

TABLE 116. Federal obligations for research, by detailed field of science and engineering: FYs 2002–12

(Dollars in millions)

Field	2002	2003	2004	2005	2006	2007	2008	2009	2010	Preliminary	
										2011	2012
All fields	48,006.7	51,071.8	53,357.8	53,738.2	53,535.7	54,093.6	53,893.7	63,694.3	63,728.0	58,166.7	60,712.3
Environmental sciences	3,418.3	3,740.9	3,741.6	3,502.6	3,430.6	3,170.5	2,984.6	3,751.1	3,338.9	3,124.7	3,312.7
Atmospheric sciences	1,163.5	1,259.4	1,259.7	1,185.1	1,166.9	964.6	884.5	1,018.1	953.8	NA	NA
Geological sciences	674.9	725.0	704.5	673.5	653.9	638.0	517.5	754.0	530.4	NA	NA
Oceanography	784.6	846.1	809.1	771.5	745.8	787.8	788.7	834.2	743.7	NA	NA
Environmental sciences, nec	795.2	910.3	968.4	872.5	864.0	780.1	793.9	1,144.8	1,111.0	NA	NA
Life sciences	25,476.8	27,772.2	27,728.5	28,127.8	27,927.7	29,463.6	28,918.8	33,267.1	33,909.1	30,202.7	30,803.9
Biological and agricultural sciences	16,325.1	20,407.3	14,848.7	15,144.8	15,485.6	16,326.3	16,321.4	19,460.8	19,162.1	NA	NA
Agricultural sciences	1,047.6	1,046.0	1,086.8	1,094.2	1,108.2	1,139.4	1,020.3	1,120.4	1,131.9	NA	NA
Biological sciences (excluding environmental biology)	14,498.5	18,643.5	13,091.9	13,351.6	13,690.8	14,429.7	14,443.1	17,376.8	17,213.9	NA	NA
Environmental biology	778.9	717.9	670.0	699.0	686.6	757.2	858.0	963.7	816.4	NA	NA
Medical sciences	6,427.4	6,160.3	10,898.8	10,862.1	10,592.2	10,790.7	10,387.3	11,392.7	11,677.0	NA	NA
Life sciences, nec	2,724.4	1,204.6	1,981.0	2,120.9	1,849.9	2,346.5	2,210.1	2,413.6	3,070.0	NA	NA
Mathematics and computer sciences	2,630.7	2,672.5	2,949.4	2,983.4	2,814.9	2,945.7	3,047.3	3,611.8	3,411.8	3,275.5	3,590.3
Computer sciences	2,043.2	2,052.8	2,144.9	2,157.1	1,987.8	2,077.7	2,053.0	2,422.2	2,362.0	NA	NA
Mathematics	402.0	452.9	617.8	686.6	669.2	708.6	782.9	927.9	835.5	NA	NA
Mathematics and computer sciences, nec	185.5	166.7	186.7	139.7	157.9	159.4	211.4	261.6	214.4	NA	NA
Physical sciences	4,983.2	5,021.6	5,211.1	5,493.7	5,351.1	5,136.1	5,072.6	5,821.1	5,870.8	5,534.0	5,902.4
Astronomy	751.5	871.8	920.8	884.9	792.5	655.9	527.9	671.5	559.9	NA	NA
Chemistry	1,181.7	1,137.9	1,191.0	1,197.5	1,126.4	1,149.9	1,148.4	1,274.0	1,310.6	NA	NA
Physics	2,621.4	2,500.2	2,598.6	3,041.3	3,001.8	2,939.2	2,968.9	3,356.1	3,470.1	NA	NA
Physical sciences, nec	428.6	511.7	500.8	370.0	430.5	391.1	427.4	519.6	530.2	NA	NA
Psychology	905.9	1,104.4	1,854.9	1,891.8	1,747.3	1,837.9	1,740.8	2,086.3	2,155.6	1,905.0	1,960.1
Biological aspects	10.6	23.2	6.0	2.3	3.0	3.8	21.8	2.1	13.6	NA	NA
Social aspects	52.5	50.6	51.7	46.6	40.9	36.8	18.8	50.8	74.5	NA	NA
Psychological sciences, nec	842.8	1,030.6	1,797.2	1,842.8	1,703.4	1,797.3	1,700.3	2,033.4	2,067.4	NA	NA
Social sciences	983.0	1,025.8	1,089.6	1,097.1	1,123.9	1,147.1	977.0	1,159.2	1,197.3	1,221.9	1,258.4
Anthropology	16.4	14.5	15.0	18.0	15.1	16.1	17.4	29.4	24.7	NA	NA
Economics	227.3	234.5	204.6	215.9	202.6	250.0	212.3	232.6	274.0	NA	NA
Political science	18.4	18.5	18.7	32.7	44.6	41.2	29.2	24.6	14.2	NA	NA
Sociology	96.1	124.7	120.1	70.2	144.2	217.6	95.2	138.8	132.3	NA	NA
Social sciences, nec	624.7	633.6	731.2	760.4	717.4	622.2	622.9	733.8	752.0	NA	NA
Other sciences, nec	1,334.0	1,329.3	1,916.3	2,088.9	2,461.3	1,403.1	2,177.1	3,712.7	2,763.2	2,763.5	3,028.7
Engineering	8,274.9	8,405.1	8,866.4	8,552.9	8,678.7	8,989.7	8,975.5	10,285.0	11,081.2	10,139.4	10,855.8
Aeronautical engineering	2,157.1	1,732.2	1,640.8	1,276.3	1,229.2	929.2	810.3	907.8	830.1	NA	NA
Astronautical engineering	760.8	702.5	664.9	494.1	476.3	341.0	288.1	370.2	389.9	NA	NA
Chemical engineering	201.6	327.9	318.8	283.8	294.6	353.8	345.6	447.1	509.7	NA	NA
Civil engineering	302.7	339.6	330.3	279.2	352.7	461.5	488.0	678.9	699.8	NA	NA
Electrical engineering	808.7	950.0	890.9	1,033.5	1,035.5	1,027.5	1,046.5	1,254.0	1,360.9	NA	NA

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(Dollars in millions)

Field	2002	2003	2004	2005	2006	2007	2008	2009	2010	Preliminary	
										2011	2012
Mechanical engineering	265.9	298.4	301.9	323.7	298.2	337.2	292.4	314.3	363.6	NA	NA
Metallurgy and materials engineering	1,000.5	1,083.7	1,037.2	1,184.1	1,250.0	1,479.8	1,623.9	1,721.6	1,758.8	NA	NA
Engineering, nec	2,777.6	2,970.8	3,681.6	3,678.3	3,742.3	4,059.8	4,080.8	4,591.2	5,168.4	NA	NA

NA = not available; data collected for this table were not recorded at that level in that particular fiscal year.

nec = not elsewhere classified.

NOTES: Because of rounding, detail may not add to total. Between FY 2006 and FY 2007, National Aeronautics and Space Administration's (NASA's) R&D obligations decreased for two reasons: (1) in FY 2007 NASA excluded projects that were operational in nature that were not excluded in FY 2006, which accounts for \$850 million of decrease; and (2) there was overall decrease in obligations between FY 2006 and FY 2007, which accounts for remainder of decrease. In FY 2010 NASA resumed reporting International Space Station obligations as R&D plant.

SOURCE: National Science Foundation/National Center for Science and Engineering Statistics, Survey of Federal Funds for Research and Development.