

Table III-1. Occupational employment and job openings data, 2002-12, and worker characteristics, 2002

(Numbers in thousands)

2002 national employment matrix occupation		Employment		Employment change, 2002-12				Percent self-employed, 2002	Annual average job openings due to growth and total replacement needs, 2002-12	
		2002	2012	Numeric		Percent			Number	Rank
				Number	Rank	Number	Rank			
00-0000	Total, all occupations	144,014	165,319	21,305	-	14.8	-	8.0	26,812	-
11-1300	Management, business, and financial occupations	15,501	17,883	2,382	-	15.4	-	19.1	2,095	-
11-0000	Management occupations	10,056	11,277	1,221	-	12.1	-	25.0	1,288	-
11-1000	Top executives	2,669	3,138	469	-	17.6	-	3.6	352	-
11-1011	Chief executives	553	645	93	H	16.8	H	14.6	67	L
11-1021	General and operations managers	2,049	2,425	376	VH	18.4	H	.7	280	VH
11-1031	Legislators	67	68	1	VL	1.1	VL	.0	4	VL
11-2000	Advertising, marketing, promotions, public relations, and sales managers	700	885	185	-	26.5	-	2.8	120	-
11-2011	Advertising and promotions managers	85	107	21	L	25.0	VH	2.4	15	VL
11-2020	Marketing and sales managers	546	693	148	-	27.1	-	3.1	94	-
11-2021	Marketing managers	203	246	43	L	21.4	H	3.1	33	VL
11-2022	Sales managers	343	448	105	H	30.5	VH	3.0	61	L
11-2031	Public relations managers	69	85	16	VL	23.4	VH	.9	11	VL
11-3000	Operations specialties managers	1,807	2,163	356	-	19.7	-	1.5	229	-
11-3011	Administrative services managers	321	384	63	L	19.8	H	.2	43	L
11-3021	Computer and information systems managers	284	387	103	H	36.1	VH	1.1	45	L
11-3031	Financial managers	599	709	109	H	18.3	H	3.1	77	L
11-3040	Human resources managers	202	242	39	L	19.4	H	.0	23	VL
11-3051	Industrial production managers	182	197	14	VL	7.9	VL	1.5	19	VL
11-3061	Purchasing managers	108	113	5	VL	4.8	VL	.2	9	VL
11-3071	Transportation, storage, and distribution managers	111	133	22	L	19.7	H	1.1	14	VL
11-9000	Other management occupations	4,880	5,090	210	-	4.3	-	48.5	588	-
11-9010	Agricultural managers	1,376	1,149	-227	-	-16.5	-	83.7	132	-
11-9011	Farm, ranch, and other agricultural managers	218	229	11	VL	5.1	VL	.9	26	VL
11-9012	Farmers and ranchers ¹	1,158	920	-238	VL	-20.6	VL	99.3	106	H
11-9021	Construction managers	389	435	47	L	12.0	L	46.9	49	L
11-9030	Education administrators	427	527	101	-	23.6	-	3.1	69	-
11-9031	Education administrators, preschool and child care center/program	58	77	19	VL	32.0	VH	3.0	10	VL
11-9032	Education administrators, elementary and secondary school	217	262	45	L	20.7	H	3.2	34	VL
11-9033	Education administrators, postsecondary	125	157	32	L	25.9	VH	2.6	21	VL
11-9039	Education administrators, all other	27	32	5	VL	19.1	H	5.6	4	VL
11-9041	Engineering managers	212	231	20	VL	9.2	L	.1	17	VL
11-9051	Food service managers	386	430	44	L	11.5	L	34.7	62	L
11-9061	Funeral directors ²	24	26	2	VL	6.6	VL	11.1	3	VL
11-9071	Gaming managers ³	6	7	1	VL	12.4	L	38.6	1	VL
11-9081	Lodging managers	69	73	5	VL	6.6	VL	50.3	11	VL
11-9111	Medical and health services managers ²	244	315	71	L	29.3	VH	5.3	36	L
11-9121	Natural sciences managers ³	45	51	5	VL	11.3	L	1.2	5	VL
11-9131	Postmasters and mail superintendents	25	25	0	VL	-5	VL	.0	3	VL
11-9141	Property, real estate, and community association managers	293	330	37	L	12.8	L	46.0	37	L
11-9151	Social and community service managers	129	164	36	L	27.7	VH	6.6	22	VL
11-9199	All other managers	1,256	1,325	69	L	5.5	VL	55.0	142	H
13-0000	Business and financial operations occupations	5,445	6,606	1,162	-	21.3	-	8.3	807	-
13-1000	Business operations specialists	3,177	3,910	733	-	23.1	-	6.9	509	-
13-1011	Agents and business managers of artists, performers, and athletes	15	19	4	VL	27.8	VH	27.0	2	VL
13-1020	Buyers and purchasing agents	419	455	36	-	8.6	-	4.8	58	-
13-1021	Purchasing agents and buyers, farm products ³	19	21	2	VL	10.2	L	9.6	2	VL

See footnotes at end of table.

Table III-1. Occupational employment and job openings data, 2002-12, and worker characteristics, 2002

(Numbers in thousands)

Annual average job openings due to growth and net replacement needs, 2002-12		2002 median annual earnings		Unemployment rate	Percent part-time	Most significant source of postsecondary education or training ⁹	Educational attainment cluster ¹¹	Percent of workers aged 25 to 44, by educational attainment			2002 national employment matrix occupation code
		Dollars	Rank					High school or less	Some college	College or higher	
Number	Rank										
5,631	-	-	-	-	-	-	-	-	-	-	00-0000
532	-	-	-	-	-	-	-	-	-	-	11-1300
319	-	-	-	-	-	-	-	-	-	-	11-0000
97	-	-	-	-	-	-	-	-	-	-	11-1000
20	L	126,260	VH	VL	VL	Bachelor's plus experience ¹⁰	SC/C	16.1	21.1	62.8	11-1011
76	VH	68,210	VH	VL	VL	Bachelor's plus experience ¹⁰	HS/SC/C	21.3	30.4	48.4	11-1021
1	VL	15,220	VL	VL	VL	Bachelor's plus experience ¹⁰	C	.7	1.5	97.8	11-1031
31	-	-	-	-	-	-	-	-	-	-	11-2000
4	VL	57,130	VH	L	L	Bachelor's plus experience ¹⁰	SC/C	8.5	21.7	69.9	11-2011
25	-	-	-	-	-	-	-	-	-	-	11-2020
8	L	78,250	VH	L	VL	Bachelor's plus experience ¹⁰	SC/C	9.7	23.2	67.2	11-2021
17	L	75,040	VH	L	VL	Bachelor's plus experience ¹⁰	SC/C	9.7	23.2	67.2	11-2022
3	VL	60,640	VH	VL	VL	Bachelor's plus experience ¹⁰	C	9.7	19.8	70.6	11-2031
67	-	-	-	-	-	-	-	-	-	-	11-3000
13	L	52,500	VH	VL	VL	Bachelor's plus experience ¹⁰	HS/SC/C	22.6	36.8	40.6	11-3011
15	L	85,240	VH	L	VL	Bachelor's plus experience ¹⁰	SC/C	7.3	22.4	70.4	11-3021
20	L	73,340	VH	VL	VL	Bachelor's plus experience ¹⁰	SC/C	14.4	24.3	61.3	11-3031
7	VL	64,710	VH	L	VL	Bachelor's plus experience ¹⁰	SC/C	13.4	25.8	60.8	11-3040
5	VL	67,320	VH	L	VL	Bachelor's degree	HS/SC/C	29.8	29.7	40.5	11-3051
3	VL	59,890	VH	L	VL	Bachelor's plus experience ¹⁰	SC/C	15.0	31.0	54.0	11-3061
4	VL	59,660	VH	L	VL	Work experience in a related occupation	HS/SC/C	49.0	28.8	22.2	11-3071
124	-	-	-	-	-	-	-	-	-	-	11-9000
12	-	-	-	-	-	-	-	-	-	-	11-9010
5	VL	43,740	VH	VL	L	Bachelor's plus experience ¹⁰	HS/SC/C	48.0	30.6	21.4	11-9011
7	VL	24,076	L	VL	H	Long-term on-the-job	HS/SC	54.7	28.7	16.6	11-9012 ¹
12	L	63,500	VH	VL	VL	Bachelor's degree	HS/SC/C	41.4	30.6	28.0	11-9021
21	-	-	-	-	-	-	-	-	-	-	11-9030
3	VL	33,340	H	VL	L	Bachelor's plus experience ¹⁰	C	8.6	17.9	73.5	11-9031
10	L	71,490	VH	VL	L	Bachelor's plus experience ¹⁰	C	8.6	17.9	73.5	11-9032
6	VL	64,640	VH	VL	L	Bachelor's plus experience ¹⁰	C	8.6	17.9	73.5	11-9033
1	VL	57,840	VH	VL	L	Bachelor's plus experience ¹⁰	C	8.6	17.9	73.5	11-9039
6	VL	90,930	VH	VL	VL	Bachelor's plus experience ¹⁰	C	7.6	16.9	75.5	11-9041
11	L	35,790	H	L	L	Work experience in a related occupation	HS/SC/C	42.9	32.6	24.4	11-9051
1	VL	43,380	VH	VL	L	Associate degree	SC/C	4.5	56.2	39.2	11-9061 ²
0	VL	54,330	VH	H	L	Work experience in a related occupation	HS/SC	38.0	45.8	16.2	11-9071 ³
2	VL	33,970	H	L	L	Work experience in a related occupation	HS/SC/C	30.6	21.9	47.5	11-9081
12	L	61,370	VH	VL	VL	Bachelor's plus experience ¹⁰	SC/C	9.4	29.6	61.0	11-9111 ²
1	VL	82,250	VH	VL	VL	Bachelor's plus experience ¹⁰	C	8.8	4.2	87.0	11-9121 ³
0	VL	48,540	VH	VL	VL	Work experience in a related occupation	HS/SC/C	21.3	30.4	48.4	11-9131
9	L	36,880	H	VL	H	Bachelor's degree	HS/SC/C	29.1	33.3	37.7	11-9141
6	VL	43,080	VH	L	L	Bachelor's degree	C	9.7	19.2	71.1	11-9151
31	H	66,890	VH	VL	L	Work experience in a related occupation	HS/SC/C	24.7	27.3	48.0	11-9199
213	-	-	-	-	-	-	-	-	-	-	13-0000
129	-	-	-	-	-	-	-	-	-	-	13-1000
1	VL	55,730	VH	L	H	Bachelor's plus experience ¹⁰	C	17.4	17.0	65.6	13-1011
14	-	-	-	-	-	-	-	-	-	-	13-1020
1	VL	40,900	H	VL	L	Work experience in a related occupation	HS/SC/C	55.3	20.1	24.6	13-1021 ³

See footnotes at end of table.

Table III-1. Occupational employment and job openings data, 2002-12, and worker characteristics, 2002-Continued

(Numbers in thousands)

2002 national employment matrix occupation		Employment		Employment change, 2002-12				Per- cent self- em- ployed, 2002	Annual average job openings due to growth and total replacement needs, 2002-12	
		2002	2012	Numeric		Percent			Number	Rank
				Number	Rank	Number	Rank			
13-1022	Wholesale and retail buyers, except farm products	155	162	7	VL	4.3	VL	9.9	25	VL
13-1023	Purchasing agents, except wholesale, retail, and farm products	245	273	27	L	11.2	L	1.3	31	VL
13-1030	Claims adjusters, appraisers, examiners, and investigators	241	275	34	-	14.0	-	1.9	35	-
13-1031	Claims adjusters, examiners, and investigators	227	260	32	L	14.2	L	1.9	33	VL
13-1032	Insurance appraisers, auto damage	14	16	2	VL	11.7	L	1.8	2	VL
13-1041	Compliance officers, except agriculture, construction, health and safety, and transportation	158	173	15	VL	9.8	L	.9	21	VL
13-1051	Cost estimators	188	223	35	L	18.6	H	1.7	27	VL
13-1061	Emergency management specialists ⁵	11	14	3	VL	28.2	VH	.0	2	VL
13-1070	Human resources, training, and labor relations specialists	474	606	131	-	27.7	-	.8	88	-
13-1071	Employment, recruitment, and placement specialists	175	223	48	L	27.3	VH	.8	32	VL
13-1072	Compensation, benefits, and job analysis specialists	91	116	25	L	28.0	VH	.8	17	VL
13-1073	Training and development specialists	209	267	58	L	27.9	VH	.8	39	L
13-1111	Management analysts ²	577	753	176	H	30.4	VH	29.8	88	L
13-1121	Meeting and convention planners	37	45	8	VL	21.3	H	1.8	7	VL
13-1198	All other business operations specialists ¹	1,056	1,346	290	VH	27.5	VH	.8	181	H
13-2000	Financial specialists	2,268	2,696	429	-	18.9	-	10.2	298	-
13-2011	Accountants and auditors	1,055	1,261	205	H	19.5	H	10.6	128	H
13-2021	Appraisers and assessors of real estate	88	104	16	VL	17.6	H	34.8	11	VL
13-2031	Budget analysts	62	71	9	VL	14.0	L	.0	9	VL
13-2041	Credit analysts	66	78	12	VL	18.7	H	.0	9	VL
13-2050	Financial analysts and advisors	400	486	86	-	21.5	-	14.2	56	-
13-2051	Financial analysts	172	204	32	L	18.7	H	4.8	23	VL
13-2052	Personal financial advisors	126	170	44	L	34.6	VH	37.7	21	VL
13-2053	Insurance underwriters	102	112	10	VL	10.0	L	1.0	12	VL
13-2061	Financial examiners ⁸	25	27	2	VL	8.9	L	.0	4	VL
13-2070	Loan counselors and officers	255	302	48	-	18.7	-	2.3	37	-
13-2071	Loan counselors	31	37	6	VL	17.8	H	2.3	4	VL
13-2072	Loan officers	223	266	42	L	18.8	H	2.3	33	VL
13-2080	Tax examiners, collectors, preparers, and revenue agents	154	176	22	-	14.4	-	13.5	20	-
13-2081	Tax examiners, collectors, and revenue agents	75	79	4	VL	5.0	VL	.0	9	VL
13-2082	Tax preparers	79	98	18	VL	23.2	VH	26.2	12	VL
13-2099	All other financial specialists	162	190	28	L	17.6	H	3.6	24	VL
15-2900	Professional and related occupations	27,687	34,147	6,459	-	23.3	-	6.8	3,972	-
15-0000	Computer and mathematical science occupations ...	3,018	4,069	1,051	-	34.8	-	4.5	452	-
15-1000	Computer specialists	2,911	3,954	1,043	-	35.8	-	4.5	440	-
15-1011	Computer and information scientists, research	23	30	7	VL	30.0	VH	7.4	4	VL
15-1021	Computer programmers	499	571	73	L	14.6	L	3.7	48	L
15-1030	Computer software engineers	675	982	307	-	45.5	-	3.0	109	-
15-1031	Computer software engineers, applications ..	394	573	179	H	45.5	VH	3.1	63	L
15-1032	Computer software engineers, systems software	281	409	128	H	45.5	VH	3.0	45	L
15-1041	Computer support specialists	507	660	153	H	30.3	VH	.6	80	L
15-1051	Computer systems analysts	468	653	184	H	39.4	VH	6.4	78	L
15-1061	Database administrators	110	159	49	L	44.2	VH	.6	19	VL
15-1071	Network and computer systems administrators	251	345	94	H	37.4	VH	.5	40	L

See footnotes at end of table.

Table III-1. Occupational employment and job openings data, 2002-12, and worker characteristics, 2002-Continued

(Numbers in thousands)

Annual average job openings due to growth and net replacement needs, 2002-12		2002 median annual earnings		Unemployment rate	Percent part-time	Most significant source of postsecondary education or training ⁹	Educational attainment cluster ¹¹	Percent of workers aged 25 to 44, by educational attainment			2002 national employment matrix occupation code
		Dollars	Rank					High school or less	Some college	College or higher	
Number	Rank										
5	VL	40,780	H	L	H	Work experience in a related occupation	HS/SC/C	30.4	34.6	35.0	13-1022
9	L	45,090	VH	L	VL	Work experience in a related occupation	HS/SC/C	29.4	33.7	36.9	13-1023
6	-	-	-	-	-	-	-	-	-	-	13-1030
6	VL	43,020	VH	VL	VL	Long-term on-the-job	HS/SC/C	24.1	32.2	43.7	13-1031
0	VL	42,630	VH	VL	VL	Long-term on-the-job	HS/SC/C	24.1	32.2	43.7	13-1032
5	VL	44,800	VH	VL	VL	Long-term on-the-job	SC/C	11.9	30.8	57.3	13-1041
8	L	47,550	VH	VL	VL	Work experience in a related occupation	HS/SC/C	32.8	38.4	28.8	13-1051
1	VL	43,560	VH	VL	L	Work experience in a related occupation	SC/C	19.9	30.8	49.3	13-1061 ⁵
20	-	-	-	-	-	-	-	-	-	-	13-1070
7	L	39,410	H	L	L	Bachelor's degree	SC/C	15.8	28.5	55.7	13-1071
4	VL	45,100	VH	L	L	Bachelor's degree	SC/C	15.8	28.5	55.7	13-1072
9	L	42,800	VH	L	L	Bachelor's degree	SC/C	15.8	28.5	55.7	13-1073
25	H	60,340	VH	L	L	Bachelor's plus experience ¹⁰	C	7.5	15.7	76.8	13-1111 ²
2	VL	37,420	H	L	L	Bachelor's degree	SC/C	15.4	26.7	57.9	13-1121
47	H	50,680	VH	L	L	Bachelor's degree	SC/C	15.8	28.5	55.7	13-1198 ¹
83	-	-	-	-	-	-	-	-	-	-	13-2000
40	H	47,000	VH	VL	L	Bachelor's degree	C	6.7	19.7	73.6	13-2011
3	VL	41,760	H	VL	L	Postsecondary vocational award	SC/C	14.7	29.9	55.4	13-2021
2	VL	52,480	VH	VL	VL	Bachelor's degree	C	7.3	17.6	75.1	13-2031
2	VL	42,910	VH	L	VL	Bachelor's degree	SC/C	17.0	26.7	56.3	13-2041
15	-	-	-	-	-	-	-	-	-	-	13-2050
6	VL	57,100	VH	VL	L	Bachelor's degree	C	5.9	15.9	78.2	13-2051
6	VL	56,680	VH	VL	L	Bachelor's degree	C	4.5	13.7	81.8	13-2052
3	VL	45,590	VH	VL	VL	Bachelor's degree	HS/SC/C	21.3	25.8	53.0	13-2053
1	VL	56,220	VH	VL	L	Bachelor's degree	SC/C	11.3	23.4	65.3	13-2061 ⁸
9	-	-	-	-	-	-	-	-	-	-	13-2070
1	VL	32,010	H	VL	VL	Bachelor's degree	SC/C	19.2	30.5	50.3	13-2071
8	L	43,980	VH	VL	VL	Bachelor's degree	SC/C	19.2	30.5	50.3	13-2072
5	-	-	-	-	-	-	-	-	-	-	13-2080
2	VL	42,250	VH	H	VL	Bachelor's degree	SC/C	14.6	32.1	53.3	13-2081
3	VL	25,630	L	VH	H	Moderate-term on-the-job	SC/C	16.7	29.2	54.0	13-2082
6	VL	44,140	VH	VL	L	Bachelor's degree	HS/SC/C	25.2	29.6	45.2	13-2099
1,179	-	-	-	-	-	-	-	-	-	-	15-2900
146	-	-	-	-	-	-	-	-	-	-	15-0000
143	-	-	-	-	-	-	-	-	-	-	15-1000
1	VL	77,760	VH	L	VL	Doctoral degree	SC/C	10.4	27.2	62.4	15-1011
19	L	60,290	VH	L	VL	Bachelor's degree	SC/C	7.6	22.4	70.1	15-1021
37	-	-	-	-	-	-	-	-	-	-	15-1030
22	L	70,900	VH	L	VL	Bachelor's degree	C	4.1	15.2	80.7	15-1031
16	L	74,040	VH	L	VL	Bachelor's degree	C	4.1	15.2	80.7	15-1032
22	L	39,100	H	H	L	Associate degree	SC/C	15.5	42.7	41.8	15-1041
24	H	62,890	VH	L	VL	Bachelor's degree	SC/C	10.4	27.2	62.4	15-1051
6	VL	55,480	VH	L	VL	Bachelor's degree	SC/C	9.8	23.0	67.1	15-1061
12	L	54,810	VH	L	VL	Bachelor's degree	SC/C	11.1	38.8	50.2	15-1071

See footnotes at end of table.

Table III-1. Occupational employment and job openings data, 2002-12, and worker characteristics, 2002-Continued

(Numbers in thousands)

2002 national employment matrix occupation		Employment		Employment change, 2002-12				Percent self-employed, 2002	Annual average job openings due to growth and total replacement needs, 2002-12	
		2002	2012	Numeric		Percent			Number	Rank
				Number	Rank	Number	Rank			
15-1081	Network systems and data communications analysts	186	292	106	H	57.0	VH	23.6	34	VL
15-1099	All other computer specialists	192	262	70	L	36.5	VH	6.2	31	VL
15-2000	Mathematical science occupations	107	115	8	-	7.4	-	4.7	12	-
15-2011	Actuaries ²	15	18	2	VL	14.9	H	1.4	2	VL
15-2021	Mathematicians ^{2,8}	3	3	0	VL	-1.0	VL	4.6	0	VL
15-2031	Operations research analysts	62	66	4	VL	6.2	VL	5.8	7	VL
15-2041	Statisticians ²	20	21	1	VL	4.8	VL	5.7	2	VL
15-2090	Miscellaneous mathematical science occupations ^{2,8}	7	8	1	VL	11.8	L	.0	1	VL
17-0000	Architecture and engineering occupations	2,587	2,809	222	-	8.6	-	4.1	252	-
17-1000	Architects, surveyors, and cartographers	204	233	29	-	14.0	-	15.6	18	-
17-1010	Architects, except naval	136	161	25	-	18.1	-	21.8	11	-
17-1011	Architects, except landscape and naval	113	133	20	VL	17.2	H	21.4	9	VL
17-1012	Landscape architects	23	28	5	VL	22.2	VH	23.4	2	VL
17-1020	Surveyors, cartographers, and photogrammetrists	64	68	4	-	5.6	-	3.5	7	-
17-1021	Cartographers and photogrammetrists ⁵	9	10	1	VL	15.1	H	3.3	1	VL
17-1022	Surveyors	56	58	2	VL	4.2	VL	3.5	6	VL
17-1099	All other architects, surveyors, and cartographers	3	4	0	VL	10.9	L	.0	0	VL
17-2000	Engineers	1,478	1,587	109	-	7.3	-	3.7	117	-
17-2011	Aerospace engineers ²	78	74	-4	VL	-5.2	VL	1.6	5	VL
17-2021	Agricultural engineers ⁸	3	3	0	VL	10.3	L	12.5	0	VL
17-2031	Biomedical engineers ⁸	8	10	2	VL	26.1	VH	4.9	1	VL
17-2041	Chemical engineers ²	33	33	0	VL	.4	VL	.6	2	VL
17-2051	Civil engineers	228	246	18	VL	8.0	VL	6.7	17	VL
17-2061	Computer hardware engineers	74	78	5	VL	6.1	VL	4.7	6	VL
17-2070	Electrical and electronics engineers	292	309	17	-	5.7	-	3.2	23	-
17-2071	Electrical engineers	156	160	4	VL	2.5	VL	3.3	11	VL
17-2072	Electronics engineers, except computer	136	149	13	VL	9.4	L	3.1	11	VL
17-2081	Environmental engineers	47	65	18	VL	38.2	VH	.4	7	VL
17-2110	Industrial engineers, including health and safety	194	213	20	-	10.1	-	1.5	21	-
17-2111	Health and safety engineers, except mining safety engineers and inspectors	36	38	3	VL	7.9	VL	1.6	4	VL
17-2112	Industrial engineers	158	175	17	VL	10.6	L	1.5	17	VL
17-2121	Marine engineers and naval architects ^{2,8}	5	5	0	VL	-5.0	VL	.0	0	VL
17-2131	Materials engineers	24	25	1	VL	4.1	VL	3.6	2	VL
17-2141	Mechanical engineers	215	225	10	VL	4.8	VL	3.0	14	VL
17-2151	Mining and geological engineers, including mining safety engineers ⁸	5	5	0	VL	-2.7	VL	.0	0	VL
17-2161	Nuclear engineers ^{2,3}	16	16	0	VL	-.1	VL	.0	1	VL
17-2171	Petroleum engineers ²	14	12	-1	VL	-9.8	VL	16.5	1	VL
17-2199	All other engineers	243	267	24	L	9.7	L	4.8	18	VL
17-3000	Drafters, engineering, and mapping technicians ..	905	990	85	-	9.4	-	2.2	116	-
17-3010	Drafters	216	222	6	-	2.8	-	3.8	28	-
17-3011	Architectural and civil drafters	106	110	4	VL	4.2	VL	3.7	14	VL
17-3012	Electrical and electronics drafters	38	38	0	VL	.7	VL	4.0	5	VL
17-3013	Mechanical drafters	72	74	1	VL	1.9	VL	3.7	9	VL
17-3020	Engineering technicians, except drafters	478	526	48	-	10.1	-	.4	58	-
17-3021	Aerospace engineering and operations technicians ³	15	15	0	VL	1.5	VL	.4	2	VL
17-3022	Civil engineering technicians	92	99	7	VL	7.6	VL	.4	11	VL
17-3023	Electrical and electronic engineering technicians	204	224	20	VL	10.0	L	.4	25	VL
17-3024	Electro-mechanical technicians	31	35	4	VL	11.5	L	.6	4	VL
17-3025	Environmental engineering technicians ³	19	24	5	VL	28.4	VH	.4	3	VL
17-3026	Industrial engineering technicians	62	67	5	VL	8.7	L	.4	7	VL

See footnotes at end of table.

Table III-1. Occupational employment and job openings data, 2002-12, and worker characteristics, 2002-Continued

(Numbers in thousands)

Annual average job openings due to growth and net replacement needs, 2002-12		2002 median annual earnings		Unemployment rate	Percent part-time	Most significant source of postsecondary education or training ⁹	Educational attainment cluster ¹¹	Percent of workers aged 25 to 44, by educational attainment			2002 national employment matrix occupation code
		Dollars	Rank					High school or less	Some college	College or higher	
Number	Rank										
13	L	58,420	VH	L	L	Bachelor's degree	SC/C	11.3	31.2	57.5	15-1081
9	L	54,070	VH	L	VL	Associate degree	SC/C	10.4	27.2	62.4	15-1099
4	-	-	-	-	-	-	-	-	-	-	15-2000
1	VL	69,970	VH	VL	VL	Bachelor's plus experience ¹⁰	C	2.7	9.0	88.4	15-2011 ²
0	VL	76,470	VH	VL	L	Master's degree	SC/C	7.5	24.2	68.3	15-2021 ^{2,8}
2	VL	56,920	VH	VL	VL	Master's degree	SC/C	11.0	30.7	58.3	15-2031
1	VL	57,080	VH	VL	VL	Master's degree	C	6.7	10.4	82.9	15-2041 ²
0	VL	52,060	VH	VL	L	Master's degree	SC/C	7.5	24.2	68.3	15-2090 ^{2,8}
80	-	-	-	-	-	-	-	-	-	-	17-0000
7	-	-	-	-	-	-	-	-	-	-	17-1000
4	-	-	-	-	-	-	-	-	-	-	17-1010
3	VL	56,620	VH	VL	VL	Bachelor's degree	C	3.0	9.8	87.2	17-1011
1	VL	47,400	VH	VL	VL	Bachelor's degree	C	3.0	9.8	87.2	17-1012
3	-	-	-	-	-	-	-	-	-	-	17-1020
0	VL	42,870	VH	VL	L	Bachelor's degree	C	11.3	14.1	74.6	17-1021 ⁵
2	VL	39,970	H	VL	L	Bachelor's degree	C	11.3	14.1	74.6	17-1022
0	VL	43,210	VH	VL	VL	Bachelor's degree	C	11.3	14.1	74.6	17-1099
43	-	-	-	-	-	-	-	-	-	-	17-2000
2	VL	72,750	VH	VL	VL	Bachelor's degree	C	4.5	13.8	81.8	17-2011 ²
0	VL	50,700	VH	L	L	Bachelor's degree	C	5.9	19.2	74.9	17-2021 ⁸
0	VL	60,410	VH	L	VL	Bachelor's degree	C	5.9	19.2	74.9	17-2031 ⁸
1	VL	72,490	VH	L	VL	Bachelor's degree	C	1.7	5.4	92.9	17-2041 ²
5	VL	60,070	VH	VL	VL	Bachelor's degree	C	2.7	9.2	88.1	17-2051
2	VL	72,150	VH	L	VL	Bachelor's degree	SC/C	5.9	25.5	68.6	17-2061
7	-	-	-	-	-	-	-	-	-	-	17-2070
3	VL	68,180	VH	VL	VL	Bachelor's degree	C	4.9	14.7	80.4	17-2071
4	VL	69,930	VH	VL	VL	Bachelor's degree	C	4.9	14.7	80.4	17-2072
3	VL	61,410	VH	VL	VL	Bachelor's degree	C	7.3	6.9	85.9	17-2081
7	-	-	-	-	-	-	-	-	-	-	17-2110
1	VL	58,010	VH	L	VL	Bachelor's degree	SC/C	5.1	26.5	68.3	17-2111
6	VL	62,150	VH	L	VL	Bachelor's degree	SC/C	5.1	26.5	68.3	17-2112
0	VL	66,650	VH	L	VL	Bachelor's degree	C	5.9	19.2	74.9	17-2121 ^{2,8}
1	VL	62,590	VH	VL	VL	Bachelor's degree	C	10.4	20.0	69.6	17-2131
7	VL	62,880	VH	L	VL	Bachelor's degree	C	5.0	17.7	77.3	17-2141
0	VL	61,770	VH	L	VL	Bachelor's degree	C	5.9	19.2	74.9	17-2151 ⁸
0	VL	81,350	VH	VL	VL	Bachelor's degree	C	5.4	5.5	89.1	17-2161 ^{2,3}
0	VL	83,370	VH	VL	VL	Bachelor's degree	C	7.5	9.6	82.9	17-2171 ²
7	VL	70,540	VH	VL	VL	Bachelor's degree	C	3.9	19.1	77.0	17-2199
30	-	-	-	-	-	-	-	-	-	-	17-3000
7	-	-	-	-	-	-	-	-	-	-	17-3010
3	VL	37,330	H	H	VL	Postsecondary vocational award	SC/C	15.5	61.0	23.5	17-3011
1	VL	41,090	H	H	VL	Postsecondary vocational award	SC/C	15.5	61.0	23.5	17-3012
2	VL	40,730	H	H	VL	Postsecondary vocational award	SC/C	15.5	61.0	23.5	17-3013
15	-	-	-	-	-	-	-	-	-	-	17-3020
0	VL	51,650	VH	L	VL	Associate degree	HS/SC	29.9	53.8	16.2	17-3021 ³
3	VL	37,720	H	L	VL	Associate degree	HS/SC	28.8	54.5	16.7	17-3022
6	VL	42,950	VH	L	VL	Associate degree	HS/SC	28.8	54.5	16.7	17-3023
1	VL	38,120	H	L	VL	Associate degree	HS/SC	28.8	54.5	16.7	17-3024
1	VL	36,850	H	L	VL	Associate degree	HS/SC	29.9	53.8	16.2	17-3025 ³
2	VL	41,910	VH	L	VL	Associate degree	HS/SC	28.8	54.5	16.7	17-3026

See footnotes at end of table.

Table III-1. Occupational employment and job openings data, 2002-12, and worker characteristics, 2002-Continued

(Numbers in thousands)

2002 national employment matrix occupation		Employment		Employment change, 2002-12				Percent self-employed, 2002	Annual average job openings due to growth and total replacement needs, 2002-12	
		2002	2012	Numeric		Percent			Number	Rank
				Number	Rank	Number	Rank			
17-3027	Mechanical engineering technicians	55	61	6	VL	11.0	L	.4	7	VL
17-3031	Surveying and mapping technicians	60	74	14	VL	23.2	VH	5.5	11	VL
17-3099	All other drafters, engineering, and mapping technicians	150	167	17	VL	11.3	L	4.5	19	VL
19-0000	Life, physical, and social science occupations	1,237	1,450	212	-	17.2	-	7.3	152	-
19-1000	Life scientists	214	253	39	-	18.2	-	4.3	21	-
19-1010	Agricultural and food scientists ²	18	20	2	VL	9.1	L	8.9	2	VL
19-1020	Biological scientists	75	90	14	-	19.0	-	2.6	7	-
19-1021	Biochemists and biophysicists	17	21	4	VL	22.9	VH	2.6	2	VL
19-1022	Microbiologists	16	20	3	VL	20.0	H	2.6	2	VL
19-1023	Zoologists and wildlife biologists	15	16	1	VL	7.7	VL	2.4	1	VL
19-1029	Biological scientists, all other	27	33	6	VL	22.3	VH	2.7	3	VL
19-1030	Conservation scientists and foresters	33	34	1	-	4.4	-	14.1	2	-
19-1031	Conservation scientists ^{2,3}	19	20	1	VL	4.1	VL	13.6	1	VL
19-1032	Foresters ^{2,3}	14	14	1	VL	4.7	VL	14.6	1	VL
19-1040	Medical scientists	62	79	17	-	27.3	-	1.7	7	-
19-1041	Epidemiologists ^{2,5}	4	5	1	VL	32.5	VH	2.1	0	VL
19-1042	Medical scientists, except epidemiologists ² ..	58	73	16	VL	26.9	VH	1.7	6	VL
19-1099	All other life scientists ²	26	31	5	VL	18.3	H	.0	3	VL
19-2000	Physical scientists	251	287	36	-	14.4	-	4.1	22	-
19-2010	Astronomers and physicists	14	15	1	-	6.8	-	9.9	1	-
19-2011	Astronomers ^{2,5}	1	1	0	VL	4.9	VL	10.2	0	VL
19-2012	Physicists ²	13	14	1	VL	6.9	VL	9.9	1	VL
19-2021	Atmospheric and space scientists ^{2,3}	8	9	1	VL	16.2	H	2.1	1	VL
19-2030	Chemists and materials scientists	91	103	11	-	12.4	-	.2	8	-
19-2031	Chemists	84	95	11	VL	12.7	L	.2	7	VL
19-2032	Materials scientists ³	7	8	1	VL	8.6	VL	.2	1	VL
19-2040	Environmental scientists and geoscientists	101	121	20	-	20.1	-	2.8	9	-
19-2041	Environmental scientists and specialists, including health	65	80	15	VL	23.7	VH	2.9	6	VL
19-2042	Geoscientists, except hydrologists and geographers	28	31	3	VL	11.5	L	2.7	2	VL
19-2043	Hydrologists ⁵	8	10	2	VL	21.0	H	3.0	1	VL
19-2099	All other physical scientists	37	39	2	VL	6.5	VL	15.0	3	VL
19-3000	Social scientists and related occupations	426	512	86	-	20.2	-	16.1	59	-
19-3011	Economists ³	16	18	2	VL	13.4	L	11.5	2	VL
19-3020	Market and survey researchers	155	193	38	-	24.7	-	7.6	22	-
19-3021	Market research analysts	134	166	31	L	23.4	VH	7.3	19	VL
19-3022	Survey researchers ³	20	27	7	VL	33.6	VH	9.3	3	VL
19-3030	Psychologists	139	173	34	-	24.3	-	25.4	19	-
19-3031	Clinical, counseling, and school psychologists	137	171	34	L	24.4	VH	25.4	19	VL
19-3032	Industrial-organizational psychologists ⁵	2	2	0	VL	16.0	H	26.8	0	VL
19-3041	Sociologists ^{2,8}	3	3	0	VL	13.4	L	.0	0	VL
19-3051	Urban and regional planners ²	32	36	3	VL	10.7	L	2.6	5	VL
19-3090	Miscellaneous social scientists and related workers	14	15	1	-	9.2	-	3.3	2	-
19-3091	Anthropologists and archeologists ^{2,5}	5	5	1	VL	12.8	L	3.5	1	VL
19-3092	Geographers ^{2,5}	1	1	0	VL	19.5	H	3.7	0	VL
19-3093	Historians ^{2,5}	2	2	0	VL	6.6	VL	3.5	0	VL
19-3094	Political scientists ^{2,5}	6	6	0	VL	5.9	VL	2.9	1	VL
19-3098	All other social scientists and related workers ..	68	74	7	VL	9.7	L	27.1	9	VL
19-4000	Life, physical, and social science technicians	346	397	51	-	14.8	-	.7	50	-
19-4011	Agricultural and food science technicians	20	22	2	VL	9.3	L	.0	3	VL
19-4021	Biological technicians ²	48	57	9	VL	19.4	H	.1	8	VL
19-4031	Chemical technicians	69	72	3	VL	4.6	VL	.1	9	VL
19-4041	Geological and petroleum technicians ³	11	11	0	VL	1.3	VL	2.1	1	VL
19-4051	Nuclear technicians ⁸	6	6	0	VL	1.5	VL	.0	1	VL

See footnotes at end of table.

Table III-1. Occupational employment and job openings data, 2002-12, and worker characteristics, 2002-Continued

(Numbers in thousands)

Annual average job openings due to growth and net replacement needs, 2002-12		2002 median annual earnings		Unemployment rate	Percent part-time	Most significant source of postsecondary education or training ⁹	Educational attainment cluster ¹¹	Percent of workers aged 25 to 44, by educational attainment			2002 national employment matrix occupation code
Number	Rank	Dollars	Rank					High school or less	Some college	College or higher	
2	VL	41,280	H	L	VL	Associate degree	HS/SC	28.8	54.5	16.7	17-3027
4	VL	29,230	H	H	L	Moderate-term on-the-job	HS/SC	47.5	45.4	7.2	17-3031
5	VL	44,450	VH	H	VL	Associate degree	SC/C	15.5	61.0	23.5	17-3099
51	-	-	-	-	-	-	-	-	-	-	19-0000
9	-	-	-	-	-	-	-	-	-	-	19-1000
0	VL	48,670	VH	VL	L	Bachelor's degree	HS/SC/C	25.7	12.0	62.3	19-1010 ²
4	-	-	-	-	-	-	-	-	-	-	19-1020
1	VL	60,390	VH	VL	L	Doctoral degree	C	.5	3.6	95.9	19-1021
1	VL	51,020	VH	VL	L	Doctoral degree	C	.5	3.6	95.9	19-1022
1	VL	47,740	VH	VL	L	Bachelor's degree	C	.5	3.6	95.9	19-1023
1	VL	53,300	VH	VL	L	Bachelor's degree	C	.5	3.6	95.9	19-1029
1	-	-	-	-	-	-	-	-	-	-	19-1030
1	VL	50,340	VH	L	VL	Bachelor's degree	SC/C	9.7	23.2	67.1	19-1031 ^{2,3}
0	VL	46,730	VH	L	VL	Bachelor's degree	SC/C	9.7	23.2	67.1	19-1032 ^{2,3}
3	-	-	-	-	-	-	-	-	-	-	19-1040
0	VL	53,840	VH	VL	L	Master's degree	C	.6	1.8	97.7	19-1041 ^{2,5}
3	VL	56,980	VH	VL	L	Doctoral degree	C	.6	1.8	97.7	19-1042 ²
1	VL	46,140	VH	VL	L	Bachelor's degree	C	.6	1.8	97.7	19-1099 ²
10	-	-	-	-	-	-	-	-	-	-	19-2000
1	-	-	-	-	-	-	-	-	-	-	19-2010
0	VL	81,690	VH	VL	VL	Doctoral degree	C	-	6.5	93.5	19-2011 ^{2,5}
1	VL	85,020	VH	VL	VL	Doctoral degree	C	-	6.5	93.5	19-2012 ²
0	VL	60,200	VH	VL	VL	Bachelor's degree	C	.4	9.2	90.4	19-2021 ^{2,3}
4	-	-	-	-	-	-	-	-	-	-	19-2030
4	VL	52,890	VH	VL	VL	Bachelor's degree	C	2.9	3.2	94.0	19-2031
0	VL	64,590	VH	VL	VL	Bachelor's degree	C	3.2	5.6	91.2	19-2032 ³
4	-	-	-	-	-	-	-	-	-	-	19-2040
3	VL	47,600	VH	VL	L	Master's degree	C	3.3	4.4	92.3	19-2041
1	VL	67,470	VH	VL	L	Master's degree	C	3.3	4.4	92.3	19-2042
0	VL	56,530	VH	VL	L	Master's degree	C	3.3	4.4	92.3	19-2043 ⁵
1	VL	67,890	VH	VL	VL	Bachelor's degree	C	.7	1.3	98.0	19-2099
19	-	-	-	-	-	-	-	-	-	-	19-3000
1	VL	68,550	VH	L	L	Master's degree	C	1.0	8.5	90.4	19-3011 ³
8	-	-	-	-	-	-	-	-	-	-	19-3020
7	VL	53,810	VH	H	L	Master's degree	C	7.4	13.6	79.0	19-3021
1	VL	22,200	L	H	L	Master's degree	C	7.5	14.8	77.6	19-3022 ³
6	-	-	-	-	-	-	-	-	-	-	19-3030
6	VL	51,170	VH	VL	VH	Doctoral degree	C	-	.6	99.4	19-3031
0	VL	63,710	VH	VL	VH	Master's degree	C	-	.6	99.4	19-3032 ⁵
0	VL	53,160	VH	VL	L	Master's degree	C	3.5	7.1	89.5	19-3041 ^{2,8}
1	VL	49,880	VH	VL	L	Master's degree	C	4.5	-	95.5	19-3051 ²
0	-	-	-	-	-	-	-	-	-	-	19-3090
0	VL	38,620	H	VL	H	Master's degree	C	6.5	11.5	81.9	19-3091 ^{2,5}
0	VL	53,420	VH	VL	H	Master's degree	C	6.5	11.5	81.9	19-3092 ^{2,5}
0	VL	42,030	VH	VL	H	Master's degree	C	6.5	11.5	81.9	19-3093 ^{2,5}
0	VL	80,560	VH	VL	H	Master's degree	C	6.5	11.5	81.9	19-3094 ^{2,5}
2	VL	53,940	VH	VL	H	Master's degree	C	-	.6	99.4	19-3098
13	-	-	-	-	-	-	-	-	-	-	19-4000
1	VL	28,580	H	H	VL	Associate degree	HS/SC/C	34.4	26.4	39.3	19-4011
2	VL	32,710	H	L	L	Associate degree	HS/SC/C	24.6	16.4	59.0	19-4021 ²
2	VL	37,430	H	L	VL	Associate degree	HS/SC/C	31.7	39.7	28.7	19-4031
0	VL	39,430	H	H	VL	Associate degree	HS/SC/C	29.2	43.5	27.3	19-4041 ³
0	VL	59,990	VH	L	L	Associate degree	HS/SC/C	26.8	39.0	34.2	19-4051 ⁸

See footnotes at end of table.

Table III-1. Occupational employment and job openings data, 2002–12, and worker characteristics, 2002—Continued

(Numbers in thousands)

2002 national employment matrix occupation		Employment		Employment change, 2002–12				Percent self-employed, 2002	Annual average job openings due to growth and total replacement needs, 2002–12	
		2002	2012	Numeric		Percent			Number	Rank
				Number	Rank	Number	Rank			
19-4090	Other life, physical, and social science technicians	55	67	12	–	22.8	–	1.1	8	–
19-4091	Environmental science and protection technicians, including health	28	38	10	VL	36.8	VH	1.1	5	VL
19-4092	Forensic science technicians ⁵	8	10	2	VL	18.9	H	1.0	1	VL
19-4093	Forest and conservation technicians ³	19	20	1	VL	4.0	VL	1.0	2	VL
19-4098	All other life, physical, and social science technicians	137	162	24	L	17.5	H	1.1	20	VL
21-0000	Community and social services occupations	2,190	2,764	574	–	26.2	–	2.3	371	–
21-1000	Counselors, social workers, and other community and social service specialists	1,436	1,853	417	–	29.0	–	2.2	273	–
21-1010	Counselors	526	645	119	–	22.6	–	4.4	85	–
21-1011	Substance abuse and behavioral disorder counselors	67	83	16	VL	23.2	VH	4.5	11	VL
21-1012	Educational, vocational, and school counselors	228	262	34	L	15.0	H	4.4	34	L
21-1013	Marriage and family therapists ³	23	29	5	VL	22.4	VH	4.2	4	VL
21-1014	Mental health counselors	85	107	23	L	26.6	VH	4.1	14	VL
21-1015	Rehabilitation counselors	122	164	41	L	33.8	VH	4.4	22	VL
21-1020	Social workers	477	604	127	–	26.7	–	1.7	89	–
21-1021	Child, family, and school social workers	274	338	64	L	23.2	VH	1.7	49	L
21-1022	Medical and public health social workers	107	138	31	L	28.6	VH	1.7	20	VL
21-1023	Mental health and substance abuse social workers	95	128	33	L	34.5	VH	1.6	19	VL
21-1090	Miscellaneous community and social service specialists	434	605	171	–	39.4	–	.2	99	–
21-1091	Health educators ³	45	54	10	VL	21.9	VH	.2	9	VL
21-1092	Probation officers and correctional treatment specialists	84	97	12	VL	14.6	H	.2	15	VL
21-1093	Social and human service assistants	305	454	149	H	48.7	VH	.2	75	L
21-2000	Religious workers	506	593	87	–	17.3	–	.2	53	–
21-2011	Clergy	400	463	62	L	15.5	H	.3	36	L
21-2021	Directors, religious activities and education ²	105	131	25	L	24.1	VH	.0	17	VL
21-9099	All other counselors, social, and religious workers	248	318	70	L	28.3	VH	6.7	45	L
23-0000	Legal occupations	1,168	1,357	190	–	16.2	–	18.4	119	–
23-1000	Lawyers, judges, and related workers	747	869	122	–	16.4	–	25.1	60	–
23-1011	Lawyers	695	813	118	H	17.0	H	26.8	56	L
23-1020	Judges, magistrates, and other judicial workers	51	56	4	–	8.3	–	2.6	4	–
23-1021	Administrative law judges, adjudicators, and hearing officers	19	20	1	VL	5.8	VL	3.4	1	VL
23-1022	Arbitrators, mediators, and conciliators	6	7	1	VL	13.7	L	11.2	0	VL
23-1023	Judges, magistrate judges, and magistrates	27	29	2	VL	8.7	L	.0	2	VL
23-2000	Legal support workers	320	380	60	–	18.7	–	5.4	46	–
23-2011	Paralegals and legal assistants	200	257	57	L	28.7	VH	2.3	32	VL
23-2090	Miscellaneous legal support workers	121	123	3	–	2.2	–	10.5	14	–
23-2091	Court reporters	18	20	2	VL	12.7	L	11.0	2	VL
23-2092	Law clerks	48	50	2	VL	3.8	VL	10.7	6	VL
23-2093	Title examiners, abstractors, and searchers	55	53	-1	VL	-2.7	VL	10.1	6	VL
23-9099	All other legal and related workers	101	109	8	VL	7.6	VL	9.6	13	VL
25-0000	Education, training, and library occupations	8,530	10,639	2,109	–	24.7	–	2.7	1,436	–
25-1000	Postsecondary teachers	1,581	2,184	603	VH	38.1	VH	.3	245	H
25-2000	Primary, secondary, and special education teachers	4,187	4,983	795	–	19.0	–	.4	613	–
25-2010	Preschool and kindergarten teachers	592	791	199	–	33.6	–	2.2	139	–

See footnotes at end of table.

Table III-1. Occupational employment and job openings data, 2002-12, and worker characteristics, 2002-Continued

(Numbers in thousands)

Annual average job openings due to growth and net replacement needs, 2002-12		2002 median annual earnings		Unemployment rate	Percent part-time	Most significant source of postsecondary education or training ⁹	Educational attainment cluster ¹¹	Percent of workers aged 25 to 44, by educational attainment			2002 national employment matrix occupation code
		Dollars	Rank					High school or less	Some college	College or higher	
Number	Rank										
3	-	-	-	-	-	-	-	-	-	-	19-4090
2	VL	35,320	H	H	H	Associate degree	HS/SC/C	20.7	33.6	45.7	19-4091
0	VL	41,040	H	H	H	Associate degree	HS/SC/C	20.7	33.6	45.7	19-4092 ⁵
1	VL	30,980	H	H	H	Associate degree	HS/SC/C	23.2	36.7	40.1	19-4093 ³
6	VL	34,030	H	H	H	Associate degree	HS/SC/C	20.7	33.6	45.7	19-4098
99	-	-	-	-	-	-	-	-	-	-	21-0000
69	-	-	-	-	-	-	-	-	-	-	21-1000
24	-	-	-	-	-	-	-	-	-	-	21-1010
3	VL	30,180	H	L	L	Master's degree	C	10.6	19.6	69.8	21-1011
9	L	44,100	VH	L	L	Master's degree	C	10.6	19.6	69.8	21-1012
1	VL	35,580	H	L	L	Master's degree	C	9.0	16.3	74.6	21-1013 ³
4	VL	29,940	H	L	L	Master's degree	C	10.6	19.6	69.8	21-1014
7	VL	25,840	L	L	L	Master's degree	C	10.6	19.6	69.8	21-1015
21	-	-	-	-	-	-	-	-	-	-	21-1020
11	L	33,150	H	VL	L	Bachelor's degree	C	7.8	18.4	73.8	21-1021
5	VL	37,380	H	VL	L	Bachelor's degree	C	7.8	18.4	73.8	21-1022
5	VL	32,850	H	VL	L	Master's degree	C	7.8	18.4	73.8	21-1023
25	-	-	-	-	-	-	-	-	-	-	21-1090
2	VL	36,240	H	L	L	Master's degree	SC/C	18.4	23.7	57.9	21-1091 ³
3	VL	38,360	H	L	L	Bachelor's degree	SC/C	15.2	24.0	60.8	21-1092
20	L	23,370	L	L	L	Moderate-term on-the-job	SC/C	15.2	24.0	60.8	21-1093
18	-	-	-	-	-	-	-	-	-	-	21-2000
14	L	33,110	H	VL	L	First professional degree	C	8.2	13.9	77.8	21-2011
4	VL	28,020	H	VL	VH	Bachelor's degree	SC/C	11.1	31.9	57.0	21-2021 ²
12	L	31,150	H	L	L	Bachelor's degree	C	10.6	19.6	69.8	21-9099
33	-	-	-	-	-	-	-	-	-	-	23-0000
22	-	-	-	-	-	-	-	-	-	-	23-1000
21	L	90,290	VH	VL	VL	First professional degree	C	.7	1.5	97.8	23-1011
1	-	-	-	-	-	-	-	-	-	-	23-1020
0	VL	64,540	VH	VL	VL	Bachelor's plus experience ¹⁰	C	.7	1.5	97.8	23-1021
0	VL	47,320	VH	VL	VL	Bachelor's plus experience ¹⁰	C	.7	1.5	97.8	23-1022
1	VL	94,070	VH	VL	VL	Bachelor's plus experience ¹⁰	C	.7	1.5	97.8	23-1023
9	-	-	-	-	-	-	-	-	-	-	23-2000
7	VL	37,950	H	L	L	Associate degree	SC/C	15.8	41.9	42.2	23-2011
2	-	-	-	-	-	-	-	-	-	-	23-2090
0	VL	41,550	H	L	L	Postsecondary vocational award	HS/SC/C	25.2	41.1	33.6	23-2091
1	VL	30,460	H	L	L	Bachelor's degree	HS/SC/C	25.2	41.1	33.6	23-2092
1	VL	32,610	H	L	L	Moderate-term on-the-job	HS/SC/C	25.2	41.1	33.6	23-2093
2	VL	38,700	H	L	L	Bachelor's degree	HS/SC/C	25.2	41.1	33.6	23-9099
389	-	-	-	-	-	-	-	-	-	-	25-0000
96	VH	49,090	VH	VL	VH	Doctoral degree	C	2.8	7.4	89.8	25-1000
173	-	-	-	-	-	-	-	-	-	-	25-2000
27	-	-	-	-	-	-	-	-	-	-	25-2010

See footnotes at end of table.

Table III-1. Occupational employment and job openings data, 2002-12, and worker characteristics, 2002-Continued

(Numbers in thousands)

2002 national employment matrix occupation		Employment		Employment change, 2002-12				Percent self-employed, 2002	Annual average job openings due to growth and total replacement needs, 2002-12	
		2002	2012	Numeric		Percent			Number	Rank
				Number	Rank	Number	Rank			
25-2011	Preschool teachers, except special education	424	577	153	H	36.2	VH	2.2	101	L
25-2012	Kindergarten teachers, except special education	168	214	46	L	27.2	VH	2.2	38	L
25-2020	Elementary and middle school teachers	2,070	2,347	277	-	13.4	-	.1	270	-
25-2021	Elementary school teachers, except special education	1,467	1,690	223	H	15.2	H	.1	196	H
25-2022	Middle school teachers, except special and vocational education	585	637	52	L	9.0	L	.1	72	L
25-2023	Vocational education teachers, middle school	18	19	2	VL	9.0	L	.1	2	VL
25-2030	Secondary school teachers	1,093	1,282	189	-	17.3	-	.0	139	-
25-2031	Secondary school teachers, except special and vocational education	988	1,167	180	H	18.2	H	.0	127	H
25-2032	Vocational education teachers, secondary school	105	115	10	VL	9.0	L	.0	12	VL
25-2040	Special education teachers	433	563	130	H	30.0	VH	.3	65	L
25-3000	Other teachers and instructors	960	1,285	325	-	33.9	-	20.3	207	-
25-3011	Adult literacy, remedial education, and GED teachers and instructors	80	96	16	VL	20.4	H	19.5	15	VL
25-3021	Self-enrichment education teachers	200	281	80	L	40.1	VH	19.9	45	L
25-3999	All other teachers, primary, secondary, and adult	679	908	229	H	33.7	VH	20.5	146	H
25-4000	Librarians, curators, and archivists	309	349	41	-	13.2	-	.3	42	-
25-4010	Archivists, curators, and museum technicians ²	22	26	4	VL	17.0	H	3.4	3	VL
25-4021	Librarians	167	184	17	VL	10.1	L	.1	16	VL
25-4031	Library technicians ³	119	139	20	VL	16.8	H	.0	24	VL
25-9000	Other education, training, and library occupations	1,493	1,838	345	-	23.1	-	.7	328	-
25-9011	Audio-visual collections specialists ⁵	10	11	2	VL	16.3	H	3.1	2	VL
25-9021	Farm and home management advisors ⁵	16	17	1	VL	6.9	VL	2.4	3	VL
25-9031	Instructional coordinators	98	123	25	L	25.4	VH	2.7	20	VL
25-9041	Teacher assistants	1,277	1,571	294	VH	23.0	VH	.3	286	VH
25-9199	All other library, museum, training, and other education workers	93	116	23	L	24.6	VH	3.0	18	VL
27-0000	Arts, design, entertainment, sports, and media occupations	2,377	2,769	393	-	16.5	-	31.8	369	-
27-1000	Art and design occupations	775	900	125	-	16.1	-	40.0	114	-
27-1010	Artists and related workers	149	170	21	-	14.4	-	53.8	24	-
27-1011	Art directors	51	56	6	VL	11.4	L	53.6	8	VL
27-1013	Fine artists, including painters, sculptors, and illustrators	23	27	4	VL	16.5	H	55.5	4	VL
27-1014	Multi-media artists and animators	75	87	12	VL	15.8	H	53.5	12	VL
27-1020	Designers	532	625	93	-	17.4	-	31.7	75	-
27-1021	Commercial and industrial designers	52	59	8	VL	14.6	H	31.0	7	VL
27-1022	Fashion designers	15	16	2	VL	10.6	L	29.3	2	VL
27-1023	Floral designers	104	117	13	VL	12.4	L	32.5	14	VL
27-1024	Graphic designers	212	258	46	L	21.9	VH	31.8	31	VL
27-1025	Interior designers	60	73	13	VL	21.7	VH	32.2	9	VL
27-1026	Merchandise displayers and window trimmers	77	86	9	VL	11.3	L	30.9	10	VL
27-1027	Set and exhibit designers ³	12	15	3	VL	20.9	H	32.2	2	VL
27-1099	All other art and design workers	95	106	11	VL	11.5	L	65.0	14	VL
27-2000	Entertainers and performers, sports and related occupations	606	709	103	-	17.0	-	30.7	105	-
27-2010	Actors, producers, and directors	139	164	25	-	18.0	-	25.9	20	-
27-2011	Actors ²	63	74	11	VL	17.7	H	17.4	9	VL
27-2012	Producers and directors ²	76	90	14	VL	18.2	H	32.8	11	VL

See footnotes at end of table.

Table III-1. Occupational employment and job openings data, 2002-12, and worker characteristics, 2002-Continued

(Numbers in thousands)

Annual average job openings due to growth and net replacement needs, 2002-12		2002 median annual earnings		Unemployment rate	Percent part-time	Most significant source of postsecondary education or training ⁹	Educational attainment cluster ¹¹	Percent of workers aged 25 to 44, by educational attainment			2002 national employment matrix occupation code
		Dollars	Rank					High school or less	Some college	College or higher	
Number	Rank										
20	L	19,270	VL	L	H	Postsecondary vocational award	HS/SC/C	21.7	31.0	47.2	25-2011
7	VL	39,810	H	L	H	Bachelor's degree	HS/SC/C	21.7	31.0	47.2	25-2012
73	-	-	-	-	-	-	-	-	-	-	25-2020
55	VH	41,780	VH	VL	L	Bachelor's degree	C	2.8	5.3	91.8	25-2021
18	L	41,820	VH	VL	L	Bachelor's degree	C	2.8	5.3	91.8	25-2022
1	VL	42,590	VH	VL	L	Bachelor's plus experience ¹⁰	C	2.8	5.3	91.8	25-2023
50	-	-	-	-	-	-	-	-	-	-	25-2030
46	H	43,950	VH	VL	L	Bachelor's degree	C	1.5	3.6	94.9	25-2031
4	VL	44,340	VH	VL	L	Bachelor's plus experience ¹⁰	C	1.5	3.6	94.9	25-2032
23	H	43,450	VH	VL	L	Bachelor's degree	C	3.8	5.9	90.2	25-2040
44	-	-	-	-	-	-	-	-	-	-	25-3000
3	VL	36,400	H	L	VH	Bachelor's degree	SC/C	14.4	30.4	55.2	25-3011
11	L	29,320	H	L	VH	Work experience in a related occupation	SC/C	14.4	30.4	55.2	25-3021
31	H	29,250	H	L	VH	Bachelor's degree	SC/C	14.4	30.4	55.2	25-3999
13	-	-	-	-	-	-	-	-	-	-	25-4000
1	VL	35,270	H	VL	L	Master's degree	C	3.5	8.9	87.6	25-4010 ²
6	VL	43,090	VH	VL	H	Master's degree	C	8.5	15.0	76.5	25-4021
6	VL	24,090	L	L	VH	Short-term on-the-job	HS/SC/C	23.0	34.6	42.3	25-4031 ³
62	-	-	-	-	-	-	-	-	-	-	25-9000
0	VL	32,360	H	VL	H	Moderate-term on-the-job	C	8.2	7.1	84.6	25-9011 ⁵
0	VL	39,430	H	VL	H	Bachelor's degree	C	8.2	7.1	84.6	25-9021 ⁵
4	VL	47,350	VH	VL	H	Master's degree	C	8.2	7.1	84.6	25-9031
54	VH	18,660	VL	L	VH	Short-term on-the-job	HS/SC	43.7	40.0	16.3	25-9041
4	VL	27,280	L	VL	H	Bachelor's degree	C	8.2	7.1	84.6	25-9199
85	-	-	-	-	-	-	-	-	-	-	27-0000
25	-	-	-	-	-	-	-	-	-	-	27-1000
5	-	-	-	-	-	-	-	-	-	-	27-1010
2	VL	61,850	VH	L	H	Bachelor's plus experience ¹⁰	SC/C	13.7	27.8	58.5	27-1011
1	VL	35,260	H	L	H	Long-term on-the-job	SC/C	13.7	27.8	58.5	27-1013
3	VL	43,980	VH	L	H	Bachelor's degree	SC/C	13.7	27.8	58.5	27-1014
16	-	-	-	-	-	-	-	-	-	-	27-1020
1	VL	52,260	VH	L	H	Bachelor's degree	SC/C	17.3	29.7	53.1	27-1021
0	VL	51,290	VH	L	H	Bachelor's degree	SC/C	17.3	29.7	53.1	27-1022
3	VL	19,480	VL	L	H	Moderate-term on-the-job	SC/C	17.3	29.7	53.1	27-1023
7	L	36,680	H	L	H	Bachelor's degree	SC/C	17.3	29.7	53.1	27-1024
2	VL	39,180	H	L	H	Bachelor's degree	SC/C	17.3	29.7	53.1	27-1025
2	VL	22,550	L	L	H	Moderate-term on-the-job	SC/C	17.3	29.7	53.1	27-1026
0	VL	33,870	H	L	H	Bachelor's degree	SC/C	19.8	31.8	48.4	27-1027 ³
3	VL	34,060	H	L	H	Bachelor's degree	SC/C	13.7	27.8	58.5	27-1099
23	-	-	-	-	-	-	-	-	-	-	27-2000
4	-	-	-	-	-	-	-	-	-	-	27-2010
2	VL	23,470	L	VH	VH	Long-term on-the-job	SC/C	4.0	29.6	66.4	27-2011 ²
3	VL	46,240	VH	H	L	Bachelor's plus experience ¹⁰	SC/C	4.8	21.9	73.3	27-2012 ²

See footnotes at end of table.

Table III-1. Occupational employment and job openings data, 2002-12, and worker characteristics, 2002-Continued

(Numbers in thousands)

2002 national employment matrix occupation		Employment		Employment change, 2002-12				Percent self-employed, 2002	Annual average job openings due to growth and total replacement needs, 2002-12	
		2002	2012	Numeric		Percent			Number	Rank
				Number	Rank	Number	Rank			
27-2020	Athletes, coaches, umpires, and related workers	158	187	29	-	18.3	-	27.5	34	-
27-2021	Athletes and sports competitors	15	18	3	VL	19.2	H	31.5	3	VL
27-2022	Coaches and scouts	130	153	24	L	18.3	H	26.6	28	VL
27-2023	Umpires, referees, and other sports officials ³	14	16	2	VL	16.9	H	31.3	3	VL
27-2030	Dancers and choreographers	37	42	5	-	13.3	-	18.1	6	-
27-2031	Dancers ^{2,4}	20	22	2	VL	11.1	L	19.3	3	VL
27-2032	Choreographers ^{2,4}	17	20	3	VL	15.8	H	16.7	3	VL
27-2040	Musicians, singers, and related workers	215	250	35	-	16.2	-	38.6	35	-
27-2041	Music directors and composers	54	62	7	VL	13.5	L	39.3	9	VL
27-2042	Musicians and singers	161	189	27	L	17.1	H	38.3	26	VL
27-2099	All other entertainers and performers, sports and related workers ²	56	65	9	VL	16.4	H	30.2	10	VL
27-3000	Media and communication occupations	700	815	115	-	16.4	-	24.4	107	-
27-3010	Announcers	76	68	-8	VL	-10.1	VL	34.4	8	VL
27-3020	News analysts, reporters and correspondents	66	70	4	VL	6.2	VL	6.3	7	VL
27-3031	Public relations specialists	158	210	52	L	32.9	VH	6.1	32	VL
27-3040	Writers and editors	319	370	51	-	16.0	-	36.0	46	-
27-3041	Editors	130	145	15	VL	11.8	L	12.9	14	VL
27-3042	Technical writers	50	63	13	VL	27.1	VH	7.3	6	VL
27-3043	Writers and authors	139	161	22	L	16.1	H	67.9	25	VL
27-3090	Miscellaneous media and communications workers	82	97	15	-	18.6	-	20.1	15	-
27-3091	Interpreters and translators ^{2,3}	24	29	5	VL	22.0	VH	19.6	5	VL
27-3099	All other media and communication workers ²	58	68	10	VL	17.2	H	20.3	10	VL
27-4000	Media and communication equipment occupations	295	345	50	-	16.9	-	29.8	43	-
27-4010	Broadcast and sound engineering technicians and radio operators	93	111	18	-	19.6	-	9.3	11	-
27-4011	Audio and video equipment technicians	42	53	11	VL	26.8	VH	9.1	5	VL
27-4012	Broadcast technicians	35	39	4	VL	11.3	L	9.6	4	VL
27-4013	Radio operators ⁵	3	3	0	VL	-6.2	VL	11.5	0	VL
27-4014	Sound engineering technicians ³	13	16	3	VL	25.5	VH	8.6	2	VL
27-4021	Photographers	130	148	18	VL	13.6	L	52.5	19	VL
27-4030	Television, video, and motion picture camera operators and editors	48	56	9	-	18.7	-	23.0	7	-
27-4031	Camera operators, television, video, and motion picture ³	28	32	4	VL	13.4	L	23.8	4	VL
27-4032	Film and video editors ⁴	19	25	5	VL	26.4	VH	21.9	3	VL
27-4099	All other media and communication equipment workers ⁸	24	29	5	VL	20.1	H	.0	6	VL
29-0000	Healthcare practitioners and technical occupations	6,580	8,288	1,708	-	26.0	-	4.8	820	-
29-1000	Health diagnosing and treating practitioners	4,071	5,125	1,054	-	25.9	-	7.2	403	-
29-1011	Chiropractors ²	49	60	11	VL	23.3	VH	58.5	3	VL
29-1020	Dentists ²	153	159	6	VL	4.1	VL	39.9	7	VL
29-1031	Dietitians and nutritionists	49	58	9	VL	17.8	H	6.3	9	VL
29-1041	Optometrists ²	32	38	5	VL	17.1	H	29.2	2	VL
29-1051	Pharmacists ²	230	299	69	L	30.1	VH	3.4	25	VL
29-1060	Physicians and surgeons	583	697	114	H	19.5	H	16.9	41	L
29-1071	Physician assistants ²	63	94	31	L	48.8	VH	.8	8	VL
29-1081	Podiatrists ^{2,3}	13	15	2	VL	15.0	H	44.4	1	VL
29-1111	Registered nurses	2,284	2,908	623	VH	27.3	VH	1.2	236	H
29-1120	Therapists	450	592	142	-	31.7	-	4.4	57	-
29-1121	Audiologists ^{2,3}	11	14	3	VL	29.0	VH	7.1	1	VL
29-1122	Occupational therapists ²	82	110	29	L	35.2	VH	4.0	11	VL
29-1123	Physical therapists ²	137	185	48	L	35.3	VH	5.7	18	VL
29-1124	Radiation therapists ^{2,4}	14	18	4	VL	31.6	VH	.0	2	VL

See footnotes at end of table.

Table III-1. Occupational employment and job openings data, 2002–12, and worker characteristics, 2002—Continued

(Numbers in thousands)

Annual average job openings due to growth and net replacement needs, 2002–12		2002 median annual earnings		Unemployment rate	Percent part-time	Most significant source of postsecondary education or training ⁹	Educational attainment cluster ¹¹	Percent of workers aged 25 to 44, by educational attainment			2002 national employment matrix occupation code
		Dollars	Rank					High school or less	Some college	College or higher	
Number	Rank										
6	–	–	–	–	–	–	–	–	–	–	27-2020
1	VL	45,320	VH	H	VH	Long-term on-the-job	SC/C	14.8	25.5	59.7	27-2021
5	VL	27,880	H	H	VH	Long-term on-the-job	SC/C	14.8	25.5	59.7	27-2022
0	VL	20,540	L	H	VH	Long-term on-the-job	SC/C	16.3	22.9	60.8	27-2023 ³
3	–	–	–	–	–	–	–	–	–	–	27-2030
1	VL	21,100	L	H	VH	Long-term on-the-job	HS/SC	57.5	33.5	9.0	27-2031 ^{2,4}
1	VL	29,470	H	H	VH	Work experience in a related occupation	HS/SC	57.5	33.5	9.0	27-2032 ^{2,4}
8	–	–	–	–	–	–	–	–	–	–	27-2040
2	VL	31,310	H	H	VH	Bachelor's plus experience ¹⁰	HS/SC/C	21.0	26.1	52.9	27-2041
6	VL	36,290	H	H	VH	Long-term on-the-job	HS/SC/C	21.0	26.1	52.9	27-2042
2	VL	33,740	H	H	H	Long-term on-the-job	HS/SC/C	34.4	25.4	40.2	27-2099 ²
26	–	–	–	–	–	–	–	–	–	–	27-3000
2	VL	20,620	L	L	VH	Long-term on-the-job	HS/SC/C	45.3	31.6	23.0	27-3010
2	VL	30,510	H	L	L	Bachelor's plus experience ¹⁰	C	6.6	6.5	86.9	27-3020
7	L	41,710	H	H	L	Bachelor's degree	C	7.8	14.3	77.8	27-3031
12	–	–	–	–	–	–	–	–	–	–	27-3040
5	VL	41,170	H	L	L	Bachelor's degree	C	5.6	13.1	81.3	27-3041
3	VL	50,580	VH	H	VL	Bachelor's degree	SC/C	5.3	25.3	69.4	27-3042
5	VL	42,790	VH	H	H	Bachelor's degree	C	3.0	13.1	83.8	27-3043
3	–	–	–	–	–	–	–	–	–	–	27-3090
1	VL	32,590	H	H	VH	Long-term on-the-job	SC/C	16.4	30.9	52.8	27-3091 ^{2,3}
2	VL	38,680	H	H	VH	Long-term on-the-job	SC/C	13.8	32.5	53.7	27-3099 ²
11	–	–	–	–	–	–	–	–	–	–	27-4000
4	–	–	–	–	–	–	–	–	–	–	27-4010
2	VL	31,110	H	L	L	Long-term on-the-job	HS/SC/C	22.7	40.9	36.4	27-4011
1	VL	27,760	H	L	L	Associate degree	HS/SC/C	22.7	40.9	36.4	27-4012
0	VL	31,530	H	L	L	Moderate-term on-the-job	HS/SC/C	22.7	40.9	36.4	27-4013 ⁵
1	VL	36,970	H	L	L	Postsecondary vocational award	HS/SC/C	25.0	41.7	33.3	27-4014 ³
4	VL	24,040	L	H	H	Long-term on-the-job	SC/C	19.4	27.4	53.1	27-4021
2	–	–	–	–	–	–	–	–	–	–	27-4030
1	VL	32,720	H	VH	H	Moderate-term on-the-job	SC/C	14.5	28.2	57.3	27-4031 ³
1	VL	38,270	H	VH	H	Bachelor's degree	SC/C	15.0	34.9	50.1	27-4032 ⁴
1	VL	34,680	H	VH	VH	Moderate-term on-the-job	SC/C	19.0	31.9	49.1	27-4099 ⁸
296	–	–	–	–	–	–	–	–	–	–	29-0000
185	–	–	–	–	–	–	–	–	–	–	29-1000
2	VL	65,330	VH	VL	H	First professional degree	C	2.0	.2	97.9	29-1011 ²
3	VL	123,210	VH	VL	H	First professional degree	C	1.0	3.5	95.5	29-1020 ²
2	VL	41,170	H	VL	H	Bachelor's degree	HS/SC/C	28.9	13.6	57.5	29-1031
1	VL	86,090	VH	VL	H	First professional degree	C	8.4	8.0	83.6	29-1041 ²
11	L	77,050	VH	VL	H	First professional degree	C	1.3	3.8	94.8	29-1051 ²
19	L	145,600	VH	VL	L	First professional degree	C	.8	2.3	96.9	29-1060
4	VL	64,670	VH	VL	H	Bachelor's degree	SC/C	5.1	27.5	67.4	29-1071 ²
1	VL	94,870	VH	VL	H	First professional degree	C	.6	.7	98.7	29-1081 ^{2,3}
110	VH	48,090	VH	VL	H	Associate degree	SC/C	1.8	40.1	58.1	29-1111
23	–	–	–	–	–	–	–	–	–	–	29-1120
1	VL	48,400	VH	VL	H	Master's degree	C	2.5	.3	97.1	29-1121 ^{2,3}
4	VL	51,990	VH	VL	VH	Bachelor's degree	C	.1	13.8	86.1	29-1122 ²
6	VL	57,330	VH	VL	H	Master's degree	C	2.7	5.8	91.4	29-1123 ²
1	VL	50,640	VH	VL	L	Associate degree	SC/C	1.8	57.3	41.0	29-1124 ^{2,4}

See footnotes at end of table.

Table III-1. Occupational employment and job openings data, 2002-12, and worker characteristics, 2002-Continued

(Numbers in thousands)

2002 national employment matrix occupation		Employment		Employment change, 2002-12				Percent self-employed, 2002	Annual average job openings due to growth and total replacement needs, 2002-12	
		2002	2012	Numeric		Percent			Number	Rank
				Number	Rank	Number	Rank			
29-1125	Recreational therapists ²	27	29	2	VL	9.1	L	1.0	3	VL
29-1126	Respiratory therapists ²	86	116	30	L	34.8	VH	.0	11	VL
29-1127	Speech-language pathologists ²	94	120	26	L	27.2	VH	8.2	11	VL
29-1131	Veterinarians ²	58	72	14	VL	25.1	VH	27.7	4	VL
29-1198	All other health diagnosing and treating practitioners ²	107	134	26	L	24.5	VH	14.6	11	VL
29-2000	Health technologists and technicians	2,263	2,857	593	-	26.2	-	.7	373	-
29-2010	Clinical laboratory technologists and technicians	297	355	58	-	19.4	-	1.6	45	-
29-2011	Medical and clinical laboratory technologists	150	179	29	L	19.3	H	1.6	23	VL
29-2012	Medical and clinical laboratory technicians	147	176	29	L	19.4	H	1.6	22	VL
29-2021	Dental hygienists	148	212	64	L	43.1	VH	.7	10	VL
29-2030	Diagnostic related technologists and technicians	271	338	67	-	24.8	-	.2	36	-
29-2031	Cardiovascular technologists and technicians	43	58	15	VL	33.5	VH	.2	6	VL
29-2032	Diagnostic medical sonographers	37	45	9	VL	24.0	VH	.2	5	VL
29-2033	Nuclear medicine technologists ³	17	21	4	VL	23.6	VH	.2	2	VL
29-2034	Radiologic technologists and technicians	174	214	40	L	23.0	VH	.2	23	VL
29-2041	Emergency medical technicians and paramedics	179	238	59	L	33.1	VH	.8	36	L
29-2050	Health diagnosing and treating practitioner support technicians	451	574	123	-	27.2	-	.0	92	-
29-2051	Dietetic technicians ²	29	35	6	VL	20.2	H	.0	6	VL
29-2052	Pharmacy technicians ²	211	271	61	L	28.8	VH	.0	44	L
29-2053	Psychiatric technicians ²	60	63	4	VL	5.9	VL	.0	10	VL
29-2054	Respiratory therapy technicians ²	26	35	9	VL	34.2	VH	.0	6	VL
29-2055	Surgical technologists ²	72	92	20	VL	27.9	VH	.0	15	VL
29-2056	Veterinary technologists and technicians ²	53	76	23	L	44.1	VH	.0	12	VL
29-2061	Licensed practical and licensed vocational nurses	702	844	142	H	20.2	H	.6	115	L
29-2071	Medical records and health information technicians	147	216	69	L	46.8	VH	1.1	28	VL
29-2081	Opticians, dispensing ²	63	75	11	VL	18.2	H	2.8	11	VL
29-2090	Miscellaneous health technologists and technicians	5	6	1	-	18.9	-	2.1	1	-
29-2091	Orthotists and prosthetists ⁵	5	6	1	VL	18.9	H	2.1	1	VL
29-9000	Other healthcare practitioners and technical occupations	56	65	10	-	17.4	-	1.8	10	-
29-9010	Occupational health and safety specialists and technicians ⁵	41	47	5	VL	13.2	L	2.4	7	VL
29-9090	Miscellaneous health practitioners and technical workers	14	19	4	-	29.9	-	.1	3	-
29-9091	Athletic trainers ⁵	14	19	4	VL	29.9	VH	.1	3	VL
29-9199	All other health practitioners and technical workers	190	241	52	L	27.2	VH	1.8	34	VL
31-3900	Service occupations	26,569	31,905	5,336	-	20.1	-	7.5	7,204	-
31-0000	Healthcare support occupations	3,310	4,452	1,143	-	34.5	-	3.5	795	-
31-1000	Nursing, psychiatric, and home health aides	2,014	2,645	630	-	31.3	-	1.6	517	-
31-1011	Home health aides	580	859	279	VH	48.1	VH	1.6	168	H
31-1012	Nursing aides, orderlies, and attendants	1,375	1,718	343	VH	24.9	VH	1.6	336	VH
31-1013	Psychiatric aides	59	68	9	VL	14.5	L	1.7	13	VL
31-2000	Occupational and physical therapist assistants and aides	114	164	50	-	44.2	-	1.0	26	-
31-2010	Occupational therapist assistants and aides	27	38	11	-	40.2	-	2.9	5	-
31-2011	Occupational therapist assistants ^{2,8}	18	26	7	VL	39.2	VH	2.9	3	VL
31-2012	Occupational therapist aides ^{2,8}	8	12	4	VL	42.6	VH	2.9	1	VL

See footnotes at end of table.

Table III-1. Occupational employment and job openings data, 2002-12, and worker characteristics, 2002-Continued

(Numbers in thousands)

Annual average job openings due to growth and net replacement needs, 2002-12		2002 median annual earnings		Unemployment rate	Percent part-time	Most significant source of postsecondary education or training ⁹	Educational attainment cluster ¹¹	Percent of workers aged 25 to 44, by educational attainment			2002 national employment matrix occupation code
		Dollars	Rank					High school or less	Some college	College or higher	
Number	Rank										
1	VL	30,540	H	VL	VH	Bachelor's degree	SC/C	12.5	22.3	65.2	29-1125 ²
6	VL	40,220	H	VL	H	Associate degree	SC/C	4.8	67.6	27.6	29-1126 ²
5	VL	49,450	VH	VL	VH	Master's degree	C	1.7	1.4	97.0	29-1127 ²
3	VL	63,090	VH	VL	L	First professional degree	C	-	1.2	98.8	29-1131 ²
5	VL	52,430	VH	VL	H	Bachelor's degree	C	7.3	9.4	83.3	29-1198 ²
100	-	-	-	-	-	-	-	-	-	-	29-2000
14	-	-	-	-	-	-	-	-	-	-	29-2010
7	VL	42,910	VH	VL	H	Bachelor's degree	SC/C	14.8	35.5	49.7	29-2011
7	VL	29,040	H	VL	H	Associate degree	SC/C	14.8	35.5	49.7	29-2012
8	L	55,320	VH	VL	VH	Associate degree	SC/C	5.3	62.6	32.1	29-2021
12	-	-	-	-	-	-	-	-	-	-	29-2030
2	VL	36,430	H	VL	H	Associate degree	SC/C	10.6	65.8	23.6	29-2031
2	VL	48,660	VH	VL	H	Associate degree	SC/C	10.6	65.8	23.6	29-2032
1	VL	48,750	VH	VL	H	Associate degree	SC/C	12.1	66.6	21.3	29-2033 ³
7	VL	38,970	H	VL	H	Associate degree	SC/C	10.6	65.8	23.6	29-2034
8	L	24,030	L	VL	L	Postsecondary vocational award	HS/SC	24.4	62.9	12.7	29-2041
18	-	-	-	-	-	-	-	-	-	-	29-2050
1	VL	22,490	L	VL	H	Moderate-term on-the-job	HS/SC	33.7	54.0	12.3	29-2051 ²
9	L	22,250	L	VL	H	Moderate-term on-the-job	HS/SC	33.7	54.0	12.3	29-2052 ²
1	VL	25,710	L	VL	H	Moderate-term on-the-job	HS/SC	33.7	54.0	12.3	29-2053 ²
1	VL	34,130	H	VL	H	Postsecondary vocational award	HS/SC	33.7	54.0	12.3	29-2054 ²
3	VL	31,210	H	VL	H	Postsecondary vocational award	HS/SC	33.7	54.0	12.3	29-2055 ²
3	VL	22,950	L	VL	H	Associate degree	HS/SC	33.7	54.0	12.3	29-2056 ²
29	H	31,440	H	L	H	Postsecondary vocational award	HS/SC	23.2	71.7	5.1	29-2061
9	L	23,890	L	H	H	Associate degree	HS/SC	35.5	48.1	16.4	29-2071
2	VL	25,600	L	VL	H	Long-term on-the-job	HS/SC	22.2	60.1	17.7	29-2081 ²
0	-	-	-	-	-	-	-	-	-	-	29-2090
0	VL	46,260	VH	VL	L	Bachelor's degree	HS/SC/C	31.0	47.0	22.0	29-2091 ⁵
2	-	-	-	-	-	-	-	-	-	-	29-9000
1	VL	46,010	VH	VL	L	Bachelor's degree	C	9.2	17.5	73.3	29-9010 ⁵
1	-	-	-	-	-	-	-	-	-	-	29-9090
1	VL	33,820	H	VL	L	Bachelor's degree	C	9.2	17.5	73.3	29-9091 ⁵
9	L	31,690	H	VL	L	Postsecondary vocational award	HS/SC/C	31.0	47.0	22.0	29-9199
1,296	-	-	-	-	-	-	-	-	-	-	31-3900
167	-	-	-	-	-	-	-	-	-	-	31-0000
89	-	-	-	-	-	-	-	-	-	-	31-1000
35	H	18,090	VL	H	H	Short-term on-the-job	HS/SC	62.7	31.4	5.9	31-1011
52	H	19,960	L	H	H	Short-term on-the-job	HS/SC	62.7	31.4	5.9	31-1012
2	VL	22,970	L	H	H	Short-term on-the-job	HS/SC	62.7	31.4	5.9	31-1013
7	-	-	-	-	-	-	-	-	-	-	31-2000
1	-	-	-	-	-	-	-	-	-	-	31-2010
1	VL	36,660	H	VL	H	Associate degree	SC	19.9	63.0	17.1	31-2011 ^{2,8}
0	VL	22,040	L	VL	H	Short-term on-the-job	SC	19.9	63.0	17.1	31-2012 ^{2,8}

See footnotes at end of table.

Table III-1. Occupational employment and job openings data, 2002-12, and worker characteristics, 2002-Continued

(Numbers in thousands)

2002 national employment matrix occupation		Employment		Employment change, 2002-12				Per- cent self- em- ployed, 2002	Annual average job openings due to growth and total replacement needs, 2002-12	
		2002	2012	Numeric		Percent			Number	Rank
				Number	Rank	Number	Rank			
		Number	Rank							
31-2020	Physical therapist assistants and aides	87	127	40	-	45.4	-	.4	21	-
31-2021	Physical therapist assistants ²	50	73	22	L	44.6	VH	.4	12	VL
31-2022	Physical therapist aides ²	37	54	17	VL	46.4	VH	.4	9	VL
31-9000	Other healthcare support occupations	1,182	1,644	462	-	39.1	-	7.1	252	-
31-9011	Massage therapists	92	117	25	L	27.0	VH	70.1	27	VL
31-9090	Miscellaneous healthcare support occupations	1,090	1,527	437	-	40.1	-	1.8	225	-
31-9091	Dental assistants	266	379	113	H	42.5	VH	.0	39	L
31-9092	Medical assistants	365	579	215	H	58.9	VH	2.3	95	L
31-9093	Medical equipment preparers	36	43	7	VL	18.1	H	2.2	7	VL
31-9094	Medical transcriptionists	101	124	23	L	22.6	VH	2.3	20	VL
31-9095	Pharmacy aides	60	71	11	VL	17.6	H	2.3	11	VL
31-9096	Veterinary assistants and laboratory animal caretakers	63	79	16	VL	26.2	VH	2.1	13	VL
31-9099	All other healthcare support workers	198	251	53	L	26.6	VH	2.5	40	L
33-0000	Protective service occupations	3,116	3,885	769	-	24.7	-	.9	569	-
33-1000	First-line supervisors/managers, protective service workers	266	315	49	-	18.4	-	.7	35	-
33-1010	First-line supervisors/managers, law enforcement workers	147	171	24	-	16.1	-	.0	19	-
33-1011	First-line supervisors/managers of correctional officers	33	40	6	VL	19.0	H	.0	4	VL
33-1012	First-line supervisors/managers of police and detectives	114	131	17	VL	15.2	H	.0	15	VL
33-1021	First-line supervisors/managers of fire fighting and prevention workers ²	63	74	12	VL	18.7	H	.0	8	VL
33-1099	All other first-line supervisors/managers, protective service workers	56	70	13	VL	23.9	VH	3.5	8	VL
33-2000	Fire fighting and prevention workers	296	356	60	-	20.3	-	.0	33	-
33-2011	Fire fighters	282	340	58	L	20.7	H	.0	31	VL
33-2020	Fire inspectors ³	14	16	2	VL	11.6	L	.0	1	VL
33-3000	Law enforcement workers	1,179	1,460	281	-	23.9	-	.0	144	-
33-3010	Bailiffs, correctional officers, and jailers	442	547	105	-	23.7	-	.0	55	-
33-3011	Bailiffs ³	15	16	1	VL	9.5	L	.0	2	VL
33-3012	Correctional officers and jailers	427	531	103	H	24.2	VH	.0	54	L
33-3021	Detectives and criminal investigators	94	115	21	L	22.4	VH	.0	12	VL
33-3031	Fish and game wardens ^{2,8}	8	8	1	VL	7.1	VL	.0	1	VL
33-3041	Parking enforcement workers ^{2,8}	11	12	1	VL	11.5	L	.0	1	VL
33-3050	Police officers	625	779	154	-	24.6	-	.0	74	-
33-3051	Police and sheriff's patrol officers	619	772	153	H	24.7	VH	.0	73	L
33-3052	Transit and railroad police ⁸	6	7	1	VL	15.9	H	.0	1	VL
33-9000	Other protective service workers	1,374	1,753	379	-	27.6	-	1.9	357	-
33-9011	Animal control workers ⁸	11	12	1	VL	12.6	L	1.6	2	VL
33-9021	Private detectives and investigators	48	60	12	VL	25.3	VH	34.7	10	VL
33-9030	Security guards and gaming surveillance officers	1,004	1,324	319	-	31.8	-	.9	261	-
33-9031	Gaming surveillance officers and gaming investigators ⁵	9	11	2	VL	24.6	VH	.9	2	VL
33-9032	Security guards	995	1,313	317	VH	31.8	VH	.9	259	H
33-9091	Crossing guards ²	74	86	12	VL	16.5	H	.0	21	VL
33-9095	All other protective service workers	237	271	34	L	14.3	L	.0	64	L
35-0000	Food preparation and serving related occupations ...	10,200	11,807	1,607	-	15.8	-	1.0	3,498	-
35-1000	Supervisors, food preparation and serving workers	824	952	128	-	15.6	-	4.9	201	-
35-1011	Chefs and head cooks	132	153	21	L	15.8	H	7.4	35	L
35-1012	First-line supervisors/managers of food preparation and serving workers	692	800	107	H	15.5	H	4.5	166	H
35-2000	Cooks and food preparation workers	2,836	3,182	346	-	12.2	-	1.2	879	-

See footnotes at end of table.

Table III-1. Occupational employment and job openings data, 2002-12, and worker characteristics, 2002-Continued

(Numbers in thousands)

Annual average job openings due to growth and net replacement needs, 2002-12		2002 median annual earnings		Unemployment rate	Percent part-time	Most significant source of postsecondary education or training ⁹	Educational attainment cluster ¹¹	Percent of workers aged 25 to 44, by educational attainment			2002 national employment matrix occupation code	
		Dollars	Rank					High school or less	Some college	College or higher		
Number	Rank											
5	-	-	-	-	-	-	-	-	-	-	-	31-2020
3	VL	36,080	H	VL	H	Associate degree	SC/C	16.0	61.5	22.5	-	31-2021 ²
2	VL	20,670	L	VL	H	Short-term on-the-job	SC/C	16.0	61.5	22.5	-	31-2022 ²
71	-	-	-	-	-	-	-	-	-	-	-	31-9000
4	VL	28,610	H	L	VH	Postsecondary vocational award	SC/C	17.7	47.0	35.3	-	31-9011
66	-	-	-	-	-	-	-	-	-	-	-	31-9090
19	L	27,240	L	VL	VH	Moderate-term on-the-job	HS/SC	34.2	57.4	8.4	-	31-9091
28	H	23,940	L	L	H	Moderate-term on-the-job	HS/SC	36.6	49.8	13.5	-	31-9092
1	VL	22,960	L	L	H	Short-term on-the-job	HS/SC	36.6	49.8	13.5	-	31-9093
4	VL	27,140	L	L	H	Postsecondary vocational award	HS/SC	36.6	49.8	13.5	-	31-9094
2	VL	18,430	VL	L	H	Short-term on-the-job	HS/SC	36.6	49.8	13.5	-	31-9095
3	VL	17,790	VL	L	H	Short-term on-the-job	HS/SC	36.6	49.8	13.5	-	31-9096
9	L	23,690	L	L	H	Short-term on-the-job	HS/SC	36.6	49.8	13.5	-	31-9099
165	-	-	-	-	-	-	-	-	-	-	-	33-0000
14	-	-	-	-	-	-	-	-	-	-	-	33-1000
7	-	-	-	-	-	-	-	-	-	-	-	33-1010
2	VL	44,940	VH	VL	VL	Work experience in a related occupation	HS/SC/C	27.7	46.6	25.8	-	33-1011
5	VL	61,010	VH	VL	VL	Work experience in a related occupation	SC/C	17.2	54.3	28.4	-	33-1012
4	VL	55,450	VH	VL	VL	Work experience in a related occupation	SC/C	17.8	57.2	25.0	-	33-1021 ²
3	VL	34,320	H	VL	VL	Work experience in a related occupation	HS/SC/C	31.1	46.2	22.8	-	33-1099
15	-	-	-	-	-	-	-	-	-	-	-	33-2000
14	L	36,230	H	VL	VL	Long-term on-the-job	HS/SC	25.9	57.8	16.3	-	33-2011
1	VL	44,250	VH	H	L	Work experience in a related occupation	HS/SC	44.7	38.9	16.4	-	33-2020 ³
56	-	-	-	-	-	-	-	-	-	-	-	33-3000
20	-	-	-	-	-	-	-	-	-	-	-	33-3010
0	VL	32,710	H	VL	VL	Moderate-term on-the-job	HS/SC	44.8	43.9	11.3	-	33-3011 ³
19	L	32,670	H	VL	VL	Moderate-term on-the-job	HS/SC	43.1	46.9	10.0	-	33-3012
5	VL	51,410	VH	VL	VL	Work experience in a related occupation	SC/C	9.4	35.0	55.6	-	33-3021
0	VL	41,010	H	VL	VL	Long-term on-the-job	HS/SC/C	28.7	47.3	24.0	-	33-3031 ^{2,8}
0	VL	28,110	H	VL	L	Short-term on-the-job	HS/SC/C	28.7	47.3	24.0	-	33-3041 ^{2,8}
32	-	-	-	-	-	-	-	-	-	-	-	33-3050
31	H	42,270	VH	VL	VL	Long-term on-the-job	SC/C	18.8	53.4	27.8	-	33-3051
0	VL	43,710	VH	VL	VL	Long-term on-the-job	HS/SC/C	21.0	52.1	26.9	-	33-3052 ⁸
80	-	-	-	-	-	-	-	-	-	-	-	33-9000
1	VL	24,780	L	VL	VL	Moderate-term on-the-job	HS/SC	53.7	32.6	13.6	-	33-9011 ⁸
2	VL	29,300	H	L	L	Work experience in a related occupation	SC/C	18.4	35.9	45.8	-	33-9021
54	-	-	-	-	-	-	-	-	-	-	-	33-9030
0	VL	23,110	L	H	H	Moderate-term on-the-job	HS/SC	52.5	34.7	12.8	-	33-9031 ⁵
53	H	19,140	VL	H	H	Short-term on-the-job	HS/SC	52.5	34.7	12.8	-	33-9032
4	VL	18,680	VL	VH	VH	Short-term on-the-job	HS/SC	76.0	23.3	.6	-	33-9091 ²
20	L	23,410	L	VH	VH	Short-term on-the-job	HS/SC/C	39.9	37.0	23.1	-	33-9095
566	-	-	-	-	-	-	-	-	-	-	-	35-0000
33	-	-	-	-	-	-	-	-	-	-	-	35-1000
6	VL	27,940	H	H	L	Work experience in a related occupation	HS/SC	47.7	38.0	14.3	-	35-1011
27	H	24,390	L	H	L	Work experience in a related occupation	HS/SC	56.2	30.3	13.5	-	35-1012
126	-	-	-	-	-	-	-	-	-	-	-	35-2000

See footnotes at end of table.

Table III-1. Occupational employment and job openings data, 2002–12, and worker characteristics, 2002—Continued

(Numbers in thousands)

2002 national employment matrix occupation		Employment		Employment change, 2002–12				Percent self-employed, 2002	Annual average job openings due to growth and total replacement needs, 2002–12	
		2002	2012	Numeric		Percent			Number	Rank
				Number	Rank	Number	Rank			
35-2010	Cooks	1,986	2,160	174	–	8.8	–	1.4	587	–
35-2011	Cooks, fast food	588	617	29	L	5.0	VL	1.5	169	H
35-2012	Cooks, institution and cafeteria	436	445	9	VL	2.1	VL	1.5	122	H
35-2013	Cooks, private household ^{1,5}	8	8	0	VL	-5.4	VL	.0	2	VL
35-2014	Cooks, restaurant	727	843	116	H	15.9	H	1.3	227	H
35-2015	Cooks, short order	227	247	20	VL	9.0	L	1.4	67	L
35-2021	Food preparation workers	850	1,022	172	H	20.2	H	.6	292	VH
35-3000	Food and beverage serving workers	5,211	6,171	960	–	18.4	–	.4	1,953	–
35-3011	Bartenders	463	503	40	L	8.6	VL	1.9	104	L
35-3020	Fast food and counter workers	2,457	2,989	532	–	21.7	–	.2	1,018	–
35-3021	Combined food preparation and serving workers, including fast food ²	1,990	2,444	454	VH	22.8	VH	.1	813	VH
35-3022	Counter attendants, cafeteria, food concession, and coffee shop	467	545	78	L	16.7	H	.9	205	H
35-3031	Waiters and waitresses	2,097	2,464	367	VH	17.5	H	.3	781	VH
35-3041	Food servers, nonrestaurant	195	215	20	VL	10.4	L	.5	49	L
35-9000	Other food preparation and serving related workers	1,328	1,502	173	–	13.0	–	.3	465	–
35-9011	Dining room and cafeteria attendants and bartender helpers	409	470	61	L	14.9	H	.1	153	H
35-9021	Dishwashers	505	551	46	L	9.0	L	.1	174	H
35-9031	Hosts and hostesses, restaurant, lounge, and coffee shop	298	347	49	L	16.4	H	.6	103	L
35-9098	All other food preparation and serving related workers	117	134	18	VL	15.2	H	1.5	36	L
37-0000	Building and grounds cleaning and maintenance occupations	5,485	6,386	901	–	16.4	–	11.3	1,186	–
37-1000	Supervisors, building and grounds cleaning and maintenance workers	380	449	70	–	18.4	–	17.0	50	–
37-1011	First-line supervisors/managers of housekeeping and janitorial workers	230	267	37	L	16.2	H	5.6	30	VL
37-1012	First-line supervisors/managers of landscaping, lawn service, and groundskeeping workers	150	182	32	L	21.6	H	34.7	19	VL
37-2000	Building cleaning and pest control workers	3,820	4,381	561	–	14.7	–	6.4	871	–
37-2010	Building cleaning workers	3,759	4,309	550	–	14.6	–	6.4	859	–
37-2011	Janitors and cleaners, except maids and housekeeping cleaners	2,267	2,681	414	VH	18.3	H	4.7	492	VH
37-2012	Maids and housekeeping cleaners	1,492	1,629	137	H	9.2	L	9.0	367	VH
37-2021	Pest control workers ²	62	72	10	VL	17.0	H	9.1	12	VL
37-3000	Grounds maintenance workers	1,285	1,555	270	–	21.0	–	23.9	265	–
37-3010	Grounds maintenance workers	1,160	1,410	250	–	21.6	–	23.5	240	–
37-3011	Landscaping and groundskeeping workers ..	1,074	1,311	237	H	22.0	VH	23.3	223	H
37-3012	Pesticide handlers, sprayers, and applicators, vegetation	27	30	3	VL	9.7	L	26.5	5	VL
37-3013	Tree trimmers and pruners	59	69	11	VL	18.6	H	25.6	12	VL
37-9099	All other building and grounds cleaning and maintenance workers	125	145	20	VL	16.1	H	27.6	25	VL
39-0000	Personal care and service occupations	4,458	5,375	917	–	20.6	–	25.6	1,156	–
39-1000	Supervisors, personal care and service workers ..	276	305	29	–	10.7	–	45.8	37	–
39-1010	First-line supervisors/managers of gaming workers	60	69	9	–	15.4	–	32.9	10	–
39-1011	Gaming supervisors	39	45	6	VL	15.7	H	33.8	6	VL
39-1012	Slot key persons	21	24	3	VL	14.8	H	31.2	3	VL
39-1021	First-line supervisors/managers of personal service workers	216	236	20	VL	9.4	L	49.4	27	VL
39-2000	Animal care and service workers	151	183	32	–	20.8	–	32.9	40	–
39-2011	Animal trainers	26	30	4	VL	14.3	L	60.0	5	VL

See footnotes at end of table.

Table III-1. Occupational employment and job openings data, 2002-12, and worker characteristics, 2002-Continued

(Numbers in thousands)

Annual average job openings due to growth and net replacement needs, 2002-12		2002 median annual earnings		Unemployment rate	Percent part-time	Most significant source of postsecondary education or training ⁹	Educational attainment cluster ¹¹	Percent of workers aged 25 to 44, by educational attainment			2002 national employment matrix occupation code
		Dollars	Rank					High school or less	Some college	College or higher	
Number	Rank										
79	-	-	-	-	-	-	-	-	-	-	35-2010
21	L	14,350	VL	VH	VH	Short-term on-the-job	HS	78.3	16.4	5.3	35-2011
14	L	18,140	VL	VH	VH	Moderate-term on-the-job	HS	78.3	16.4	5.3	35-2012
0	VL	16,692	VL	VH	VH	Long-term on-the-job	HS	78.3	16.4	5.3	35-2013 ^{1,5}
34	H	19,050	VL	VH	VH	Long-term on-the-job	HS	78.3	16.4	5.3	35-2014
9	L	16,270	VL	VH	VH	Short-term on-the-job	HS	78.3	16.4	5.3	35-2015
47	H	16,330	VL	VH	VH	Short-term on-the-job	HS	76.9	17.7	5.4	35-2021
345	-	-	-	-	-	-	-	-	-	-	35-3000
22	L	15,000	VL	H	VH	Short-term on-the-job	HS/SC	49.2	37.9	12.9	35-3011
170	-	-	-	-	-	-	-	-	-	-	35-3020
132	VH	14,500	VL	VH	VH	Short-term on-the-job	HS	76.7	18.1	5.3	35-3021 ²
38	H	15,230	VL	VH	VH	Short-term on-the-job	HS/SC	72.0	20.1	7.9	35-3022
145	VH	14,150	VL	VH	VH	Short-term on-the-job	HS/SC	55.2	32.3	12.5	35-3031
9	L	15,640	VL	H	VH	Short-term on-the-job	HS/SC	70.2	24.1	5.6	35-3041
61	-	-	-	-	-	-	-	-	-	-	35-9000
20	L	14,530	VL	VH	VH	Short-term on-the-job	HS	78.4	14.6	7.0	35-9011
22	L	14,860	VL	VH	VH	Short-term on-the-job	HS	89.6	7.4	3.0	35-9021
14	L	15,310	VL	VH	VH	Short-term on-the-job	HS/SC	48.1	32.3	19.6	35-9031
5	VL	16,320	VL	VH	VH	Short-term on-the-job	HS	78.3	16.4	5.3	35-9098
200	-	-	-	-	-	-	-	-	-	-	37-0000
14	-	-	-	-	-	-	-	-	-	-	37-1000
9	L	28,140	H	L	L	Work experience in a related occupation	HS/SC	61.7	29.6	8.6	37-1011
5	VL	33,050	H	VL	VL	Work experience in a related occupation	HS/SC	50.7	29.5	19.8	37-1012
131	-	-	-	-	-	-	-	-	-	-	37-2000
129	-	-	-	-	-	-	-	-	-	-	37-2010
84	VH	18,250	VL	H	H	Short-term on-the-job	HS	79.2	17.3	3.5	37-2011
45	H	16,440	VL	VH	VH	Short-term on-the-job	HS	81.5	13.9	4.6	37-2012
2	VL	24,760	L	H	VL	Moderate-term on-the-job	HS/SC	60.2	34.4	5.4	37-2021 ²
55	-	-	-	-	-	-	-	-	-	-	37-3000
50	-	-	-	-	-	-	-	-	-	-	37-3010
47	H	19,770	L	VH	H	Short-term on-the-job	HS	76.5	17.7	5.8	37-3011
1	VL	24,830	L	VH	H	Moderate-term on-the-job	HS	76.5	17.7	5.8	37-3012
2	VL	25,110	L	VH	H	Short-term on-the-job	HS	76.5	17.7	5.8	37-3013
5	VL	20,990	L	VH	H	Short-term on-the-job	HS	79.2	17.3	3.5	37-9099
198	-	-	-	-	-	-	-	-	-	-	39-0000
10	-	-	-	-	-	-	-	-	-	-	39-1000
2	-	-	-	-	-	-	-	-	-	-	39-1010
1	VL	39,290	H	L	H	Work experience in a related occupation	HS/SC/C	35.4	31.5	33.1	39-1011
1	VL	22,870	L	L	H	Postsecondary vocational award	HS/SC/C	35.4	31.5	33.1	39-1012
7	L	28,960	H	VL	H	Work experience in a related occupation	HS/SC	45.6	39.7	14.8	39-1021
7	-	-	-	-	-	-	-	-	-	-	39-2000
1	VL	22,950	L	H	H	Moderate-term on-the-job	HS/SC/C	47.5	28.3	24.2	39-2011

See footnotes at end of table.

Table III-1. Occupational employment and job openings data, 2002-12, and worker characteristics, 2002-Continued

(Numbers in thousands)

2002 national employment matrix occupation		Employment		Employment change, 2002-12				Percent self-employed, 2002	Annual average job openings due to growth and total replacement needs, 2002-12	
		2002	2012	Numeric		Percent			Number	Rank
				Number	Rank	Number	Rank			
39-2021	Nonfarm animal caretakers	125	153	28	L	22.2	VH	27.3	35	L
39-3000	Entertaining attendants and related workers	507	626	119	-	23.6	-	1.0	161	-
39-3010	Gaming services workers	92	115	23	-	24.7	-	2.4	35	-
39-3011	Gaming dealers	78	97	19	VL	24.7	VH	2.5	29	VL
39-3012	Gaming and sports book writers and runners ⁵	14	18	3	VL	24.4	VH	2.0	5	VL
39-3021	Motion picture projectionists ^{2,8}	9	9	0	VL	.4	VL	.0	1	VL
39-3031	Ushers, lobby attendants, and ticket takers ^{2,3} ..	105	121	16	VL	15.5	H	1.1	29	VL
39-3090	Miscellaneous entertainment attendants and related workers	261	333	72	-	27.6	-	.4	83	-
39-3091	Amusement and recreation attendants	234	299	65	L	27.8	VH	.4	75	L
39-3092	Costume attendants ⁵	4	5	1	VL	25.1	VH	.4	1	VL
39-3093	Locker room, coatroom, and dressing room attendants ⁴	23	29	6	VL	26.5	VH	.3	7	VL
39-3199	All other gaming service workers	40	49	9	VL	21.3	H	2.0	13	VL
39-4000	Funeral service workers	33	38	5	-	16.7	-	.0	4	-
39-4011	Embalmers ⁷	7	7	1	VL	8.3	VL	.0	1	VL
39-4021	Funeral attendants ⁷	26	31	5	VL	18.9	H	.0	4	VL
39-5000	Personal appearance workers	754	865	111	-	14.7	-	46.2	94	-
39-5010	Barbers and cosmetologists	651	741	90	-	13.8	-	47.2	80	-
39-5011	Barbers	66	70	4	VL	6.4	VL	72.6	7	VL
39-5012	Hairdressers, hairstylists, and cosmetologists	585	671	86	H	14.7	H	44.3	73	L
39-5090	Miscellaneous personal appearance workers ...	103	124	21	-	20.3	-	39.6	14	-
39-5091	Makeup artists, theatrical and performance ⁵	2	2	0	VL	18.2	H	50.6	0	VL
39-5092	Manicurists and pedicurists	51	63	12	VL	22.7	VH	39.7	7	VL
39-5093	Shampooers	25	29	4	VL	16.6	H	40.2	3	VL
39-5094	Skin care specialists	25	30	5	VL	19.4	H	38.2	3	VL
39-6000	Transportation, tourism, and lodging attendants ..	248	284	36	-	14.7	-	2.4	63	-
39-6010	Baggage porters, bellhops, and concierges	75	86	11	-	14.6	-	.3	21	-
39-6011	Baggage porters and bellhops ²	58	67	8	VL	14.4	L	.3	16	VL
39-6012	Concierges ^{2,3}	17	20	3	VL	15.3	H	.3	5	VL
39-6020	Tour and travel guides	43	47	4	-	9.3	-	13.3	11	-
39-6021	Tour guides and escorts ²	36	40	4	VL	11.0	L	13.2	10	VL
39-6022	Travel guides ^{2,5}	6	6	0	VL	-.3	VL	14.1	2	VL
39-6030	Transportation attendants	130	152	22	-	16.5	-	.0	31	-
39-6031	Flight attendants ²	104	121	17	VL	16.0	H	.0	25	VL
39-6032	Transportation attendants, except flight attendants and baggage porters ²	26	31	5	VL	18.9	H	.2	6	VL
39-9000	Other personal care and service workers	2,490	3,073	583	-	23.4	-	24.3	757	-
39-9011	Child care workers	1,211	1,353	142	H	11.7	L	43.4	429	VH
39-9021	Personal and home care aides	608	854	246	VH	40.5	VH	7.1	181	H
39-9030	Recreation and fitness workers	485	628	143	-	29.5	-	5.6	105	-
39-9031	Fitness trainers and aerobics instructors	183	264	81	H	44.4	VH	5.4	45	L
39-9032	Recreation workers	302	364	62	L	20.5	H	5.7	61	L
39-9041	Residential advisors	53	71	18	VL	33.6	VH	.7	14	VL
39-9099	Personal care and service workers, all other	134	168	35	L	25.9	VH	6.7	28	VL
41-0000	Sales and related occupations	15,260	17,231	1,971	-	12.9	-	11.9	3,624	-
41-1000	Supervisors, sales workers	2,395	2,599	204	-	8.5	-	35.9	336	-
41-1011	First-line supervisors/managers of retail sales workers	1,798	1,962	163	H	9.1	L	33.0	262	H
41-1012	First-line supervisors/managers of non-retail sales workers	597	637	41	L	6.8	VL	44.7	74	L
41-2000	Retail sales workers	8,224	9,392	1,167	-	14.2	-	2.7	2,594	-
41-2010	Cashiers	3,465	3,927	462	-	13.3	-	1.0	1,312	-
41-2011	Cashiers, except gaming	3,432	3,886	454	VH	13.2	L	1.0	1,299	VH

See footnotes at end of table.

Table III-1. Occupational employment and job openings data, 2002-12, and worker characteristics, 2002-Continued

(Numbers in thousands)

Annual average job openings due to growth and net replacement needs, 2002-12		2002 median annual earnings		Unemployment rate	Percent part-time	Most significant source of postsecondary education or training ⁹	Educational attainment cluster ¹¹	Percent of workers aged 25 to 44, by educational attainment			2002 national employment matrix occupation code
		Dollars	Rank					High school or less	Some college	College or higher	
Number	Rank										
6	VL	17,080	VL	H	VH	Short-term on-the-job	HS/SC	55.6	31.7	12.7	39-2021
30	-	-	-	-	-	-	-	-	-	-	39-3000
5	-	-	-	-	-	-	-	-	-	-	39-3010
4	VL	14,090	VL	H	H	Postsecondary vocational award	HS/SC	51.4	35.3	13.3	39-3011
1	VL	18,660	VL	H	H	Postsecondary vocational award	HS/SC	51.4	35.3	13.3	39-3012 ⁵
0	VL	16,580	VL	VH	H	Short-term on-the-job	HS/SC	56.4	33.4	10.2	39-3021 ^{2,8}
8	L	14,600	VL	VH	VH	Short-term on-the-job	HS/SC	49.8	30.9	19.3	39-3031 ^{2,3}
15	-	-	-	-	-	-	-	-	-	-	39-3090
13	L	14,920	VL	VH	VH	Short-term on-the-job	HS/SC	45.8	40.5	13.7	39-3091
0	VL	24,160	L	VH	VH	Short-term on-the-job	HS/SC	45.8	40.5	13.7	39-3092 ⁵
1	VL	16,930	VL	VH	VH	Short-term on-the-job	HS/SC	56.9	34.0	9.1	39-3093 ⁴
2	VL	17,970	VL	VH	VH	Moderate-term on-the-job	HS/SC	51.4	35.3	13.3	39-3199
1	-	-	-	-	-	-	-	-	-	-	39-4000
0	VL	34,240	H	L	VH	Postsecondary vocational award	HS/SC/C	37.1	42.3	20.6	39-4011 ⁷
1	VL	18,190	VL	L	VH	Short-term on-the-job	HS/SC/C	37.1	42.3	20.6	39-4021 ⁷
26	-	-	-	-	-	-	-	-	-	-	39-5000
22	-	-	-	-	-	-	-	-	-	-	39-5010
2	VL	19,550	VL	VL	H	Postsecondary vocational award	HS/SC	59.7	38.6	1.7	39-5011
20	L	18,960	VL	VL	VH	Postsecondary vocational award	HS/SC	55.7	40.2	4.1	39-5012
4	-	-	-	-	-	-	-	-	-	-	39-5090
0	VL	24,730	L	L	VH	Postsecondary vocational award	HS/SC	58.6	32.8	8.7	39-5091 ⁵
2	VL	17,330	VL	L	VH	Postsecondary vocational award	HS/SC	58.6	32.8	8.7	39-5092
1	VL	14,360	VL	L	VH	Short-term on-the-job	HS/SC	58.6	32.8	8.7	39-5093
1	VL	22,450	L	L	VH	Postsecondary vocational award	HS/SC	58.6	32.8	8.7	39-5094
8	-	-	-	-	-	-	-	-	-	-	39-6000
3	-	-	-	-	-	-	-	-	-	-	39-6010
2	VL	17,860	VL	H	H	Short-term on-the-job	HS/SC	44.5	45.8	9.6	39-6011 ²
1	VL	21,720	L	H	H	Moderate-term on-the-job	HS/SC	51.9	36.1	12.0	39-6012 ^{2,3}
2	-	-	-	-	-	-	-	-	-	-	39-6020
1	VL	18,500	VL	VH	VH	Moderate-term on-the-job	HS/SC/C	41.7	23.7	34.7	39-6021 ²
0	VL	26,110	L	VH	VH	Moderate-term on-the-job	HS/SC/C	41.7	23.7	34.7	39-6022 ^{2,5}
4	-	-	-	-	-	-	-	-	-	-	39-6030
3	VL	43,140	VH	H	VH	Long-term on-the-job	HS/SC/C	25.3	37.9	36.7	39-6031 ²
1	VL	18,720	VL	H	VH	Short-term on-the-job	HS/SC/C	25.3	37.9	36.7	39-6032 ²
116	-	-	-	-	-	-	-	-	-	-	39-9000
47	H	16,350	VL	H	VH	Short-term on-the-job	HS/SC	52.9	34.4	12.7	39-9011
34	H	16,250	VL	VH	VH	Short-term on-the-job	HS/SC	59.6	32.1	8.2	39-9021
25	-	-	-	-	-	-	-	-	-	-	39-9030
12	L	23,950	L	H	VH	Postsecondary vocational award	HS/SC/C	22.0	30.6	47.4	39-9031
13	L	18,060	VL	H	VH	Bachelor's degree	HS/SC/C	22.0	30.6	47.4	39-9032
3	VL	20,700	L	L	H	Moderate-term on-the-job	HS/SC/C	31.8	43.2	24.9	39-9041
6	VL	17,820	VL	VH	VH	Short-term on-the-job	HS/SC/C	40.1	38.9	21.0	39-9099
690	-	-	-	-	-	-	-	-	-	-	41-0000
64	-	-	-	-	-	-	-	-	-	-	41-1000
49	H	29,700	H	VL	L	Work experience in a related occupation	HS/SC/C	41.1	34.4	24.5	41-1011
15	L	53,020	VH	VL	VL	Work experience in a related occupation	HS/SC/C	34.9	28.7	36.4	41-1012
458	-	-	-	-	-	-	-	-	-	-	41-2000
215	-	-	-	-	-	-	-	-	-	-	41-2010
212	VH	15,420	VL	VH	VH	Short-term on-the-job	HS/SC	66.1	25.6	8.3	41-2011

See footnotes at end of table.

Table III-1. Occupational employment and job openings data, 2002-12, and worker characteristics, 2002-Continued

(Numbers in thousands)

2002 national employment matrix occupation		Employment		Employment change, 2002-12				Percent self-employed, 2002	Annual average job openings due to growth and total replacement needs, 2002-12	
		2002	2012	Numeric		Percent			Number	Rank
				Number	Rank	Number	Rank			
41-2012	Gaming change persons and booth cashiers ³ ..	33	41	8	VL	24.1	VH	1.0	14	VL
41-2020	Counter and rental clerks and parts salespersons	683	793	109	-	16.0	-	1.3	197	-
41-2021	Counter and rental clerks	436	550	114	H	26.2	VH	1.3	161	H
41-2022	Parts salespersons	248	243	-5	VL	-2.0	VL	1.5	36	L
41-2031	Retail salespersons	4,076	4,672	596	VH	14.6	H	4.3	1,084	VH
41-3000	Sales representatives, services	957	1,033	76	-	7.9	-	17.1	133	-
41-3011	Advertising sales agents	157	178	21	L	13.4	L	9.5	25	VL
41-3021	Insurance sales agents	381	413	32	L	8.4	VL	26.2	54	L
41-3031	Securities, commodities, and financial services sales agents	300	339	39	L	13.0	L	12.8	41	L
41-3041	Travel agents ²	118	102	-16	VL	-13.8	VL	9.2	13	VL
41-4000	Sales representatives, wholesale and manufacturing	1,857	2,213	356	-	19.2	-	4.6	220	-
41-4011	Sales representatives, wholesale and manufacturing, technical and scientific products ²	398	475	77	L	19.3	H	4.6	47	L
41-4012	Sales representatives, wholesale and manufacturing, except technical and scientific products ²	1,459	1,738	279	VH	19.2	H	4.6	173	H
41-9000	Other sales and related workers	1,827	1,994	167	-	9.2	-	26.9	341	-
41-9010	Models, demonstrators, and product promoters ...	179	210	30	-	16.9	-	42.3	43	-
41-9011	Demonstrators and product promoters	175	204	30	L	17.0	H	42.1	41	L
41-9012	Models ⁵	5	5	1	VL	14.5	L	49.1	1	VL
41-9020	Real estate brokers and sales agents	407	427	20	-	4.9	-	59.1	46	-
41-9021	Real estate brokers	99	101	2	VL	2.4	VL	59.1	11	VL
41-9022	Real estate sales agents	308	325	18	VL	5.7	VL	59.0	35	L
41-9031	Sales engineers ²	82	98	16	VL	19.9	H	.6	7	VL
41-9041	Telemarketers	428	406	-21	VL	-4.9	VL	1.0	88	L
41-9091	Door-to-door sales workers, news and street vendors, and related workers	155	137	-18	VL	-11.8	VL	82.8	37	L
41-9098	All other sales and related workers	577	717	140	H	24.3	VH	7.3	122	L
43-0000	Office and administrative support occupations	23,851	25,464	1,613	-	6.8	-	1.6	4,322	-
43-1000	Supervisors, office and administrative support workers	1,459	1,555	96	-	6.6	-	.9	144	-
43-1011	First-line supervisors/managers of office and administrative support workers	1,459	1,555	96	H	6.6	VL	.9	144	H
43-2000	Communications equipment operators	304	272	-32	-	-10.5	-	.9	55	-
43-2011	Switchboard operators, including answering service	236	236	1	VL	.2	VL	.9	48	L
43-2021	Telephone operators	50	22	-28	VL	-56.3	VL	1.1	5	VL
43-2099	All other communications equipment operators ⁸ ..	18	14	-5	VL	-24.6	VL	.0	3	VL
43-3000	Financial clerks	3,726	3,987	261	-	7.0	-	4.7	616	-
43-3011	Bill and account collectors	413	514	101	H	24.4	VH	.9	84	L
43-3021	Billing and posting clerks and machine operators	507	547	40	L	7.9	VL	2.2	81	L
43-3031	Bookkeeping, accounting, and auditing clerks	1,983	2,042	59	L	3.0	VL	7.9	278	VH
43-3041	Gaming cage workers ⁸	18	21	3	VL	14.5	L	.0	7	VL
43-3051	Payroll and timekeeping clerks	198	211	13	VL	6.5	VL	.5	20	VL
43-3061	Procurement clerks	77	72	-5	VL	-6.7	VL	.0	13	VL
43-3071	Tellers	530	580	50	L	9.4	L	.2	132	H
43-4000	Information and record clerks	5,394	6,310	916	-	17.0	-	.7	1,297	-
43-4011	Brokerage clerks ³	78	67	-11	VL	-14.7	VL	.0	9	VL
43-4021	Correspondence clerks ⁸	33	33	0	VL	-1.4	VL	.0	7	VL
43-4031	Court, municipal, and license clerks	106	119	13	VL	12.3	L	2.6	15	VL
43-4041	Credit authorizers, checkers, and clerks	80	74	-5	VL	-6.7	VL	.0	15	VL
43-4051	Customer service representatives	1,894	2,354	460	VH	24.3	VH	.5	465	VH

See footnotes at end of table.

Table III-1. Occupational employment and job openings data, 2002-12, and worker characteristics, 2002-Continued

(Numbers in thousands)

Annual average job openings due to growth and net replacement needs, 2002-12		2002 median annual earnings		Unemployment rate	Percent part-time	Most significant source of postsecondary education or training ⁹	Educational attainment cluster ¹¹	Percent of workers aged 25 to 44, by educational attainment			2002 national employment matrix occupation code
		Dollars	Rank					High school or less	Some college	College or higher	
Number	Rank										
2	VL	19,600	VL	VH	VH	Short-term on-the-job	HS/SC	66.7	24.7	8.6	41-2012 ³
35	-	-	-	-	-	-	-	-	-	-	41-2020
28	H	17,280	VL	H	VH	Short-term on-the-job	HS/SC/C	49.1	28.1	22.8	41-2021
7	VL	23,950	L	L	L	Moderate-term on-the-job	HS/SC	67.3	27.8	4.9	41-2022
208	VH	17,710	VL	H	VH	Short-term on-the-job	HS/SC/C	42.0	32.9	25.1	41-2031
27	-	-	-	-	-	-	-	-	-	-	41-3000
5	VL	37,670	H	L	L	Moderate-term on-the-job	HS/SC/C	20.6	28.6	50.8	41-3011
12	L	40,750	H	VL	L	Bachelor's degree	HS/SC/C	22.6	34.0	43.4	41-3021
7	VL	60,990	VH	L	VL	Bachelor's degree	SC/C	11.9	21.0	67.1	41-3031
3	VL	26,630	L	H	H	Postsecondary vocational award	HS/SC/C	27.9	44.1	28.0	41-3041 ²
84	-	-	-	-	-	-	-	-	-	-	41-4000
18	L	55,740	VH	L	L	Moderate-term on-the-job	HS/SC/C	24.5	27.0	48.5	41-4011 ²
66	VH	42,730	VH	L	L	Moderate-term on-the-job	HS/SC/C	24.5	27.0	48.5	41-4012 ²
57	-	-	-	-	-	-	-	-	-	-	41-9000
7	-	-	-	-	-	-	-	-	-	-	41-9010
7	VL	20,380	L	H	VH	Moderate-term on-the-job	HS/SC/C	26.5	38.3	35.2	41-9011
0	VL	21,400	L	H	VH	Moderate-term on-the-job	HS/SC/C	26.5	38.3	35.2	41-9012 ⁵
10	-	-	-	-	-	-	-	-	-	-	41-9020
2	VL	50,330	VH	VL	H	Work experience in a related occupation	HS/SC/C	22.2	37.0	40.7	41-9021
8	L	30,930	H	VL	H	Postsecondary vocational award	HS/SC/C	22.2	37.0	40.7	41-9022
4	VL	63,660	VH	L	VL	Bachelor's degree	C	4.2	15.9	79.9	41-9031 ²
7	VL	19,550	VL	VH	VH	Short-term on-the-job	HS/SC	54.8	33.6	11.6	41-9041
4	VL	25,340	L	H	VH	Short-term on-the-job	HS/SC/C	46.1	31.3	22.6	41-9091
25	H	35,170	H	H	L	Moderate-term on-the-job	HS/SC/C	22.4	30.5	47.1	41-9098
750	-	-	-	-	-	-	-	-	-	-	43-0000
41	-	-	-	-	-	-	-	-	-	-	43-1000
41	H	38,820	H	L	L	Work experience in a related occupation	HS/SC/C	33.1	39.5	27.3	43-1011
8	-	-	-	-	-	-	-	-	-	-	43-2000
6	VL	21,190	L	H	H	Short-term on-the-job	HS/SC	54.6	34.0	11.4	43-2011
1	VL	28,600	H	H	H	Short-term on-the-job	HS/SC	42.3	48.0	9.7	43-2021
0	VL	31,640	H	VH	L	Short-term on-the-job	HS/SC	53.5	38.5	8.0	43-2099 ⁸
114	-	-	-	-	-	-	-	-	-	-	43-3000
18	L	26,780	L	L	L	Short-term on-the-job	HS/SC	45.6	35.7	18.7	43-3011
13	L	26,110	L	L	H	Moderate-term on-the-job	HS/SC	39.3	43.9	16.8	43-3021
43	H	27,380	H	L	H	Moderate-term on-the-job	HS/SC	40.4	43.8	15.8	43-3031
1	VL	21,780	L	VL	VL	Short-term on-the-job	HS/SC	43.6	42.5	13.9	43-3041 ⁸
7	VL	29,000	H	L	L	Moderate-term on-the-job	HS/SC	37.9	46.8	15.2	43-3051
2	VL	29,600	H	VL	L	Short-term on-the-job	HS/SC	55.7	30.9	13.4	43-3061
31	H	20,400	L	L	VH	Short-term on-the-job	HS/SC	44.3	42.9	12.7	43-3071
213	-	-	-	-	-	-	-	-	-	-	43-4000
1	VL	33,210	H	H	L	Moderate-term on-the-job	HS/SC/C	31.7	40.4	27.9	43-4011 ³
1	VL	25,960	L	VL	L	Short-term on-the-job	HS/SC	44.3	41.0	14.7	43-4021 ⁸
4	VL	27,300	L	VL	L	Short-term on-the-job	HS/SC	39.9	46.1	14.0	43-4031
2	VL	26,690	L	L	L	Short-term on-the-job	HS/SC	33.0	48.9	18.1	43-4041
74	VH	26,240	L	H	H	Moderate-term on-the-job	HS/SC/C	38.3	40.3	21.4	43-4051

See footnotes at end of table.

Table III-1. Occupational employment and job openings data, 2002–12, and worker characteristics, 2002—Continued

(Numbers in thousands)

2002 national employment matrix occupation		Employment		Employment change, 2002–12				Per- cent self- em- ployed, 2002	Annual average job openings due to growth and total replacement needs, 2002–12	
		2002	2012	Numeric		Percent			Number	Rank
				Number	Rank	Number	Rank			
43-4061	Eligibility interviewers, government programs	94	83	-11	VL	-11.6	VL	.0	11	VL
43-4071	File clerks	265	264	-1	VL	-.3	VL	1.2	62	L
43-4081	Hotel, motel, and resort desk clerks	178	220	42	L	23.9	VH	.0	51	L
43-4111	Interviewers, except eligibility and loan	193	247	54	L	28.0	VH	.7	51	L
43-4121	Library assistants, clerical	120	146	26	L	21.5	H	.1	30	VL
43-4131	Loan interviewers and clerks	170	146	-24	VL	-14.3	VL	3.5	29	L
43-4141	New accounts clerks ³	99	110	11	VL	11.2	L	.0	25	VL
43-4151	Order clerks	330	311	-19	VL	-5.7	VL	.4	60	L
43-4161	Human resources assistants, except payroll and timekeeping	174	207	33	L	19.2	H	.0	39	L
43-4171	Receptionists and information clerks	1,100	1,425	325	VH	29.5	VH	1.2	335	VH
43-4181	Reservation and transportation ticket agents and travel clerks ²	177	199	22	L	12.2	L	1.1	37	L
43-4999	All other financial, information, and record clerks	304	306	2	VL	.5	VL	.1	57	L
43-5000	Material recording, scheduling, dispatching, and distributing occupations	4,005	4,025	20	–	.5	–	.6	776	–
43-5011	Cargo and freight agents	59	68	9	VL	15.5	H	.1	9	VL
43-5021	Couriers and messengers	132	138	5	VL	4.0	VL	6.9	25	VL
43-5030	Dispatchers	262	298	36	–	13.8	–	.6	46	–
43-5031	Police, fire, and ambulance dispatchers	92	104	12	VL	12.7	L	.6	16	VL
43-5032	Dispatchers, except police, fire, and ambulance	170	194	24	L	14.4	L	.6	30	VL
43-5041	Meter readers, utilities ²	54	46	-8	VL	-14.1	VL	.4	9	VL
43-5050	Postal service workers	664	636	-28	–	-4.3	–	.0	42	–
43-5051	Postal service clerks	77	77	0	VL	-.5	VL	.0	5	VL
43-5052	Postal service mail carriers ²	334	333	-2	VL	-.5	VL	.0	20	VL
43-5053	Postal service mail sorters, processors, and processing machine operators	253	226	-26	VL	-10.5	VL	.0	17	VL
43-5061	Production, planning, and expediting clerks ²	288	328	40	L	14.0	L	.4	55	L
43-5071	Shipping, receiving, and traffic clerks	803	827	24	L	3.0	VL	.2	156	H
43-5081	Stock clerks and order fillers	1,628	1,560	-68	VL	-4.2	VL	.4	409	VH
43-5111	Weighers, measurers, checkers, and samplers, recordkeeping	81	93	12	VL	14.6	L	2.0	17	VL
43-5199	All other material recording, scheduling, dispatching, and distributing workers	34	32	-2	VL	-6.9	VL	.0	8	VL
43-6000	Secretaries and administrative assistants	4,104	4,288	184	–	4.5	–	1.6	564	–
43-6011	Executive secretaries and administrative assistants	1,526	1,658	132	H	8.7	L	1.6	218	H
43-6012	Legal secretaries	264	313	50	L	18.8	H	1.7	42	L
43-6013	Medical secretaries	339	398	58	L	17.2	H	1.6	53	L
43-6014	Secretaries, except legal, medical, and executive	1,975	1,918	-57	VL	-2.9	VL	1.6	251	H
43-9000	Other office and administrative support workers	4,858	5,027	169	–	3.5	–	1.3	871	–
43-9011	Computer operators	182	151	-30	VL	-16.8	VL	1.7	25	VL
43-9020	Data entry and information processing workers	633	519	-114	–	-18.1	–	4.1	106	–
43-9021	Data entry keyers	392	371	-21	VL	-5.4	VL	1.4	70	L
43-9022	Word processors and typists	241	148	-93	VL	-38.6	VL	8.6	36	L
43-9031	Desktop publishers ⁸	35	45	10	VL	29.2	VH	.0	5	VL
43-9041	Insurance claims and policy processing clerks	266	276	10	VL	3.6	VL	.3	41	L
43-9051	Mail clerks and mail machine operators, except postal service	170	165	-5	VL	-2.9	VL	.0	29	VL
43-9061	Office clerks, general	2,991	3,301	310	VH	10.4	L	.5	577	VH
43-9071	Office machine operators, except computer	96	91	-4	VL	-4.6	VL	.0	17	VL
43-9081	Proofreaders and copy markers ^{2,3}	27	26	-1	VL	-4.8	VL	6.2	5	VL
43-9111	Statistical assistants ³	23	22	-2	VL	-7.2	VL	.0	2	VL
43-9999	All other secretaries, administrative assistants, and other office support workers	435	431	-4	VL	-.9	VL	3.4	64	L
45-0000	Farming, fishing, and forestry occupations	1,072	1,107	35	–	3.3	–	6.0	239	–

See footnotes at end of table.

Table III-1. Occupational employment and job openings data, 2002-12, and worker characteristics, 2002-Continued

(Numbers in thousands)

Annual average job openings due to growth and net replacement needs, 2002-12		2002 median annual earnings		Unemployment rate	Percent part-time	Most significant source of postsecondary education or training ⁹	Educational attainment cluster ¹¹	Percent of workers aged 25 to 44, by educational attainment			2002 national employment matrix occupation code
		Dollars	Rank					High school or less	Some college	College or higher	
Number	Rank										
3	VL	31,010	H	VL	VL	Moderate-term on-the-job	HS/SC/C	20.4	50.8	28.8	43-4061
8	L	20,020	L	VH	VH	Short-term on-the-job	HS/SC	44.7	40.5	14.8	43-4071
12	L	17,370	VL	VH	VH	Short-term on-the-job	HS/SC	45.3	38.8	16.0	43-4081
10	L	21,690	L	VH	VH	Short-term on-the-job	HS/SC	30.1	50.3	19.6	43-4111
7	L	19,450	VL	L	VH	Short-term on-the-job	HS/SC/C	25.2	44.7	30.0	43-4121
2	VL	27,830	H	L	L	Short-term on-the-job	HS/SC/C	33.3	42.8	23.9	43-4131
4	VL	25,200	L	L	H	Work experience in a related occupation	HS/SC	41.0	43.0	16.0	43-4141 ³
7	L	24,810	L	H	H	Short-term on-the-job	HS/SC	51.6	36.5	11.8	43-4151
7	VL	30,410	H	VL	H	Short-term on-the-job	HS/SC/C	28.8	48.8	22.4	43-4161
59	VH	21,150	L	H	VH	Short-term on-the-job	HS/SC	49.7	38.6	11.8	43-4171
7	VL	25,350	L	L	H	Short-term on-the-job	HS/SC/C	31.6	45.3	23.1	43-4181 ²
5	VL	30,030	H	VL	L	Short-term on-the-job	HS/SC/C	26.8	50.3	22.9	43-4999
131	-	-	-	-	-	-	-	-	-	-	43-5000
2	VL	31,410	H	L	VL	Moderate-term on-the-job	HS/SC	50.1	36.7	13.2	43-5011
4	VL	19,390	VL	H	VH	Short-term on-the-job	HS/SC	53.2	36.6	10.2	43-5021
9	-	-	-	-	-	-	-	-	-	-	43-5030
3	VL	27,660	H	L	L	Moderate-term on-the-job	HS/SC	44.1	43.7	12.2	43-5031
6	VL	30,280	H	L	L	Moderate-term on-the-job	HS/SC	44.1	43.7	12.2	43-5032
2	VL	28,830	H	L	VL	Short-term on-the-job	HS/SC	57.2	38.8	4.1	43-5041 ²
19	-	-	-	-	-	-	-	-	-	-	43-5050
2	VL	39,700	H	VL	L	Short-term on-the-job	HS/SC	43.8	41.5	14.7	43-5051
10	L	39,530	H	VL	VL	Short-term on-the-job	HS/SC	52.0	40.2	7.8	43-5052 ²
7	VL	38,150	H	H	VL	Short-term on-the-job	HS/SC	44.5	40.7	14.7	43-5053
11	L	33,650	H	H	L	Short-term on-the-job	HS/SC/C	37.0	35.2	27.8	43-5061 ²
19	L	23,420	L	H	L	Short-term on-the-job	HS/SC	64.5	28.6	6.9	43-5071
60	VH	19,270	VL	VH	H	Short-term on-the-job	HS/SC	65.4	26.0	8.6	43-5081
3	VL	24,170	L	H	L	Short-term on-the-job	HS/SC	56.4	30.6	13.0	43-5111
1	VL	25,890	L	L	H	Short-term on-the-job	HS/SC	65.4	26.0	8.6	43-5199
103	-	-	-	-	-	-	-	-	-	-	43-6000
42	H	33,410	H	L	H	Moderate-term on-the-job	HS/SC	37.2	47.0	15.9	43-6011
10	L	35,020	H	L	H	Postsecondary vocational award	HS/SC	37.2	47.0	15.9	43-6012
12	L	25,430	L	L	H	Postsecondary vocational award	HS/SC	37.2	47.0	15.9	43-6013
38	H	25,290	L	L	H	Moderate-term on-the-job	HS/SC	37.2	47.0	15.9	43-6014
140	-	-	-	-	-	-	-	-	-	-	43-9000
4	VL	29,650	H	H	L	Moderate-term on-the-job	HS/SC/C	39.1	40.5	20.4	43-9011
15	-	-	-	-	-	-	-	-	-	-	43-9020
9	L	22,390	L	H	H	Moderate-term on-the-job	HS/SC	45.1	41.0	13.9	43-9021
5	VL	26,730	L	H	H	Moderate-term on-the-job	HS/SC	37.6	48.2	14.2	43-9022
2	VL	31,620	H	VL	H	Postsecondary vocational award	HS/SC	42.6	41.1	16.3	43-9031 ⁸
5	VL	28,870	H	L	L	Moderate-term on-the-job	HS/SC	39.4	44.4	16.2	43-9041
5	VL	21,190	L	VH	H	Short-term on-the-job	HS/SC	56.9	36.0	7.1	43-9051
97	VH	22,280	L	H	VH	Short-term on-the-job	HS/SC	40.9	42.4	16.7	43-9061
2	VL	21,770	L	H	H	Short-term on-the-job	HS/SC	58.3	31.9	9.9	43-9071
1	VL	24,280	L	H	H	Short-term on-the-job	HS/SC/C	32.3	33.7	34.0	43-9081 ^{2,3}
0	VL	29,470	H	H	L	Moderate-term on-the-job	HS/SC/C	35.6	35.8	28.6	43-9111 ³
9	L	25,840	L	L	H	Short-term on-the-job	HS/SC/C	29.5	37.8	32.6	43-9999
33	-	-	-	-	-	-	-	-	-	-	45-0000

See footnotes at end of table.

Table III-1. Occupational employment and job openings data, 2002-12, and worker characteristics, 2002-Continued

(Numbers in thousands)

2002 national employment matrix occupation		Employment		Employment change, 2002-12				Percent self-employed, 2002	Annual average job openings due to growth and total replacement needs, 2002-12	
		2002	2012	Numeric		Percent			Number	Rank
				Number	Rank	Number	Rank			
45-1000	Supervisors, farming, fishing, and forestry workers ..	52	58	6	VL	11.4	L	16.9	7	VL
45-2000	Agricultural workers	804	840	36	-	4.5	-	1.4	188	-
45-2011	Agricultural inspectors ³	16	17	1	VL	6.8	VL	.0	4	VL
45-2021	Animal breeders ⁸	9	10	1	VL	6.1	VL	47.4	1	VL
45-2041	Graders and sorters, agricultural products	49	52	3	VL	6.7	VL	.0	11	VL
45-2090	Miscellaneous agricultural workers	731	762	31	-	4.3	-	1.0	173	-
45-2091	Agricultural equipment operators	61	65	4	VL	7.3	VL	1.0	15	VL
45-2092	Farmworkers and laborers, crop, nursery, and greenhouse	617	641	24	L	4.0	VL	1.0	145	H
45-2093	Farmworkers, farm and ranch animals	53	56	2	VL	4.4	VL	.6	13	VL
45-3000	Fishing and hunting workers	38	28	-10	-	-25.5	-	54.3	6	-
45-3011	Fishers and related fishing workers ²	36	27	-10	VL	-26.8	VL	53.7	6	VL
45-3021	Hunters and trappers ^{2,8}	1	2	0	VL	6.4	VL	70.2	0	VL
45-4000	Forest, conservation, and logging workers	81	80	-2	-	-1.9	-	28.1	16	-
45-4011	Forest and conservation workers ³	14	15	1	VL	4.5	VL	11.8	3	VL
45-4020	Logging workers	67	65	-2	-	-3.2	-	31.5	14	-
45-4021	Fallers ⁵	14	14	0	VL	-3.4	VL	25.9	3	VL
45-4022	Logging equipment operators ³	43	41	-2	VL	-3.6	VL	29.3	9	VL
45-4023	Log graders and scalers ⁵	10	10	0	VL	-1.2	VL	47.8	2	VL
45-9099	All other farming, fishing, and forestry workers	96	101	4	VL	4.5	VL	.9	22	VL
47-0000	Construction and extraction occupations	7,292	8,388	1,096	-	15.0	-	16.5	1,110	-
47-1000	Supervisors, construction and extraction workers	633	722	89	-	14.1	-	20.1	72	-
47-1011	First-line supervisors/managers of construction trades and extraction workers ²	633	722	89	H	14.1	L	20.1	72	L
47-2000	Construction trades and related workers	5,596	6,452	857	-	15.3	-	18.7	859	-
47-2011	Boilermakers ^{2,3}	25	25	0	VL	1.7	VL	.0	2	VL
47-2020	Brickmasons, blockmasons, and stonemasons	165	188	23	-	14.2	-	27.8	25	-
47-2021	Brickmasons and blockmasons ²	148	169	21	L	14.2	L	27.9	22	VL
47-2022	Stonemasons ²	17	19	2	VL	14.1	L	26.5	3	VL
47-2031	Carpenters	1,209	1,331	122	H	10.1	L	29.7	202	H
47-2040	Carpet, floor, and tile installers and finishers	164	191	27	-	16.8	-	42.6	21	-
47-2041	Carpet installers	82	96	14	VL	16.8	H	53.5	10	VL
47-2042	Floor layers, except carpet, wood, and hard tiles	31	35	4	VL	13.4	L	52.0	4	VL
47-2043	Floor sanders and finishers	17	18	1	VL	4.2	VL	55.5	2	VL
47-2044	Tile and marble setters	33	42	9	VL	26.5	VH	.0	5	VL
47-2050	Cement masons, concrete finishers, and terrazzo workers	188	236	48	-	25.7	-	5.2	27	-
47-2051	Cement masons and concrete finishers	182	229	47	L	26.1	VH	5.2	27	VL
47-2053	Terrazzo workers and finishers ⁵	6	7	1	VL	15.2	H	4.9	1	VL
47-2061	Construction laborers	938	1,070	133	H	14.2	L	13.3	177	H
47-2070	Construction equipment operators	416	460	45	-	10.7	-	3.6	57	-
47-2071	Paving, surfacing, and tamping equipment operators ^{2,3}	58	65	7	VL	12.6	L	2.3	9	VL
47-2072	Pile-driver operators ⁸	5	6	0	VL	8.2	VL	13.6	1	VL
47-2073	Operating engineers and other construction equipment operators	353	389	37	L	10.4	L	3.7	47	L
47-2080	Drywall installers, ceiling tile installers, and tapers	176	214	37	-	21.3	-	18.5	24	-
47-2081	Drywall and ceiling tile installers	135	164	29	L	21.4	H	18.4	19	VL
47-2082	Tapers	41	49	8	VL	20.8	H	19.1	6	VL
47-2111	Electricians	659	814	154	H	23.4	VH	9.1	71	L
47-2121	Glaziers ²	49	57	8	VL	17.2	H	5.6	8	VL
47-2130	Insulation workers	53	62	8	VL	15.8	H	3.9	9	VL
47-2140	Painters and paperhangers	468	521	53	-	11.4	-	42.2	76	-
47-2141	Painters, construction and maintenance	448	500	52	L	11.6	L	41.7	73	L

See footnotes at end of table.

Table III-1. Occupational employment and job openings data, 2002-12, and worker characteristics, 2002-Continued

(Numbers in thousands)

Annual average job openings due to growth and net replacement needs, 2002-12		2002 median annual earnings		Unemployment rate	Percent part-time	Most significant source of postsecondary education or training ⁹	Educational attainment cluster ¹¹	Percent of workers aged 25 to 44, by educational attainment			2002 national employment matrix occupation code
		Dollars	Rank					High school or less	Some college	College or higher	
Number	Rank										
2	VL	31,140	H	H	VL	Work experience in a related occupation	HS	77.6	12.1	10.4	45-1000
26	-	-	-	-	-	-	-	-	-	-	45-2000
0	VL	28,620	H	L	VL	Work experience in a related occupation	HS/SC/C	36.6	31.4	32.0	45-2011 ³
0	VL	25,090	L	VH	H	Moderate-term on-the-job	HS	81.8	12.9	5.3	45-2021 ⁸
2	VL	15,940	VL	VH	L	Work experience in a related occupation	HS	80.9	12.0	7.1	45-2041
24	-	-	-	-	-	-	-	-	-	-	45-2090
2	VL	17,290	VL	VH	L	Moderate-term on-the-job	HS	83.6	11.8	4.6	45-2091
20	L	15,070	VL	VH	L	Short-term on-the-job	HS	83.6	11.8	4.6	45-2092
2	VL	17,090	VL	VH	L	Short-term on-the-job	HS	83.6	11.8	4.6	45-2093
1	-	-	-	-	-	-	-	-	-	-	45-3000
1	VL	20,710	L	VH	VL	Moderate-term on-the-job	HS	75.4	16.2	8.4	45-3011 ²
0	VL	30,660	H	VH	H	Moderate-term on-the-job	HS	74.0	18.0	8.0	45-3021 ^{2,8}
2	-	-	-	-	-	-	-	-	-	-	45-4000
0	VL	18,960	VL	VH	L	Moderate-term on-the-job	HS	73.2	16.3	10.6	45-4011 ³
1	-	-	-	-	-	-	-	-	-	-	45-4020
0	VL	28,160	H	VH	L	Moderate-term on-the-job	HS	85.1	10.8	4.1	45-4021 ⁵
1	VL	26,790	L	VH	L	Moderate-term on-the-job	HS	83.3	12.5	4.2	45-4022 ³
0	VL	27,200	L	VH	L	Moderate-term on-the-job	HS	85.1	10.8	4.1	45-4023 ⁵
3	VL	21,450	L	VH	L	Moderate-term on-the-job	HS	83.6	11.8	4.6	45-9099
255	-	-	-	-	-	-	-	-	-	-	47-0000
20	-	-	-	-	-	-	-	-	-	-	47-1000
20	L	47,670	VH	L	VL	Work experience in a related occupation	HS/SC	63.0	26.9	10.1	47-1011 ²
189	-	-	-	-	-	-	-	-	-	-	47-2000
1	VL	41,960	VH	VH	VL	Long-term on-the-job	HS/SC	66.0	31.2	2.8	47-2011 ^{2,3}
5	-	-	-	-	-	-	-	-	-	-	47-2020
4	VL	41,840	VH	VH	VL	Long-term on-the-job	HS	83.2	13.3	3.5	47-2021 ²
0	VL	34,040	H	VH	VL	Long-term on-the-job	HS	83.2	13.3	3.5	47-2022 ²
32	H	34,190	H	VH	VL	Long-term on-the-job	HS/SC	72.7	22.2	5.1	47-2031
5	-	-	-	-	-	-	-	-	-	-	47-2040
3	VL	32,590	H	H	L	Moderate-term on-the-job	HS	77.6	18.4	3.9	47-2041
1	VL	33,590	H	H	L	Moderate-term on-the-job	HS	77.6	18.4	3.9	47-2042
0	VL	27,500	H	H	L	Moderate-term on-the-job	HS	77.6	18.4	3.9	47-2043
1	VL	35,770	H	VH	VL	Long-term on-the-job	HS	77.6	18.4	3.9	47-2044
9	-	-	-	-	-	-	-	-	-	-	47-2050
8	L	30,660	H	VH	VL	Moderate-term on-the-job	HS	85.4	12.7	2.0	47-2051
0	VL	27,910	H	VH	VL	Long-term on-the-job	HS	85.4	12.7	2.0	47-2053 ⁵
26	H	24,740	L	VH	L	Moderate-term on-the-job	HS	79.5	15.6	4.8	47-2061
14	-	-	-	-	-	-	-	-	-	-	47-2070
2	VL	28,860	H	VH	VL	Moderate-term on-the-job	HS	88.4	11.4	.2	47-2071 ^{2,3}
0	VL	45,420	VH	VH	L	Moderate-term on-the-job	HS	80.5	17.1	2.4	47-2072 ⁸
13	L	35,240	H	VH	VL	Moderate-term on-the-job	HS	78.5	19.1	2.4	47-2073
8	-	-	-	-	-	-	-	-	-	-	47-2080
6	VL	33,710	H	VH	VL	Moderate-term on-the-job	HS	83.8	13.8	2.3	47-2081
2	VL	39,000	H	VH	VL	Moderate-term on-the-job	HS	83.8	13.8	2.3	47-2082
28	H	41,390	H	H	VL	Long-term on-the-job	HS/SC	49.8	44.1	6.1	47-2111
2	VL	31,620	H	VH	VL	Long-term on-the-job	HS/SC	61.3	33.9	4.8	47-2121 ²
2	VL	28,930	H	VH	VL	Moderate-term on-the-job	HS/SC	66.1	30.6	3.4	47-2130
12	-	-	-	-	-	-	-	-	-	-	47-2140
12	L	29,070	H	VH	L	Moderate-term on-the-job	HS	77.2	16.9	5.9	47-2141

See footnotes at end of table.

Table III-1. Occupational employment and job openings data, 2002-12, and worker characteristics, 2002-Continued

(Numbers in thousands)

2002 national employment matrix occupation		Employment		Employment change, 2002-12				Per- cent self- em- ployed, 2002	Annual average job openings due to growth and total replacement needs, 2002-12	
		2002	2012	Numeric		Percent			Number	Rank
				Number	Rank	Number	Rank			
47-2142	Paperhangers ^{2,3}	20	21	1	VL	5.9	VL	53.1	3	VL
47-2150	Pipelayers, plumbers, pipefitters, and steamfitters	550	649	99	-	18.0	-	10.4	67	-
47-2151	Pipelayers	58	65	7	VL	11.8	L	11.2	7	VL
47-2152	Plumbers, pipefitters, and steamfitters	492	584	92	H	18.7	H	10.3	60	L
47-2161	Plasterers and stucco masons ²	59	67	8	VL	13.5	L	9.6	9	VL
47-2171	Reinforcing iron and rebar workers ⁴	29	33	5	VL	16.7	H	.0	3	VL
47-2181	Roofers	166	197	31	L	18.6	H	31.9	41	L
47-2211	Sheet metal workers	205	246	41	L	19.8	H	3.1	32	VL
47-2221	Structural iron and steel workers	78	90	12	VL	15.9	H	6.2	9	VL
47-3000	Helpers, construction trades	431	490	59	-	13.7	-	.4	77	-
47-3010	Helpers, construction trades	431	490	59	-	13.7	-	.4	77	-
47-3011	Helpers—brickmasons, blockmasons, stonemasons, and tile and marble setters ⁴	59	61	1	VL	2.2	VL	.4	9	VL
47-3012	Helpers—carpenters	97	111	14	VL	14.0	L	.4	17	VL
47-3013	Helpers—electricians	99	117	18	VL	18.0	H	.4	18	VL
47-3014	Helpers—painters, paperhangers, plasterers, and stucco masons ⁵	31	36	5	VL	15.9	H	.3	6	VL
47-3015	Helpers—pipelayers, plumbers, pipefitters, and steamfitters ³	79	88	9	VL	10.9	L	.4	14	VL
47-3016	Helpers—roofers ⁵	21	25	4	VL	19.3	H	.4	4	VL
47-3019	All other helpers, construction trades ⁴	44	53	9	VL	19.4	H	.4	8	VL
47-4000	Other construction and related workers	354	408	54	-	15.2	-	5.2	58	-
47-4011	Construction and building inspectors ²	84	95	12	VL	13.8	L	8.1	10	VL
47-4021	Elevator installers and repairers ²	21	25	4	VL	17.1	H	.0	3	VL
47-4031	Fence erectors	27	31	4	VL	13.4	L	23.0	4	VL
47-4041	Hazardous materials removal workers	38	54	16	VL	43.1	VH	.0	9	VL
47-4051	Highway maintenance workers	154	170	16	VL	10.4	L	1.6	26	VL
47-4061	Rail-track laying and maintenance equipment operators ⁹	11	9	-1	VL	-11.5	VL	.8	1	VL
47-4071	Septic tank servicers and sewer pipe cleaners ⁴ ..	18	22	4	VL	21.2	H	13.9	4	VL
47-4090	Miscellaneous construction and related workers ..	2	3	0	-	16.5	-	6.4	0	-
47-4091	Segmental pavers ⁵	2	3	0	VL	16.5	H	6.4	0	VL
47-4999	All other construction trades and related workers	110	146	35	L	32.0	VH	5.3	19	VL
47-5000	Extraction workers	167	169	2	-	1.2	-	2.4	25	-
47-5010	Derrick, rotary drill, and service unit operators, oil, gas, and mining	41	41	0	-	.6	-	1.1	5	-
47-5011	Derrick operators, oil and gas ^{2,6}	15	15	0	VL	.8	VL	1.1	2	VL
47-5012	Rotary drill operators, oil and gas ^{2,6}	14	14	0	VL	1.5	VL	1.2	2	VL
47-5013	Service unit operators, oil, gas, and mining ^{2,6} ..	13	13	0	VL	-.8	VL	1.1	2	VL
47-5021	Earth drillers, except oil and gas ²	23	25	2	VL	7.7	VL	14.9	3	VL
47-5031	Explosives workers, ordnance handling experts, and blasters ^{2,8}	5	5	0	VL	2.0	VL	2.4	1	VL
47-5040	Mining machine operators	18	16	-2	-	-13.3	-	.0	3	-
47-5041	Continuous mining machine operators ^{2,3}	8	7	-2	VL	-18.5	VL	.0	1	VL
47-5042	Mine cutting and channeling machine operators ^{2,4}	5	5	0	VL	-7.1	VL	.0	1	VL
47-5049	All other mining machine operators ^{2,5}	4	4	0	VL	-10.8	VL	.0	1	VL
47-5051	Rock splitters, quarry ⁵	3	3	0	VL	14.3	L	.4	0	VL
47-5061	Roof bolters, mining ^{2,8}	4	3	-1	VL	-27.7	VL	.0	1	VL
47-5071	Roustabouts, oil and gas ^{2,8}	32	34	2	VL	6.4	VL	.0	5	VL
47-5081	Helpers—extraction workers ^{2,8}	29	30	1	VL	3.9	VL	.0	6	VL
47-5099	Extraction workers, all other ³	12	12	0	VL	-.8	VL	.4	2	VL
49-0000	Installation, maintenance, and repair occupations	5,696	6,472	776	-	13.6	-	6.4	716	-
49-1000	Supervisors of installation, maintenance, and repair workers	444	512	68	-	15.4	-	.1	45	-
49-1011	First-line supervisors/managers of mechanics, installers, and repairers	444	512	68	L	15.4	H	.1	45	L

See footnotes at end of table.

Table III-1. Occupational employment and job openings data, 2002-12, and worker characteristics, 2002-Continued

(Numbers in thousands)

Annual average job openings due to growth and net replacement needs, 2002-12		2002 median annual earnings		Unemployment rate	Percent part-time	Most significant source of postsecondary education or training ⁹	Educational attainment cluster ¹¹	Percent of workers aged 25 to 44, by educational attainment			2002 national employment matrix occupation code
		Dollars	Rank					High school or less	Some college	College or higher	
Number	Rank										
0	VL	31,650	H	H	L	Moderate-term on-the-job	HS/SC	57.9	34.9	7.2	47-2142 ^{2,3}
23	-	-	-	-	-	-	-	-	-	-	47-2150
2	VL	28,500	H	H	VL	Moderate-term on-the-job	HS/SC	67.0	28.8	4.2	47-2151
21	L	40,170	H	H	VL	Long-term on-the-job	HS/SC	67.0	28.8	4.2	47-2152
2	VL	33,100	H	VH	L	Long-term on-the-job	HS	86.7	10.6	2.7	47-2161 ²
1	VL	36,740	H	VL	VL	Long-term on-the-job	HS	83.8	10.7	5.6	47-2171 ⁴
7	VL	30,180	H	VH	L	Moderate-term on-the-job	HS	84.6	12.1	3.2	47-2181
9	L	34,560	H	H	VL	Moderate-term on-the-job	HS/SC	68.7	29.5	1.8	47-2211
3	VL	40,660	H	VH	VL	Long-term on-the-job	HS/SC	70.9	27.8	1.3	47-2221
24	-	-	-	-	-	-	-	-	-	-	47-3000
24	-	-	-	-	-	-	-	-	-	-	47-3010
3	VL	24,390	L	VH	L	Short-term on-the-job	HS	82.3	14.0	3.7	47-3011 ⁴
5	VL	21,510	L	VH	L	Short-term on-the-job	HS	81.2	12.8	6.1	47-3012
6	VL	23,090	L	VH	L	Short-term on-the-job	HS	81.2	12.8	6.1	47-3013
2	VL	20,100	L	VH	L	Short-term on-the-job	HS	81.2	12.8	6.1	47-3014 ⁵
4	VL	22,230	L	VH	L	Short-term on-the-job	HS	80.8	13.8	5.4	47-3015 ³
1	VL	20,480	L	VH	L	Short-term on-the-job	HS	81.2	12.8	6.1	47-3016 ⁵
3	VL	20,230	L	VH	L	Short-term on-the-job	HS	82.3	14.0	3.7	47-3019 ⁴
12	-	-	-	-	-	-	-	-	-	-	47-4000
3	VL	41,620	H	L	VL	Work experience in a related occupation	HS/SC/C	35.6	41.9	22.4	47-4011 ²
1	VL	54,070	VH	VL	VL	Long-term on-the-job	HS/SC	68.4	31.3	.3	47-4021 ²
1	VL	22,160	L	VH	VL	Moderate-term on-the-job	HS	75.5	17.5	7.0	47-4031
3	VL	32,460	H	VH	VL	Moderate-term on-the-job	HS	74.3	18.0	7.7	47-4041
4	VL	28,390	H	H	VL	Moderate-term on-the-job	HS/SC	74.9	23.2	1.9	47-4051
0	VL	35,160	H	VH	VL	Moderate-term on-the-job	HS/SC	61.5	28.9	9.6	47-4061 ⁸
1	VL	27,940	H	VL	VL	Moderate-term on-the-job	HS/SC	66.2	28.5	5.3	47-4071 ⁴
0	-	-	-	-	-	-	-	-	-	-	47-4090
0	VL	26,940	L	VH	L	Moderate-term on-the-job	HS	81.0	11.4	7.6	47-4091 ⁵
5	VL	22,900	L	VH	L	Moderate-term on-the-job	HS	81.0	11.4	7.6	47-4999
5	-	-	-	-	-	-	-	-	-	-	47-5000
1	-	-	-	-	-	-	-	-	-	-	47-5010
0	VL	29,820	H	VH	VL	Moderate-term on-the-job	HS	69.5	18.1	12.4	47-5011 ^{2,6}
0	VL	33,750	H	VH	VL	Moderate-term on-the-job	HS	69.5	18.1	12.4	47-5012 ^{2,6}
0	VL	28,670	H	VH	VL	Moderate-term on-the-job	HS	69.5	18.1	12.4	47-5013 ^{2,6}
1	VL	32,490	H	H	VL	Moderate-term on-the-job	HS/SC	78.4	20.5	1.2	47-5021 ²
0	VL	35,110	H	H	VL	Moderate-term on-the-job	HS	76.6	19.5	3.8	47-5031 ^{2,8}
1	-	-	-	-	-	-	-	-	-	-	47-5040
0	VL	34,850	H	H	VL	Moderate-term on-the-job	HS/SC	70.7	25.7	3.5	47-5041 ^{2,3}
0	VL	37,590	H	H	VL	Moderate-term on-the-job	HS/SC	72.4	24.3	3.3	47-5042 ^{2,4}
0	VL	38,780	H	H	VL	Moderate-term on-the-job	HS/SC	71.0	24.8	4.2	47-5049 ^{2,5}
0	VL	26,170	L	VH	VL	Moderate-term on-the-job	HS	84.0	12.8	3.3	47-5051 ⁵
0	VL	38,430	H	L	VL	Moderate-term on-the-job	HS	76.6	19.5	3.8	47-5061 ^{2,8}
1	VL	22,280	L	H	VL	Moderate-term on-the-job	HS	76.6	19.5	3.8	47-5071 ^{2,8}
1	VL	25,200	L	VH	L	Short-term on-the-job	HS	76.6	19.5	3.8	47-5081 ^{2,8}
0	VL	29,110	H	VH	VL	Moderate-term on-the-job	HS	83.2	14.4	2.4	47-5099 ³
209	-	-	-	-	-	-	-	-	-	-	49-0000
18	-	-	-	-	-	-	-	-	-	-	49-1000
18	L	47,580	VH	VL	VL	Work experience in a related occupation	HS/SC	47.7	40.2	12.1	49-1011

See footnotes at end of table.

Table III-1. Occupational employment and job openings data, 2002-12, and worker characteristics, 2002-Continued

(Numbers in thousands)

2002 national employment matrix occupation		Employment		Employment change, 2002-12				Per- cent self- em- ployed, 2002	Annual average job openings due to growth and total replacement needs, 2002-12	
		2002	2012	Numeric		Percent			Number	Rank
				Number	Rank	Number	Rank			
49-2000	Electrical and electronic equipment mechanics, installers, and repairers	689	746	57	-	8.3	-	7.3	80	-
49-2011	Computer, automated teller, and office machine repairers	156	180	24	L	15.0	H	12.2	20	VL
49-2020	Radio and telecommunications equipment installers and repairers	226	222	-4	-	-1.6	-	4.6	23	-
49-2021	Radio mechanics ⁵	7	5	-2	VL	-29.3	VL	4.4	1	VL
49-2022	Telecommunications equipment installers and repairers, except line installers	219	217	-1	VL	-6	VL	4.6	23	VL
49-2090	Miscellaneous electrical and electronic equipment mechanics, installers, and repairers	284	317	33	-	11.5	-	7.2	34	-
49-2091	Avionics technicians ⁸	23	24	1	VL	3.4	VL	1.5	3	VL
49-2092	Electric motor, power tool, and related repairers	31	33	2	VL	5.3	VL	5.7	4	VL
49-2093	Electrical and electronics installers and repairers, transportation equipment ⁸	18	19	1	VL	7.1	VL	.0	2	VL
49-2094	Electrical and electronics repairers, commercial and industrial equipment ⁶	85	94	9	VL	10.4	L	.7	10	VL
49-2095	Electrical and electronics repairers, powerhouse, substation, and relay ⁶	21	21	0	VL	-6	VL	.7	2	VL
49-2096	Electronic equipment installers and repairers, motor vehicles	18	21	3	VL	14.8	H	15.8	2	VL
49-2097	Electronic home entertainment equipment installers and repairers	43	46	4	VL	8.6	VL	27.5	6	VL
49-2098	Security and fire alarm systems installers	46	60	14	VL	30.2	VH	6.8	6	VL
49-2099	All other electrical and electronic equipment mechanics, installers, and repairers	22	26	4	VL	19.6	H	.0	3	VL
49-3000	Vehicle and mobile equipment mechanics, installers, and repairers	1,817	2,043	226	-	12.4	-	10.0	233	-
49-3011	Aircraft mechanics and service technicians ²	131	145	14	VL	11.0	L	1.0	12	VL
49-3020	Automotive technicians and repairers	1,038	1,168	130	-	12.5	-	14.6	134	-
49-3021	Automotive body and related repairers	198	225	26	L	13.2	L	11.3	25	VL
49-3022	Automotive glass installers and repairers	22	24	2	VL	10.7	L	9.2	3	VL
49-3023	Automotive service technicians and mechanics	818	919	101	H	12.4	L	15.5	106	L
49-3031	Bus and truck mechanics and diesel engine specialists	267	305	38	L	14.2	L	3.9	30	VL
49-3040	Heavy vehicle and mobile equipment service technicians and mechanics	176	191	15	-	8.8	-	4.5	18	-
49-3041	Farm equipment mechanics	35	38	3	VL	7.7	VL	4.9	3	VL
49-3042	Mobile heavy equipment mechanics, except engines	126	138	12	VL	9.6	L	4.4	13	VL
49-3043	Rail car repairers ³	15	15	1	VL	4.5	VL	3.7	1	VL
49-3050	Small engine mechanics	67	79	12	-	18.7	-	14.8	6	-
49-3051	Motorboat mechanics ^{2,3}	22	26	4	VL	18.3	H	14.1	2	VL
49-3052	Motorcycle mechanics ^{2,4}	15	18	3	VL	18.7	H	14.5	1	VL
49-3053	Outdoor power equipment and other small engine mechanics ²	30	36	6	VL	18.9	H	15.5	3	VL
49-3090	Miscellaneous vehicle and mobile equipment mechanics, installers, and repairers ²	102	113	11	-	10.4	-	1.3	29	-
49-3091	Bicycle repairers ⁵	7	8	1	VL	18.8	H	1.4	2	VL
49-3092	Recreational vehicle service technicians ⁵	13	15	3	VL	21.8	VH	1.2	4	VL
49-3093	Tire repairers and changers	83	89	7	VL	8.0	VL	1.4	23	VL
49-3099	All other vehicle and mobile equipment mechanics, installers, and repairers	36	41	6	VL	15.4	H	.0	5	VL
49-9000	Other installation, maintenance, and repair occupations	2,746	3,171	424	-	15.5	-	4.8	358	-
49-9010	Control and valve installers and repairers	49	55	7	-	14.2	-	.7	7	-
49-9011	Mechanical door repairers ⁵	11	13	2	VL	21.8	VH	.7	2	VL
49-9012	Control and valve installers and repairers, except mechanical door ³	38	42	5	VL	12.0	L	.7	5	VL

See footnotes at end of table.

Table III-1. Occupational employment and job openings data, 2002-12, and worker characteristics, 2002-Continued

(Numbers in thousands)

Annual average job openings due to growth and net replacement needs, 2002-12		2002 median annual earnings		Unemployment rate	Percent part-time	Most significant source of postsecondary education or training ⁹	Educational attainment cluster ¹¹	Percent of workers aged 25 to 44, by educational attainment			2002 national employment matrix occupation code
		Dollars	Rank					High school or less	Some college	College or higher	
Number	Rank										
19	-	-	-	-	-	-	-	-	-	-	49-2000
4	VL	33,250	H	L	L	Postsecondary vocational award	HS/SC/C	27.6	50.3	22.0	49-2011
5	-	-	-	-	-	-	-	-	-	-	49-2020
0	VL	36,230	H	L	VL	Postsecondary vocational award	HS/SC	40.8	48.2	11.0	49-2021 ⁵
5	VL	47,380	VH	L	VL	Long-term on-the-job	HS/SC	40.8	48.2	11.0	49-2022
9	-	-	-	-	-	-	-	-	-	-	49-2090
1	VL	42,030	VH	VH	VL	Postsecondary vocational award	HS/SC	49.4	44.1	6.5	49-2091 ⁸
1	VL	32,210	H	VL	L	Postsecondary vocational award	HS/SC	49.4	43.7	6.9	49-2092
1	VL	38,610	H	H	VL	Postsecondary vocational award	HS/SC	49.4	44.1	6.5	49-2093 ⁸
3	VL	41,110	H	VL	VL	Postsecondary vocational award	HS/SC	31.5	63.4	5.1	49-2094 ⁶
0	VL	51,690	VH	VL	VL	Postsecondary vocational award	HS/SC	31.5	63.4	5.1	49-2095 ⁶
1	VL	26,010	L	VL	VL	Postsecondary vocational award	HS/SC	37.9	59.6	2.5	49-2096
1	VL	27,200	L	H	L	Postsecondary vocational award	HS/SC	59.4	33.4	7.1	49-2097
2	VL	32,370	H	L	VL	Postsecondary vocational award	HS/SC	49.0	44.8	6.2	49-2098
1	VL	35,160	H	VL	VL	Postsecondary vocational award	HS/SC	40.8	48.2	11.0	49-2099
70	-	-	-	-	-	-	-	-	-	-	49-3000
5	VL	43,070	VH	L	VL	Postsecondary vocational award	HS/SC	36.1	52.7	11.2	49-3011 ²
39	-	-	-	-	-	-	-	-	-	-	49-3020
7	VL	32,680	H	L	VL	Long-term on-the-job	HS/SC	73.7	21.8	4.5	49-3021
1	VL	26,890	L	H	L	Long-term on-the-job	HS	77.6	12.7	9.7	49-3022
32	H	30,590	H	L	VL	Postsecondary vocational award	HS/SC	66.8	30.0	3.2	49-3023
11	L	34,380	H	L	VL	Postsecondary vocational award	HS/SC	66.0	30.6	3.4	49-3031
5	-	-	-	-	-	-	-	-	-	-	49-3040
1	VL	27,100	L	L	VL	Postsecondary vocational award	HS/SC	63.2	31.1	5.7	49-3041
4	VL	35,970	H	L	VL	Postsecondary vocational award	HS/SC	63.2	31.1	5.7	49-3042
0	VL	39,060	H	L	VL	Long-term on-the-job	HS/SC	65.8	29.5	4.7	49-3043 ³
3	-	-	-	-	-	-	-	-	-	-	49-3050
1	VL	29,050	H	H	VL	Long-term on-the-job	HS/SC	62.9	34.7	2.4	49-3051 ^{2,3}
1	VL	27,100	L	H	VL	Long-term on-the-job	HS/SC	63.9	34.0	2.1	49-3052 ^{2,4}
1	VL	24,820	L	H	VL	Moderate-term on-the-job	HS/SC	59.6	39.6	.7	49-3053 ²
5	-	-	-	-	-	-	-	-	-	-	49-3090 ²
0	VL	19,230	VL	VH	L	Moderate-term on-the-job	HS	87.9	9.8	2.3	49-3091 ⁵
1	VL	27,080	L	VH	L	Long-term on-the-job	HS	87.9	9.8	2.3	49-3092 ⁵
4	VL	20,160	L	VH	L	Short-term on-the-job	HS	87.9	9.8	2.3	49-3093
2	VL	35,840	H	VH	L	Moderate-term on-the-job	HS/SC	66.8	30.0	3.2	49-3099
102	-	-	-	-	-	-	-	-	-	-	49-9000
2	-	-	-	-	-	-	-	-	-	-	49-9010
1	VL	29,190	H	VL	VL	Moderate-term on-the-job	HS/SC	59.2	30.0	10.8	49-9011 ⁵
1	VL	43,460	VH	VL	VL	Moderate-term on-the-job	HS/SC	55.9	34.2	9.9	49-9012 ³

See footnotes at end of table.

Table III-1. Occupational employment and job openings data, 2002-12, and worker characteristics, 2002-Continued

(Numbers in thousands)

2002 national employment matrix occupation		Employment		Employment change, 2002-12				Per- cent self- em- ployed, 2002	Annual average job openings due to growth and total replacement needs, 2002-12	
		2002	2012	Numeric		Percent			Number	Rank
				Number	Rank	Number	Rank			
49-9021	Heating, air conditioning, and refrigeration mechanics and installers	249	328	79	L	31.8	VH	15.4	39	L
49-9031	Home appliance repairers	42	44	2	VL	5.5	VL	16.7	5	VL
49-9040	Industrial machinery installation, repair, and maintenance workers	1,628	1,855	227	-	13.9	-	1.5	198	-
49-9041	Industrial machinery mechanics	197	208	11	VL	5.5	VL	6.3	20	VL
49-9042	Maintenance and repair workers, general	1,266	1,472	207	H	16.3	H	.9	166	H
49-9043	Maintenance workers, machinery	92	97	5	VL	5.9	VL	.0	5	VL
49-9044	Millwrights	69	73	4	VL	5.3	VL	1.5	7	VL
49-9045	Refractory materials repairers, except brickmasons ⁵	4	4	0	VL	5.6	VL	6.1	0	VL
49-9050	Line installers and repairers	268	301	33	-	12.3	-	3.5	24	-
49-9051	Electrical power-line installers and repairers	101	103	2	VL	1.6	VL	3.1	9	VL
49-9052	Telecommunications line installers and repairers	167	199	31	L	18.8	H	3.7	14	VL
49-9060	Precision instrument and equipment repairers	64	69	6	-	8.6	-	22.4	8	-
49-9061	Camera and photographic equipment repairers ⁵	7	6	0	VL	-7.2	VL	24.1	1	VL
49-9062	Medical equipment repairers	29	33	4	VL	14.8	H	23.2	4	VL
49-9063	Musical instrument repairers and tuners ⁵	6	7	0	VL	6.3	VL	21.9	1	VL
49-9064	Watch repairers ⁵	5	5	0	VL	3.5	VL	22.8	1	VL
49-9069	All other precision instrument and equipment repairers ³	17	18	1	VL	7.0	VL	20.3	2	VL
49-9090	Miscellaneous installation, maintenance, and repair workers	447	518	71	-	15.8	-	8.1	77	-
49-9091	Coin, vending, and amusement machine servicers and repairers	43	49	6	VL	15.2	H	17.0	7	VL
49-9092	Commercial divers ^{2,8}	4	5	0	VL	10.6	L	34.6	1	VL
49-9093	Fabric menders, except garment ⁵	2	2	0	VL	-2.2	VL	10.0	0	VL
49-9094	Locksmiths and safe repairers ²	23	28	5	VL	21.0	H	16.8	3	VL
49-9095	Manufactured building and mobile home installers	18	22	4	VL	23.4	VH	24.2	2	VL
49-9096	Riggers ⁸	14	16	2	VL	14.3	L	.0	3	VL
49-9097	Signal and track switch repairers ⁸	8	8	0	VL	-3.0	VL	.0	1	VL
49-9098	Helpers—installation, maintenance, and repair workers ^{2,3}	150	181	30	L	20.3	H	.0	36	L
49-9099	Installation, maintenance, and repair workers, all other	185	207	23	L	12.2	L	10.4	23	VL
51-0000	Production occupations	11,258	11,612	354	-	3.2	-	3.0	1,529	-
51-1000	Supervisors, production workers	733	803	70	-	9.5	-	2.2	68	-
51-1011	First-line supervisors/managers of production and operating workers	733	803	70	L	9.5	L	2.2	68	L
51-2000	Assemblers and fabricators	2,122	2,044	-77	-	-3.6	-	.9	234	-
51-2011	Aircraft structure, surfaces, rigging, and systems assemblers ⁸	27	24	-2	VL	-9.4	VL	.0	2	VL
51-2020	Electrical, electronics, and electromechanical assemblers	377	316	-61	-	-16.3	-	.3	24	-
51-2021	Coil winders, tapers, and finishers	36	31	-5	VL	-13.9	VL	.3	2	VL
51-2022	Electrical and electronic equipment assemblers	281	230	-51	VL	-18.3	VL	.3	17	VL
51-2023	Electromechanical equipment assemblers	60	55	-5	VL	-8.3	VL	.3	4	VL
51-2031	Engine and other machine assemblers ³	50	49	-1	VL	-1.9	VL	.0	3	VL
51-2041	Structural metal fabricators and fitters	89	94	6	VL	6.2	VL	.3	15	VL
51-2090	Miscellaneous assemblers and fabricators	1,579	1,561	-18	-	-1.1	-	1.1	191	-
51-2091	Fiberglass laminators and fabricators	37	39	2	VL	5.6	VL	1.2	5	VL
51-2092	Team assemblers	1,174	1,155	-19	VL	-1.6	VL	1.1	141	H
51-2093	Timing device assemblers, adjusters, and calibrators ⁵	7	6	0	VL	-3.0	VL	1.4	1	VL
51-2099	All other assemblers and fabricators	361	360	-1	VL	-.2	VL	1.1	44	L

See footnotes at end of table.

Table III-1. Occupational employment and job openings data, 2002-12, and worker characteristics, 2002-Continued

(Numbers in thousands)

Annual average job openings due to growth and net replacement needs, 2002-12		2002 median annual earnings		Unemployment rate	Percent part-time	Most significant source of postsecondary education or training ⁹	Educational attainment cluster ¹¹	Percent of workers aged 25 to 44, by educational attainment			2002 national employment matrix occupation code
		Dollars	Rank					High school or less	Some college	College or higher	
Number	Rank										
11	L	34,900	H	L	VL	Long-term on-the-job	HS/SC	59.6	36.8	3.6	49-9021
1	VL	30,390	H	VL	L	Long-term on-the-job	HS/SC	69.9	25.4	4.7	49-9031
55	-	-	-	-	-	-	-	-	-	-	49-9040
5	VL	37,980	H	L	VL	Long-term on-the-job	HS/SC	60.4	34.3	5.3	49-9041
45	H	29,370	H	VL	VL	Moderate-term on-the-job	HS/SC	56.7	34.8	8.5	49-9042
3	VL	32,520	H	L	VL	Short-term on-the-job	HS/SC	72.6	25.3	2.2	49-9043
2	VL	41,990	VH	VH	VL	Long-term on-the-job	HS/SC	60.2	39.3	.5	49-9044
0	VL	35,100	H	L	VL	Moderate-term on-the-job	HS/SC	60.4	34.3	5.3	49-9045 ⁵
11	-	-	-	-	-	-	-	-	-	-	49-9050
3	VL	48,530	VH	H	VL	Long-term on-the-job	HS/SC	61.1	34.6	4.3	49-9051
8	L	39,640	H	H	VL	Long-term on-the-job	HS/SC	48.1	46.5	5.3	49-9052
2	-	-	-	-	-	-	-	-	-	-	49-9060
0	VL	31,390	H	VL	L	Moderate-term on-the-job	HS/SC	36.0	49.0	15.0	49-9061 ⁵
1	VL	36,380	H	VL	L	Associate degree	HS/SC	36.0	49.0	15.0	49-9062
0	VL	29,440	H	VL	L	Long-term on-the-job	HS/SC	36.0	49.0	15.0	49-9063 ⁵
0	VL	26,560	L	VL	L	Long-term on-the-job	HS/SC	36.0	49.0	15.0	49-9064 ⁵
1	VL	44,090	VH	VL	L	Long-term on-the-job	HS/SC	38.6	43.4	18.0	49-9069 ³
19	-	-	-	-	-	-	-	-	-	-	49-9090
2	VL	27,380	L	H	H	Moderate-term on-the-job	HS/SC	62.6	32.3	5.1	49-9091
0	VL	34,710	H	L	L	Moderate-term on-the-job	HS/SC	63.2	28.2	8.6	49-9092 ^{2,8}
0	VL	25,690	L	L	L	Moderate-term on-the-job	HS/SC	62.3	25.6	12.1	49-9093 ⁵
1	VL	28,430	H	VL	L	Moderate-term on-the-job	HS/SC	70.7	25.2	4.1	49-9094 ²
1	VL	23,170	L	H	VL	Moderate-term on-the-job	HS	73.7	18.5	7.8	49-9095
1	VL	33,790	H	H	VL	Short-term on-the-job	HS/SC	63.2	28.2	8.6	49-9096 ⁸
0	VL	43,370	VH	VL	VL	Moderate-term on-the-job	HS/SC	63.2	28.2	8.6	49-9097 ⁸
8	L	21,440	L	VH	H	Short-term on-the-job	HS	83.6	15.5	.9	49-9098 ^{2,3}
6	VL	33,010	H	L	L	Moderate-term on-the-job	HS/SC	62.3	25.6	12.1	49-9099
336	-	-	-	-	-	-	-	-	-	-	51-0000
22	-	-	-	-	-	-	-	-	-	-	51-1000
22	L	42,930	VH	L	VL	Work experience in a related occupation	HS/SC	58.7	28.8	12.5	51-1011
55	-	-	-	-	-	-	-	-	-	-	51-2000
1	VL	38,910	H	H	VL	Long-term on-the-job	HS/SC	74.7	20.4	4.9	51-2011 ⁸
9	-	-	-	-	-	-	-	-	-	-	51-2020
1	VL	23,020	L	VH	VL	Short-term on-the-job	HS/SC	72.6	21.6	5.8	51-2021
7	VL	22,940	L	VH	VL	Short-term on-the-job	HS/SC	72.6	21.6	5.8	51-2022
1	VL	25,260	L	VH	VL	Short-term on-the-job	HS/SC	72.6	21.6	5.8	51-2023
1	VL	29,170	H	VH	VL	Short-term on-the-job	HS/SC	70.5	26.0	3.5	51-2031 ³
3	VL	28,620	H	VH	VL	Moderate-term on-the-job	HS/SC	79.3	20.7	-	51-2041
41	-	-	-	-	-	-	-	-	-	-	51-2090
1	VL	24,610	L	VH	VL	Moderate-term on-the-job	HS/SC	73.8	21.2	5.0	51-2091
30	H	22,680	L	VH	VL	Moderate-term on-the-job	HS/SC	73.8	21.2	5.0	51-2092
0	VL	24,190	L	VH	VL	Moderate-term on-the-job	HS/SC	73.8	21.2	5.0	51-2093 ⁵
9	L	22,890	L	VH	VL	Moderate-term on-the-job	HS/SC	73.8	21.2	5.0	51-2099

See footnotes at end of table.

Table III-1. Occupational employment and job openings data, 2002-12, and worker characteristics, 2002-Continued

(Numbers in thousands)

2002 national employment matrix occupation		Employment		Employment change, 2002-12				Per- cent self- em- ployed, 2002	Annual average job openings due to growth and total replacement needs, 2002-12	
		2002	2012	Numeric		Percent			Number	Rank
				Number	Rank	Number	Rank			
51-3000	Food processing occupations	757	836	79	-	10.5	-	2.5	132	-
51-3011	Bakers	173	192	19	VL	11.2	L	6.4	30	VL
51-3020	Butchers and other meat, poultry, and fish processing workers	414	459	45	-	10.9	-	1.1	74	-
51-3021	Butchers and meat cutters	132	129	-3	VL	-2.5	VL	1.1	21	VL
51-3022	Meat, poultry, and fish cutters and trimmers	154	179	25	L	16.4	H	1.1	29	VL
51-3023	Slaughterers and meat packers	128	151	23	L	18.2	H	1.0	24	VL
51-3090	Miscellaneous food processing workers	127	137	9	-	7.2	-	2.6	20	-
51-3091	Food and tobacco roasting, baking, and drying machine operators and tenders ⁸	19	20	1	VL	4.2	VL	3.7	3	VL
51-3092	Food batchmakers ²	74	79	5	VL	7.2	VL	3.4	11	VL
51-3093	Food cooking machine operators and tenders ⁴	34	37	3	VL	8.8	L	.3	6	VL
51-3099	All other food processing workers	42	48	6	VL	13.4	L	.0	8	VL
51-4000	Metal workers and plastic workers	2,367	2,544	177	-	7.5	-	2.0	273	-
51-4010	Computer control programmers and operators	151	166	15	-	9.8	-	.0	13	-
51-4011	Computer-controlled machine tool operators, metal and plastic	132	144	12	VL	9.3	L	.0	11	VL
51-4012	Numerical tool and process control programmers ⁵	19	22	3	VL	13.0	L	.0	2	VL
51-4020	Forming machine setters, operators, and tenders, metal and plastic	188	198	11	-	5.6	-	.6	21	-
51-4021	Extruding and drawing machine setters, operators, and tenders, metal and plastic ²	98	105	7	VL	7.1	VL	.0	14	VL
51-4022	Forging machine setters, operators, and tenders, metal and plastic ^{2,3}	45	48	3	VL	6.0	VL	.0	3	VL
51-4023	Rolling machine setters, operators, and tenders, metal and plastic ³	44	45	1	VL	2.0	VL	2.4	3	VL
51-4030	Machine tool cutting setters, operators, and tenders, metal and plastic	546	569	24	-	4.3	-	.5	61	-
51-4031	Cutting, punching, and press machine setters, operators, and tenders, metal and plastic	283	302	19	VL	6.8	VL	.0	38	L
51-4032	Drilling and boring machine tool setters, operators, and tenders, metal and plastic ^{2,3}	53	54	1	VL	2.1	VL	.0	5	VL
51-4033	Grinding, lapping, polishing, and buffing machine tool setters, operators, and tenders, metal and plastic	104	106	3	VL	2.4	VL	1.8	9	VL
51-4034	Lathe and turning machine tool setters, operators, and tenders, metal and plastic	75	75	1	VL	.8	VL	1.0	7	VL
51-4035	Milling and planing machine setters, operators, and tenders, metal and plastic ⁸	31	31	0	VL	.8	VL	.0	2	VL
51-4041	Machinists	387	419	32	L	8.2	VL	2.7	31	VL
51-4050	Metal furnace and kiln operators and tenders	31	30	0	-	-1.3	-	.0	4	-
51-4051	Metal-refining furnace operators and tenders ²	18	17	0	VL	-0.8	VL	.0	2	VL
51-4052	Pourers and casters, metal ^{2,3}	13	13	0	VL	-2.0	VL	.0	2	VL
51-4060	Model makers and patternmakers, metal and plastic	15	16	1	-	9.8	-	.0	1	-
51-4061	Model makers, metal and plastic ⁶	9	10	1	VL	14.6	L	.0	1	VL
51-4062	Patternmakers, metal and plastic ⁶	6	7	0	VL	3.6	VL	.0	0	VL
51-4070	Molders and molding machine setters, operators, and tenders, metal and plastic	174	189	14	-	8.2	-	1.1	21	-
51-4071	Foundry mold and coremakers ³	23	24	1	VL	3.6	VL	1.2	3	VL
51-4072	Molding, coremaking, and casting machine setters, operators, and tenders, metal and plastic	151	165	14	VL	8.9	L	1.1	19	VL

See footnotes at end of table.

Table III-1. Occupational employment and job openings data, 2002-12, and worker characteristics, 2002-Continued

(Numbers in thousands)

Annual average job openings due to growth and net replacement needs, 2002-12		2002 median annual earnings		Unemployment rate	Percent part-time	Most significant source of postsecondary education or training ⁹	Educational attainment cluster ¹¹	Percent of workers aged 25 to 44, by educational attainment			2002 national employment matrix occupation code
		Dollars	Rank					High school or less	Some college	College or higher	
Number	Rank										
25	-	-	-	-	-	-	-	-	-	-	51-3000
6	VL	20,580	L	H	H	Long-term on-the-job	HS/SC	73.5	20.5	6.0	51-3011
14	-	-	-	-	-	-	-	-	-	-	51-3020
3	VL	25,500	L	H	L	Long-term on-the-job	HS	81.2	16.2	2.6	51-3021
6	VL	17,820	VL	H	L	Short-term on-the-job	HS	81.2	16.2	2.6	51-3022
5	VL	20,370	L	H	L	Moderate-term on-the-job	HS	81.2	16.2	2.6	51-3023
4	-	-	-	-	-	-	-	-	-	-	51-3090
1	VL	23,260	L	VH	H	Short-term on-the-job	HS	76.9	18.9	4.2	51-3091 ⁸
2	VL	21,920	L	H	H	Short-term on-the-job	HS	77.1	18.4	4.5	51-3092 ²
1	VL	21,860	L	H	H	Short-term on-the-job	HS	81.7	14.0	4.4	51-3093 ⁴
1	VL	19,410	VL	H	H	Short-term on-the-job	HS	81.2	16.2	2.6	51-3099
75	-	-	-	-	-	-	-	-	-	-	51-4000
4	-	-	-	-	-	-	-	-	-	-	51-4010
3	VL	29,050	H	VH	VL	Moderate-term on-the-job	HS/SC	58.5	36.5	5.0	51-4011
1	VL	37,520	H	VH	VL	Long-term on-the-job	HS/SC	58.5	36.5	5.0	51-4012 ⁵
6	-	-	-	-	-	-	-	-	-	-	51-4020
4	VL	25,870	L	H	VL	Moderate-term on-the-job	HS/SC	76.3	23.6	.1	51-4021 ²
1	VL	26,300	L	H	VL	Moderate-term on-the-job	HS/SC	76.6	23.4	-	51-4022 ^{2,3}
1	VL	28,330	H	VH	VL	Moderate-term on-the-job	HS	75.7	18.1	6.2	51-4023 ³
14	-	-	-	-	-	-	-	-	-	-	51-4030
8	L	24,570	L	VH	VL	Moderate-term on-the-job	HS/SC	72.4	26.1	1.5	51-4031
2	VL	27,530	H	VH	VL	Moderate-term on-the-job	HS/SC	72.9	23.1	4.0	51-4032 ^{2,3}
2	VL	26,120	L	VH	VL	Moderate-term on-the-job	HS	82.5	13.8	3.6	51-4033
1	VL	30,270	H	VH	VL	Moderate-term on-the-job	HS/SC	77.4	20.9	1.7	51-4034
1	VL	29,210	H	VH	L	Moderate-term on-the-job	HS	78.4	19.0	2.6	51-4035 ⁸
12	L	32,570	H	H	VL	Long-term on-the-job	HS/SC	63.9	32.4	3.7	51-4041
1	-	-	-	-	-	-	-	-	-	-	51-4050
0	VL	30,770	H	H	VL	Moderate-term on-the-job	HS	77.9	18.2	3.9	51-4051 ²
0	VL	27,880	H	H	VL	Moderate-term on-the-job	HS	78.5	15.5	6.0	51-4052 ^{2,3}
1	-	-	-	-	-	-	-	-	-	-	51-4060
0	VL	38,000	H	L	VL	Moderate-term on-the-job	HS/SC	59.0	38.5	2.4	51-4061 ⁶
0	VL	33,470	H	L	VL	Moderate-term on-the-job	HS/SC	59.0	38.5	2.4	51-4062 ⁶
6	-	-	-	-	-	-	-	-	-	-	51-4070
1	VL	26,100	L	VH	VL	Moderate-term on-the-job	HS/SC	74.9	21.5	3.5	51-4071 ³
5	VL	23,230	L	VH	VL	Moderate-term on-the-job	HS/SC	71.4	25.7	2.9	51-4072

See footnotes at end of table.

Table III-1. Occupational employment and job openings data, 2002-12, and worker characteristics, 2002-Continued

(Numbers in thousands)

2002 national employment matrix occupation		Employment		Employment change, 2002-12				Per- cent self- em- ployed, 2002	Annual average job openings due to growth and total replacement needs, 2002-12	
		2002	2012	Numeric		Percent			Number	Rank
				Number	Rank	Number	Rank			
51-4081	Multiple machine tool setters, operators, and tenders, metal and plastic ⁸	99	107	8	VL	8.3	VL	.0	8	VL
51-4111	Tool and die makers	109	110	0	VL	.4	VL	1.7	3	VL
51-4120	Welding, soldering, and brazing workers	452	518	67	-	14.8	-	5.6	87	-
51-4121	Welders, cutters, solderers, and brazers	391	457	66	L	17.0	H	5.6	76	L
51-4122	Welding, soldering, and brazing machine setters, operators, and tenders	61	62	1	VL	.9	VL	5.7	10	VL
51-4190	Miscellaneous metalworkers and plastic workers	215	221	6	-	2.6	-	1.8	23	-
51-4191	Heat treating equipment setters, operators, and tenders, metal and plastic ^{2,3}	29	29	0	VL	-.6	VL	.0	4	VL
51-4192	Lay-out workers, metal and plastic ⁸	13	15	2	VL	15.6	H	.0	1	VL
51-4193	Plating and coating machine setters, operators, and tenders, metal and plastic ²	44	42	-1	VL	-2.6	VL	2.4	6	VL
51-4194	Tool grinders, filers, and sharpeners ^{2,3}	26	24	-2	VL	-7.7	VL	10.9	2	VL
51-4199	All other metal workers and plastic workers	104	111	7	VL	6.6	VL	.0	11	VL
51-5000	Printing occupations	465	466	1	-	.3	-	2.7	53	-
51-5010	Bookbinders and bindery workers	98	93	-5	-	-4.8	-	.7	6	-
51-5011	Bindery workers ²	91	86	-5	VL	-5.2	VL	.7	6	VL
51-5012	Bookbinders ^{2,5}	7	7	0	VL	1.3	VL	.7	0	VL
51-5020	Printers	346	350	4	-	1.2	-	3.5	43	-
51-5021	Job printers	56	61	5	VL	9.2	L	10.8	7	VL
51-5022	Prepress technicians and workers	91	81	-10	VL	-11.2	VL	.6	5	VL
51-5023	Printing machine operators	199	208	9	VL	4.6	VL	2.7	31	VL
51-5099	All other printing workers	21	23	2	VL	9.3	L	.0	3	VL
51-6000	Textile, apparel, and furnishings occupations	1,085	932	-152	-	-14.1	-	9.8	160	-
51-6011	Laundry and dry-cleaning workers	231	260	29	L	12.3	L	6.8	50	L
51-6021	Pressers, textile, garment, and related materials	91	91	0	VL	-.2	VL	.9	19	VL
51-6031	Sewing machine operators	315	216	-99	VL	-31.5	VL	7.4	33	L
51-6040	Shoe and leather workers	23	18	-4	-	-19.0	-	27.1	3	-
51-6041	Shoe and leather workers and repairers ^{2,3}	16	14	-3	VL	-16.1	VL	38.1	2	VL
51-6042	Shoe machine operators and tenders ^{2,5}	7	5	-2	VL	-26.1	VL	.0	1	VL
51-6050	Tailors, dressmakers, and sewers	90	77	-13	-	-14.0	-	43.6	14	-
51-6051	Sewers, hand	36	29	-8	VL	-21.2	VL	44.7	5	VL
51-6052	Tailors, dressmakers, and custom sewers	53	48	-5	VL	-9.1	VL	42.9	8	VL
51-6060	Textile machine setters, operators, and tenders ...	179	124	-56	-	-31.0	-	1.5	19	-
51-6061	Textile bleaching and dyeing machine operators and tenders ⁸	27	19	-8	VL	-28.7	VL	.0	3	VL
51-6062	Textile cutting machine setters, operators, and tenders ³	34	26	-8	VL	-22.6	VL	.0	3	VL
51-6063	Textile knitting and weaving machine setters, operators, and tenders ²	53	33	-20	VL	-38.6	VL	3.2	5	VL
51-6064	Textile winding, twisting, and drawing out machine setters, operators, and tenders ²	66	46	-20	VL	-30.3	VL	1.4	8	VL
51-6090	Miscellaneous textile, apparel, and furnishings workers	156	147	-9	-	-5.9	-	11.8	22	-
51-6091	Extruding and forming machine setters, operators, and tenders, synthetic and glass fibers ^{2,8}	27	24	-4	VL	-13.1	VL	.0	4	VL
51-6092	Fabric and apparel patternmakers ^{2,8}	11	8	-3	VL	-24.6	VL	.0	1	VL
51-6093	Upholsterers ²	56	51	-5	VL	-8.7	VL	26.3	8	VL
51-6099	All other textile, apparel, and furnishings workers	61	63	2	VL	3.3	VL	5.8	9	VL
51-7000	Woodworkers	374	393	19	-	5.1	-	10.4	47	-
51-7011	Cabinetmakers and bench carpenters	147	160	14	VL	9.4	L	13.0	16	VL
51-7021	Furniture finishers ²	39	41	1	VL	3.3	VL	22.1	4	VL
51-7030	Model makers and patternmakers, wood	9	10	1	-	11.0	-	.0	1	-
51-7031	Model makers, wood ^{2,8}	4	5	0	VL	10.3	L	.0	0	VL

See footnotes at end of table.

Table III-1. Occupational employment and job openings data, 2002-12, and worker characteristics, 2002-Continued

(Numbers in thousands)

Annual average job openings due to growth and net replacement needs, 2002-12		2002 median annual earnings		Unemployment rate	Percent part-time	Most significant source of postsecondary education or training ⁹	Educational attainment cluster ¹¹	Percent of workers aged 25 to 44, by educational attainment			2002 national employment matrix occupation code
		Dollars	Rank					High school or less	Some college	College or higher	
Number	Rank										
4	VL	28,690	H	VL	VL	Moderate-term on-the-job	HS/SC	72.3	24.3	3.3	51-4081 ⁸
3	VL	42,730	VH	H	VL	Long-term on-the-job	HS/SC	47.5	47.3	5.2	51-4111
19	-	-	-	-	-	-	-	-	-	-	51-4120
18	L	29,160	H	VH	VL	Long-term on-the-job	HS/SC	74.6	23.2	2.2	51-4121
2	VL	28,900	H	VH	VL	Moderate-term on-the-job	HS/SC	74.6	23.2	2.2	51-4122
6	-	-	-	-	-	-	-	-	-	-	51-4190
1	VL	28,200	H	L	VL	Moderate-term on-the-job	HS	78.6	18.5	2.9	51-4191 ^{2,3}
0	VL	30,760	H	H	VL	Moderate-term on-the-job	HS/SC	76.3	20.0	3.7	51-4192 ⁸
1	VL	25,420	L	H	VL	Moderate-term on-the-job	HS	86.4	7.4	6.3	51-4193 ²
1	VL	29,400	H	L	VL	Moderate-term on-the-job	HS/SC	68.4	22.5	9.1	51-4194 ^{2,3}
3	VL	28,400	H	H	VL	Moderate-term on-the-job	HS/SC	75.7	21.5	2.7	51-4199
13	-	-	-	-	-	-	-	-	-	-	51-5000
3	-	-	-	-	-	-	-	-	-	-	51-5010
2	VL	21,860	L	H	L	Short-term on-the-job	HS/SC	70.4	21.5	8.1	51-5011 ²
0	VL	27,680	H	H	L	Moderate-term on-the-job	HS/SC	70.4	21.5	8.1	51-5012 ^{2,5}
9	-	-	-	-	-	-	-	-	-	-	51-5020
2	VL	30,100	H	H	VL	Long-term on-the-job	HS/SC	66.5	27.0	6.5	51-5021
2	VL	31,150	H	H	L	Long-term on-the-job	HS/SC	57.1	30.0	12.9	51-5022
6	VL	29,010	H	L	VL	Moderate-term on-the-job	HS/SC	70.6	25.3	4.1	51-5023
1	VL	23,330	L	H	L	Moderate-term on-the-job	HS/SC	70.6	25.3	4.1	51-5099
24	-	-	-	-	-	-	-	-	-	-	51-6000
9	L	16,780	VL	H	H	Moderate-term on-the-job	HS	82.4	13.6	4.0	51-6011
1	VL	17,070	VL	VH	H	Short-term on-the-job	HS	89.8	8.4	1.8	51-6021
4	VL	17,440	VL	VH	L	Moderate-term on-the-job	HS	86.7	10.2	3.1	51-6031
1	-	-	-	-	-	-	-	-	-	-	51-6040
1	VL	19,010	VL	L	L	Long-term on-the-job	HS/SC	70.2	20.3	9.5	51-6041 ^{2,3}
0	VL	20,600	L	H	VL	Moderate-term on-the-job	HS	83.7	10.4	6.0	51-6042 ^{2,5}
2	-	-	-	-	-	-	-	-	-	-	51-6050
1	VL	18,070	VL	H	H	Short-term on-the-job	HS/SC	63.1	24.2	12.7	51-6051
1	VL	22,220	L	H	H	Long-term on-the-job	HS/SC	63.1	24.2	12.7	51-6052
3	-	-	-	-	-	-	-	-	-	-	51-6060
1	VL	20,800	L	VH	VL	Moderate-term on-the-job	HS	88.5	9.8	1.7	51-6061 ⁸
1	VL	20,320	L	VH	L	Moderate-term on-the-job	HS	90.7	8.5	.8	51-6062 ³
1	VL	22,970	L	VH	L	Long-term on-the-job	HS	89.3	7.9	2.8	51-6063 ²
1	VL	21,920	L	VH	VL	Moderate-term on-the-job	HS	87.9	11.7	.4	51-6064 ²
4	-	-	-	-	-	-	-	-	-	-	51-6090
1	VL	27,500	H	VH	VL	Moderate-term on-the-job	HS	80.3	14.5	5.2	51-6091 ^{2,8}
1	VL	26,360	L	VL	VL	Long-term on-the-job	HS	80.3	14.5	5.2	51-6092 ^{2,8}
1	VL	24,670	L	L	L	Long-term on-the-job	HS	80.1	19.9	-	51-6093 ²
2	VL	18,740	VL	H	L	Short-term on-the-job	HS	86.2	10.5	3.4	51-6099
12	-	-	-	-	-	-	-	-	-	-	51-7000
5	VL	24,000	L	L	VL	Long-term on-the-job	HS/SC	69.0	23.3	7.7	51-7011
1	VL	22,710	L	H	L	Long-term on-the-job	HS	76.3	17.2	6.5	51-7021 ²
0	-	-	-	-	-	-	-	-	-	-	51-7030
0	VL	24,740	L	H	L	Long-term on-the-job	HS	70.2	19.4	10.4	51-7031 ^{2,8}

See footnotes at end of table.

Table III-1. Occupational employment and job openings data, 2002-12, and worker characteristics, 2002-Continued

(Numbers in thousands)

2002 national employment matrix occupation		Employment		Employment change, 2002-12				Percent self-employed, 2002	Annual average job openings due to growth and total replacement needs, 2002-12	
		2002	2012	Numeric		Percent			Number	Rank
				Number	Rank	Number	Rank			
51-7032	Patternmakers, wood ^{2,8}	4	5	0	VL	11.8	L	.0	0	VL
51-7040	Woodworking machine setters, operators, and tenders	151	153	3	-	1.8	-	2.8	24	-
51-7041	Sawing machine setters, operators, and tenders, wood	56	56	0	VL	-2	VL	2.2	10	VL
51-7042	Woodworking machine setters, operators, and tenders, except sawing	95	98	3	VL	3.0	VL	3.1	14	VL
51-7099	All other woodworkers ²	29	29	0	VL	1.7	VL	24.5	3	VL
51-8000	Plant and system operators	346	353	7	-	2.0	-	.7	27	-
51-8010	Power plant operators, distributors, and dispatchers	51	51	0	-	-.7	-	.0	4	-
51-8011	Nuclear power reactor operators ^{2,5}	3	3	0	VL	-3.2	VL	.0	0	VL
51-8012	Power distributors and dispatchers ^{2,4}	12	12	0	VL	-3.0	VL	.0	1	VL
51-8013	Power plant operators ²	35	36	0	VL	.3	VL	.0	3	VL
51-8021	Stationary engineers and boiler operators	55	56	0	VL	.3	VL	2.2	4	VL
51-8031	Water and liquid waste treatment plant and system operators ²	99	115	16	VL	16.0	H	.0	9	VL
51-8090	Miscellaneous plant and system operators	141	132	-9	-	-6.2	-	.9	10	-
51-8091	Chemical plant and system operators ²	58	51	-7	VL	-12.3	VL	.9	4	VL
51-8092	Gas plant operators ^{2,5}	12	13	1	VL	6.7	VL	.9	1	VL
51-8093	Petroleum pump system operators, refinery operators, and gaugers ^{2,3}	39	35	-4	VL	-11.0	VL	.8	3	VL
51-8099	All other plant and system operators ^{2,3}	32	33	2	VL	5.6	VL	.9	3	VL
51-9000	Other production occupations	3,010	3,240	230	-	7.6	-	2.5	535	-
51-9010	Chemical processing machine setters, operators, and tenders	94	92	-2	-	-2.0	-	.9	13	-
51-9011	Chemical equipment operators and tenders ²	58	56	-2	VL	-3.8	VL	.8	8	VL
51-9012	Separating, filtering, clarifying, precipitating, and still machine setters, operators, and tenders ²	36	36	0	VL	.8	VL	.9	5	VL
51-9020	Crushing, grinding, polishing, mixing, and blending workers	196	192	-4	-	-2.1	-	1.1	26	-
51-9021	Crushing, grinding, and polishing machine setters, operators, and tenders	45	44	-1	VL	-2.8	VL	1.1	6	VL
51-9022	Grinding and polishing workers, hand	45	49	4	VL	9.0	L	1.1	7	VL
51-9023	Mixing and blending machine setters, operators, and tenders	106	99	-7	VL	-6.5	VL	1.2	14	VL
51-9030	Cutting workers	109	116	7	-	6.9	-	.9	17	-
51-9031	Cutters and trimmers, hand	31	33	2	VL	7.6	VL	.9	5	VL
51-9032	Cutting and slicing machine setters, operators, and tenders	77	83	5	VL	6.6	VL	.9	12	VL
51-9041	Extruding, forming, pressing, and compacting machine setters, operators, and tenders	73	73	0	VL	-.1	VL	1.1	10	VL
51-9051	Furnace, kiln, oven, drier, and kettle operators and tenders	31	29	-2	VL	-4.9	VL	1.7	4	VL
51-9061	Inspectors, testers, sorters, samplers, and weighers	515	539	24	L	4.7	VL	1.2	89	L
51-9071	Jewelers and precious stone and metal workers ²	40	42	2	VL	4.5	VL	25.5	3	VL
51-9080	Medical, dental, and ophthalmic laboratory technicians	94	101	7	-	7.4	-	8.4	6	-
51-9081	Dental laboratory technicians	47	49	2	VL	3.6	VL	13.0	3	VL
51-9082	Medical appliance technicians ³	14	16	2	VL	16.1	H	13.0	1	VL
51-9083	Ophthalmic laboratory technicians	33	36	3	VL	9.2	L	.0	2	VL
51-9111	Packaging and filling machine operators and tenders	387	468	82	H	21.2	H	.0	76	L
51-9120	Painting workers	187	211	24	-	13.0	-	8.0	34	-
51-9121	Coating, painting, and spraying machine setters, operators, and tenders	103	112	10	VL	9.4	L	8.0	18	VL
51-9122	Painters, transportation equipment	50	59	9	VL	17.5	H	7.8	9	VL
51-9123	Painting, coating, and decorating workers	34	40	6	VL	17.6	H	8.2	6	VL

See footnotes at end of table.

Table III-1. Occupational employment and job openings data, 2002-12, and worker characteristics, 2002-Continued

(Numbers in thousands)

Annual average job openings due to growth and net replacement needs, 2002-12		2002 median annual earnings		Unemployment rate	Percent part-time	Most significant source of postsecondary education or training ⁹	Educational attainment cluster ¹¹	Percent of workers aged 25 to 44, by educational attainment			2002 national employment matrix occupation code
		Dollars	Rank					High school or less	Some college	College or higher	
Number	Rank										
0	VL	29,780	H	H	L	Long-term on-the-job	HS	70.2	19.4	10.4	51-7032 ^{2,8}
4	-	-	-	-	-	-	-	-	-	-	51-7040
2	VL	22,080	L	VH	VL	Moderate-term on-the-job	HS	86.1	13.5	.4	51-7041
3	VL	22,030	L	H	L	Moderate-term on-the-job	HS/SC/C	66.5	11.5	22.0	51-7042
1	VL	21,020	L	H	L	Moderate-term on-the-job	HS/SC/C	56.9	22.7	20.4	51-7099 ²
12	-	-	-	-	-	-	-	-	-	-	51-8000
1	VL	-	-	-	-	-	-	-	-	-	51-8010
0	VL	61,060	VH	VL	VL	Long-term on-the-job	HS/SC	49.8	38.0	12.2	51-8011 ^{2,5}
0	VL	54,120	VH	VL	VL	Long-term on-the-job	HS/SC	47.1	40.5	12.4	51-8012 ^{2,4}
1	VL	49,920	VH	VL	VL	Long-term on-the-job	HS/SC	49.8	38.0	12.2	51-8013 ²
1	VL	43,240	VH	VL	VL	Long-term on-the-job	HS/SC	53.7	35.4	11.0	51-8021
5	VL	33,390	H	VL	VL	Long-term on-the-job	HS/SC	48.7	43.8	7.5	51-8031 ²
5	-	-	-	-	-	-	-	-	-	-	51-8090
2	VL	43,940	VH	VL	VL	Long-term on-the-job	HS/SC	54.6	39.0	6.4	51-8091 ²
0	VL	48,340	VH	VL	VL	Long-term on-the-job	HS/SC	54.6	39.0	6.4	51-8092 ^{2,5}
1	VL	49,280	VH	VL	VL	Long-term on-the-job	HS/SC	57.6	37.5	4.9	51-8093 ^{2,3}
1	VL	36,660	H	VL	VL	Long-term on-the-job	HS/SC	57.6	37.5	4.9	51-8099 ^{2,3}
98	-	-	-	-	-	-	-	-	-	-	51-9000
3	-	-	-	-	-	-	-	-	-	-	51-9010
2	VL	37,430	H	L	VL	Moderate-term on-the-job	HS/SC	46.2	36.4	17.5	51-9011 ²
1	VL	30,340	H	L	VL	Moderate-term on-the-job	HS/SC	46.2	36.4	17.5	51-9012 ²
6	-	-	-	-	-	-	-	-	-	-	51-9020
1	VL	26,690	L	H	VL	Moderate-term on-the-job	HS/SC	67.9	28.6	3.6	51-9021
2	VL	22,970	L	H	VL	Moderate-term on-the-job	HS/SC	67.9	28.6	3.6	51-9022
3	VL	27,530	H	H	VL	Moderate-term on-the-job	HS/SC	67.9	28.6	3.6	51-9023
3	-	-	-	-	-	-	-	-	-	-	51-9030
1	VL	22,020	L	H	VL	Short-term on-the-job	HS	81.1	17.0	1.9	51-9031
2	VL	25,690	L	H	VL	Moderate-term on-the-job	HS	81.1	17.0	1.9	51-9032
2	VL	26,540	L	VH	VL	Moderate-term on-the-job	HS/SC	69.5	26.0	4.5	51-9041
1	VL	28,210	H	L	VL	Moderate-term on-the-job	HS/SC	71.2	23.0	5.7	51-9051
14	L	27,060	L	H	VL	Moderate-term on-the-job	HS/SC	52.9	33.7	13.4	51-9061
1	VL	26,260	L	L	L	Postsecondary vocational award	HS/SC	61.5	24.8	13.7	51-9071 ²
3	-	-	-	-	-	-	-	-	-	-	51-9080
1	VL	28,500	H	L	L	Long-term on-the-job	HS/SC	51.8	34.6	13.6	51-9081
1	VL	27,680	H	L	L	Long-term on-the-job	HS/SC	50.4	34.2	15.4	51-9082 ³
1	VL	21,760	L	L	L	Moderate-term on-the-job	HS/SC	51.8	34.6	13.6	51-9083
16	L	21,210	L	VH	VL	Short-term on-the-job	HS	81.7	15.5	2.8	51-9111
7	-	-	-	-	-	-	-	-	-	-	51-9120
4	VL	25,290	L	VH	VL	Moderate-term on-the-job	HS/SC	76.7	20.8	2.5	51-9121
2	VL	33,550	H	VH	VL	Moderate-term on-the-job	HS/SC	76.7	20.8	2.5	51-9122
1	VL	21,200	L	VH	VL	Short-term on-the-job	HS/SC	76.7	20.8	2.5	51-9123

See footnotes at end of table.

Table III-1. Occupational employment and job openings data, 2002–12, and worker characteristics, 2002—Continued

(Numbers in thousands)

2002 national employment matrix occupation		Employment		Employment change, 2002–12				Per- cent self- em- ployed, 2002	Annual average job openings due to growth and total replacement needs, 2002–12	
		2002	2012	Numeric		Percent			Number	Rank
				Number	Rank	Number	Rank			
51-9130	Photographic process workers and processing machine operators	82	89	6	–	7.9	–	4.3	14	–
51-9131	Photographic process workers	28	30	2	VL	5.4	VL	4.0	5	VL
51-9132	Photographic processing machine operators ..	54	59	5	VL	9.2	L	4.5	9	VL
51-9141	Semiconductor processors ³	46	42	-5	VL	-10.6	VL	.0	4	VL
51-9190	Miscellaneous production workers	1,155	1,245	90	–	7.8	–	2.3	242	–
51-9191	Cementing and gluing machine operators and tenders ²	27	28	0	VL	1.0	VL	.0	4	VL
51-9192	Cleaning, washing, and metal pickling equipment operators and tenders ³	18	19	1	VL	6.9	VL	.0	3	VL
51-9193	Cooling and freezing equipment operators and tenders ⁸	7	8	1	VL	7.1	VL	.0	1	VL
51-9194	Etchers and engravers ^{2,3}	10	10	1	VL	6.2	VL	4.6	1	VL
51-9195	Molders, shapers, and casters, except metal and plastic	46	49	3	VL	6.4	VL	19.2	6	VL
51-9196	Paper goods machine setters, operators, and tenders	117	114	-3	VL	-2.8	VL	.2	15	VL
51-9197	Tire builders	14	15	1	VL	6.6	VL	4.8	2	VL
51-9198	Helpers—production workers	467	503	36	L	7.7	VL	.2	139	H
51-9199	All other production workers	449	500	51	L	11.3	L	3.4	71	L
53-0000	Transportation and material moving occupations ..	9,828	11,111	1,282	–	13.0	–	4.4	2,000	–
53-1000	Supervisors, transportation and material moving workers	364	411	47	–	12.9	–	.2	42	–
53-1011	Aircraft cargo handling supervisors ⁵	9	10	1	VL	15.6	H	.2	1	VL
53-1021	First-line supervisors/managers of helpers, laborers, and material movers, hand	147	168	21	L	14.0	L	.2	17	VL
53-1031	First-line supervisors/managers of transportation and material-moving machine and vehicle operators	207	232	25	L	12.0	L	.2	24	VL
53-2000	Air transportation occupations	144	168	24	–	17.0	–	1.6	13	–
53-2010	Aircraft pilots and flight engineers	100	118	18	–	17.8	–	2.4	8	–
53-2011	Airline pilots, copilots, and flight engineers ²	79	94	15	VL	18.5	H	.0	7	VL
53-2012	Commercial pilots ²	21	24	3	VL	14.9	H	11.2	2	VL
53-2020	Air traffic controllers and airfield operations specialists	32	36	4	–	13.5	–	.0	3	–
53-2021	Air traffic controllers ²	26	29	3	VL	12.6	L	.0	2	VL
53-2022	Airfield operations specialists ^{2,5}	6	7	1	VL	17.2	H	.0	1	VL
53-2099	All other air transportation workers	12	14	2	VL	19.4	H	.0	1	VL
53-3000	Motor vehicle operators	4,136	4,896	760	–	18.4	–	8.5	808	–
53-3011	Ambulance drivers and attendants, except emergency medical technicians ⁸	17	22	5	VL	26.7	VH	.0	4	VL
53-3020	Bus drivers	654	761	106	–	16.2	–	.7	117	–
53-3021	Bus drivers, transit and intercity	202	233	31	L	15.2	H	.7	36	L
53-3022	Bus drivers, school	453	528	76	L	16.7	H	.7	81	L
53-3030	Driver/sales workers and truck drivers	3,221	3,813	592	–	18.4	–	10.5	634	–
53-3031	Driver/sales workers	431	450	19	VL	4.3	VL	13.2	68	L
53-3032	Truck drivers, heavy and tractor-trailer	1,767	2,104	337	VH	19.0	H	13.1	324	VH
53-3033	Truck drivers, light or delivery services	1,022	1,259	237	VH	23.2	VH	4.7	241	H
53-3041	Taxi drivers and chauffeurs	132	161	29	L	21.7	VH	4.8	31	VL
53-3099	All other motor vehicle operators ³	111	139	28	L	25.2	VH	3.6	22	VL
53-4000	Rail transportation occupations	101	96	-5	–	-5.4	–	.3	13	–
53-4010	Locomotive engineers and operators ²	33	31	-2	VL	-7.2	VL	.0	4	VL
53-4021	Railroad brake, signal, and switch operators ^{2,8}	15	12	-3	VL	-22.8	VL	1.7	2	VL
53-4031	Railroad conductors and yardmasters ²	38	36	-2	VL	-4.2	VL	.0	5	VL
53-4039	Subway, streetcar operators and all other rail transportation workers ⁸	15	17	2	VL	13.2	L	.0	2	VL
53-5000	Water transportation occupations	68	70	2	–	3.4	–	2.1	8	–
53-5011	Sailors and marine oilers ^{2,3}	27	28	1	VL	4.0	VL	.0	3	VL

See footnotes at end of table.

Table III-1. Occupational employment and job openings data, 2002-12, and worker characteristics, 2002-Continued

(Numbers in thousands)

Annual average job openings due to growth and net replacement needs, 2002-12		2002 median annual earnings		Unemployment rate	Percent part-time	Most significant source of postsecondary education or training ⁹	Educational attainment cluster ¹¹	Percent of workers aged 25 to 44, by educational attainment			2002 national employment matrix occupation code
		Dollars	Rank					High school or less	Some college	College or higher	
Number	Rank										
3	-	-	-	-	-	-	-	-	-	-	51-9130
1	VL	20,220	L	H	H	Moderate-term on-the-job	HS/SC/C	41.6	32.8	25.5	51-9131
2	VL	18,820	VL	H	H	Short-term on-the-job	HS/SC/C	41.6	32.8	25.5	51-9132
1	VL	27,340	L	H	VL	Associate degree	HS/SC	68.7	23.9	7.5	51-9141 ⁸
39	-	-	-	-	-	-	-	-	-	-	51-9190
1	VL	23,190	L	H	VL	Moderate-term on-the-job	HS	82.7	17.3	-	51-9191 ²
1	VL	22,850	L	VH	VL	Moderate-term on-the-job	HS	88.0	8.9	3.1	51-9192 ³
0	VL	21,240	L	VL	VL	Moderate-term on-the-job	HS	75.3	19.9	4.8	51-9193 ⁸
0	VL	22,450	L	H	H	Long-term on-the-job	HS/SC	63.1	25.3	11.6	51-9194 ^{2,3}
1	VL	24,700	L	VH	L	Moderate-term on-the-job	HS	64.6	17.3	18.1	51-9195
2	VL	28,280	H	H	VL	Moderate-term on-the-job	HS/SC	75.0	22.8	2.2	51-9196
0	VL	38,840	H	H	VL	Moderate-term on-the-job	HS/SC	49.9	44.2	6.0	51-9197
17	L	19,240	VL	VH	H	Short-term on-the-job	HS	77.3	17.3	5.4	51-9198
16	L	22,260	L	VH	VL	Moderate-term on-the-job	HS/SC	74.3	21.0	4.7	51-9199
350	-	-	-	-	-	-	-	-	-	-	53-0000
13	-	-	-	-	-	-	-	-	-	-	53-1000
0	VL	37,220	H	L	L	Work experience in a related occupation	HS/SC	50.0	36.5	13.5	53-1011 ⁵
6	VL	37,180	H	L	L	Work experience in a related occupation	HS/SC	50.0	36.5	13.5	53-1021
7	VL	42,910	VH	L	L	Work experience in a related occupation	HS/SC	50.0	36.5	13.5	53-1031
6	-	-	-	-	-	-	-	-	-	-	53-2000
4	-	-	-	-	-	-	-	-	-	-	53-2010
4	VL	109,580	VH	L	L	Bachelor's degree	C	5.0	18.9	76.1	53-2011 ²
1	VL	47,970	VH	L	L	Postsecondary vocational award	C	5.0	18.9	76.1	53-2012 ²
1	-	-	-	-	-	-	-	-	-	-	53-2020
1	VL	91,600	VH	VL	VL	Long-term on-the-job	SC/C	17.3	33.6	49.1	53-2021 ²
0	VL	36,010	H	VL	VL	Long-term on-the-job	SC/C	17.3	33.6	49.1	53-2022 ^{2,5}
1	VL	23,330	L	VL	VL	Moderate-term on-the-job	HS/SC	50.0	36.5	13.5	53-2099
138	-	-	-	-	-	-	-	-	-	-	53-3000
1	VL	19,100	VL	L	VL	Moderate-term on-the-job	HS/SC	69.5	24.9	5.6	53-3011 ⁸
25	-	-	-	-	-	-	-	-	-	-	53-3020
7	L	29,580	H	L	VH	Moderate-term on-the-job	HS/SC	63.9	29.2	7.0	53-3021
17	L	22,390	L	L	VH	Short-term on-the-job	HS/SC	63.9	29.2	7.0	53-3022
105	-	-	-	-	-	-	-	-	-	-	53-3030
9	L	20,640	L	H	L	Short-term on-the-job	HS/SC	70.9	24.2	4.9	53-3031
63	VH	33,210	H	H	L	Moderate-term on-the-job	HS/SC	70.9	24.2	4.9	53-3032
33	H	23,870	L	H	H	Short-term on-the-job	HS/SC	60.9	25.9	13.2	53-3033
4	VL	18,530	VL	H	H	Short-term on-the-job	HS/SC	60.9	25.9	13.2	53-3041
4	VL	18,820	VL	VH	VH	Short-term on-the-job	HS	73.0	16.8	10.2	53-3099 ³
3	-	-	-	-	-	-	-	-	-	-	53-4000
1	VL	45,450	VH	VL	VL	Work experience in a related occupation	HS/SC	46.8	47.3	5.9	53-4010 ²
0	VL	43,520	VH	VL	VL	Work experience in a related occupation	HS/SC	50.9	37.6	11.6	53-4021 ^{2,8}
1	VL	44,490	VH	VL	VL	Work experience in a related occupation	HS/SC	46.8	42.4	10.9	53-4031 ²
1	VL	44,680	VH	L	L	Work experience in a related occupation	HS/SC	50.9	37.6	11.6	53-4039 ⁸
2	-	-	-	-	-	-	-	-	-	-	53-5000
1	VL	28,370	H	VH	VL	Short-term on-the-job	HS/SC	69.8	24.8	5.4	53-5011 ^{2,3}

See footnotes at end of table.

Table III-1. Occupational employment and job openings data, 2002-12, and worker characteristics, 2002-Continued

(Numbers in thousands)

2002 national employment matrix occupation		Employment		Employment change, 2002-12				Per- cent self- em- ployed, 2002	Annual average job openings due to growth and total replacement needs, 2002-12	
		2002	2012	Numeric		Percent			Number	Rank
				Number	Rank	Number	Rank			
53-5020	Ship and boat captains and operators	29	30	1	-	2.4	-	5.0	4	-
53-5021	Captains, mates, and pilots of water vessels ² ..	25	26	1	VL	2.4	VL	5.0	3	VL
53-5022	Motorboat operators ^{2,5}	4	4	0	VL	2.7	VL	4.7	1	VL
53-5031	Ship engineers ⁸	8	9	0	VL	4.5	VL	.0	1	VL
53-5099	All other water transportation workers	4	4	0	VL	5.6	VL	.0	0	VL
53-6000	Other transportation workers	294	326	32	-	11.0	-	1.4	57	-
53-6011	Bridge and lock tenders ⁸	4	3	-1	VL	-17.4	VL	.0	0	VL
53-6021	Parking lot attendants ²	107	128	21	L	19.2	H	.4	20	VL
53-6031	Service station attendants	107	111	4	VL	3.3	VL	3.2	24	VL
53-6041	Traffic technicians ⁵	6	6	1	VL	9.3	L	.0	1	VL
53-6051	Transportation inspectors	29	32	2	VL	7.7	VL	.4	5	VL
53-6099	All other related transportation workers ³	40	47	6	VL	15.2	H	.0	7	VL
53-7000	Material moving occupations	4,722	5,144	422	-	8.9	-	1.4	1,059	-
53-7011	Conveyor operators and tenders ⁸	58	65	7	VL	12.4	L	.0	9	VL
53-7021	Crane and tower operators	50	55	5	VL	10.8	L	1.9	5	VL
53-7030	Dredge, excavating, and loading machine operators	87	94	7	-	7.5	-	16.9	16	-
53-7031	Dredge operators ^{2,5}	3	3	0	VL	.3	VL	16.6	1	VL
53-7032	Excavating and loading machine and dragline operators ²	80	87	7	VL	8.9	L	16.9	15	VL
53-7033	Loading machine operators, underground mining ^{2,5}	4	3	-1	VL	-14.1	VL	16.5	1	VL
53-7041	Hoist and winch operators ^{2,4}	9	10	1	VL	13.0	L	.6	1	VL
53-7051	Industrial truck and tractor operators	594	659	66	L	11.1	L	.1	98	L
53-7060	Laborers and material movers, hand	3,659	3,967	308	-	8.4	-	1.3	861	-
53-7061	Cleaners of vehicles and equipment	344	374	30	L	8.7	L	8.3	77	L
53-7062	Laborers and freight, stock, and material movers, hand	2,231	2,378	147	H	6.6	VL	.8	541	VH
53-7063	Machine feeders and offbearers	164	162	-2	VL	-1.4	VL	.0	31	VL
53-7064	Packers and packagers, hand	920	1,052	132	H	14.4	L	.1	211	H
53-7070	Pumping station operators	32	30	-2	-	-6.0	-	5.8	4	-
53-7071	Gas compressor and gas pumping station operators ⁶	7	7	0	VL	1.0	VL	5.4	1	VL
53-7072	Pump operators, except wellhead pumpers ⁶	13	13	-1	VL	-5.0	VL	6.3	2	VL
53-7073	Wellhead pumpers ⁶	11	10	-1	VL	-11.7	VL	5.5	1	VL
53-7081	Refuse and recyclable material collectors ²	134	158	24	L	17.6	H	1.8	45	L
53-7111	Shuttle car operators ⁸	3	2	-1	VL	-31.3	VL	.0	1	VL
53-7121	Tank car, truck, and ship loaders ⁸	17	17	0	VL	-2.1	VL	.0	3	VL
53-7199	Material moving workers, all other	78	86	8	VL	10.0	L	.1	16	VL

Table III-1. Occupational employment and job openings data, 2002–12, and worker characteristics, 2002—Continued

(Numbers in thousands)

Annual average job openings due to growth and net replacement needs, 2002–12		2002 median annual earnings		Unemployment rate	Percent part-time	Most significant source of postsecondary education or training ⁹	Educational attainment cluster ¹¹	Percent of workers aged 25 to 44, by educational attainment			2002 national employment matrix occupation code
		Dollars	Rank					High school or less	Some college	College or higher	
Number	Rank										
1	–	–	–	–	–	–	–	–	–	–	53-5020
1	VL	49,850	VH	H	VL	Work experience in a related occupation	HS	72.4	13.6	13.9	53-5021 ²
0	VL	26,440	L	H	VL	Moderate-term on-the-job	HS	72.4	13.6	13.9	53-5022 ^{2,5}
0	VL	51,190	VH	VH	VL	Postsecondary vocational award	HS/SC	59.5	26.6	13.9	53-5031 ⁸
0	VL	30,520	H	H	VL	Short-term on-the-job	HS/SC	50.0	36.5	13.5	53-5099
14	–	–	–	–	–	–	–	–	–	–	53-6000
0	VL	35,310	H	VH	L	Short-term on-the-job	HS/SC	62.8	30.3	6.9	53-6011 ⁸
5	VL	16,320	VL	VH	VH	Short-term on-the-job	HS	70.3	19.4	10.3	53-6021 ²
5	VL	16,570	VL	VH	H	Short-term on-the-job	HS/SC	67.8	26.4	5.9	53-6031
0	VL	31,650	H	H	L	Short-term on-the-job	HS/SC	36.7	54.9	8.4	53-6041 ⁵
1	VL	48,450	VH	L	VL	Work experience in a related occupation	HS/SC	39.7	45.9	14.4	53-6051
2	VL	26,600	L	H	L	Short-term on-the-job	HS/SC	44.5	49.2	6.3	53-6099 ³
173	–	–	–	–	–	–	–	–	–	–	53-7000
2	VL	24,250	L	VL	VL	Short-term on-the-job	HS	77.0	19.5	3.5	53-7011 ⁸
2	VL	36,330	H	VH	VL	Moderate-term on-the-job	HS	87.4	10.9	1.7	53-7021
3	–	–	–	–	–	–	–	–	–	–	53-7030
0	VL	27,730	H	L	VL	Moderate-term on-the-job	HS	83.9	15.5	.7	53-7031 ^{2,5}
3	VL	32,410	H	L	VL	Moderate-term on-the-job	HS	83.9	15.5	.7	53-7032 ²
0	VL	31,930	H	L	VL	Moderate-term on-the-job	HS	83.9	15.5	.7	53-7033 ^{2,5}
0	VL	31,400	H	VH	VL	Moderate-term on-the-job	HS	78.1	19.4	2.5	53-7041 ^{2,4}
18	L	26,070	L	VH	VL	Short-term on-the-job	HS	78.8	17.9	3.3	53-7051
138	–	–	–	–	–	–	–	–	–	–	53-7060
15	L	17,060	VL	VH	H	Short-term on-the-job	HS	78.1	17.4	4.5	53-7061
88	VH	19,710	L	VH	H	Short-term on-the-job	HS/SC	73.8	21.7	4.5	53-7062
4	VL	21,840	L	VH	L	Short-term on-the-job	HS	81.0	15.7	3.3	53-7063
30	H	16,700	VL	VH	H	Short-term on-the-job	HS	83.3	12.6	4.1	53-7064
1	–	–	–	–	–	–	–	–	–	–	53-7070
0	VL	42,510	VH	VL	VL	Moderate-term on-the-job	HS/SC	52.2	38.8	9.0	53-7071 ⁶
0	VL	36,470	H	VL	VL	Moderate-term on-the-job	HS/SC	52.2	38.8	9.0	53-7072 ⁶
0	VL	33,770	H	VL	VL	Moderate-term on-the-job	HS/SC	52.2	38.8	9.0	53-7073 ⁶
6	VL	24,130	L	H	L	Short-term on-the-job	HS	79.0	14.6	6.4	53-7081 ²
0	VL	38,360	H	VH	L	Short-term on-the-job	HS	77.0	19.5	3.5	53-7111 ⁸
0	VL	32,500	H	H	VL	Moderate-term on-the-job	HS	77.0	19.5	3.5	53-7121 ⁸
3	VL	25,070	L	H	L	Moderate-term on-the-job	HS/SC	73.7	22.3	4.1	53-7199

¹ CPS earnings data are used for this occupation.

² One or more Current Population Survey (CPS) proxy occupations are used to estimate CPS based data.

³ Employment of the 25–44 age group was less than 10,000; employment for the 25-and-older age group was used instead.

⁴ Employment of the 25-and-older age group was less than 10,000; employment for the 16-and-older age group was used instead.

⁵ Employment was less than 10,000; employment for the 25-and-older age group was used instead.

⁶ CPS-based employment of the 25–44 age group was less than 10,000; employment for the 25-and-older age group was used instead.

⁷ CPS-based employment of the 25-and-older age group was less than 10,000; employment for the 16-and-older age group was used instead.

⁸ CPS-based employment was less than 10,000; CPS-based summary employment was used instead.

⁹ An occupation is placed into one of 11 categories that best describes the postsecondary education or training needed by most workers to become fully qualified in the occupation.

¹⁰ Bachelor's or higher degree, plus work experience.

¹¹ The job types are presented in the following categories: HS = high school occupations, HS/SC = high school/some college occupations, SC = some college occupations, HS/SC/C = high school/some college/college occupations, SC/C = some college/college occupations, and C = college occupations.

NOTE: Rankings are based on employment in all detailed occupations in the National Employment Matrix. For details, see "Data presented" section of text. Codes for describing the ranked variables are: VH = Very high, H = High, L = Low, and VL = Very low. A dash indicates data are not applicable. Quartile ranking data ranges are available at <http://www.bls.gov/emp/empqrnk.htm>.