

TABLE 138. Federal obligations for applied research, by detailed field of science and engineering: FYs 2005–15
(Dollars in millions)

Field	2005	2006	2007	2008	2009	2010	2011	2012	2013	Preliminary	
										2014	2015
All fields	26,597.9	26,951.1	27,227.8	26,739.7	30,812.5	31,932.6	28,710.1	30,988.0	29,420.4	31,060.5	31,139.5
Computer sciences and mathematics	1,754.9	1,606.7	1,652.1	1,639.8	1,750.3	1,748.6	1,585.9	1,732.6	1,736.2	1,949.3	1,990.6
Computer sciences	1,499.0	1,316.9	1,369.4	1,319.2	1,444.1	1,488.4	1,255.2	1,469.7	1,501.7	NA	NA
Mathematics	144.1	150.5	147.5	137.8	123.6	118.9	150.3	119.1	106.5	NA	NA
Other computer sciences and mathematics	111.9	139.3	135.2	182.8	182.7	141.4	180.4	143.8	128.0	NA	NA
Engineering	6,252.5	6,314.2	6,359.8	6,239.5	6,878.8	7,590.0	6,889.2	7,944.5	7,540.7	7,870.8	8,029.8
Aeronautical engineering	958.6	986.5	734.0	660.8	722.5	678.8	691.9	1,413.0	1,433.2	NA	NA
Astronautical engineering	421.2	418.6	297.2	256.1	334.9	358.3	377.2	610.8	652.3	NA	NA
Chemical engineering	217.0	227.0	244.8	234.0	279.4	366.9	291.8	255.2	334.8	NA	NA
Civil engineering	217.1	285.2	337.9	361.8	493.4	544.6	467.9	478.3	418.7	NA	NA
Electrical engineering	820.9	830.3	781.1	825.1	956.6	1,065.9	954.4	1,025.9	903.9	NA	NA
Mechanical engineering	247.0	227.7	259.5	226.6	230.1	283.3	227.5	215.7	401.7	NA	NA
Metallurgy and materials engineering	518.2	438.6	519.9	630.7	609.0	667.4	544.0	513.1	528.2	NA	NA
Other engineering	2,852.5	2,900.2	3,185.3	3,044.6	3,252.9	3,624.7	3,334.4	3,432.4	2,867.8	NA	NA
Environmental sciences	1,536.5	1,581.1	1,442.7	1,391.5	1,608.2	1,551.5	1,410.7	1,625.6	1,645.2	1,713.1	1,619.9
Atmospheric sciences	441.5	500.7	380.9	361.3	367.6	356.9	341.4	516.9	547.6	NA	NA
Geological sciences	203.2	209.3	211.2	214.5	324.3	197.7	201.4	224.1	215.4	NA	NA
Oceanography	340.4	329.4	350.9	355.1	285.0	272.1	240.7	319.1	331.1	NA	NA
Other environmental sciences	551.4	541.8	499.6	460.6	631.3	724.8	627.2	565.5	551.1	NA	NA
Life sciences	12,880.2	12,993.3	13,820.1	13,361.5	15,679.9	16,160.8	14,035.2	14,950.9	14,012.6	14,596.1	14,614.2
Agricultural sciences	583.0	593.9	606.5	525.6	589.0	560.4	538.0	202.5	198.8	NA	NA
Biological sciences (excluding environmental biology)	5,743.6	5,991.1	6,354.2	6,184.4	7,776.7	7,796.5	6,901.2	7,372.2	6,884.5	NA	NA
Environmental biology	360.0	342.3	406.4	489.9	497.0	380.9	420.3	361.4	370.9	NA	NA
Medical sciences	5,159.4	5,137.8	5,286.7	5,073.0	5,645.1	5,890.1	5,075.6	5,526.4	5,272.8	NA	NA
Other life sciences	1,034.2	928.2	1,166.3	1,088.6	1,172.1	1,532.9	1,100.1	1,488.5	1,285.6	NA	NA
Physical sciences	1,755.0	1,835.6	1,591.6	1,669.5	1,700.1	1,886.7	1,611.6	1,850.8	1,849.7	1,676.3	1,720.7
Astronomy	106.5	105.5	63.3	45.4	53.8	55.7	56.6	174.4	173.1	NA	NA
Chemistry	433.5	405.7	417.1	422.6	438.6	482.9	332.0	326.7	267.4	NA	NA
Physics	1,045.4	1,091.0	926.9	982.4	985.7	1,093.0	993.6	1,140.3	1,013.0	NA	NA
Other physical sciences	169.6	233.4	184.3	219.2	222.0	255.1	229.4	209.3	396.1	NA	NA
Psychology	851.6	802.4	859.1	804.8	985.9	1,026.4	908.1	998.8	919.2	936.6	943.4
Biological aspects	2.0	2.3	2.3	21.2	0.2	3.5	3.0	1.1	0.5	NA	NA
Social aspects	42.3	36.0	31.4	12.2	32.3	56.2	37.6	48.4	48.5	NA	NA
Other psychological sciences	807.3	764.1	825.3	771.4	953.3	966.6	867.5	949.3	870.2	NA	NA
Social sciences	705.8	742.9	785.9	647.0	724.5	838.4	891.4	743.1	863.4	1,033.5	936.8
Anthropology	2.8	1.0	0.8	2.2	1.6	0.4	0.3	3.4	2.3	NA	NA
Economics	164.6	156.3	197.7	168.6	178.1	229.6	344.1	289.0	274.6	NA	NA
Political science	22.2	33.6	32.7	12.7	11.6	4.7	2.7	2.6	2.1	NA	NA

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Field	2005	2006	2007	2008	2009	2010	2011	2012	2013	Preliminary	
										2014	2015
Sociology	52.2	124.9	176.8	81.2	105.5	102.8	97.0	116.0	112.8	NA	NA
Other social sciences	463.9	427.1	377.9	382.2	427.7	500.9	447.3	332.2	471.7	NA	NA
Other sciences nec	861.4	1,074.9	716.7	986.2	1,484.8	1,130.2	1,377.9	1,141.7	853.5	1,284.9	1,284.1

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. In FY 2006, the National Aeronautics and Space Administration (NASA) reclassified as operational costs funding for Space Operations, the Hubble Space Telescope, the Stratospheric Observatory for Infrared Astronomy, and the James Webb Space Telescope that previously had been reported as R&D plant. Between FY 2006 and FY 2007, 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 the decrease; and (2) there was an overall decrease in obligations between FY 2006 and FY 2007, which accounts for the remainder of the decrease. In FY 2010, NASA resumed reporting International Space Station (ISS) obligations as R&D plant. In FY 2012, NASA began reporting ISS obligations as research rather than R&D plant. FYs 2009 and 2010 obligations include additional funding provided by the American Recovery and Reinvestment Act of 2009.

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