

TABLE 90

**Federal obligations for research, by detailed field of science and engineering: FYs 2003–13**

(Dollars in millions)

Field	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
All fields	51,072	53,358	53,738	53,536	54,094	53,894	63,692	63,728	58,065	61,986	59,533
Computer sciences and mathematics	2,672	2,949	2,983	2,815	2,946	3,047	3,612	3,412	3,374	3,528	3,427
Computer sciences	2,053	2,145	2,157	1,988	2,078	2,053	2,422	2,362	2,192	2,392	2,362
Mathematics	453	618	687	669	709	783	928	835	892	925	864
Other computer sciences and mathematics	167	187	140	158	159	211	262	214	291	210	201
Engineering	8,405	8,866	8,553	8,679	8,990	8,976	10,285	11,081	10,057	11,403	10,948
Aeronautical engineering	1,732	1,641	1,276	1,229	929	810	908	830	845	1,815	1,842
Astronautical engineering	702	665	494	476	341	288	370	390	410	690	737
Chemical engineering	328	319	284	295	354	346	447	510	475	350	419
Civil engineering	340	330	279	353	462	488	679	700	617	514	447
Electrical engineering	950	891	1,033	1,035	1,027	1,046	1,254	1,361	1,235	1,325	1,163
Mechanical engineering	298	302	324	298	337	292	314	364	310	372	549
Metallurgy and materials engineering	1,084	1,037	1,184	1,250	1,480	1,624	1,722	1,759	1,621	1,699	1,729
Other engineering	2,971	3,682	3,678	3,742	4,060	4,081	4,591	5,168	4,544	4,639	4,062
Environmental sciences	3,741	3,742	3,503	3,431	3,170	2,985	3,751	3,339	3,207	3,884	4,041
Atmospheric sciences	1,259	1,260	1,185	1,167	965	884	1,018	954	954	1,469	1,542
Geological sciences	725	704	674	654	638	517	754	530	598	726	627
Oceanography	846	809	772	746	788	789	834	744	724	814	788
Other environmental sciences	910	968	872	864	780	794	1,145	1,111	932	876	1,084
Life sciences	27,772	27,728	28,128	27,928	29,464	28,919	33,267	33,909	29,450	31,006	29,663
Agricultural sciences	1,046	1,087	1,094	1,108	1,139	1,020	1,120	1,132	1,085	943	903
Biological sciences (excluding environmental biology)	18,643	13,092	13,352	13,691	14,430	14,443	17,377	17,214	15,178	15,458	14,588
Environmental biology	718	670	699	687	757	858	964	816	855	797	782
Medical sciences	6,160	10,899	10,862	10,592	10,791	10,387	11,393	11,677	10,202	11,078	10,917
Other life sciences	1,205	1,981	2,121	1,850	2,347	2,210	2,414	3,070	2,129	2,730	2,472
Physical sciences	5,022	5,211	5,494	5,351	5,136	5,073	5,821	5,871	5,427	6,408	6,282
Astronomy	872	921	885	792	656	528	672	560	555	1,099	1,147
Chemistry	1,138	1,191	1,198	1,126	1,150	1,148	1,274	1,311	1,106	1,103	982
Physics	2,500	2,599	3,041	3,002	2,939	2,969	3,356	3,470	3,269	3,708	3,482
Other physical sciences	512	501	370	430	391	427	520	530	496	497	671
Psychology	1,104	1,855	1,892	1,747	1,838	1,741	2,086	2,156	1,887	2,087	1,935
Biological aspects	23	6	2	3	4	22	2	14	16	14	14
Social aspects	51	52	47	41	37	19	51	75	54	62	65
Other psychological sciences	1,031	1,797	1,843	1,703	1,797	1,700	2,033	2,067	1,816	2,011	1,856
Social sciences	1,026	1,090	1,097	1,124	1,147	977	1,157	1,197	1,262	1,125	1,237
Anthropology	15	15	18	15	16	17	29	25	26	30	26
Economics	234	205	216	203	250	212	230	274	399	344	333
Political science	19	19	33	45	41	29	25	14	12	13	11
Sociology	125	120	70	144	218	95	139	132	133	155	137
Other social sciences	634	731	760	717	622	623	734	752	693	583	730
Other sciences nec	1,329	1,916	2,089	2,461	1,403	2,177	3,713	2,763	3,401	2,546	1,999

nec = not elsewhere classified.

**Note(s):**

Because of rounding, detail may not add to total. FYs 2009 and 2010 obligations include additional funding provided by the American Recovery and Reinvestment Act of 2009.

**Source(s):**

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