

**Table A. Federal obligations for research and development, by character of work,
R&D plant, and major agency: fiscal years 1951-2002**
[Dollars in thousands]

Fiscal year and agency	Total research and development and R&D plant	Total research and development	Research		Development	R&D plant
			Basic research	Applied research		
Fiscal year 1951:						
Total, all agencies	1,851,571	1,521,527	NA	NA	NA	330,044
Department of Agriculture	55,211	55,076	NA	NA	NA	135
Department of Commerce	47,282	45,995	NA	NA	NA	1,287
Department of Defense	1,275,690	1,123,636	NA	NA	NA	152,054
Department of Energy	NA	NA	NA	NA	NA	NA
Department of Health, Education, & Welfare	53,992	38,941	NA	NA	NA	15,051
Department of Health & Human Services	NA	NA	NA	NA	NA	NA
Department of the Interior	32,240	30,442	NA	NA	NA	1,798
Department of Transportation ¹	0	0	NA	NA	NA	0
Department of Veterans Affairs	5,071	5,071	NA	NA	NA	0
Atomic Energy Commission	278,484	157,901	NA	NA	NA	120,583
Energy Research & Development Administration	NA	NA	NA	NA	NA	NA
National Aeronautics & Space Administration	84,400	45,428	NA	NA	NA	38,972
National Science Foundation	151	151	NA	NA	NA	0
Other agencies	19,050	18,886	NA	NA	NA	164
Fiscal year 1952:						
Total, all agencies	2,216,848	1,909,665	120,945	NA	NA	307,183
Department of Agriculture	55,703	55,291	6,796	NA	NA	412
Department of Commerce	31,444	27,684	2,259	NA	NA	3,760
Department of Defense	1,704,640	1,506,540	31,187	NA	NA	198,100
Department of Energy	NA	NA	NA	NA	NA	NA
Department of Health, Education, & Welfare	53,023	44,607	15,469	NA	NA	8,416
Department of Health & Human Services	NA	NA	NA	NA	NA	NA
Department of the Interior	35,963	30,709	8,345	NA	NA	5,254
Department of Transportation ¹	0	0	0	NA	NA	0
Department of Veterans Affairs	3,872	3,872	0	NA	NA	0
Atomic Energy Commission	228,887	168,844	34,086	NA	NA	60,043
Energy Research & Development Administration	NA	NA	NA	NA	NA	NA
National Aeronautics & Space Administration	81,711	50,536	17,670	NA	NA	31,175
National Science Foundation	1,244	1,244	1,244	NA	NA	0
Other agencies	20,361	20,338	3,889	NA	NA	23
Fiscal year 1953:						
Total, all agencies	2,167,456	1,919,543	115,997	NA	NA	247,913
Department of Agriculture	56,614	56,045	6,951	NA	NA	569
Department of Commerce	23,319	23,045	3,055	NA	NA	274
Department of Defense	1,632,374	1,476,774	27,070	NA	NA	155,600
Department of Energy	NA	NA	NA	NA	NA	NA
Department of Health, Education, & Welfare	59,801	51,017	15,457	NA	NA	8,784
Department of Health & Human Services	NA	NA	NA	NA	NA	NA
Department of the Interior	34,381	32,113	8,438	NA	NA	2,268
Department of Transportation ¹	0	0	0	NA	NA	0
Department of Veterans Affairs	5,091	5,091	0	NA	NA	0
Atomic Energy Commission	250,315	204,404	34,706	NA	NA	45,911
Energy Research & Development Administration	NA	NA	NA	NA	NA	NA
National Aeronautics & Space Administration	78,599	48,393	15,780	NA	NA	30,206
National Science Foundation	2,495	2,495	2,495	NA	NA	0
Other agencies	24,467	20,166	2,045	NA	NA	4,301
Fiscal year 1954:						
Total, all agencies	1,918,046	1,761,840	116,033	NA	NA	156,206
Department of Agriculture	67,354	59,459	7,791	NA	NA	7,895
Department of Commerce	17,375	16,920	1,228	NA	NA	455
Department of Defense	1,379,336	1,282,936	19,955	NA	NA	96,400
Department of Energy	NA	NA	NA	NA	NA	NA
Department of Health, Education, & Welfare	63,531	59,745	17,165	NA	NA	3,786
Department of Health & Human Services	NA	NA	NA	NA	NA	NA
Department of the Interior	39,857	38,832	9,398	NA	NA	1,025
Department of Transportation ¹	0	0	0	NA	NA	0
Department of Veterans Affairs	5,343	5,343	0	NA	NA	0
Atomic Energy Commission	266,282	229,552	40,366	NA	NA	36,730
Energy Research & Development Administration	NA	NA	NA	NA	NA	NA
National Aeronautics & Space Administration	56,913	47,358	13,690	NA	NA	9,555
National Science Foundation	4,580	4,552	4,552	NA	NA	28
Other agencies	17,475	17,143	1,888	NA	NA	332

See explanatory information, if any, and SOURCE at end of table.

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[Dollars in thousands]

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			Basic research	Applied research		
Fiscal year 1955:						
Total, all agencies	2,251,894	2,044,593	130,068	NA	NA	207,301
Department of Agriculture	73,312	72,176	11,477	NA	NA	1,136
Department of Commerce	15,886	14,996	1,337	NA	NA	890
Department of Defense	1,667,789	1,528,689	20,421	NA	NA	139,100
Department of Energy	NA	NA	NA	NA	NA	NA
Department of Health, Education, & Welfare	70,872	68,049	21,277	NA	NA	2,823
Department of Health & Human Services	NA	NA	NA	NA	NA	NA
Department of the Interior	34,660	34,527	10,157	NA	NA	133
Department of Transportation ¹	0	0	0	NA	NA	0
Department of Veterans Affairs	5,575	5,575	0	NA	NA	0
Atomic Energy Commission	294,425	253,406	41,815	NA	NA	41,019
Energy Research & Development Administration	NA	NA	NA	NA	NA	NA
National Aeronautics & Space Administration	64,498	43,030	11,500	NA	NA	21,468
National Science Foundation	10,321	9,654	9,654	NA	NA	667
Other agencies	14,556	14,491	2,430	NA	NA	65
Fiscal year 1956:						
Total, all agencies	3,266,903	2,988,203	206,441	645,506	2,136,256	278,700
Department of Agriculture	83,638	83,038	15,159	67,879	0	600
Department of Commerce	18,410	18,210	3,444	4,600	10,166	200
Department of Defense	2,430,547	2,268,547	78,416	403,684	1,786,447	162,000
Department of Energy	NA	NA	NA	NA	NA	NA
Department of Health, Education, & Welfare	88,976	85,976	26,156	56,611	3,209	3,000
Department of Health & Human Services	NA	NA	NA	NA	NA	NA
Department of the Interior	36,610	36,110	9,747	24,587	1,776	500
Department of Transportation ¹	0	0	0	0	0	0
Department of Veterans Affairs	6,471	6,471	0	6,471	0	0
Atomic Energy Commission	505,027	410,727	44,698	41,829	324,200	94,300
Energy Research & Development Administration	NA	NA	NA	NA	NA	NA
National Aeronautics & Space Administration	65,724	49,524	13,272	29,467	6,785	16,200
National Science Foundation	17,389	15,989	15,003	986	0	1,400
Other agencies	14,111	13,611	546	9,392	3,673	500
Fiscal year 1957:						
Total, all agencies	4,389,237	3,932,001	262,348	662,199	3,007,454	457,236
Department of Agriculture	102,794	99,794	19,203	75,831	4,760	3,000
Department of Commerce	19,296	17,696	3,862	6,758	7,076	1,600
Department of Defense	3,249,955	2,985,555	83,836	361,619	2,540,100	264,400
Department of Energy	NA	NA	NA	NA	NA	NA
Department of Health, Education, & Welfare	177,913	144,213	38,353	103,998	1,862	33,700
Department of Health & Human Services	NA	NA	NA	NA	NA	NA
Department of the Interior	45,307	45,207	14,290	25,484	5,433	100
Department of Transportation ¹	0	0	0	0	0	0
Department of Veterans Affairs	10,107	7,707	1,156	6,551	0	2,400
Atomic Energy Commission	644,643	528,043	54,888	44,355	428,800	116,600
Energy Research & Development Administration	NA	NA	NA	NA	NA	NA
National Aeronautics & Space Administration	83,360	55,260	16,025	30,725	8,510	28,100
National Science Foundation	37,785	30,649	29,999	0	650	7,136
Other agencies	18,077	17,877	736	6,878	10,263	200
Fiscal year 1958:						
Total, all agencies	4,774,355	4,441,226	305,891	654,611	3,480,724	333,129
Department of Agriculture	0	0	0	0	0	0
Department of Commerce	0	0	0	0	0	0
Department of Defense	3,480,278	3,403,278	111,020	378,008	2,914,250	77,000
Department of Energy	NA	NA	NA	NA	NA	NA
Department of Health, Education, & Welfare	217,872	184,870	49,647	132,786	2,437	33,002
Department of Health & Human Services	NA	NA	NA	NA	NA	NA
Department of the Interior	51,883	51,119	11,675	28,923	10,521	764
Department of Transportation ¹	18,370	16,312	0	120	16,192	2,058
Department of Veterans Affairs	12,553	9,976	2,254	6,761	961	2,577
Atomic Energy Commission	828,608	644,003	72,034	58,926	513,043	184,605
Energy Research & Development Administration	NA	NA	NA	NA	NA	NA
National Aeronautics & Space Administration	97,326	77,058	25,600	40,800	10,658	20,268
National Science Foundation	41,475	33,584	32,834	0	750	7,891
Other agencies	25,990	21,026	827	8,287	11,912	4,964

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Fiscal year and agency	Total research and development and R&D plant	Total research and development	Research		Development	R&D plant
			Basic research	Applied research		
Fiscal year 1959:						
Total, all agencies	7,122,610	6,693,510	465,981	874,272	5,353,257	429,100
Department of Agriculture	138,597	120,697	29,266	86,805	4,626	17,900
Department of Commerce	30,089	25,589	6,625	12,078	6,886	4,500
Department of Defense	5,236,774	5,161,674	137,314	386,160	4,638,200	75,100
Department of Energy	NA	NA	NA	NA	NA	NA
Department of Health, Education, & Welfare	278,728	242,828	74,940	164,755	3,133	35,900
Department of Health & Human Services	NA	NA	NA	NA	NA	NA
Department of the Interior	63,673	60,573	16,522	34,071	9,980	3,100
Department of Transportation ¹	35,055	27,255	0	6,827	20,428	7,800
Department of Veterans Affairs	17,115	12,815	3,274	8,570	971	4,300
Atomic Energy Commission	925,156	699,756	87,359	82,716	529,681	225,400
Energy Research & Development Administration	NA	NA	NA	NA	NA	NA
National Aeronautics & Space Administration	299,671	261,671	55,474	83,211	122,986	38,000
National Science Foundation	75,218	60,418	54,238	0	6,180	14,800
Other agencies	22,534	20,234	969	9,079	10,186	2,300
Fiscal year 1960:						
Total, all agencies	8,080,015	7,551,746	590,374	1,282,135	5,679,237	528,269
Department of Agriculture	129,130	125,759	33,606	87,159	4,994	3,371
Department of Commerce	33,434	31,396	9,172	13,908	8,316	2,038
Department of Defense	5,825,250	5,711,532	168,106	693,255	4,850,171	113,718
Department of Energy	NA	NA	NA	NA	NA	NA
Department of Health, Education, & Welfare	358,585	319,778	103,266	214,208	2,304	38,807
Department of Health & Human Services	NA	NA	NA	NA	NA	NA
Department of the Interior	66,697	63,991	20,196	36,071	7,724	2,706
Department of Transportation ¹	52,923	47,902	0	4,960	42,942	5,021
Department of Veterans Affairs	19,065	15,087	3,747	10,633	707	3,978
Atomic Energy Commission	988,242	761,657	103,773	95,141	562,743	226,585
Energy Research & Development Administration	NA	NA	NA	NA	NA	NA
National Aeronautics & Space Administration	486,945	369,278	78,283	117,424	173,571	117,667
National Science Foundation	87,568	74,720	68,417	0	6,303	12,848
Other agencies	32,176	30,646	1,808	9,376	19,462	1,530
Fiscal year 1961:						
Total, all agencies	9,607,023	9,058,623	814,513	1,663,431	6,580,679	548,400
Department of Agriculture	145,643	143,443	40,556	97,047	5,840	2,200
Department of Commerce	46,834	32,334	11,118	15,444	5,772	14,500
Department of Defense	6,687,929	6,574,029	173,011	999,916	5,401,102	113,900
Department of Energy	NA	NA	NA	NA	NA	NA
Department of Health, Education, & Welfare	466,225	428,525	136,818	290,617	1,090	37,700
Department of Health & Human Services	NA	NA	NA	NA	NA	NA
Department of the Interior	79,102	73,302	23,153	41,423	8,726	5,800
Department of Transportation ¹	52,837	48,237	0	5,323	42,914	4,600
Department of Veterans Affairs	23,215	20,015	2,943	18,402	670	1,200
Atomic Energy Commission	1,063,457	850,157	167,146	53,227	629,784	213,300
Energy Research & Development Administration	NA	NA	NA	NA	NA	NA
National Aeronautics & Space Administration	905,120	776,920	180,252	130,528	466,140	128,200
National Science Foundation	106,283	83,983	77,265	0	6,718	22,300
Other agencies	30,378	25,678	2,251	11,504	11,923	4,700
Fiscal year 1962:						
Total, all agencies	11,069,059	10,289,947	986,314	2,018,481	7,285,152	779,112
Department of Agriculture	166,128	157,167	49,666	100,755	6,746	8,961
Department of Commerce	70,948	40,101	16,290	12,779	11,032	30,847
Department of Defense	6,816,495	6,722,867	204,073	1,107,352	5,411,442	93,628
Department of Energy	NA	NA	NA	NA	NA	NA
Department of Health, Education, & Welfare	617,433	576,936	190,421	384,003	2,512	40,497
Department of Health & Human Services	NA	NA	NA	NA	NA	NA
Department of the Interior	89,413	85,645	25,992	49,812	9,841	3,768
Department of Transportation ¹	74,582	66,228	0	16,389	49,839	8,354
Department of Veterans Affairs	30,819	27,456	3,399	23,518	539	3,363
Atomic Energy Commission	1,315,991	1,029,195	191,565	55,128	782,502	286,796
Energy Research & Development Administration	NA	NA	NA	NA	NA	NA
National Aeronautics & Space Administration	1,684,231	1,439,208	196,310	249,850	993,048	245,023
National Science Foundation	169,637	113,943	103,897	0	10,046	55,694
Other agencies	33,382	31,201	4,701	18,895	7,605	2,181

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Fiscal year and agency	Total research and development and R&D plant	Total research and development	Research		Development	R&D plant
			Basic research	Applied research		
Fiscal year 1963:						
Total, all agencies	13,662,879	12,494,611	1,151,753	2,356,150	8,986,708	1,168,268
Department of Agriculture	174,799	168,038	56,020	104,312	7,706	6,761
Department of Commerce	80,933	52,246	21,262	14,618	16,366	28,687
Department of Defense	7,372,816	7,285,659	231,015	1,374,167	5,680,477	87,157
Department of Energy	NA	NA	NA	NA	NA	NA
Department of Health, Education, & Welfare	715,904	656,158	236,406	416,156	3,596	59,746
Department of Health & Human Services	NA	NA	NA	NA	NA	NA
Department of the Interior	105,859	92,122	28,889	46,737	16,496	13,737
Department of Transportation ¹	90,645	83,478	0	26,012	57,466	7,167
Department of Veterans Affairs	33,068	29,868	3,140	26,188	540	3,200
Atomic Energy Commission	1,398,632	1,077,942	218,553	62,358	797,031	320,690
Energy Research & Development Administration	NA	NA	NA	NA	NA	NA
National Aeronautics & Space Administration	3,434,125	2,857,423	210,286	262,528	2,384,609	576,702
National Science Foundation	218,264	154,123	140,696	0	13,427	64,141
Other agencies	37,834	37,554	5,486	23,074	8,994	280
Fiscal year 1964:						
Total, all agencies	15,323,870	14,225,354	1,303,000	2,571,452	10,350,902	1,098,516
Department of Agriculture	191,430	189,034	67,989	113,805	7,240	2,396
Department of Commerce	98,590	53,828	22,845	16,435	14,548	44,762
Department of Defense	7,352,484	7,261,867	241,191	1,430,713	5,589,963	90,617
Department of Energy	NA	NA	NA	NA	NA	NA
Department of Health, Education, & Welfare	847,743	776,947	274,447	497,095	5,405	70,796
Department of Health & Human Services	NA	NA	NA	NA	NA	NA
Department of the Interior	114,322	106,437	33,533	56,741	16,163	7,885
Department of Transportation ¹	73,662	62,786	0	3,835	58,951	10,876
Department of Veterans Affairs	34,265	33,742	2,811	30,327	604	523
Atomic Energy Commission	1,478,613	1,235,979	237,548	70,773	927,658	242,634
Energy Research & Development Administration	NA	NA	NA	NA	NA	NA
National Aeronautics & Space Administration	4,842,225	4,286,550	260,540	326,717	3,699,293	555,675
National Science Foundation	238,006	170,229	155,279	1,076	13,874	67,777
Other agencies	52,530	47,955	6,817	23,935	17,203	4,575
Fiscal year 1965:						
Total, all agencies	15,745,852	14,614,249	1,435,469	2,811,761	10,367,019	1,131,603
Department of Agriculture	233,672	224,552	90,254	127,570	6,728	9,120
Department of Commerce	63,507	61,339	24,235	19,336	17,768	2,168
Department of Defense	6,865,011	6,796,540	263,326	1,488,167	5,045,047	68,471
Department of Energy	NA	NA	NA	NA	NA	NA
Department of Health, Education, & Welfare	970,523	869,354	302,915	558,820	7,619	101,169
Department of Health & Human Services	NA	NA	NA	NA	NA	NA
Department of the Interior	127,351	113,173	40,463	57,062	15,648	14,178
Department of Transportation ¹	71,661	64,408	0	4,294	60,114	7,253
Department of Veterans Affairs	47,258	37,371	3,600	33,210	561	9,887
Atomic Energy Commission	1,539,714	1,240,664	258,196	75,801	906,667	299,050
Energy Research & Development Administration	NA	NA	NA	NA	NA	NA
National Aeronautics & Space Administration	5,481,900	4,951,522	273,324	409,986	4,268,212	530,378
National Science Foundation	275,350	187,150	171,057	675	15,418	88,200
Other agencies	69,905	68,176	8,099	36,840	23,237	1,729
Fiscal year 1966:						
Total, all agencies	16,178,640	15,320,334	1,579,181	3,081,066	10,660,087	858,306
Department of Agriculture	256,668	234,896	93,902	133,907	7,087	21,772
Department of Commerce	66,365	55,186	22,203	18,614	14,369	11,179
Department of Defense	7,099,047	7,023,647	262,433	1,586,851	5,174,363	75,400
Department of Energy	NA	NA	NA	NA	NA	NA
Department of Health, Education, & Welfare	1,142,707	1,014,399	326,394	639,776	48,229	128,308
Department of Health & Human Services	NA	NA	NA	NA	NA	NA
Department of the Interior	162,583	143,203	50,580	70,475	22,148	19,380
Department of Transportation ¹	181,510	171,746	2,213	16,214	153,319	9,764
Department of Veterans Affairs	45,970	40,057	4,044	35,414	599	5,913
Atomic Energy Commission	1,441,647	1,212,377	280,935	89,932	841,510	229,270
Energy Research & Development Administration	NA	NA	NA	NA	NA	NA
National Aeronautics & Space Administration	5,327,403	5,050,006	298,960	448,441	4,302,605	277,397
National Science Foundation	323,083	243,669	222,552	1,897	19,220	79,414
Other agencies	131,657	131,148	14,965	39,545	76,638	509

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Fiscal year 1967:						
Total, all agencies	17,149,186	16,529,099	1,845,847	2,785,543	11,897,709	620,087
Department of Agriculture	260,878	252,642	100,199	137,130	15,313	8,236
Department of Commerce	78,935	74,836	23,648	26,989	24,199	4,099
Department of Defense	8,135,857	8,049,155	284,316	1,307,015	6,457,824	86,702
Department of Energy	NA	NA	NA	NA	NA	NA
Department of Health, Education, & Welfare	1,207,182	1,146,614	489,851	530,772	125,991	60,568
Department of Health & Human Services	NA	NA	NA	NA	NA	NA
Department of the Interior	202,718	170,401	52,693	90,541	27,167	32,317
Department of Transportation ¹	292,613	283,608	166	44,882	238,560	9,005
Department of Veterans Affairs	45,887	40,894	4,800	35,472	622	4,993
Atomic Energy Commission	1,484,925	1,257,342	301,678	90,023	865,641	227,583
Energy Research & Development Administration	NA	NA	NA	NA	NA	NA
National Aeronautics & Space Administration	4,987,761	4,866,962	328,018	470,598	4,068,346	120,799
National Science Foundation	327,875	262,426	238,562	2,602	21,262	65,449
Other agencies	124,555	124,219	21,916	49,519	52,784	336
Fiscal year 1968:						
Total, all agencies	16,525,038	15,921,208	1,840,562	2,940,500	11,140,146	603,830
Department of Agriculture	271,877	253,540	99,657	139,817	14,066	18,337
Department of Commerce	88,145	83,900	25,436	30,102	28,362	4,245
Department of Defense	7,907,667	7,709,319	263,490	1,313,419	6,132,410	198,348
Department of Energy	NA	NA	NA	NA	NA	NA
Department of Health, Education, & Welfare	1,298,516	1,251,816	516,565	550,642	184,609	46,700
Department of Health & Human Services	NA	NA	NA	NA	NA	NA
Department of the Interior	217,512	190,597	49,947	101,861	38,789	26,915
Department of Transportation ¹	179,798	171,671	442	50,853	120,376	8,127
Department of Veterans Affairs	47,998	44,658	5,634	38,388	636	3,340
Atomic Energy Commission	1,534,262	1,368,999	282,359	119,604	967,036	165,263
Energy Research & Development Administration	NA	NA	NA	NA	NA	NA
National Aeronautics & Space Administration	4,494,433	4,429,407	320,516	536,307	3,572,584	65,026
National Science Foundation	350,318	283,457	251,550	5,871	26,036	66,861
Other agencies	134,512	133,844	24,966	53,636	55,242	668
Fiscal year 1969:						
Total, all agencies	16,309,900	15,640,888	1,944,773	2,700,117	10,995,998	669,012
Department of Agriculture	270,754	260,066	106,636	144,674	8,756	10,688
Department of Commerce	75,276	72,054	27,259	28,572	16,223	3,222
Department of Defense	7,890,028	7,696,253	276,458	1,135,387	6,284,408	193,775
Department of Energy	NA	NA	NA	NA	NA	NA
Department of Health, Education, & Welfare	1,350,208	1,297,441	536,531	547,476	213,434	52,767
Department of Health & Human Services	NA	NA	NA	NA	NA	NA
Department of the Interior	221,800	207,620	54,490	109,047	44,083	14,180
Department of Transportation ¹	237,465	231,844	181	57,270	174,393	5,621
Department of Veterans Affairs	54,330	50,207	6,426	43,078	703	4,123
Atomic Energy Commission	1,708,453	1,405,944	285,145	132,194	988,605	302,509
Energy Research & Development Administration	NA	NA	NA	NA	NA	NA
National Aeronautics & Space Administration	4,018,099	3,963,306	379,538	423,118	3,160,650	54,793
National Science Foundation	300,679	273,790	247,589	10,826	15,375	26,889
Other agencies	182,808	182,363	24,520	68,475	89,368	445
Fiscal year 1970:						
Total, all agencies	15,863,385	15,338,937	1,925,908	2,974,890	10,438,139	524,448
Department of Agriculture	286,407	281,157	115,709	156,216	9,232	5,250
Department of Commerce	125,454	121,571	18,163	75,951	27,457	3,883
Department of Defense	7,500,949	7,360,368	317,013	1,012,887	6,030,468	140,581
Department of Energy	NA	NA	NA	NA	NA	NA
Department of Health, Education, & Welfare	1,252,185	1,220,975	512,964	527,963	180,048	31,210
Department of Health & Human Services	NA	NA	NA	NA	NA	NA
Department of the Interior	167,416	156,806	39,485	81,105	36,216	10,610
Department of Transportation ¹	333,278	327,808	364	82,898	244,546	5,470
Department of Veterans Affairs	61,246	58,612	5,260	52,502	850	2,634
Atomic Energy Commission	1,611,889	1,345,989	286,669	146,448	912,872	265,900
Energy Research & Development Administration	NA	NA	NA	NA	NA	NA
National Aeronautics & Space Administration	3,833,362	3,799,946	357,530	672,687	2,769,729	33,416
National Science Foundation	312,313	288,978	244,977	29,812	14,189	23,335
Other agencies	378,886	376,727	27,774	136,421	212,532	2,159

See explanatory information, if any, and SOURCE at end of table.

**Table A. Federal obligations for research and development, by character of work,
R&D plant, and major agency: fiscal years 1951-2002**
[Dollars in thousands]

Fiscal year and agency	Total research and development and R&D plant	Total research and development	Research		Development	R&D plant
			Basic research	Applied research		
Fiscal year 1971:						
Total, all agencies	16,153,756	15,542,512	1,980,141	3,143,030	10,419,341	611,244
Department of Agriculture	310,006	304,902	118,414	173,738	12,750	5,104
Department of Commerce	152,886	143,711	15,711	97,963	30,037	9,175
Department of Defense	7,662,706	7,509,036	322,139	987,124	6,199,773	153,670
Department of Energy	NA	NA	NA	NA	NA	NA
Department of Health, Education, & Welfare	1,493,433	1,476,071	574,523	657,396	244,152	17,362
Department of Health & Human Services	NA	NA	NA	NA	NA	NA
Department of the Interior	200,020	191,516	41,711	95,145	54,660	8,504
Department of Transportation ¹	507,992	497,204	341	96,659	400,204	10,788
Department of Veterans Affairs	77,902	62,901	3,077	59,032	792	15,001
Atomic Energy Commission	1,615,169	1,302,926	276,897	152,094	873,935	312,243
Energy Research & Development Administration	NA	NA	NA	NA	NA	NA
National Aeronautics & Space Administration	3,298,166	3,257,927	327,301	595,387	2,335,239	40,239
National Science Foundation	364,794	336,942	272,566	45,720	18,656	27,852
Other agencies	470,682	459,376	27,461	182,772	249,143	11,306
Fiscal year 1972:						
Total, all agencies	17,097,951	16,495,895	2,186,937	3,360,759	10,948,199	602,056
Department of Agriculture	357,376	349,573	137,311	199,858	12,404	7,803
Department of Commerce	194,684	187,259	7,928	135,466	43,865	7,425
Department of Defense	8,492,867	8,318,145	328,774	1,175,780	6,813,591	174,722
Department of Energy	NA	NA	NA	NA	NA	NA
Department of Health, Education, & Welfare	1,806,069	1,751,112	665,362	766,666	319,084	54,957
Department of Health & Human Services	NA	NA	NA	NA	NA	NA
Department of the Interior	232,474	218,722	43,052	104,261	71,409	13,752
Department of Transportation ¹	336,283	310,505	535	97,648	212,322	25,778
Department of Veterans Affairs	71,326	69,087	3,150	63,907	2,030	2,239
Atomic Energy Commission	1,544,388	1,297,668	268,289	148,833	880,546	246,720
Energy Research & Development Administration	NA	NA	NA	NA	NA	NA
National Aeronautics & Space Administration	3,202,455	3,157,237	331,611	432,981	2,392,645	45,218
National Science Foundation	473,463	454,840	367,691	59,579	27,570	18,623
Other agencies	386,566	381,747	33,234	175,780	172,733	4,819
Fiscal year 1973:						
Total, all agencies	17,574,486	16,800,153	2,232,006	3,349,423	11,218,724	774,333
Department of Agriculture	369,401	366,522	142,726	211,380	12,416	2,879
Department of Commerce	198,454	190,600	6,644	123,511	60,445	7,854
Department of Defense	8,550,571	8,404,214	306,711	1,129,368	6,968,135	146,357
Department of Energy	NA	NA	NA	NA	NA	NA
Department of Health, Education, & Welfare	1,879,149	1,837,578	667,348	776,851	393,379	41,571
Department of Health & Human Services	NA	NA	NA	NA	NA	NA
Department of the Interior	265,783	243,746	48,741	111,420	83,585	22,037
Department of Transportation ¹	348,885	310,640	166	77,070	233,404	38,245
Department of Veterans Affairs	84,602	74,271	3,195	66,535	4,541	10,331
Atomic Energy Commission	1,712,301	1,363,196	275,156	149,628	938,412	349,105
Energy Research & Development Administration	NA	NA	NA	NA	NA	NA
National Aeronautics & Space Administration	3,130,212	3,060,887	350,279	443,641	2,266,967	69,325
National Science Foundation	537,000	479,893	392,442	71,511	15,940	57,107
Other agencies	498,128	468,606	38,598	188,508	241,500	29,522
Fiscal year 1974:						
Total, all agencies	18,176,457	17,410,128	2,387,681	3,787,559	11,234,888	766,329
Department of Agriculture	387,540	378,706	145,611	219,453	13,642	8,834
Department of Commerce	192,159	180,585	7,681	121,508	51,396	11,574
Department of Defense	8,589,516	8,420,386	302,943	1,131,465	6,985,978	169,130
Department of Energy	NA	NA	NA	NA	NA	NA
Department of Health, Education, & Welfare	2,331,036	2,290,114	850,065	996,627	443,422	40,922
Department of Health & Human Services	NA	NA	NA	NA	NA	NA
Department of the Interior	194,522	192,427	48,681	94,817	48,929	2,095
Department of Transportation ¹	383,153	369,789	275	61,506	308,008	13,364
Department of Veterans Affairs	86,926	84,805	3,560	75,168	6,077	2,121
Atomic Energy Commission	NA	NA	NA	NA	NA	NA
Energy Research & Development Administration	1,881,567	1,488,903	269,504	195,244	1,024,155	392,664
National Aeronautics & Space Administration	3,100,528	3,002,172	305,857	539,810	2,156,505	98,356
National Science Foundation	568,084	556,413	415,217	105,039	36,157	11,671
Other agencies	461,426	445,828	38,287	246,922	160,619	15,598

See explanatory information, if any, and SOURCE at end of table.

**Table A. Federal obligations for research and development, by character of work,
R&D plant, and major agency: fiscal years 1951-2002**
[Dollars in thousands]

Fiscal year and agency	Total research and development and R&D plant	Total research and development	Research		Development	R&D plant
			Basic research	Applied research		
Fiscal year 1975:						
Total, all agencies	19,859,548	19,038,818	2,588,427	4,141,281	12,309,110	820,730
Department of Agriculture	427,879	420,082	154,184	247,760	18,138	7,797
Department of Commerce	224,915	215,382	8,109	136,311	70,962	9,533
Department of Defense	9,179,602	9,012,472	300,065	1,130,942	7,581,465	167,130
Department of Energy	NA	NA	NA	NA	NA	NA
Department of Health, Education, & Welfare	2,436,527	2,397,458	903,747	1,021,083	472,628	39,069
Department of Health & Human Services	NA	NA	NA	NA	NA	NA
Department of the Interior	307,200	303,329	54,944	179,109	69,276	3,871
Department of Transportation ¹	324,818	311,563	75	53,769	257,719	13,255
Department of Veterans Affairs	97,026	94,807	3,880	83,260	7,667	2,219
Atomic Energy Commission	NA	NA	NA	NA	NA	NA
Energy Research & Development Administration	2,439,872	2,047,306	312,758	280,673	1,453,875	392,566
National Aeronautics & Space Administration	3,207,068	3,064,413	309,335	625,804	2,129,274	142,655
National Science Foundation	618,075	595,021	485,989	84,026	25,006	23,054
Other agencies	596,566	576,985	55,341	298,544	223,100	19,581
Fiscal year 1976:						
Total, all agencies	21,616,382	20,779,658	2,767,454	4,851,878	13,160,326	836,724
Department of Agriculture	478,591	462,449	171,371	270,853	20,225	16,142
Department of Commerce	235,484	228,853	11,001	144,712	73,140	6,631
Department of Defense	9,798,145	9,654,722	326,885	1,200,596	8,127,241	143,423
Department of Energy	NA	NA	NA	NA	NA	NA
Department of Health, Education, & Welfare	2,616,665	2,583,563	986,172	1,164,561	432,830	33,102
Department of Health & Human Services	NA	NA	NA	NA	NA	NA
Department of the Interior	339,112	333,198	54,330	205,128	73,740	5,914
Department of Transportation ¹	308,700	294,500	0	31,100	263,400	14,200
Department of Veterans Affairs	109,504	97,679	8,900	76,227	12,552	11,825
Atomic Energy Commission	NA	NA	NA	NA	NA	NA
Energy Research & Development Administration	2,902,630	2,463,809	345,790	400,709	1,717,310	438,821
National Aeronautics & Space Administration	3,528,960	3,446,830	293,209	929,632	2,223,989	82,130
National Science Foundation	661,833	609,256	523,634	72,142	13,480	52,577
Other agencies	636,758	604,799	46,162	356,218	202,419	31,959
Fiscal year 1977:						
Total, all agencies	24,817,577	23,450,377	3,258,640	5,255,475	14,936,262	1,367,200
Department of Agriculture	559,871	546,963	204,450	319,570	22,943	12,908
Department of Commerce	251,811	244,721	12,302	163,827	68,592	7,090
Department of Defense	11,408,951	10,963,351	373,254	1,342,591	9,247,506	445,600
Department of Energy	4,097,237	3,536,220	389,450	501,816	2,644,954	561,017
Department of Health, Education, & Welfare	2,955,937	2,823,297	1,119,495	1,294,785	409,017	132,640
Department of Health & Human Services	NA	NA	NA	NA	NA	NA
Department of the Interior	319,654	314,682	63,579	192,363	58,740	4,972
Department of Transportation ¹	377,104	354,604	0	51,760	302,844	22,500
Department of Veterans Affairs	112,895	107,001	9,095	83,247	14,659	5,894
Atomic Energy Commission	NA	NA	NA	NA	NA	NA
Energy Research & Development Administration	NA	NA	NA	NA	NA	NA
National Aeronautics & Space Administration	3,288,879	3,170,789	413,774	792,302	1,964,713	118,090
National Science Foundation	724,098	697,019	624,900	63,400	8,719	27,079
Other agencies	721,140	691,730	48,341	449,814	193,575	29,410
Fiscal year 1978:						
Total, all agencies	27,140,849	25,845,137	3,698,604	5,908,154	16,238,379	1,295,712
Department of Agriculture	645,947	621,282	242,704	351,780	26,798	24,665
Department of Commerce	287,729	283,665	11,806	180,969	90,890	4,064
Department of Defense	11,786,238	11,553,638	410,410	1,413,648	9,729,580	232,600
Department of Energy	4,935,504	4,244,827	440,534	661,709	3,142,584	690,677
Department of Health, Education, & Welfare	3,281,527	3,207,254	1,292,339	1,448,378	466,537	74,273
Department of Health & Human Services	NA	NA	NA	NA	NA	NA
Department of the Interior	373,985	358,974	65,876	217,616	75,482	15,011
Department of Transportation ¹	422,350	408,250	0	66,500	341,750	14,100
Department of Veterans Affairs	118,087	113,991	8,891	90,509	14,591	4,096
Atomic Energy Commission	NA	NA	NA	NA	NA	NA
Energy Research & Development Administration	NA	NA	NA	NA	NA	NA
National Aeronautics & Space Administration	3,495,600	3,333,260	479,729	865,438	1,988,093	162,340
National Science Foundation	788,475	748,775	678,040	65,462	5,273	39,700
Other agencies	1,005,407	971,221	68,275	546,145	356,801	34,186

See explanatory information, if any, and SOURCE at end of table.

**Table A. Federal obligations for research and development, by character of work,
R&D plant, and major agency: fiscal years 1951-2002**
[Dollars in thousands]

Fiscal year and agency	Total research and development and R&D plant	Total research and development	Research		Development	R&D plant
			Basic research	Applied research		
Fiscal year 1979:						
Total, all agencies	29,620,597	28,145,142	4,192,665	6,342,340	17,610,137	1,475,455
Department of Agriculture	685,660	663,025	256,420	375,500	31,105	22,635
Department of Commerce	311,776	309,359	11,900	207,558	89,901	2,417
Department of Defense	12,776,425	12,506,225	471,527	1,542,571	10,492,127	270,200
Department of Energy	5,483,177	4,638,766	462,968	668,878	3,506,920	844,411
Department of Health, Education, & Welfare	NA	NA	NA	NA	NA	NA
Department of Health & Human Services	3,558,362	3,504,880	1,576,011	1,439,658	489,211	53,482
Department of the Interior	410,793	405,778	72,522	266,946	66,310	5,015
Department of Transportation ¹	392,689	370,089	0	66,983	303,106	22,600
Department of Veterans Affairs	132,059	127,004	9,523	101,839	15,642	5,055
Atomic Energy Commission	NA	NA	NA	NA	NA	NA
Energy Research & Development Administration	NA	NA	NA	NA	NA	NA
National Aeronautics & Space Administration	3,725,904	3,578,404	512,847	938,389	2,127,168	147,500
National Science Foundation	838,125	807,925	733,255	66,770	7,900	30,200
Other agencies	1,305,627	1,233,687	85,692	667,248	480,747	71,940
Fiscal year 1980:						
Total, all agencies	31,386,095	29,830,432	4,674,156	6,923,222	18,233,054	1,555,663
Department of Agriculture	744,457	687,586	275,650	381,785	30,151	56,871
Department of Commerce	347,194	342,549	15,910	238,523	88,116	4,645
Department of Defense	14,189,212	13,981,012	540,341	1,721,428	11,719,243	208,200
Department of Energy	5,777,812	4,753,688	523,136	754,190	3,476,362	1,024,124
Department of Health, Education, & Welfare	NA	NA	NA	NA	NA	NA
Department of Health & Human Services	3,810,794	3,780,221	1,762,668	1,570,109	447,444	30,573
Department of the Interior	418,799	411,258	71,634	282,812	56,812	7,541
Department of Transportation ¹	384,530	361,230	0	82,445	278,785	23,300
Department of Veterans Affairs	137,784	133,400	14,300	103,600	15,500	4,384
Atomic Energy Commission	NA	NA	NA	NA	NA	NA
Energy Research & Development Administration	NA	NA	NA	NA	NA	NA
National Aeronautics & Space Administration	3,393,188	3,234,088	559,113	1,050,531	1,624,444	159,100
National Science Foundation	900,492	881,792	815,246	58,441	8,105	18,700
Other agencies	1,281,833	1,263,608	96,158	679,358	488,092	18,225
Fiscal year 1981:						
Total, all agencies	34,589,634	33,103,924	5,041,295	7,171,485	20,891,144	1,485,710
Department of Agriculture	794,708	773,958	314,128	426,856	32,974	20,750
Department of Commerce	329,255	327,925	16,204	233,171	78,550	1,330
Department of Defense	16,786,349	16,508,649	604,285	1,996,615	13,907,749	277,700
Department of Energy	5,896,419	4,918,225	586,340	827,265	3,504,620	978,194
Department of Health, Education, & Welfare	NA	NA	NA	NA	NA	NA
Department of Health & Human Services	3,950,852	3,927,141	1,900,384	1,591,857	434,900	23,711
Department of the Interior	430,558	427,105	80,663	289,174	57,268	3,453
Department of Transportation ¹	434,453	415,539	1,210	87,379	326,950	18,914
Department of Veterans Affairs	159,161	144,400	15,000	112,700	16,700	14,761
Atomic Energy Commission	NA	NA	NA	NA	NA	NA
Energy Research & Development Administration	NA	NA	NA	NA	NA	NA
National Aeronautics & Space Administration	3,708,905	3,593,155	531,122	876,036	2,185,997	115,750
National Science Foundation	976,190	961,564	896,569	58,895	6,100	14,626
Other agencies	1,122,784	1,106,263	95,390	671,537	339,336	16,521
Fiscal year 1982:						
Total, all agencies	37,822,363	36,432,589	5,481,605	7,540,580	23,410,404	1,389,774
Department of Agriculture	818,743	797,274	330,755	435,708	30,811	21,469
Department of Commerce	337,317	336,278	16,867	259,188	60,223	1,039
Department of Defense	20,913,074	20,622,574	686,684	2,266,137	17,669,753	290,500
Department of Energy	5,622,186	4,708,158	642,211	1,053,877	3,012,070	914,028
Department of Health, Education, & Welfare	NA	NA	NA	NA	NA	NA
Department of Health & Human Services	3,965,429	3,940,745	2,144,694	1,460,890	335,161	24,684
Department of the Interior	382,363	381,074	76,454	275,006	29,614	1,289
Department of Transportation ¹	321,983	310,083	1,000	65,685	243,398	11,900
Department of Veterans Affairs	140,100	137,300	12,900	110,100	14,300	2,800
Atomic Energy Commission	NA	NA	NA	NA	NA	NA
Energy Research & Development Administration	NA	NA	NA	NA	NA	NA
National Aeronautics & Space Administration	3,191,559	3,077,859	535,733	871,407	1,670,719	113,700
National Science Foundation	976,827	975,327	916,078	57,087	2,162	1,500
Other agencies	1,152,782	1,145,917	118,229	685,495	342,193	6,865

See explanatory information, if any, and SOURCE at end of table.

**Table A. Federal obligations for research and development, by character of work,
R&D plant, and major agency: fiscal years 1951-2002**
[Dollars in thousands]

Fiscal year and agency	Total research and development and R&D plant	Total research and development	Research		Development	R&D plant
			Basic research	Applied research		
Fiscal year 1983:						
Total, all agencies	40,009,032	38,711,537	6,260,131	7,993,394	24,458,012	1,297,495
Department of Agriculture	881,459	847,605	362,019	455,539	30,047	33,854
Department of Commerce	335,669	334,992	19,221	265,620	50,151	677
Department of Defense	23,305,289	22,992,789	785,620	2,437,029	19,770,140	312,500
Department of Energy	5,294,350	4,536,682	767,718	1,193,409	2,575,555	757,668
Department of Health, Education, & Welfare	NA	NA	NA	NA	NA	NA
Department of Health & Human Services	4,400,405	4,352,530	2,475,400	1,545,446	331,684	47,875
Department of the Interior	384,867	382,473	103,033	254,675	24,765	2,394
Department of Transportation ¹	369,628	347,728	900	71,696	275,132	21,900
Department of Veterans Affairs	171,900	161,400	14,100	132,000	15,300	10,500
Atomic Energy Commission	NA	NA	NA	NA	NA	NA
Energy Research & Development Administration	NA	NA	NA	NA	NA	NA
National Aeronautics & Space Administration	2,762,349	2,661,579	617,033	927,787	1,116,759	100,770
National Science Foundation	1,065,238	1,061,990	999,136	62,854	0	3,248
Other agencies	1,037,878	1,031,769	115,951	647,339	268,479	6,109
Fiscal year 1984:						
Total, all agencies	44,012,149	42,224,865	7,067,359	7,911,414	27,246,092	1,787,284
Department of Agriculture	905,392	866,171	392,649	442,238	31,284	39,221
Department of Commerce	367,583	358,226	20,613	276,088	61,525	9,357
Department of Defense	25,902,085	25,372,870	847,857	2,200,674	22,324,339	529,215
Department of Energy	5,525,995	4,673,578	830,432	1,194,457	2,648,689	852,417
Department of Health, Education, & Welfare	NA	NA	NA	NA	NA	NA
Department of Health & Human Services	4,861,825	4,830,693	2,814,525	1,651,498	364,670	31,132
Department of the Interior	416,123	410,877	125,921	254,303	30,653	5,246
Department of Transportation ¹	465,235	448,335	3,481	74,211	370,643	16,900
Department of Veterans Affairs	196,400	190,300	15,800	156,100	18,400	6,100
Atomic Energy Commission	NA	NA	NA	NA	NA	NA
Energy Research & Development Administration	NA	NA	NA	NA	NA	NA
National Aeronautics & Space Administration	3,066,100	2,821,900	754,500	954,700	1,112,700	244,200
National Science Foundation	1,247,973	1,202,820	1,132,340	70,480	0	45,153
Other agencies	1,057,438	1,049,095	129,241	636,665	283,189	8,343
Fiscal year 1985:						
Total, all agencies	50,180,369	48,359,565	7,818,682	8,314,739	32,226,144	1,820,804
Department of Agriculture	983,613	942,979	445,388	465,552	32,039	40,634
Department of Commerce	402,960	398,759	23,227	300,952	74,580	4,201
Department of Defense	30,322,411	29,791,504	861,407	2,306,876	26,623,221	530,907
Department of Energy	5,834,372	4,966,008	942,592	1,198,445	2,824,971	868,364
Department of Health, Education, & Welfare	NA	NA	NA	NA	NA	NA
Department of Health & Human Services	5,493,182	5,451,036	3,232,547	1,795,787	422,702	42,146
Department of the Interior	395,927	391,685	138,274	230,978	22,433	4,242
Department of Transportation ¹	437,859	428,859	1,063	70,163	357,633	9,000
Department of Veterans Affairs	229,900	226,600	15,400	193,700	17,500	3,300
Atomic Energy Commission	NA	NA	NA	NA	NA	NA
Energy Research & Development Administration	NA	NA	NA	NA	NA	NA
National Aeronautics & Space Administration	3,561,500	3,327,200	750,900	1,032,700	1,543,600	234,300
National Science Foundation	1,419,140	1,345,583	1,261,807	83,776	0	73,557
Other agencies	1,099,505	1,089,352	146,077	635,810	307,465	10,153
Fiscal year 1986:						
Total, all agencies	52,951,181	51,412,364	8,153,076	8,349,123	34,910,165	1,538,817
Department of Agriculture	1,007,878	928,528	432,857	463,549	32,122	79,350
Department of Commerce	408,427	399,166	26,523	312,936	59,707	9,261
Department of Defense	33,224,071	32,937,939	923,915	2,303,348	29,710,676	286,132
Department of Energy	5,430,613	4,688,304	959,668	1,080,653	2,647,983	742,309
Department of Health, Education, & Welfare	NA	NA	NA	NA	NA	NA
Department of Health & Human Services	5,695,483	5,657,604	3,338,767	1,850,791	468,046	37,879
Department of the Interior	389,561	385,219	132,986	234,926	17,307	4,342
Department of Transportation ¹	397,526	385,474	608	67,615	317,251	12,052
Department of Veterans Affairs	191,000	186,200	14,800	155,100	16,300	4,800
Atomic Energy Commission	NA	NA	NA	NA	NA	NA
Energy Research & Development Administration	NA	NA	NA	NA	NA	NA
National Aeronautics & Space Administration	3,694,775	3,419,800	916,700	1,152,300	1,350,800	274,975
National Science Foundation	1,406,499	1,353,335	1,275,221	78,114	0	53,164
Other agencies	1,105,348	1,070,795	131,031	649,791	289,973	34,553

See explanatory information, if any, and SOURCE at end of table.

**Table A. Federal obligations for research and development, by character of work,
R&D plant, and major agency: fiscal years 1951-2002**
[Dollars in thousands]

Fiscal year and agency	Total research and development and R&D plant	Total research and development	Research		Development	R&D plant
			Basic research	Applied research		
Fiscal year 1987:						
Total, all agencies	57,099,656	55,253,693	8,942,425	8,998,096	37,313,172	1,845,963
Department of Agriculture	1,059,640	947,858	445,464	473,443	28,951	111,782
Department of Commerce	407,461	402,240	25,779	312,800	63,661	5,221
Department of Defense	35,708,714	35,231,532	907,599	2,439,957	31,883,976	477,182
Department of Energy	5,529,440	4,757,202	1,068,465	1,029,386	2,659,351	772,238
Department of Health, Education, & Welfare	NA	NA	NA	NA	NA	NA
Department of Health & Human Services	6,643,025	6,606,289	3,827,918	2,194,026	584,345	36,736
Department of the Interior	415,653	403,834	134,874	247,253	21,707	11,819
Department of Transportation ¹	336,159	324,980	174	68,582	256,224	11,179
Department of Veterans Affairs	215,400	209,500	17,200	173,100	19,200	5,900
Atomic Energy Commission	NA	NA	NA	NA	NA	NA
Energy Research & Development Administration	NA	NA	NA	NA	NA	NA
National Aeronautics & Space Administration	4,096,482	3,787,072	1,013,717	1,255,530	1,517,825	309,410
National Science Foundation	1,531,808	1,470,505	1,371,169	99,336	0	61,303
Other agencies	1,155,874	1,112,681	130,066	704,683	277,932	43,193
Fiscal year 1988:						
Total, all agencies	58,826,512	56,769,425	9,473,618	9,176,527	38,119,280	2,057,087
Department of Agriculture	1,151,790	1,016,627	480,588	504,618	31,421	135,163
Department of Commerce	400,158	388,949	30,858	311,472	46,619	11,209
Department of Defense	35,684,646	35,248,856	876,922	2,362,201	32,009,733	435,790
Department of Energy	5,951,370	5,036,400	1,184,808	1,050,559	2,801,033	914,970
Department of Health, Education, & Welfare	NA	NA	NA	NA	NA	NA
Department of Health & Human Services	7,177,570	7,158,041	4,081,403	2,415,560	661,078	19,529
Department of the Interior	426,125	416,768	126,464	266,016	24,288	9,357
Department of Transportation ¹	318,527	304,590	0	91,204	213,386	13,937
Department of Veterans Affairs	234,800	215,300	17,300	178,800	19,200	19,500
Atomic Energy Commission	NA	NA	NA	NA	NA	NA
Energy Research & Development Administration	NA	NA	NA	NA	NA	NA
National Aeronautics & Space Administration	4,758,594	4,330,358	1,112,713	1,218,862	1,998,783	428,236
National Science Foundation	1,589,636	1,532,773	1,433,190	99,583	0	56,863
Other agencies	1,133,296	1,120,763	129,372	677,652	313,739	12,533
Fiscal year 1989:						
Total, all agencies	63,571,605	61,406,484	10,602,011	10,163,520	40,640,953	2,165,121
Department of Agriculture	1,127,457	1,038,279	484,928	517,294	36,057	89,178
Department of Commerce	406,984	397,862	29,099	321,879	46,884	9,122
Department of Defense	38,076,162	37,576,887	947,927	2,708,197	33,920,763	499,275
Department of Energy	6,065,598	5,192,612	1,410,902	1,020,779	2,760,931	872,986
Department of Health, Education, & Welfare	NA	NA	NA	NA	NA	NA
Department of Health & Human Services	7,981,400	7,902,837	4,388,007	2,700,427	814,403	78,563
Department of the Interior	479,773	469,020	188,907	253,031	27,082	10,753
Department of Transportation ¹	318,852	303,312	0	120,455	182,857	15,540
Department of Veterans Affairs	245,700	234,700	16,600	197,100	21,000	11,000
Atomic Energy Commission	NA	NA	NA	NA	NA	NA
Energy Research & Development Administration	NA	NA	NA	NA	NA	NA
National Aeronautics & Space Administration	5,913,003	5,393,476	1,417,410	1,461,400	2,514,666	519,527
National Science Foundation	1,723,977	1,670,396	1,562,629	107,767	0	53,581
Other agencies	1,232,699	1,227,103	155,602	755,191	316,310	5,596
Fiscal year 1990:						
Total, all agencies	65,831,189	63,559,471	11,285,593	10,336,771	41,937,107	2,271,718
Department of Agriculture	1,210,619	1,108,380	519,190	542,096	47,094	102,239
Department of Commerce	453,535	438,168	31,382	345,612	61,174	15,367
Department of Defense	37,755,497	37,268,148	947,621	2,581,608	33,738,919	487,349
Department of Energy	6,546,595	5,630,554	1,504,796	1,065,687	3,060,071	916,041
Department of Health, Education, & Welfare	NA	NA	NA	NA	NA	NA
Department of Health & Human Services	8,513,441	8,405,641	4,649,031	2,818,062	938,548	107,800
Department of the Interior	522,558	508,509	205,431	269,783	33,295	14,049
Department of Transportation ¹	388,346	366,554	0	119,175	247,379	21,792
Department of Veterans Affairs	241,000	237,700	16,200	199,400	22,100	3,300
Atomic Energy Commission	NA	NA	NA	NA	NA	NA
Energy Research & Development Administration	NA	NA	NA	NA	NA	NA
National Aeronautics & Space Administration	7,060,254	6,533,246	1,636,926	1,423,765	3,472,555	527,008
National Science Foundation	1,728,822	1,689,535	1,586,276	103,259	0	39,287
Other agencies	1,410,522	1,373,036	188,740	868,324	315,972	37,486

See explanatory information, if any, and SOURCE at end of table.

**Table A. Federal obligations for research and development, by character of work,
R&D plant, and major agency: fiscal years 1951-2002**
[Dollars in thousands]

Fiscal year and agency	Total research and development and R&D plant	Total research and development	Research		Development	R&D plant
			Basic research	Applied research		
Fiscal year 1991:						
Total, all agencies	64,147,951	61,295,152	12,170,794	11,797,583	37,326,775	2,852,799
Department of Agriculture	1,381,266	1,236,646	557,578	617,887	61,181	144,620
Department of Commerce	505,350	489,601	34,332	415,374	39,895	15,749
Department of Defense	32,560,470	32,134,765	994,154	2,723,754	28,416,857	425,705
Department of Energy	7,203,220	5,983,100	1,686,453	1,587,177	2,709,470	1,220,120
Department of Health, Education, & Welfare	NA	NA	NA	NA	NA	NA
Department of Health & Human Services	9,842,283	9,755,999	5,050,114	3,112,373	1,593,512	86,284
Department of the Interior	615,129	592,938	229,294	324,102	39,542	22,191
Department of Transportation ¹	398,304	379,921	0	114,624	265,297	18,383
Department of Veterans Affairs	220,000	216,600	16,100	177,700	22,800	3,400
Atomic Energy Commission	NA	NA	NA	NA	NA	NA
Energy Research & Development Administration	NA	NA	NA	NA	NA	NA
National Aeronautics & Space Administration	8,003,812	7,280,239	1,705,575	1,665,587	3,909,077	723,573
National Science Foundation	1,944,780	1,785,223	1,676,205	109,018	0	159,557
Other agencies	1,473,337	1,440,120	220,989	949,987	269,144	33,217
Fiscal year 1992:						
Total, all agencies	68,577,184	65,592,590	12,489,864	12,000,734	41,101,992	2,984,594
Department of Agriculture	1,491,833	1,327,112	595,153	665,843	66,116	164,721
Department of Commerce	672,210	651,165	34,517	561,392	55,256	21,045
Department of Defense	36,525,974	36,129,467	1,098,945	2,974,461	32,056,061	396,507
Department of Energy	7,493,017	6,172,230	1,736,404	1,676,131	2,759,695	1,320,787
Department of Health, Education, & Welfare	NA	NA	NA	NA	NA	NA
Department of Health & Human Services	9,084,564	8,987,823	5,058,703	2,886,816	1,042,304	96,741
Department of the Interior	627,603	609,178	230,920	339,675	38,583	18,425
Department of Transportation ¹	470,281	445,012	1,170	155,700	288,142	25,269
Department of Veterans Affairs	229,600	223,900	15,700	185,200	23,000	5,700
Atomic Energy Commission	NA	NA	NA	NA	NA	NA
Energy Research & Development Administration	NA	NA	NA	NA	NA	NA
National Aeronautics & Space Administration	8,475,401	7,657,606	1,738,171	1,491,134	4,428,301	817,795
National Science Foundation	1,969,967	1,868,397	1,741,472	126,925	0	101,570
Other agencies	1,536,734	1,520,700	238,709	937,457	344,534	16,034
Fiscal year 1993:						
Total, all agencies	70,414,697	67,314,025	13,399,121	13,491,376	40,423,528	3,100,672
Department of Agriculture	1,470,199	1,327,795	615,941	635,784	76,070	142,404
Department of Commerce	681,702	656,276	37,201	544,874	74,201	25,426
Department of Defense	36,220,664	35,849,149	1,268,238	3,515,246	31,065,665	371,515
Department of Energy	7,723,679	6,262,146	1,754,831	1,685,383	2,821,932	1,461,533
Department of Health, Education, & Welfare	NA	NA	NA	NA	NA	NA
Department of Health & Human Services	10,498,505	10,349,177	5,696,697	3,495,916	1,156,564	149,328
Department of the Interior	642,210	619,069	230,259	349,821	38,989	23,141
Department of Transportation ¹	577,642	545,323	1,656	224,405	319,262	32,319
Department of Veterans Affairs	239,509	236,159	13,339	194,079	28,741	3,350
Atomic Energy Commission	NA	NA	NA	NA	NA	NA
Energy Research & Development Administration	NA	NA	NA	NA	NA	NA
National Aeronautics & Space Administration	8,769,217	8,019,854	1,800,087	1,748,641	4,471,126	749,363
National Science Foundation	2,012,325	1,881,889	1,743,770	138,119	0	130,436
Other agencies	1,579,045	1,567,188	237,102	959,108	370,978	11,857
Fiscal year 1994:						
Total, all agencies	69,450,776	67,235,390	13,523,476	13,887,733	39,824,181	2,215,386
Department of Agriculture	1,525,624	1,399,883	606,328	716,172	77,383	125,741
Department of Commerce	857,291	826,081	40,119	678,161	107,801	31,210
Department of Defense	34,818,856	34,553,204	1,200,652	3,039,950	30,312,602	265,652
Department of Energy	6,959,756	6,047,985	1,603,223	1,679,243	2,765,519	911,771
Department of Health, Education, & Welfare	NA	NA	NA	NA	NA	NA
Department of Health & Human Services	11,141,749	11,021,519	5,883,983	3,852,458	1,285,078	120,230
Department of the Interior	703,125	694,095	83,222	566,928	43,945	9,030
Department of Transportation ¹	661,684	620,747	3,007	270,380	347,360	40,937
Department of Veterans Affairs	259,679	247,979	14,373	209,106	24,500	11,700
Atomic Energy Commission	NA	NA	NA	NA	NA	NA
Energy Research & Development Administration	NA	NA	NA	NA	NA	NA
National Aeronautics & Space Administration	8,811,502	8,296,247	1,963,909	1,876,650	4,455,688	515,255
National Science Foundation	2,212,224	2,040,358	1,870,669	169,689	0	171,866
Other agencies	1,499,286	1,487,292	253,991	828,996	404,305	11,994

See explanatory information, if any, and SOURCE at end of table.

**Table A. Federal obligations for research and development, by character of work,
R&D plant, and major agency: fiscal years 1951-2002**
[Dollars in thousands]

Fiscal year and agency	Total research and development and R&D plant	Total research and development	Research		Development	R&D plant
			Basic research	Applied research		
Fiscal year 1995:						
Total, all agencies	70,442,935	68,186,798	13,877,031	14,557,365	39,752,402	2,256,137
Department of Agriculture	1,523,590	1,380,218	595,034	703,796	81,388	143,372
Department of Commerce	1,213,706	1,136,003	39,258	853,060	243,685	77,703
Department of Defense	33,856,799	33,796,302	1,248,330	2,950,098	29,597,874	60,497
Department of Energy	6,890,044	6,144,975	1,634,353	1,825,581	2,685,041	745,069
Department of Health, Education, & Welfare	NA	NA	NA	NA	NA	NA
Department of Health & Human Services	11,710,952	11,455,247	6,061,057	4,014,893	1,379,297	255,705
Department of the Interior	568,279	561,613	55,179	477,257	29,177	6,666
Department of Transportation ¹	755,765	726,986	46,880	323,866	356,240	28,779
Department of Veterans Affairs	245,060	237,860	12,390	206,416	19,054	7,200
Atomic Energy Commission	NA	NA	NA	NA	NA	NA
Energy Research & Development Administration	NA	NA	NA	NA	NA	NA
National Aeronautics & Space Administration	9,639,744	9,014,944	1,978,193	2,067,896	4,968,855	624,800
National Science Foundation	2,438,858	2,149,277	1,973,264	176,013	0	289,581
Other agencies	1,600,138	1,583,373	233,093	958,489	391,791	16,765
Fiscal year 1996:						
Total, all agencies	69,399,164	67,653,047	14,464,035	13,795,729	39,393,283	1,746,117
Department of Agriculture	1,428,739	1,300,326	549,980	670,024	80,322	128,413
Department of Commerce	1,152,001	1,067,520	37,536	813,064	216,920	84,481
Department of Defense	34,582,215	34,535,389	1,137,866	2,857,639	30,539,884	46,826
Department of Energy	6,050,832	5,344,937	1,929,656	1,432,497	1,982,784	705,895
Department of Health, Education, & Welfare	NA	NA	NA	NA	NA	NA
Department of Health & Human Services	12,084,202	11,951,108	6,504,626	4,041,256	1,405,226	133,094
Department of the Interior	569,455	567,535	56,038	486,036	25,461	1,920
Department of Transportation ¹	584,298	552,457	38,448	336,702	177,307	31,841
Department of Veterans Affairs	259,864	256,075	12,483	222,801	20,791	3,789
Atomic Energy Commission	NA	NA	NA	NA	NA	NA
Energy Research & Development Administration	NA	NA	NA	NA	NA	NA
National Aeronautics & Space Administration	8,987,500	8,570,100	1,980,935	1,897,097	4,692,068	417,400
National Science Foundation	2,375,505	2,188,313	2,007,355	180,958	0	187,192
Other agencies	1,324,553	1,319,287	209,112	857,655	252,520	5,266
Fiscal year 1997:						
Total, all agencies	71,753,430	69,826,779	14,941,892	14,423,397	40,461,490	1,926,651
Department of Agriculture	1,572,779	1,388,619	590,097	700,009	98,513	184,160
Department of Commerce	1,046,471	1,003,118	39,235	768,823	195,060	43,353
Department of Defense	34,873,757	34,788,263	1,022,870	2,786,947	30,978,446	85,494
Department of Energy	6,332,812	5,603,506	1,970,861	1,596,836	2,035,809	729,306
Department of Health, Education, & Welfare	NA	NA	NA	NA	NA	NA
Department of Health & Human Services	13,045,331	12,785,262	6,851,762	4,376,326	1,557,174	260,069
Department of the Interior	587,087	579,901	56,442	496,213	27,246	7,186
Department of Transportation ¹	545,908	526,872	37,540	343,665	145,667	19,036
Department of Veterans Affairs	283,976	252,699	13,575	217,406	21,718	31,277
Atomic Energy Commission	NA	NA	NA	NA	NA	NA
Energy Research & Development Administration	NA	NA	NA	NA	NA	NA
National Aeronautics & Space Administration	9,661,100	9,327,300	2,094,767	2,090,120	5,142,413	333,800
National Science Foundation	2,452,346	2,248,520	2,056,713	191,807	0	203,826
Other agencies	1,351,863	1,322,719	208,030	855,245	259,444	29,144

See explanatory information, if any, and SOURCE at end of table.

**Table A. Federal obligations for research and development, by character of work,
R&D plant, and major agency: fiscal years 1951-2002**
[Dollars in thousands]

Fiscal year and agency	Total research and development and R&D plant	Total research and development	Research		Development	R&D plant
			Basic research	Applied research		
Fiscal year 1998:						
Total, all agencies	73,913,988	72,100,724	15,613,012	15,309,257	41,178,455	1,813,264
Department of Agriculture	1,530,834	1,441,046	603,763	730,142	107,141	89,788
Department of Commerce	969,950	948,578	39,593	767,400	141,585	21,372
Department of Defense	35,351,986	35,286,223	1,030,839	2,939,052	31,316,332	65,763
Department of Energy	6,600,900	5,873,804	2,028,805	1,758,706	2,086,293	727,096
Department of Health, Education, & Welfare	NA	NA	NA	NA	NA	NA
Department of Health & Human Services	14,187,939	13,901,663	7,355,363	4,663,111	1,883,189	286,276
Department of the Interior	533,469	531,969	48,733	454,119	29,117	1,500
Department of Transportation ¹	583,734	566,117	34,971	366,075	165,071	17,617
Department of Veterans Affairs	277,476	277,094	120,015	149,051	8,028	382
Atomic Energy Commission	NA	NA	NA	NA	NA	NA
Energy Research & Development Administration	NA	NA	NA	NA	NA	NA
National Aeronautics & Space Administration	9,918,029	9,568,029	2,023,793	2,389,858	5,154,378	350,000
National Science Foundation	2,473,682	2,289,337	2,118,677	170,660	0	184,345
Other agencies	1,485,989	1,416,864	208,460	921,083	287,321	69,125
Fiscal year 1999:						
Total, all agencies	77,386,368	75,340,622	17,443,653	16,083,861	41,813,108	2,045,746
Department of Agriculture	1,745,219	1,614,133	743,295	744,764	126,074	131,086
Department of Commerce	1,009,829	990,226	49,128	798,872	142,226	19,603
Department of Defense	35,753,425	35,645,859	1,040,210	3,102,052	31,503,597	107,566
Department of Energy	6,875,935	6,009,730	2,131,823	1,787,991	2,089,916	866,205
Department of Health, Education, & Welfare	NA	NA	NA	NA	NA	NA
Department of Health & Human Services	16,167,554	15,914,736	8,632,526	5,082,114	2,200,096	252,818
Department of the Interior	642,932	641,542	59,136	550,910	31,496	1,390
Department of Transportation ¹	681,517	666,950	60,689	415,979	190,282	14,567
Department of Veterans Affairs	339,434	339,088	148,438	183,846	6,804	346
Atomic Energy Commission	NA	NA	NA	NA	NA	NA
Energy Research & Development Administration	NA	NA	NA	NA	NA	NA
National Aeronautics & Space Administration	9,885,193	9,525,693	2,040,901	2,317,028	5,167,764	359,500
National Science Foundation	2,679,571	2,506,031	2,359,503	146,528	0	173,540
Other agencies	1,605,759	1,486,634	178,004	953,777	354,853	119,125
Fiscal year 2000:						
Total, all agencies	77,356,165	72,863,318	19,569,849	18,900,781	34,392,688	4,492,847
Department of Agriculture	1,833,483	1,746,848	807,947	803,519	135,382	86,635
Department of Commerce	1,237,148	1,036,631	46,362	849,554	140,715	200,517
Department of Defense	33,215,178	33,167,025	1,230,119	3,690,234	28,246,672	48,153
Department of Energy	6,873,818	6,063,064	2,175,837	1,925,018	1,962,209	810,754
Department of Health, Education, & Welfare	NA	NA	NA	NA	NA	NA
Department of Health & Human Services	18,645,491	18,425,903	10,055,392	7,857,672	512,839	219,588
Department of the Interior	581,240	579,911	51,822	496,642	31,447	1,329
Department of Transportation ¹	479,263	467,388	16,198	328,220	122,970	11,875
Department of Veterans Affairs	342,012	341,664	149,241	185,399	7,024	348
Atomic Energy Commission	NA	NA	NA	NA	NA	NA
Energy Research & Development Administration	NA	NA	NA	NA	NA	NA
National Aeronautics & Space Administration	9,754,900	6,881,900	2,305,437	1,658,538	2,917,925	2,873,000
National Science Foundation	2,942,080	2,725,512	2,540,012	185,500	0	216,568
Other agencies	1,451,552	1,427,472	191,482	920,485	315,505	24,080

See explanatory information, if any, and SOURCE at end of table.

**Table A. Federal obligations for research and development, by character of work,
R&D plant, and major agency: fiscal years 1951-2002**
[Dollars in thousands]

Fiscal year and agency	Total research and development and R&D plant	Total research and development	Research		Development	R&D plant
			Basic research	Applied research		
Fiscal year 2001 (preliminary):						
Total, all agencies	85,452,177	80,898,068	22,704,680	21,131,300	37,062,088	4,554,109
Department of Agriculture	2,079,596	1,979,945	906,849	925,686	147,410	99,651
Department of Commerce	1,173,170	1,112,429	47,907	928,806	135,716	60,741
Department of Defense	36,457,191	36,333,517	1,915,639	3,807,184	30,610,694	123,674
Department of Energy	7,674,776	6,711,939	2,368,986	2,213,403	2,129,550	962,837
Department of Health, Education, & Welfare	NA	NA	NA	NA	NA	NA
Department of Health & Human Services	21,592,460	21,355,050	11,533,424	9,167,627	653,999	237,410
Department of the Interior	625,070	623,700	56,409	533,182	34,109	1,370
Department of Transportation ¹	624,128	609,124	29,989	383,759	195,376	15,004
Department of Veterans Affairs	350,580	350,228	153,324	189,884	7,020	352
Atomic Energy Commission	NA	NA	NA	NA	NA	NA
Energy Research & Development Administration	NA	NA	NA	NA	NA	NA
National Aeronautics & Space Administration	9,972,900	7,220,900	2,657,291	1,754,679	2,808,930	2,752,000
National Science Foundation	3,278,248	3,015,278	2,795,730	219,548	0	262,970
Other agencies	1,624,058	1,585,958	239,132	1,007,542	339,284	38,100
Fiscal year 2002 (preliminary):						
Total, all agencies	84,938,444	80,645,451	23,399,291	21,927,617	35,318,543	4,292,993
Department of Agriculture	1,911,447	1,805,885	848,751	806,899	150,235	105,562
Department of Commerce	1,132,447	1,111,554	53,351	966,880	91,323	20,893
Department of Defense	34,324,364	34,235,264	1,363,205	3,657,023	29,215,036	89,100
Department of Energy	7,294,593	6,321,757	2,339,169	2,165,057	1,817,531	972,836
Department of Health, Education, & Welfare	NA	NA	NA	NA	NA	NA
Department of Health & Human Services	24,230,117	23,815,897	12,969,005	10,166,479	680,413	414,220
Department of the Interior	565,691	564,391	53,722	478,941	31,728	1,300
Department of Transportation ¹	602,279	584,951	33,196	387,552	164,203	17,328
Department of Veterans Affairs	360,589	360,237	157,690	195,333	7,214	352
Atomic Energy Commission	NA	NA	NA	NA	NA	NA
Energy Research & Development Administration	NA	NA	NA	NA	NA	NA
National Aeronautics & Space Administration	9,696,400	7,259,400	2,548,050	1,872,925	2,838,425	2,437,000
National Science Foundation	3,226,336	3,017,080	2,799,076	218,004	0	209,256
Other agencies	1,594,181	1,569,035	234,076	1,012,524	322,435	25,146

¹ The Department of Transportation (DOT) did not become operational until 1967. Prior to 1966, similar obligations appear under DOT's organizational predecessors: the Federal Aviation Agency; the U.S. Coast Guard (formerly part of the Department of the Treasury); the Bureau of Public Roads; the Office of Transportation Research and Development; and other components of the Department of Commerce vested with transportation functions.

KEY: NA = Not applicable (indicates that the data collected for this table were not recorded at that level in that particular fiscal year, or that the agency or subagency did not exist as such or in that organization in that year)

SOURCE: National Science Foundation/Division of Science Resources Statistics, Survey of Federal Funds for Research and Development: Fiscal Years 2000, 2001, and 2002