

## Expenditures for academic R&amp;D, by field: Selected years, 1975–2006

Field	1975	1980	1985	1990	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
	Current \$millions															
All fields.....	3,409	6,063	9,687	16,286	22,174	23,049	24,373	25,859	27,534	30,073	32,811	36,394	40,087	43,242	45,777	47,760
Computer sciences.....	46	124	281	515	682	690	710	747	861	876	956	1,125	1,305	1,404	1,406	1,438
Environmental sciences.....	255	508	705	1,069	1,434	1,489	1,533	1,625	1,692	1,765	1,829	2,017	2,194	2,353	2,551	2,602
Atmospheric sciences.....	NA	76	108	173	208	224	246	269	288	288	301	341	396	414	457	507
Earth sciences.....	NA	188	254	355	457	446	450	514	546	563	555	640	724	828	919	897
Oceanography.....	NA	176	258	377	473	533	537	546	604	633	673	718	770	779	812	840
Environmental sciences nec.....	255	68	86	164	295	285	301	296	254	282	300	318	305	332	363	358
Life sciences.....	1,901	3,218	5,279	8,725	12,189	12,717	13,593	14,598	15,632	17,471	19,229	21,439	23,757	25,948	27,604	28,831
Agricultural sciences.....	384	676	999	1,349	1,815	1,910	1,966	1,996	2,036	2,177	2,322	2,450	2,555	2,695	2,657	2,794
Biological sciences.....	630	1,028	1,781	2,859	3,837	3,913	4,184	4,586	5,041	5,621	5,957	6,602	7,384	8,152	8,843	9,044
Medical sciences.....	811	1,423	2,318	4,154	6,070	6,391	6,908	7,472	8,003	8,986	10,191	11,488	12,779	14,037	14,877	15,808
Life sciences nec.....	75	91	181	363	468	503	534	545	552	686	760	898	1,038	1,064	1,227	1,186
Mathematical sciences.....	40	78	128	222	279	289	290	311	314	342	360	388	428	448	495	530
Physical sciences.....	350	677	1,148	1,807	2,257	2,259	2,372	2,484	2,606	2,713	2,805	3,017	3,276	3,546	3,704	3,823
Astronomy.....	27	59	96	170	304	276	288	303	385	386	378	402	392	420	454	470
Chemistry.....	121	244	422	648	772	802	821	877	920	962	1,008	1,129	1,226	1,318	1,365	1,424
Physics.....	174	323	551	842	990	988	1,059	1,079	1,149	1,208	1,241	1,287	1,418	1,522	1,604	1,608
Physical sciences nec.....	29	52	80	147	191	193	204	226	153	158	178	199	240	286	280	321
Psychology.....	80	110	158	253	371	382	397	445	465	517	583	673	770	782	826	875
Social sciences.....	256	339	383	703	1,019	1,097	1,126	1,132	1,252	1,299	1,444	1,596	1,675	1,676	1,685	1,703
Economics.....	56	91	118	201	250	271	261	261	266	255	272	284	313	317	324	339
Political science.....	29	54	59	115	173	180	176	176	200	230	255	283	304	308	324	317
Sociology.....	69	87	75	132	215	231	257	253	272	301	328	375	368	355	370	400
Social sciences nec.....	102	107	131	255	381	415	432	442	514	513	588	654	689	695	667	649
Sciences nec.....	100	146	186	336	427	419	515	449	452	535	585	616	690	774	769	882
Engineering.....	381	862	1,418	2,656	3,516	3,708	3,839	4,070	4,261	4,555	5,019	5,522	5,993	6,310	6,738	7,076
Aeronautical/astronautical.....	NA	53	81	164	241	233	247	250	261	257	339	343	402	432	441	381
Bioengineering/biomedical.....	NA	NA	NA	NA	NA	NA	77	102	137	174	213	282	314	370	420	476
Chemical.....	NA	61	116	218	297	317	317	327	349	376	414	431	453	493	506	547
Civil.....	NA	83	153	284	431	455	472	495	529	601	664	717	776	789	788	858
Electrical.....	NA	183	337	663	819	888	942	1,043	1,017	1,118	1,164	1,306	1,401	1,437	1,581	1,614
Mechanical.....	NA	140	208	391	521	519	518	568	625	633	687	780	821	875	936	1,048
Metallurgical/materials.....	NA	NA	NA	274	330	349	389	391	384	399	453	468	548	565	612	644
Engineering nec.....	381	341	523	663	877	946	878	894	960	998	1,085	1,195	1,278	1,348	1,455	1,508
	2000 constant \$millions															
All fields.....	9,283	11,421	13,917	20,051	24,057	24,548	25,512	26,730	28,095	30,073	32,247	35,079	37,861	39,852	40,916	41,413
Computer sciences.....	124	234	403	634	740	735	743	772	879	876	940	1,085	1,233	1,294	1,256	1,247
Environmental sciences.....	695	957	1,013	1,316	1,556	1,586	1,605	1,679	1,726	1,765	1,797	1,944	2,072	2,169	2,280	2,256
Atmospheric sciences.....	NA	143	155	213	226	239	257	278	294	288	296	329	374	382	408	439
Earth sciences.....	NA	354	365	437	496	475	471	531	557	563	546	617	684	763	821	778
Oceanography.....	NA	332	370	464	514	568	562	564	616	633	661	692	727	718	726	728

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Environmental sciences nec .....	695	128	123	202	320	303	315	306	259	282	294	306	288	306	324	310
Life sciences .....	5,177	6,062	7,584	10,743	13,225	13,544	14,228	15,090	15,950	17,471	18,899	20,664	22,437	23,914	24,673	25,000
Agricultural sciences .....	1,045	1,273	1,436	1,660	1,969	2,035	2,058	2,063	2,077	2,177	2,282	2,361	2,413	2,484	2,375	2,422
Biological sciences .....	1,716	1,937	2,559	3,520	4,163	4,167	4,380	4,740	5,143	5,621	5,854	6,364	6,974	7,513	7,904	7,842
Medical sciences .....	2,210	2,681	3,330	5,115	6,586	6,807	7,231	7,723	8,166	8,986	10,016	11,073	12,069	12,936	13,298	13,707
Life sciences nec .....	205	171	260	447	508	536	559	563	563	686	747	866	980	981	1,096	1,028
Mathematical sciences .....	108	147	184	273	303	307	303	321	320	342	354	374	404	413	442	460
Physical sciences .....	954	1,276	1,650	2,225	2,449	2,406	2,483	2,568	2,659	2,713	2,757	2,908	3,094	3,268	3,311	3,315
Astronomy .....	72	110	138	210	330	294	301	313	392	386	372	388	370	387	406	407
Chemistry .....	329	460	606	798	837	854	860	906	938	962	991	1,088	1,158	1,214	1,220	1,235
Physics .....	473	608	792	1,036	1,074	1,052	1,108	1,115	1,173	1,208	1,219	1,240	1,340	1,403	1,434	1,394
Physical sciences nec .....	80	98	115	181	208	205	214	233	156	158	175	191	227	264	250	278
Psychology .....	219	207	227	311	402	407	415	460	474	517	573	649	727	721	738	759
Social sciences .....	698	639	551	866	1,106	1,168	1,178	1,170	1,278	1,299	1,419	1,539	1,582	1,544	1,506	1,477
Economics .....	152	171	170	247	272	289	273	270	272	255	267	274	296	292	290	294
Political science .....	80	103	85	142	188	192	184	182	204	230	251	273	288	284	289	274
Sociology .....	187	164	107	162	234	246	270	261	277	301	323	362	348	327	331	346
Social sciences nec .....	278	201	188	314	413	442	452	457	524	513	578	630	650	641	596	563
Sciences nec .....	272	275	268	414	463	446	539	464	461	535	575	594	651	714	688	764
Engineering .....	1,037	1,624	2,037	3,270	3,814	3,949	4,019	4,207	4,348	4,555	4,933	5,322	5,660	5,815	6,023	6,136
Aeronautical/astronautical .....	NA	100	116	201	262	248	259	258	266	257	333	331	380	399	394	331
Bioengineering/biomedical .....	NA	NA	NA	NA	NA	NA	80	105	139	174	209	272	296	341	375	413
Chemical .....	NA	114	167	269	322	338	331	338	356	376	407	415	428	454	452	475
Civil .....	NA	157	220	350	467	484	494	512	540	601	653	691	733	727	704	744
Electrical .....	NA	345	485	816	888	946	986	1,078	1,038	1,118	1,144	1,259	1,323	1,325	1,413	1,399
Mechanical .....	NA	264	298	481	565	553	542	587	638	633	675	752	775	806	836	909
Metallurgical/materials .....	NA	NA	NA	337	358	372	407	405	392	399	445	451	518	521	547	558
Engineering nec .....	1,037	643	751	817	952	1,008	919	924	979	998	1,067	1,152	1,207	1,242	1,301	1,307
Percent distribution																
All fields .....	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Computer sciences .....	1.3	2.1	2.9	3.2	3.1	3.0	2.9	2.9	3.1	2.9	2.9	3.1	3.3	3.2	3.1	3.0
Environmental sciences .....	7.5	8.4	7.3	6.6	6.5	6.5	6.3	6.3	6.1	5.9	5.6	5.5	5.5	5.4	5.6	5.4
Atmospheric sciences .....	NA	1.3	1.1	1.1	0.9	1.0	1.0	1.0	1.1	1.0	0.9	0.9	1.0	1.0	1.0	1.1
Earth sciences .....	NA	3.1	2.6	2.2	2.1	1.9	1.8	2.0	2.0	1.9	1.7	1.8	1.8	1.9	2.0	1.9
Oceanography .....	NA	2.9	2.7	2.3	2.1	2.3	2.2	2.1	2.2	2.1	2.1	2.0	1.9	1.8	1.8	1.8
Environmental sciences nec .....	7.5	1.1	0.9	1.0	1.3	1.2	1.2	1.1	0.9	0.9	0.9	0.9	0.8	0.8	0.8	0.7
Life sciences .....	55.8	53.1	54.5	53.6	55.0	55.2	55.8	56.5	56.8	58.1	58.6	58.9	59.3	60.0	60.3	60.4
Agricultural sciences .....	11.3	11.1	10.3	8.3	8.2	8.3	8.1	7.7	7.4	7.2	7.1	6.7	6.4	6.2	5.8	5.8
Biological sciences .....	18.5	17.0	18.4	17.6	17.3	17.0	17.2	17.7	18.3	18.7	18.2	18.1	18.4	18.9	19.3	18.9
Medical sciences .....	23.8	23.5	23.9	25.5	27.4	27.7	28.3	28.9	29.1	29.9	31.1	31.6	31.9	32.5	32.5	33.1
Life sciences nec .....	2.2	1.5	1.9	2.2	2.1	2.2	2.2	2.1	2.0	2.3	2.3	2.5	2.6	2.5	2.7	2.5
Mathematical sciences .....	1.2	1.3	1.3	1.4	1.3	1.3	1.2	1.2	1.1	1.1	1.1	1.1	1.1	1.0	1.1	1.1

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Field	1975	1980	1985	1990	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
Physical sciences .....	10.3	11.2	11.9	11.1	10.2	9.8	9.7	9.6	9.5	9.0	8.6	8.3	8.2	8.2	8.1	8.0
Astronomy .....	0.8	1.0	1.0	1.1	1.4	1.2	1.2	1.2	1.4	1.3	1.2	1.1	1.0	1.0	1.0	1.0
Chemistry .....	3.5	4.0	4.4	4.0	3.5	3.5	3.4	3.4	3.3	3.2	3.1	3.1	3.1	3.0	3.0	3.0
Physics .....	5.1	5.3	5.7	5.2	4.5	4.3	4.3	4.2	4.2	4.0	3.8	3.5	3.5	3.5	3.5	3.4
Physical sciences nec .....	0.9	0.9	0.8	0.9	0.9	0.8	0.8	0.9	0.6	0.5	0.5	0.5	0.6	0.7	0.6	0.7
Psychology .....	2.4	1.8	1.6	1.6	1.7	1.7	1.6	1.7	1.7	1.7	1.8	1.8	1.9	1.8	1.8	1.8
Social sciences .....	7.5	5.6	4.0	4.3	4.6	4.8	4.6	4.4	4.5	4.3	4.4	4.4	4.2	3.9	3.7	3.6
Economics .....	1.6	1.5	1.2	1.2	1.1	1.2	1.1	1.0	1.0	0.8	0.8	0.8	0.8	0.7	0.7	0.7
Political science .....	0.9	0.9	0.6	0.7	0.8	0.8	0.7	0.7	0.7	0.8	0.8	0.8	0.8	0.7	0.7	0.7
Sociology .....	2.0	1.4	0.8	0.8	1.0	1.0	1.1	1.0	1.0	1.0	1.0	1.0	0.9	0.8	0.8	0.8
Social sciences nec .....	3.0	1.8	1.4	1.6	1.7	1.8	1.8	1.7	1.9	1.7	1.8	1.8	1.7	1.6	1.5	1.4
Sciences nec .....	2.9	2.4	1.9	2.1	1.9	1.8	2.1	1.7	1.6	1.8	1.8	1.7	1.7	1.8	1.7	1.8
Engineering .....	11.2	14.2	14.6	16.3	15.9	16.1	15.8	15.7	15.5	15.1	15.3	15.2	14.9	14.6	14.7	14.8
Aeronautical/astronautical .....	NA	0.9	0.8	1.0	1.1	1.0	1.0	1.0	0.9	0.9	1.0	0.9	1.0	1.0	1.0	0.8
Bioengineering/biomedical .....	NA	NA	NA	NA	NA	NA	0.3	0.4	0.5	0.6	0.6	0.8	0.8	0.9	0.9	1.0
Chemical .....	NA	1.0	1.2	1.3	1.3	1.4	1.3	1.3	1.3	1.2	1.3	1.2	1.1	1.1	1.1	1.1
Civil .....	NA	1.4	1.6	1.7	1.9	2.0	1.9	1.9	1.9	2.0	2.0	2.0	1.9	1.8	1.7	1.8
Electrical .....	NA	3.0	3.5	4.1	3.7	3.9	3.9	4.0	3.7	3.7	3.5	3.6	3.5	3.3	3.5	3.4
Mechanical .....	NA	2.3	2.1	2.4	2.3	2.3	2.1	2.2	2.3	2.1	2.1	2.1	2.0	2.0	2.0	2.2
Metallurgical/materials .....	NA	NA	NA	1.7	1.5	1.5	1.6	1.5	1.4	1.3	1.4	1.3	1.4	1.3	1.3	1.3
Engineering nec .....	11.2	5.6	5.4	4.1	4.0	4.1	3.6	3.5	3.5	3.3	3.3	3.3	3.2	3.1	3.2	3.2

NA = not available; nec = not elsewhere classified

NOTES: Detail may not add to total because of rounding. See appendix table 4-1 for gross domestic product implicit price deflators used to convert current dollars to constant 2000 dollars.

SOURCES: National Science Foundation, Division of Science Resources Statistics, Academic Research and Development Expenditures: Fiscal Year 2006; and Integrated Science and Resources Data System (WebCASPAR), <http://webcaspar.nsf.gov>.*Science and Engineering Indicators 2008*