

New River/Mount Rogers Workforce Development Region

2022 Q1 QUARTERLY
WORKFORCE REPORT

Introduction

Welcome to the 2022 Quarter One Workforce Report.

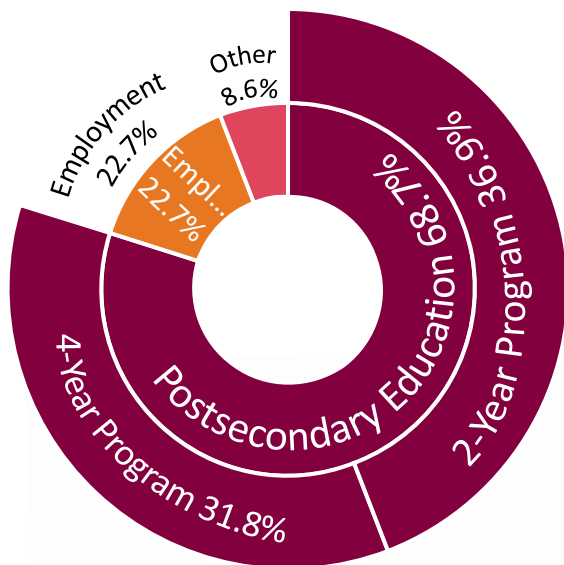
The skilled trades industry is largely represented within the region's labor force. The trades provide essential services for which there will always be a need. They offer a stable income and opportunities for an interesting and important career. In a previous request, CECE developed visuals that reflect different career pathways among employers in the region, also referred to as "career lattices". For the purpose of this report, the skilled trades industry has been segmented into three subsectors: Construction Building, Construction Repair, and Automotive. Each "lattice" captures the promotional pathways of occupations in the region, including the main skills, education, and experience necessary to advance in one's career.

This report will analyze the region's skilled trades industry and take a deeper dive into each subsector. A full skilled trades lattice can be found on the back page of this report.



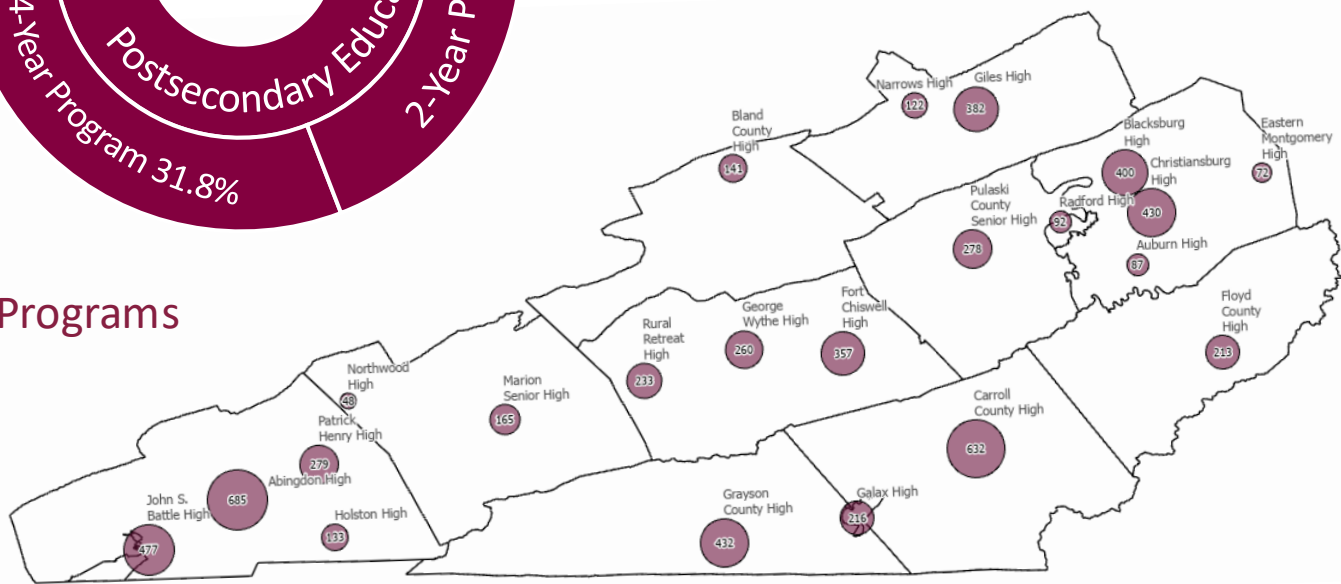
Regional Educational Attainment

Plans After High School



In 2020-2021, 3,272 total graduates recorded their continuing education plans for the region. Most students planned to attend postsecondary education, with 36.9% attending a 2-year program. Montgomery County accounted for the largest proportion of students planning to attend a 2-year program while Galax City had the least number of students.

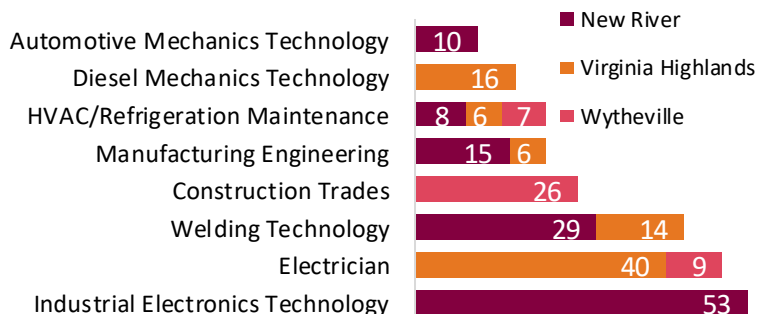
CTE Programs



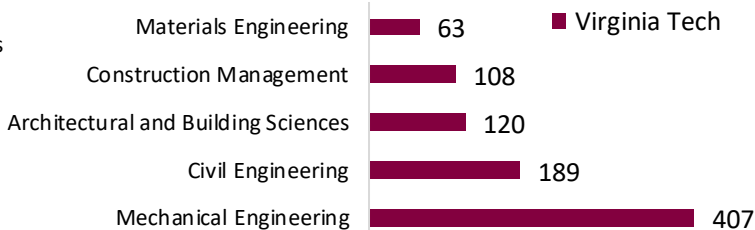
CTE completions were most extensively calculated for the 2018-2019 school year. For all credentials achieved, Washington County had the highest number, at 1,574 total credentials achieved, followed by Montgomery County with 989. Abingdon High in Washington County had the highest for an individual school, at 685. Encouraging students to complete CTE credentials could assist in beginning the pipeline of skilled trade careers for students in the region.

Skilled Trade Program Completions (2020)

<1 Year to Associate's Degree Completions



Bachelor's Degree Completions



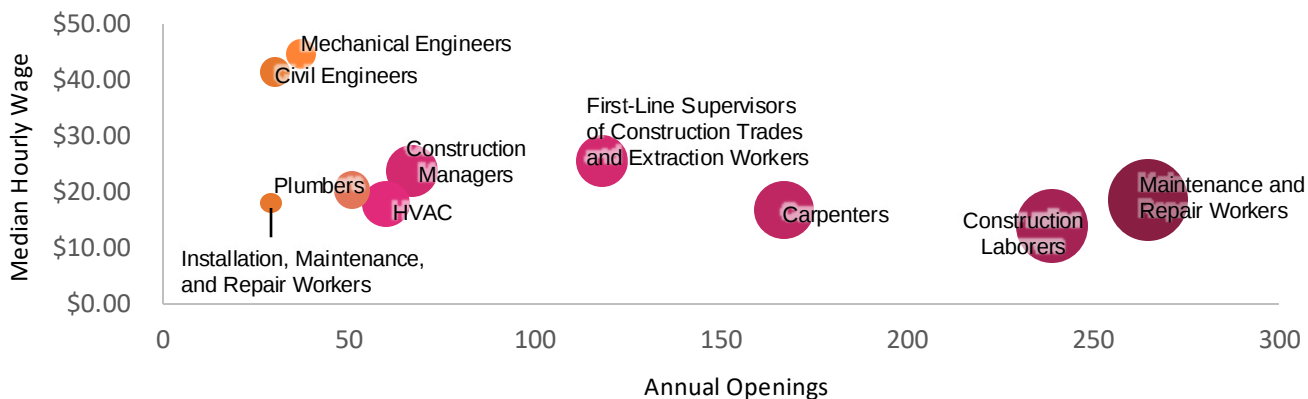
Construction | Buildings

Top Ten Industries

Industry	2021 Jobs	2026 Jobs	% Change	2021 LQ	2021 GRP
Engineering Services	934	1,028	9.99%	0.88	\$101,270,049
Residential Remodelers	855	819	-4.20%	1.12	\$48,054,779
All Other Specialty Trade Contractors	803	829	3.18%	1.15	\$43,411,968
Plumbing, Heating, and Air-Conditioning Contractors	795	780	-1.92%	0.61	\$57,547,420
Site Preparation Contractors	792	753	-5.01%	1.16	\$45,471,503
New Single-Family Housing Construction	638	553	-13.36%	1.19	\$35,828,238
Electrical Contractors and Other Wiring Installation Contractors	502	517	3.02%	0.46	\$36,124,750
Commercial and Institutional Building Construction	324	299	-7.72%	0.46	\$23,478,202
Painting and Wall Covering Contractors	268	247	-7.76%	0.58	\$11,616,101
Finish Carpentry Contractors	150	138	-8.0%	0.54	\$11,808,180

Engineering Services accounts for the largest employment in the construction buildings industry in 2021 and is expected to experience positive growth over the next five years. The New River Valley region accounts for a large proportion of construction building jobs, specifically in Engineering Services and Other Specialty Trade Contractors. Alternatively, Residential Remodelers as well as a number of other new housing construction services will experience shrinkage by 2026. Only four industries in this subsector have a significant LQ, indicating that many industries within construction are not concentrated in the region.

Top Ten Occupations



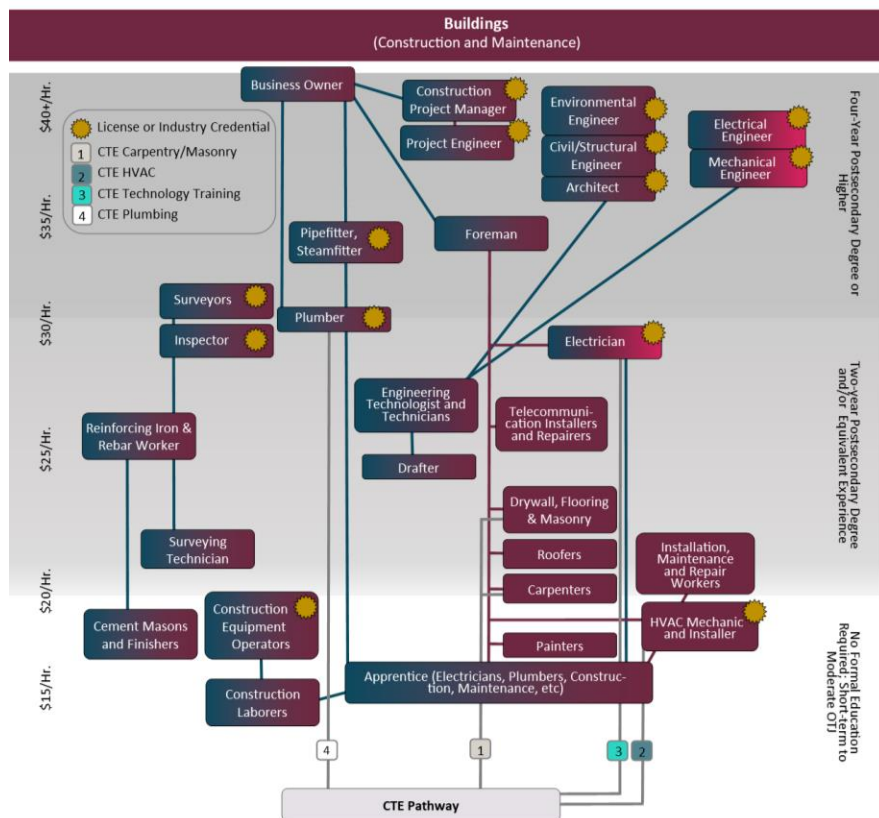
In-Demand vs. Over Saturated

Maintenance and Repair Workers have the greatest number of jobs and openings in 2021; however, 42% of these workers are over the age of 55. Preparing a younger pipeline of workers to fill these roles will be an important priority. By 2026, occupations such as Mechanical and Civil Engineers are expecting 13% and 12% growth, respectively, and demand will increase as more college graduates complete these degrees.

Occupation	2021 Jobs	2026 Jobs	% Change	Age 55+	Job Openings
Maintenance and Repair Workers	1,934	2,038	5%	42%	265
Construction Laborers	1,538	1,556	1%	35%	239
Carpenters	1,259	1,217	-3%	26%	167
First-Line Supervisors of Construction Trades	781	778	0%	34%	118
Construction Managers	528	549	4%	33%	67
HVAC and Refrigeration Mechanics & Installers	364	364	0%	29%	60
Plumbers, Pipefitters, and Steamfitters	333	340	2%	33%	51
Mechanical Engineers	296	333	13%	27%	37
Civil Engineers	212	236	12%	33%	30
Installation, Maintenance, and Repair Workers	182	180	-1%	29%	29

Construction | Buildings

Career Lattice



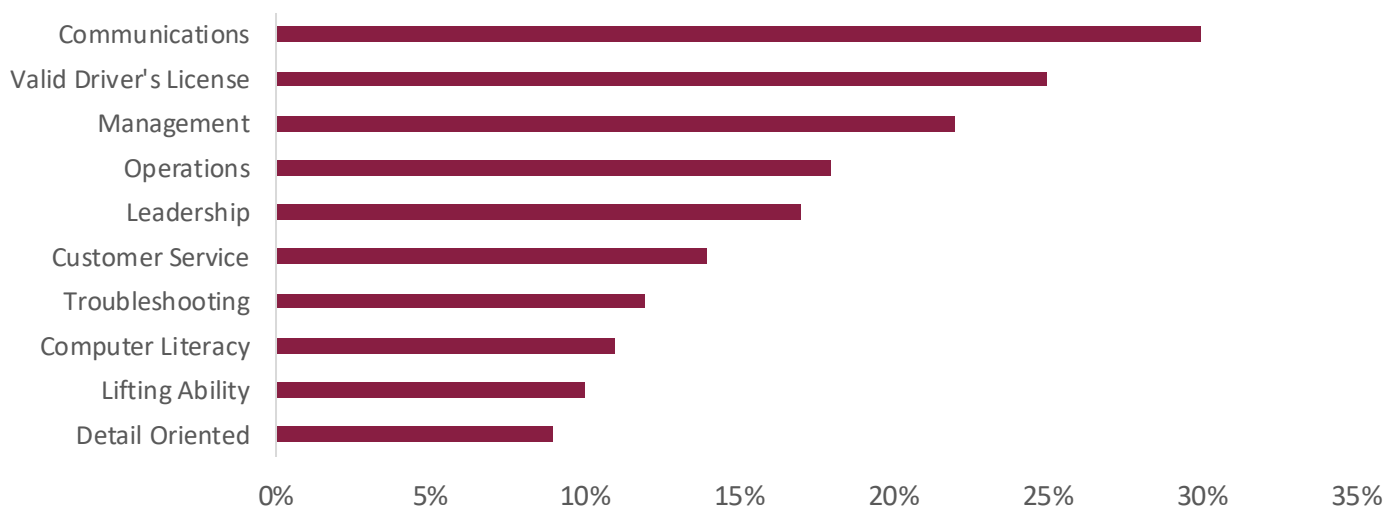
For a skilled trades career in Buildings (construction and maintenance), there are many different paths and post-secondary options one can take to have a successful career. By becoming a licensed journeyman, the worker is skilled in a building trade and has successfully completed an official apprenticeship qualification. There are multiple avenues to become a licensed journeyman in the state of Virginia depending on educational attainment and on the job work experience. The range of education/experience starts with no formal education and ten years of practical experience to receiving a bachelor's degree and one year of practical experience.

CTE programs can help students qualify for a job, especially in Carpentry, HVAC, Technology, and Plumbing related careers. After working in a more hands-on role, many tradespeople move on to management related careers, or become business owners, using the experience they have gained to employ others.

Top Common Skills

Percentage of jobs postings with listed skills

Top skills included communication, a valid driver's license, and management. Typical occupations in this field require teamwork, operating heavy machinery or trucks, and multi-tasking projects. As the industry adopts more advanced technologies due to industry changes and new technological needs, skills such as operations, troubleshooting, and computer literacy may grow in the future.



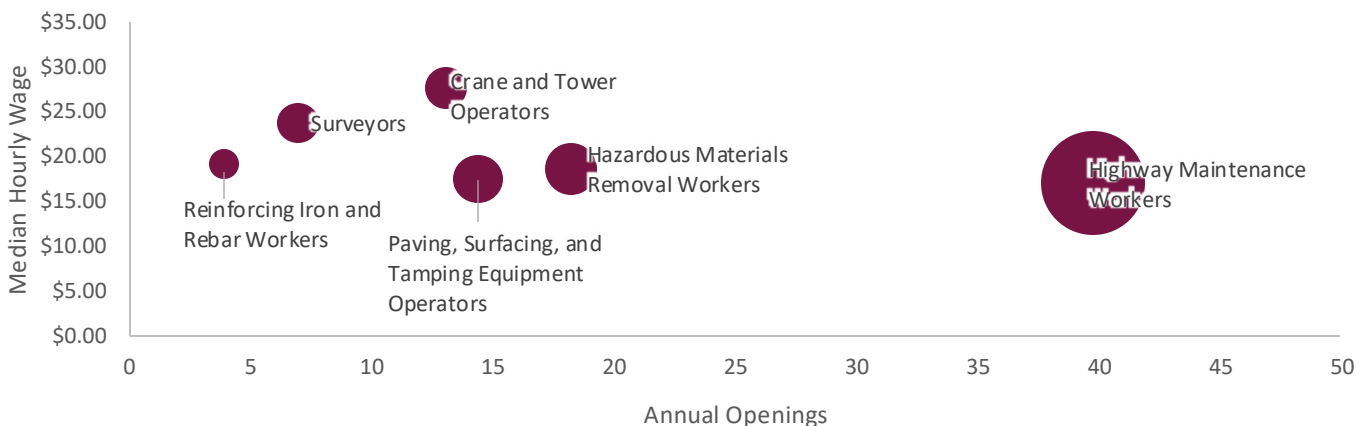
Construction | Infrastructure

Top Ten Industries

Industry	2021 Jobs	2026 Jobs	% Change	2021 LQ	2021 GRP
Highway, Street, and Bridge Construction	680	753	10.72%	1.97	\$69,724,389
Water and Sewer Line and Related Structures Construction	230	272	17.91%	1.16	\$19,949,287
Power and Communication Line and Related Structures Construction	197	241	22.08%	0.91	\$26,235,146
Poured Concrete Foundation and Structures Construction	124	109	-12.10%	0.42	\$7,178,584
Oil and Gas Pipeline and Related Structures Construction	111	180	62.03%	0.9	\$19,951,149
Electric Power Distribution	104	117	12.67%	0.49	\$53,109,996
Other Heavy and Civil Engineering Construction	96	101	5.45%	0.61	\$4,573,163
Natural Gas Distribution	34	37	6.56%	0.32	\$21,382,431
Other Technical and Trade Schools	29	27	-5.82%	0.29	\$552,919
Telecommunications Resellers	27	35	31.49%	0.52	\$3,830,340

The Highway, Street, and Bridge Construction industry accounted for the largest employment in the construction industry in 2021, followed by Water and Sewer Line Construction. Both are expected to experience significant positive growth over the next five years. These two industries are the only sectors that have significant employment concentration in the region.

Top Ten Occupations



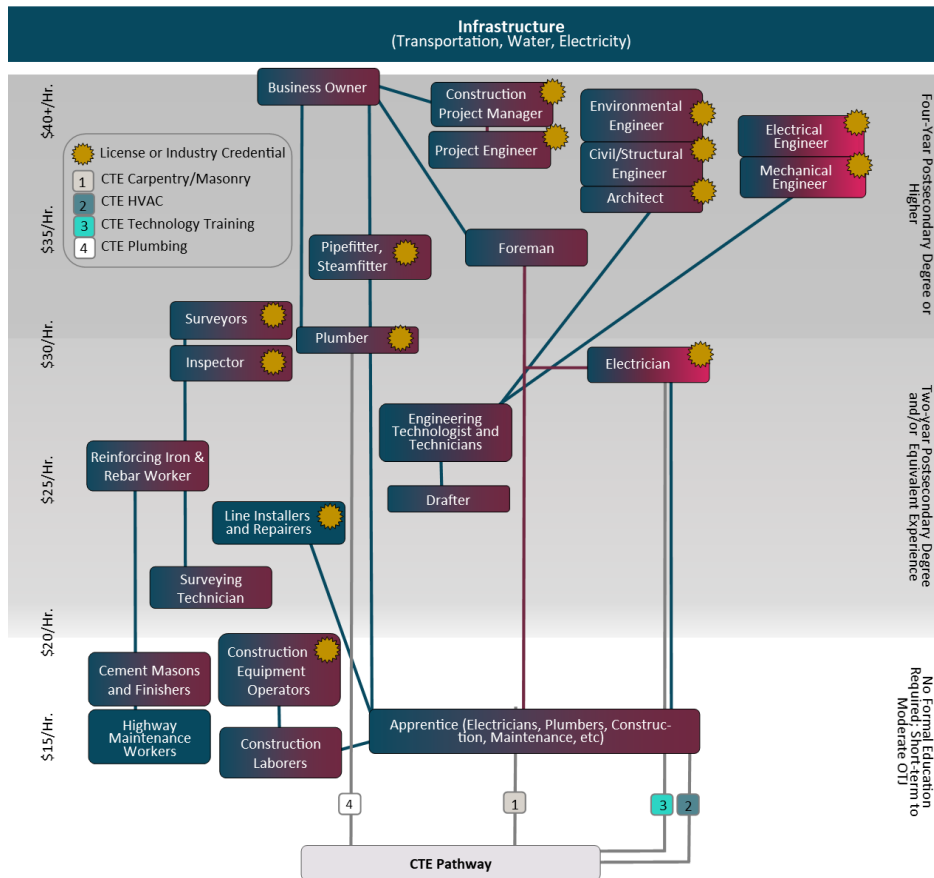
In-Demand vs. Over Saturated

Many construction infrastructure jobs are obtained through apprenticeships, thus there are few formal online postings. Nevertheless, Operating Engineers are expected to see the greatest amount of growth over the next five years suggesting the greatest number of hires. The majority of occupations contain a large proportion of workers over the age of 55, indicating many open positions in the future due to retirement.

Occupation	2021 Jobs	2026 Jobs	% Change	Age 55+	Job Openings
Operating Eng. and Other Construction Operators	478	514	7%	35%	64
Highway Maintenance Workers	310	308	-1%	33%	34
Hazardous Materials Removal Workers	74	72	-4%	27%	10
Paving, Surfacing, and Tamping Equip. Operators	67	68	1%	36%	Less than 10
Crane and Tower Operators	50	54	6%	34%	Less than 10
Surveyors	48	50	4%	28%	Less than 10
Reinforcing Iron and Rebar Workers	24	24	1%	33%	Less than 10
Pile Driver Operators	15	11	-21%	38%	Less than 10

Construction | Infrastructure

Career Lattice



For a skilled trade career in Infrastructure (transportation, water, electricity), the career pathways are similar to those in building construction. One can become a licensed Journeyman with the state of Virginia with a bachelor's degree and one year of practical experience, or with no formal education but ten years of practical experience. A college degree is not necessary to advance in the industry. The keys to success include a strong work ethic, passion for the trade, and a willingness to learn and acquire new skills.

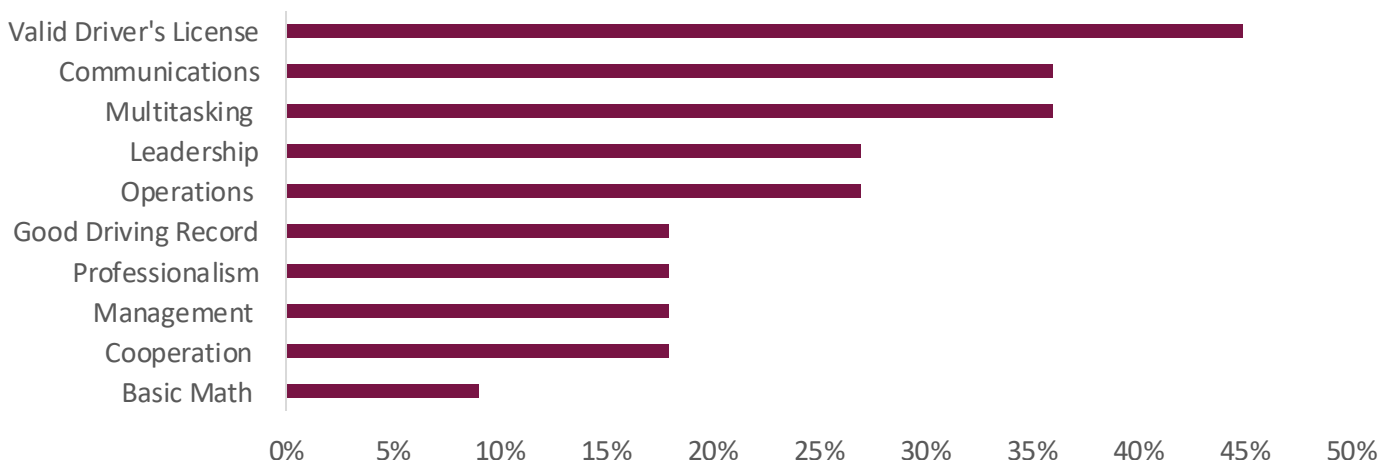
There is no one formal way to advance in the infrastructure skilled trades fields, however many roles require licenses to practice.

CTE programs can help students gain critical experience and necessary certifications needed for a job. After working in a more hands-on role, many tradespeople move on to less physically intensive positions in management or start their own business, using the experience they have gained to employ others.

Top Common Skills

Percentage of jobs postings with listed skills

Top skills included communication, a valid driver's license, and management. Many task specific skills can be learned on the job. The ability to communicate with others and work in a team environment are of the utmost importance working in the field. Many of the issues relating to infrastructure projects are in communication failures.



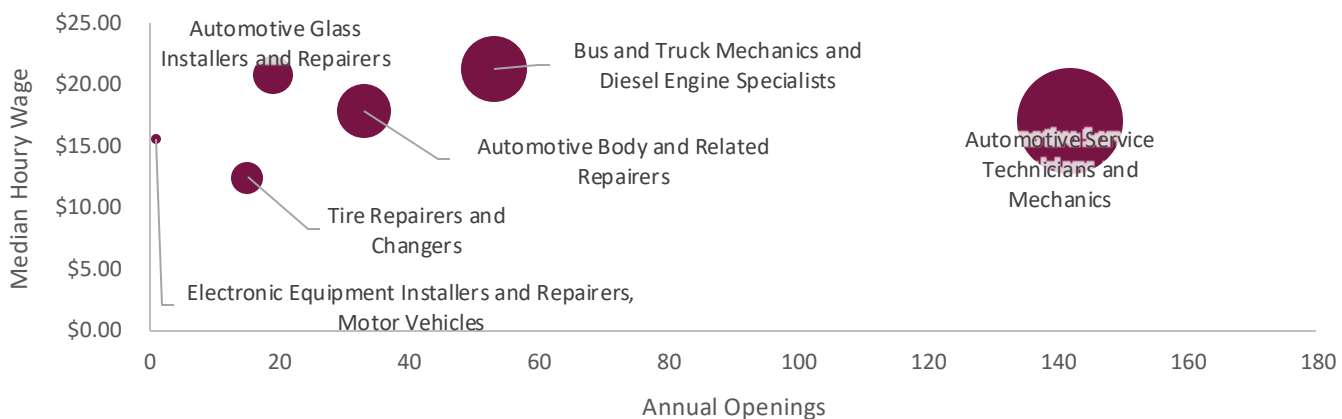
Automotive

Top Ten Industries

Industry	2021 Jobs	2026 Jobs	% Change	2021 LQ	2021 GRP
General Automotive Repair	881	950	7.81%	1.47	\$44,368,571
Automotive Parts and Accessories Stores	621	661	6.37%	1.69	\$34,894,859
Automotive Body, Paint, and Interior Repair and Maintenance	319	320	0.49%	1.06	\$18,824,865
Tire Dealers	194	207	6.42%	1.07	\$15,303,786
Car Washes	200	195	-2.69%	0.91	\$7,293,491
All Other Automotive Repair and Maintenance	99	119	19.78%	1.99	\$4,498,844
Automotive Oil Change and Lubrication Shops	81	76	-6.14%	0.95	\$2,698,881
Automotive Glass Replacement Shops	27	22	-19.27%	0.55	\$1,305,751
Automotive Transmission Repair	28	30	7.04%	0.90	\$987,406
Other Automotive Mechanical and Electrical Repair and Maintenance	24	30	24.33%	0.70	\$986,749
Automotive Exhaust System Repair	21	19	-6.68%	1.53	\$540,541

The General Automotive Repair industry accounted for the largest employment in the automotive industry in 2021, followed by Automotive Parts Stores and Automotive Body Repair. All three are expected to have positive growth over the next five years. All Other Automotive Repair and Maintenance had the most significant employment concentration in the region at 1.99 LQ.

Top Occupations



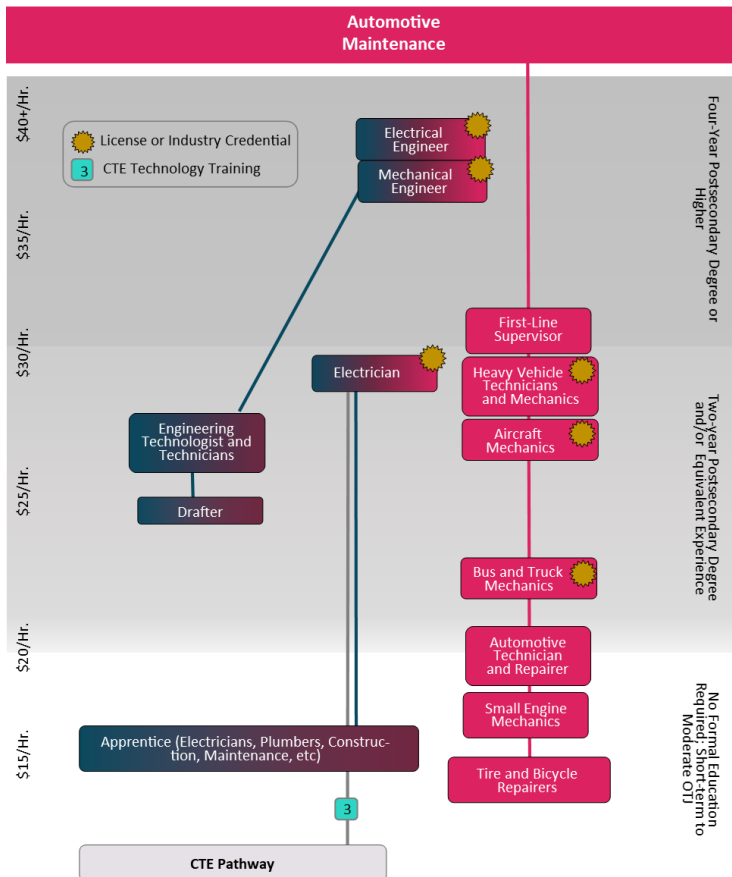
In Demand vs. Over Saturated

The automotive repair industry is a growing field in the NRV region. Employers in the automotive repair industry are hiring and in need of qualified candidates. Personal miles driven, and bus travel demand have nearly bounced back to pre-pandemic levels, yet there are not enough people interested or available to fill demand. Many public agencies and private sector businesses are offering hiring bonuses and other benefits to entice workers to fill open roles.

Occupation	2021 Jobs	2026 Jobs	% Change	Age 55+	Job Openings
Automotive Service Technicians and Mechanics	1,298	1,338	3%	24%	144
Bus and Truck Mechanics & Diesel Engine Specialists	490	525	7%	27%	54
Automotive Body and Related Repairers	332	336	1%	28%	34
Automotive Glass Installers and Repairers	168	171	1%	16%	19
Tire Repairers and Changers	112	117	5%	13%	16
Electronic Equip. Installers and Repairers, Motor	13	13	-5%	18%	Less than 10

Automotive

Career Lattice



For a skilled trades career in automotive maintenance, the career pathways are similar to those in the building construction and infrastructure industries. A college degree is not necessary to advance in the industry, generally only a high school diploma or GED is required. The keys to success include a strong work ethic, passion for the trade, and a willingness to learn and acquire new skills. CTE programs can help students gain critical experience and necessary certifications needed for a job. Cars are increasingly complex with advanced computer systems and electronics. As cars become increasingly electrified in their powertrain and interior systems, gaining computer skills is paramount for success.

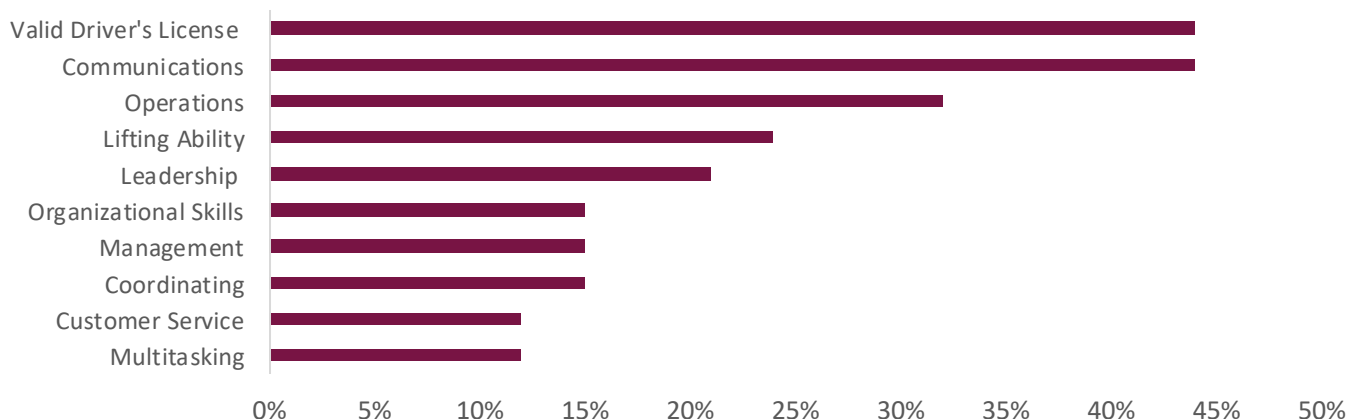
A common certification many people in the automotive maintenance field complete is the ASE certification (short for the National Institute for Automotive Service Excellence). To become an ASE certified technician, one must pass the ASE certification test, one must have two years of on-the-job training or one year of on-the-job training and a two year degree in automotive repair.

Jobs in the private sector tend to have higher pay and work hour demands than public sector jobs. However, jobs in the public sector tend to have more robust benefits such as paid time off and healthcare coverage.

Top Common Skills

Percentage of jobs postings with listed skills

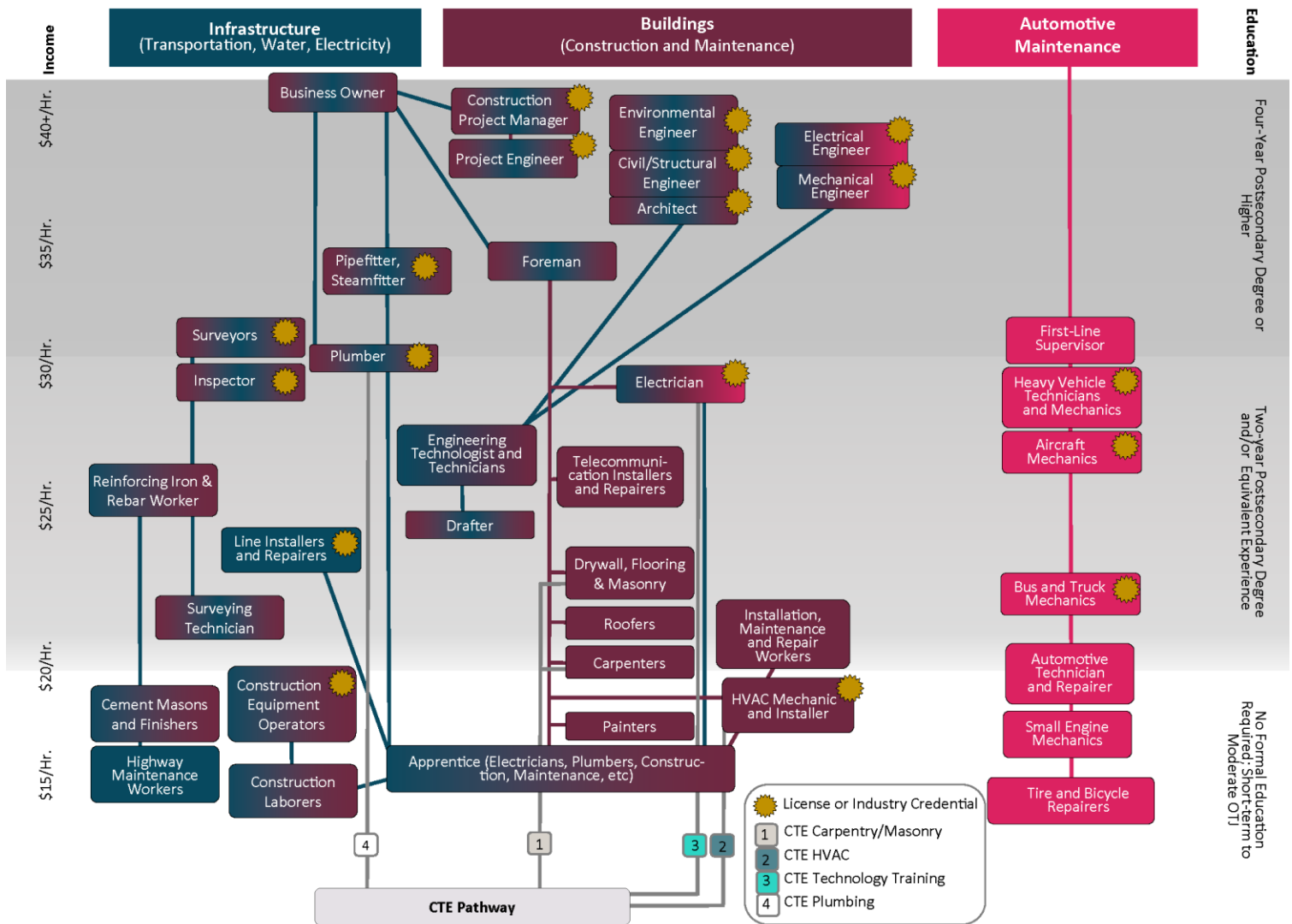
For practically all roles in the automotive maintenance field a drivers license is required. Many of the task specific skills can be learned on the job. The ability to communicate with others and work in a team environment are of the utmost importance working in the field. Cars are increasingly becoming computers on wheels, particularly as they become electrified, therefore suggesting the increasing need for computer literacy and electrical skills.



Primary Skilled Trades

Career Lattice

New River | Mount Rogers Construction and Maintenance Skilled Trades Career Lattice



Skilled Trades

Local Resources

Virginia Highlands Community College

Career Studies Certificates in:

- Practical Electrical Technician
- Advanced Practical Electrician
- Refrigeration
- Commercial Refrigeration
- Precision Machining
- Advanced Precision Machining
- Applied Mechatronics
- Advanced Mechatronics
- Welding
- Advanced Welding

Wytheville Community College

Career Studies Certificates in:

- Electrician
- Carpentry I
- Heating, Ventilation and Air Conditioning
- Solar Installer
- Plumbing

FastForward Career Programs in:

- Welding
- Truck Driver
- Power Line Worker
- Automotive Technician
- Underground Power Worker

Certificate in:

- Machine Technologist

CTE Programs

Career and Technical Education (CTE) programs prepare students in grades 6-12 for careers through classroom and hands-on training. The Trade and Industrial Education program develops skills in...

- Machining
- Mechatronics
- Drafting
- Building Trades
- And more...

Please visit your local school website for more information on course availability.

New River Community College

Career Studies Certificates in:

- Advanced Welding
- Alternative Energy
- Applied Mechatronics
- Automotive Drivability
- Basic Machine Tool Operations
- Electricity
- Engineering Design Fundamentals I & II
- Engineering Design Technology
- Fundamentals of Welding
- Machine Operations
- Machine Technology Fundamentals I & II
- Mechatronics Fundamentals
- Practical Electrical Energy Technician I & II
- Practical Electrical Technician I & II
- Practical Electronics Technician I & II
- Refrigeration and Air Conditioning
- Unmanned Systems

NRV Home Builders Association

The New River Valley Home Builders Association is a professional trade association that advocates for the construction industry through education, support, and workforce development. Visit the Trades Education section on their website nrvhba.com for more information on resources in the region.

HBI Pre-Apprenticeship Certificate Training

This program, also known as HBI PACT, is offered through the New River/Mount Rogers Workforce Development Board. HBI PACT integrates performance-based learning in the building trades with vocational and academic skills training and includes life skills, career development, and on-the-job training.

For information on recruitment opportunities and programs to support Employed Worker Training, On-the-Job Training and other work-based learning opportunities contact the New River/Mount Rogers Workforce Development Board [Contact - New River/Mount Rogers Workforce Development Board \(vcwnewrivermtrogers.com\)](http://vcwnewrivermtrogers.com)



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