

Table 1. Certification and licensing status of the civilian noninstitutional population 16 years and over by employment status, 2015-17 three-year average

Employment Status	Number of Persons (in thousands)					Percent Distribution			
	Total	Total	With Certification	With license**	Without a certification or license	Total	With Certification	With license**	Without a certification or license
Civilian noninstitutional population	3,822	578	61	516	3,244	15.1	1.6	13.5	84.9
Civilian labor force	2,186	504	54	449	1,682	23.0	2.5	20.6	77.0
Employed	2,066	493	53	440	1,574	23.9	2.5	21.3	76.1
Usually work full time	1,743	441	48	393	1,302	25.3	2.8	22.6	74.7
Usually work part time	323	52	5	47	272	16.0	1.4	14.6	84.0
Unemployed	119	11	3	9	108	9.1	2.5	7.6	90.9
Not in the labor force	1,636	74	7	67	1,562	4.5	0.5	4.1	95.5

* A person may have more than one certification or license.

** Persons with a license may also have a certification.

Blank cells indicate suppressed/undisclosed values

NOTES: Certifications are issued by a non-governmental certification body and convey that an individual has the knowledge or skill to perform a specific job.

A license is awarded by a government agency and conveys a legal authority to work in an occupation.

Table 2. Employment status of the civilian noninstitutional population by certification & licensing status & selected characteristics, 2015-17 three-year average [Numbers in thousands]

Characteristics	Civilian noninstitutional population	Civilian Labor Force						Not in labor force
		Total	Participation Rate	Employed		Unemployed		
				Total	Percent of population	Total	Unemployment Rate	
Age								
Total, 16 years and over	3,822	2,186	57	2,066	54.1	119	5.5	1,636
With a certification or license*	578	504	87	493	85.3	14	2.7	74
With a certification, but no license	61	55	89	53	86.0	7	13.4	11
With a license**	516	449	87	440	85.3	12	2.8	68
Without a certification or license	3,244	1,682	52	1,574	48.5	108	6.4	1,562
16 to 24 years	599	314	52	278	46.5	36	11.3	284
With a certification or license*	32	28	87	26	82.5	n/a	n/a	5
With a certification, but no license	6	6	93	5	87.5	n/a	n/a	n/a
With a license**	26	22	85	21	81.3	n/a	n/a	5
Without a certification or license	567	287	51	252	44.5	34	11.9	280
25 to 54 years	1,822	1,401	77	1,332	73.1	69	4.9	420
With a certification or license*	381	354	93	347	91.1	8	2.1	26
With a certification, but no license	40	37	94	36	90.5	n/a	n/a	4
With a license**	341	317	93	311	91.2	6	2.0	24
Without a certification or license	1,441	1,047	73	986	68.4	62	5.9	394
55 years and over	1,402	470	34	456	32.5	14	3.1	932
With a certification or license*	165	122	74	120	72.6	3	2.5	43
With a certification, but no license	15	12	75	11	73.7	n/a	n/a	5
With a license**	150	110	74	109	72.5	3	2.7	39
Without a certification or license	1,237	348	28	336	27.1	12	3.5	889
Sex								
Men, 16 years and over	1,808	1,152	64	1,087	60.1	65	5.6	656
With a certification or license*	270	243	90	237	87.7	6	2.4	28
With a certification, but no license	36	33	92	32	87.4	n/a	n/a	4
With a license**	234	209	89	206	87.7	4	2.1	25
Without a certification or license	1,538	910	59	850	55.3	59	6.5	628
Women, 16 years and over	2,013	1,033	51	979	48.6	54	5.3	980
With a certification or license*	307	261	85	256	83.3	5	2.1	46
With a certification, but no license	25	21	85	21	84.0	n/a	n/a	5
With a license**	282	240	85	235	83.2	5	2.2	42
Without a certification or license	1,706	772	45	723	42.4	49	6.4	934
Race and Hispanic or Latino ethnicity								
White, 16 years and over	2,703	1,535	57	1,474	54.5	61	4.0	1,168
With a certification or license*	444	388	88	382	86.0	7	1.7	55
With a certification, but no license	49	43	89	n/a	n/a	n/a	n/a	6
With a license**	395	345	87	6	1.4	n/a	n/a	50
Without a certification or license	2,259	1,147	51	1,092	48.4	54	4.7	1,113
Black or African American, 16 years & over	984	572	58	518	52.6	54	9.4	413
With a certification or license*	112	96	86	93	82.8	5	4.9	15
With a certification, but no license	10	9	88	n/a	n/a	n/a	n/a	n/a
With a license**	102	88	86	5	4.5	6	6.8	14
Without a certification or license	872	475	54	425	48.7	50	10.5	397
Asian, 16 years and over	51	33	64	32	62.1	n/a	n/a	18

Table 2. Employment status of the civilian noninstitutional population by certification & licensing status & selected characteristics, 2015-17 three-year average [Numbers in thousands]

Characteristics	Civilian noninstitutional population	Civilian Labor Force						Not in labor force
		Total	Participation Rate	Employed		Unemployed		
				Total	Percent of population	Total	Unemployment Rate	
With a certification or license*	11	10	89	10	89.0	n/a	n/a	n/a
With a certification, but no license	n/a	n/a	n/a	n/a	n/a	9	n/a	n/a
With a license**	10	9	88	9	88.3	84	953.9	n/a
Without a certification or license	41	24	58	22	55.0	n/a	n/a	17
Hispanic or Latino ethnicity, 16 years & over	123	85	70	81	66.4	4	5.0	37
With a certification or license*	9	8	84	7	78.9	n/a	n/a	n/a
With a certification, but no license	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
With a license**	9	7	86	7	80.8	n/a	n/a	n/a
Without a certification or license	114	78	69	74	65.4	4	4.8	36
Educational attainment								
Total, 25 years and over	3,223	1,871	58	1,788	55.5	84	4.5	1,352
With a certification or license*	546	476	87	467	85.5	16	3.3	71
With a certification, but no license	56	49	89	48	86.8	n/a	n/a	15
With a license**	491	427	87	419	85.5	15	3.4	64
Without a certification or license	2,678	1,395	52	1,321	49.3	75	5.4	1,282
Less than a high school diploma	439	159	36	144	32.8	15	9.4	280
With a certification or license*	16	14	84	13	80.1	n/a	n/a	4
With a certification, but no license	3	3	87	3	87.8	n/a	n/a	n/a
With a license**	14	11	84	11	80.8	n/a	n/a	3
Without a certification or license	423	145	34	131	31.0	14	9.8	277
High school graduates, no college***	1,064	560	53	531	49.9	29	5.2	504
With a certification or license*	91	80	88	78	85.1	3	4.2	11
With a certification, but no license	12	11	89	10	86.0	n/a	n/a	n/a
With a license**	79	70	88	67	85.0	3	4.5	10
Without a certification or license	973	479	49	453	46.5	26	5.5	493
Some college or associate degree	879	561	64	534	60.8	27	4.8	318
With a certification or license*	161	138	86	135	83.3	5	3.6	23
With a certification, but no license	18	16	87	15	84.1	n/a	n/a	5
With a license**	143	122	85	119	83.3	5	3.7	21
Without a certification or license	717	423	59	400	55.7	23	5.4	295
Some college, no degree	554	340	61	322	58.2	18	5.3	213
With a certification or license*	79	66	83	65	81.4	2	3.3	13
With a certification, but no license	8	7	78	6	75.8	n/a	n/a	4
With a license**	71	60	84	58	82.0	2	3.6	11
Without a certification or license	474	274	58	258	54.4	16	5.9	200
Associate degree	325	221	68	212	65.2	9	4.0	104
With a certification or license*	82	72	88	70	85.3	3	3.8	10
With a certification, but no license	10	9	95	9	91.3	n/a	n/a	n/a
With a license**	72	62	87	61	84.5	2	3.8	10
Without a certification or license	243	149	61	142	58.4	7	4.5	94
Bachelor's degree and higher	842	592	70	579	68.8	14	2.3	250
With a certification or license*	277	244	88	241	87.2	5	2.1	33
With a certification, but no license	22	20	90	20	89.4	n/a	n/a	5
With a license**	255	224	88	222	87.1	5	2.3	31

Table 2. Employment status of the civilian noninstitutional population by certification & licensing status & selected characteristics, 2015-17 three-year average [Numbers in thousands]

Characteristics	Civilian noninstitutional population	Civilian Labor Force						Not in labor force
		Total	Participation Rate	Employed		Unemployed		
				Total	Percent of population	Total	Unemployment Rate	
Without a certification or license	565	348	62	338	59.8	11	3.2	217
Bachelor's degree only	531	372	70	363	68.3	10	2.6	159
With a certification or license*	133	116	87	115	86.4	n/a	n/a	17
With a certification, but no license	13	11	87	11	86.3	n/a	n/a	n/a
With a license**	121	105	87	104	86.4	n/a	n/a	15
Without a certification or license	398	256	64	248	62.3	8	3.2	142
Advanced degree****	311	220	71	216	69.6	4	1.7	91
With a certification or license*	144	127	89	126	88.0	n/a	n/a	16
With a certification, but no license	9	9	94	9	93.5	n/a	n/a	n/a
With a license**	134	119	88	118	87.8	n/a	n/a	15
Without a certification or license	167	92	55	90	53.8	3	3.2	75

* A person may have more than one certification or license.

** Persons with a license may also have a certification.

*** Includes persons with a high school diploma or equivalent.

**** Includes persons with masters, professional, and doctoral degrees.

n/a indicates suppressed/undisclosed values

NOTES: Certifications are issued by a non-governmental certification body and convey that an individual has the knowledge or skill to perform a specific job.

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Estimates for the above race groups (White, Black or African American, and Asian) do not sum to totals because data are not presented for all races.

Persons whose ethnicity is identified as Hispanic or Latino may be of any race.

Table 3. Certification and licensing status of employed persons 16 years and over by selected characteristics, 2015-17 three-year average

Employment Status	Number of Persons (in thousands)					Percent Distribution			
	Total	With a certification or license*			Without a certification or license	With a certification or license*			Without a certification or license
		Total	With Certification	With license**		Total	With Certification	With license**	
Age and Sex									
Total, 16 years and over	2,066	493	53	440	1,574	23.85	2.55	21.31	76.15
16 to 24 years	278	26	5	21	252	9.38	1.93	7.50	90.62
25 to 54 years	1,332	347	36	311	986	26.03	2.70	23.33	73.97
25 to 34 years	440	104	10	94	337	23.57	2.37	21.26	76.43
35 to 44 years	431	114	12	102	317	26.50	2.87	23.62	73.50
45 to 54 years	461	129	13	115	332	27.95	2.92	25.03	72.05
55 years and over	456	120	11	109	336	26.32	2.49	23.82	73.68
55 to 64 years	343	91	9	82	252	26.66	2.71	23.95	73.34
65 years and over	112	28	3	26	84	25.28	2.65	23.44	74.72
Men, 16 years and over	1,087	237	32	206	850	21.80	2.94	18.92	78.20
16 to 24 years	137	10	4	7	126	7.64	3.00	5.11	92.36
25 to 54 years	707	165	22	143	541	23.41	3.12	20.29	76.59
25 to 34 years	235	46	7	40	189	19.54	3.07	16.89	80.46
35 to 44 years	229	53	8	46	175	23.23	3.29	20.03	76.77
45 to 54 years	243	66	9	58	177	27.32	3.50	23.82	72.68
55 years and over	244	61	6	55	183	25.06	2.39	22.67	74.94
55 to 64 years	183	44	5	39	139	23.96	2.81	21.46	76.04
65 years and over	61	17	n/a	16	44	28.34	n/a	26.27	71.66
Women, 16 years and over	979	256	22	235	723	26.13	2.30	23.98	73.87
16 to 24 years	142	16	n/a	14	126	11.05	n/a	9.94	88.95
25 to 54 years	626	181	14	167	444	28.99	2.23	26.76	71.01
25 to 34 years	205	58	5	54	147	28.18	2.46	26.27	71.82
35 to 44 years	202	61	6	56	141	30.18	2.91	27.67	69.82
45 to 54 years	218	62	5	57	155	28.66	2.28	26.38	71.34
55 years and over	211	59	6	53	153	27.77	2.69	25.16	72.23
55 to 64 years	160	48	5	43	113	29.74	3.03	26.79	70.26
65 years and over	51	11	n/a	10	40	21.62	n/a	20.05	78.38
Race and Hispanic or Latino ethnicity									
White, 16 years and over	1,474	382	42	340	1,092	25.89	2.85	23.04	74.11
Men	816	197	27	170	619	24.16	3.35	20.81	75.84
Women	658	185	15	170	474	28.04	2.23	25.81	71.96
Black or African American, 16 yrs & over	518	93	9	84	425	17.89	1.71	16.23	82.11
Men	231	31	4	28	200	13.47	1.69	11.97	86.53
Women	287	62	6	56	226	21.44	2.14	19.66	78.56
Asian, 16 years and over	32	10	n/a	9	22	29.80	n/a	27.62	70.20
Men	18	5	n/a	4	13	25.94	n/a	24.84	74.06
Women	14	5	n/a	5	9	37.81	n/a	34.90	65.34
Hispanic or Latino ethnicity, 16 yrs & over	81	7	n/a	7	74	8.85	n/a	8.57	91.15
Men	52	4	n/a	4	49	7.59	n/a	6.99	94.52
Women	29	5	n/a	5	25	16.24	n/a	16.24	85.11
Educational attainment									
Total, 25 years and over	1,788	467	48	419	1,321	26.11	2.70	23.46	73.89

Source: Published in 2018 Data provided by the Council for Community and Economic Research (C2ER) and the Labor Market Information Institute.

Table 3. Certification and licensing status of employed persons 16 years and over by selected characteristics, 2015-17 three-year average

Employment Status	Number of Persons (in thousands)					Percent Distribution			
	Total	With a certification or license*			Without a certification or license	With a certification or license*			Without a certification or license
		Total	With Certification	With license**		Total	With Certification	With license**	
Less than a high school diploma	144	13	3	11	131	9.02	1.89	7.60	90.98
High school graduates, no college***	531	78	10	67	453	14.67	1.97	12.70	85.33
Some college or associate degree	534	135	15	119	400	25.19	2.90	22.29	74.81
Some college, no degree	322	65	6	58	258	20.05	2.00	18.05	79.95
Associate degree	212	70	9	61	142	33.02	4.28	28.75	66.98
Bachelor's degree and higher	579	241	20	222	338	41.68	3.39	38.34	58.32
Bachelor's degree only	363	115	11	104	248	31.69	2.98	28.71	68.31
Advanced degree****	216	126	9	118	90	58.44	4.07	54.49	41.56
Men, 25 years and over	951	227	30	199	724	23.84	3.18	20.98	76.16
Less than a high school diploma	98	9	3	8	89	9.57	2.69	8.49	90.43
High school graduates, no college***	307	56	8	48	251	18.26	2.71	15.54	81.74
Some college or associate degree	268	64	9	56	203	24.07	3.34	21.10	75.93
Some college, no degree	163	37	4	33	126	22.61	2.66	20.32	77.39
Associate degree	105	28	5	23	77	26.34	4.40	22.31	73.66
Bachelor's degree and higher	278	97	10	87	181	34.80	3.70	31.27	65.20
Bachelor's degree only	177	47	4	42	130	26.38	2.44	24.01	73.62
Advanced degree****	102	50	6	45	51	49.45	5.88	43.89	50.55
Women, 25 years and over	837	241	24	222	597	28.77	2.87	26.49	71.32
Less than a high school diploma	46	4	n/a	4	42	9.39	n/a	9.63	92.17
High school graduates, no college***	223	22	4	20	202	9.74	1.63	8.79	90.26
Some college or associate degree	267	70	8	63	197	26.32	3.00	23.49	73.68
Some college, no degree	159	28	3	25	132	17.43	1.80	15.73	82.57
Associate degree	107	42	5	38	65	39.53	4.78	35.02	60.47
Bachelor's degree and higher	301	145	10	135	156	48.04	3.46	44.87	51.96
Bachelor's degree only	186	68	7	62	118	36.72	3.66	33.16	63.28
Advanced degree****	115	76	4	73	39	66.41	3.15	63.87	33.59

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Table 4. Certification and licensing status of the employed by industry and class of worker, 2015-17 three-year average [Numbers in thousands]

Industry and class of worker	Total Employed	Percent Distribution			
		With a certification or license*			Without a certification or license
		Total	With a certification, but no license	With a license**	
Total, 16 years and over	2,066	24.0	3.2	21.5	76.0
Industry					
Agriculture and related industries	37	10.8	n/a	10.3	89.2
Nonagricultural industries	2,029	24.3	3.2	21.7	75.7
Mining, quarrying, and oil and gas extraction	11	34.6	n/a	29.6	65.4
Construction	135	23.2	3.3	20.0	76.8
Manufacturing	323	9.0	2.3	6.6	91.0
Wholesale trade	47	11.1	n/a	9.3	88.9
Retail trade	231	9.8	1.8	8.2	90.2
Transportation and utilities	122	27.1	3.0	24.4	72.9
Information	29	n/a	n/a	n/a	n/a
Financial activities	123	30.2	5.2	26.1	69.8
Professional and business services	194	24.0	2.6	21.6	76.0
Education and health services	435	47.6	3.2	44.4	52.4
Leisure and hospitality	168	4.2	n/a	3.4	95.8
Other services	100	29.5	6.2	24.6	70.5
Public administration	112	32.7	3.6	30.9	67.3
Class of Worker***					
Wage and salary workers****	1,958	23.6	2.7	21.1	76.4
Private industries	1,640	20.1	2.7	17.4	79.9
Government	318	42.0	2.7	40.0	58.0
Federal	74	27.0	3.8	24.3	73.0
State	100	43.0	2.6	41.1	57.0
Local	143	49.1	2.3	47.4	50.9
Self-employed workers, unincorporated	107	28.0	2.8	25.8	72.0

* A person may have more than one certification or license.

**Persons with a license may also have a certification.

*** Unpaid family workers are included in total employed, but not shown separately.

****Includes self-employed workers whose businesses are incorporated.

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Table 5. Certification and licensing status of the employed by occupation, 2015-17 three-year average [Numbers in thousands]

Occupation	Total Employed	Percent Distribution			
		With a certification or license*			Without a certification or license
		Total	With a certification, but no license	With a license**	
Total, 16 years and over	2,066	23.9	2.9	21.4	76.1
Management, professional, and related occupations	705	39.1	3.6	35.5	60.9
Management, business, and financial operations occupations	278	21.1	2.9	18.2	78.9
Management occupations	194	20.2	3.1	17.4	79.8
Business and financial operations occupations	84	23.2	4.1	20.2	76.8
Professional and related occupations	427	50.8	4.0	46.8	49.2
Computer and mathematical occupations	43	18.5	8.6	11.9	81.5
Architecture and engineering occupations	51	26.7	6.0	23.7	73.3
Life, physical, and social science occupations	12	31.1	n/a	30.5	68.9
Community and social services occupations	31	45.9	10.1	39.5	54.1
Legal occupations	18	62.5	n/a	58.2	37.5
Education, training, and library occupations	117	57.5	n/a	56.5	42.5
Arts, design, entertainment, sports, and media occupations	25	12.9	n/a	12.7	87.1
Healthcare practitioners and technical occupations	130	74.5	7.5	68.5	25.5
Service occupations	335	20.0	1.9	18.2	80.0
Healthcare support occupations	45	42.3	9.1	37.5	57.7
Protective service occupations	43	37.3	n/a	36.9	62.7
Food preparation and serving related occupations	104	5.0	n/a	4.6	95.0
Building and grounds cleaning and maintenance occupations	78	9.6	n/a	8.8	90.4
Personal care and service occupations	65	30.9	4.5	27.6	69.1
Sales and office occupations	459	11.5	2.0	10.0	88.5
Sales and related occupations	216	14.7	2.8	13.0	85.3
Office and administrative support occupations	243	8.6	1.3	7.4	91.4
Natural resources, construction, and maintenance occupations	215	19.9	4.9	16.7	80.1
Farming, fishing, and forestry occupations	16	n/a	n/a	n/a	n/a
Construction and extraction occupations	108	19.2	3.4	17.3	80.8
Installation, maintenance, and repair occupations	90	21.8	5.3	16.8	78.2
Production, transportation, and material moving occupations	352	15.9	2.7	13.5	84.1
Production occupations	195	10.0	2.9	7.4	90.0
Transportation and material moving occupations	158	23.1	2.5	21.1	76.9

* A person may have more than one certification or license.

**Persons with a license may also have a certification.

n/a indicate suppressed/undisclosed values

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Table 6. Median weekly earnings of full-time wage & salary workers by certification & licensing status & selected characteristics 2015-17 three-year average

Characteristic	Full-time wage and salary workers (in thousands)	Median weekly earnings				
		Total	With a certification or license*			Without a certification or license
			Total	With a certification, but no license	With a license**	
Age and Sex						
Total, 16 years and over	1,670	\$736	\$919	\$971	\$923	\$681
16 to 24 years	166	\$474	\$695	n/a	\$627	\$459
25 to 54 years	1,155	\$755	\$915	\$1,035	\$913	\$701
25 to 34 years	378	\$667	\$833	\$976	\$840	\$622
35 to 44 years	374	\$813	\$968	\$1,172	\$951	\$760
45 to 54 years	402	\$833	\$984	\$1,060	\$1,008	\$776
55 years and over	349	\$872	\$1,019	\$1,301	\$1,005	\$814
55 to 64 years	283	\$867	\$1,033	\$1,260	\$1,045	\$814
65 years and over	66	\$968	\$1,212	n/a	\$1,266	\$896
Men, 16 years and over	922	\$843	\$1,029	\$1,150	\$1,028	\$794
16 to 24 years	92	\$536	\$803	n/a	n/a	\$527
25 to 54 years	635	\$852	\$1,001	\$1,184	\$1,000	\$819
55 years and over	195	\$1,044	\$1,180	n/a	\$1,208	\$968
Women, 16 years and over	747	\$641	\$844	\$980	\$847	\$591
16 to 24 years	74	\$434	\$550	n/a	\$579	\$420
25 to 54 years	520	\$667	\$860	\$1,008	\$860	\$603
55 years and over	154	\$713	\$918	n/a	\$937	\$675
Race and Hispanic or Latino ethnicity						
White, 16 years and over	1,182	\$805	\$976	\$1,054	\$966	\$740
Men	691	\$920	\$1,081	\$1,294	\$1,066	\$865
Women	491	\$693	\$891	\$1,014	\$881	\$620
Black or African American, 16 years and over	427	\$590	\$728	\$754	\$742	\$574
Men	197	\$661	\$812	n/a	\$849	\$641
Women	230	\$553	\$681	n/a	\$696	\$530
Asian, 16 years and over	27	\$1,079	\$1,025	n/a	\$966	\$1,110
Men	16	\$1,284	n/a	n/a	n/a	\$1,251
Women	11	\$934	n/a	n/a	n/a	n/a
Hispanic or Latino ethnicity, 16 years and over	69	\$596	n/a	n/a	n/a	\$584
Men	48	\$642	n/a	n/a	n/a	\$616
Women	21	\$622	n/a	n/a	n/a	\$577
Educational attainment						
Total, 25 years and over	1,503	\$736	\$919	\$971	\$923	\$681
Less than a high school diploma	112	\$513	\$714	n/a	\$651	\$516
High school graduates, no college***	446	\$646	\$761	\$877	\$795	\$633
Some college or associate degree	448	\$720	\$780	\$937	\$792	\$700
Some college, no degree	267	\$704	\$814	n/a	\$783	\$680
Associate degree	181	\$751	\$799	\$879	\$852	\$766
Bachelor's degree and higher	498	\$1,085	\$1,096	\$1,352	\$1,077	\$1,107
Bachelor's degree only	312	\$1,066	\$1,046	\$1,199	\$1,079	\$1,088

Table 6. Median weekly earnings of full-time wage & salary workers by certification & licensing status & selected characteristics 2015-17 three-year average

Characteristic	Full-time wage and salary workers (in thousands)	Median weekly earnings				
		Total	With a certification or license*			Without a certification or license
			Total	With a certification, but no license	With a license**	
Advanced degree****	186	\$1,155	\$1,135	\$1,489	\$1,125	\$1,211
Men, 25 years and over	830	\$843	\$1,029	\$1,150	\$1,028	\$794
Less than a high school diploma	80	\$552	\$839	n/a	\$686	\$549
High school graduates, no college***	268	\$751	\$868	n/a	\$868	\$739
Some college or associate degree	234	\$850	\$940	\$1,050	\$928	\$852
Some college, no degree	142	\$856	\$1,084	n/a	\$1,028	\$862
Associate degree	93	\$876	\$982	n/a	\$1,017	\$891
Bachelor's degree and higher	247	\$1,329	\$1,386	\$1,453	\$1,396	\$1,354
Bachelor's degree only	159	\$1,268	\$1,381	n/a	\$1,369	\$1,285
Advanced degree****	88	\$1,501	\$1,395	n/a	\$1,478	\$1,577
Women, 25 years and over	673	\$641	\$844	\$980	\$847	\$591
Less than a high school diploma	32	\$450	n/a	n/a	n/a	\$449
High school graduates, no college***	177	\$530	\$639	n/a	\$669	\$531
Some college or associate degree	214	\$621	\$727	n/a	\$738	\$599
Some college, no degree	125	\$585	\$814	n/a	\$738	\$581
Associate degree	88	\$683	\$750	n/a	\$775	\$670
Bachelor's degree and higher	251	\$943	\$969	\$1,176	\$962	\$890
Bachelor's degree only	153	\$891	\$929	\$1,034	\$940	\$866
Advanced degree****	98	\$997	\$1,104	n/a	\$1,097	\$979

* A person may have more than one certification or license.

**Persons with a license may also have a certification.

*** Includes persons with a high school diploma or equivalent.

****Includes persons with masters, professional, and doctoral degrees.

n/a indicate suppressed/undisclosed values

NOTES: Certifications are issued by a non-governmental certification body and convey that an individual has the knowledge or skill to perform a specific job.

A license is awarded by a government agency and conveys a legal authority to work in an occupation.

Estimates for the above race groups (White, Black or African American, and Asian) do not sum to totals because data are not presented for all races.

Persons whose ethnicity is identified as Hispanic or Latino may be of any race.

Data are for wage and salary workers; all self-employed workers are excluded, both those with incorporated businesses and those with unincorporated businesses.

Table 7. Median weekly earnings of full-time wage & salary workers by certification & licensing status & occupation, 2015-17 three-year average

Occupation	Full-time wage and salary workers (in thousands)	Median weekly earnings				
		Total	With a certification or license*			Without a certification or license
			Total	With a certification, but no license	With a license**	
Total, 16 years & over	1,670	\$736	\$919	\$971	\$923	\$681
Management, professional, & related occupations	602	\$1,011	\$1,023	\$1,168	\$1,022	\$1,003
Management, business, & financial operations occupations	239	\$1,070	\$1,309	\$1,502	\$1,271	\$1,008
Management occupations	163	\$1,092	\$1,378	n/a	\$1,415	\$1,009
Business & financial operations occupations	75	\$1,011	\$1,324	n/a	\$1,278	\$990
Professional & related occupations	363	\$990	\$978	\$1,147	\$972	\$1,018
Computer & mathematical occupations	41	\$1,307	\$1,256	n/a	n/a	\$1,339
Architecture & engineering occupations	49	\$1,382	\$1,600	n/a	\$1,722	\$1,390
Life, physical, & social science occupations	12	\$1,307	n/a	n/a	n/a	\$1,324
Community & social services occupations	25	\$811	\$998	n/a	\$960	\$825
Legal occupations	14	\$1,193	n/a	n/a	n/a	\$947
Education, training, & library occupations	98	\$893	\$935	n/a	\$935	\$849
Arts, design, entertainment, sports, & media occupations	15	\$1,059	n/a	n/a	n/a	\$1,047
Healthcare practitioners & technical occupations	108	\$943	\$966	\$1,162	\$969	\$868
Service occupations	227	\$473	\$597	n/a	\$615	\$452
Healthcare support occupations	38	\$469	\$472	n/a	\$521	\$508
Protective service occupations	40	\$680	\$919	n/a	\$919	\$707
Food preparation & serving related occupations	61	\$410	n/a	n/a	n/a	\$406
Building & grounds cleaning & maintenance occupations	54	\$483	n/a	n/a	n/a	\$459
Personal care & service occupations	35	\$463	\$659	n/a	\$671	\$456
Sales & office occupations	344	\$623	\$769	n/a	\$756	\$614
Sales & related occupations	145	\$637	\$975	n/a	\$960	\$620
Office & administrative support occupations	198	\$626	\$813	n/a	\$820	\$629
Natural resources, construction, & maintenance occupations	183	\$803	\$937	n/a	\$945	\$776
Farming, fishing, & forestry occupations	12	\$614	n/a	n/a	n/a	\$650
Construction & extraction occupations	88	\$793	\$959	n/a	\$981	\$750
Installation, maintenance, & repair occupations	82	\$836	\$944	n/a	\$925	\$828
Production, transportation, & material moving occupations	314	\$668	\$872	\$972	\$944	\$633
Production occupations	183	\$674	\$877	n/a	\$867	\$660
Transportation & material moving occupations	132	\$699	\$888	n/a	\$924	\$637

* A person may have more than one certification or license.

**Persons with a license may also have a certification.

*** Includes persons with a high school diploma or equivalent.

****Includes persons with masters, professional, & doctoral degrees.

n/a indicate suppressed/undisclosed values

NOTES: Certifications are issued by a non-governmental certification body & convey that an individual has the knowledge or skill to perform a specific job.

A license is awarded by a government agency & conveys a legal authority to work in an occupation.

Data are for wage & salary workers; all self-employed workers are excluded, both those with incorporated businesses & those with unincorporated businesses.

Table 8. Unemployment Rates & Median Weekly Earnings by Occupational Groups, Educational Attainment & Certification & Licensing Status, 2015-17 three-year average, Persons 25 years & older

Occupation & Educational Attainment	Number of Persons in the Civilian Labor Force [in thousands]			Unemployment Rate			Median weekly earnings, Full-Time Employed Wage & Salary workers only		
	Total	with License or Certification	without License or Certification	Total	with License or Certification	without License or Certification	with License or Certification	without License or Certification	Total
All Occupational Groups									
All Education Levels	1,871	476	1,391	4.5	1.9	5.0	\$940	\$723	\$777
No High School Diploma	159	14	144	9.4	n/a	9.0	\$714	\$516	\$513
High School or GED	560	80	478	5.2	3.0	5.4	\$761	\$633	\$646
Middle-skilled	561	138	422	4.8	2.5	5.2	\$780	\$700	\$720
Bachelors Degree or Higher	592	244	347	2.2	1.0	2.8	\$1,096	\$1,107	\$1,085
Management, professional, & related occupations									
All Education Levels	679	269	409	1.8	0.9	2.4	\$1,040	\$1,032	\$1,032
No High School Diploma	11	n/a	9	n/a	n/a	n/a	n/a	n/a	n/a
High School or GED	76	11	65	1.9	n/a	2.2	\$1,026	\$837	\$856
Middle-skilled	172	57	115	2.6	n/a	3.2	\$818	\$882	\$845
Bachelor's Degree or Higher	420	200	220	1.5	0.8	2.1	\$1,109	\$1,202	\$1,151
Education, training, & library occupations (subset of Management, professional, & related)									
All Education Levels	113	66	47	1.8	n/a	n/a	\$937	\$932	\$895
No High School Diploma	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
High School or GED	7	n/a	6	n/a	n/a	n/a	n/a	n/a	n/a
Middle-skilled	13	2	11	n/a	n/a	n/a	n/a	\$551	\$562
Bachelor's Degree or Higher	92	63	29	n/a	n/a	n/a	\$944	\$1,196	\$941
Healthcare practitioner & technical occupations (subset of Management, professional, & related)									
All Education Levels	122	93	29	n/a	n/a	n/a	\$997	\$875	\$972
No High School Diploma	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
High School or GED	7	2	5	n/a	n/a	n/a	n/a	n/a	n/a
Middle-skilled	45	35	10	n/a	n/a	n/a	\$819	\$791	\$788
Bachelor's Degree or Higher	70	56	14	n/a	n/a	n/a	\$1,150	\$1,164	\$1,173
Service Occupations									
All Education Levels	277	60	217	7.5	3.1	8.8	\$623	\$472	\$501
No High School Diploma	42	3	39	9.8	n/a	9.8	n/a	\$437	\$439
High School or GED	105	16	88	6.7	n/a	7.4	\$639	\$486	\$483
Middle-skilled	94	28	66	7.9	n/a	10.0	\$595	\$575	\$551
Bachelor's Degree or Higher	36	13	24	6.5	n/a	8.7	\$1,018	\$792	\$803
Healthcare support occupations (subset of Service occupations)									
All Education Levels	39	16	22	6.3	n/a	7.8	\$505	\$586	\$556
No High School Diploma	3	n/a	2	n/a	n/a	n/a	n/a	n/a	n/a
High School or GED	15	6	9	n/a	n/a	n/a	n/a	\$548	\$518
Middle-skilled	16	7	9	n/a	n/a	n/a	n/a	\$661	\$582
Bachelor's Degree or Higher	4	2	2	n/a	n/a	n/a	n/a	n/a	n/a
Sales & office occupations									
All Education Levels	387	51	336	3.9	n/a	4.3	\$772	\$650	\$661
No High School Diploma	20	n/a	19	11.3	n/a	11.9	n/a	\$550	\$546

Table 8. Unemployment Rates & Median Weekly Earnings by Occupational Groups, Educational Attainment & Certification & Licensing Status, 2015-17 three-year average, Persons 25 years & older

Occupation & Educational Attainment	Number of Persons in the Civilian Labor Force [in thousands]			Unemployment Rate			Median weekly earnings, Full-Time Employed Wage & Salary workers only		
	Total	with License or Certification	without License or Certification	Total	with License or Certification	without License or Certification	with License or Certification	without License or Certification	Total
High School or GED	130	11	118	4.1	n/a	4.1	\$604	\$622	\$621
Middle-skilled	143	18	125	4.1	n/a	4.5	\$735	\$640	\$634
Bachelor's Degree or Higher	95	21	73	2.0	n/a	2.3	\$1,134	\$936	\$951
Natural resources, construction, & maintenance occupations									
All Education Levels	204	41	163	6.1	4.2	6.6	\$958	\$817	\$822
No High School Diploma	41	3	37	9.6	n/a	9.6	n/a	\$665	\$657
High School or GED	89	17	73	5.6	n/a	6.1	\$953	\$846	\$828
Middle-skilled	58	18	41	4.9	n/a	5.3	\$1,078	\$949	\$966
Bachelor's Degree or Higher	16	4	12	n/a	n/a	n/a	n/a	\$1,363	\$1,288
Construction, extraction, installation, maintenance & repair (subset of Natural resources, construction, etc.)									
All Education Levels	190	40	150	6.0	4.2	6.4	\$958	\$825	\$853
No High School Diploma	36	3	33	8.3	n/a	8.1	n/a	\$696	\$678
High School or GED	82	16	66	5.8	n/a	6.5	\$990	\$857	\$854
Middle-skilled	57	17	39	5.0	n/a	5.4	\$1,078	\$945	\$974
Bachelor's Degree or Higher	15	4	11	n/a	n/a	n/a	n/a	\$1,372	\$1,293
Production, transportation, & material moving occupations									
All Education Levels	320	54	266	5.7	4.2	6.0	\$902	\$670	\$703
No High School Diploma	45	5	40	7.0	n/a	7.5	n/a	\$623	\$625
High School or GED	159	26	134	5.9	n/a	6.3	\$857	\$678	\$703
Middle-skilled	92	17	75	4.9	n/a	4.7	\$954	\$740	\$755
Bachelor's Degree or Higher	24	6	18	n/a	n/a	n/a	n/a	\$1,139	\$1,144
Production occupations (subset of Production, transportation, & material moving)									
All Education Levels	178	18	160	7.1	n/a	7.1	\$852	\$698	\$718
No High School Diploma	23	2	21	10.7	n/a	11.3	n/a	\$641	\$702
High School or GED	87	7	80	7.4	n/a	7.3	n/a	\$698	\$702
Middle-skilled	55	8	48	5.2	n/a	4.8	n/a	\$756	\$722
Bachelor's Degree or Higher	13	2	11	n/a	n/a	n/a	n/a	\$1,259	\$1,247
Transportation & material moving (subset of Production, transportation, & material moving)									
All Education Levels	141	35	106	3.9	n/a	4.2	\$889	\$671	\$724
No High School Diploma	22	3	19	n/a	n/a	n/a	n/a	\$602	\$725
High School or GED	73	18	54	4.2	n/a	4.7	\$897	\$712	\$752
Middle-skilled	36	9	27	n/a	n/a	n/a	\$992	\$668	\$766
Bachelor's Degree or Higher	11	4	6	n/a	n/a	n/a	n/a	n/a	\$1,026

n/a indicate suppressed/undisclosed values

NOTES: Certifications are issued by a non-governmental certification body & convey that an individual has the knowledge or skill to perform a specific job.

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ABOUT THE DATA: The Council for Community and Economic Research (C2ER) and the Labor Market Information Institute (LMI) produce the State Certifications and Licenses Data Tables based on questions included in the Current Population Survey (CPS) that measure the prevalence of certifications and licenses. The Census Bureau surveys households each March and the Bureau of Labor Statistics (BLS) publishes the national level data each April.

METHODOLOGICAL OVERVIEW: The State Certifications and Licenses Data Tables measure the prevalence of certifications and licenses in each state. The data allows analysts to examine the relationship between certifications/licenses and various demographic, occupational, industrial, wage, and labor force outcomes. To produce state estimates, C2ER combines CPS microdata associated with certifications, licenses, and other relevant variables for three years (2015, 2016, and 2017). Combining the three years provides a sample of a sufficient size to estimate the prevalence of certifications and licenses for each state.

EIGHT TABLES ARE CONTAINED: The State Certifications and Licenses Data Tables present data in eight ways:

Table 1. Certification and licensing status of the civilian non-institutional population 16 years and over by employment status

Table 2. Employment status of the civilian non-institutional population by certification and licensing status and selected characteristics

Table 3. Certification and licensing status of employed persons 16 years and over by selected characteristics

Table 4. Certification and licensing status of the employed by industry and class of worker

Table 5. Certification and licensing status of the employed by occupation

Table 6. Median weekly earnings of full-time wage and salary workers by certification and licensing status and selected characteristics

Table 7. Median weekly earnings of full-time wage and salary workers by certification and licensing status and occupation

Table 8. Unemployment rates and median weekly earnings by occupational groups, educational attainment and certification and licensing status

DATA REQUESTS and OTHER QUESTIONS: Please use our website or direct requests for data to C2ER at 703-522-4980 or www.c2er.org ("Contact Us").

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