

TABLE 134. Federal obligations for research, by detailed field of science and engineering: FYs 2004–14

(Dollars in millions)

Field	2004	2005	2006	2007	2008	2009	2010	2011	2012	Preliminary	
										2013	2014
All fields	53,357.8	53,738.2	53,535.7	54,093.6	53,893.7	63,691.9	63,728.0	58,023.7	61,946.9	61,616.7	64,199.4
Computer sciences and mathematics	2,949.4	2,983.4	2,814.9	2,945.7	3,047.3	3,611.8	3,411.8	3,374.3	3,527.5	3,643.1	3,931.8
Computer sciences	2,144.9	2,157.1	1,987.8	2,077.7	2,053.0	2,422.2	2,362.0	2,191.7	2,392.2	NA	NA
Mathematics	617.8	686.6	669.2	708.6	782.9	927.9	835.5	891.6	925.3	NA	NA
Other computer sciences and mathematics	186.7	139.7	157.9	159.4	211.4	261.6	214.4	291.0	210.1	NA	NA
Engineering	8,866.4	8,552.9	8,678.7	8,989.7	8,975.5	10,285.0	11,081.2	10,057.2	11,403.4	10,635.6	11,274.5
Aeronautical engineering	1,640.8	1,276.3	1,229.2	929.2	810.3	907.8	830.1	845.1	1,814.9	NA	NA
Astronautical engineering	664.9	494.1	476.3	341.0	288.1	370.2	389.9	410.1	690.2	NA	NA
Chemical engineering	318.8	283.8	294.6	353.8	345.6	447.1	509.7	474.5	349.6	NA	NA
Civil engineering	330.3	279.2	352.7	461.5	488.0	678.9	699.8	617.1	513.6	NA	NA
Electrical engineering	890.9	1,033.5	1,035.5	1,027.5	1,046.5	1,254.0	1,360.9	1,235.5	1,324.6	NA	NA
Mechanical engineering	301.9	323.7	298.2	337.2	292.4	314.3	363.6	309.8	372.2	NA	NA
Metallurgy and materials engineering	1,037.2	1,184.1	1,250.0	1,479.8	1,623.9	1,721.6	1,758.8	1,621.3	1,699.2	NA	NA
Other engineering	3,681.6	3,678.3	3,742.3	4,059.8	4,080.8	4,591.2	5,168.4	4,543.8	4,639.1	NA	NA
Environmental sciences	3,741.6	3,502.6	3,430.6	3,170.5	2,984.6	3,751.1	3,338.9	3,207.2	3,884.3	3,946.7	4,100.7
Atmospheric sciences	1,259.7	1,185.1	1,166.9	964.6	884.5	1,018.1	953.8	953.9	1,469.2	NA	NA
Geological sciences	704.5	673.5	653.9	638.0	517.5	754.0	530.4	597.8	725.7	NA	NA
Oceanography	809.1	771.5	745.8	787.8	788.7	834.2	743.7	723.7	813.5	NA	NA
Other environmental sciences	968.4	872.5	864.0	780.1	793.9	1,144.8	1,111.0	931.7	875.8	NA	NA
Life sciences	27,728.5	28,127.8	27,927.7	29,463.6	28,918.8	33,267.1	33,909.1	29,408.6	30,966.7	31,162.4	31,458.2
Agricultural sciences	1,086.8	1,094.2	1,108.2	1,139.4	1,020.3	1,120.4	1,131.9	1,085.0	330.0	NA	NA
Biological sciences (excluding environmental biology)	13,091.9	13,351.6	13,690.8	14,429.7	14,443.1	17,376.8	17,213.9	15,178.3	15,962.4	NA	NA
Environmental biology	670.0	699.0	686.6	757.2	858.0	963.7	816.4	854.9	721.1	NA	NA
Medical sciences	10,898.8	10,862.1	10,592.2	10,790.7	10,387.3	11,392.7	11,677.0	10,161.1	11,077.3	NA	NA
Other life sciences	1,981.0	2,120.9	1,849.9	2,346.5	2,210.1	2,413.6	3,070.0	2,129.4	2,876.0	NA	NA
Physical sciences	5,211.1	5,493.7	5,351.1	5,136.1	5,072.6	5,821.1	5,870.8	5,426.6	6,407.5	6,478.2	6,791.0
Astronomy	920.8	884.9	792.5	655.9	527.9	671.5	559.9	555.4	1,099.4	NA	NA
Chemistry	1,191.0	1,197.5	1,126.4	1,149.9	1,148.4	1,274.0	1,310.6	1,106.3	1,103.0	NA	NA
Physics	2,598.6	3,041.3	3,001.8	2,939.2	2,968.9	3,356.1	3,470.1	3,268.8	3,708.3	NA	NA
Other physical sciences	500.8	370.0	430.5	391.1	427.4	519.6	530.2	496.1	496.7	NA	NA
Psychology	1,854.9	1,891.8	1,747.3	1,837.9	1,740.8	2,086.3	2,155.6	1,886.8	2,086.6	2,101.9	2,144.5
Biological aspects	6.0	2.3	3.0	3.8	21.8	2.1	13.6	16.4	14.2	NA	NA
Social aspects	51.7	46.6	40.9	36.8	18.8	50.8	74.5	54.5	61.7	NA	NA
Other psychological sciences	1,797.2	1,842.8	1,703.4	1,797.3	1,700.3	2,033.4	2,067.4	1,816.0	2,010.8	NA	NA
Social sciences	1,089.6	1,097.1	1,123.9	1,147.1	977.0	1,156.7	1,197.3	1,262.4	1,124.5	1,031.7	1,212.6
Anthropology	15.0	18.0	15.1	16.1	17.4	29.4	24.7	26.1	30.2	NA	NA
Economics	204.6	215.9	202.6	250.0	212.3	230.1	274.0	398.6	343.5	NA	NA
Political science	18.7	32.7	44.6	41.2	29.2	24.6	14.2	12.0	12.9	NA	NA

TABLE 134. Federal obligations for research, by detailed field of science and engineering: FYs 2004–14

(Dollars in millions)

Field	2004	2005	2006	2007	2008	2009	2010	2011	2012	Preliminary	
										2013	2014
Sociology	120.1	70.2	144.2	217.6	95.2	138.8	132.3	132.5	154.7	NA	NA
Other social sciences	731.2	760.4	717.4	622.2	622.9	733.8	752.0	693.2	583.2	NA	NA
Other sciences nec	1,916.3	2,088.9	2,461.3	1,403.1	2,177.1	3,712.7	2,763.2	3,400.5	2,546.3	2,617.0	3,286.2

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 obligations as R&D plant. In FY 2012, NASA began reporting International Space Station 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.