

## Federal technology transfer indicators, by selected U.S. agencies: FY 1987–2001

Agency	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001
Invention disclosures and patenting															
All 10 agencies															
Inventions disclosed .....	2,662	3,047	3,168	3,772	4,213	3,901	3,538	3,753	4,001	4,153	3,842	3,503	3,646	3,564	3,909
Patent applications filed .....	848	1,131	1,466	1,727	1,940	1,867	1,838	1,724	1,803	1,723	1,850	1,894	2,089	2,083	2,172
Patents issued .....	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1,265	1,466	1,448	1,391	1,608
USDA															
Inventions disclosed .....	83	144	127	158	127	83	110	111	133	129	260	208	162	109	118
Patent applications filed .....	44	50	71	76	110	70	68	40	80	91	56	64	84	78	83
Patents issued .....	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	45	75	74	64	64
DOC															
Inventions disclosed .....	43	31	49	46	30	55	66	51	65	71	58	40	35	32	26
Patent applications filed .....	8	15	28	28	18	53	43	41	35	60	49	66	27	18	12
Patents issued .....	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	23	19	26	14	22
DOD															
Inventions disclosed .....	953	1,147	1,153	1,383	1,524	1,283	1,189	1,172	1,168	1,115	1,150	1,028	1,060	991	1,005
Patent applications filed .....	343	447	616	807	919	850	835	732	759	716	735	755	703	774	809
Patents issued .....	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	554	579	547	553	619
DOE															
Inventions disclosed .....	857	1,003	1,053	1,335	1,666	1,698	1,443	1,588	1,758	1,886	1,500	1,313	1,474	1,371	1,527
Patent applications filed .....	252	336	382	366	397	432	497	543	571	564	705	751	850	788	792
Patents issued .....	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	384	512	525	515	605
EPA															
Inventions disclosed .....	0	0	0	12	20	9	22	19	15	20	9	14	5	11	17
Patent applications filed .....	4	5	5	6	8	12	15	15	24	18	13	11	15	10	7
Patents issued .....	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	12	1	8	6	12
HHS															
Inventions disclosed .....	194	226	209	215	215	311	282	307	307	305	268	287	328	375	434
Patent applications filed .....	98	145	225	239	261	224	193	171	166	147	148	132	241	263	255
Patents issued .....	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	152	171	180	132	119
DOI															
Inventions disclosed .....	3	6	3	26	26	1	2	2	2	2	5	5	8	16	6
Patent applications filed .....	5	4	11	15	21	1	2	2	2	2	2	5	3	5	22
Patents issued .....	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1	3	1	4	4
NASA															
Inventions disclosed .....	496	462	532	538	570	416	384	457	517	550	550	554	525	574	696
Patent applications filed .....	94	129	125	181	205	225	185	179	164	123	140	105	129	109	151
Patents issued .....	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	94	105	87	99	159
DOT															
Inventions disclosed .....	0	0	0	1	2	1	1	1	0	4	2	4	1	0	2
Patent applications filed .....	0	0	0	1	1	0	0	1	2	2	1	3	0	3	3
Patents issued .....	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0	1	0	3	0
VA															
Inventions disclosed .....	33	28	42	58	33	44	39	45	36	71	40	50	48	85	78
Patent applications filed .....	NA	NA	3	8	NA	0	0	0	0	0	1	2	37	35	38
Patents issued .....	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0	1	4

## Federal technology transfer indicators, by selected U.S. agencies: FY 1987–2001

Agency	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001
Invention licences															
All 10 agencies															
Active invention licences .....	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2,736	3,009	3,142
New invention licences .....	128	129	150	164	206	239	260	337	408	462	487	492	596	511	578
USDA															
Active invention licences .....	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	218	225	255
New invention licences .....	30	24	23	33	29	31	28	9	21	26	22	23	29	24	32
DOC															
Active invention licences .....	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	41	41	39
New invention licences .....	0	0	1	0	2	5	3	3	4	10	11	17	7	4	5
DOD															
Active invention licences .....	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	177	189	283
New invention licences .....	10	10	14	15	25	19	20	28	34	41	34	34	61	67	49
DOE															
Active invention licences .....	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	981	1,094	1,162
New invention licences .....	37	43	57	62	75	81	96	118	140	154	175	162	202	169	226
EPA															
Active invention licences .....	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	17	18	19
New invention licences .....	0	0	0	1	2	2	2	9	1	2	1	0	2	3	4
HHS															
Active invention licences .....	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1,041	1,222	1,007
New invention licences .....	35	42	48	47	69	96	99	151	176	193	208	215	208	192	212
DOI															
Active invention licences .....	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	12	6	8
New invention licences .....	3	3	0	0	0	NA	NA	8	3	NA	0	0	0	2	2
NASA															
Active invention licences .....	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	249	214	292
New invention licences .....	13	7	7	6	4	5	12	11	29	36	36	40	40	47	42
DOT															
Active invention licences .....	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0	0	1
New invention licences .....	0	0	0	0	0	NA	NA	NA	NA	NA	0	1	0	0	1
VA															
Active invention licences .....	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	76
New invention licences .....	0	0	0	0	0	NA	NA	NA	NA	NA	NA	NA	47	3	5

## Federal technology transfer indicators, by selected U.S. agencies: FY 1987–2001

Agency	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001
Cooperative research and development agreements (CRADAs)															
All 10 agencies															
Total active CRADAs .....	34	98	271	460	731	1,078	1,628	2,471	3,121	3,530	3,078	3,038	3,227	3,133	3,603
New CRADAs.....	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1,058	1,034	1,023	874	926
Nontraditional CRADAs, active .....	NA	NA	NA	NA	NA	NA	NA	NA	NA	0	0	0	231	194	555
New nontraditional CRADAs.....	NA	NA	NA	NA	NA	NA	NA	NA	NA	43	121	106	78	75	166
USDA															
Total active CRADAs .....	9	51	98	128	177	172	172	208	229	244	273	288	298	257	219
New CRADAs .....	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	93	102	101	69	49
Nontraditional CRADAs, active .....	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0
New nontraditional CRADAs .....	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0
DOC															
Total active CRADAs .....	0	9	44	82	115	177	292	368	407	406	377	337	275	221	188
New CRADAs .....	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	90	77	67	46	26
Nontraditional CRADAs, active .....	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0
New nontraditional CRADAs .....	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0
DOD															
Total active CRADAs .....	3	10	36	113	193	277	365	563	845	1,086	1,360	1,424	1,350	1,364	1,965
New CRADAs .....	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	408	399	449	425	459
Nontraditional CRADAs, active .....	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	330
New nontraditional CRADAs .....	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	82
DOE															
Total active CRADAs .....	0	0	0	1	43	250	582	1,094	1,392	1,677	963	868	715	687	558
New CRADAs .....	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	274	266	240	151	204
Nontraditional CRADAs, active .....	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0
New nontraditional CRADAs .....	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0
EPA															
Total active CRADAs .....	0	0	2	11	31	30	28	35	30	35	34	37	38	44	48
New CRADAs .....	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	11	12	13	10	19
Nontraditional CRADAs, active .....	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3
New nontraditional CRADAs .....	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1
HHS															
Total active CRADAs .....	22	28	89	110	144	146	149	147	152	NA	NA	NA	468	438	490
New CRADAs .....	NA	NA	NA	NA	NA	NA	NA	NA	NA	87	153	149	136	125	137
Nontraditional CRADAs, active .....	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	231	194	209
New nontraditional CRADAs .....	NA	NA	NA	NA	NA	NA	NA	NA	NA	43	121	106	78	75	76
DOI															
Total active CRADAs .....	0	0	1	12	11	1	3	9	15	22	23	30	30	40	50
New CRADAs .....	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9	7	10	8	21
Nontraditional CRADAs, active .....	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9
New nontraditional CRADAs .....	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7

## Federal technology transfer indicators, by selected U.S. agencies: FY 1987–2001

Agency	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001
NASA															
Total active CRADAs .....	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1
New CRADAs .....	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0	0	1	0	0
Nontraditional CRADAs, active .....	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0
New nontraditional CRADAs .....	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0
DOT															
Total active CRADAs .....	0	0	0	1	9	17	30	38	37	43	36	39	51	79	82
New CRADAs .....	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	14	13	5	38	11
Nontraditional CRADAs, active .....	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4
New nontraditional CRADAs .....	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0
VA															
Total active CRADAs .....	0	0	1	2	8	8	7	9	14	17	12	15	1	2	2
New CRADAs .....	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6	9	1	2	0
Nontraditional CRADAs, active .....	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0
New nontraditional CRADAs .....	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0

NA data not requested or not available; CRADA Cooperative Research and Development Agreement; DOC Department of Commerce; DOD Department of Defense; DOE Department of Energy; DOI Department of the Interior; DOT Department of Transportation; EPA Environmental Protection Agency; HHS Department of Health and Human Services; NASA National Aeronautics and Space Administration; USDA Department of Agriculture; VA Department of Veterans Affairs

NOTE: Data for CRADAs are for agreements established under the authority of 15 U.S.C. Sec. 3710a. Nontraditional CRADAs are agreements for special purposes, such as material transfer or technical assistance. Before 1999, NASA performed all of its technology transfer activities under the authority of the 1958 Space Act.

SOURCE: U.S. Department of Commerce, Office of the Secretary, *Summary Report on Federal Laboratory Technology Transfer: 2002 Report to the President and the Congress Under the Technology Transfer and Commercialization Act* (Washington, DC, 2002).

*Science & Engineering Indicators – 2004*