to other performers not available and consequently included in other sectors' support for their own R&D, e.g., nonfederal government support to nonprofits is included in nonprofit support for their own R&D.

^fIncludes all R&D expenditures of FFRDCs administered by academic institutions.

NOTES: All data for calendar years. For some performers, these levels are approximations based on fiscal year data. For federal government expenditures starting in 1977, calendar-year approximation is 75% of amount reported in same fiscal year plus 25% of amount reported in subsequent fiscal year. Academic expenditures in all years and federal government expenditures before 1977 each 50% because those fiscal years (for most academic institutions and federal government before 1977) began on 1 July instead of 1 October. Technical notes explaining methodological issues of measurement available from National Science Foundation (NSF), Division of Science Resources Statistics (SRS) on request. Data based on annual reports by performers except for nonprofit sector. Preliminary data for 2005 and 2006. For trend comparisons, use only historical data reported here. Table incorporates latest revisions to prior-year data. Do not use data published earlier.

SOURCES: NSF/SRS, Research and Development in Industry 2005 (forthcoming); Academic Research and Development Expenditures: Fiscal Year 2005 (2007); Federal Funds for Research and Development: Fiscal Years 2004, 2005, and 2006 (2007); and Survey of Research and Development Funding and Performance by Nonprofit Organizations: FY 1996–97 (2001).