TABLE 120. Federal obligations for applied 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	Preliminary 2012
All fields	24,338.4	26,320.4	27,237.1	26,597.9	26,951.1	27,227.8	26,739.7	30,821.2	31,932.6	29,105.9	30,047.5
Environmental sciences	1,585.0	1,841.4	1,718.7	1,536.5	1,581.1	1,442.7	1,391.5	1,608.2	1,551.5	1,416.3	1,390.6
Atmospheric sciences	479.4	591.3	532.9	441.5	500.7	380.9	361.3	367.6	356.9	NA	NA
Geological sciences	248.9	263.1	222.5	203.2	209.3	211.2	214.5	324.3	197.7	NA	NA
Oceanography	357.6	403.9	356.5	340.4	329.4	350.9	355.1	285.0	272.1	NA	NA
Environmental sciences, nec	499.1	583.0	606.9	551.4	541.8	499.6	460.6	631.3	724.8	NA	NA
Life sciences	11,452.7	13,007.0	13,238.5	12,880.2	12,993.3	13,820.1	13,361.5	15,679.9	16,160.8	14,531.0	14,612.0
Biological and agricultural sciences	7,080.2	9,083.5	6,793.0	6,686.6	6,927.2	7,367.1	7,199.8	8,862.7	8,737.8	NA	NA
Agricultural sciences	517.1	517.7	583.1	583.0	593.9	606.5	525.6	589.0	560.4	NA	NA
Biological sciences (excluding environmental biology)	6,118.8	8,172.0	5,869.1	5,743.6	5,991.1	6,354.2	6,184.4	7,776.7	7,796.5	NA	NA
Environmental biology	444.4	393.8	340.8	360.0	342.3	406.4	489.9	497.0	380.9	NA	NA
Medical sciences	3,066.4	3,241.2	5,421.5	5,159.4	5,137.8	5,286.7	5,073.0	5,645.1	5,890.1	NA	NA
Life sciences, nec	1,306.0	682.3	1,023.9	1,034.2	928.2	1,166.3	1,088.6	1,172.1	1,532.9	NA	NA
Mathematics and computer sciences	1,632.0	1,552.2	1,710.3	1,754.9	1,606.7	1,652.1	1,639.8	1,750.3	1,748.6	1,683.1	1,741.0
Computer sciences	1,406.3	1,322.3	1,432.7	1,499.0	1,316.9	1,369.4	1,319.2	1,444.1	1,488.4	NA	NA
Mathematics	76.4	93.2	138.7	144.1	150.5	147.5	137.8	123.6	118.9	NA	NA
Mathematics and computer sciences, nec	149.3	136.7	138.9	111.9	139.3	135.2	182.8	182.7	141.4	NA	NA
Physical sciences	1,577.4	1,567.6	1,548.6	1,755.0	1,835.6	1,591.6	1,669.5	1,700.1	1,886.7	1,799.9	1,818.8
Astronomy	148.2	175.8	155.4	106.5	105.5	63.3	45.4	53.8	55.7	NA	NA
Chemistry	432.9	389.3	415.0	433.5	405.7	417.1	422.6	438.6	482.9	NA	NA
Physics	759.6	679.6	694.0	1,045.4	1,091.0	926.9	982.4	985.7	1,093.0	NA	NA
Physical sciences, nec	236.6	322.9	284.1	169.6	233.4	184.3	219.2	222.0	255.1	NA	NA
Psychology	441.3	560.6	875.6	851.6	802.4	859.1	804.8	985.9	1,026.4	911.7	951.1
Biological aspects	2.8	12.7	5.0	2.0	2.3	2.3	21.2	0.2	3.5	NA	NA
Social aspects	47.7	46.5	46.6	42.3	36.0	31.4	12.2	32.3	56.2	NA	NA
Psychological sciences, nec	390.8	501.5	824.0	807.3	764.1	825.3	771.4	953.3	966.6	NA	NA
Social sciences	621.3	673.0	670.3	705.8	742.9	785.9	647.0	733.2	838.4	843.5	881.4
Anthropology	1.2	1.8	2.1	2.8	1.0	0.8	2.2	1.6	0.4	NA	NA
Economics	182.1	186.2	156.7	164.6	156.3	197.7	168.6	186.8	229.6	NA	NA
Political science	12.7	12.5	12.0	22.2	33.6	32.7	12.7	11.6	4.7	NA	NA
Sociology	76.6	76.0	71.5	52.2	124.9	176.8	81.2	105.5	102.8	NA	NA
Social sciences, nec	348.7	396.5	428.0	463.9	427.1	377.9	382.2	427.7	500.9	NA	NA
Other sciences, nec	618.8	626.6	880.5	861.4	1,074.9	716.7	986.2	1,484.8	1,130.2	1,298.5	1,474.4
Engineering	6,410.0	6,492.0	6,594.7	6,252.5	6,314.2	6,359.8	6,239.5	6,878.8	7,590.0	6,622.0	7,178.2
Aeronautical engineering	1,827.0	1,476.5	1,336.6	958.6	986.5	734.0	660.8	722.5	678.8	NA	NA
Astronautical engineering	692.6	643.0	597.8	421.2	418.6	297.2	256.1	334.9	358.3	NA	NA
Chemical engineering	139.2	256.4	250.2	217.0	227.0	244.8	234.0	279.4	366.9	NA	NA
Civil engineering	256.1	288.5	274.7	217.1	285.2	337.9	361.8	493.4	544.6	NA	NA
Electrical engineering	595.6	723.7	691.3	820.9	830.3	781.1	825.1	956.6	1,065.9	NA	NA

TABLE 120. Federal obligations for applied 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	Preliminary 2012
Mechanical engineering	176.7	202.2	212.3	247.0	227.7	259.5	226.6	230.1	283.3	NA	NA
Metallurgy and materials engineering	492.8	502.7	445.2	518.2	438.6	519.9	630.7	609.0	667.4	NA	NA
Engineering, nec	2,229.9	2,399.1	2,786.6	2,852.5	2,900.2	3,185.3	3,044.6	3,252.9	3,624.7	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. In FY 2003 Substance Abuse and Mental Health Services Administration reclassified some of its funding categories as non-R&D that were considered R&D in prior years. 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.