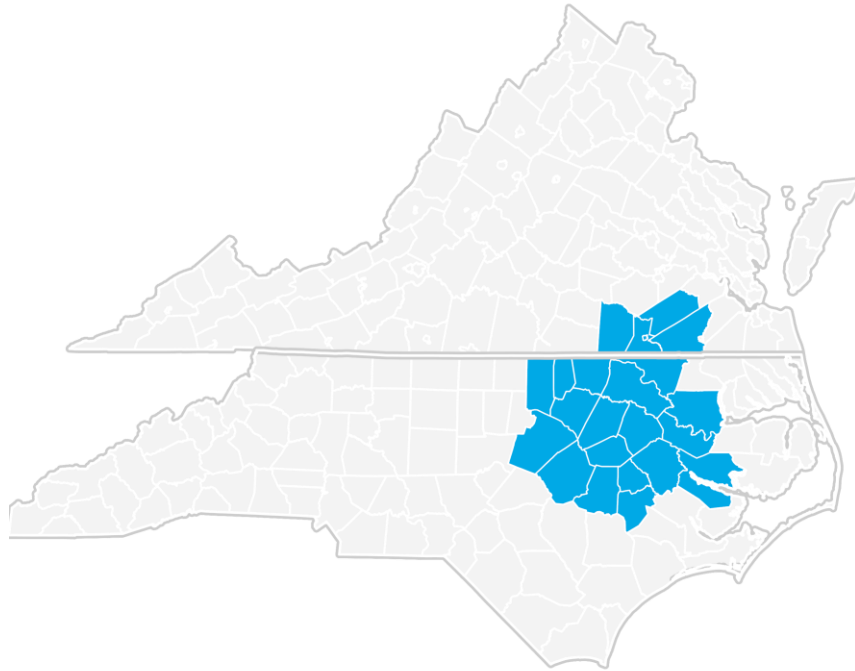


Occupation Report for Welders, Cutters, Solderers, and Brazers

60 minute commute from Rocky Mount, NC MSA



JOBS eQ

August 3, 2018

DEFINITION OF WELDERS, CUTTERS, SOLDERERS, AND BRAZERS, SOC 51-4121	3
OCCUPATION SNAPSHOT	4
GEOGRAPHIC DISTRIBUTION	5
EMPLOYMENT BY INDUSTRY	7
WAGES	9
EDUCATION PROFILE	10
AWARDS	11
APPRENTICESHIPS	12
OPENINGS BY OCCUPATIONS	13
OPENINGS BY EMPLOYERS	13
OPENINGS BY CERTIFICATIONS	14
OPENINGS BY SKILLS	14
OPENINGS BY JOB TITLES	15
OPENINGS BY EDUCATION LEVELS	15
OPENINGS BY LOCATIONS	16
REGION DEFINITION	17
FAQ	18

Definition of Welders, Cutters, Solderers, and Brazers, SOC 51-4121

Use hand-welding, flame-cutting, hand soldering, or brazing equipment to weld or join metal components or to fill holes, indentations, or seams of fabricated metal products.

Occupation Snapshot

As of 2018Q1, total employment for Welders, Cutters, Solderers, and Brazers in the 60 minute commute from Rocky Mount, NC MSA was 1,983. Over the past three years, this occupation added 70 jobs in the region and is expected to increase by 103 jobs over the next seven years, or at an annual average rate of 0.7%.

Occupation Snapshot of Welders, Cutters, Solderers, and Brazers in 60 minute commute from Rocky Mount, NC MSA, 2018q1

Current						3-Year History		7-Year Forecast				
Four Quarters Ending with 2018q1			----2018q1----			Total Change	Avg Ann % Chg in Empl	--Separations--		---Growth---		
Empl	Avg Ann Wages ¹	LQ	Unempl	Unempl Rate	Online Job Ads ²	Empl	Region	Total New Demand	Exits	Transfers	Empl	Avg Ann Rate
1,983	\$41,600	0.74	162	7.5%	39	70	1.2%	1,608	387	1,118	103	0.7%

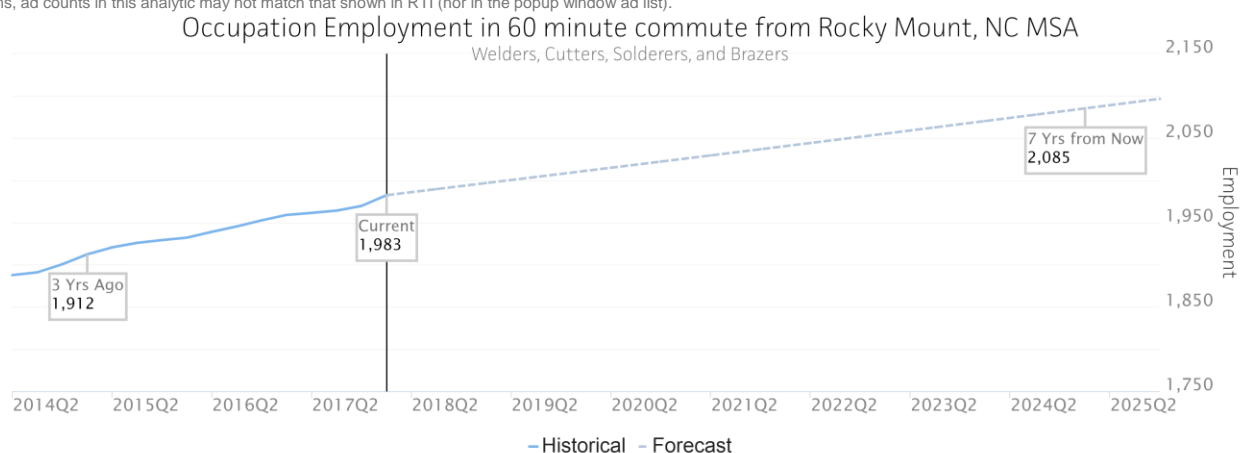
Source: JobsEQ®

Data as of 2018Q1 unless noted otherwise

Note: Figures may not sum due to rounding.

1. Occupation wages are as of 2017 and should be taken as the average for all Covered Employment

2. Data represent found online ads active within the last thirty days in the selected region; data represents a sampling rather than the complete universe of postings. Ads lacking zip code information but designating a place (city, town, etc.) may be assigned to the zip code with greatest employment in that place for queries in this analytic. Due to alternative county-assignment algorithms, ad counts in this analytic may not match that shown in RTI (nor in the popup window ad list).



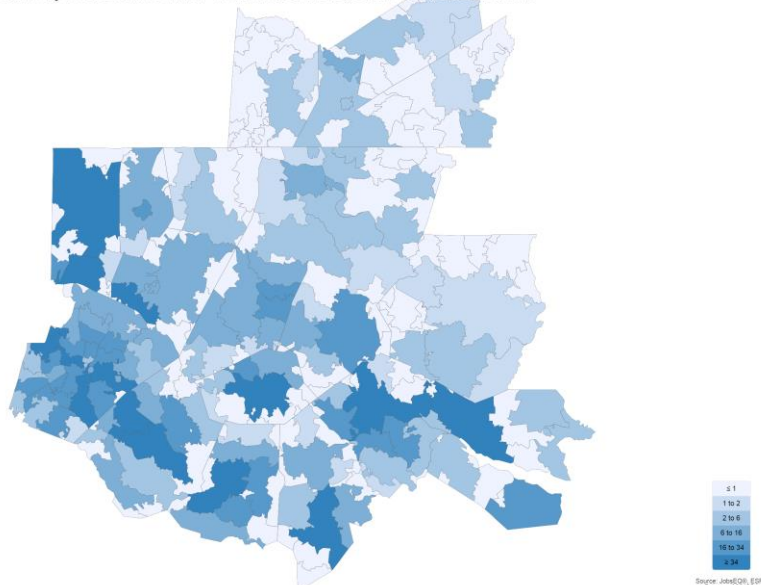
Source: JobsEQ®, Data as of 2018Q1, The shaded areas represent national recessions.

Occupation employment data are estimated via industry employment data and the industry/occupation mix. Industry employment data are derived from the Quarterly Census of Employment and Wages, provided by the Bureau of Labor Statistics and currently updated through 2017Q3, imputed where necessary with preliminary estimates updated to 2018Q1. Wages by occupation are as of 2017 provided by the BLS and imputed where necessary. Forecast employment growth uses national projections from the Bureau of Labor Statistics adapted for regional growth patterns. Occupation unemployment figures are imputed by Chmura.

Geographic Distribution

The below maps illustrate the ZCTA-level distribution of employed Welders, Cutters, Solderers, and Brazers in the 60 minute commute from Rocky Mount, NC MSA. Employment is shown by place of work and by residence.

Occupation Concentration by Place of Work for Welders, Cutters, Solderers, and Brazers



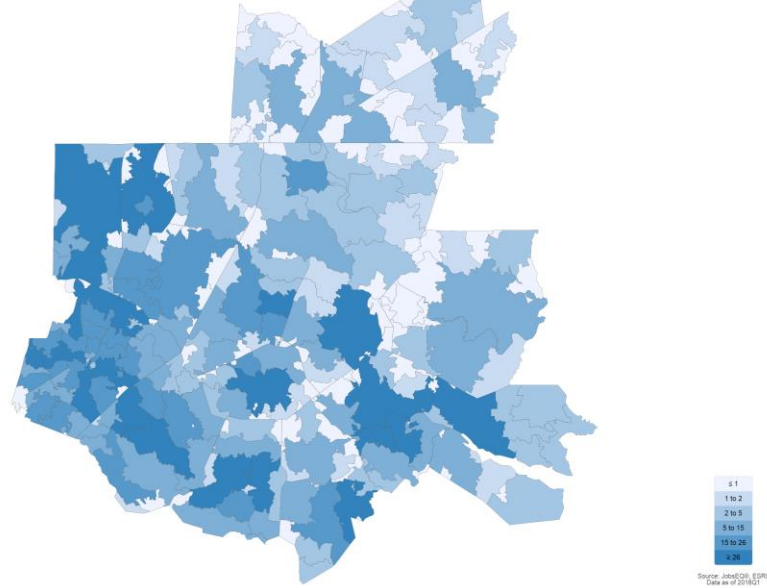
Top ZCTAs by Place of Work for Welders, Cutters, Solderers, and Brazers, 2018Q1

Region	Employment
ZCTA 27560 (Wake County, NC portion)	122
ZCTA 27834 (Pitt County, NC portion)	114
ZCTA 27565 (Granville County, NC portion)	83
ZCTA 27520 (Johnston County, NC portion)	78
ZCTA 27530	71
ZCTA 27522 (Granville County, NC portion)	63
ZCTA 28504 (Lenoir County, NC portion)	62
ZCTA 27889 (Beaufort County, NC portion)	59
ZCTA 27603 (Wake County, NC portion)	59
ZCTA 27893	58

Source: JobsEQ®

Occupation employment data are estimated via industry employment data and the industry/occupation mix. Industry employment data are derived from the Quarterly Census of Employment and Wages, provided by the Bureau of Labor Statistics and currently updated through 2017Q3, imputed where necessary with preliminary estimates updated to 2018Q1. Occupation by residence data are derived from the same in addition to commuting pattern data.

Occupation Concentration by Place of Residence for Welders, Cutters, Solderers, and Brazers



Top ZCTAs by Place of Residence for Welders, Cutters, Solderers, and Brazers, 2018Q1

Region	Employment
ZCTA 27858	71
ZCTA 27565 (Granville County, NC portion)	61
ZCTA 27607	59
ZCTA 27520 (Johnston County, NC portion)	54
ZCTA 27889 (Beaufort County, NC portion)	48
ZCTA 27893	42
ZCTA 27834 (Pitt County, NC portion)	41
ZCTA 27530	41
ZCTA 27577	39
ZCTA 27534	39

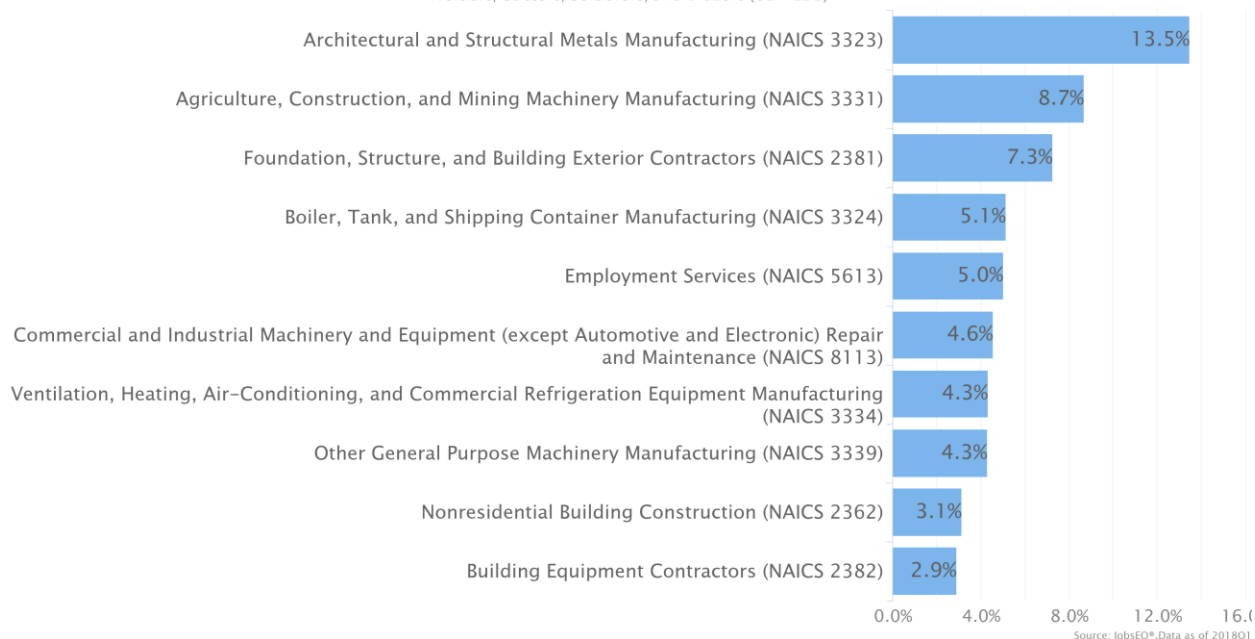
Source: JobsEQ®

Occupation employment data are estimated via industry employment data and the industry/occupation mix. Industry employment data are derived from the Quarterly Census of Employment and Wages, provided by the Bureau of Labor Statistics and currently updated through 2017Q3, imputed where necessary with preliminary estimates updated to 2018Q1. Occupation by residence data are derived from the same in addition to commuting pattern data.

Employment by Industry

The following chart and table illustrate the industries in the 60 minute commute from Rocky Mount, NC MSA which most employ Welders, Cutters, Solderers, and Brazers. The single industry most employing this occupation in the region is Architectural and Structural Metals Manufacturing, NAICS 3323. This industry employs 267 Welders, Cutters, Solderers, and Brazers—employment which is expected to increase by 12 jobs over the next ten years; furthermore, 286 additional new workers in this occupation will be needed for this industry due to separation demand, that is, to replace workers in this occupation and industry that retire or move into a different occupation.

Top Industries in the 60 minute commute from Rocky Mount, NC MSA
Welders, Cutters, Solderers, and Brazers (51-4121)



Occupation employment data are estimated via industry employment data and the industry/occupation mix. Industry employment data are derived from the Quarterly Census of Employment and Wages, provided by the Bureau of Labor Statistics and currently updated through 2017Q3, imputed where necessary with preliminary estimates updated to 2018Q1.

Top Industry Distribution for Welders, Cutters, Solderers, and Brazers (51-4121) in 60 minute commute from Rocky Mount, NC MSA

NAICS Code	Industry Title	Current Occupation Employment	10-Year Sep Demand	10-Year Growth Demand	10-Year Total Demand
3323	Architectural and Structural Metals Manufacturing	267	286	12	298
3331	Agriculture, Construction, and Mining Machinery Manufacturing	172	194	28	222
2381	Foundation, Structure, and Building Exterior Contractors	144	161	19	180
3324	Boiler, Tank, and Shipping Container Manufacturing	102	106	-1	105
5613	Employment Services	100	113	18	131
8113	Commercial and Industrial Machinery and Equipment (except Automotive and Electronic) Repair and Maintenance	90	101	13	114
3334	Ventilation, Heating, Air-Conditioning, and Commercial Refrigeration Equipment Manufacturing	86	88	-4	84
3339	Other General Purpose Machinery Manufacturing	85	88	-3	85
2362	Nonresidential Building Construction	62	70	11	81
2382	Building Equipment Contractors	57	66	13	79
3329	Other Fabricated Metal Product Manufacturing	52	56	3	59

Top Industry Distribution for Welders, Cutters, Solderers, and Brazers (51-4121) in 60 minute commute from Rocky Mount, NC MSA

NAICS Code	Industry Title	Current Occupation Employment	10-Year Sep Demand	10-Year Growth Demand	10-Year Total Demand
3327	Machine Shops; Turned Product; and Screw, Nut, and Bolt Manufacturing	51	55	3	57
3366	Ship and Boat Building	49	49	-4	45
2371	Utility System Construction	48	59	18	76
3353	Electrical Equipment Manufacturing	46	49	1	50
4238	Machinery, Equipment, and Supplies Merchant Wholesalers	44	49	4	53
3345	Navigational, Measuring, Electromedical, and Control Instruments Manufacturing	37	40	1	41
2389	Other Specialty Trade Contractors	32	36	5	41
3363	Motor Vehicle Parts Manufacturing	26	28	0	28
3332	Industrial Machinery Manufacturing	24	24	-2	22
-All Others-		406	432	14	446

Source: JobsEQ®

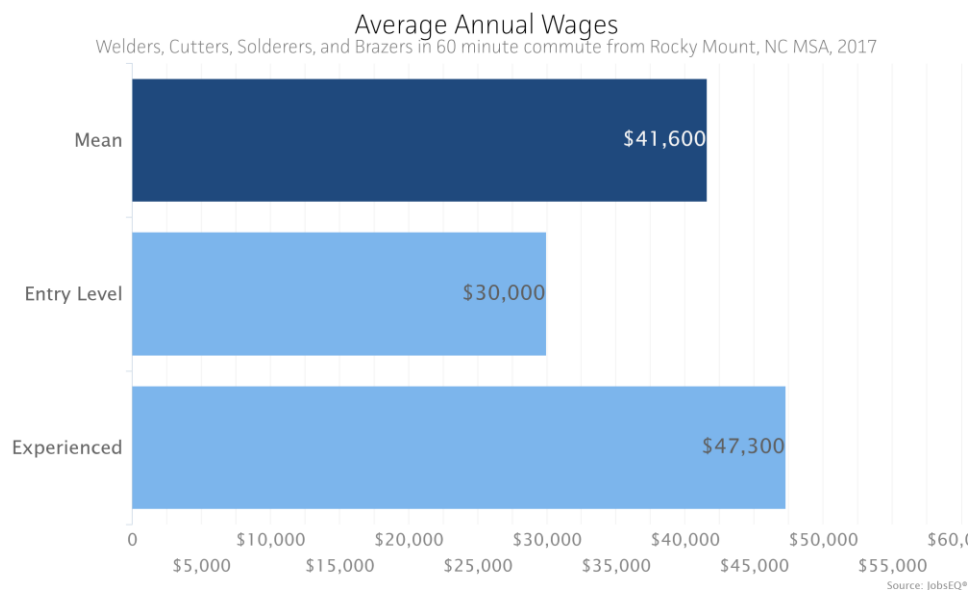
Data as of 2018Q1 except wages which are as of 2017. Note that occupation-by-industry wages represent adjusted national data and may not be consistent with regional, all-industry occupation wages shown elsewhere in JobsEQ.

Note: Figures may not sum due to rounding.

Occupation employment data are estimated via industry employment data and the industry/occupation mix. Industry employment data are derived from the Quarterly Census of Employment and Wages, provided by the Bureau of Labor Statistics and currently updated through 2017Q3, imputed where necessary with preliminary estimates updated to 2018Q1. Forecast employment growth uses national projections from the Bureau of Labor Statistics adapted for regional growth patterns.

Wages

The average (mean) annual wage for Welders, Cutters, Solderers, and Brazers was \$41,600 in the 60 minute commute from Rocky Mount, NC MSA as of 2017. For the same year, average entry level wages were approximately \$30,000 compared to an average of \$47,300 for experienced workers.



Occupation wages (mean, median, and percentiles) are as of 2017 provided by the BLS, modified and imputed by Chmura where necessary. Entry-level and experienced wages are derived from these source data, computed by Chmura.

Education Profile

Typical education and training requirements for Welders, Cutters, Solderers, and Brazers are described below.

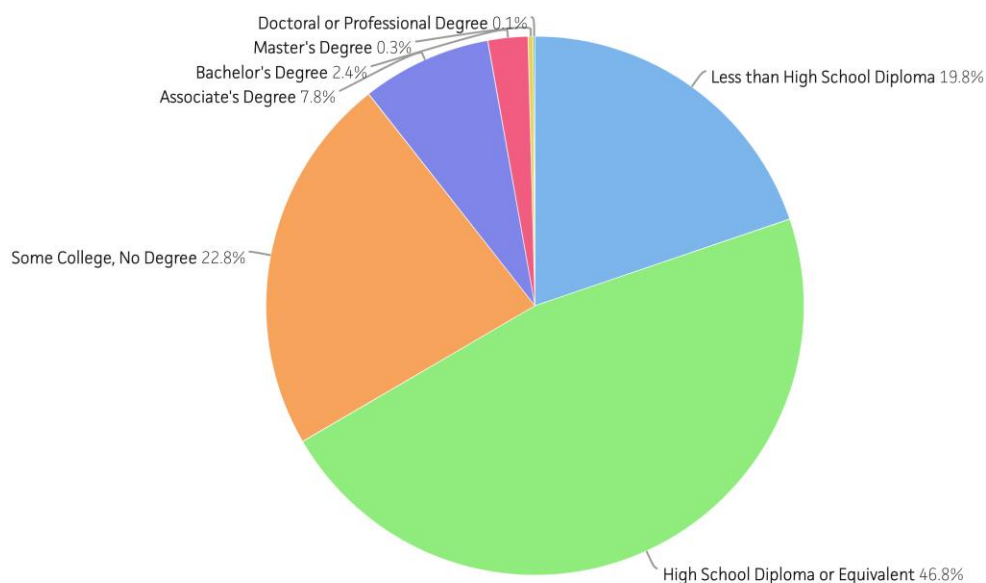
Education and Training Requirements

Typical Entry-Level Education:	High school diploma or equivalent
Previous Work Experience:	None
Typical On-the-Job Training:	Moderate-term on-the-job training

Source: JobsEQ®

The below education mix for Welders, Cutters, Solderers, and Brazers is estimated from national survey data.

Educational Attainment Profile, Age 25+



Source: JobsEQ®

Education and training requirements as well as educational attainment mix data are from the Bureau of Labor Statistics.

Awards

The table below is a list of postsecondary program awards that were granted by postsecondary institutions located in the 60 minute commute from Rocky Mount, NC MSA in the 2017 academic year. These programs have been identified as providing training for Welders, Cutters, Solderers, and Brazers (for further details, see the source note).

Annual Awards - 60 minute commute from Rocky Mount, NC MSA			
Title/School	Certificates and 2yr		
	Degrees	4yr Degrees	Postgraduate Degrees
48.0508 Welding Technology/Welder			
Beaufort County Community College	40	0	0
Halifax Community College	46	0	0
Johnston Community College	39	0	0
Lenoir Community College	26	0	0
Nash Community College	11	0	0
Pitt Community College	135	0	0
Southside Virginia Community College	35	0	0
Vance-Granville Community College	31	0	0
Wake Technical Community College	58	0	0
Wayne Community College	84	0	0
Wilson Community College	13	0	0
Total			
Total	518	0	0

Source: JobsEQ®

Data as of the 2017 academic year

Awards data are per the National Center for Education Statistics (NCES) and JobsEQ for the 2017 academic year. Any programs shown here have been identified as being linked with the occupation being analyzed. Other existing programs may also provide training in the region for this occupation but have not been so identified by the program-occupation crosswalk (see the FAQ section at the end of this report for more details). Furthermore, any programs shown here reflect only data reported to the NCES; reporting is required of all schools participating in any federal finance assistance program authorized by Title IV of the Higher Education Act of 1965, as amended—other training providers in the region that do not report data to the NCES are not reflected in the above.

Apprenticeships

The apprenticeable specialties associated with this occupation are:

Rapids Code	Rapids Title
0274	Lead Burner
0620	Welder, Arc
0622	Welder, Combination
0627	Welder-Fitter

Source: [JobsEQ®](#)

Apprenticeable occupations are identified through the Department of Labor's Registered Apprenticeship program.

Openings by Occupations

Occupations		
SOC	Title	Total Ads
51-4121.06	Welders, Cutters, and Welder Fitters	140

Source: [JobsEQ®](#)

Data reflect online job postings for the 180 day period ending 8/2/2018

Note: Data are subject to revision. Please do not use the volume of data for historical comparisons until such time that an adjusted historical series of these data are provided.

Openings by Employers

Employers	
Employer Name	Total Ads
Micro Tech Staffing	14
Aerotek	13
ResourceMFG	8
Randstad	7
Crown	7
EMCOR Group	5
Roberts Company	5
Express Employment Professionals	5
Tradesmen International	4
Altec Industries , Inc.	4

Source: [JobsEQ®](#)

Data reflect online job postings for the 180 day period ending 8/2/2018

Note: Data are subject to revision. Please do not use the volume of data for historical comparisons until such time that an adjusted historical series of these data are provided.

Openings by Certifications

Certifications

Certificate Name	Total Ads
Certified Welder	2
Operator Certification	1
Certified Crane Operator (NCCCO) (not specified)	1

Source: [JobsEQ®](#)

Data reflect online job postings for the 180 day period ending 8/2/2018

Note: Data are subject to revision. Please do not use the volume of data for historical comparisons until such time that an adjusted historical series of these data are provided.

Openings by Skills

Hard Skills

Skill Name	Total Ads
Welding	101
Metal Inert Gas Welders (MIG welders)	54
Gauges	19
Hand Trucks	12
Power Tools	10
Mathematics	10
Forklifts	9
English	8
Keyboarding/Typing	5
Tape Measures	4

Source: [JobsEQ®](#)

Data reflect online job postings for the 180 day period ending 8/2/2018

Note: Data are subject to revision. Please do not use the volume of data for historical comparisons until such time that an adjusted historical series of these data are provided.

Openings by Job Titles

Job Titles

Job Title	Total Ads
Welder	42
Production Welder	5
Welder - 2nd Shift	4
Mig/Tig Stainless Welder	4
Welders	4
ASME Welder	3
Pipe Welders, Journeyman	3
Structural Welder	3
Stainless and Aluminum Welders	2
Tig Welder Stainless	2

Source: [JobsEQ®](#)

Data reflect online job postings for the 180 day period ending 8/2/2018

Note: Data are subject to revision. Please do not use the volume of data for historical comparisons until such time that an adjusted historical series of these data are provided.

Openings by Education Levels

Education Levels

Education Level	Total Ads
High school diploma or equivalent	58

Source: [JobsEQ®](#)

Data reflect online job postings for the 180 day period ending 8/2/2018

Note: Data are subject to revision. Please do not use the volume of data for historical comparisons until such time that an adjusted historical series of these data are provided.

Openings by Locations

Locations

Location	Total Ads
Raleigh, North Carolina	22
Goldsboro, North Carolina	11
Kinston, North Carolina	9
Clayton, North Carolina	7
Rocky Mount, North Carolina	6
Durham, North Carolina	5
Aurora, North Carolina	5
Washington, North Carolina	4
Creedmoor, NC 27522	4
Cary, North Carolina	3

Source: [JobsEQ®](#)

Data reflect online job postings for the 180 day period ending 8/2/2018

Note: Data are subject to revision. Please do not use the volume of data for historical comparisons until such time that an adjusted historical series of these data are provided.

Region Definition

60 minute commute from Rocky Mount, NC MSA is defined as the following counties: Brunswick County, Virginia; Greenville County, Virginia; Southampton County, Virginia; Sussex County, Virginia; Emporia City, Virginia; Beaufort County, North Carolina; Bertie County, North Carolina; Edgecombe County, North Carolina; Franklin County, North Carolina; Granville County, North Carolina; Greene County, North Carolina; Halifax County, North Carolina; Johnston County, North Carolina; Lenoir County, North Carolina; Martin County, North Carolina; Nash County, North Carolina; Northampton County, North Carolina; Pitt County, North Carolina; Vance County, North Carolina; Wake County, North Carolina; Warren County, North Carolina; Wayne County, North Carolina; Wilson County, North Carolina

FAQ

What is SOC?

The Standard Occupational Classification system (SOC) is used to classify workers into occupational categories. All workers are classified into one of over 840 occupations according to their occupational definition. To facilitate classification, occupations are combined to form 23 major groups, 97 minor groups, and 461 occupation groups. Each occupation group includes detailed occupations requiring similar job duties, skills, education, or experience.

What is a location quotient?

A location quotient (LQ) is a measurement of concentration in comparison to the nation. An LQ of 1.00 indicates a region has the same concentration of an occupation (or industry) as the nation. An LQ of 2.00 would mean the region has twice the expected employment compared to the nation and an LQ of 0.50 would mean the region has half the expected employment in comparison to the nation.

What is training concentration?

The training concentration analysis compares local postsecondary training output compared to the national norm. Let's consider registered nurses as an example. If in the nation, one RN award is granted for every ten RNs employed, that 1:10 ratio is the national norm. If in your region your schools also grant one RN award for every ten RNs employed, then your region will be right at the national norm, or we say at 100% of the national norm which is termed a 100% training concentration. If your region grants two RN awards for every ten employed, your region would be at twice the national norm or have a 200% training concentration. Similarly, if your region grants one RN award for every twenty employed, your region would be at half the national norm or have a 50% training concentration.

What is the program-to-occupation crosswalk?

Training programs are classified according to the Classification of Instructional Programs (CIP codes). For relating training programs, this report uses a modified version of the CIP to SOC crosswalk from the National Center for Education Statistics (NCES). While this is a very helpful crosswalk for estimating occupation production from training program awards data, the crosswalk is neither perfect nor comprehensive. Indeed, it is hard to imagine such a crosswalk being perfect since many training program graduates for one reason or another do not end up employed in occupations that are most related to the training program from which they graduated. Therefore, the education program analyses should be considered in this light.

As an example of the many scenarios that may unfold, consider a journalism degree that crosswalks into three occupations: editors, writers, and postsecondary communications teachers. Graduates with a journalism degree may get a job in one of these occupations—and that may be the most-likely scenario—but a good number of these graduates may get a job in a different occupation altogether (the job may be somewhat related, such as a reporter, or the job may be totally unrelated, such as a real estate agent). Furthermore, a graduate may stay in school or go back to school for a degree that will lead to other occupation possibilities. Still another possibility includes the graduate not entering the labor market (maybe being unemployed, being a non-participant, or moving to another region).

What is separation demand?

Separation demand is the number of jobs required due to separations—labor force exits (including retirements) and turnover resulting from workers moving from one occupation into another. Note that separation demand does not include all turnover—it does not include when workers stay in the same occupation but switch employers. The total projected demand for an occupation is the sum of the separation demand and the growth demand (which is the increase or decrease of jobs in an occupation expected due to expansion or contraction of the overall number of jobs in that occupation).

What is NAICS?

The North American Industry Classification System (NAICS) is used to classify business establishments according to the type of economic activity. The NAICS Code comprises six levels, from the “all industry” level to the 6-digit level. The first two digits define the top level category, known as the “sector,” which is the level examined in this report.

About This Report

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