

Table V-3. Total and net replacement rates and annual average projected replacement needs, 2006-16
(Numbers in thousands)

2006 National Employment Matrix code and title		Total employment, 2006	Replacement rate (percent)		Annual average replacement needs, 2006-16	
			Total, 2005-06	Net, 2006-16	Total	Net
00-0000	Total, all occupations	150,620	15.9	22.1	25,186	3,336
11-1300	Management, business, and financial occupations	15,397	9.7	18.6	1,578	287
11-0000	Management occupations	8,789	9.2	19.8	832	174
11-1000	Top executives	2,187	6.0	24.6	133	54
11-1011	Chief executives	402	5.0	27.3	20	11
11-1021	General and operations managers	1,720	6.3	24.1	109	41
11-1031	Legislators ¹	65	5.1	19.0	3	1
11-2000	Advertising, marketing, promotions, public relations, and sales managers	583	9.5	22.3	59	13
11-2011	Advertising and promotions managers ¹	47	5.5	22.2	3	1
11-2020	Marketing and sales managers	486	9.9	22.2	51	11
11-2021	Marketing managers	167	9.9	22.2	18	4
11-2022	Sales managers	318	9.9	22.2	33	7
11-2031	Public relations managers ¹	50	9.2	23.3	5	1
11-3000	Operations specialties managers	1,474	8.9	21.0	138	31
11-3011	Administrative services managers	247	6.4	26.4	17	7
11-3021	Computer and information systems managers	264	9.3	16.2	27	4
11-3031	Financial managers	506	9.5	14.5	51	7
11-3040	Human resources managers	136	10.6	18.8	15	3
11-3041	Compensation and benefits managers	49	10.6	18.8	6	1
11-3042	Training and development managers	29	10.6	18.8	3	1
11-3049	Human resources managers, all other	58	10.6	18.8	7	1
11-3051	Industrial production managers	157	9.7	34.5	15	5
11-3061	Purchasing managers	70	9.9	28.6	7	2
11-3071	Transportation, storage, and distribution managers	94	6.3	29.7	6	3
11-9000	Other management occupations	4,545	10.7	16.8	503	76
11-9010	Agricultural managers	1,317	11.6	8.7	147	11
11-9011	Farm, ranch, and other agricultural managers	258	6.9	7.3	18	2
11-9012	Farmers and ranchers	1,058	12.8	9.0	130	10
11-9021	Construction managers	487	6.9	15.5	37	8
11-9030	Education administrators	443	10.8	27.9	51	12
11-9031	Education administrators, preschool and child care center/program	56	10.8	27.9	7	2
11-9032	Education administrators, elementary and secondary school	226	10.8	27.9	25	6
11-9033	Education administrators, postsecondary	131	10.8	27.9	15	4
11-9039	Education administrators, all other	30	10.8	27.9	3	1
11-9041	Engineering managers	187	3.1	20.2	6	4
11-9051	Food service managers	350	16.0	23.6	58	8
11-9061	Funeral directors	29	11.7	24.0	4	1
11-9071	Gaming managers ¹	4	10.1	18.7	(²)	(²)
11-9081	Lodging managers	71	6.2	22.0	5	2
11-9111	Medical and health services managers	262	9.7	18.7	28	5
11-9121	Natural sciences managers ¹	41	7.4	21.9	3	1
11-9131	Postmasters and mail superintendents ¹	26	6.3	24.1	2	1
11-9141	Property, real estate, and community association managers	329	12.7	13.8	45	5
11-9151	Social and community service managers	130	14.1	19.1	21	2
11-9199	Managers, all other	870	10.9	19.9	98	17
13-0000	Business and financial operations occupations	6,608	10.4	17.1	746	113
13-1000	Business operations specialists	3,860	11.6	17.3	484	67
13-1011	Agents and business managers of artists, performers, and athletes	25	14.2	27.3	4	1
13-1020	Buyers and purchasing agents	460	9.5	21.4	44	10
13-1021	Purchasing agents and buyers, farm products ¹	16	10.6	13.0	2	(²)
13-1022	Wholesale and retail buyers, except farm products	157	12.7	22.4	20	4
13-1023	Purchasing agents, except wholesale, retail, and farm products	287	7.8	21.4	22	6
13-1030	Claims adjusters, appraisers, examiners, and investigators	319	6.1	25.5	20	8
13-1031	Claims adjusters, examiners, and investigators	305	6.1	25.5	19	8
13-1032	Insurance appraisers, auto damage	13	6.1	25.5	1	(²)

See footnotes at end of table.

Table V-3. Total and net replacement rates and annual average projected replacement needs, 2006-16 — Continued
(Numbers in thousands)

2006 National Employment Matrix code and title		Total employment, 2006	Replacement rate (percent)		Annual average replacement needs, 2006-16	
			Total, 2005-06	Net, 2006-16	Total	Net
13-1041	Compliance officers, except agriculture, construction, health and safety, and transportation	237	6.0	11.7	15	3
13-1051	Cost estimators	221	14.2	20.5	34	5
13-1061	Emergency management specialists	12	11.2	10.7	1	(²)
13-1070	Human resources, training, and labor relations specialists	732	13.9	21.5	111	16
13-1071	Employment, recruitment, and placement specialists	197	13.9	21.5	30	4
13-1072	Compensation, benefits, and job analysis specialists	110	13.9	21.5	17	2
13-1073	Training and development specialists	210	13.9	21.5	32	5
13-1079	Human resources, training, and labor relations specialists, all other	214	13.9	21.5	32	5
13-1081	Logisticians	83	9.1	14.9	8	1
13-1111	Management analysts	678	14.7	17.1	111	12
13-1121	Meeting and convention planners ¹	51	13.0	20.0	7	1
13-1199	Business operation specialists, all other	1,043	11.2	10.7	129	11
13-2000	Financial specialists	2,748	8.8	16.8	261	46
13-2011	Accountants and auditors	1,274	8.1	17.6	112	22
13-2021	Appraisers and assessors of real estate	101	4.4	20.0	5	2
13-2031	Budget analysts ¹	62	9.3	23.1	6	1
13-2041	Credit analysts ¹	67	4.5	38.2	3	3
13-2050	Financial analysts and advisors	501	6.6	11.2	38	6
13-2051	Financial analysts	221	8.5	5.7	22	1
13-2052	Personal financial advisors	176	4.7	9.0	10	2
13-2053	Insurance underwriters	104	5.8	26.8	6	3
13-2061	Financial examiners ¹	26	8.1	17.6	2	(²)
13-2070	Loan counselors and officers	406	12.7	10.8	54	4
13-2071	Loan counselors	33	12.7	10.8	4	(²)
13-2072	Loan officers	373	12.7	10.8	50	4
13-2080	Tax examiners, collectors, preparers, and revenue agents	181	17.1	21.1	30	4
13-2081	Tax examiners, collectors, and revenue agents	81	5.3	25.4	4	2
13-2082	Tax preparers	100	27.2	17.6	26	2
13-2099	Financial specialists, all other	129	7.9	26.7	11	3
15-2900	Professional and related occupations	29,819	9.6	20.3	3,111	606
15-0000	Computer and mathematical science occupations	3,313	8.3	22.0	309	73
15-1000	Computer specialists	3,200	8.2	21.9	295	70
15-1011	Computer and information scientists, research	25	8.4	26.5	2	1
15-1021	Computer programmers	435	6.6	20.9	28	9
15-1030	Computer software engineers	857	5.8	14.6	59	12
15-1031	Computer software engineers, applications	507	5.8	14.6	36	7
15-1032	Computer software engineers, systems software	350	5.8	14.6	23	5
15-1041	Computer support specialists	552	15.3	30.9	90	17
15-1051	Computer systems analysts	504	8.4	26.5	49	13
15-1061	Database administrators	119	3.6	10.7	5	1
15-1071	Network and computer systems administrators	309	8.2	22.8	29	7
15-1081	Network systems and data communications analysts	262	6.4	20.4	21	5
15-1099	Computer specialists, all other	136	8.4	26.5	12	4
15-2000	Mathematical science occupations	114	11.1	25.4	13	3
15-2011	Actuaries ¹	18	13.9	36.1	3	1
15-2021	Mathematicians ¹	3	13.9	24.7	(²)	(²)
15-2031	Operations research analysts	58	8.3	20.1	5	1
15-2041	Statisticians ¹	22	13.9	31.2	3	1
15-2090	Miscellaneous mathematical science occupations	12	13.9	24.7	2	(²)
15-2091	Mathematical technicians ¹	1	13.9	24.7	(²)	(²)
15-2099	Mathematical scientists, all other ¹	10	13.9	24.7	2	(²)
17-0000	Architecture and engineering occupations	2,583	6.6	22.6	180	58
17-1000	Architects, surveyors, and cartographers	232	10.4	22.6	26	5
17-1010	Architects, except naval	160	6.3	18.9	11	3
17-1011	Architects, except landscape and naval	132	6.3	18.9	9	2

See footnotes at end of table.

Table V-3. Total and net replacement rates and annual average projected replacement needs, 2006-16 — Continued
(Numbers in thousands)

2006 National Employment Matrix code and title		Total employment, 2006	Replacement rate (percent)		Annual average replacement needs, 2006-16	
			Total, 2005-06	Net, 2006-16	Total	Net
17-1012	Landscape architects	28	6.3	18.9	2	1
17-1020	Surveyors, cartographers, and photogrammetrists	72	19.2	30.9	15	2
17-1021	Cartographers and photogrammetrists	12	19.2	30.9	3	(²)
17-1022	Surveyors	60	19.2	30.9	13	2
17-2000	Engineers	1,512	4.8	22.9	77	35
17-2011	Aerospace engineers ¹	90	5.9	19.8	6	2
17-2021	Agricultural engineers ¹	3	6.1	22.8	(²)	(²)
17-2031	Biomedical engineers ¹	14	9.4	22.8	2	(²)
17-2041	Chemical engineers ¹	30	5.9	25.4	2	1
17-2051	Civil engineers	256	4.1	26.4	11	7
17-2061	Computer hardware engineers	79	4.0	30.7	3	2
17-2070	Electrical and electronics engineers	291	3.7	23.2	11	7
17-2071	Electrical engineers	153	3.7	23.2	6	4
17-2072	Electronics engineers, except computer	138	3.7	23.2	5	3
17-2081	Environmental engineers ¹	54	5.9	29.3	4	2
17-2110	Industrial engineers, including health and safety	227	3.2	24.1	8	5
17-2111	Health and safety engineers, except mining safety engineers and inspectors	25	3.2	24.1	1	1
17-2112	Industrial engineers	201	3.2	24.1	7	5
17-2121	Marine engineers and naval architects ¹	9	4.1	26.4	(²)	(²)
17-2131	Materials engineers ¹	22	5.9	23.3	1	1
17-2141	Mechanical engineers	226	5.0	21.7	11	5
17-2151	Mining and geological engineers, including mining safety engineers ¹	7	5.2	22.8	(²)	(²)
17-2161	Nuclear engineers ¹	15	5.9	22.8	1	(²)
17-2171	Petroleum engineers ¹	17	5.2	25.9	1	(²)
17-2199	Engineers, all other	170	8.5	11.8	15	2
17-3000	Drafters, engineering, and mapping technicians	840	8.9	22.2	77	19
17-3010	Drafters	253	13.1	28.6	34	7
17-3011	Architectural and civil drafters	116	13.1	28.6	16	3
17-3012	Electrical and electronics drafters	35	13.1	28.6	5	1
17-3013	Mechanical drafters	78	13.1	28.6	10	2
17-3019	Drafters, all other	25	13.1	28.6	3	1
17-3020	Engineering technicians, except drafters	511	6.9	19.5	36	10
17-3021	Aerospace engineering and operations technicians	9	6.9	19.5	1	(²)
17-3022	Civil engineering technicians	91	6.9	19.5	7	2
17-3023	Electrical and electronic engineering technicians	170	6.9	19.5	12	3
17-3024	Electro-mechanical technicians	16	6.9	19.5	1	(²)
17-3025	Environmental engineering technicians	21	6.9	19.5	2	(²)
17-3026	Industrial engineering technicians	75	6.9	19.5	5	1
17-3027	Mechanical engineering technicians	48	6.9	19.5	3	1
17-3029	Engineering technicians, except drafters, all other	82	6.9	19.5	6	2
17-3031	Surveying and mapping technicians	76	8.2	18.9	7	1
19-0000	Life, physical, and social science occupations	1,407	10.1	23.8	152	33
19-1000	Life scientists	258	7.1	27.2	19	7
19-1010	Agricultural and food scientists	33	4.4	30.6	2	1
19-1011	Animal scientists	5	4.4	30.6	(²)	(²)
19-1012	Food scientists and technologists	12	4.4	30.6	1	(²)
19-1013	Soil and plant Scientists	16	4.4	30.6	1	(²)
19-1020	Biological scientists	87	6.1	20.3	5	2
19-1021	Biochemists and biophysicists	20	6.1	20.3	1	(²)
19-1022	Microbiologists	17	6.1	20.3	1	(²)
19-1023	Zoologists and wildlife biologists	20	6.1	20.3	1	(²)
19-1029	Biological scientists, all other	29	6.1	20.3	2	1
19-1030	Conservation scientists and foresters	33	5.2	29.5	2	1
19-1031	Conservation scientists ¹	20	5.2	29.5	1	1

See footnotes at end of table.

Table V-3. Total and net replacement rates and annual average projected replacement needs, 2006-16 — Continued
(Numbers in thousands)

2006 National Employment Matrix code and title		Total employment, 2006	Replacement rate (percent)		Annual average replacement needs, 2006-16	
			Total, 2005-06	Net, 2006-16	Total	Net
19-1032	Foresters ¹	13	5.2	29.5	1	(²)
19-1040	Medical scientists	92	9.2	31.0	9	3
19-1041	Epidemiologists	5	9.2	31.0	(²)	(²)
19-1042	Medical scientists, except epidemiologists	87	9.2	31.0	9	3
19-1099	Life scientists, all other	14	9.2	31.0	1	(²)
19-2000	Physical scientists	267	6.7	25.3	19	7
19-2010	Astronomers and physicists	18	7.0	24.4	1	(²)
19-2011	Astronomers ¹	2	7.0	24.4	(²)	(²)
19-2012	Physicists ¹	17	7.0	24.4	1	(²)
19-2021	Atmospheric and space scientists ¹	9	7.0	24.4	1	(²)
19-2030	Chemists and materials scientists	93	9.4	26.4	9	2
19-2031	Chemists	84	9.4	26.4	8	2
19-2032	Materials scientists	10	9.4	26.4	1	(²)
19-2040	Environmental scientists and geoscientists	123	5.2	25.9	7	3
19-2041	Environmental scientists and specialists, including health	83	5.2	25.9	5	2
19-2042	Geoscientists, except hydrologists and geographers	31	5.2	25.9	2	1
19-2043	Hydrologists	8	5.2	25.9	(²)	(²)
19-2099	Physical scientists, all other	24	3.7	19.1	1	(²)
19-3000	Social scientists and related occupations	530	10.1	14.0	58	7
19-3011	Economists ¹	15	9.4	29.4	1	(²)
19-3020	Market and survey researchers	261	15.6	6.8	45	2
19-3021	Market research analysts	234	15.6	6.8	40	2
19-3022	Survey researchers	27	15.6	6.8	5	(²)
19-3030	Psychologists	166	3.6	15.3	6	3
19-3031	Clinical, counseling, and school psychologists	152	3.6	15.3	6	2
19-3032	Industrial-organizational psychologists	2	3.6	15.3	(²)	(²)
19-3039	Psychologists, all other	12	3.6	15.3	(²)	(²)
19-3041	Sociologists ¹	4	9.4	16.6	(²)	(²)
19-3051	Urban and regional planners ¹	34	4.1	29.5	1	1
19-3090	Miscellaneous social scientists and related workers	51	6.1	31.9	3	2
19-3091	Anthropologists and archeologists	6	6.1	31.9	(²)	(²)
19-3092	Geographers	1	6.1	31.9	(²)	(²)
19-3093	Historians	3	6.1	31.9	(²)	(²)
19-3094	Political scientists	5	6.1	31.9	(²)	(²)
19-3099	Social scientists and related workers, all other	36	6.1	31.9	2	1
19-4000	Life, physical, and social science technicians	351	15.1	35.0	56	12
19-4011	Agricultural and food science technicians ¹	26	14.5	15.6	4	(²)
19-4021	Biological technicians	79	16.6	35.7	14	3
19-4031	Chemical technicians	61	5.8	33.4	4	2
19-4041	Geological and petroleum technicians ¹	12	14.5	37.8	2	(²)
19-4051	Nuclear technicians ¹	7	14.5	35.0	1	(²)
19-4061	Social science research assistants	18	17.7	38.0	3	1
19-4090	Other life, physical, and social science technicians	150	17.7	38.0	28	6
19-4091	Environmental science and protection technicians, including health	36	17.7	38.0	7	1
19-4092	Forensic science technicians	13	17.7	38.0	3	(²)
19-4093	Forest and conservation technicians	34	17.7	38.0	6	1
19-4099	Life, physical, and social science technicians, all other	66	17.7	38.0	12	3
21-0000	Community and social services occupations	2,386	13.5	16.9	359	40
21-1000	Counselors, social workers, and other community and social service specialists	1,843	15.3	17.5	315	32
21-1010	Counselors	635	18.4	19.8	129	13
21-1011	Substance abuse and behavioral disorder counselors	83	18.4	19.8	18	2
21-1012	Educational, vocational, and school counselors	260	18.4	19.8	51	5
21-1013	Marriage and family therapists	25	18.4	19.8	5	(²)
21-1014	Mental health counselors	100	18.4	19.8	21	2

See footnotes at end of table.

Table V-3. Total and net replacement rates and annual average projected replacement needs, 2006-16 — Continued
(Numbers in thousands)

2006 National Employment Matrix code and title		Total employment, 2006	Replacement rate (percent)		Annual average replacement needs, 2006-16	
			Total, 2005-06	Net, 2006-16	Total	Net
21-1015	Rehabilitation counselors	141	18.4	19.8	29	3
21-1019	Counselors, all other	27	18.4	19.8	5	1
21-1020	Social workers	595	9.7	21.1	64	13
21-1021	Child, family, and school social workers	282	9.7	21.1	30	6
21-1022	Medical and public health social workers	124	9.7	21.1	13	3
21-1023	Mental health and substance abuse social workers	122	9.7	21.1	14	3
21-1029	Social workers, all other	66	9.7	21.1	7	1
21-1090	Miscellaneous community and social service specialists	613	17.4	11.6	121	7
21-1091	Health educators	62	17.4	11.6	12	1
21-1092	Probation officers and correctional treatment specialists	94	17.4	11.6	17	1
21-1093	Social and human service assistants	339	17.4	11.6	69	4
21-1099	Community and social service specialists, all other	118	17.4	11.6	23	1
21-2000	Religious workers	543	7.4	15.0	44	8
21-2011	Clergy	404	6.2	13.4	27	5
21-2021	Directors, religious activities and education	99	8.7	22.9	10	2
21-2099	Religious workers, all other	39	16.6	11.0	7	(²)
23-0000	Legal occupations	1,222	6.1	17.5	79	21
23-1000	Lawyers, judges, and related workers	812	5.1	19.0	44	15
23-1011	Lawyers	761	5.1	19.0	41	14
23-1020	Judges, magistrates, and other judicial workers	51	5.1	19.0	3	1
23-1021	Administrative law judges, adjudicators, and hearing officers ¹	15	5.1	19.0	1	(²)
23-1022	Arbitrators, mediators, and conciliators ¹	8	5.1	19.0	(²)	(²)
23-1023	Judges, magistrate judges, and magistrates ¹	27	5.1	19.0	1	1
23-2000	Legal support workers	410	8.0	14.6	35	6
23-2011	Paralegals and legal assistants	238	6.6	13.2	17	3
23-2090	Miscellaneous legal support workers	173	10.0	16.6	18	3
23-2091	Court reporters	19	10.0	16.6	2	(²)
23-2092	Law clerks	37	10.0	16.6	4	1
23-2093	Title examiners, abstractors, and searchers	69	10.0	16.6	7	1
23-2099	Legal support workers, all other	48	10.0	16.6	5	1
25-0000	Education, training, and library occupations	9,034	11.8	19.7	1,142	178
25-1000	Postsecondary teachers	1,672	10.7	16.7	199	28
25-2000	Primary, secondary, and special education teachers	4,413	9.6	23.2	449	102
25-2010	Preschool and kindergarten teachers	607	13.5	16.5	92	10
25-2011	Preschool teachers, except special education	437	13.5	16.5	67	7
25-2012	Kindergarten teachers, except special education	170	13.5	16.5	25	3
25-2020	Elementary and middle school teachers	2,214	9.8	21.8	230	48
25-2021	Elementary school teachers, except special education	1,540	9.8	21.8	161	34
25-2022	Middle school teachers, except special and vocational education	658	9.8	21.8	68	14
25-2023	Vocational education teachers, middle school	16	9.8	21.8	2	(²)
25-2030	Secondary school teachers	1,133	8.2	29.8	95	34
25-2031	Secondary school teachers, except special and vocational education	1,038	8.2	29.8	87	31
25-2032	Vocational education teachers, secondary school	96	8.2	29.8	8	3
25-2040	Special education teachers	459	6.6	22.2	32	10
25-2041	Special education teachers, preschool, kindergarten, and elementary school	219	6.6	22.2	16	5
25-2042	Special education teachers, middle school	102	6.6	22.2	7	2
25-2043	Special education teachers, secondary school	138	6.6	22.2	9	3
25-3000	Other teachers and instructors	1,078	20.0	10.7	229	12
25-3011	Adult literacy, remedial education, and GED teachers and instructors	76	20.0	10.7	16	1
25-3021	Self-enrichment education teachers	261	20.0	10.7	58	3
25-3099	Teachers and instructors, all other	741	20.0	10.7	155	8
25-4000	Librarians, curators, and archivists	307	15.6	37.0	49	11
25-4010	Archivists, curators, and museum technicians	27	10.2	43.2	3	1
25-4011	Archivists	6	10.2	43.2	1	(²)
25-4012	Curators	10	10.2	43.2	1	(²)
25-4013	Museum Technicians and Conservators	11	10.2	43.2	1	(²)

See footnotes at end of table.

Table V-3. Total and net replacement rates and annual average projected replacement needs, 2006-16 — Continued
(Numbers in thousands)

2006 National Employment Matrix code and title		Total employment, 2006	Replacement rate (percent)		Annual average replacement needs, 2006-16	
			Total, 2005-06	Net, 2006-16	Total	Net
25-4021	Librarians	158	11.4	27.1	18	4
25-4031	Library technicians	121	22.2	48.6	28	6
25-9000	Other education, training, and library occupations.....	1,563	13.0	15.9	215	25
25-9011	Audio-visual collections specialists	7	12.8	13.7	1	(²)
25-9021	Farm and home management advisors	15	12.8	13.7	2	(²)
25-9031	Instructional coordinators	129	12.8	13.7	18	2
25-9041	Teacher assistants	1,312	13.1	16.3	180	21
25-9099	Education, training, and library workers, all other	99	12.8	13.7	13	1
27-0000	Arts, design, entertainment, sports, and media occupations.....	2,677	12.8	24.3	362	65
27-1000	Art and design occupations.....	821	9.5	25.7	82	21
27-1010	Artists and related workers.....	218	11.1	23.4	26	5
27-1011	Art directors	78	11.1	23.4	9	2
27-1012	Craft artists.....	9	11.1	23.4	1	(²)
27-1013	Fine artists, including painters, sculptors, and illustrators.....	30	11.1	23.4	4	1
27-1014	Multi-media artists and animators	87	11.1	23.4	11	2
27-1019	Artists and related workers, all other	14	11.1	23.4	2	(²)
27-1020	Designers	603	8.9	26.6	56	16
27-1021	Commercial and industrial designers	48	8.9	26.6	4	1
27-1022	Fashion designers.....	20	8.9	26.6	2	1
27-1023	Floral designers.....	87	8.9	26.6	7	2
27-1024	Graphic designers	261	8.9	26.6	24	7
27-1025	Interior designers	72	8.9	26.6	7	2
27-1026	Merchandise displayers and window trimmers	87	8.9	26.6	8	2
27-1027	Set and exhibit designers.....	12	8.9	26.6	1	(²)
27-1029	Designers, all other	16	8.9	26.6	2	(²)
27-2000	Entertainers and performers, sports and related occupations	798	14.7	26.0	124	21
27-2010	Actors, producers, and directors	163	16.3	25.8	28	4
27-2011	Actors	70	27.1	20.6	20	1
27-2012	Producers and directors	93	8.1	29.7	8	3
27-2020	Athletes, coaches, umpires, and related workers.....	253	20.6	25.7	56	6
27-2021	Athletes and sports competitors	18	20.6	25.7	4	(²)
27-2022	Coaches and scouts.....	217	20.6	25.7	48	6
27-2023	Umpires, referees, and other sports officials.....	19	20.6	25.7	4	(²)
27-2030	Dancers and choreographers.....	40	6.1	55.2	3	2
27-2031	Dancers.....	20	6.1	55.2	1	1
27-2032	Choreographers	20	6.1	55.2	1	1
27-2040	Musicians, singers, and related workers.....	264	10.7	20.3	30	5
27-2041	Music directors and composers	68	10.7	20.3	8	1
27-2042	Musicians and singers.....	196	10.7	20.3	22	4
27-2099	Entertainers and performers, sports and related workers, all other	77	9.6	31.9	8	2
27-3000	Media and communication occupations.....	764	15.6	20.6	126	16
27-3010	Announcers	71	11.3	34.1	8	2
27-3011	Radio and television announcers.....	59	11.3	34.1	6	2
27-3012	Public address system and other announcers	12	11.3	34.1	1	(²)
27-3020	News analysts, reporters and correspondents.....	67	17.6	31.5	12	2
27-3021	Broadcast news analysts	8	17.6	31.5	1	(²)
27-3022	Reporters and correspondents.....	59	17.6	31.5	10	2
27-3031	Public relations specialists	243	17.7	7.5	47	2
27-3040	Writers and editors	306	15.2	24.6	49	8
27-3041	Editors	122	16.2	29.8	20	4
27-3042	Technical writers.....	49	12.1	30.2	7	1
27-3043	Writers and authors.....	135	15.5	18.0	22	2
27-3090	Miscellaneous media and communications workers.....	77	12.3	23.8	10	2
27-3091	Interpreters and translators	41	12.3	23.8	6	1
27-3099	Media and communication workers, all other.....	36	12.3	23.8	5	1
27-4000	Media and communication equipment occupations	294	9.6	25.5	30	7

See footnotes at end of table.

Table V-3. Total and net replacement rates and annual average projected replacement needs, 2006-16 — Continued
(Numbers in thousands)

2006 National Employment Matrix code and title		Total employment, 2006	Replacement rate (percent)		Annual average replacement needs, 2006-16	
			Total, 2005-06	Net, 2006-16	Total	Net
27-4010	Broadcast and sound engineering technicians and radio operators	105	6.2	32.5	7	3
27-4011	Audio and video equipment technicians	50	6.2	32.5	3	2
27-4012	Broadcast technicians	38	6.2	32.5	2	1
27-4013	Radio operators	2	6.2	32.5	(²)	(²)
27-4014	Sound engineering technicians	16	6.2	32.5	1	1
27-4021	Photographers	122	11.5	22.0	15	3
27-4030	Television, video, and motion picture camera operators and editors	47	11.2	18.6	6	1
27-4031	Camera operators, television, video, and motion picture	27	11.2	18.6	3	1
27-4032	Film and video editors	21	11.2	18.6	2	(²)
27-4099	Media and communication equipment workers, all other ¹	19	12.0	25.3	2	(²)
29-0000	Healthcare practitioners and technical occupations	7,198	6.7	18.9	528	136
29-1000	Health diagnosing and treating practitioners	4,460	5.6	16.7	278	75
29-1011	Chiropractors ¹	53	4.3	10.9	2	1
29-1020	Dentists	161	4.1	19.6	7	3
29-1021	Dentists, general ¹	136	4.1	19.6	6	3
29-1022	Oral and maxillofacial surgeons ¹	8	4.1	19.6	(²)	(²)
29-1023	Orthodontists ¹	9	4.1	19.6	(²)	(²)
29-1024	Prosthodontists ¹	1	4.1	19.6	(²)	(²)
29-1029	Dentists, all other specialists ¹	7	4.1	19.6	(²)	(²)
29-1031	Dietitians and nutritionists	57	7.6	25.3	5	1
29-1041	Optometrists ¹	33	4.1	17.1	1	1
29-1051	Pharmacists	243	4.1	17.3	11	4
29-1060	Physicians and surgeons	633	4.3	18.0	29	11
29-1071	Physician assistants	66	7.2	13.8	5	1
29-1081	Podiatrists ¹	12	4.3	34.0	1	(²)
29-1111	Registered nurses	2,505	6.2	16.5	175	41
29-1120	Therapists	570	5.7	14.6	36	8
29-1121	Audiologists ¹	12	6.7	11.5	1	(²)
29-1122	Occupational therapists	99	5.5	14.7	6	1
29-1123	Physical therapists	173	3.8	12.0	7	2
29-1124	Radiation therapists ¹	15	6.7	15.0	1	(²)
29-1125	Recreational therapists ¹	25	6.7	15.0	2	(²)
29-1126	Respiratory therapists	102	2.8	14.7	3	2
29-1127	Speech-language pathologists	110	8.7	19.3	10	2
29-1129	Therapists, all other	35	15.3	12.0	6	(²)
29-1131	Veterinarians ¹	62	4.3	19.6	3	1
29-1199	Health diagnosing and treating practitioners, all other ¹	65	3.8	17.1	3	1
29-2000	Health technologists and technicians	2,612	8.5	22.6	242	59
29-2010	Clinical laboratory technologists and technicians	319	5.3	15.1	18	5
29-2011	Medical and clinical laboratory technologists	167	5.3	15.1	9	3
29-2012	Medical and clinical laboratory technicians	151	5.3	15.1	9	2
29-2021	Dental hygienists	167	2.8	19.1	5	3
29-2030	Diagnostic related technologists and technicians	307	4.7	13.6	16	4
29-2031	Cardiovascular technologists and technicians	45	4.7	13.6	2	1
29-2032	Diagnostic medical sonographers	46	4.7	13.6	2	1
29-2033	Nuclear medicine technologists	20	4.7	13.6	1	(²)
29-2034	Radiologic technologists and technicians	196	4.7	13.6	10	3
29-2041	Emergency medical technicians and paramedics	201	7.1	11.4	16	2
29-2050	Health diagnosing and treating practitioner support technicians	549	13.7	30.5	85	17
29-2051	Dietetic technicians	25	13.7	30.5	4	1
29-2052	Pharmacy technicians	285	13.7	30.5	45	9
29-2053	Psychiatric technicians	62	13.7	30.5	8	2
29-2054	Respiratory therapy technicians	19	13.7	30.5	3	1
29-2055	Surgical technologists	86	13.7	30.5	13	3
29-2056	Veterinary technologists and technicians	71	13.7	30.5	12	2

See footnotes at end of table.

Table V-3. Total and net replacement rates and annual average projected replacement needs, 2006-16 — Continued
(Numbers in thousands)

2006 National Employment Matrix code and title		Total employment, 2006	Replacement rate (percent)		Annual average replacement needs, 2006-16	
			Total, 2005-06	Net, 2006-16	Total	Net
29-2061	Licensed practical and licensed vocational nurses	749	7.5	27.3	60	20
29-2071	Medical records and health information technicians ¹	170	19.5	27.1	36	5
29-2081	Opticians, dispensing	66	3.7	31.8	3	2
29-2090	Miscellaneous health technologists and technicians	85	3.8	7.9	3	1
29-2091	Orthotists and prosthetists	6	3.8	7.9	(²)	(²)
29-2099	Healthcare technologists and technicians, all other	79	3.8	7.9	3	1
29-9000	Other healthcare practitioners and technical occupations	126	6.5	19.0	9	2
29-9010	Occupational health and safety specialists and technicians	56	6.5	19.0	4	1
29-9011	Occupational health and safety specialists ¹	45	6.5	19.0	3	1
29-9012	Occupational health and safety technicians ¹	10	6.5	19.0	1	(²)
29-9090	Miscellaneous health practitioners and technical workers	70	6.5	19.0	5	1
29-9091	Athletic trainers ¹	17	6.5	19.0	1	(²)
29-9099	Healthcare practitioners and technical workers, all other ¹	53	6.5	19.0	4	1
31-3900	Service occupations	28,950	22.5	25.5	7,071	737
31-0000	Healthcare support occupations	3,723	16.2	10.7	685	40
31-1000	Nursing, psychiatric, and home health aides	2,296	18.7	8.9	489	21
31-1011	Home health aides	787	18.7	8.9	183	7
31-1012	Nursing aides, orderlies, and attendants	1,447	18.7	8.9	295	13
31-1013	Psychiatric aides	62	18.7	8.9	12	1
31-2000	Occupational and physical therapist assistants and aides	140	6.0	13.4	10	2
31-2010	Occupational therapist assistants and aides	33	7.1	15.3	3	1
31-2011	Occupational therapist assistants ¹	25	7.1	15.3	2	(²)
31-2012	Occupational therapist aides ¹	8	7.1	15.3	1	(²)
31-2020	Physical therapist assistants and aides	107	5.7	12.8	7	1
31-2021	Physical therapist assistants	60	5.7	12.8	4	1
31-2022	Physical therapist aides	46	5.7	12.8	3	1
31-9000	Other healthcare support occupations	1,287	12.9	13.4	186	17
31-9011	Massage therapists	118	5.3	11.4	7	1
31-9090	Miscellaneous healthcare support occupations	1,170	13.7	13.6	180	16
31-9091	Dental assistants	280	6.6	17.4	21	5
31-9092	Medical assistants	417	15.9	12.4	78	5
31-9093	Medical equipment preparers	45	15.9	12.4	8	1
31-9094	Medical transcriptionists	98	15.9	12.4	17	1
31-9095	Pharmacy aides	50	15.9	12.4	8	1
31-9096	Veterinary assistants and laboratory animal caretakers	75	15.9	12.4	13	1
31-9099	Healthcare support workers, all other	204	15.9	12.4	35	3
33-0000	Protective service occupations	3,163	12.4	27.6	421	87
33-1000	First-line supervisors/managers, protective service workers	233	8.1	27.5	20	6
33-1010	First-line supervisors/managers, law enforcement workers	133	8.8	30.1	12	4
33-1011	First-line supervisors/managers of correctional officers	40	8.8	27.3	4	1
33-1012	First-line supervisors/managers of police and detectives ¹	93	8.8	31.3	9	3
33-1021	First-line supervisors/managers of fire fighting and prevention workers ¹	52	5.7	31.3	3	2
33-1099	First-line supervisors/managers, protective service workers, all other	48	8.7	16.3	4	1
33-2000	Fire fighting and prevention workers	308	4.9	35.7	16	11
33-2011	Fire fighters	293	4.9	36.4	15	11
33-2020	Fire inspectors	16	3.4	22.6	1	(²)
33-2021	Fire inspectors and investigators	14	3.4	22.6	(²)	(²)
33-2022	Forest fire inspectors and prevention specialists	2	3.4	22.6	(²)	(²)
33-3000	Law enforcement workers	1,239	7.3	24.9	97	31
33-3010	Bailiffs, correctional officers, and jailers	460	10.3	22.9	51	11
33-3011	Bailiffs	19	10.3	22.9	2	(²)
33-3012	Correctional officers and jailers	442	10.3	22.9	49	10
33-3021	Detectives and criminal investigators	106	11.2	21.9	13	2
33-3031	Fish and game wardens ¹	8	7.2	25.0	1	(²)
33-3041	Parking enforcement workers ¹	11	7.2	25.0	1	(²)

See footnotes at end of table.

Table V-3. Total and net replacement rates and annual average projected replacement needs, 2006-16 — Continued
(Numbers in thousands)

2006 National Employment Matrix code and title		Total employment, 2006	Replacement rate (percent)		Annual average replacement needs, 2006-16	
			Total, 2005-06	Net, 2006-16	Total	Net
33-3050	Police officers.....	654	4.5	26.7	31	17
33-3051	Police and sheriff's patrol officers.....	648	4.5	26.7	31	17
33-3052	Transit and railroad police ¹	6	4.5	26.8	(²)	(²)
33-9000	Other protective service workers.....	1,382	19.3	28.3	288	39
33-9011	Animal control workers ¹	15	19.7	21.0	3	(²)
33-9021	Private detectives and investigators.....	52	11.3	19.4	6	1
33-9030	Security guards and gaming surveillance officers.....	1,049	18.1	20.3	206	21
33-9031	Gaming surveillance officers and gaming investigators.....	9	18.1	20.3	2	(²)
33-9032	Security guards.....	1,040	18.1	20.3	205	21
33-9090	Miscellaneous protective service workers.....	266	25.6	62.2	72	17
33-9091	Crossing guards.....	69	5.7	28.8	4	2
33-9092	Lifeguards, ski patrol, and other recreational protective service workers.....	114	32.1	74.0	40	8
33-9099	Protective service workers, all other.....	83	32.1	74.0	28	6
35-0000	Food preparation and serving related occupations.....	11,352	30.1	34.8	3,632	395
35-1000	Supervisors, food preparation and serving workers.....	932	15.6	8.2	153	8
35-1011	Chefs and head cooks.....	115	7.2	12.7	9	1
35-1012	First-line supervisors/managers of food preparation and serving workers.....	817	16.8	7.5	145	6
35-2000	Cooks and food preparation workers.....	2,998	26.6	29.4	843	88
35-2010	Cooks.....	2,097	25.4	27.1	559	57
35-2011	Cooks, fast food.....	629	25.4	27.1	167	17
35-2012	Cooks, institution and cafeteria.....	401	25.4	27.1	108	11
35-2013	Cooks, private household.....	5	25.4	27.1	1	(²)
35-2014	Cooks, restaurant.....	850	25.4	27.1	229	23
35-2015	Cooks, short order.....	195	25.4	27.1	51	5
35-2019	Cooks, all other.....	16	25.4	27.1	4	(²)
35-2021	Food preparation workers.....	902	29.3	34.7	284	31
35-3000	Food and beverage serving workers.....	6,081	32.7	38.4	2,126	234
35-3011	Bartenders.....	495	15.7	36.4	82	18
35-3020	Fast food and counter workers.....	3,036	37.9	27.8	1,248	84
35-3021	Combined food preparation and serving workers, including fast food.....	2,503	36.6	19.0	998	47
35-3022	Counter attendants, cafeteria, food concession, and coffee shop.....	533	44.6	69.4	250	37
35-3031	Waiters and waitresses.....	2,361	29.8	54.3	742	128
35-3041	Food servers, nonrestaurant.....	189	26.1	15.3	53	3
35-9000	Other food preparation and serving related workers.....	1,341	36.0	48.7	509	65
35-9011	Dining room and cafeteria attendants and bartender helpers.....	416	33.9	41.9	149	17
35-9021	Dishwashers.....	517	35.9	40.8	195	21
35-9031	Hosts and hostesses, restaurant, lounge, and coffee shop.....	351	38.5	68.3	142	24
35-9099	Food preparation and serving related workers, all other ¹	56	37.1	48.8	22	3
37-0000	Building and grounds cleaning and maintenance occupations.....	5,745	18.8	17.1	1,160	98
37-1000	Supervisors, building and grounds cleaning and maintenance workers.....	484	8.2	11.4	42	6
37-1011	First-line supervisors/managers of housekeeping and janitorial workers.....	282	9.0	14.7	27	4
37-1012	First-line supervisors/managers of landscaping, lawn service, and groundskeeping workers.....	202	7.0	6.8	15	1
37-2000	Building cleaning and pest control workers.....	3,941	19.2	19.1	810	75
37-2010	Building cleaning workers.....	3,872	19.5	19.0	805	74
37-2011	Janitors and cleaners, except maids and housekeeping cleaners.....	2,387	19.5	19.1	498	46
37-2012	Maids and housekeeping cleaners.....	1,470	19.4	18.8	304	28
37-2019	Building cleaning workers, all other.....	16	19.5	19.1	3	(²)
37-2021	Pest control workers.....	70	6.6	24.2	5	2
37-3000	Grounds maintenance workers.....	1,319	21.4	13.2	308	17
37-3010	Grounds maintenance workers.....	1,319	21.4	13.2	308	17
37-3011	Landscaping and groundskeeping workers.....	1,220	21.4	13.2	285	16
37-3012	Pesticide handlers, sprayers, and applicators, vegetation.....	31	21.4	13.2	7	(²)
37-3013	Tree trimmers and pruners.....	41	21.4	13.2	9	1
37-3019	Grounds maintenance workers, all other.....	28	21.4	13.2	6	(²)
39-0000	Personal care and service occupations.....	4,966	21.3	23.6	1,174	117

See footnotes at end of table.

Table V-3. Total and net replacement rates and annual average projected replacement needs, 2006-16 — Continued
(Numbers in thousands)

2006 National Employment Matrix code and title	Total employment, 2006	Replacement rate (percent)		Annual average replacement needs, 2006-16	
		Total, 2005-06	Net, 2006-16	Total	Net
39-1000 Supervisors, personal care and service workers	268	13.8	21.0	40	6
39-1010 First-line supervisors/managers of gaming workers.....	54	10.1	18.7	6	1
39-1011 Gaming supervisors.....	34	10.1	18.7	4	1
39-1012 Slot key persons.....	20	10.1	18.7	2	(²)
39-1021 First-line supervisors/managers of personal service workers	215	14.8	21.6	34	5
39-2000 Animal care and service workers	200	17.7	16.4	39	3
39-2011 Animal trainers	43	12.0	17.2	6	1
39-2021 Nonfarm animal caretakers	157	19.3	16.1	33	3
39-3000 Entertainment attendants and related workers	546	29.0	46.9	176	26
39-3010 Gaming services workers.....	117	10.6	20.1	14	2
39-3011 Gaming dealers.....	84	10.6	20.1	10	2
39-3012 Gaming and sports book writers and runners	18	10.6	20.1	2	(²)
39-3019 Gaming service workers, all other.....	15	10.6	20.1	2	(²)
39-3021 Motion picture projectionists ¹	11	30.3	43.9	3	1
39-3031 Ushers, lobby attendants, and ticket takers ¹	103	30.3	70.2	34	7
39-3090 Miscellaneous entertainment attendants and related workers	315	35.4	49.4	125	16
39-3091 Amusement and recreation attendants	247	35.4	49.4	98	12
39-3092 Costume attendants	4	35.4	49.4	2	(²)
39-3093 Locker room, coatroom, and dressing room attendants.....	19	35.4	49.4	8	1
39-4000 Funeral service workers.....	42	15.8	23.7	7	1
39-4011 Embalmers	9	15.8	23.7	2	(²)
39-4021 Funeral attendants	33	15.8	23.7	6	1
39-5000 Personal appearance workers	825	10.0	12.1	88	10
39-5010 Barbers and cosmetologists.....	677	9.5	12.5	68	8
39-5011 Barbers.....	60	4.5	18.3	3	1
39-5012 Hairdressers, hairstylists, and cosmetologists	617	10.0	11.9	65	7
39-5090 Miscellaneous personal appearance workers	148	11.9	10.4	20	2
39-5091 Makeup artists, theatrical and performance	2	11.9	10.4	(²)	(²)
39-5092 Manicurists and pedicurists.....	78	11.9	10.4	11	1
39-5093 Shampooers.....	29	11.9	10.4	4	(²)
39-5094 Skin care specialists.....	38	11.9	10.4	5	(²)
39-6000 Transportation, tourism, and lodging attendants	232	17.6	20.4	43	5
39-6010 Baggage porters, bellhops, and concierges.....	69	21.8	12.8	16	1
39-6011 Baggage porters and bellhops	49	21.8	12.8	11	1
39-6012 Concierges	20	21.8	12.8	5	(²)
39-6020 Tour and travel guides.....	45	31.7	39.8	16	2
39-6021 Tour guides and escorts	40	31.7	39.8	14	2
39-6022 Travel guides.....	5	31.7	39.8	2	(²)
39-6030 Transportation attendants	118	9.6	17.4	12	2
39-6031 Flight attendants.....	97	9.6	17.4	10	2
39-6032 Transportation attendants, except flight attendants and baggage porters	21	9.6	17.4	2	(²)
39-9000 Other personal care and service workers	2,853	24.2	23.4	781	67
39-9011 Child care workers	1,388	29.6	28.7	447	40
39-9021 Personal and home care aides	767	22.5	16.9	216	13
39-9030 Recreation and fitness workers.....	555	16.9	18.7	102	10
39-9031 Fitness trainers and aerobics instructors	235	16.9	18.7	45	4
39-9032 Recreation workers	320	16.9	18.7	57	6
39-9041 Residential advisors	57	11.3	28.4	7	2
39-9099 Personal care and service workers, all other ¹	86	9.9	21.7	8	2
41-0000 Sales and related occupations.....	15,985	22.4	30.0	3,717	479
41-1000 Supervisors, sales workers	2,206	11.6	19.4	261	43
41-1011 First-line supervisors/managers of retail sales workers	1,676	12.5	21.0	214	35
41-1012 First-line supervisors/managers of non-retail sales workers.....	530	8.7	14.4	47	8
41-2000 Retail sales workers.....	8,719	29.7	37.4	2,674	326
41-2010 Cashiers	3,527	34.5	47.6	1,197	168

See footnotes at end of table.

Table V-3. Total and net replacement rates and annual average projected replacement needs, 2006-16 — Continued
(Numbers in thousands)

2006 National Employment Matrix code and title		Total employment, 2006	Replacement rate (percent)		Annual average replacement needs, 2006-16	
			Total, 2005-06	Net, 2006-16	Total	Net
41-2011	Cashiers, except gaming.....	3,500	34.5	47.6	1,187	166
41-2012	Gaming change persons and booth cashiers.....	27	34.5	47.6	10	1
41-2020	Counter and rental clerks and parts salespersons.....	715	21.6	29.2	165	21
41-2021	Counter and rental clerks.....	477	21.2	38.1	113	18
41-2022	Parts salespersons.....	238	22.3	11.2	52	3
41-2031	Retail salespersons.....	4,477	27.6	30.8	1,312	138
41-3000	Sales representatives, services.....	1,567	11.5	21.7	198	34
41-3011	Advertising sales agents.....	170	13.7	17.5	26	3
41-3021	Insurance sales agents.....	436	12.6	21.7	59	9
41-3031	Securities, commodities, and financial services sales agents.....	320	11.1	25.6	40	8
41-3041	Travel agents.....	101	12.8	7.0	13	1
41-3099	Sales representatives, services, all other.....	540	9.9	23.5	61	13
41-4000	Sales representatives, wholesale and manufacturing.....	1,973	8.8	22.1	182	44
41-4011	Sales representatives, wholesale and manufacturing, technical and scientific products.....	411	8.8	22.1	38	9
41-4012	Sales representatives, wholesale and manufacturing, except technical and scientific products.....	1,562	8.8	22.1	143	34
41-9000	Other sales and related workers.....	1,520	25.8	21.2	402	32
41-9010	Models, demonstrators, and product promoters.....	107	27.0	28.4	31	3
41-9011	Demonstrators and product promoters.....	105	27.0	28.4	31	3
41-9012	Models.....	2	27.0	28.4	1	(²)
41-9020	Real estate brokers and sales agents.....	564	12.4	16.0	74	9
41-9021	Real estate brokers.....	131	12.4	16.0	17	2
41-9022	Real estate sales agents.....	432	12.4	16.0	57	7
41-9031	Sales engineers ¹	76	8.5	25.2	7	2
41-9041	Telemarketers.....	395	56.2	35.2	211	14
41-9090	Miscellaneous sales and related workers.....	379	20.1	11.4	80	4
41-9091	Door-to-door sales workers, news and street vendors, and related workers.....	200	23.5	13.6	48	3
41-9099	Sales and related workers, all other.....	180	16.5	9.0	32	2
43-0000	Office and administrative support occupations.....	24,344	17.2	21.2	4,336	515
43-1000	Supervisors, office and administrative support workers.....	1,418	8.9	20.6	130	29
43-1011	First-line supervisors/managers of office and administrative support workers.....	1,418	8.9	20.6	130	29
43-2000	Communications equipment operators.....	209	23.2	19.8	45	4
43-2011	Switchboard operators, including answering service.....	177	23.7	20.9	40	4
43-2021	Telephone operators.....	27	19.5	12.5	4	(²)
43-2099	Communications equipment operators, all other ¹	4	23.2	19.0	1	(²)
43-3000	Financial clerks.....	4,007	14.5	20.1	616	81
43-3011	Bill and account collectors.....	434	22.5	15.1	109	7
43-3021	Billing and posting clerks and machine operators.....	542	14.4	12.8	80	7
43-3031	Bookkeeping, accounting, and auditing clerks.....	2,114	11.6	15.6	261	33
43-3041	Gaming cage workers ¹	18	21.3	26.7	4	(²)
43-3051	Payroll and timekeeping clerks.....	214	8.2	25.3	18	5
43-3061	Procurement clerks ¹	78	9.1	20.1	7	2
43-3071	Tellers.....	608	21.3	43.7	138	27
43-4000	Information and record clerks.....	5,738	20.9	25.3	1,269	145
43-4011	Brokerage clerks ¹	73	11.6	32.3	9	2
43-4021	Correspondence clerks ¹	17	22.3	25.7	4	(²)
43-4031	Court, municipal, and license clerks.....	115	12.7	22.8	15	3
43-4041	Credit authorizers, checkers, and clerks.....	69	13.3	30.8	9	2
43-4051	Customer service representatives.....	2,202	22.1	27.8	546	61
43-4061	Eligibility interviewers, government programs.....	112	9.6	17.4	11	2
43-4071	File clerks.....	234	27.0	26.5	50	6
43-4081	Hotel, motel, and resort desk clerks.....	219	30.2	40.5	72	9
43-4111	Interviewers, except eligibility and loan.....	221	22.4	26.3	52	6
43-4121	Library assistants, clerical.....	116	15.0	31.6	18	4
43-4131	Loan interviewers and clerks.....	256	15.8	17.3	40	4

See footnotes at end of table.

Table V-3. Total and net replacement rates and annual average projected replacement needs, 2006-16 — Continued
(Numbers in thousands)

2006 National Employment Matrix code and title		Total employment, 2006	Replacement rate (percent)		Annual average replacement needs, 2006-16	
			Total, 2005-06	Net, 2006-16	Total	Net
43-4141	New accounts clerks ¹	81	22.3	29.4	17	2
43-4151	Order clerks.....	271	19.6	20.9	47	6
43-4161	Human resources assistants, except payroll and timekeeping.....	168	9.4	7.4	17	1
43-4171	Receptionists and information clerks.....	1,173	24.6	24.5	314	29
43-4181	Reservation and transportation ticket agents and travel clerks.....	165	18.4	22.0	31	4
43-4199	Information and record clerks, all other.....	245	7.8	15.9	18	4
43-5000	Material recording, scheduling, dispatching, and distributing occupations.....	4,016	18.9	24.3	751	97
43-5011	Cargo and freight agents.....	86	9.2	27.2	9	2
43-5021	Couriers and messengers ¹	134	16.3	27.2	22	4
43-5030	Dispatchers.....	289	15.4	25.3	46	7
43-5031	Police, fire, and ambulance dispatchers.....	99	15.4	25.3	16	3
43-5032	Dispatchers, except police, fire, and ambulance.....	190	15.4	25.3	30	5
43-5041	Meter readers, utilities.....	47	16.6	31.7	7	1
43-5050	Postal service workers.....	615	4.4	22.4	27	14
43-5051	Postal service clerks.....	80	4.5	22.5	4	2
43-5052	Postal service mail carriers.....	338	4.8	29.3	16	10
43-5053	Postal service mail sorters, processors, and processing machine operators.....	198	3.6	10.7	7	2
43-5061	Production, planning, and expediting clerks.....	293	17.2	27.2	52	8
43-5071	Shipping, receiving, and traffic clerks.....	769	17.4	24.0	136	18
43-5081	Stock clerks and order fillers.....	1,705	26.8	23.7	439	40
43-5111	Weighers, measurers, checkers, and samplers, recordkeeping.....	79	18.3	26.2	14	2
43-6000	Secretaries and administrative assistants.....	4,241	12.2	15.9	538	68
43-6011	Executive secretaries and administrative assistants.....	1,618	12.2	15.9	211	26
43-6012	Legal secretaries.....	275	12.2	15.9	35	4
43-6013	Medical secretaries.....	408	12.2	15.9	54	7
43-6014	Secretaries, except legal, medical, and executive.....	1,940	12.2	15.9	237	31
43-9000	Other office and administrative support workers.....	4,715	20.3	19.3	987	91
43-9011	Computer operators.....	130	15.7	16.0	18	2
43-9020	Data entry and information processing workers.....	492	23.5	22.5	111	11
43-9021	Data entry keyers.....	313	25.9	24.6	79	8
43-9022	Word processors and typists.....	179	19.1	18.9	32	3
43-9031	Desktop publishers ¹	32	20.0	20.3	6	1
43-9041	Insurance claims and policy processing clerks.....	254	16.7	12.0	42	3
43-9051	Mail clerks and mail machine operators, except postal service.....	152	19.5	26.4	28	4
43-9061	Office clerks, general.....	3,200	21.3	18.3	725	59
43-9071	Office machine operators, except computer.....	94	8.9	33.0	8	3
43-9081	Proofreaders and copy markers ¹	18	20.0	20.0	4	(²)
43-9111	Statistical assistants ¹	23	20.0	43.7	5	1
43-9199	Office and administrative support workers, all other.....	320	12.8	22.2	39	7
45-0000	Farming, fishing, and forestry occupations.....	1,039	22.5	23.8	231	25
45-1000	Supervisors, farming, fishing, and forestry workers.....	53	22.4	18.5	12	1
45-2000	Agricultural workers.....	858	24.2	24.5	205	21
45-2011	Agricultural inspectors ¹	16	23.0	25.0	4	(²)
45-2021	Animal breeders ¹	11	23.0	24.0	2	(²)
45-2041	Graders and sorters, agricultural products.....	42	20.6	14.2	9	1
45-2090	Miscellaneous agricultural workers.....	790	24.4	25.0	190	20
45-2091	Agricultural equipment operators.....	59	24.4	25.0	14	1
45-2092	Farmworkers and laborers, crop, nursery, and greenhouse.....	603	24.4	25.0	145	15
45-2093	Farmworkers, farm and ranch animals.....	107	24.4	25.0	26	3
45-2099	Agricultural workers, all other.....	20	24.4	25.0	5	1
45-3000	Fishing and hunting workers.....	39	20.8	14.0	7	1
45-3011	Fishers and related fishing workers.....	38	20.8	14.0	7	1
45-3021	Hunters and trappers ¹	0	20.9	15.1	(²)	(²)
45-4000	Forest, conservation, and logging workers.....	88	7.3	24.3	6	2
45-4011	Forest and conservation workers.....	20	8.6	38.2	2	1
45-4020	Logging workers.....	69	6.8	20.2	5	1

See footnotes at end of table.

Table V-3. Total and net replacement rates and annual average projected replacement needs, 2006-16 — Continued
(Numbers in thousands)

2006 National Employment Matrix code and title		Total employment, 2006	Replacement rate (percent)		Annual average replacement needs, 2006-16	
			Total, 2005-06	Net, 2006-16	Total	Net
45-4021	Fallers	13	6.8	20.2	1	(²)
45-4022	Logging equipment operators	40	6.8	20.2	3	1
45-4023	Log graders and scalers.....	7	6.8	20.2	(²)	(²)
45-4029	Logging workers, all other.....	8	6.8	20.2	1	(²)
47-0000	Construction and extraction occupations	8,295	14.5	17.5	1,261	145
47-1000	Supervisors, construction and extraction workers.....	772	9.4	14.0	76	11
47-1011	First-line supervisors/managers of construction trades and extraction workers	772	9.4	14.0	76	11
47-2000	Construction trades and related workers	6,422	14.3	17.0	960	109
47-2011	Boilermakers	18	11.1	36.2	2	1
47-2020	Brickmasons, blockmasons, and stonemasons	182	9.7	20.9	18	4
47-2021	Brickmasons and blockmasons.....	158	9.7	20.9	16	3
47-2022	Stonemasons	24	9.7	20.9	2	(²)
47-2031	Carpenters	1,462	13.5	13.5	208	20
47-2040	Carpet, floor, and tile installers and finishers	196	9.2	14.5	18	3
47-2041	Carpet installers	73	9.2	14.5	7	1
47-2042	Floor layers, except carpet, wood, and hard tiles.....	29	9.2	14.5	3	(²)
47-2043	Floor sanders and finishers.....	14	9.2	14.5	1	(²)
47-2044	Tile and marble setters.....	79	9.2	14.5	8	1
47-2050	Cement masons, concrete finishers, and terrazzo workers	228	13.7	29.0	33	7
47-2051	Cement masons and concrete finishers.....	222	13.7	29.0	32	6
47-2053	Terrazzo workers and finishers	7	13.7	29.0	1	(²)
47-2061	Construction laborers	1,232	18.8	7.5	244	9
47-2070	Construction equipment operators	494	10.8	19.5	55	10
47-2071	Paving, surfacing, and tamping equipment operators.....	64	4.3	20.0	3	1
47-2072	Pile-driver operators ¹	6	11.3	19.4	1	(²)
47-2073	Operating engineers and other construction equipment operators	424	11.7	19.4	52	8
47-2080	Drywall installers, ceiling tile installers, and tapers	240	15.4	13.8	38	3
47-2081	Drywall and ceiling tile installers	186	15.4	13.8	30	3
47-2082	Tapers	54	15.4	13.8	9	1
47-2111	Electricians.....	705	10.1	25.7	74	18
47-2121	Glaziers ¹	55	9.9	16.8	6	1
47-2130	Insulation workers	61	18.7	22.8	12	1
47-2131	Insulation workers, floor, ceiling, and wall.....	32	18.7	22.8	6	1
47-2132	Insulation workers, mechanical.....	28	18.7	22.8	6	1
47-2140	Painters and paperhangers.....	473	19.5	17.8	98	8
47-2141	Painters, construction and maintenance	463	19.5	17.8	96	8
47-2142	Paperhangers ¹	10	19.7	17.5	2	(²)
47-2150	Pipelayers, plumbers, pipefitters, and steamfitters	569	12.0	20.6	72	12
47-2151	Pipelayers	67	12.0	20.6	8	1
47-2152	Plumbers, pipefitters, and steamfitters.....	502	12.0	20.6	63	10
47-2161	Plasterers and stucco masons	61	6.3	23.3	4	1
47-2171	Reinforcing iron and rebar workers ¹	30	13.0	25.1	4	1
47-2181	Roofers.....	156	21.6	22.9	36	4
47-2211	Sheet metal workers	189	15.6	24.3	30	5
47-2221	Structural iron and steel workers.....	72	8.8	32.5	7	2
47-3000	Helpers, construction trades	448	31.6	25.3	148	11
47-3010	Helpers, construction trades	448	31.6	25.3	148	11
47-3011	Helpers—Brickmasons, blockmasons, stonemasons, and tile and marble setters..	65	31.6	25.3	22	2
47-3012	Helpers—Carpenters	109	31.6	25.3	36	3
47-3013	Helpers—Electricians.....	105	31.6	25.3	34	3
47-3014	Helpers—Painters, paperhangers, plasterers, and stucco masons	24	31.6	25.3	8	1
47-3015	Helpers—Pipelayers, plumbers, pipefitters, and steamfitters	85	31.6	25.3	28	2
47-3016	Helpers—Roofers.....	22	31.6	25.3	7	1
47-3019	Helpers, construction trades, all other.....	38	31.6	25.3	13	1
47-4000	Other construction and related workers	451	11.5	20.5	55	9

See footnotes at end of table.

Table V-3. Total and net replacement rates and annual average projected replacement needs, 2006-16 — Continued
(Numbers in thousands)

2006 National Employment Matrix code and title		Total employment, 2006	Replacement rate (percent)		Annual average replacement needs, 2006-16	
			Total, 2005-06	Net, 2006-16	Total	Net
47-4011	Construction and building inspectors	110	8.9	18.5	11	2
47-4021	Elevator installers and repairers ¹	22	11.7	26.5	3	1
47-4031	Fence erectors ¹	32	7.2	20.1	2	1
47-4041	Hazardous materials removal workers	39	3.6	21.5	1	1
47-4051	Highway maintenance workers	145	15.5	18.2	23	3
47-4061	Rail-track laying and maintenance equipment operators ¹	15	11.7	24.5	2	(²)
47-4071	Septic tank servicers and sewer pipe cleaners ¹	24	11.7	20.1	3	(²)
47-4090	Miscellaneous construction and related workers	63	14.2	26.1	9	2
47-4091	Segmental pavers	1	14.2	26.1	(²)	(²)
47-4099	Construction and related workers, all other	62	14.2	26.1	9	2
47-5000	Extraction workers	202	11.0	24.1	22	5
47-5010	Derrick, rotary drill, and service unit operators, oil, gas, and mining	67	11.1	10.1	7	1
47-5011	Derrick operators, oil and gas ¹	19	11.1	10.1	2	(²)
47-5012	Rotary drill operators, oil and gas ¹	20	11.1	10.1	2	(²)
47-5013	Service unit operators, oil, gas, and mining ¹	28	11.1	10.1	3	(²)
47-5021	Earth drillers, except oil and gas	22	11.1	32.5	2	1
47-5031	Explosives workers, ordnance handling experts, and blasters ¹	5	11.1	29.6	1	(²)
47-5040	Mining machine operators	21	11.1	38.2	2	1
47-5041	Continuous mining machine operators	10	11.1	38.2	1	(²)
47-5042	Mine cutting and channeling machine operators	8	11.1	38.2	1	(²)
47-5049	Mining machine operators, all other	3	11.1	38.2	(²)	(²)
47-5051	Rock splitters, quarry	4	9.8	25.2	(²)	(²)
47-5061	Roof bolters, mining ¹	4	11.1	29.6	(²)	(²)
47-5071	Roustabouts, oil and gas ¹	44	11.1	29.6	5	1
47-5081	Helpers—Extraction workers ¹	25	11.1	29.6	3	1
47-5099	Extraction workers, all other	10	9.8	25.2	1	(²)
49-0000	Installation, maintenance, and repair occupations	5,883	9.8	16.1	601	95
49-1000	Supervisors of installation, maintenance, and repair workers	465	4.3	23.5	21	11
49-1011	First-line supervisors/managers of mechanics, installers, and repairers	465	4.3	23.5	21	11
49-2000	Electrical and electronic equipment mechanics, installers, and repairers	661	8.5	21.0	57	14
49-2011	Computer, automated teller, and office machine repairers	175	12.3	11.6	22	2
49-2020	Radio and telecommunications equipment installers and repairers	205	6.5	24.6	13	5
49-2021	Radio mechanics	7	6.5	24.6	(²)	(²)
49-2022	Telecommunications equipment installers and repairers, except line installers	198	6.5	24.6	13	5
49-2090	Miscellaneous electrical and electronic equipment mechanics, installers, and repairers	281	7.5	24.2	22	7
49-2091	Avionics technicians ¹	16	6.5	10.2	1	(²)
49-2092	Electric motor, power tool, and related repairers	25	10.5	37.6	3	1
49-2093	Electrical and electronics installers and repairers, transportation equipment ¹	21	7.3	21.5	2	(²)
49-2094	Electrical and electronics repairers, commercial and industrial equipment ¹	80	7.3	33.9	6	3
49-2095	Electrical and electronics repairers, powerhouse, substation, and relay ¹	22	7.3	33.9	2	1
49-2096	Electronic equipment installers and repairers, motor vehicles ¹	20	7.3	32.1	1	1
49-2097	Electronic home entertainment equipment installers and repairers ¹	40	7.3	9.3	3	(²)
49-2098	Security and fire alarm systems installers ¹	57	7.3	13.2	5	1
49-3000	Vehicle and mobile equipment mechanics, installers, and repairers	1,771	10.7	20.2	201	36
49-3011	Aircraft mechanics and service technicians	122	6.5	10.2	8	1
49-3020	Automotive technicians and repairers	979	11.9	21.1	125	21
49-3021	Automotive body and related repairers	183	18.3	23.7	35	4
49-3022	Automotive glass installers and repairers ¹	24	11.7	36.4	3	1
49-3023	Automotive service technicians and mechanics	773	10.4	20.1	86	15
49-3031	Bus and truck mechanics and diesel engine specialists	275	7.7	21.8	22	6
49-3040	Heavy vehicle and mobile equipment service technicians and mechanics	188	6.8	19.6	13	4
49-3041	Farm equipment mechanics	31	6.8	19.6	2	1

See footnotes at end of table.

Table V-3. Total and net replacement rates and annual average projected replacement needs, 2006-16 — Continued
(Numbers in thousands)

2006 National Employment Matrix code and title	Total employment, 2006	Replacement rate (percent)		Annual average replacement needs, 2006-16	
		Total, 2005-06	Net, 2006-16	Total	Net
49-3042 Mobile heavy equipment mechanics, except engines.....	131	6.8	19.6	9	3
49-3043 Rail car repairers.....	27	6.8	19.6	2	1
49-3050 Small engine mechanics.....	78	14.6	20.0	12	2
49-3051 Motorboat mechanics.....	24	14.6	20.0	4	(²)
49-3052 Motorcycle mechanics.....	21	14.6	20.0	3	(²)
49-3053 Outdoor power equipment and other small engine mechanics.....	33	14.6	20.0	5	1
49-3090 Miscellaneous vehicle and mobile equipment mechanics, installers, and repairers ..	128	14.3	19.9	20	3
49-3091 Bicycle repairers.....	9	14.3	19.9	1	(²)
49-3092 Recreational vehicle service technicians.....	14	14.3	19.9	2	(²)
49-3093 Tire repairers and changers.....	106	14.3	19.9	17	2
49-9000 Other installation, maintenance, and repair occupations.....	2,987	10.3	11.4	322	34
49-9010 Control and valve installers and repairers.....	58	8.9	17.5	5	1
49-9011 Mechanical door repairers ¹	15	8.9	17.5	1	(²)
49-9012 Control and valve installers and repairers, except mechanical door ¹	43	8.9	17.5	4	1
49-9021 Heating, air conditioning, and refrigeration mechanics and installers.....	292	8.9	17.5	27	5
49-9031 Home appliance repairers.....	57	7.2	22.6	4	1
49-9040 Industrial machinery installation, repair, and maintenance workers.....	1,794	10.2	5.5	192	10
49-9041 Industrial machinery mechanics.....	261	7.7	16.7	21	4
49-9042 Maintenance and repair workers, general.....	1,391	10.4	2.5	152	3
49-9043 Maintenance workers, machinery.....	84	18.0	16.0	15	1
49-9044 Millwrights.....	55	7.9	12.5	4	1
49-9045 Refractory materials repairers, except brickmasons.....	3	7.7	16.7	(²)	(²)
49-9050 Line installers and repairers.....	275	6.9	28.3	20	8
49-9051 Electrical power-line installers and repairers.....	112	4.8	31.5	6	4
49-9052 Telecommunications line installers and repairers.....	162	8.4	26.0	14	4
49-9060 Precision instrument and equipment repairers.....	68	3.7	28.0	3	2
49-9061 Camera and photographic equipment repairers ¹	4	3.7	28.0	(²)	(²)
49-9062 Medical equipment repairers ¹	38	3.7	28.0	2	1
49-9063 Musical instrument repairers and tuners ¹	6	3.7	28.0	(²)	(²)
49-9064 Watch repairers ¹	4	3.7	28.0	(²)	(²)
49-9069 Precision instrument and equipment repairers, all other ¹	16	3.7	28.0	1	(²)
49-9090 Miscellaneous installation, maintenance, and repair workers.....	442	15.4	16.1	71	7
49-9091 Coin, vending, and amusement machine servicers and repairers.....	48	10.3	27.7	5	1
49-9092 Commercial divers ¹	3	5.6	6.4	(²)	(²)
49-9093 Fabric menders, except garment.....	2	5.6	6.4	(²)	(²)
49-9094 Locksmiths and safe repairers ¹	26	10.3	19.4	3	1
49-9095 Manufactured building and mobile home installers.....	12	12.4	18.9	1	(²)
49-9096 Riggers ¹	12	5.6	6.4	1	(²)
49-9097 Signal and track switch repairers ¹	7	5.6	6.4	(²)	(²)
49-9098 Helpers--Installation, maintenance, and repair workers.....	163	29.0	23.5	50	4
49-9099 Installation, maintenance, and repair workers, all other.....	168	5.6	6.4	10	1
51-0000 Production occupations.....	10,675	13.6	20.2	1,416	216
51-1000 Supervisors, production workers.....	699	6.8	16.7	46	12
51-1011 First-line supervisors/managers of production and operating workers.....	699	6.8	16.7	46	12
51-2000 Assemblers and fabricators.....	2,075	19.9	20.1	403	42
51-2011 Aircraft structure, surfaces, rigging, and systems assemblers ¹	28	20.7	20.8	6	1
51-2020 Electrical, electronics, and electromechanical assemblers.....	297	14.4	17.0	38	5
51-2021 Coil winders, tapers, and finishers.....	23	14.4	17.0	3	(²)
51-2022 Electrical and electronic equipment assemblers.....	213	14.4	17.0	27	4
51-2023 Electromechanical equipment assemblers.....	60	14.4	17.0	8	1
51-2031 Engine and other machine assemblers ¹	45	20.2	23.9	9	1
51-2041 Structural metal fabricators and fitters ¹	103	20.2	17.3	21	2
51-2090 Miscellaneous assemblers and fabricators.....	1,602	20.7	20.8	329	33
51-2091 Fiberglass laminators and fabricators.....	33	20.7	20.8	7	1

See footnotes at end of table.

Table V-3. Total and net replacement rates and annual average projected replacement needs, 2006-16 — Continued
(Numbers in thousands)

2006 National Employment Matrix code and title		Total employment, 2006	Replacement rate (percent)		Annual average replacement needs, 2006-16	
			Total, 2005-06	Net, 2006-16	Total	Net
51-2092	Team assemblers	1,274	20.7	20.8	264	26
51-2093	Timing device assemblers, adjusters, and calibrators.....	3	20.7	20.8	1	(²)
51-2099	Assemblers and fabricators, all other	292	20.7	20.8	58	6
51-3000	Food processing occupations	705	13.6	29.2	100	21
51-3011	Bakers	149	19.1	21.1	30	3
51-3020	Butchers and other meat, poultry, and fish processing workers.....	398	10.7	31.7	45	13
51-3021	Butchers and meat cutters	131	10.7	31.7	14	4
51-3022	Meat, poultry, and fish cutters and trimmers	144	10.7	31.7	16	5
51-3023	Slaughterers and meat packers	122	10.7	31.7	14	4
51-3090	Miscellaneous food processing workers	158	15.5	30.6	25	5
51-3091	Food and tobacco roasting, baking, and drying machine operators and tenders	19	20.0	37.2	4	1
51-3092	Food batchmakers	95	14.7	25.5	15	2
51-3093	Food cooking machine operators and tenders ¹	44	15.5	38.8	7	2
51-4000	Metal workers and plastic workers	2,258	13.3	19.2	288	43
51-4010	Computer control programmers and operators	158	9.4	11.9	15	2
51-4011	Computer-controlled machine tool operators, metal and plastic ¹	141	9.4	11.9	13	2
51-4012	Numerical tool and process control programmers ¹	18	9.4	11.9	2	(²)
51-4020	Forming machine setters, operators, and tenders, metal and plastic	161	9.1	26.6	14	4
51-4021	Extruding and drawing machine setters, operators, and tenders, metal and plastic ¹	94	9.1	27.2	8	3
51-4022	Forging machine setters, operators, and tenders, metal and plastic ¹	31	9.1	31.6	2	1
51-4023	Rolling machine setters, operators, and tenders, metal and plastic ¹	36	9.1	20.7	3	1
51-4030	Machine tool cutting setters, operators, and tenders, metal and plastic	513	15.0	19.4	70	10
51-4031	Cutting, punching, and press machine setters, operators, and tenders, metal and plastic	272	12.2	24.0	31	7
51-4032	Drilling and boring machine tool setters, operators, and tenders, metal and plastic ¹	43	16.2	20.1	6	1
51-4033	Grinding, lapping, polishing, and buffing machine tool setters, operators, and tenders, metal and plastic	101	19.3	9.8	18	1
51-4034	Lathe and turning machine tool setters, operators, and tenders, metal and plastic	68	17.5	19.5	10	1
51-4035	Milling and planing machine setters, operators, and tenders, metal and plastic ¹	29	19.3	9.8	5	(²)
51-4041	Machinists	397	10.1	15.5	40	6
51-4050	Metal furnace and kiln operators and tenders.....	33	33.0	15.5	10	1
51-4051	Metal-refining furnace operators and tenders	18	33.0	15.5	5	(²)
51-4052	Pourers and casters, metal	15	33.0	15.5	4	(²)
51-4060	Model makers and patternmakers, metal and plastic.....	16	21.2	23.5	3	(²)
51-4061	Model makers, metal and plastic ¹	9	21.2	23.5	2	(²)
51-4062	Patternmakers, metal and plastic ¹	7	21.2	23.5	2	(²)
51-4070	Molders and molding machine setters, operators, and tenders, metal and plastic	171	21.2	23.5	34	4
51-4071	Foundry mold and coremakers	15	21.2	23.5	3	(²)
51-4072	Molding, coremaking, and casting machine setters, operators, and tenders, metal and plastic	157	21.2	23.5	31	4
51-4081	Multiple machine tool setters, operators, and tenders, metal and plastic ¹	97	16.2	20.1	16	2
51-4111	Tool and die makers	101	5.5	13.3	5	1
51-4120	Welding, soldering, and brazing workers	462	14.1	21.2	67	10
51-4121	Welders, cutters, solderers, and brazers	409	14.1	21.2	59	9
51-4122	Welding, soldering, and brazing machine setters, operators, and tenders	53	14.1	21.2	8	1
51-4190	Miscellaneous metalworkers and plastic workers	150	11.3	20.2	15	3
51-4191	Heat treating equipment setters, operators, and tenders, metal and plastic ¹	27	11.8	17.1	3	(²)
51-4192	Lay-out workers, metal and plastic ¹	10	11.8	17.1	1	(²)
51-4193	Plating and coating machine setters, operators, and tenders, metal and plastic.....	42	10.3	29.7	4	1
51-4194	Tool grinders, filers, and sharpeners ¹	22	11.8	17.1	2	(²)
51-4199	Metal workers and plastic workers, all other	49	11.6	15.9	5	1
51-5000	Printing occupations.....	389	8.9	17.9	33	7
51-5010	Bookbinders and bindery workers.....	72	13.0	14.2	8	1

See footnotes at end of table.

Table V-3. Total and net replacement rates and annual average projected replacement needs, 2006-16 — Continued
(Numbers in thousands)

2006 National Employment Matrix code and title		Total employment, 2006	Replacement rate (percent)		Annual average replacement needs, 2006-16	
			Total, 2005-06	Net, 2006-16	Total	Net
51-5011	Bindery workers	65	13.0	14.2	8	1
51-5012	Bookbinders	7	13.0	14.2	1	(²)
51-5020	Printers	317	8.0	18.8	24	6
51-5021	Job printers	48	4.1	9.6	2	(²)
51-5022	Prepress technicians and workers	71	15.8	15.7	10	1
51-5023	Printing machine operators	198	6.4	22.1	12	4
51-6000	Textile, apparel, and furnishings occupations	873	13.9	16.6	115	14
51-6011	Laundry and dry-cleaning workers	239	14.5	22.4	36	5
51-6021	Pressers, textile, garment, and related materials	77	13.5	7.3	10	1
51-6031	Sewing machine operators	233	17.8	9.6	36	2
51-6040	Shoe and leather workers	20	15.1	18.4	3	(²)
51-6041	Shoe and leather workers and repairers ¹	16	14.5	20.7	2	(²)
51-6042	Shoe machine operators and tenders ¹	4	17.8	9.6	1	(²)
51-6050	Tailors, dressmakers, and sewers	77	15.7	16.8	12	1
51-6051	Sewers, hand	23	15.7	16.8	3	(²)
51-6052	Tailors, dressmakers, and custom sewers	54	15.7	16.8	9	1
51-6060	Textile machine setters, operators, and tenders	122	9.6	22.0	10	3
51-6061	Textile bleaching and dyeing machine operators and tenders ¹	19	10.5	14.2	2	(²)
51-6062	Textile cutting machine setters, operators, and tenders ¹	19	10.5	33.4	2	1
51-6063	Textile knitting and weaving machine setters, operators, and tenders	40	6.8	28.8	2	1
51-6064	Textile winding, twisting, and drawing out machine setters, operators, and tenders	43	11.3	14.2	4	1
51-6090	Miscellaneous textile, apparel, and furnishings workers	106	7.4	18.8	7	2
51-6091	Extruding and forming machine setters, operators, and tenders, synthetic and glass fibers ¹	18	6.9	20.1	1	(²)
51-6092	Fabric and apparel patternmakers ¹	9	6.9	20.1	1	(²)
51-6093	Upholsterers	55	5.5	15.6	3	1
51-6099	Textile, apparel, and furnishings workers, all other	24	12.1	24.8	3	1
51-7000	Woodworkers	370	10.4	25.2	39	9
51-7011	Cabinetmakers and bench carpenters	149	6.2	29.7	9	4
51-7021	Furniture finishers	31	32.9	18.0	10	1
51-7030	Model makers and patternmakers, wood	4	9.9	21.5	(²)	(²)
51-7031	Model makers, wood ¹	2	9.9	21.5	(²)	(²)
51-7032	Patternmakers, wood ¹	2	9.9	21.5	(²)	(²)
51-7040	Woodworking machine setters, operators, and tenders	165	10.1	22.9	17	4
51-7041	Sawing machine setters, operators, and tenders, wood	65	8.8	19.9	6	1
51-7042	Woodworking machine setters, operators, and tenders, except sawing	100	10.9	24.9	11	2
51-7099	Woodworkers, all other	20	9.9	21.5	2	(²)
51-8000	Plant and system operators	325	7.7	23.7	25	8
51-8010	Power plant operators, distributors, and dispatchers	47	4.8	34.5	2	2
51-8011	Nuclear power reactor operators	4	4.8	34.5	(²)	(²)
51-8012	Power distributors and dispatchers	9	4.8	34.5	(²)	(²)
51-8013	Power plant operators	35	4.8	34.5	2	1
51-8021	Stationary engineers and boiler operators	45	3.8	16.9	2	1
51-8031	Water and liquid waste treatment plant and system operators	111	6.8	17.5	8	2
51-8090	Miscellaneous plant and system operators	122	11.4	27.7	13	3
51-8091	Chemical plant and system operators	53	11.4	27.7	6	1
51-8092	Gas plant operators	12	11.4	27.7	1	(²)
51-8093	Petroleum pump system operators, refinery operators, and gaugers	42	11.4	27.7	4	1
51-8099	Plant and system operators, all other	14	11.4	27.7	2	(²)
51-9000	Other production occupations	2,981	12.7	20.2	368	60
51-9010	Chemical processing machine setters, operators, and tenders	97	2.8	22.8	3	2
51-9011	Chemical equipment operators and tenders	53	2.8	22.8	1	1
51-9012	Separating, filtering, clarifying, precipitating, and still machine setters, operators, and tenders	44	2.8	22.8	1	1

See footnotes at end of table.

Table V-3. Total and net replacement rates and annual average projected replacement needs, 2006-16 — Continued
(Numbers in thousands)

2006 National Employment Matrix code and title	Total employment, 2006	Replacement rate (percent)		Annual average replacement needs, 2006-16	
		Total, 2005-06	Net, 2006-16	Total	Net
51-9020 Crushing, grinding, polishing, mixing, and blending workers	230	13.4	16.3	30	4
51-9021 Crushing, grinding, and polishing machine setters, operators, and tenders	42	13.4	16.3	5	1
51-9022 Grinding and polishing workers, hand	45	13.4	16.3	6	1
51-9023 Mixing and blending machine setters, operators, and tenders.....	143	13.4	16.3	19	2
51-9030 Cutting workers	107	5.3	15.2	5	2
51-9031 Cutters and trimmers, hand.....	29	5.3	15.2	1	(²)
51-9032 Cutting and slicing machine setters, operators, and tenders	79	5.3	15.2	4	1
51-9041 Extruding, forming, pressing, and compacting machine setters, operators, and tenders	81	9.7	18.4	8	1
51-9051 Furnace, kiln, oven, drier, and kettle operators and tenders.....	32	5.9	27.5	2	1
51-9061 Inspectors, testers, sorters, samplers, and weighers.....	491	15.9	14.8	75	7
51-9071 Jewelers and precious stone and metal workers	52	14.3	17.2	7	1
51-9080 Medical, dental, and ophthalmic laboratory technicians.....	95	6.0	18.8	6	2
51-9081 Dental laboratory technicians.....	53	6.0	18.8	3	1
51-9082 Medical appliance technicians	12	6.0	18.8	1	(²)
51-9083 Ophthalmic laboratory technicians.....	29	6.0	18.8	2	1
51-9111 Packaging and filling machine operators and tenders	386	21.2	18.6	80	7
51-9120 Painting workers.....	192	5.0	19.6	9	4
51-9121 Coating, painting, and spraying machine setters, operators, and tenders.....	106	5.0	19.6	5	2
51-9122 Painters, transportation equipment	54	5.0	19.6	3	1
51-9123 Painting, coating, and decorating workers	31	5.0	19.6	2	1
51-9130 Photographic process workers and processing machine operators.....	73	13.8	34.7	8	3
51-9131 Photographic process workers.....	24	13.8	34.7	3	1
51-9132 Photographic processing machine operators.....	49	13.8	34.7	5	2
51-9141 Semiconductor processors ¹	42	14.4	17.0	6	1
51-9190 Miscellaneous production workers	1,102	11.9	23.6	130	26
51-9191 Cementing and gluing machine operators and tenders ¹	23	17.0	26.3	4	1
51-9192 Cleaning, washing, and metal pickling equipment operators and tenders ¹	16	17.0	28.7	3	(²)
51-9193 Cooling and freezing equipment operators and tenders ¹	11	17.0	22.2	2	(²)
51-9194 Etchers and engravers ¹	14	15.8	18.5	2	(²)
51-9195 Molders, shapers, and casters, except metal and plastic ¹	56	10.2	22.2	6	1
51-9196 Paper goods machine setters, operators, and tenders	113	7.7	24.2	8	3
51-9197 Tire builders ¹	23	17.0	36.9	4	1
51-9198 Helpers--Production workers.....	542	9.0	24.6	49	13
51-9199 Production workers, all other.....	305	17.4	20.7	54	6
53-0000 Transportation and material moving occupations.....	10,233	17.8	22.6	1,864	231
53-1000 Supervisors, transportation and material moving workers	414	6.0	20.4	26	8
53-1011 Aircraft cargo handling supervisors.....	6	6.0	20.4	(²)	(²)
53-1021 First-line supervisors/managers of helpers, laborers, and material movers, hand....	182	6.0	20.4	12	4
53-1031 First-line supervisors/managers of transportation and material-moving machine and vehicle operators	226	6.0	20.4	14	5
53-2000 Air transportation occupations.....	137	3.6	28.8	5	4
53-2010 Aircraft pilots and flight engineers	107	3.6	29.2	4	3
53-2011 Airline pilots, copilots, and flight engineers	79	3.6	29.2	3	2
53-2012 Commercial pilots.....	28	3.6	29.2	1	1
53-2020 Air traffic controllers and airfield operations specialists.....	30	3.6	27.3	1	1
53-2021 Air traffic controllers ¹	25	3.6	27.3	1	1
53-2022 Airfield operations specialists ¹	5	3.6	27.3	(²)	(²)
53-3000 Motor vehicle operators.....	4,335	13.2	16.7	597	73
53-3011 Ambulance drivers and attendants, except emergency medical technicians ¹	22	13.6	12.9	3	(²)
53-3020 Bus drivers	653	11.7	13.1	80	9
53-3021 Bus drivers, transit and intercity	198	11.7	13.1	25	3
53-3022 Bus drivers, school.....	455	11.7	13.1	56	6
53-3030 Driver/sales workers and truck drivers	3,356	13.3	17.7	463	60
53-3031 Driver/sales workers.....	445	13.3	17.7	58	8

See footnotes at end of table.

Table V-3. Total and net replacement rates and annual average projected replacement needs, 2006-16 — Continued
(Numbers in thousands)

2006 National Employment Matrix code and title	Total employment, 2006	Replacement rate (percent)		Annual average replacement needs, 2006-16	
		Total, 2005-06	Net, 2006-16	Total	Net
53-3032 Truck drivers, heavy and tractor-trailer.....	1,860	13.3	17.7	260	33
53-3033 Truck drivers, light or delivery services.....	1,051	13.3	17.7	145	19
53-3041 Taxi drivers and chauffeurs.....	229	13.6	12.9	33	3
53-3099 Motor vehicle operators, all other.....	76	22.8	15.8	18	1
53-4000 Rail transportation occupations.....	125	6.8	34.6	9	4
53-4010 Locomotive engineers and operators.....	47	6.8	30.7	3	1
53-4021 Railroad brake, signal, and switch operators ¹	25	6.8	34.7	2	1
53-4031 Railroad conductors and yardmasters ¹	40	6.8	38.9	3	2
53-4041 Subway and streetcar operators ¹	7	6.8	34.7	1	(²)
53-4099 Rail transportation workers, all other ¹	7	6.8	34.7	(²)	(²)
53-5000 Water transportation occupations.....	84	12.3	29.9	11	3
53-5011 Sailors and marine oilers ¹	33	22.7	35.4	8	1
53-5020 Ship and boat captains and operators.....	37	5.6	26.3	2	1
53-5021 Captains, mates, and pilots of water vessels.....	34	5.6	26.3	2	1
53-5022 Motorboat operators.....	3	5.6	26.3	(²)	(²)
53-5031 Ship engineers ¹	15	5.6	26.3	1	(²)
53-6000 Other transportation workers.....	312	21.8	32.0	72	10
53-6011 Bridge and lock tenders ¹	4	4.0	18.2	(²)	(²)
53-6021 Parking lot attendants.....	135	29.3	27.3	42	4
53-6031 Service station attendants.....	96	25.6	45.9	26	4
53-6041 Traffic technicians.....	7	4.0	18.2	(²)	(²)
53-6051 Transportation inspectors.....	26	5.9	33.6	2	1
53-6099 Transportation workers, all other.....	44	4.0	18.2	2	1
53-7000 Material moving occupations.....	4,825	23.7	26.9	1,143	130
53-7011 Conveyor operators and tenders ¹	50	13.4	17.3	6	1
53-7021 Crane and tower operators.....	46	5.3	17.9	2	1
53-7030 Dredge, excavating, and loading machine operators.....	85	7.1	15.9	6	1
53-7031 Dredge operators.....	2	7.1	15.9	(²)	(²)
53-7032 Excavating and loading machine and dragline operators.....	80	7.1	15.9	6	1
53-7033 Loading machine operators, underground mining.....	3	7.1	15.9	(²)	(²)
53-7041 Hoist and winch operators ¹	3	11.7	17.3	(²)	(²)
53-7051 Industrial truck and tractor operators.....	637	14.2	25.2	90	16
53-7060 Laborers and material movers, hand.....	3,766	26.3	27.7	987	104
53-7061 Cleaners of vehicles and equipment.....	368	32.3	38.2	127	14
53-7062 Laborers and freight, stock, and material movers, hand.....	2,416	25.6	32.0	626	77
53-7063 Machine feeders and offbearers.....	148	17.5	17.9	24	3
53-7064 Packers and packagers, hand.....	834	26.9	12.2	211	10
53-7070 Pumping station operators.....	29	18.6	39.6	5	1
53-7071 Gas compressor and gas pumping station operators.....	4	18.6	39.6	1	(²)
53-7072 Pump operators, except wellhead pumps.....	11	18.6	39.6	2	(²)
53-7073 Wellhead pumps.....	14	18.6	39.6	3	1
53-7081 Refuse and recyclable material collectors.....	136	26.1	27.1	37	4
53-7111 Shuttle car operators ¹	3	13.3	38.2	(²)	(²)
53-7121 Tank car, truck, and ship loaders ¹	16	25.6	17.7	4	(²)
53-7199 Material moving workers, all other.....	54	7.8	18.1	4	1

¹ One or more Current Population Survey (CPS) proxy occupations may be used to estimate CPS-based data.

² Less than 500.