

**Table 376.—Summary of federal funds for research, development, and R&D plant:
Fiscal years 1991 to 1999**
[In millions of current dollars]

Item	Actual							Estimate		
	1991	1992	1993	1994	1995	1996	1997	1998	1999	Percent change, 1998 to 1999
1	2	3	4	5	6	7	8	9	10	11
Total outlays for research, development, and R & D plant	\$64,292.3	\$65,719.0	\$68,385.8	\$68,335.9	\$68,410.0	\$67,756.1	\$70,892.0	\$71,780.3	\$73,150.4	1.9
Research and development	61,130.4	62,934.5	65,241.3	66,158.8	66,374.6	65,909.9	68,897.2	69,849.2	71,111.5	1.8
R & D plant	3,162.0	2,784.5	3,144.5	2,177.1	2,035.4	1,846.2	1,994.8	1,931.1	2,038.9	5.6
Total obligations for research, development, and R & D plant	64,990.5	68,577.2	70,414.7	69,427.0	71,011.8	69,408.7	71,744.7	74,202.8	75,330.5	1.5
Research and development obligations	61,295.2	65,592.6	67,314.0	67,255.8	68,754.9	67,662.6	69,829.9	72,114.1	73,333.2	1.7
Performers										
Federal intramural ¹	15,238.1	15,690.1	16,556.2	16,139.1	17,342.7	16,596.4	16,720.0	17,097.6	17,463.3	2.1
Industrial firms	26,420.6	29,744.8	30,326.1	30,454.4	30,468.7	30,361.4	31,418.0	32,313.4	31,830.5	-1.5
FFRDCs ² administered by industrial firms	2,068.3	2,009.8	1,451.3	1,293.5	1,203.9	1,137.0	1,128.2	1,226.6	1,326.3	8.1
Universities and colleges	10,168.5	10,271.2	11,156.1	11,828.7	11,933.0	11,944.7	12,561.1	13,273.2	14,170.5	6.8
FFRDCs ² administered by universities and colleges	3,603.8	3,855.5	3,666.5	3,292.9	3,574.3	3,447.7	3,701.1	3,570.6	3,894.4	9.1
Other nonprofit institutions	2,637.4	2,803.6	2,811.9	2,929.6	2,806.5	2,886.9	2,962.1	3,256.9	3,245.0	-0.4
FFRDCs ² administered by nonprofit institutions	679.4	745.6	753.4	735.5	831.4	754.5	821.0	817.2	841.5	3.0
State and local governments	215.1	184.1	320.3	325.4	316.5	246.7	261.1	310.3	328.1	5.7
Foreign	263.9	287.9	272.2	256.6	277.8	287.4	257.5	248.1	233.6	-5.9
Research obligations	23,968.4	24,490.6	26,890.5	27,440.4	28,573.4	28,265.1	29,365.6	31,470.5	32,992.4	4.8
Performers										
Federal intramural ¹	6,539.3	6,615.7	7,360.1	7,488.2	7,787.8	7,528.2	7,667.2	8,250.6	8,610.9	4.4
Industrial firms	3,406.5	3,451.2	4,018.9	4,063.5	4,727.9	4,291.3	4,392.1	5,004.4	4,785.8	-4.4
FFRDCs ² administered by industrial firms	624.6	592.4	795.8	737.2	818.0	696.2	759.6	803.7	849.6	5.7
Universities and colleges	8,867.5	9,060.7	9,844.1	10,323.5	10,371.6	10,673.7	11,173.2	11,815.1	12,721.2	7.7
FFRDCs ² administered by universities and colleges	2,160.9	2,351.8	2,347.6	2,181.1	2,235.6	2,386.0	2,598.9	2,665.3	2,955.0	10.9
Other nonprofit institutions	1,925.9	2,049.6	2,041.3	2,094.9	2,056.1	2,179.5	2,294.9	2,426.2	2,559.9	5.5
FFRDCs ² administered by nonprofit institutions	170.9	139.9	173.4	178.0	210.1	195.8	217.5	217.2	207.5	-4.6
State and local governments	129.3	109.3	211.8	230.8	221.4	187.4	144.0	168.8	184.3	9.2
Foreign	143.4	120.0	97.4	143.3	144.8	126.8	118.1	119.0	118.3	-0.6
Fields of science										
Life sciences	9,622.0	9,910.5	10,772.1	11,078.8	11,979.0	12,099.7	12,661.3	13,620.8	14,386.4	5.6
Psychology	482.4	298.1	550.7	550.2	653.6	513.0	545.4	578.0	612.4	6.0
Physical sciences	4,235.3	4,439.2	4,427.0	6,792.7	4,851.2	3,964.4	4,148.7	4,335.0	4,577.9	5.6
Environmental sciences	2,149.8	2,207.6	2,608.5	2,032.0	2,722.9	2,997.0	3,045.7	3,287.6	3,261.0	-0.8
Mathematics and computer sciences	903.7	1,150.3	1,225.4	1,242.3	1,667.9	1,554.1	1,671.8	1,830.9	2,254.9	23.2
Engineering	4,944.5	4,977.0	5,499.4	4,023.3	4,952.7	5,679.6	5,690.3	6,090.0	6,023.0	-1.1
Social sciences	727.3	689.7	674.9	655.0	682.9	674.2	696.3	823.7	883.0	7.2
Other sciences	903.4	806.3	1,132.5	1,066.1	1,063.2	783.0	906.1	904.4	993.8	9.9
Basic research obligations	12,170.8	12,489.9	13,391.1	13,552.9	13,895.5	14,462.4	14,942.2	15,861.5	16,913.8	6.6
Performers										
Federal intramural ¹	2,446.5	2,397.0	2,605.1	2,505.0	2,712.9	2,689.2	2,688.6	2,872.2	3,063.7	6.7
Industrial firms	949.9	920.3	959.2	1,109.1	1,221.2	1,131.0	1,166.7	1,373.9	1,279.1	-6.9
FFRDCs ² administered by industrial firms	209.1	187.8	237.3	237.6	239.1	272.8	294.7	324.0	335.6	3.6
Universities and colleges	6,064.5	6,331.8	6,798.5	7,024.2	6,951.3	7,406.1	7,695.8	8,067.0	8,763.0	8.6
FFRDCs ² administered by universities and colleges	1,306.2	1,394.1	1,437.8	1,336.0	1,438.3	1,522.0	1,600.0	1,584.5	1,754.9	10.8
Other nonprofit institutions	1,015.5	1,097.2	1,164.9	1,125.7	1,134.2	1,235.2	1,289.6	1,400.6	1,476.2	5.4
FFRDCs ² administered by nonprofit institutions	80.8	65.5	71.3	73.9	75.2	76.5	88.4	113.2	105.3	-6.9
State and local governments	49.1	42.4	71.7	75.2	78.7	80.2	68.4	72.7	80.6	10.7
Foreign	49.1	53.8	53.3	66.1	44.5	49.5	49.9	53.4	55.5	3.8
Fields of science										
Life sciences	5,433.6	5,841.7	6,288.8	6,429.8	6,746.7	6,911.0	7,203.8	7,687.6	8,322.2	8.3
Psychology	225.5	122.6	246.8	247.4	279.8	281.5	293.9	303.9	332.3	9.3
Physical sciences	2,881.5	2,951.4	2,907.1	3,649.2	2,709.3	2,901.7	2,976.4	3,126.6	3,304.9	5.7
Environmental sciences	1,263.5	1,303.6	1,533.5	997.2	1,410.7	1,531.2	1,543.5	1,640.9	1,675.5	2.1
Mathematics and computer sciences	426.1	481.4	511.3	503.6	626.1	622.0	661.4	699.8	786.7	12.4
Engineering	1,233.7	1,249.8	1,207.4	1,061.7	1,432.2	1,606.6	1,583.0	1,696.4	1,712.8	1.0
Social sciences	161.4	139.9	194.1	191.7	210.8	230.0	221.0	238.5	265.8	11.4
Other sciences	545.6	399.4	510.1	472.4	479.9	378.3	459.3	467.8	513.7	9.8
Applied research obligations	11,797.6	12,000.7	13,491.4	13,887.5	14,677.9	13,802.7	14,423.4	15,609.0	16,078.6	3.0
Performers										
Federal intramural ¹	4,092.8	4,218.7	4,755.0	4,983.2	5,074.9	4,839.0	4,978.7	5,378.4	5,547.2	3.1
Industrial firms	2,456.6	2,530.9	3,059.7	2,954.4	3,506.7	3,160.3	3,225.5	3,630.5	3,506.7	-3.4
FFRDCs ² administered by industrial firms	415.5	404.6	558.6	499.6	578.9	423.4	464.9	479.8	514.0	7.1
Universities and colleges	2,803.0	2,728.9	3,045.5	3,299.3	3,420.3	3,267.6	3,477.4	3,748.1	3,958.1	5.6
FFRDCs ² administered by universities and colleges	854.7	957.6	909.8	845.1	797.3	864.0	998.8	1,080.8	1,200.1	11.0
Other nonprofit institutions	910.4	952.5	876.4	969.2	921.9	944.3	1,005.3	1,025.6	1,083.7	5.7
FFRDCs ² administered by nonprofit institutions	90.1	74.5	102.2	104.0	134.9	119.4	129.2	104.2	102.2	-2.0
State and local governments	80.2	66.9	140.1	155.5	142.7	107.3	75.5	96.1	103.8	8.0
Foreign	94.3	66.2	44.1	77.2	100.3	77.4	68.2	65.5	62.8	-4.1
Fields of science										
Life sciences	4,188.4	4,068.8	4,483.3	4,649.0	5,232.3	5,188.7	5,457.6	5,933.2	6,064.2	2.2
Psychology	258.9	175.6	303.9	302.9	373.9	231.5	251.5	274.1	280.1	2.2
Physical sciences	1,353.9	1,467.7	1,519.8	3,143.5	2,141.9	1,062.7	1,172.4	1,208.4	1,273.0	5.3
Environmental sciences	886.3	904.0	1,075.0	1,034.8	1,312.3	1,465.8	1,502.2	1,646.7	1,585.5	-3.7
Mathematics and computer sciences	477.6	678.9	714.1	738.7	1,041.7	932.1	1,010.5	1,131.1	1,468.3	29.8
Engineering	3,710.8	3,727.1	4,292.0	2,961.6	3,520.5	4,073.0	4,107.3	4,393.6	4,310.2	-1.9

**Table 376.—Summary of federal funds for research, development, and R&D plant:
Fiscal years 1991 to 1999—Continued**
[In millions of current dollars]

Item	Actual							Estimate		
	1991	1992	1993	1994	1995	1996	1997	1998	1999	Percent change, 1998 to 1999
1	2	3	4	5	6	7	8	9	10	11
Social sciences	566.0	549.8	480.8	463.3	472.0	444.2	475.3	585.2	617.2	5.5
Other sciences	357.8	406.8	622.4	593.8	583.3	404.7	446.8	436.6	480.2	10.0
Development obligations	37,326.8	41,102.0	40,423.5	39,815.4	40,181.4	39,397.5	40,464.3	40,643.6	40,340.8	-0.7
Performers										
Federal intramural ¹	8,698.8	9,074.4	9,196.2	8,650.9	9,554.9	9,068.1	9,052.7	8,847.1	8,852.3	0.1
Industrial firms	23,014.1	26,293.6	26,307.2	26,390.9	25,740.7	26,070.1	27,025.8	27,309.0	27,044.7	-1.0
FFRDCs ² administered by industrial firms	1,443.7	1,417.4	655.5	556.3	385.9	440.7	368.6	422.9	476.7	12.7
Universities and colleges	1,301.0	1,210.6	1,312.0	1,505.2	1,561.4	1,271.0	1,387.9	1,458.1	1,449.4	-0.6
FFRDCs ² administered by universities and colleges	1,442.9	1,503.7	1,318.9	1,111.8	1,338.7	1,061.6	1,102.1	905.3	939.4	3.8
Other nonprofit institutions	711.5	753.9	770.6	834.8	750.4	707.4	667.2	830.7	685.1	-17.5
FFRDCs ² administered by nonprofit institutions	508.5	605.7	580.0	557.6	621.3	558.7	603.4	599.8	634.1	5.7
State and local governments	85.8	74.8	108.5	94.7	95.1	59.3	117.1	141.5	143.8	1.6
Foreign	120.5	167.9	174.8	113.3	133.0	160.5	139.3	129.2	115.3	-10.7
R & D plant obligations	3,695.4	2,984.6	3,100.7	2,171.2	2,256.9	1,746.1	1,914.8	2,088.8	1,997.3	-4.4
Performers										
Federal intramural ¹	461.1	506.2	432.0	392.6	482.6	405.1	608.3	819.8	582.3	-29.0
Industrial firms	1,889.2	1,014.4	1,048.2	746.8	696.6	465.4	389.8	381.5	369.8	-3.1
FFRDCs ² administered by industrial firms	279.6	202.2	124.4	119.4	95.1	43.9	60.5	36.6	196.8	437.5
Universities and colleges	253.3	241.5	361.4	209.0	323.8	243.1	238.6	180.1	173.1	-3.9
FFRDCs ² administered by universities and colleges	624.6	579.5	619.5	608.8	543.9	497.8	548.8	634.8	643.4	1.4
Other nonprofit institutions	154.6	393.9	415.6	20.9	25.6	23.4	16.7	16.4	15.8	-3.8
FFRDCs ² administered by nonprofit institutions	19.7	46.3	65.5	72.9	62.6	66.1	52.0	19.5	15.9	-18.3
State and local governments	0.6	0.5	0.5	0.8	0.5	1.0	—	—	—	—
Foreign	12.8	0.0	33.4	0.2	26.1	0.5	0.1	0.1	0.1	0.0

¹ Includes costs associated with the administration of intramural and extramural programs by federal personnel as well as actual intramural performance.
² Federally funded research and development centers.
 —Data not available or not applicable.

NOTE.—Some data have been revised from previously published figures. Because of rounding, details may not add to totals.

SOURCE: National Science Foundation, *Federal Funds for Research and Development*, various years. (This table was prepared June 1999.)