

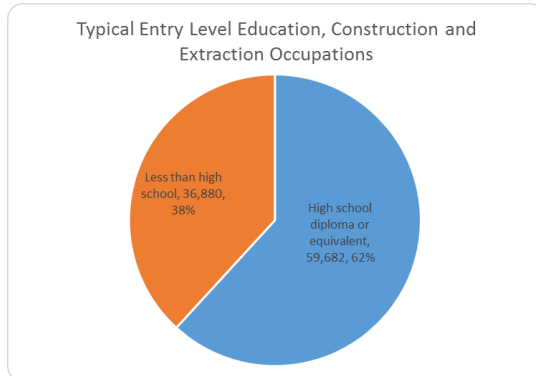
## Career Pathways Core Business Group Construction and Extraction Occupations

All industries are made up of three groups of people:

- The **core business group**, which produce the goods or provide the services
- The **business operations group**, which is charged with advertising, marketing, budgeting and sales
- The **administration & support** group, which performs tasks that support the core and business operations groups

Employment by Occupational Grouping, Colorado Central Planning Region					
SOC	Description	2015 Jobs	2020 Jobs	Change	Percent Change
47-1000	Supervisors of Construction and Extraction Workers	9,299	9,937	638	6.9%
47-2000	Construction Trades Workers	77,025	81,963	4,938	6.4%
47-3000	Helpers, Construction Trades	1,618	1,854	236	14.6%
47-4000	Other Construction and Related Workers	4,804	5,238	434	9.0%
47-5000	Extraction Workers	2,616	3,737	1,121	42.9%

Source: EMSI 2015.3 QCEW, Non-QCEW & Self-Employed Class of Worker



The skilled construction trades offer a variety of opportunities that pay well, offer advancement opportunities and require little in the way of formal training.

This pie chart is slightly misleading, however. Skilled occupations in the construction trades, such as electricians, plumbers and pipefitters and sheet metal workers must have a good grasp of mathematics, and in fact have successfully completed one year of high school algebra or one semester of college algebra.

The reader should note that there are some pre apprenticeship programs that can help people prepare for entry into an actual apprenticeship should they not yet meet the qualifications.

**Arapahoe County  
Centennial Workforce Center**  
6964 S. Lima Street  
Centennial, Colorado 80112  
Phone: 303.636.1160  
Fax: 303.636.1250

**Arapahoe County  
Aurora Workforce Center**  
15400 E. 14<sup>th</sup> Place  
Aurora, Colorado 80011  
Phone: 303.636.2013  
Fax: 303.636.2020

[www.adworks.org](http://www.adworks.org)

Construction and Extraction Occupations, Denver-Aurora-Lakewood MSA, Boulder & Larimer Counties						
SOC	Description	2015 Jobs	2020 Jobs	Change	Percent Change	Typical Entry Level Education
47-1011	First-Line Supervisors of Construction Trades and Extraction Workers	9,401	9,930	529	5.6%	High school diploma or equivalent
47-2011	Boilermakers	106	111	5	4.7%	High school diploma or equivalent
47-2021	Brickmasons and Blockmasons	1,289	1,404	115	8.9%	High school diploma or equivalent
47-2022	Stonemasons	136	148	12	8.8%	High school diploma or equivalent
47-2031	Carpenters	13,944	14,581	637	4.6%	High school diploma or equivalent
47-2041	Carpet Installers	553	549	(4)	(0.7%)	Less than high school
47-2042	Floor Layers, Except Carpet, Wood, and Hard Tiles	219	221	2	0.9%	High school diploma or equivalent
47-2043	Floor Sanders and Finishers	137	135	(2)	(1.5%)	High school diploma or equivalent
47-2044	Tile and Marble Setters	672	681	9	1.3%	Less than high school
47-2051	Cement Masons and Concrete Finishers	3,074	3,038	(36)	(1.2%)	Less than high school
47-2053	Terrazzo Workers and Finishers	38	39	1	2.6%	High school diploma or equivalent
47-2061	Construction Laborers	18,140	19,437	1,297	7.1%	Less than high school
47-2071	Paving, Surfacing, and Tamping Equipment Operators	1,040	1,102	62	6.0%	High school diploma or equivalent
47-2072	Pile-Driver Operators	26	28	2	7.7%	High school diploma or equivalent
47-2073	Operating Engineers and Other Construction Equipment Operators	4,585	4,842	257	5.6%	High school diploma or equivalent
47-2081	Drywall and Ceiling Tile Installers	2,029	1,991	(38)	(1.9%)	Less than high school
47-2082	Tapers	766	736	(30)	(3.9%)	Less than high school
47-2111	Electricians	11,550	12,386	836	7.2%	High school diploma or equivalent
47-2121	Glaziers	687	740	53	7.7%	High school diploma or equivalent
47-2131	Insulation Workers, Floor, Ceiling, and Wall	672	673	1	0.1%	Less than high school
47-2132	Insulation Workers, Mechanical	743	794	51	6.9%	High school diploma or equivalent
47-2141	Painters, Construction and Maintenance	4,686	4,820	134	2.9%	Less than high school
47-2142	Paperhangers	74	74	0	0.0%	High school diploma or equivalent
47-2151	Pipelayers	672	702	30	4.5%	Less than high school
47-2152	Plumbers, Pipefitters, and Steamfitters	6,367	6,807	440	6.9%	High school diploma or equivalent
47-2161	Plasterers and Stucco Masons	383	375	(8)	(2.1%)	Less than high school
47-2171	Reinforcing Iron and Rebar Workers	216	234	18	8.3%	High school diploma or equivalent
47-2181	Roofers	2,208	2,335	127	5.8%	Less than high school
47-2211	Sheet Metal Workers	2,156	2,270	114	5.3%	High school diploma or equivalent
47-2221	Structural Iron and Steel Workers	570	630	60	10.5%	High school diploma or equivalent
47-2231	Solar Photovoltaic Installers	94	101	7	7.4%	High school diploma or equivalent
47-3011	Helpers--Brickmasons, Blockmasons, Stonemasons, and Tile and Marble Setters	195	229	34	17.4%	Less than high school
47-3012	Helpers--Carpenters	192	208	16	8.3%	Less than high school
47-3013	Helpers--Electricians	541	636	95	17.6%	High school diploma or equivalent
47-3014	Helpers--Painters, Paperhangers, Plasterers, and Stucco Masons	145	137	(8)	(5.5%)	Less than high school
47-3015	Helpers--Pipelayers, Plumbers, Pipefitters, and Steamfitters	379	422	43	11.3%	High school diploma or equivalent
47-3016	Helpers--Roofers	140	152	12	8.6%	Less than high school
47-3019	Helpers, Construction Trades, All Other	68	78	10	14.7%	Less than high school
47-4011	Construction and Building Inspectors	1,271	1,379	108	8.5%	High school diploma or equivalent
47-4021	Elevator Installers and Repairers	213	224	11	5.2%	High school diploma or equivalent
47-4031	Fence Erectors	261	276	15	5.7%	High school diploma or equivalent
47-4041	Hazardous Materials Removal Workers	796	853	57	7.2%	High school diploma or equivalent
47-4051	Highway Maintenance Workers	1,199	1,269	70	5.8%	High school diploma or equivalent
47-4061	Rail-Track Laying and Maintenance Equipment Operators	99	106	7	7.1%	High school diploma or equivalent
47-4071	Septic Tank Servicers and Sewer Pipe Cleaners	389	426	37	9.5%	Less than high school
47-4091	Segmental Pavers	26	28	2	7.7%	High school diploma or equivalent
47-4099	Construction and Related Workers, All Other	668	689	21	3.1%	High school diploma or equivalent
47-5011	Derrick Operators, Oil and Gas	208	296	88	42.3%	Less than high school
47-5012	Rotary Drill Operators, Oil and Gas	344	468	124	36.0%	Less than high school
47-5013	Service Unit Operators, Oil, Gas, and Mining	661	923	262	39.6%	Less than high school
47-5021	Earth Drillers, Except Oil and Gas	286	321	35	12.2%	High school diploma or equivalent
47-5031	Explosives Workers, Ordnance Handling Experts, and Blasters	80	89	9	11.3%	High school diploma or equivalent
47-5041	Continuous Mining Machine Operators	133	137	4	3.0%	High school diploma or equivalent
47-5042	Mine Cutting and Channeling Machine Operators	33	35	2	6.1%	High school diploma or equivalent
47-5049	Mining Machine Operators, All Other	47	51	4	8.5%	High school diploma or equivalent
47-5051	Rock Splitters, Quarry	<10	<10	Insf. Data	Insf. Data	High school diploma or equivalent
47-5061	Roof Bolters, Mining	<10	<10	Insf. Data	Insf. Data	High school diploma or equivalent
47-5071	Roustabouts, Oil and Gas	682	939	257	37.7%	Less than high school
47-5081	Helpers--Extraction Workers	218	283	65	29.8%	High school diploma or equivalent
47-5099	Extraction Workers, All Other	51	65	14	27.5%	High school diploma or equivalent
	Totals	96,562	102,636	6,075	6.3%	

Source: EMSI 2015.3 QCEW, Non-QCEW & Self-Employed Class of Worker

## ***How can I learn more about personal care and service career pathways?***

Use the table below to access information on job descriptions, local wage information, training programs, credentials and apprenticeship opportunities. Simply click on each link for the information you need.

Occupation Information	Local Wage	Job Postings	Training Opportunities	Credentials	Apprenticeship Opportunities
<a href="#">First-Line Supervisors of Construction Trades &amp; Extraction Workers</a>	<a href="#">Wage</a>	<a href="#">Jobs</a>	<a href="#">Training</a>	<a href="#">Credential</a>	<a href="#">Apprenticeship</a>
<a href="#">Boilermakers</a>	<a href="#">Wage</a>	<a href="#">Jobs</a>	<a href="#">Training</a>	<a href="#">Credential</a>	<a href="#">Apprenticeship</a>
<a href="#">Brickmasons and Blockmasons</a>	<a href="#">Wage</a>	<a href="#">Jobs</a>	<a href="#">Training</a>	<a href="#">Credential</a>	<a href="#">Apprenticeship</a>
<a href="#">Stonemasons</a>	<a href="#">Wage</a>	<a href="#">Jobs</a>	<a href="#">Training</a>	<a href="#">Credential</a>	<a href="#">Apprenticeship</a>
<a href="#">Carpenters</a>	<a href="#">Wage</a>	<a href="#">Jobs</a>	<a href="#">Training</a>	<a href="#">Credential</a>	<a href="#">Apprenticeship</a>
<a href="#">Carpet Installers</a>	<a href="#">Wage</a>	<a href="#">Jobs</a>	<a href="#">Training</a>	<a href="#">Credential</a>	<a href="#">Apprenticeship</a>
<a href="#">Floor Layers, Except Carpet, Wood and Hard Tiles</a>	<a href="#">Wage</a>	<a href="#">Jobs</a>	<a href="#">Training</a>	<a href="#">Credential</a>	<a href="#">Apprenticeship</a>
<a href="#">Floor Sanders and Finishers</a>	<a href="#">Wage</a>	<a href="#">Jobs</a>	<a href="#">Training</a>	<a href="#">Credential</a>	<a href="#">Apprenticeship</a>
<a href="#">Tile and Marble Setters</a>	<a href="#">Wage</a>	<a href="#">Jobs</a>	<a href="#">Training</a>	<a href="#">Credential</a>	<a href="#">Apprenticeship</a>
<a href="#">Cement Masons and Concrete Finishers</a>	<a href="#">Wage</a>	<a href="#">Jobs</a>	<a href="#">Training</a>	<a href="#">Credential</a>	<a href="#">Apprenticeship</a>
<a href="#">Terrazzo Workers and Finishers</a>	<a href="#">Wage</a>	<a href="#">Jobs</a>	<a href="#">Training</a>	<a href="#">Credential</a>	<a href="#">Apprenticeship</a>
<a href="#">Construction Laborers</a>	<a href="#">Wage</a>	<a href="#">Jobs</a>	<a href="#">Training</a>	<a href="#">Credential</a>	<a href="#">Apprenticeship</a>
<a href="#">Paving, Surfacing, and Tamping Equipment Operators</a>	<a href="#">Wage</a>	<a href="#">Jobs</a>	<a href="#">Training</a>	<a href="#">Credential</a>	<a href="#">Apprenticeship</a>
<a href="#">Pile-Driver Operators</a>	<a href="#">Wage</a>	<a href="#">Jobs</a>	<a href="#">Training</a>	<a href="#">Credential</a>	<a href="#">Apprenticeship</a>
<a href="#">Operating Engineers &amp; Other Construction Equipment Operators</a>	<a href="#">Wage</a>	<a href="#">Jobs</a>	<a href="#">Training</a>	<a href="#">Credential</a>	<a href="#">Apprenticeship</a>
<a href="#">Drywall and Ceiling Tile Installers</a>	<a href="#">Wage</a>	<a href="#">Jobs</a>	<a href="#">Training</a>	<a href="#">Credential</a>	<a href="#">Apprenticeship</a>
<a href="#">Tapers</a>	<a href="#">Wage</a>	<a href="#">Jobs</a>	<a href="#">Training</a>	<a href="#">Credential</a>	<a href="#">Apprenticeship</a>
<a href="#">Electricians</a>	<a href="#">Wage</a>	<a href="#">Jobs</a>	<a href="#">Training</a>	<a href="#">Credential</a>	<a href="#">Apprenticeship</a>
<a href="#">Glaziers</a>	<a href="#">Wage</a>	<a href="#">Jobs</a>	<a href="#">Training</a>	<a href="#">Credential</a>	<a href="#">Apprenticeship</a>
<a href="#">Insulation Workers, Floor, Ceiling and Wall</a>	<a href="#">Wage</a>	<a href="#">Jobs</a>	<a href="#">Training</a>	<a href="#">Credential</a>	<a href="#">Apprenticeship</a>
<a href="#">Insulation Workers, Mechanical</a>	<a href="#">Wage</a>	<a href="#">Jobs</a>	<a href="#">Training</a>	<a href="#">Credential</a>	<a href="#">Apprenticeship</a>
<a href="#">Painters, Construction and Maintenance</a>	<a href="#">Wage</a>	<a href="#">Jobs</a>	<a href="#">Training</a>	<a href="#">Credential</a>	<a href="#">Apprenticeship</a>
<a href="#">Paperhangers</a>	<a href="#">Wage</a>	<a href="#">Jobs</a>	<a href="#">Training</a>	<a href="#">Credential</a>	<a href="#">Apprenticeship</a>
<a href="#">Pipelayers</a>	<a href="#">Wage</a>	<a href="#">Jobs</a>	<a href="#">Training</a>	<a href="#">Credential</a>	<a href="#">Apprenticeship</a>
<a href="#">Plumbers, Pipefitters, and Steamfitters</a>	<a href="#">Wage</a>	<a href="#">Jobs</a>	<a href="#">Training</a>	<a href="#">Credential</a>	<a href="#">Apprenticeship</a>
<a href="#">Plasterers and Stucco Masons</a>	<a href="#">Wage</a>	<a href="#">Jobs</a>	<a href="#">Training</a>	<a href="#">Credential</a>	<a href="#">Apprenticeship</a>
<a href="#">Reinforcing Iron and Rebar Workers</a>	<a href="#">Wage</a>	<a href="#">Jobs</a>	<a href="#">Training</a>	<a href="#">Credential</a>	<a href="#">Apprenticeship</a>
<a href="#">Roofers</a>	<a href="#">Wage</a>	<a href="#">Jobs</a>	<a href="#">Training</a>	<a href="#">Credential</a>	<a href="#">Apprenticeship</a>
<a href="#">Sheet Metal Workers</a>	<a href="#">Wage</a>	<a href="#">Jobs</a>	<a href="#">Training</a>	<a href="#">Credential</a>	<a href="#">Apprenticeship</a>
<a href="#">Structural Iron and Steel Workers</a>	<a href="#">Wage</a>	<a href="#">Jobs</a>	<a href="#">Training</a>	<a href="#">Credential</a>	<a href="#">Apprenticeship</a>
<a href="#">Solar Photovoltaic Installers</a>	<a href="#">Wage</a>	<a href="#">Jobs</a>	<a href="#">Training</a>	<a href="#">Credential</a>	<a href="#">Apprenticeship</a>
<a href="#">Helpers – Brickmasons, Blockmasons, Stonemasons, and Tile and Marble Setters</a>	<a href="#">Wage</a>	<a href="#">Jobs</a>	<a href="#">Training</a>	<a href="#">Credential</a>	<a href="#">Apprenticeship</a>
<a href="#">Helpers – Carpenters</a>	<a href="#">Wage</a>	<a href="#">Jobs</a>	<a href="#">Training</a>	<a href="#">Credential</a>	<a href="#">Apprenticeship</a>
<a href="#">Helpers – Electricians</a>	<a href="#">Wage</a>	<a href="#">Jobs</a>	<a href="#">Training</a>	<a href="#">Credential</a>	<a href="#">Apprenticeship</a>
<a href="#">Helpers – Painters, Paperhangers, Plasterers, and Stucco Masons</a>	<a href="#">Wage</a>	<a href="#">Jobs</a>	<a href="#">Training</a>	<a href="#">Credential</a>	<a href="#">Apprenticeship</a>
<a href="#">Helpers – Pipelayers, Plumbers, Pipefitters, and Steamfitters</a>	<a href="#">Wage</a>	<a href="#">Jobs</a>	<a href="#">Training</a>	<a href="#">Credential</a>	<a href="#">Apprenticeship</a>
<a href="#">Helpers – Roofers</a>	<a href="#">Wage</a>	<a href="#">Jobs</a>	<a href="#">Training</a>	<a href="#">Credential</a>	<a href="#">Apprenticeship</a>
<a href="#">Helpers – Construction Trades, All Other</a>	<a href="#">Wage</a>	<a href="#">Jobs</a>	<a href="#">Training</a>	<a href="#">Credential</a>	<a href="#">Apprenticeship</a>

Occupation Information	Local Wage	Job Postings	Training Opportunities	Credentials	Apprenticeship Opportunities
<a href="#">Construction and Building Inspectors</a>	<a href="#">Wage</a>	<a href="#">Jobs</a>	<a href="#">Training</a>	<a href="#">Credential</a>	<a href="#">Apprenticeship</a>
<a href="#">Elevator Installers and Repairers</a>	<a href="#">Wage</a>	<a href="#">Jobs</a>	<a href="#">Training</a>	<a href="#">Credential</a>	<a href="#">Apprenticeship</a>
<a href="#">Fence Erectors</a>	<a href="#">Wage</a>	<a href="#">Jobs</a>	<a href="#">Training</a>	<a href="#">Credential</a>	<a href="#">Apprenticeship</a>
<a href="#">Hazardous Materials Removal Workers</a>	<a href="#">Wage</a>	<a href="#">Jobs</a>	<a href="#">Training</a>	<a href="#">Credential</a>	<a href="#">Apprenticeship</a>
<a href="#">Highway Maintenance Workers</a>	<a href="#">Wage</a>	<a href="#">Jobs</a>	<a href="#">Training</a>	<a href="#">Credential</a>	<a href="#">Apprenticeship</a>
<a href="#">Rail-Track Laying and Maintenance Equipment Operators</a>	<a href="#">Wage</a>	<a href="#">Jobs</a>	<a href="#">Training</a>	<a href="#">Credential</a>	<a href="#">Apprenticeship</a>
<a href="#">Septic Tank Services and Sewer Pipe Cleaners</a>	<a href="#">Wage</a>	<a href="#">Jobs</a>	<a href="#">Training</a>	<a href="#">Credential</a>	<a href="#">Apprenticeship</a>
<a href="#">Segmental Pavers</a>	<a href="#">Wage</a>	<a href="#">Jobs</a>	<a href="#">Training</a>	<a href="#">Credential</a>	<a href="#">Apprenticeship</a>
<a href="#">Construction and Related Workers, All Other</a>	<a href="#">Wage</a>	<a href="#">Jobs</a>	<a href="#">Training</a>	<a href="#">Credential</a>	<a href="#">Apprenticeship</a>
<a href="#">Derrick Operators, Oil and Gas</a>	<a href="#">Wage</a>	<a href="#">Jobs</a>	<a href="#">Training</a>	<a href="#">Credential</a>	<a href="#">Apprenticeship</a>
<a href="#">Rotary Drill Operators, Oil and Gas</a>	<a href="#">Wage</a>	<a href="#">Jobs</a>	<a href="#">Training</a>	<a href="#">Credential</a>	<a href="#">Apprenticeship</a>
<a href="#">Service Unit Operators, Oil, Gas, and Mining</a>	<a href="#">Wage</a>	<a href="#">Jobs</a>	<a href="#">Training</a>	<a href="#">Credential</a>	<a href="#">Apprenticeship</a>
<a href="#">Earth Drillers, Except Oil and Gas</a>	<a href="#">Wage</a>	<a href="#">Jobs</a>	<a href="#">Training</a>	<a href="#">Credential</a>	<a href="#">Apprenticeship</a>
<a href="#">Explosives Workers, Ordnance Handling Experts, and Blasters</a>	<a href="#">Wage</a>	<a href="#">Jobs</a>	<a href="#">Training</a>	<a href="#">Credential</a>	<a href="#">Apprenticeship</a>
<a href="#">Continuous Mining Machine Operators</a>	<a href="#">Wage</a>	<a href="#">Jobs</a>	<a href="#">Training</a>	<a href="#">Credential</a>	<a href="#">Apprenticeship</a>
<a href="#">Mine Cutting and Channeling Machine Operators</a>	<a href="#">Wage</a>	<a href="#">Jobs</a>	<a href="#">Training</a>	<a href="#">Credential</a>	<a href="#">Apprenticeship</a>
<a href="#">Mining Machine Operators, All Other</a>	<a href="#">Wage</a>	<a href="#">Jobs</a>	<a href="#">Training</a>	<a href="#">Credential</a>	<a href="#">Apprenticeship</a>
<a href="#">Rock Splitters, Quarry</a>	<a href="#">Wage</a>	<a href="#">Jobs</a>	<a href="#">Training</a>	<a href="#">Credential</a>	<a href="#">Apprenticeship</a>
<a href="#">Roof Bolters, Mining</a>	<a href="#">Wage</a>	<a href="#">Jobs</a>	<a href="#">Training</a>	<a href="#">Credential</a>	<a href="#">Apprenticeship</a>
<a href="#">Roustabouts, Oil and Gas</a>	<a href="#">Wage</a>	<a href="#">Jobs</a>	<a href="#">Training</a>	<a href="#">Credential</a>	<a href="#">Apprenticeship</a>
<a href="#">Helpers – Extraction Workers</a>	<a href="#">Wage</a>	<a href="#">Jobs</a>	<a href="#">Training</a>	<a href="#">Credential</a>	<a href="#">Apprenticeship</a>
<a href="#">Extraction Workers, All Other</a>	<a href="#">Wage</a>	<a href="#">Jobs</a>	<a href="#">Training</a>	<a href="#">Credential</a>	<a href="#">Apprenticeship</a>