

Roanoke Higher Education Center Workforce Review



Released: May 2025

Compiled by: Mease Consulting LLC

Prepared for: Roanoke Higher Education Center

Executive Summary

The mission of the Roanoke Higher Education Center (RHEC) is to develop partnerships and provide citizens of the Roanoke region access to training, certifications, and degrees. This happens through the hard work of our member institutions who have a vested interest in developing human capital to meet the area's workforce needs. Since the Center opened in 2000, over 16,000 certifications and degrees have been awarded creating skilled workers who contribute to the region's economic vitality.

As the workforce transforms at an unprecedented pace, higher education must adapt to meet its demands. The RHEC Workforce Review examines the evolving landscape of employment, education, and skill development in GO VA: Region 2. This study utilizes a comprehensive framework that integrates over 867 SOC occupation codes, 1,030 industry codes, and more than 2,800 CIP award codes to assess regional job demand, workforce capabilities, and postsecondary training alignment.

The information from this report is intended to clarify the gaps in workforce training programs that are required to match the region's current and future job growth. Additionally, RHEC predicts the data will guide the development of new partnerships and program development opportunities. Data is reported from Q32024.

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Section 1.0. Identification of the top jobs currently available in the region and the growth anticipated for the next five years, including skill gaps in incumbent workers.

1.1. Occupation Snapshot by Total Employment

This chart provides an overview of the Top 25 occupations in Region 2 based on total employment according to the 867 six-digit Standard Occupational Classification (SOC) codes.

Among them, *Team Assemblers* and *Nursing Assistants* show a strong regional presence with a Location Quotient (LQ) above 1.25, indicating a competitive advantage. However, both are projected to experience negative annual growth.

The fastest-growing occupations in this group are *Personal Care Aides*, *Restaurant Cooks*, and *Software Developers*. Overall, only 6 of the 25 occupations are expected to grow.

In contrast, roles such as *Cashiers*, *Retail Supervisors*, *Administrative and Office Clerks*, *Customer Service Representatives*, and *Bookkeepers* are forecasted to decline, likely due to increasing automation and AI integration. These roles may be strong candidates for reskilling and transformation into growth-oriented occupations.

GoVirginia - Region 2, 2024Q3 ¹														
SOC	Occupation	Current						5-Year History		5-Year Forecast				
		Mean Ann Empl	Wages ²	LQ	Unempl	Unempl Rate	Online Job Ads ³	Empl Change	Ann %	Total Demand	Exits	Transfers	Empl Growth	Ann % Growth
41-2031	Retail Salespersons	9,036	\$33,600	1.10	388	4.1%	775	-663	1.4%	6,118	2,770	3,605	-257	-0.6%
35-3023	Fast Food and Counter Workers	8,630	\$29,500	1.07	493	5.5%	523	-565	1.3%	10,066	4,572	5,478	16	0.0%
29-1141	Registered Nurses	8,545	\$84,400	1.18	84	1.0%	2,954	646	1.6%	2,094	1,227	931	-64	-0.2%
41-2011	Cashiers	7,892	\$28,600	1.09	549	6.5%	139	-681	1.6%	6,391	3,348	3,643	-600	-1.6%
11-1021	General and Operations Managers	7,114	\$119,900	0.91	90	1.2%	102	926	2.8%	2,820	779	2,055	-14	0.0%
53-7065	Stockers and Order Fillers	6,148	\$36,000	0.98	383	5.7%	426	427	1.4%	4,907	1,814	3,075	17	0.1%
43-9061	Office Clerks, General	5,843	\$40,500	1.04	191	3.0%	81	-363	1.2%	2,931	1,500	1,750	-319	-1.1%
51-2092	Team Assemblers	5,708	\$46,900	2.10	250	4.6%	6	345	1.3%	3,245	1,162	2,153	-70	-0.2%
53-3032	Heavy and Tractor-Trailer Truck Drivers	5,444	\$55,800	1.14	174	3.1%	345	224	0.8%	2,740	1,110	1,651	-21	-0.1%
3333343-4051	Customer Service Representatives	5,227	\$40,300	0.83	238	3.8%	218	-109	0.4%	2,963	1,262	2,005	-304	-1.2%
37-2011	Janitors and Cleaners, Except Maids and Housekeeping Cleaners	5,222	\$33,400	0.99	221	4.0%	300	231	0.9%	3,553	1,682	1,915	-43	-0.2%

GoVirginia - Region 2, 2024Q3¹

SOC	Occupation	Current					5-Year History			5-Year Forecast				
		Empl	Mean Ann Wages ²	LQ	Unempl	Unempl Rate	Online Job Ads ³	Empl Change	Ann %	Total Demand	Exits	Transfers	Empl Growth	Ann % Growth
31-1131	Nursing Assistants	5,101	\$37,700	1.62	182	3.5%	256	-97	0.4%	3,425	1,483	2,011	-69	-0.3%
53-7062	Laborers and Freight, Stock, and Material Movers, Hand	5,101	\$40,600	0.79	352	6.1%	160	35	0.1%	3,218	1,159	2,116	-57	-0.2%
35-3031	Waiters and Waitresses	4,867	\$35,600	0.98	237	4.6%	105	-518	2.0%	4,773	1,929	2,953	-108	-0.4%
31-1122	Personal Care Aides	4,750	\$29,300	0.72	153	3.0%	137	827	3.9%	3,835	1,858	1,632	345	1.4%
43-6014	Secretaries and Administrative Assistants, Except Legal, Medical, and Executive	3,830	\$42,100	0.91	93	2.3%	276	-168	0.9%	1,927	1,007	1,026	-105	-0.6%
41-1011	First-Line Supervisors of Retail Sales Workers	3,689	\$51,400	1.20	70	1.8%	841	-10	0.1%	1,491	628	1,082	-219	-1.2%
47-2061	Construction Laborers	3,519	\$38,600	1.13	195	5.5%	76	481	3.0%	1,569	554	947	69	0.4%
43-3031	Bookkeeping, Accounting, and Auditing Clerks	3,289	\$45,200	0.91	58	1.6%	80	-380	2.2%	1,595	923	845	-174	-1.1%
49-9071	Maintenance and Repair Workers, General	3,232	\$48,900	0.93	90	2.6%	421	0	0.0%	1,437	675	772	-10	-0.1%
25-2021	Elementary School Teachers, Except Special Education	3,177	\$58,000	1.04	54	1.7%	54	86	0.6%	965	483	545	-64	-0.4%
13-2011	Accountants and Auditors	3,139	\$75,800	0.94	49	1.4%	105	41	0.3%	1,178	453	734	-9	-0.1%
35-2014	Cooks, Restaurant	3,100	\$33,700	0.99	158	4.9%	135	167	1.1%	2,582	1,067	1,357	158	1.0%
43-1011	First-Line Supervisors of Office and Administrative Support Workers	3,064	\$61,900	0.91	47	1.4%	94	-98	0.6%	1,218	541	833	-155	-1.0%
15-1252	Software Developers	3,036	\$115,500	0.84	94	2.4%	65	200	1.4%	962	268	552	143	0.9%
00-0000	Total - All Occupations	360,638	\$59,700	1.00	11,842	3.1%	24,939	972	0.1%	190,335	79,778	113,154	-2,597	-0.1%

Source: [JobsEQ®](#)

Data as of 2024Q3 unless noted otherwise

Note: Figures may not sum due to rounding.

1. Data based on a four-quarter moving average unless noted otherwise.

2. Wage data represent the average for all Covered Employment

3. Data represent found online ads active within the last thirty days in the selected region. 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). Ad counts for ZCTA-based regions are estimates.

1.2. Occupation Snapshot by Annual Growth Percentage

Among the 37 occupations projected to grow by at least 1.0%, eight exceed the regional competitive advantage benchmark with a location quotient (LQ) above 1.25. Of these eight, only Mental Health Counselors have a regional unemployment rate higher than 2%. Health and Nursing Instructors stand out due to their direct connection to the region's healthcare education institutions.

As a result, the following occupations present potential opportunities for labor force expansion: Information Security Analysts, Operations Research Analysts, Veterinarians, Veterinary Assistants, and Industrial Machinery Mechanics.

In terms of compensation, 9 of the 37 occupations offer salaries over \$100,000, while 14 fall below the region's average annual wage of \$59,700.

GoVirginia - Region 2, 2024Q3 ¹														
SOC	Occupation	Current					5-Year History			5-Year Forecast				
		Empl	Mean Ann Wages ²	LQ	Unempl	Unempl Rate	Online Job Ads ³	Empl Change	Ann %	Total Demand	Exits	Transfers	Empl Growth	Ann % Growth
29-1171	Nurse Practitioners	733	\$121,100	1.13	4	0.6%	242	174	5.6%	312	85	97	129	3.3%
47-2231	Solar Photovoltaic Installers	51	\$43,800	0.83	7	9.7%	n/a	13	6.1%	33	6	20	7	2.6%
15-2051	Data Scientists	259	\$107,700	0.60	5	1.7%	6	70	6.5%	114	30	52	32	2.4%
49-9081	Wind Turbine Service Technicians	21	\$63,300	0.77	1	5.5%	n/a	5	6.0%	14	5	7	3	2.4%
15-1212	Information Security Analysts	686	\$115,300	1.77	5	0.7%	25	102	3.3%	280	64	139	77	2.1%
11-9071	Gambling Managers	2	\$92,900	0.19	0	n/a	n/a	-3	-14.9%	2	0	1	0	2.0%
11-9111	Medical and Health Services Managers	1,030	\$129,300	0.84	12	1.1%	770	151	3.2%	497	140	257	101	1.9%
29-1071	Physician Assistants	380	\$123,300	1.12	0	n/a	147	73	4.4%	139	39	62	38	1.9%
11-9072	Entertainment and Recreation Managers, Except Gambling	21	\$90,000	0.27	0	n/a	8	7	9.2%	15	4	9	2	1.7%

GoVirginia - Region 2, 2024Q3¹

SOC	Occupation	Current				5-Year History				5-Year Forecast				
		Empl	Mean	LQ	Unempl	Rate	Online	Empl	Ann	Total	Exits	Transfers	Empl	Ann %
			Ann				Job							
			Wages ²				Ads ³	Change	%	Demand			Growth	Growth
15-1221	Computer and Information Research Scientists	63	\$124,000	0.92	2	2.4%	20	0	0.0%	25	7	13	5	1.6%
21-1018	Substance Abuse, Behavioral Disorder, and Mental Health Counselors	1,678	\$55,200	1.64	101	5.8%	132	218	2.8%	864	304	430	130	1.5%
31-2021	Physical Therapist Assistants	260	\$70,300	1.08	2	0.6%	50	7	0.5%	223	66	137	20	1.5%
15-2011	Actuaries	28	\$122,700	0.52	0	n/a	2	-7	-4.4%	9	2	4	2	1.5%
31-1122	Personal Care Aides	4,750	\$29,300	0.72	153	3.0%	137	827	3.9%	3,835	1,858	1,632	345	1.4%
31-1121	Home Health Aides	1,672	\$29,300	0.72	62	3.4%	37	-437	-4.5%	1,112	477	513	122	1.4%
31-9096	Veterinary Assistants and Laboratory Animal Caretakers	439	\$33,700	1.70	6	1.4%	17	69	3.5%	453	114	307	31	1.4%
15-2031	Operations Research Analysts	369	\$99,500	1.44	6	1.5%	17	18	1.0%	148	63	59	27	1.4%
29-1131	Veterinarians	273	\$111,600	1.41	0	n/a	39	40	3.3%	58	25	13	20	1.4%
29-2056	Veterinary Technologists and Technicians	272	\$48,300	1.01	12	3.8%	15	39	3.1%	155	45	91	19	1.4%
13-2061	Financial Examiners	74	\$94,600	0.55	3	3.9%	3	10	2.9%	33	13	15	5	1.4%
39-3011	Gambling Dealers	20	\$37,600	0.10	2	4.9%	n/a	4	4.9%	20	6	12	1	1.4%
21-1013	Marriage and Family Therapists	157	\$65,600	0.84	0	n/a	6	18	2.4%	73	32	31	10	1.3%
19-1041	Epidemiologists	17	\$88,300	0.74	0	n/a	n/a	2	2.2%	5	1	3	1	1.3%
25-1071	Health Specialties Teachers, Postsecondary	1,458	\$125,400	3.01	15	1.3%	145	197	2.9%	670	300	277	93	1.2%
39-2021	Animal Caretakers	817	\$31,300	1.02	24	2.6%	41	116	3.1%	813	262	499	51	1.2%
25-1072	Nursing Instructors and Teachers, Postsecondary	454	\$74,400	2.89	6	1.6%	21	49	2.3%	206	93	86	27	1.2%

GoVirginia - Region 2, 2024Q3¹

SOC	Occupation	Current					5-Year History			5-Year Forecast				
		Empl	Mean	LQ	Unempl	Rate	Online	Empl	Ann	Total	Exits	Transfers	Empl	Ann %
			Ann				Job							
			Wages ²				Ads ³	Change	%	Demand			Growth	Growth
29-2053	Psychiatric Technicians	306	\$44,900	1.15	4	1.2%	68	50	3.6%	151	55	77	19	1.2%
31-9011	Massage Therapists	258	\$51,000	0.79	2	0.7%	13	1	0.1%	186	79	92	15	1.2%
31-2011	Occupational Therapy Assistants	103	\$71,100	0.97	1	0.8%	56	4	0.8%	69	21	42	7	1.2%
49-9041	Industrial Machinery Mechanics	1,585	\$59,300	1.70	22	1.4%	17	163	2.2%	733	274	366	93	1.1%
13-1081	Logisticians	519	\$79,400	1.03	13	2.2%	24	94	4.1%	253	65	160	28	1.1%
29-1127	Speech-Language Pathologists	303	\$87,800	0.77	2	0.5%	234	13	0.9%	99	40	43	17	1.1%
35-2014	Cooks, Restaurant	3,100	\$33,700	0.99	158	4.9%	135	167	1.1%	2,582	1,067	1,357	158	1.0%
21-1094	Community Health Workers	142	\$48,100	1.06	5	3.0%	4	12	1.7%	80	29	44	7	1.0%
21-1019	Counselors, All Other	121	\$68,400	0.80	2	1.4%	n/a	15	2.7%	63	23	34	6	1.0%
27-2021	Athletes and Sports Competitors	38	\$70,300	0.78	3	6.7%	n/a	8	5.0%	26	6	17	2	1.0%
39-1013	First-Line Supervisors of Gambling Services Workers	22	\$58,000	0.30	0	n/a	n/a	-21	-12.7%	13	4	8	1	1.0%
00-0000	Total - All Occupations	360,638	\$59,700	1.00	11,842	3.1%	24,939	972	0.1%	190,335	79,778	113,154	-2,597	-0.1%

Source: [JobsEQ®](#)

Data as of 2024Q3 unless noted otherwise

Note: Figures may not sum due to rounding.

1. Data based on a four-quarter moving average unless noted otherwise.

2. Wage data represent the average for all Covered Employment

3. Data represent found online ads active within the last thirty days in the selected region. 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). Ad counts for ZCTA-based regions are estimates.

1.3. Occupation Snapshot by Online Job Ads

This section analyzes the number of online job advertisements collected from the JobsEQ system over a 12-month period to assess current employer demand for various occupations. The data excludes postings from staffing agencies and removes duplicate listings.

It's important to note that one job posting does not necessarily equate to one job opening as some postings may represent multiple vacancies. Additionally, the data only includes ads from companies that post jobs on websites that can be tracked.

The occupations with the highest number of job ads reflect a mix of high-turnover, lower-wage positions and in-demand, higher-paying roles.

While job postings provide valuable insight into labor market demand, readers should interpret the data with caution due to these limitations.

GoVirginia - Region 2, 2024Q3 ¹														
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		Empl	Mean Ann Wages ²	LQ	Unempl	Unempl Rate	Online Job Ads ³	Empl Change	Ann %	Total Demand	Exits	Transfers	Empl Growth	Ann % Growth
29-1141	Registered Nurses	8,545	\$84,400	1.18	84	1.0%	2,954	646	1.6%	2,094	1,227	931	-64	-0.2%
41-1011	First-Line Supervisors of Retail Sales Workers	3,689	\$51,400	1.20	70	1.8%	841	-10	0.1%	1,491	628	1,082	-219	-1.2%
41-2031	Retail Salespersons	9,036	\$33,600	1.10	388	4.1%	775	-663	1.4%	6,118	2,770	3,605	-257	-0.6%
11-9111	Medical and Health Services Managers	1,030	\$129,300	0.84	12	1.1%	770	151	3.2%	497	140	257	101	1.9%
35-1012	First-Line Supervisors of Food Preparation and Serving Workers	2,759	\$42,500	1.05	98	3.4%	547	75	0.6%	1,991	636	1,341	14	0.1%
21-1093	Social and Human Service Assistants	1,057	\$37,000	1.11	25	2.3%	525	-62	1.1%	577	212	331	34	0.6%
35-3023	Fast Food and Counter Workers	8,630	\$29,500	1.07	493	5.5%	523	-565	1.3%	10,066	4,572	5,478	16	0.0%
53-7065	Stockers and Order Fillers	6,148	\$36,000	0.98	383	5.7%	426	427	1.4%	4,907	1,814	3,075	17	0.1%
49-9071	Maintenance and Repair Workers, General	3,232	\$48,900	0.93	90	2.6%	421	0	0.0%	1,437	675	772	-10	-0.1%

GoVirginia - Region 2, 2024Q3¹

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		Empl	Mean Ann Wages ²	LQ	Unempl	Unempl Rate	Online Job Ads ³	Empl Change	Ann %	Total Demand	Exits	Transfers	Empl Growth	Ann % Growth
29-2034	Radiologic Technologists and Technicians	593	\$74,800	1.17	3	0.5%	397	39	1.4%	144	79	70	-6	-0.2%
29-2031	Cardiovascular Technologists and Technicians	213	\$72,200	1.63	1	0.6%	354	16	1.6%	57	30	30	-4	-0.3%
53-3032	Heavy and Tractor-Trailer Truck Drivers	5,444	\$55,800	1.14	174	3.1%	345	224	0.8%	2,740	1,110	1,651	-21	-0.1%
29-2061	Licensed Practical and Licensed Vocational Nurses	1,745	\$57,200	1.20	24	1.3%	343	-161	1.7%	645	334	343	-32	-0.4%
29-1123	Physical Therapists	703	\$96,500	1.22	4	0.5%	328	1	0.0%	149	72	57	20	0.6%
37-2011	Janitors and Cleaners, Except Maids and Housekeeping Cleaners	5,222	\$33,400	0.99	221	4.0%	300	231	0.9%	3,553	1,682	1,915	-43	-0.2%
43-6014	Secretaries and Administrative Assistants, Except Legal, Medical, and Executive	3,830	\$42,100	0.91	93	2.3%	276	-168	0.9%	1,927	1,007	1,026	-105	-0.6%
41-3091	Sales Representatives of Services, Except Advertising, Insurance, Financial Services, and Travel	1,955	\$68,500	0.79	82	3.4%	259	219	2.4%	891	231	684	-25	-0.3%
31-1131	Nursing Assistants	5,101	\$37,700	1.62	182	3.5%	256	-97	0.4%	3,425	1,483	2,011	-69	-0.3%
29-1171	Nurse Practitioners	733	\$121,100	1.13	4	0.6%	242	174	5.6%	312	85	97	129	3.3%
29-1127	Speech-Language Pathologists	303	\$87,800	0.77	2	0.5%	234	13	0.9%	99	40	43	17	1.1%
13-1071	Human Resources Specialists	2,006	\$69,500	1.01	58	2.6%	221	256	2.8%	835	271	553	11	0.1%
43-4051	Customer Service Representatives	5,227	\$40,300	0.83	238	3.8%	218	-109	0.4%	2,963	1,262	2,005	-304	-1.2%
41-3031	Securities, Commodities, and Financial	638	\$101,300	0.58	34	4.4%	207	37	1.2%	222	76	149	-3	-0.1%

GoVirginia - Region 2, 2024Q3¹

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		Empl	Mean Ann Wages ²	LQ	Unempl	Unempl Rate	Online Job Ads ³	Empl Change	Ann %	Total Demand	Exits	Transfers	Empl Growth	Ann % Growth
	Services Sales Agents													
29-2055	Surgical Technologists	302	\$65,300	1.20	2	0.5%	197	23	1.6%	81	39	45	-2	-0.2%
21-1023	Mental Health and Substance Abuse Social Workers	376	\$58,800	1.37	16	4.0%	196	-24	1.2%	159	72	70	16	0.9%
00-0000	Total - All Occupations	360,638	\$59,700	1.00	11,842	3.1%	24,939	972	0.1%	190,335	79,778	113,154	-2,597	-0.1%

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1.4. Occupation Snapshot by the Lowest and Highest Unemployment Rates

This section analyzes occupations in Region 2 with at least 100 employed workers, categorized by unemployment rate. A total of 289 occupations have unemployment rates at or below 3.0%, which is better than the regional average of 3.1%. In contrast, 145 occupations have unemployment rates at or above 3.1%, despite also employing at least 100 workers.

The first charts shows a group are occupations with a 0.0% unemployment rate, including Physician Assistants, Veterinarians, Dentists, and Marriage and Family Therapists. These roles are experiencing positive employment growth and had the most online job postings in the past 30 days. However, many in these occupations are likely self-employed or operate as sole proprietors.

GoVirginia - Region 2, 2024Q3 ¹										
SOC	Occupation	Current						5-Year History		
		Empl	Mean Ann Wages ²	LQ	Unempl	Unempl Rate	Online Job Ads ³	Empl Change	Ann %	Ann % Growth
21-2021	Directors, Religious Activities and Education	584	\$51,500	1.74	0	0.0%	5	-32	-1.1%	-0.1%
29-1071	Physician Assistants	380	\$123,300	1.12	0	0.0%	119	73	4.4%	1.9%
33-1012	First-Line Supervisors of Police and Detectives	280	\$94,300	0.93	0	0.0%	8	13	0.9%	-0.2%
29-1131	Veterinarians	273	\$111,600	1.41	0	0.0%	34	40	3.3%	1.4%
29-1021	Dentists, General	252	\$185,100	0.81	0	0.0%	22	-1	-0.1%	0.1%
53-4031	Railroad Conductors and Yardmasters	192	\$72,000	2.35	0	0.0%	2	-52	-4.7%	-0.3%
21-1013	Marriage and Family Therapists	157	\$65,600	0.84	0	0.0%	6	18	2.4%	1.3%
19-4031	Chemical Technicians	117	\$50,600	0.96	0	0.0%	6	-15	-2.4%	-0.1%
47-5022	Excavating and Loading Machine and Dragline Operators, Surface Mining	112	\$49,000	1.52	0	0.0%	1	-38	-5.7%	0.0%

The second group includes 34 occupations with median annual wages nearly double the regional average of \$59,700. Of these, all but three—Marketing Managers, Social Scientists, and Computer Network Architects—have unemployment rates below the region’s 3.1% average. Notably, 10 of the 34 occupations are projected to decline, aligning with the region’s overall negative job growth rate of -0.1% annually.

GoVirginia - Region 2, 2024Q3 ¹										
SOC	Occupation	Current					Online Job Ads ³	5-Year History		
		Empl	Mean Ann Wages ²	LQ	Unempl	Unempl Rate		Empl Change	Ann %	Ann % Growth
29-1214	Emergency Medicine Physicians	119	\$325,400	1.41	1	1.0%	12	18	3.3%	-0.2%
29-1216	General Internal Medicine Physicians	104	\$302,500	0.64	1	0.5%	5	12	2.4%	-0.3%
11-1011	Chief Executives	607	\$288,700	0.98	10	1.6%	34	-107	-3.2%	0.0%
29-1229	Physicians, All Other	805	\$251,800	1.11	4	0.6%	50	136	3.8%	-0.2%
29-1215	Family Medicine Physicians	326	\$239,900	1.25	2	0.5%	11	9	0.6%	-0.1%
29-1151	Nurse Anesthetists	122	\$226,300	1.11	1	1.1%	16	18	3.2%	0.4%
29-1021	Dentists, General	252	\$185,100	0.81	0	0.0%	22	-1	-0.1%	0.1%
11-3021	Computer and Information Systems Managers	846	\$169,100	0.65	19	1.8%	71	69	1.7%	0.9%
11-2022	Sales Managers	627	\$155,300	0.49	10	1.2%	64	45	1.5%	-0.2%
23-1011	Lawyers	1,111	\$154,700	0.60	8	0.7%	21	-58	-1.0%	-0.1%
11-2032	Public Relations Managers	162	\$153,600	0.99	3	2.0%	3	28	3.8%	0.0%
11-3031	Financial Managers	1,253	\$153,600	0.70	34	2.4%	73	53	0.9%	0.9%
11-9041	Architectural and Engineering Managers	343	\$151,700	0.75	9	2.3%	147	11	0.7%	-0.1%
11-2021	Marketing Managers	444	\$151,400	0.54	22	3.9%	50	43	2.1%	0.1%
11-3061	Purchasing Managers	240	\$142,000	1.36	6	2.3%	21	-2	-0.2%	-0.1%
41-9031	Sales Engineers	112	\$140,200	0.88	1	0.5%	9	-19	-3.1%	-0.1%
17-2061	Computer Hardware Engineers	125	\$139,700	0.69	2	1.2%	3	4	0.6%	0.2%
29-1041	Optometrists	126	\$139,600	1.16	2	1.2%	12	20	3.6%	0.4%
11-3121	Human Resources Managers	412	\$138,500	0.92	7	1.5%	18	69	3.7%	0.0%
29-1051	Pharmacists	735	\$137,400	1.00	5	0.7%	85	14	0.4%	0.0%
13-2052	Personal Financial Advisors	396	\$132,400	0.57	3	0.8%	1	29	1.5%	0.8%
19-3099	Social Scientists and Related Workers, All Other	151	\$132,300	1.91	6	3.7%	0	7	0.9%	-0.2%
11-9111	Medical and Health Services Managers	1,030	\$129,300	0.84	12	1.1%	704	151	3.2%	1.9%
11-9199	Managers, All Other	2,209	\$126,800	0.81	35	1.5%	16	644	7.1%	0.0%
11-3051	Industrial Production Managers	465	\$125,500	0.94	6	1.2%	53	44	2.0%	-0.3%
25-1071	Health Specialties Teachers, Postsecondary	1,458	\$125,400	3.01	15	1.3%	138	197	2.9%	1.2%
29-1071	Physician Assistants	380	\$123,300	1.12	0	0.0%	119	73	4.4%	1.9%
25-1032	Engineering Teachers, Postsecondary	241	\$121,800	2.83	3	1.4%	4	21	1.8%	0.4%
29-1171	Nurse Practitioners	733	\$121,100	1.13	4	0.6%	134	174	5.6%	3.3%
15-1241	Computer Network Architects	406	\$120,200	1.07	16	3.2%	0	-2	-0.1%	0.6%
11-1021	General and Operations Managers	7,114	\$119,900	0.91	90	1.2%	89	926	2.8%	0.0%
15-1243	Database Architects	148	\$119,600	1.17	1	0.9%	0	-6	-0.8%	0.3%
15-1252	Software Developers	3,036	\$115,500	0.84	94	2.4%	60	200	1.4%	0.9%
15-1212	Information Security Analysts	686	\$115,300	1.77	5	0.7%	18	102	3.3%	2.1%

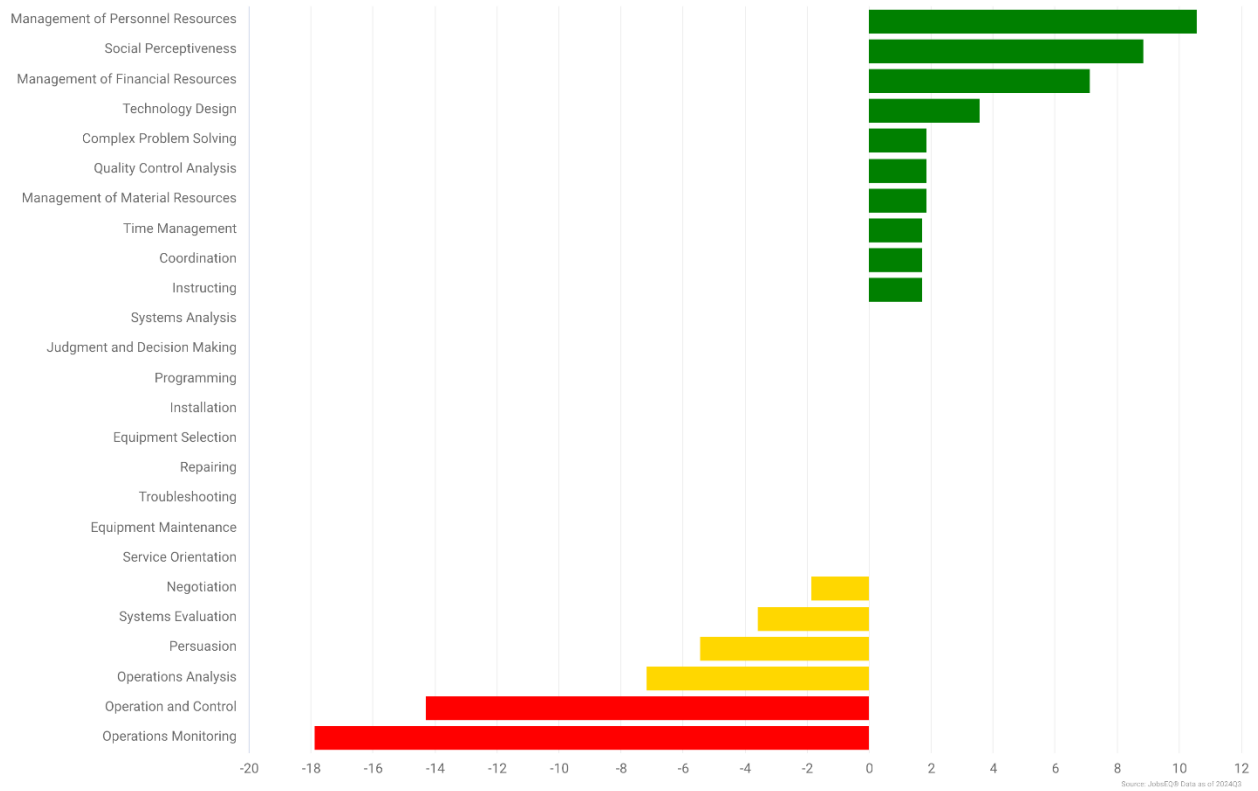
The final chart highlights 28 occupations that each employ at least 100 workers and have an unemployment rate of 6% nearly double the regional average. These occupations typically exhibit high unemployment, negative projected job growth, and limited online job postings, making them strong candidates for workforce transformation or retraining initiatives.

GoVirginia - Region 2, 2024Q3 ¹										
SOC	Occupation	Current						5-Year History		Ann % Growth
		Empl	Mean Ann Wages ²	LQ	Unempl	Unempl Rate	Online Job Ads ³	Empl Change	Ann %	
51-9197	Tire Builders	146	\$57,900	3.08	27	15.9%	0	-28	-3.4%	-0.3%
51-4072	Molding, Coremaking, and Casting Machine Setters, Operators, and Tenders, Metal and Plastic	347	\$40,200	1.03	40	10.4%	10	-16	-0.9%	-0.7%
39-9032	Recreation Workers	738	\$33,000	1.14	79	9.6%	72	-78	-2.0%	0.1%
13-2082	Tax Preparers	163	\$55,600	0.73	19	9.1%	6	1	0.2%	-0.2%
39-3091	Amusement and Recreation Attendants	726	\$30,900	0.86	76	8.9%	16	144	4.5%	0.1%
47-2081	Drywall and Ceiling Tile Installers	188	\$43,900	0.71	15	8.4%	1	12	1.4%	-0.1%
39-7011	Tour Guides and Escorts	101	\$33,800	0.78	12	8.4%	5	4	0.8%	0.5%
49-9098	Helpers--Installation, Maintenance, and Repair Workers	421	\$37,000	1.85	36	8.1%	0	-38	-1.7%	-0.1%
47-3013	Helpers--Electricians	190	\$37,400	1.21	17	8.1%	6	-36	-3.4%	-0.3%
47-3015	Helpers--Pipelayers, Plumbers, Pipefitters, and Steamfitters	148	\$35,800	1.44	13	8.1%	7	-18	-2.2%	0.1%
45-2093	Farmworkers, Farm, Ranch, and Aquacultural Animals	212	\$40,100	0.64	14	7.8%	7	-34	-3.0%	-0.7%
49-2094	Electrical and Electronics Repairers, Commercial and Industrial Equipment	135	\$64,100	1.05	12	7.6%	7	-22	-3.0%	-0.8%
43-4081	Hotel, Motel, and Resort Desk Clerks	483	\$29,400	0.82	44	7.1%	37	16	0.7%	0.1%
33-1091	First-Line Supervisors of Security Workers	120	\$65,000	0.81	11	7.1%	6	11	1.9%	-0.2%
53-7064	Packers and Packagers, Hand	816	\$34,300	0.58	64	7.0%	6	-208	-4.4%	-1.0%
31-9097	Phlebotomists	285	\$41,500	0.92	23	6.7%	61	28	2.1%	0.0%
13-2071	Credit Counselors	104	\$47,900	1.64	7	6.7%	0	5	1.1%	-0.1%
41-2021	Counter and Rental Clerks	997	\$38,900	1.14	75	6.6%	0	-61	-1.2%	-0.1%
35-3041	Food Servers, Nonrestaurant	768	\$32,000	1.24	57	6.6%	22	47	1.3%	0.0%
41-2011	Cashiers	7,892	\$28,600	1.09	549	6.5%	140	-681	-1.6%	-1.6%
51-9198	Helpers--Production Workers	493	\$38,000	1.22	30	6.3%	1	-288	-8.8%	-1.5%
47-2141	Painters, Construction and Maintenance	613	\$41,200	0.82	37	6.2%	3	-15	-0.5%	0.0%
51-2031	Engine and Other Machine Assemblers	168	\$41,300	1.53	11	6.2%	0	7	0.9%	-2.5%
53-7062	Laborers and Freight, Stock, and Material Movers, Hand	5,101	\$40,600	0.79	352	6.1%	157	35	0.1%	-0.2%
47-2051	Cement Masons and Concrete Finishers	435	\$48,700	0.93	25	6.1%	2	11	0.5%	-0.6%
51-6031	Sewing Machine Operators	186	\$35,400	0.68	11	6.1%	0	-34	-3.3%	-2.5%
45-2092	Farmworkers and Laborers, Crop, Nursery, and Greenhouse	344	\$34,400	0.29	20	6.0%	0	24	1.4%	-0.4%

Tire Builders have a high location quotient (LQ) of 3.08, indicating a historical regional strength in this occupation. However, there are currently no active job postings for this role, suggesting limited demand. The 146 individuals employed in this field may be strong candidates for reskilling or job transformation. Similarly, Credit Counselors and Engine and Other Machine Assemblers show the same pattern.

For example, when comparing Credit Counselors to Insurance Agents—a role with positive job growth and higher wages—the chart highlights skill alignment and gaps. Green attributes indicate areas where Credit Counselors are already well-prepared for the Insurance Agent role. However, yellow and red attributes point to skill deficiencies that would require additional training. These gaps can help inform the design of a targeted curriculum to support the transition from Credit Counselor to Insurance Agent.

Attribute Gaps for Cross-Functional Skills
 between Credit Counselors (current occupation) and Insurance Sales Agents



This chart quantifies the attribute gaps between the Current Occupation (Credit Counselors) and the Target Occupation (Insurance Agents), highlighting content needed for a training program.

Attribute	Current Occ	Target Occ	Gap
Management of Personnel Resources	37.4	26.9	10.6
Social Perceptiveness	51.7	42.9	8.9
Management of Financial Resources	10.7	3.6	7.1
Technology Design	14.3	10.7	3.6
Complex Problem Solving	46.4	44.6	1.9
Quality Control Analysis	3.6	1.7	1.9
Management of Material Resources	3.6	1.7	1.9
Time Management	44.6	42.9	1.7
Coordination	44.6	42.9	1.7
Instructing	42.9	41.1	1.7
Systems Analysis	42.9	42.9	0.0
Judgment and Decision Making	46.4	46.4	0.0
Programming	10.7	10.7	0.0
Installation	0.0	0.0	0.0
Equipment Selection	0.0	0.0	0.0
Repairing	0.0	0.0	0.0
Troubleshooting	0.0	0.0	0.0
Equipment Maintenance	0.0	0.0	0.0
Service Orientation	50.0	50.0	0.0
Negotiation	46.4	48.3	-1.9
Systems Evaluation	39.3	42.9	-3.6
Persuasion	50.0	55.4	-5.4
Operations Analysis	14.3	21.4	-7.1
Operation and Control	0.0	14.3	-14.3
Operations Monitoring	0.0	17.9	-17.9
Source: JobsEQ® Data as of 2024Q3			

1.5. Existing Hard and Emerging Skill Gaps

Two data sources were used to identify skill gaps: JobsEQ and the Virginia Office of Education Economics (VOEE). The hard skills gap is calculated by subtracting the number of job postings that mention a specific skill from the number of candidates listing that skill on their public online profiles.

There are two key caveats to this analysis:

1. It assumes all job openings are posted online and captured by the data sources' web crawlers.
2. It assumes candidates have online profiles that accurately reflect their complete skill sets.

While this approach only represents a fraction of the total workforce, it still provides valuable insights for analysis.

Skill Gaps: GoVirginia - Region 2			
Skill	Candidates	Openings	Gap
	#	#	#
Ability to Lift 51-100 lbs.	314	682	-368
Manufacturing	554	868	-313
Microsoft Office	1,945	2,248	-303
Microsoft Excel	2,073	2,359	-286
Calculators	129	382	-253
Food Preparation	227	472	-245
Sales	749	991	-243
Merchandising	362	577	-215
Forklifts	359	574	-215
Plumbing	321	536	-214
Retail Sales	688	898	-210
Teaching/Training, School	965	1,159	-195
Cash Handling (Cashier)	992	1,184	-191
Spanish	379	553	-173
Microsoft Outlook	673	840	-167
Medical Terminology	89	252	-163
Medication Administration	66	222	-156
Welding	168	313	-145
JavaScript	143	281	-138
Home Health Care	111	240	-129
Food Service	250	379	-129
Teaching/Training, Job	428	554	-126
Hand Trucks	23	149	-126
Marketing	266	389	-123
Word Processing	231	352	-121

Source: [JobsEQ®](#)

Data as of 2024Q3; openings and candidate sample compiled in July 2022.

Note: Figures may not sum due to rounding.

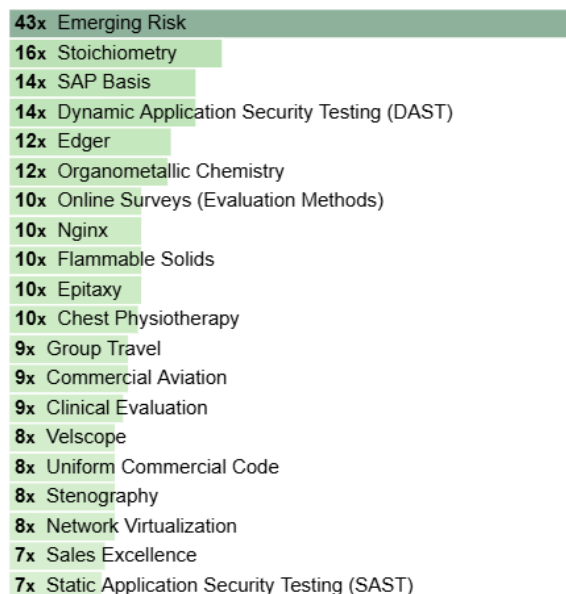
The data set reveals that different sectors prioritize distinct hard skills based on job demands. Skilled trades and manual labor value physical ability and equipment use, while manufacturing and production emphasize technical skills and digital tools. Retail and customer service require strong customer interaction and point-of-sale system knowledge. Food service and hospitality focus on speed, hygiene, and customer efficiency. Healthcare support highlights caregiving, medical knowledge, and bilingual communication. Education and training prioritize communication and adaptability for diverse learning environments. Technology skills, including Microsoft Office and programming, are widely relevant. Language and communication, especially Spanish proficiency, enhance effectiveness across nearly all sectors.

The second tool used to evaluate emerging hard skill gaps is the Virginia Office of Education Economics (VOEE) dashboard. It highlights the fastest-growing skills in Region 2 of GO Virginia over the past two years, with the number x indicating how commonly these skills appear.

Emerging Skills

The fastest growing skills over the last 24 months

→ [Hover over chart for more detail](#)



These skills reflect increasing demand for expertise that often blends multiple fields such as:

- **STEM (Science, Technology, Engineering, Math):** e.g., *Stoichiometry, Organometallic Chemistry, Flammable Solids, Edger (likely a tech/tool)*.
- **Cybersecurity and IT:** e.g., *Dynamic Application Security Testing (DAST), Nginx, SAP Basis, Network Virtualization, Static Application Security Testing (SAST)*.
- **Risk & Compliance:** *Emerging Risk, Uniform Commercial Code*.
- **Healthcare & Clinical Fields:** *Clinical Evaluation, Chest Physiotherapy*.
- **Soft Skills/Business Ops:** *Online Surveys, Group Travel, Sales Excellence*.

These skills are emerging rapidly because industries are facing new challenges such as cybersecurity threats, complex healthcare needs, and the increasing importance of data and risk evaluation.

1.6. Certification Gaps

Certification gaps across key sectors (i.e. healthcare, childcare, transportation, IT, and business) are limiting both workforce readiness and the ability of educational systems to align with industry needs. Common barriers include high costs, limited access to training, unclear pathways between certifications and careers, and a disconnect between credentials and academic programs. These issues contribute to talent shortages, underemployment, and reduced economic mobility.

However, it is important to recognize that not all jobs requiring certifications actually depend on them for successful performance. In many cases, individuals may already possess the necessary skills without holding a formal, third-party credential. This reflects a broader issue seen with hard skills: the need to better recognize and validate real-world competencies (whether gained through formal education, experience, or alternative training) in order to fully tap into the workforce's potential.

Skill Gaps: GoVirginia - Region 2			
Skill	Candidates	Openings	Gap
	#	#	#
Commercial Driver's License (CDL)	152	313	-161
Basic Life Support (BLS)	331	428	-97
Driver's License	88	158	-70
Registered Nurse (RN)	201	260	-59
Certified Nursing Assistant (CNA)	384	439	-55
Child Development Associate (CDA)	4	58	-55
Pediatric Advanced Life Support (PALS)	38	72	-34
American Red Cross Water Safety Instructor Certification (WSI)	5	35	-30
Certified Public Accountant (CPA)	60	86	-26
Advanced Cardiac Life Support Certification (ACLS)	93	117	-24
National Phlebotomy Association Certified Phlebotomist	16	35	-20
Certified Pharmacy Technician (CPT)	15	32	-17
Emergency Medical Technician - Basic (EMT-B)	2	19	-16
Certified Dental Assistant (CDA)	0	16	-16
Licensed Professional Counselor (LPC)	51	67	-16
Neonatal Resuscitation Program (NRP)	14	30	-16
Lifeguard Certification	14	28	-14
Class A Commercial Driver's License (CDL-A)	134	146	-12
Cisco Certified Network Associate (CCNA)	11	23	-12
OSHA 10	11	23	-12

Skill Gaps: GoVirginia - Region 2

Skill	Candidates	Openings	Gap
	#	#	#
EPA Universal Certification	0	11	-11
Notary Public	6	17	-11
Certified Information Security Manager (CISM)	2	12	-11
Class B Commercial Driver's License (CDL-B)	22	33	-10
AFAA Personal Fitness Trainer	1	12	-10

Source: [JobsEQ®](#)

Data as of 2024Q3; openings and candidate sample compiled in July 2022.

Note: Figures may not sum due to rounding.

Region 2 certification gaps occur across healthcare, transportation, early childhood education, and information technology, present clear opportunities for targeted training programs. Expanding access to healthcare and driver training, alongside programs in childcare, IT, and public safety, can quickly upskill the local workforce and meet employer needs. Focused investment in these areas will help close labor gaps and support long-term economic growth.

Section 2.0. Identification of award gaps by occupations and programs, including hard skills and certification gaps for the region.

2.1. Award Gaps by Occupation

This section outlines the number of educational awards granted by institutions in Region 2 that are relevant to a specific occupation. It operates under the simplifying assumption that all graduates remain in the region after completing their programs although this is not always the case.

When there is a *negative award gap*, it means that Region 2 produces fewer graduates than needed to meet occupational demand, suggesting the region must *import* talent from elsewhere. Conversely, a *positive award gap* indicates a surplus of graduates, implying the region *exports* talent for that occupation.

A negative award gap represents a potential opportunity for the RHRC to collaborate with local institutions to develop or expand programs in Region 2, helping to grow the talent pipeline locally.

For example, Diagnostic Medical Sonographers was previously identified by regional employer partners as a priority occupation. This quantitative data now confirms that need, supporting the decision to move forward with addressing the gap through targeted programming at the RHEC.

GoVirginia - Region 2, Two-Year Degree or Higher Only

SOC	Occupation	Award Gap	Awards	Target Range	Annual Demand	US Awards Benchmark
29-1051	Pharmacists	(27)	0	27 – 32	27	32
29-2032	Diagnostic Medical Sonographers	(14)	0	14 – 17	14	17
29-2031	Cardiovascular Technologists and Technicians	(8)	0	8 – 11	11	8
31-2021	Physical Therapist Assistants	(8)	3	11 – 44	44	11
19-5011	Occupational Health and Safety Specialists	(7)	0	7 – 33	33	7
29-1021	Dentists, General	(7)	0	7 – 10	7	10
29-2056	Veterinary Technologists and Technicians	(7)	0	7 – 31	31	7
39-4031	Morticians, Undertakers, and Funeral Arrangers	(7)	0	7 – 14	14	7
43-4161	Human Resources Assistants, Except Payroll and Timekeeping	(7)	0	7 – 15	15	7
17-3027	Mechanical Engineering	(6)	0	6 – 7	6	7

GoVirginia - Region 2, Two-Year Degree or Higher Only

SOC	Occupation	Award Gap	Awards	Target Range	Annual Demand	US Awards Benchmark
	Technologists and Technicians					
41-3031	Securities, Commodities, and Financial Services Sales Agents	(6)	0	6 – 44	44	6
29-1011	Chiropractors	(5)	0	5 – 5	5	5
13-1023	Purchasing Agents, Except Wholesale, Retail, and Farm Products	(4)	0	4 – 90	90	4
13-1075	Labor Relations Specialists	(4)	0	4 – 7	7	4
29-1041	Optometrists	(4)	0	4 – 5	5	4
29-1151	Nurse Anesthetists	(4)	0	4 – 5	5	4
13-1151	Training and Development Specialists	(3)	43	45 – 83	83	45
27-4012	Broadcast Technicians	(3)	0	3 – 3	3	3
29-1129	Therapists, All Other	(3)	0	3 – 4	4	3
49-9062	Medical Equipment Repairers	(3)	0	3 – 12	12	3

2.2. Award Gaps by Academic Program

This chart analyzes the award gap by CIP code and award type, highlighting the relationship between labor market demand and the capacity of institutions to meet that demand through degree offerings. It reflects both current and projected needs for each program for Region 2.

For students and job seekers, this information provides insight into real-time labor market trends, helping guide informed decisions when selecting education or training programs.

GoVirginia - Region 2							
CIP Code	Title	Total Award Gap	<2yrs Gap	Associate's Gap	Bachelor's Gap	Master's Gap	PhD Gap
51.3999	Practical Nursing, Vocational Nursing and Nursing Assistants, Other	(218)	(200)	(18)	(1)	0	0
51.2601	Health Aide	(152)	(150)	(2)	0	0	0
51.3902	Nursing Assistant/Aide and Patient Care Assistant/Aide	(150)	(149)	(2)	0	0	0
51.0711	Medical/Health Management and Clinical Assistant/Specialist	(121)	(69)	(42)	(7)	(3)	0
51.0801	Medical/Clinical Assistant	(103)	(62)	(40)	0	(1)	0
51.0809	Anesthesiologist Assistant	(103)	(62)	(40)	0	(1)	0
47.0613	Medium/Heavy Vehicle and Truck Technology/Technician	(90)	(57)	(30)	(3)	0	0
47.0600	Vehicle Maintenance and Repair Technology/Technician, General	(75)	(46)	(24)	(5)	(1)	0
47.0617	High Performance and Custom Engine Technician/Mechanic	(75)	(46)	(24)	(5)	(1)	0
15.0803	Automotive Engineering Technology/Technician	(70)	(43)	(23)	(4)	0	0
51.3901	Licensed Practical/Vocational Nurse Training	(68)	(51)	(16)	(1)	0	0
47.0604	Automobile/Automotive Mechanics Technology/Technician	(65)	(41)	(21)	(3)	0	0
47.0614	Alternative Fuel Vehicle Technology/Technician	(63)	(40)	(21)	(2)	0	0
49.0205	Truck and Bus Driver/Commercial Vehicle Operator and Instructor	(56)	(53)	(1)	(1)	0	0
12.0401	Cosmetology/Cosmetologist, General	(52)	(39)	(13)	0	0	0
12.0406	Make-Up Artist/Specialist	(42)	(32)	(11)	0	0	0

GoVirginia - Region 2

CIP Code	Title	Total Award Gap	<2yrs Gap	Associate's Gap	Bachelor's Gap	Master's Gap	PhD Gap
12.0411	Permanent Cosmetics/Makeup and Tattooing	(42)	(32)	(11)	0	0	0
12.0412	Salon/Beauty Salon Management/Manager	(41)	(31)	(10)	0	0	0
12.0407	Hair Styling/Stylist and Hair Design	(40)	(30)	(10)	0	0	0
12.0413	Cosmetology, Barber/Styling, and Nail Instructor	(40)	(30)	(10)	0	0	0
47.0701	Energy Systems Installation and Repair Technology/Technician	(38)	(24)	(11)	(3)	0	0
52.0401	Administrative Assistant and Secretarial Science, General	(37)	(15)	(9)	(10)	(3)	0

2.3. Award Gaps by 6-Digit Occupation by College Educated Percentage

This section analyzes 6-digit SOC (Standard Occupational Classification) occupations in the region by two key factors:

1. The percentage of jobs that require 75%+, 50-75%, 25-50%, and 0-25% higher education.
2. The projected shortfall in qualified workers.
3. As the percentage of college educated professions fall, the number of occupations with a shortfall declines, as well as the shortfall differential.

A lower number of educational awards in a given occupation suggests that Region 2 is either:

- Relying on talent from outside the region to fill these jobs, or
- Employing a local workforce that may not be fully trained or properly credentialed.

The Training Concentration metric compares how much postsecondary training the region provides for specific occupations relative to the national average.

- A low Training Concentration (less than 100%) means Region 2 is not producing enough qualified workers and must **import** talent to meet local demand.
- A high Training Concentration (more than 100%) means Region 2 is producing more qualified workers than needed locally and is effectively **exporting** talent to meet workforce demands in other regions.

Training Concentration, GoVirginia - Region 2, Occupations with 75%+ College-Educated

SOC	Occupation	2024Q3 Employment	Awards (2022-2023)	Training Concentration	Shortfall
31-9092	Medical Assistants	1,608	0	0%	103
29-2061	Licensed Practical and Licensed Vocational Nurses	1,745	51	43%	68
25-1062	Area, Ethnic, and Cultural Studies Teachers, Postsecondary	81	14	18%	65
29-1051	Pharmacists	735	0	0%	32
33-2011	Firefighters	811	0	0%	25
31-9096	Veterinary Assistants and Laboratory Animal Caretakers	439	0	0%	17
29-2032	Diagnostic Medical Sonographers	240	0	0%	17
43-1011	First-Line Supervisors of Office and Administrative Support Workers	3,064	0	0%	16
21-1093	Social and Human Service Assistants	1,057	14	53%	12

Training Concentration, GoVirginia - Region 2, Occupations with 75%+ College-Educated

SOC	Occupation	2024Q3 Employment	Awards (2022-2023)	Training Concentration	Shortfall
27-4011	Audio and Video Technicians	170	0	0%	12
41-4012	Sales Representatives, Wholesale and Manufacturing, Except Technical and Scientific Products	2,474	0	0%	10
29-2055	Surgical Technologists	302	6	39%	10
29-1021	Dentists, General	252	0	0%	10
29-2031	Cardiovascular Technologists and Technicians	213	0	0%	8
31-2021	Physical Therapist Assistants	260	3	29%	8
43-4161	Human Resources Assistants, Except Payroll and Timekeeping	156	0	0%	7
19-5011	Occupational Health and Safety Specialists	300	0	0%	7
39-4031	Morticians, Undertakers, and Funeral Arrangers	129	0	0%	7
29-2056	Veterinary Technologists and Technicians	272	0	0%	7
41-3031	Securities, Commodities, and Financial Services Sales Agents	638	0	0%	6

Award Gaps by 6-Digit Occupation 50-75% College Educated

Training Concentration, GoVirginia - Region 2, Occupations with 50-75% College-Educated

SOC	Occupation	2024Q3 Employment	Awards (2022-2023)	Training Concentration	Shortfall
31-1131	Nursing Assistants	5,101	0	0%	150
39-9099	Personal Care and Service Workers, All Other	156	6	14%	38
39-5012	Hairdressers, Hairstylists, and Cosmetologists	1,010	56	61%	35
31-9091	Dental Assistants	660	0	0%	28
43-3031	Bookkeeping, Accounting, and Auditing Clerks	3,289	6	22%	23
49-9041	Industrial Machinery Mechanics	1,585	0	0%	21
39-5094	Skincare Specialists	129	13	42%	17
51-1011	First-Line Supervisors of Production and Operating Workers	2,112	0	0%	17
31-9097	Phlebotomists	285	4	24%	13
49-1011	First-Line Supervisors of Mechanics, Installers, and Repairers	1,555	0	0%	12
29-2052	Pharmacy Technicians	1,050	0	0%	12
43-6014	Secretaries and Administrative Assistants, Except Legal, Medical, and Executive	3,830	0	0%	11
53-1047	First-Line Supervisors of Transportation and Material Moving Workers, Except Aircraft Cargo Handling Supervisors	1,277	0	0%	10
53-3011	Ambulance Drivers and Attendants, Except Emergency Medical Technicians	33	0	0%	9
43-4051	Customer Service Representatives	5,227	0	0%	9
49-9021	Heating, Air Conditioning, and Refrigeration Mechanics and Installers	1,267	62	88%	8

Training Concentration, GoVirginia - Region 2, Occupations with 50-75% College-Educated

SOC	Occupation	2024Q3 Employment	Awards (2022-2023)	Training Concentration	Shortfall
17-3027	Mechanical Engineering Technologists and Technicians	83	0	0%	7
51-9011	Chemical Equipment Operators and Tenders	339	0	0%	7
53-3053	Shuttle Drivers and Chauffeurs	603	0	0%	6

Award Gaps by 6-Digit Occupation 25-50% College Educated

Training Concentration, GoVirginia - Region 2, Occupations with 25-50% College-Educated

SOC	Occupation	2024Q3 Employment	Awards (2022-2023)	Training Concentration	Shortfall
49-3023	Automotive Service Technicians and Mechanics	1,983	27	30%	63
49-3031	Bus and Truck Mechanics and Diesel Engine Specialists	769	0	0%	27
53-3032	Heavy and Tractor-Trailer Truck Drivers	5,444	0	0%	26
53-3033	Light Truck Drivers	2,341	0	0%	12
53-3051	Bus Drivers, School	1,114	0	0%	10
43-5071	Shipping, Receiving, and Inventory Clerks	1,827	0	0%	9
47-2031	Carpenters	1,908	0	0%	9
39-5092	Manicurists and Pedicurists	343	14	62%	9
51-9124	Coating, Painting, and Spraying Machine Setters, Operators, and Tenders	574	0	0%	7
51-4041	Machinists	976	0	0%	7
51-3011	Bakers	515	0	0%	6
39-5011	Barbers	127	9	59%	6
47-2152	Plumbers, Pipefitters, and Steamfitters	1,164	0	0%	6
49-3021	Automotive Body and Related Repairers	472	0	0%	5
49-9099	Installation, Maintenance, and Repair Workers, All Other	351	0	0%	4
49-3042	Mobile Heavy Equipment Mechanics, Except Engines	562	0	0%	3
49-3052	Motorcycle Mechanics	43	0	0%	3
49-9071	Maintenance and Repair Workers, General	3,232	0	0%	3
53-3052	Bus Drivers, Transit and Intercity	354	0	0%	3

Award Gaps by 6-Digit Occupation <25% College Educated

Training Concentration, GoVirginia - Region 2, Occupations with <25% College-Educated

SOC	Occupation	2024Q3 Employment	Awards (2022-2023)	Training Concentration	Shortfall
51-7042	Woodworking Machine Setters, Operators, and Tenders, Except Sawing	368	0	0%	1
51-7041	Sawing Machine Setters, Operators, and Tenders, Wood	273	0	0%	1
47-2021	Brickmasons and Blockmasons	199	0	0%	-
45-2091	Agricultural Equipment Operators	57	0	0%	-
47-2044	Tile and Stone Setters	82	0	0%	-
45-4022	Logging Equipment Operators	164	0	0%	-
47-2051	Cement Masons and Concrete Finishers	435	0	0%	-
45-2021	Animal Breeders	7	0	0%	-
45-2092	Farmworkers and Laborers, Crop, Nursery, and Greenhouse	344	0	0%	-
47-2022	Stonemasons	21	0	0%	-
47-2132	Insulation Workers, Mechanical	53	0	0%	-
47-2081	Drywall and Ceiling Tile Installers	188	0	0%	-
47-2131	Insulation Workers, Floor, Ceiling, and Wall	27	0	0%	-
47-2042	Floor Layers, Except Carpet, Wood, and Hard Tiles	55	0	0%	-
47-2041	Carpet Installers	29	0	0%	-
47-2181	Roofers	290	0	0%	-
47-2043	Floor Sanders and Finishers	12	0	0%	-
47-2053	Terrazzo Workers and Finishers	3	0	0%	-

Section 3.0. Identification of emerging technologies (hard skills and certifications) within the healthcare and advanced manufacturing industries.

3.1. Hard Skill Gaps in the Healthcare Industry

Health Care is a key industry cluster in Region 2, with a Location Quotient of 1.07, indicating its relative concentration and importance to the regional economy. This section analyzes the skill gaps that exist between the current workforce and the requirements listed in online job postings by health care employers. By identifying these gaps, the analysis highlights specific upskilling opportunities that can enhance a job seeker's competitiveness and better align their qualifications with the demands of the regional health care labor market.

Skill Gaps: Healthcare Practitioners and Technical Occupations, GoVirginia - Region 2

Skill	Candidates	Openings	Gap
	#	#	#
Epic Systems	26	52	-25
Medical Terminology	19	41	-22
Home Health Care	28	49	-21
Nursing	73	94	-20
Mathematics	3	19	-16
Keyboarding/Typing	5	19	-13
Loss Prevention	0	12	-12
Cash Registers	23	32	-9
Working With Children	1	10	-9
Personal Computers (PC)	3	12	-8
Physiology	6	13	-7
Insurance	2	10	-7
Electrocardiogram (ECG, EKG)	12	19	-7
Geriatric	6	13	-7
Public Health	2	8	-6
Pharmacology	0	6	-6
Pharmacy	12	18	-6
Data Entry	5	9	-4
Defibrillators	2	7	-4
Portuguese	0	4	-4
Microsoft Word	10	14	-4
Word Processing	0	4	-4
Radiology Information System (RIS)	0	4	-4
Team Leadership	1	4	-4
IV Therapy	1	4	-3
JavaScript	0	3	-3
Microsoft Excel	18	21	-3
Employee Engagement	0	3	-3
Calculators	0	3	-3
Data Analysis	1	4	-3
Performance Management	0	3	-3

Certification Skill Gaps in the Healthcare Industry

For certifications, RNs continue to be the most in-demand for the region in health care.

Skill Gaps: Healthcare Practitioners and Technical Occupations, GoVirginia - Region 2

Skill	Candidates	Openings	Gap
	#	#	#
Registered Nurse (RN)	184	230	-45
Pediatric Advanced Life Support (PALS)	32	66	-34
Advanced Cardiac Life Support Certification (ACLS)	79	99	-20
Certified Pharmacy Technician (CPT)	13	30	-16
Neonatal Resuscitation Program (NRP)	14	30	-16
HAZMAT	0	9	-9
Medical Laboratory Technician (MLT)	1	9	-8
The American Registry of Radiologic Technologists (ARRT) Certification	11	17	-6
Medical Technologist (MT)	11	16	-6
Emergency Medical Technician - Basic (EMT-B)	2	7	-5
Registered Veterinary Technician (RVT)	0	5	-5
Registered Health Information Technician (RHIT)	0	5	-5
Registered Health Information Administrator (RHIA)	0	5	-5
Certified Coding Specialist (CCS)	0	4	-4
First Aid Certification	6	10	-4
Certified Surgical Technologist (CST)	0	3	-3

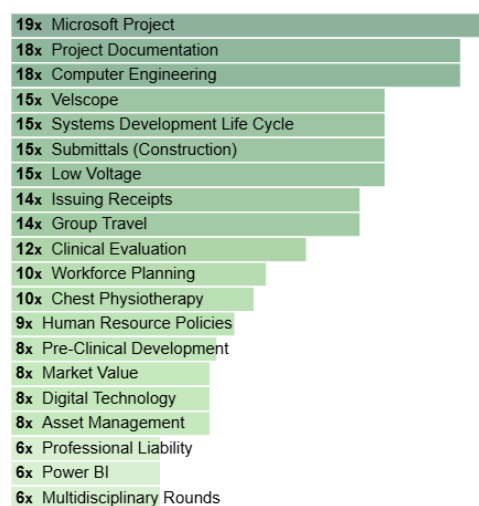
Emerging Skill Gaps in the Healthcare Industry

VOEE highlights the fastest emerging skills in the health care sector over the previous 24 months. There are five key themes shaping today's healthcare and adjacent workforce needs.

Emerging Skills

The fastest growing skills over the last 24 months

[+ Hover over chart for more detail](#)



First, digital and technical proficiency is increasingly essential, with tools like Microsoft Project, Power BI, and understanding the Systems Development Life Cycle signaling the demand for data literacy, project management, and digital transformation.

Second, interdisciplinary integration is evident as fields such as computer engineering, asset management, and construction-related submittals intersect with healthcare, reflecting a growing reliance on infrastructure and systems thinking.

Third, business and administrative capabilities (including project documentation, workforce planning, and HR policies) underscore the importance of operational efficiency and regulatory compliance, particularly in complex healthcare settings.

Fourth, emerging clinical and evaluation practices such as Velscope for oral cancer screening and chest physiotherapy point to the rise of modern diagnostic and preventative care requiring continuous upskilling.

Finally, holistic and collaborative approaches, demonstrated by multidisciplinary rounds and attention to market value, stress the importance of teamwork, patient-centered care, and resource optimization across the continuum of care.

Additionally, from an educational perspective, traditional degrees alone are no longer sufficient. Education programs must (1) incorporate real-world tools (e.g., Microsoft Project, Power BI); (2) emphasize interdisciplinary training; and (3) offer stackable credentials or microlearning for rapid upskilling.

Further, from a workforce perspective, employers need talent that's (1) tech-savvy; (2) able to work across domains; (3) skilled in both clinical and business functions; and (4) adaptable to new tools and practices.

3.2. Hard Skill Gaps in the Advanced Manufacturing Industry

In the advanced manufacturing industry, online job postings increasingly highlight a demand for business-oriented skills, such as sales, marketing, and proficiency in Microsoft Office tools.

Skill Gaps: Advanced Manufacturing Occupations, GoVirginia - Region 2

Skill	Candidates	Openings	Gap
	#	#	#
Marketing	50	148	-99
Microsoft Office	38	101	-63
Merchandising	1	44	-43
Sales	142	184	-42
Business-to-Business (B2B) Sales	4	28	-24
Microsoft PowerPoint	11	31	-20
Manufacturing	50	71	-20
Microsoft Outlook	4	23	-18
Microsoft Excel	68	86	-17
Microsoft Project	1	18	-17
Personal Computers (PC)	8	20	-12
Scheduling Software	0	12	-12
Power Tools	0	11	-11
Assembly	3	14	-11
Microsoft Word	12	21	-9
Dassault Systemes SolidWorks Software	12	20	-8
Presentation	11	19	-8
Operations Management	2	9	-7
Torque Wrenches	6	12	-7
Routers	0	7	-6
Inventory Control	4	10	-6
Fabrication	3	9	-6
Minitab	1	6	-5
Computer Aided Design Software (CAD Software)	32	37	-5
Lean Manufacturing	23	28	-4

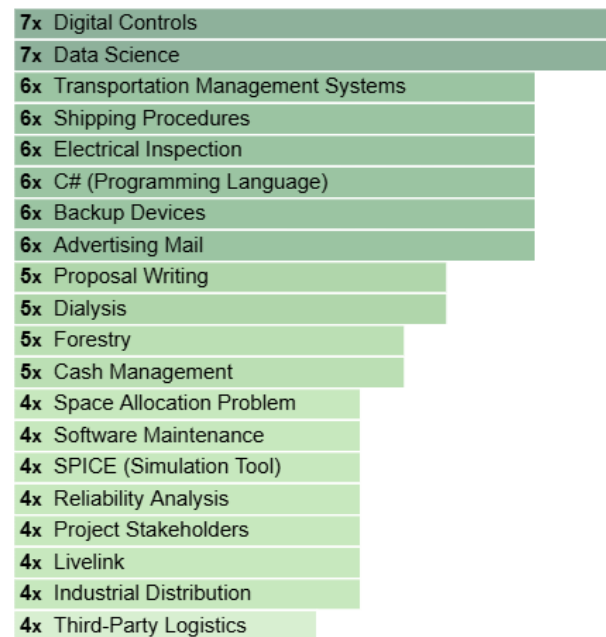
Emerging Skill Gaps in the Advanced Manufacturing Industry

VOEE highlights the fastest emerging skills in the advanced manufacturing sector over the previous 24 months. The skill analysis reveals how traditional manufacturing is rapidly converging with digital technologies, systems thinking, and operational efficiency.

Emerging Skills

The fastest growing skills over the last 24 months

↗ Hover over chart for more detail



Manufacturers increasingly require digital and data-driven capabilities such as digital controls, data science, C# programming, and simulation tools like SPICE, reflecting a shift toward automation, coding, and analytics to optimize production.

Logistics and supply chain fluency is also critical, with skills in transportation management systems, shipping procedures, and third-party logistics underscoring the need for real-time coordination and visibility across the supply chain as recent global disruptions emerged.

Operational and equipment knowledge remains foundational, as roles demand familiarity with electrical inspections, backup devices, and reliability analysis to ensure system safety and uptime.

Simultaneously, business and planning skills like proposal writing, cash management, and project stakeholder coordination point to a growing emphasis on strategic planning and cost efficiency, even in roles traditionally centered on physical tasks.

Lastly, cross-disciplinary and niche skills (ranging from document management systems like Livelink to specialized knowledge in forestry or advertising mail) demonstrate the expanding breadth of capabilities needed as back-office and sector-specific functions adopt new tools and methods.

The educational implications infer that manufacturing education must expand beyond traditional training to prepare workers for modern, technology-driven environments. Programs should incorporate skills in programming and automation, data literacy and analytics, supply chain management, project planning, and systems integration using simulation tools. In particular, there is a growing need to embed business fundamentals such as budgeting, resource allocation, and team leadership into technical curricula to equip mid-level managers with the competencies required to lead in new environments.

The workforce implications demand hybrid professionals who can operate across physical, digital, and analytical domains. Employers increasingly seek workers who are not only technically skilled but also capable of critical thinking, systems understanding, and business decision-making. Mid-level managers, in particular, are expected to solve complex problems, coordinate cross-functional teams, manage budgets, and align production goals with broader business strategies. This shift underscores the need for a new generation of manufacturing professionals who are more than task-doers. They must be adaptable leaders who understand machines, data, systems, financial statements and people.





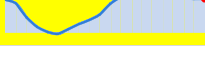



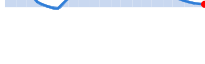

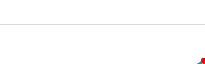


Section 4.0. Forecast exit and transfers to determine employee retention and turnover within the healthcare and advanced manufacturing industry/occupations sectors.

4.1. 2-Digit Industry Exits and Transfers over Next 5 Years









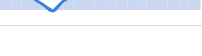
Exits are defined as separations due to workers leaving the workforce for reasons such as retirement. **Transfers** are defined as separations due to workers moving into different occupations. **Employment Growth** is the difference between **Total Demand** and the **sum** of **Exits** and **Transfers**.

Healthcare and Manufacturing are Top 5 industry clusters in Region 2, yet health care is the only industry that has a 5-year forecasted employment growth.

GoVirginia - Region 2, 2024Q3¹

NAICS	Industry	Current			5-Year History			5-Year Forecast				
		Empl	Avg Ann Wages	LQ	Empl Change	Trend	Ann %	Total Demand	Exits	Transfers	Empl Growth	Ann % Growth
62	Health Care and Social Assistance	57,707	\$61,665	1.07	2,243		0.8%	29,068	12,864	15,367	837	0.3%
72	Accommodation and Food Services	29,670	\$23,110	0.95	-944		0.6%	26,087	11,171	15,062	-146	-0.1%
44	Retail Trade	38,412	\$33,890	1.09	-1,075		0.6%	24,126	10,780	14,917	-1,570	-0.8%
61	Educational Services	43,840	\$55,511	1.51	2,357		1.1%	19,840	9,221	11,150	-531	-0.2%
31	Manufacturing	44,885	\$70,561	1.57	-11		0.0%	21,500	8,239	14,139	-879	-0.4%
81	Other Services (except Public Administration)	16,333	\$34,512	1.07	-1,691		2.0%	9,224	3,781	5,471	-28	0.0%
23	Construction	23,549	\$65,098	1.09	2,546		2.3%	10,130	3,707	6,344	79	0.1%
56	Administrative and Support and Waste Management and Remediation Services	15,901	\$40,554	0.72	-2,289		2.7%	8,835	3,583	5,390	-138	-0.2%
48	Transportation and Warehousing	14,022	\$56,098	0.78	48		0.1%	7,427	3,061	4,491	-125	-0.2%
54	Professional, Scientific, and Technical Services	17,714	\$81,561	0.67	284		0.3%	7,535	2,657	4,515	362	0.4%
92	Public Administration	12,065	\$62,327	0.71	484		0.8%	5,260	2,190	3,278	-209	-0.3%
71	Arts, Entertainment, and Recreation	7,132	\$21,778	0.96	1,544		5.0%	5,358	2,098	3,165	94	0.3%
42	Wholesale Trade	11,081	\$83,185	0.82	-375		0.7%	5,367	2,046	3,443	-122	-0.2%

GoVirginia - Region 2, 2024Q3¹

NAICS	Industry	Current				5-Year History		5-Year Forecast				
		Empl	Avg Ann Wages	LQ	Empl Change	Trend	Ann %	Total Demand	Exits	Transfers	Empl Growth	Ann % Growth
52	Finance and Insurance	8,239	\$88,917	0.58	-1,532		3.4%	3,284	1,291	2,078	-86	-0.2%
53	Real Estate and Rental and Leasing	5,151	\$58,810	0.80	141		0.6%	2,386	1,081	1,361	-56	-0.2%
55	Management of Companies and Enterprises	6,371	\$88,024	1.13	268		0.9%	2,684	996	1,675	13	0.0%
11	Agriculture, Forestry, Fishing and Hunting	3,425	\$21,293	0.79	-472		2.6%	1,978	978	1,092	-92	-0.5%
51	Information	2,682	\$61,198	0.38	-624		4.1%	1,117	419	731	-33	-0.2%
22	Utilities	1,400	\$71,179	0.75	-14		0.2%	591	225	382	-17	-0.2%
99	Unclassified	805	\$41,362	1.33	154		4.3%	444	182	265	-3	-0.1%
21	Mining, Quarrying, and Oil and Gas Extraction	253	\$70,718	0.19	-69		4.7%	118	40	77	1	0.1%
Total - All Industries		360,638	\$55,055	1.00	972		0.1%	192,008	80,079	114,525	-2,597	-0.1%

Source: [JobsEQ®](#)

Data as of 2024Q3




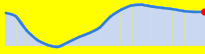





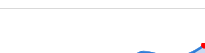






Note: Figures may not sum due to rounding.

1. All data based upon a four-quarter moving average







Exits and transfers are approximate estimates based upon occupation separation rates.

2-Digit Industry Transfers Next 5 Years

GoVirginia - Region 2, 2024Q3¹

NAICS	Industry	Current			5-Year History			5-Year Forecast				
		Empl	Avg Ann Wages	LQ	Empl Change	Trend	Ann %	Total Demand	Exits	Transfers	Empl Growth	Ann % Growth
62	Health Care and Social Assistance	57,707	\$61,665	1.07	2,243		0.8%	29,068	12,864	15,367	837	0.3%
72	Accommodation and Food Services	29,670	\$23,110	0.95	-944		-0.6%	26,087	11,171	15,062	-146	-0.1%
44	Retail Trade	38,412	\$33,890	1.09	-1,075		-0.6%	24,126	10,780	14,917	-1,570	-0.8%
31	Manufacturing	44,885	\$70,561	1.57	-11		0.0%	21,500	8,239	14,139	-879	-0.4%
61	Educational Services	43,840	\$55,511	1.51	2,357		1.1%	19,840	9,221	11,150	-531	-0.2%
23	Construction	23,549	\$65,098	1.09	2,546		2.3%	10,130	3,707	6,344	79	0.1%
81	Other Services (except Public Administration)	16,333	\$34,512	1.07	-1,691		-2.0%	9,224	3,781	5,471	-28	0.0%
56	Administrative and Support and Waste Management and Remediation Services	15,901	\$40,554	0.72	-2,289		-2.7%	8,835	3,583	5,390	-138	-0.2%
54	Professional, Scientific, and Technical Services	17,714	\$81,561	0.67	284		0.3%	7,535	2,657	4,515	362	0.4%
48	Transportation and Warehousing	14,022	\$56,098	0.78	48		0.1%	7,427	3,061	4,491	-125	-0.2%
42	Wholesale Trade	11,081	\$83,185	0.82	-375		-0.7%	5,367	2,046	3,443	-122	-0.2%
92	Public Administration	12,065	\$62,327	0.71	484		0.8%	5,260	2,190	3,278	-209	-0.3%
71	Arts, Entertainment, and Recreation	7,132	\$21,778	0.96	1,544		5.0%	5,358	2,098	3,165	94	0.3%
52	Finance and Insurance	8,239	\$88,917	0.58	-1,532		-3.4%	3,284	1,291	2,078	-86	-0.2%
55	Management of Companies and Enterprises	6,371	\$88,024	1.13	268		0.9%	2,684	996	1,675	13	0.0%
53	Real Estate and Rental and Leasing	5,151	\$58,810	0.80	141		0.6%	2,386	1,081	1,361	-56	-0.2%

GoVirginia - Region 2, 2024Q3¹

NAICS	Industry	Current			5-Year History			5-Year Forecast				
		Empl	Avg Ann Wages	LQ	Empl Change	Trend	Ann %	Total Demand	Exits	Transfers	Empl Growth	Ann % Growth
11	Agriculture, Forestry, Fishing and Hunting	3,425	\$21,293	0.79	-472		-2.6%	1,978	978	1,092	-92	-0.5%
51	Information	2,682	\$61,198	0.38	-624		4.1%	1,117	419	731	-33	-0.2%
22	Utilities	1,400	\$71,179	0.75	-14		0.2%	591	225	382	-17	-0.2%
99	Unclassified	805	\$41,362	1.33	154		4.3%	444	182	265	-3	-0.1%
21	Mining, Quarrying, and Oil and Gas Extraction	253	\$70,718	0.19	-69		4.7%	118	40	77	1	0.1%
Total - All Industries		360,638	\$55,055	1.00	972		0.1%	192,008	80,079	114,525	-2,597	-0.1%

Source: [JobsEQ®](#)

Data as of 2024Q3


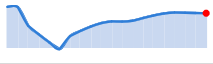




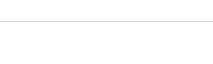



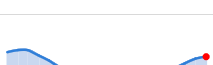

Note: Figures may not sum due to rounding.

1. All data based upon a four-quarter moving average









Exits and transfers are approximate estimates based upon occupation separation rates.

4.2. 6-Digit Industry Exits and Transfer over Next 5 Years

Home Health Care and Services for the Elderly and Persons with Disabilities make the Top 20 list of 6-digit exits, but they are also forecasted to experience the largest employment growth.

GoVirginia - Region 2, 2024Q3 ¹													
NAICS	Industry	Current			5-Year History			5-Year Forecast					
		Empl	Avg Ann Wages	LQ	Empl Change	Trend	Ann %	Total Demand	Exits	Transfers	Empl Growth	Ann % Growth	
722513	Limited-Service Restaurants	10,861	\$21,143	1.08	-603		-1.1%	10,407	4,574	5,884	-51	-0.1%	
722511	Full-Service Restaurants	11,738	\$24,641	1.01	-510		-0.8%	10,327	4,370	6,041	-84	-0.1%	
611110	Elementary and Secondary Schools	20,259	\$45,276	1.11	631		0.6%	8,890	4,286	5,043	-440	-0.4%	
611310	Colleges, Universities, and Professional Schools	20,853	\$68,507	3.08	1,888		1.9%	9,191	4,042	5,184	-35	0.0%	
622110	General Medical and Surgical Hospitals	18,879	\$88,402	1.36	1,357		1.5%	7,116	3,378	3,972	-234	-0.2%	
445110	Supermarkets and Other Grocery Retailers (except Convenience Retailers)	5,847	\$29,541	1.03	-158		-0.5%	4,164	1,893	2,544	-273	-1.0%	
455211	Warehouse Clubs and Supercenters	5,410	\$29,496	1.49	779		3.2%	3,682	1,613	2,283	-215	-0.8%	
623110	Nursing Care Facilities (Skilled Nursing Facilities)	5,268	\$44,664	1.58	-59		-0.2%	2,848	1,353	1,681	-186	-0.7%	
813110	Religious Organizations	5,314	\$22,491	1.51	-297		-1.1%	2,750	1,258	1,544	-52	-0.2%	
621111	Offices of Physicians (except Mental Health Specialists)	6,816	\$96,828	1.05	596		1.8%	2,881	1,215	1,571	95	0.3%	
624120	Services for the Elderly and Persons with Disabilities	3,295	\$25,738	0.63	267		1.7%	2,516	1,101	1,076	339	2.0%	
551114	Corporate, Subsidiary, and	6,184	\$89,294	1.14	293		1.0%	2,603	967	1,626	10	0.0%	

GoVirginia - Region 2, 2024Q3¹

NAICS	Industry	Current			5-Year History			5-Year Forecast				
		Empl	Avg Ann Wages	LQ	Empl Change	Trend	Ann %	Total Demand	Exits	Transfers	Empl Growth	Ann % Growth
	Regional Managing Offices											
561720	Janitorial Services	2,998	\$25,700	0.98	249		1.8%	1,946	902	1,066	-22	-0.1%
721110	Hotels (except Casino Hotels) and Motels	2,777	\$27,533	0.81	-28		-0.2%	1,991	844	1,137	10	0.1%
561320	Temporary Help Services	3,832	\$36,391	0.67	-2,422		-9.3%	2,041	819	1,277	-54	-0.3%
336120	Heavy Duty Truck Manufacturing	4,271	\$66,079	50.82	359		1.8%	2,297	795	1,455	47	0.2%
457110	Gasoline Stations with Convenience Stores	2,118	\$28,228	1.09	-229		-2.0%	1,566	785	932	-151	-1.5%
713940	Fitness and Recreational Sports Centers	2,486	\$13,615	1.57	1,075		12.0%	2,107	779	1,283	45	0.4%
621610	Home Health Care Services	2,436	\$37,618	0.60	-51		-0.4%	1,548	688	694	166	1.3%
Total - All Industries		360,638	\$55,055	1.00	972		0.1%	192,008	80,079	114,525	-2,597	-0.1%

Source: [JobsEQ®](#)

Data as of 2024Q3












Note: Figures may not sum due to rounding.

1. All data based upon a four-quarter moving average











Exits and transfers are approximate estimates based upon occupation separation rates.

6-Digit Industry Transfers Next 5 Years

Within the industries with the highest number of worker transfers, many are anticipated due to the temporary nature of the jobs particularly among younger and older adults who often seek part-time or transitional employment.

GoVirginia - Region 2, 2024Q3 ¹													
NAICS	Industry	Current			5-Year History			5-Year Forecast					
		Empl	Avg Ann Wages	LQ	Empl Change	Trend	Ann %	Total Demand	Exits	Transfers	Empl Growth	Ann % Growth	
722511	Full-Service Restaurants	11,738	\$24,641	1.01	-510		-0.8%	10,327	4,370	6,041	-84	-0.1%	
722513	Limited-Service Restaurants	10,861	\$21,143	1.08	-603		-1.1%	10,407	4,574	5,884	-51	-0.1%	
611310	Colleges, Universities, and Professional Schools	20,853	\$68,507	3.08	1,888		1.9%	9,191	4,042	5,184	-35	0.0%	
611110	Elementary and Secondary Schools	20,259	\$45,276	1.11	631		0.6%	8,890	4,286	5,043	-440	-0.4%	
622110	General Medical and Surgical Hospitals	18,879	\$88,402	1.36	1,357		1.5%	7,116	3,378	3,972	-234	-0.2%	
445110	Supermarkets and Other Grocery Retailers (except Convenience Retailers)	5,847	\$29,541	1.03	-158		-0.5%	4,164	1,893	2,544	-273	-1.0%	
455211	Warehouse Clubs and Supercenters	5,410	\$29,496	1.49	779		3.2%	3,682	1,613	2,283	-215	-0.8%	
623110	Nursing Care Facilities (Skilled Nursing Facilities)	5,268	\$44,664	1.58	-59		-0.2%	2,848	1,353	1,681	-186	-0.7%	
551114	Corporate, Subsidiary, and Regional Managing Offices	6,184	\$89,294	1.14	293		1.0%	2,603	967	1,626	10	0.0%	
621111	Offices of Physicians (except Mental Health Specialists)	6,816	\$96,828	1.05	596		1.8%	2,881	1,215	1,571	95	0.3%	
813110	Religious Organizations	5,314	\$22,491	1.51	-297		-1.1%	2,750	1,258	1,544	-52	-0.2%	

GoVirginia - Region 2, 2024Q3¹

NAICS	Industry	Current			5-Year History			5-Year Forecast				
		Empl	Avg Ann Wages	LQ	Empl Change	Trend	Ann %	Total Demand	Exits	Transfers	Empl Growth	Ann % Growth
336120	Heavy Duty Truck Manufacturing	4,271	\$66,079	50.82	359		1.8%	2,297	795	1,455	47	0.2%
713940	Fitness and Recreational Sports Centers	2,486	\$13,615	1.57	1,075		12.0%	2,107	779	1,283	45	0.4%
561320	Temporary Help Services	3,832	\$36,391	0.67	-2,422		-9.3%	2,041	819	1,277	-54	-0.3%
721110	Hotels (except Casino Hotels) and Motels	2,777	\$27,533	0.81	-28		-0.2%	1,991	844	1,137	10	0.1%
624120	Services for the Elderly and Persons with Disabilities	3,295	\$25,738	0.63	267		1.7%	2,516	1,101	1,076	339	2.0%
561720	Janitorial Services	2,998	\$25,700	0.98	249		1.8%	1,946	902	1,066	-22	-0.1%
492110	Couriers and Express Delivery Services	2,873	\$39,924	1.24	1,034		9.3%	1,624	600	995	29	0.2%
457110	Gasoline Stations with Convenience Stores	2,118	\$28,228	1.09	-229		-2.0%	1,566	785	932	-151	-1.5%
444110	Home Centers	2,170	\$33,195	1.36	133		1.3%	1,425	598	844	-17	-0.2%
Total - All Industries		360,638	\$55,055	1.00	972		0.1%	192,008	80,079	114,525	-2,597	-0.1%

Source: [JobsEQ®](#)

Data as of 2024Q3

Note: Figures may not sum due to rounding.

1. All data based upon a four-quarter moving average

Exits and transfers are approximate estimates based upon occupation separation rates.

4.3. 2-Digit Occupation Exits & Transfers over Next 5 Years

Many Food Preparation occupations are temporary in nature as individuals transfer out into more permanent occupation, and enter and exit the labor force in these fields.

GoVirginia - Region 2, 2024Q3 ¹														
SOC	Occupation	Current						5-Year History		5-Year Forecast				
		Empl	Mean Ann Wages ²	LQ	Unempl	Unempl Rate	Online Job Ads ³	Empl Change	Ann %	Total Demand	Exits	Transfers	Empl Growth	Ann % Growth
35-0000	Food Preparation and Serving Related Occupations	29,209	\$33,400	0.99	1,506	4.9%	1,787	-1,148	0.8%	27,450	11,901	15,698	-150	-0.1%
43-0000	Office and Administrative Support Occupations	37,644	\$44,400	0.89	1,114	2.6%	1,572	-2,845	1.4%	18,325	8,764	11,284	-1,724	-0.9%
41-0000	Sales and Related Occupations	31,468	\$46,400	1.00	1,359	4.0%	2,528	-1,858	1.1%	18,736	8,594	11,392	-1,250	-0.8%
53-0000	Transportation and Material Moving Occupations	28,763	\$45,500	0.92	1,424	4.6%	1,492	83	0.1%	17,600	7,005	10,731	-137	-0.1%
51-0000	Production Occupations	27,586	\$48,700	1.41	1,081	4.0%	642	-1,258	0.9%	13,939	5,351	9,353	-766	-0.6%
25-0000	Educational Instruction and Library Occupations	25,993	\$65,300	1.33	503	2.0%	807	938	0.7%	10,882	5,267	5,798	-183	-0.1%
31-0000	Healthcare Support Occupations	16,011	\$35,900	0.96	477	2.8%	1,016	543	0.7%	11,691	4,919	6,223	550	0.7%
29-0000	Healthcare Practitioners and Technical Occupations	24,135	\$95,700	1.12	264	1.1%	6,730	1,715	1.5%	6,827	3,415	3,203	208	0.2%
37-0000	Building and Grounds Cleaning and Maintenance Occupations	11,595	\$35,300	0.98	496	4.1%	675	-137	0.2%	7,630	3,396	4,309	-75	-0.1%
11-0000	Management Occupations	23,735	\$121,800	0.85	373	1.5%	2,038	1,898	1.7%	9,371	3,323	5,945	103	0.1%
13-0000	Business and Financial Operations Occupations	21,311	\$80,200	0.92	553	2.3%	847	1,283	1.2%	8,554	2,949	5,531	73	0.1%

GoVirginia - Region 2, 2024Q3¹

SOC	Occupation	Current						5-Year History		5-Year Forecast				
		Empl	Mean Ann Wages ²	LQ	Unempl	Unempl Rate	Online Job Ads ³	Empl Change	Ann %	Total Demand	Exits	Transfers	Empl Growth	Ann % Growth
39-0000	Personal Care and Service Occupations	8,635	\$36,600	0.93	378	3.9%	344	46	0.1%	7,563	2,791	4,663	109	0.3%
49-0000	Installation, Maintenance, and Repair Occupations	15,281	\$56,300	1.09	381	2.3%	1,037	365	0.5%	6,621	2,680	3,877	64	0.1%
47-0000	Construction and Extraction Occupations	16,777	\$50,100	1.04	727	4.2%	463	799	1.0%	7,088	2,568	4,411	109	0.1%
33-0000	Protective Service Occupations	7,116	\$50,700	0.92	231	2.9%	341	278	0.8%	3,881	1,666	2,321	-106	-0.3%
21-0000	Community and Social Service Occupations	8,255	\$53,300	1.24	214	2.6%	983	79	0.2%	3,902	1,557	2,106	239	0.6%
27-0000	Arts, Design, Entertainment, Sports, and Media Occupations	5,787	\$62,000	0.88	206	3.3%	321	77	0.3%	2,743	1,133	1,637	-27	-0.1%
15-0000	Computer and Mathematical Occupations	10,145	\$99,900	0.88	291	2.4%	430	103	0.2%	3,169	1,078	1,823	268	0.5%
17-0000	Architecture and Engineering Occupations	5,431	\$91,500	0.95	92	1.6%	517	6	0.0%	1,796	659	1,105	32	0.1%
45-0000	Farming, Fishing, and Forestry Occupations	1,026	\$42,400	0.49	61	6.2%	17	-40	0.8%	726	303	448	-25	-0.5%
23-0000	Legal Occupations	1,911	\$115,800	0.64	26	1.2%	37	-100	1.0%	535	230	331	-25	-0.3%
19-0000	Life, Physical, and Social Science Occupations	2,826	\$83,100	0.86	83	2.7%	314	147	1.1%	1,219	228	963	28	0.2%
00-0000	Total - All Occupations	360,68	\$59,700	1.00	11,842	3.1%	24,939	972	0.1%	190,335	79,778	113,154	-2,597	-0.1%

Source: [JobsEQ®](#)

Data as of 2024Q3 unless noted otherwise

Note: Figures may not sum due to rounding.

1. Data based on a four-quarter moving average unless noted otherwise.

2. Wage data represent the average for all Covered Employment

3. Data represent found online ads active within the last thirty days in the selected region. 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). Ad counts for ZCTA-based regions are estimates.

2-Digit Occupation Transfers Next 5 Years

GoVirginia - Region 2, 2024Q3 ¹														
SOC	Occupation	Current						5-Year History		5-Year Forecast				
		Empl	Mean Ann Wages ²	LQ	Unempl	Unempl Rate	Online Job Ads ³	Empl Change	Ann %	Total Demand	Exits	Transfers	Empl Growth	Ann % Growth
35-0000	Food Preparation and Serving Related Occupations	29,209	\$33,400	0.99	1,506	4.9%	1,787	-1,148	0.8%	27,450	11,901	15,698	-150	-0.1%
41-0000	Sales and Related Occupations	31,468	\$46,400	1.00	1,359	4.0%	2,528	-1,858	1.1%	18,736	8,594	11,392	-1,250	-0.8%
43-0000	Office and Administrative Support Occupations	37,644	\$44,400	0.89	1,114	2.6%	1,572	-2,845	1.4%	18,325	8,764	11,284	-1,724	-0.9%
53-0000	Transportation and Material Moving Occupations	28,763	\$45,500	0.92	1,424	4.6%	1,492	83	0.1%	17,600	7,005	10,731	-137	-0.1%
51-0000	Production Occupations	27,586	\$48,700	1.41	1,081	4.0%	642	-1,258	0.9%	13,939	5,351	9,353	-766	-0.6%
31-0000	Healthcare Support Occupations	16,011	\$35,900	0.96	477	2.8%	1,016	543	0.7%	11,691	4,919	6,223	550	0.7%
11-0000	Management Occupations	23,735	\$121,800	0.85	373	1.5%	2,038	1,898	1.7%	9,371	3,323	5,945	103	0.1%
25-0000	Educational Instruction and Library Occupations	25,993	\$65,300	1.33	503	2.0%	807	938	0.7%	10,882	5,267	5,798	-183	-0.1%
13-0000	Business and Financial Operations Occupations	21,311	\$80,200	0.92	553	2.3%	847	1,283	1.2%	8,554	2,949	5,531	73	0.1%
39-0000	Personal Care and Service Occupations	8,635	\$36,600	0.93	378	3.9%	344	46	0.1%	7,563	2,791	4,663	109	0.3%
47-0000	Construction and Extraction Occupations	16,777	\$50,100	1.04	727	4.2%	463	799	1.0%	7,088	2,568	4,411	109	0.1%
37-0000	Building and Grounds Cleaning and Maintenance Occupations	11,595	\$35,300	0.98	496	4.1%	675	-137	0.2%	7,630	3,396	4,309	-75	-0.1%
49-0000	Installation, Maintenance,	15,281	\$56,300	1.09	381	2.3%	1,037	365	0.5%	6,621	2,680	3,877	64	0.1%

GoVirginia - Region 2, 2024Q3¹

SOC	Occupation	Current						5-Year History		5-Year Forecast				
		Mean		LQ	Unempl	Rate	Online Job Ads ³	Empl Change	Ann %	Total Demand	Exits	Transfers	Empl Growth	Ann % Growth
		Empl	Ann Wages ²											
	and Repair Occupations													
29-0000	Healthcare Practitioners and Technical Occupations	24,135	\$95,700	1.12	264	1.1%	6,730	1,715	1.5%	6,827	3,415	3,203	208	0.2%
33-0000	Protective Service Occupations	7,116	\$50,700	0.92	231	2.9%	341	278	0.8%	3,881	1,666	2,321	-106	-0.3%
21-0000	Community and Social Service Occupations	8,255	\$53,300	1.24	214	2.6%	983	79	0.2%	3,902	1,557	2,106	239	0.6%
15-0000	Computer and Mathematical Occupations	10,145	\$99,900	0.88	291	2.4%	430	103	0.2%	3,169	1,078	1,823	268	0.5%
27-0000	Arts, Design, Entertainment, Sports, and Media Occupations	5,787	\$62,000	0.88	206	3.3%	321	77	0.3%	2,743	1,133	1,637	-27	-0.1%
17-0000	Architecture and Engineering Occupations	5,431	\$91,500	0.95	92	1.6%	517	6	0.0%	1,796	659	1,105	32	0.1%
19-0000	Life, Physical, and Social Science Occupations	2,826	\$83,100	0.86	83	2.7%	314	147	1.1%	1,219	228	963	28	0.2%
45-0000	Farming, Fishing, and Forestry Occupations	1,026	\$42,400	0.49	61	6.2%	17	-40	0.8%	726	303	448	-25	-0.5%
23-0000	Legal Occupations	1,911	\$115,800	0.64	26	1.2%	37	-100	1.0%	535	230	331	-25	-0.3%
00-0000	Total - All Occupations	360,68	\$59,700	1.00	11,842	3.1%	24,939	972	0.1%	190,335	79,778	113,154	-2,597	-0.1%

Source: [JobsEQ®](#)

Data as of 2024Q3 unless noted otherwise

Note: Figures may not sum due to rounding.

1. Data based on a four-quarter moving average unless noted otherwise.

2. Wage data represent the average for all Covered Employment

3. Data represent found online ads active within the last thirty days in the selected region. 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). Ad counts for ZCTA-based regions are estimates.

4.4. 6-Digit Occupation Exits & Transfers over Next 5 Years

These 6-digit occupations with negative employment growth are prime targets for continuing educational programming in fields with the highest projected employment growth. Specifically, Cashiers, Retail Salespersons, Customer Service Reps, General Office Clerks, First-Line Supervisors of Retail Sales Workers and Secretaries and Administrative Assistants will collectively contract 1,800 positions over the next 5 years because of advances in automation, artificial intelligence and e-commerce. Salaries of these roles range between \$28-51k.

Positions advancing at 1% per year are Personal Care Aides and Restaurant Cooks in roles that cannot easily be reduced due to technological advances. Salaries of these roles range between \$29-33k.

GoVirginia - Region 2, 2024Q3 ¹														
SOC	Occupation	Current					5-Year History			5-Year Forecast				
		Mean Ann Empl	Wages ²	LQ	Unempl	Unempl Rate	Online Job Ads ³	Empl Change	Ann %	Total Demand	Exits	Transfers	Empl Growth	Ann % Growth
35-3023	Fast Food and Counter Workers	8,630	\$29,500	1.07	493	5.5%	523	-565	1.3%	10,066	4,572	5,478	16	0.0%
41-2011	Cashiers	7,892	\$28,600	1.09	549	6.5%	139	-681	1.6%	6,391	3,348	3,643	-600	-1.6%
41-2031	Retail Salespersons	9,036	\$33,600	1.10	388	4.1%	775	-663	1.4%	6,118	2,770	3,605	-257	-0.6%
35-3031	Waiters and Waitresses	4,867	\$35,600	0.98	237	4.6%	105	-518	2.0%	4,773	1,929	2,953	-108	-0.4%
31-1122	Personal Care Aides	4,750	\$29,300	0.72	153	3.0%	137	827	3.9%	3,835	1,858	1,632	345	1.4%
53-7065	Stockers and Order Fillers	6,148	\$36,000	0.98	383	5.7%	426	427	1.4%	4,907	1,814	3,075	17	0.1%
37-2011	Janitors and Cleaners, Except Maids and Housekeeping Cleaners	5,222	\$33,400	0.99	221	4.0%	300	231	0.9%	3,553	1,682	1,915	-43	-0.2%
43-9061	Office Clerks, General	5,843	\$40,500	1.04	191	3.0%	81	-363	1.2%	2,931	1,500	1,750	-319	-1.1%
31-1131	Nursing Assistants	5,101	\$37,700	1.62	182	3.5%	256	-97	0.4%	3,425	1,483	2,011	-69	-0.3%
43-4051	Customer Service Representatives	5,227	\$40,300	0.83	238	3.8%	218	-109	0.4%	2,963	1,262	2,005	-304	-1.2%
29-1141	Registered Nurses	8,545	\$84,400	1.18	84	1.0%	2,954	646	1.6%	2,094	1,227	931	-64	-0.2%
51-2092	Team Assemblers	5,708	\$46,900	2.10	250	4.6%	6	345	1.3%	3,245	1,162	2,153	-70	-0.2%
53-7062	Laborers and Freight, Stock,	5,101	\$40,600	0.79	352	6.1%	160	35	0.1%	3,218	1,159	2,116	-57	-0.2%

GoVirginia - Region 2, 2024Q3¹

SOC	Occupation	Current					5-Year History			5-Year Forecast				
		Mean		LQ	Unempl	Rate	Online		Ann %	Total Demand	Exits	Transfers	Empl Growth	Ann % Growth
		Empl	Ann Wages ²				Job Ads ³	Empl Change						
	and Material Movers, Hand													
53-3032	Heavy and Tractor-Trailer Truck Drivers	5,444	\$55,800	1.14	174	3.1%	345	224	0.8%	2,740	1,110	1,651	-21	-0.1%
35-2014	Cooks, Restaurant	3,100	\$33,700	0.99	158	4.9%	135	167	1.1%	2,582	1,067	1,357	158	1.0%
43-6014	Secretaries and Administrative Assistants, Except Legal, Medical, and Executive	3,830	\$42,100	0.91	93	2.3%	276	-168	0.9%	1,927	1,007	1,026	-105	-0.6%
43-3031	Bookkeeping, Accounting, and Auditing Clerks	3,289	\$45,200	0.91	58	1.6%	80	-380	2.2%	1,595	923	845	-174	-1.1%
37-2012	Maids and Housekeeping Cleaners	2,414	\$30,200	0.98	109	4.4%	152	-403	3.0%	1,644	845	833	-34	-0.3%
11-1021	General and Operations Managers	7,114	\$119,900	0.91	90	1.2%	102	926	2.8%	2,820	779	2,055	-14	0.0%
25-9045	Teaching Assistants, Except Postsecondary	3,025	\$35,500	1.03	120	3.8%	79	29	0.2%	1,675	771	964	-61	-0.4%
35-2021	Food Preparation Workers	1,867	\$29,900	0.95	107	5.5%	143	-131	1.3%	1,516	751	850	-85	-0.9%
43-4171	Receptionists and Information Clerks	2,364	\$33,700	1.03	84	3.2%	93	-67	0.6%	1,456	680	841	-64	-0.5%
00-0000	Total - All Occupations	360,638	\$59,700	1.00	11,842	3.1%	24,939	972	0.1%	190,335	79,778	113,154	-2,597	-0.1%

Source: [JobsEQ®](#)

Data as of 2024Q3 unless noted otherwise

Note: Figures may not sum due to rounding.

1. Data based on a four-quarter moving average unless noted otherwise.

2. Wage data represent the average for all Covered Employment

3. Data represent found online ads active within the last thirty days in the selected region. 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). Ad counts for ZCTA-based regions are estimates.

6-Digit Occupation Transfers Next 5 Years

GoVirginia - Region 2, 2024Q3 ¹														
SOC	Occupation	Current						5-Year History		5-Year Forecast				
		Empl	Mean Ann Wages ²	LQ	Unempl	Unempl Rate	Online Job Ads ³	Empl Change	Ann %	Total Demand	Exits	Transfers	Empl Growth	Ann % Growth
35-3023	Fast Food and Counter Workers	8,630	\$29,500	1.07	493	5.5%	523	-565	1.3%	10,066	4,572	5,478	16	0.0%
41-2011	Cashiers	7,892	\$28,600	1.09	549	6.5%	139	-681	1.6%	6,391	3,348	3,643	-600	-1.6%
41-2031	Retail Salespersons	9,036	\$33,600	1.10	388	4.1%	775	-663	1.4%	6,118	2,770	3,605	-257	-0.6%
53-7065	Stockers and Order Fillers	6,148	\$36,000	0.98	383	5.7%	426	427	1.4%	4,907	1,814	3,075	17	0.1%
35-3031	Waiters and Waitresses	4,867	\$35,600	0.98	237	4.6%	105	-518	2.0%	4,773	1,929	2,953	-108	-0.4%
51-2092	Team Assemblers	5,708	\$46,900	2.10	250	4.6%	6	345	1.3%	3,245	1,162	2,153	-70	-0.2%
53-7062	Laborers and Freight, Stock, and Material Movers, Hand	5,101	\$40,600	0.79	352	6.1%	160	35	0.1%	3,218	1,159	2,116	-57	-0.2%
11-1021	General and Operations Managers	7,114	\$119,900	0.91	90	1.2%	102	926	2.8%	2,820	779	2,055	-14	0.0%
31-1131	Nursing Assistants	5,101	\$37,700	1.62	182	3.5%	256	-97	0.4%	3,425	1,483	2,011	-69	-0.3%
43-4051	Customer Service Representatives	5,227	\$40,300	0.83	238	3.8%	218	-109	0.4%	2,963	1,262	2,005	-304	-1.2%
37-2011	Janitors and Cleaners, Except Maids and Housekeeping Cleaners	5,222	\$33,400	0.99	221	4.0%	300	231	0.9%	3,553	1,682	1,915	-43	-0.2%
43-9061	Office Clerks, General	5,843	\$40,500	1.04	191	3.0%	81	-363	1.2%	2,931	1,500	1,750	-319	-1.1%
53-3032	Heavy and Tractor-Trailer Truck Drivers	5,444	\$55,800	1.14	174	3.1%	345	224	0.8%	2,740	1,110	1,651	-21	-0.1%
31-1122	Personal Care Aides	4,750	\$29,300	0.72	153	3.0%	137	827	3.9%	3,835	1,858	1,632	345	1.4%
35-2014	Cooks, Restaurant	3,100	\$33,700	0.99	158	4.9%	135	167	1.1%	2,582	1,067	1,357	158	1.0%
35-1012	First-Line Supervisors of Food Preparation and Serving Workers	2,759	\$42,500	1.05	98	3.4%	547	75	0.6%	1,991	636	1,341	14	0.1%
41-1011	First-Line Supervisors of Retail Sales Workers	3,689	\$51,400	1.20	70	1.8%	841	-10	0.1%	1,491	628	1,082	-219	-1.2%

GoVirginia - Region 2, 2024Q3¹

SOC	Occupation	Current						5-Year History		5-Year Forecast				
		Empl	Mean Ann Wages ²	LQ	Unempl	Unempl Rate	Online Job Ads ³	Empl Change	Ann %	Total Demand	Exits	Transfers	Empl Growth	Ann % Growth
43-6014	Secretaries and Administrative Assistants, Except Legal, Medical, and Executive	3,830	\$42,100	0.91	93	2.3%	276	-168	0.9%	1,927	1,007	1,026	-105	-0.6%
37-3011	Landscaping and Groundskeeping Workers	2,525	\$36,400	0.97	142	5.5%	97	-29	0.2%	1,618	593	1,022	3	0.0%
25-9045	Teaching Assistants, Except Postsecondary	3,025	\$35,500	1.03	120	3.8%	79	29	0.2%	1,675	771	964	-61	-0.4%
47-2061	Construction Laborers	3,519	\$38,600	1.13	195	5.5%	76	481	3.0%	1,569	554	947	69	0.4%
00-0000	Total - All Occupations	360,638	\$59,700	1.00	11,842	3.1%	24,939	972	0.1%	190,335	79,778	113,154	-2,597	-0.1%

Source: [JobsEQ®](#)

Data as of 2024Q3 unless noted otherwise

Note: Figures may not sum due to rounding.

1. Data based on a four-quarter moving average unless noted otherwise.

2. Wage data represent the average for all Covered Employment

3. Data represent found online ads active within the last thirty days in the selected region. 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). Ad counts for ZCTA-based regions are estimates.

4.5. Total Turnover Rate by Age and Educational Attainment

The turnover rate is 8.6% for 2023Q4. As age and educational attainment increases, the turnover rate declines.

GoVirginia - Region 2 (TOTAL)

NAICS	Industry	Empl ²	Average per Quarter			Average Annual Earnings	
			New Hires	Separations	Turnover	Stable Jobs	New Stable Jobs
	Total - All Industries ¹	327,935	46,982	51,100	8.6%	\$58,044	\$39,625

GoVirginia - Region 2 (AGE)

NAICS	Industry	Age	Empl ²	Average per Quarter			Average Annual Earnings	
				New Hires	Separations	Turnover	Stable Jobs	New Stable Jobs
	Total - All Industries ¹	14-18	8,975	4,085	3,303	24.8%	\$12,236	\$12,964
	Total - All Industries ¹	19-21	17,178	5,956	5,988	20.0%	\$22,501	\$22,062
	Total - All Industries ¹	22-24	19,872	5,149	5,494	16.2%	\$35,329	\$31,806
	Total - All Industries ¹	25-34	66,634	11,694	12,363	10.4%	\$51,172	\$43,179
	Total - All Industries ¹	35-44	65,031	8,360	8,881	7.4%	\$64,836	\$49,394
	Total - All Industries ¹	45-54	64,919	6,051	6,735	5.7%	\$70,771	\$52,165
	Total - All Industries ¹	55-64	58,953	3,796	5,021	4.9%	\$68,382	\$48,614
	Total - All Industries ¹	65-99	26,372	1,891	3,314	6.7%	\$49,025	\$32,470
	Total - All Industries ¹	14-99	327,935	46,982	51,100	8.6%	\$58,044	\$39,625

GoVirginia - Region 2 (EDUCATIONAL ATTAINMENT)

NAICS	Industry	Education	Empl ²	Average per Quarter			Average Annual Earnings	
				New Hires	Separations	Turnover	Stable Jobs	New Stable Jobs
	Total - All Industries ¹	Less than high school	34,921	5,280	5,754	8.6%	\$51,378	\$41,812
	Total - All Industries ¹	High school or equivalent, no college	82,970	9,546	10,927	7.1%	\$54,274	\$43,190
	Total - All Industries ¹	Some college or Associate's degree	90,319	9,941	11,348	6.9%	\$59,066	\$44,930
	Total - All Industries ¹	Bachelor's degree or advanced degree	73,701	7,026	8,286	6.5%	\$80,581	\$55,963
	Total - All Industries ¹	Educational attainment not available (workers aged 24 or younger)	46,025	15,188	14,785	19.2%	\$26,363	\$23,166
	Total - All Industries ¹	All Education Groups Together	327,935	46,982	51,100	8.6%	\$58,044	\$39,625

Source: [JobsEQ®](#)

Data are for the four quarters ending 2023Q4

Note: Figures may not sum due to rounding. Demographic details for NAICS 4851, 4911, 485 and 491 may be severely distorted due to limited source data availability.

1. Total industry figures don't reflect employment in unclassified industries (NAICS 9999).

2. Covered employment only. Employment for aggregate regions are summed from county-level data and, due to data availability, may not match employment as shown elsewhere in JobsEQ.

5.0. Outline College and Workforce Agencies Currently Offering Training

5.1. GoVirginia – Region 2 Total Awards by School

This chart displays all awards by school by type of award. Note that all awards received through the Roanoke Higher Education Center are captured through the individual partner institution.

GoVirginia - Region 2 for Total - All Programs (00.0000)

Title	Certificates and 2yr Awards	4yr Awards	Postgraduate Awards	Total Awards
Liberty University	1,676	10,159	14,012	25,847
Virginia Polytechnic Institute and State University	34	8,104	3,077	11,215
Radford University	28	1,605	589	2,222
Central Virginia Community College	1,145	0	0	1,145
Virginia Western Community College	1,136	0	0	1,136
University of Lynchburg	0	379	591	970
New River Community College	888	0	0	888
Roanoke College	0	477	0	477
Edward Via College of Osteopathic Medicine	0	0	471	471
Mountain Gateway Community College	373	0	0	373
American National University	178	23	46	247
Hollins University	0	198	48	246
Virginia University of Lynchburg	4	6	193	203
Ferrum College	0	189	2	191
Randolph College	0	111	39	150
Centra College	104	11	0	115
Sylvain Melloul International Hair Academy	78	0	0	78
Sweet Briar College	0	73	3	76
Paul Mitchell the School-Roanoke	41	0	0	41
Galen Health Institutes-Roanoke	0	0	0	0
Total	5,685	21,335	19,071	46,091
Source: JobsEQ® Data as of the 2022-2023 academic year unless noted otherwise; related occupation data as of 2024Q3. Note: Figures may not sum due to rounding.				

5.2. Roanoke Higher Education Center Awards

For the most recent RHEC fiscal year, the Center had 889 completers of programs, and 156 of these completers were awarded an associate's, bachelor's, master's or doctorate degree. For this workforce review, all RHEC awards are captured in the individual institution's awards for the corresponding program.

Roanoke Higher Education Center FY 2024 Program Completion Report July 1, 2023-June 30, 2024

FY 2024 Program Completions by Member Institution

Member	Number of Completers
James Madison University	14
Radford University	125
Region 5 Adult Education	4
Roanoke Higher Education Center	64
TAP-This Valley Works	632
Virginia Commonwealth University	5
Virginia Tech	22
Virginia Western Community College	23
TOTAL	889

Degree/Program	Number of Program Completers
Doctoral	
Doctor of Education (Ed.D)	2
Doctor of Nurse Anesthesia Practice (DNAP)	5
Total	7
Master's	
Counselor of Education	20
Master of Education (M.Ed.)- Educational Leadership	4
Total	24
Graduate Certificate	
Educational Leadership Certificate	10
Total	10
Bachelor's	
Interdisciplinary Studies (Elementary Education)	1
Nursing	111
Total	112
Associate	
Culinary Arts (A.A.S.)	6
Culinary Arts (A.A.S.)-Baking Specialization	7
Total	13
Certificate	
Culinary Arts-Professional Catering (CSC)	3
Culinary Arts-Baking and Pastry (CSC)	3
Culinary Arts-Cake Production and Decorating (CSC)	1
Culinary Arts- Intro to Food Service Career Studies	3
Government Nonprofit Assistance	13
Total	23

GED	4
Total	4
Workforce Training	
Clinical Medical Assistant-NHA CCMA	20
Certified Nursing Assistant	43
Total	63
Non-Credit	
African American Culture & Contemporary Issues	12
Coaching Boys Into Men (Adult Coaches)	18
Community Job Readiness	106
Community Series Adult Workers Training	87
Effectively Managing & Leading Human Service Organizations 18-week Course	11
Girls United "Working with Youth	59
Narcan Training	14
O.U.T.D.O.O.R. Camp	11
OSHA Training Courses	64
Pathways Home	55
Project Discovery (Seniors Only)	33
ROMA Training	32
SVREC Job Readiness (DSS)	32
Tomorrow's Leaders (Youth Mentoring)	9
Whole Family Model Training	90
Total	633
All Programs	889

5.3. Virginia Western Awards by CIP Code

This chart shows awards by CIP codes at Virginia Western for the 2022-2023 academic year. Highlighted are the eight award programs that Virginia Western is the exclusive educational provider in Region 2.

GoVirginia – Region 2, Virginia Western Community College					
CIP Code	Title	Certificate < 1Yr	Certificate 1+ but < 2 Yr	Associate's	Total Awards
52.0399	Accounting and Related Services, Other	0	0	7	7
51.0399	Allied Health Diagnostic, Intervention, and Treatment Professions, Other	0	0	0	0
01.0601	Applied Horticulture/Horticulture Operations, General	11	0	0	11
47.0604	Automobile/Automotive Mechanics Technology/Technician	12	0	0	12
30.0101	Biological and Physical Sciences	0	0	69	69
41.0101	Biology/Biotechnology Technology/Technician	2	0	0	2
52.0201	Business Administration and Management, General	0	0	65	65
52.0299	Business Administration, Management and Operations, Other	10	0	17	27
52.0499	Business Operations Support and Secretarial Services, Other	25	0	18	43
15.1302	CAD/CADD Drafting and/or Design Technology/Technician	3	0	0	3
19.0709	Child Care Provider/Assistant	15	0	7	22
51.1004	Clinical/Medical Laboratory Technician	29	0	7	36
11.0101	Computer and Information Sciences, General	19	0	23	42
46.0000	Construction Trades, General	7	0	0	7
12.0500	Cooking and Related Culinary Arts, General	12	0	9	21
43.0103	Criminal Justice/Law Enforcement Administration	18	0	10	28
51.0602	Dental Hygiene/Hygienist	3	0	27	30
50.0401	Design and Visual Communications, General	0	0	11	11
15.0303	Electrical, Electronic, and Communications Engineering Technology/Technician	36	0	0	36
46.0302	Electrician	23	0	0	23
51.0904	Emergency Medical Technology/Technician (EMT Paramedic)	2	0	0	2
14.0101	Engineering, General	1	0	25	26
24.0102	General Studies	0	0	77	77
51.0799	Health and Medical Administrative Services, Other	18	0	0	18
51.0707	Health Information/Medical Records Technology/Technician	23	0	0	23
47.0201	Technology/Technician	29	0	0	29
52.0901	Hospitality Administration/Management, General	2	0	0	2
24.0103	Humanities/Humanistic Studies	0	0	17	17
15.0612	Industrial Technology/Technician	0	0	6	6
22.0302	Legal Assistant/Paralegal	11	0	6	17
24.0199	Liberal Arts and Sciences, General Studies and Humanities, Other	0	113	0	113
51.3901	Licensed Practical/Vocational Nurse Training	2	10	0	12
15.0613	Manufacturing Engineering Technology/Technician	0	0	20	20
51.0907	Medical Radiologic Technology/Science – Radiation Therapist	5	0	17	22
51.1599	Mental and Social Health Services and Allied Professions, Other	46	0	23	69
51.0803	Occupational Therapist Assistant	0	0	0	0
51.0806	Physical Therapy Assistant	4	0	0	4
51.0911	Radiologic Technology/Science – Radiographer	10	0	15	25
51.3801	Registered Nursing/Registered Nurse	20	0	48	68
45.0101	Social Sciences, General	0	0	53	53
51.0909	Surgical Technology/Technologist	0	0	8	8
11.0801	Web Page, Digital/Multimedia and Information Resources Design	5	0	0	5
48.0508	Welding Technology/Welder	25	0	0	25
	Total	428	123	585	1,136
Source: JobsEQ®					
Data as of the 2022–2023 academic year, related occupation data as of 2024Q3.					

5.4. Virginia Western Occupation Linkages by Gaps

This chart shows awards by CIP codes at Virginia Western for the 2022-2023 academic year (from 5.3) and its corresponding occupation, current employment, annual demand, projected 2034 employment, annual supply gap, average wage, number of online job ads. The purpose of this chart is to determine if additional education providers are needed in Region 2 to meet the demand for these programs Virginia Western is the exclusive providers. The largest annual gap is for the occupation Health Specialties Teachers, Postsecondary (25-1071) at -14 per year. This gap appears to be related to Jefferson College of Health Science and Virginia Tech Carilion as these positions would be imported because of the uniqueness of the position.

Occupation Linkages for GoVirginia - Region 2, Virginia Western Community College										
CIP Code	CIP Title (Awards)	SOC Code	SOC Title (Occupation)	Current Employment 2024Q3	Total Annual Demand	Projected Employment 2034	Annual Supply Gap	Avg. Wages	Online Job Ads ¹	Total Awards
01.0601	Applied Horticulture/ Horticulture Operations, General	25-1041	Agricultural Sciences Teachers, Postsecondary	50	4	50	0	\$113,400	2	11
		37-1012	First-Line Supervisors of Landscaping, Lawn Service, and Groundskeeping Workers	538	55	535	-2	\$53,900	19	
		37-3011	Landscaping and Groundskeeping Workers	2,525	324	2,531	0	\$36,400	93	
		25-9021	Farm and Home Management Educators	73	6	68	0	\$60,900	3	
		11-9013	Farmers, Ranchers, and Other Agricultural Managers	1,954	186	1,829	-3	\$67,100	0	
30.0101	Biological and Physical Sciences	25-1199	Postsecondary Teachers, All Other	435	32	429	0	\$95,900	0	69
		25-2031	Secondary School Teachers, Except Special and Career/Technical Education	2,341	131	2,248	-1	\$65,000	43	
		11-9121	Natural Sciences Managers	78	6	79	0	\$130,100	19	
41.0101	Biology/Biotechnology/ Technician	19-4021	Biological Technicians	144	16	143	0	\$50,200	32	2
51.0602	Dental Hygiene/Hygienist	25-1071	Health Specialties Teachers, Postsecondary	1,458	135	1,650	-14	\$125,400	145	30
		29-1292	Dental Hygienists	318	22	332	-2	\$85,100	24	
15.0612	Industrial Technology/ Technician	17-3026	Industrial Engineering Technologists and Technicians	179	14	174	-1	\$71,700	15	6
51.0907	Medical Radiologic Technology/ Science - Radiation Therapist	25-1071	Health Specialties Teachers, Postsecondary	1,458	135	1,650	-14	\$125,400	145	22
		29-2099	Health Technologists and Technicians, All Other	410	29	408	-2	\$50,700	50	
		29-1124	Radiation Therapists	55	2	53	0	\$97,500	4	
		29-2036	Medical Dosimetrists	14	1	14	0	\$145,600	1	
		29-2034	Radiologic Technologists and Technicians	593	29	581	-3	\$74,800	414	
51.0806	Physical Therapy	31-2021	Physical Therapist Assistants	260	45	301	-2	\$70,300	53	4
		31-2022	Physical Therapist Aides	87	12	84	0	\$33,800	2	
51.0909	Surgical Technology/ Technologist	25-1071	Health Specialties Teachers, Postsecondary	1,458	135	1,650	-14	\$125,400	145	8
		29-2055	Surgical Technologists	302	16	297	-1	\$65,300	213	
		29-9093	Surgical Assistants	69	4	69	0	\$66,000	9	

Source: JobsEQ®

Data as of the 2022-2023 academic year, related occupation data as of 2024Q3 except wages which are as of 2024.

1. Data represent found online ads active within the last thirty days in any zip code intersecting or within 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.

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5.5. Occupation Gaps with 10+ Annually

There are 199 of the 840 occupations in Region 2 that have annual gap shortages. Eighteen (18) occupations have greater than 10 per year (on average) until the year 2034. The 18 occupations are listed below with 13 having annual positive growth, 4 negative growth, and one stagnant.

Potential Average Annual Occupation Gaps over 10 Years in GoVirginia - Region 2						
SOC	Occupation	Annual Supply Gap	Current Employment 2024Q3	Annual Growth Demand	Projected Employment 2034	Avg Wages
29-1141	Registered Nurses	(37)	8,545	-13	8,416	\$84,400
11-1021	General and Operations Managers	(30)	7,114	-3	7,086	\$119,900
15-1252	Software Developers	(25)	3,036	29	3,328	\$115,500
49-9041	Industrial Machinery Mechanics	(21)	1,585	19	1,776	\$59,300
53-3032	Heavy and Tractor-Trailer Truck Drivers	(21)	5,444	-4	5,402	\$55,800
29-1171	Nurse Practitioners	(20)	733	28	1,015	\$121,100
11-9111	Medical and Health Services Managers	(17)	1,030	21	1,241	\$129,300
49-9071	Maintenance and Repair Workers, General	(15)	3,232	-2	3,212	\$48,900
25-1071	Health Specialties Teachers, Postsecondary	(14)	1,458	19	1,650	\$125,400
47-1011	First-Line Supervisors of Construction Trades and Extraction Workers	(14)	2,145	4	2,185	\$68,700
13-1111	Management Analysts	(13)	2,514	9	2,600	\$107,900
11-3031	Financial Managers	(12)	1,253	11	1,365	\$153,600
15-1212	Information Security Analysts	(12)	686	16	849	\$115,300
21-1018	Substance Abuse, Behavioral Disorder, and Mental Health Counselors	(12)	1,678	27	1,948	\$55,200
31-9092	Medical Assistants	(12)	1,608	14	1,750	\$39,700
47-2111	Electricians	(12)	1,808	9	1,901	\$58,300
11-9199	Managers, All Other	(10)	2,209	1	2,219	\$126,800
47-2031	Carpenters	(10)	1,908	0	1,908	\$47,600

When cross-referencing these 18 occupations by awards for each SOC code in Region 2, **ALL** occupations have an abundance of 2+ years of higher education awards, indicating the supply exceeds the demand. However, the following five occupations have negative gaps when looking at educational awards less than 2 years requiring a certification.

- Industrial Machinery Mechanics (-21) annual gap
- Heavy and Tractor-Trailer Truck Drivers (-26)
- Maintenance and Repair Workers, General (-3)
- Medical Assistants (-103)
- Carpenters (-9)

Further, this does not take into consideration the retention of these awards in Region 2. This analysis further illustrates the need to proactively retain awardees in the region to meet the forecasted demand of the region.

6.0. Recommendations and Actions

There are six recommendations for exploring new programs based on the quantitative supply and demand, as well as qualitative conversations with partners.

6.1. Personal Care Aides 31-1122 / Home Health Aides 31-1121

As the demography of the US and Region 2 grows older and individuals are living longer, the need for Personal Care Aides is increasing. In the previous 5 years, this occupation has grown 3.9% per year and the unemployment rate is at 3.0% indicating full employment. Further the annual growth of this sector is expected to grow 1.4% this year with similar rates of growth in future years.

Personal Care Aides in GoVirginia - Region 2, 2024Q3¹

CLIP

EXPORT

		CURRENT						5-YEAR HISTORY		1-YEAR FORECAST				
SOC	Occupation	Empl	Mean Ann Wages ²	LQ	Unempl	Unempl Rate	Online Job Ads ³	Empl Change	Ann %	Total Demand	Exits	Transfers	Empl Growth	Ann % Growth
31-1122	Personal Care Aides	4,750	\$29,300	0.72	153	3.0%	123	827	3.9%	755	366	322	67	1.4%
00-0000	Total - All Occupations	360,638	\$59,700	1.00	11,842	3.1%	24,651	972	0.1%	38,144	15,990	22,675	-521	-0.1%

There are no formal awards for this profession in the region or the state. However, the most common hard skill referenced in these job postings is Medication Administration.

Skill Gaps: Personal Care Aides, GoVirginia - Region 2

CLIP

EXPORT

Skill	CANDIDATES		OPENINGS		GAP	
	%	#	%	#	%	#
Medication Administration	0.0%	0	18.2%	138	-18.2%	-138

Specifically, there is a certification for this hard skill - MACE. MACE is a national medication aide certification exam typically administered to nurse aides who choose to receive additional training to become certified medication aides. Other basic certifications that are offered in a number of other places that is needed by Personal Care Aides include: Basic Life Support, CPR, First Aid Certification

Further analysis and exploration for creating a training program or certification for this occupation would be likely realized by outreach to existing top employers in the region based on active jobs ads (minus staffing companies).

Employers

	Employer Name	Active Job Ads
<input type="checkbox"/>	Care Advantage Inc	119
<input type="checkbox"/>	TheKey	45
<input type="checkbox"/>	Americare Plus	33
<input type="checkbox"/>	AllPro Staffnet, LLC	23
<input type="checkbox"/>	Home Instead Senior Care	17
<input type="checkbox"/>	Allpro Homecare VA	11
<input type="checkbox"/>	Warm Hearth Village	10
<input type="checkbox"/>	Ombi Home Care Services, LLC	9
<input type="checkbox"/>	Visiting Angels	9
<input type="checkbox"/>	FirstLight Home Care	7

CNA / PCA / Caregiver

📍 Roanoke, VA, USA | ⌵ Hourly | 📄 Full time/Part time | 💵 Weekly Pay, Paid Training, Flexible Schedules

Email Me Similar Jobs

Email Me This Job

Care Advantage Inc. is looking to hire **full- or part-time CNAs / PCAs / Caregivers** to provide in-home care services to our clients in the **Roanoke, VA** area. We are a client-driven company with a mission to lift up every community we serve, enable aging adults to live life to the fullest, and empower our Care Family in their purpose-driven work. If you are purpose-driven and are currently a caregiver (or are interested in becoming a caregiver) we want to talk with you!

This position offers some **great benefits and opportunities**, including:

- Rewarding career path
- Opportunity for quarterly and annual bonuses based on performance
- \$500 friend referral bonus
- Employee recognition programs
- Paid in-service training
- Overtime opportunities

If this sounds like the right full- or part-time caregiving opportunity for you, apply today!

WHO WE ARE:

- In-home care company with over 35 years of service
- One of the largest privately owned home care companies in the Mid-Atlantic
- Compassionate employer encouraging employee growth

REQUIREMENTS:

- Eligible to work in the United States (we are not able to provide sponsorship)
- Two satisfactory professional references
- Reliable transportation
- Compassionate, respectful, committed to excellency and a good attitude

WORK SCHEDULE FOR A CNA / PCA / CAREGIVER

This Caregiver position can be full- or part-time, letting you set your own hours. Shifts include days, nights, and weekends. **We are willing to work around YOUR schedule!**

ARE YOU READY TO JOIN OUR HEALTHCARE TEAM?

If you feel that you would be right for this full- or part-time entry-level healthcare job, please fill out our initial **3-minute, mobile-friendly application**. We look forward to meeting you!

Care Advantage, Inc. and its affiliates are Equal Opportunity/Affirmative Action employers. All qualified applicants will receive consideration for employment without regard to race, color, religion, sex, age, national origin, disability, protected veteran status, and or any other status protected by federal, state, or local law.

Location: 24014, 24015,,24016, 24017, 24018, 24019, 24012, 24013

The downside of this occupation is that the wage is half of the region's median wage, however there is strong future growth and job stability compared to other similar-compensated occupations such as cashiers, which have a negative long-term growth rate due to technological advances, artificial intelligence and e-commerce. Intervention with individuals working in other occupations and exposing them to alternative career path laddering could fill this gap.

GoVirginia - Region 2, 2024Q3¹

SOC	Occupation	Current						5-Year History		5-Year Forecast				
		Empl	Mean Ann Wages ²	LQ	Unempl	Unempl Rate	Online Job Ads ³	Empl Change	Ann %	Total Demand	Exits	Transfers	Empl Growth	Ann % Growth
41-2011	Cashiers	7,892	\$28,600	1.09	549	6.5%	139	-681	1.6%	6,391	3,348	3,643	-600	-1.6%
31-1122	Personal Care Aides	4,750	\$29,300	0.72	153	3.0%	137	827	3.9%	3,835	1,858	1,632	345	1.4%

6.2. Sales

According to the Bureau of Labor Statistics, approximately 8.8% of all workers in the US (over 14 million) are employed in sales related occupations. Yet, Region 2 higher educational institutions do not award any degrees from 2022-2023 data set in 52.18 (General Sales, Merchandising and Related Marketing Operations) and 52.19 (Specialized Sales, Merchandising and Marketing Operations) CIP codes that most commonly align with sales careers.

Hampton (12) and Virginia Union (7) produce a meager total of 19 bachelor's awards 52.18 for the entire Commonwealth of Virginia, and only Marymount produces a paltry 4 graduates in their bachelor's program for 52.19.




Further, according to Eric Janssen at the Ivey Business School at Western University, 50% of all college graduates will work in sales, and only 4% of post-secondary institutions teach sales.

On a regional scale, data on Sales Representatives in the Financial Services sector does not stand out as occupations that are a regional competitive advantage, unemployment is within the same range as all occupations, and the forecasted future growth is stagnant. However, the 5-year historical annual growth percentage of these occupations is at a healthy 1.2% to 2.4% rate.

Sales Representatives, Services in GoVirginia - Region 2, 2024Q3¹

✂ CLIP

EXPORT

			CURRENT					5-YEAR HISTORY			1-YEAR FORECAST				
<input type="checkbox"/>	SOC	Occupation	Empl	Mean Ann Wages ²	LQ	Unempl	Unempl Rate	Online Job Ads ³	Empl Change	Ann %	Total Demand	Exits	Transfers	Empl Growth	Ann % Growth
<input type="checkbox"/>		41-3091 Sales Representatives of Services, Except Advertising, Insurance, Financial Services, and Travel	1,955	\$68,500	0.79	82	3.4%	238	219	2.4%	179	46	137	-5	-0.3%
<input type="checkbox"/>		41-3021 Insurance Sales Agents	949	\$68,600	0.82	33	2.7%	92	89	2.0%	74	31	42	1	0.1%
<input type="checkbox"/>		41-3031 Securities, Commodities, and Financial Services Sales Agents	638	\$101,300	0.58	34	4.4%	234	37	1.2%	44	15	30	-1	-0.1%

A closer look at job postings in the previous 12-month period shows a significant number of postings in this sector as evidenced by the JPLQ metric. Job Placement Location Quotient indicates the percentage of these jobs posted compared to the national average of a region's share of total job postings. Any number over 1.25 indicates significant demand for this type of occupation and the median duration reveals that it's taking numerous weeks to fill positions.

Occupations

Display Level:

<input type="checkbox"/>	SOC	Occupation	Median Duration	Median Wage	JPLQ	Active Job Ads
<input type="checkbox"/>	41-3031.00	Securities, Commodities, and Financial Services Sales Agents	26	\$45,200	1.67	1,106
<input type="checkbox"/>	41-3091.00	Sales Representatives of Services, Except Advertising, Insurance, Financial Services, and Travel	45	\$63,100	1.04	1,032
<input type="checkbox"/>	41-3021.00	Insurance Sales Agents	67	\$54,700	1.58	332

Below are companies in Region 2 that are posting the most job ads for this occupation, and are some of the more prominent organizations in the region.

Employers

<input type="checkbox"/>	Employer Name	Median Duration	Median Wage	Active Job Ads
<input type="checkbox"/>	Wells Fargo	7	\$76,000	116
<input type="checkbox"/>	Truist	26	n/a	70
<input type="checkbox"/>	Woodforest National Bank	20	\$38,100	68
<input type="checkbox"/>	Atlantic Union Bank	24	\$67,300	38
<input type="checkbox"/>	Carter Machinery	13	n/a	37
<input type="checkbox"/>	Guidant Financial	9	\$43,500	35
<input type="checkbox"/>	InsuraTec	15	n/a	32
<input type="checkbox"/>	First Citizen Bank	27	\$45,800	31
<input type="checkbox"/>	Virginia Farm Bureau	63	\$59,100	29
<input type="checkbox"/>	Alchemy Financial Group	76	\$109,100	21

6.3. Epic Systems

In the JobsEQ tool of scraped individual online profiles in the region and active posted job openings in the region, the skill of Epic Systems produces the largest gap of any other skills in the top-level, 2-digit occupation code for Healthcare Practitioners and Technical Operations.

Skill Gaps: Healthcare Practitioners and Technical Occupations,
GoVirginia - Region 2

✂ CLIP

📄 EXPORT

Skill	CANDIDATES	OPENINGS	GAP	
	#	#	#	
Epic Systems	26	52		-25
Medical Terminology	19	41		-22
Home Health Care	28	49		-21
Nursing	73	94		-20

Further, examining at jobs ads over the previous 12 months, the one hard skill that is universal in this occupation sector is Epic Systems at a rate of 11-to-1 of the next referenced skill. This data would indicate that anyone working in the health care sector would need this basic skill to differentiate oneself in this industry. It's becoming a minimum requirement and basic expectation of employers.

Hard Skills

✂ CLIP

Skill Name	Active Job Ads	
<input type="checkbox"/> Epic Systems	1,141	
<input type="checkbox"/> Medical Terminology	98	
<input type="checkbox"/> Personal Computers (PC)	60	
<input type="checkbox"/> Microsoft Excel	36	
<input type="checkbox"/> Computer Terminals	29	
<input type="checkbox"/> Electronic Health Record (EHR)	29	

In recent meetings with Carilion executives, one of the significant staffing shortages they are experiencing includes software developers within the Epic Systems platform. Recruiters are paying search fees to find and employ these technical workers that are essential to the operations of the organization. Carilion employs a staffer who manages in-house training of existing employees. However, Epic controls certifications of their platform through a tiered training approach. External assistance in enhancing the local talent pool with this specific skill (whatever the specific occupation across the health care industry) will be advantageous for all constituents.

Employers

[✕ CLIP](#)

Employer Name		Active Job Ads
<input type="checkbox"/>	Carilion Clinic	978

6.4. Business Skills for Mid-Level Manufacturing Workers

Many job postings in the region’s manufacturing sector highlight top hard skills, but reveal a noticeable gap in general business skills. These capabilities—such as financial literacy, team leadership, and P&L management—are essential for middle managers who are now expected to lead teams and take ownership of business outcomes. While many of these professionals have advanced through the ranks with strong technical skills, their evolving roles now demand a different set of competencies than those they initially developed in the industry.

Skill Gaps: Advanced Manufacturing Occupations, GoVirginia - Region 2

Skill	Candidates	Openings	Gap
	#	#	#
Marketing	50	148	-99
Microsoft Office	38	101	-63
Merchandising	1	44	-43
Sales	142	184	-42
Business-to-Business (B2B) Sales	4	28	-24
Microsoft PowerPoint	11	31	-20
Manufacturing	50	71	-20
Microsoft Outlook	4	23	-18
Microsoft Excel	68	86	-17
Microsoft Project	1	18	-17

As stated in Sections 3.2, emerging skill trends indicate a shift in the advanced manufacturing sector toward automation and suggest a growing emphasis on project management, cost control, and strategic planning, even for traditional hands-on roles.

Qualitative research indicates that another local college is developing a comparable non-degree financial training program aimed at mid-level healthcare professionals transitioning from clinical roles to management positions.

6.5. Sonographers 29-2032

This occupation has an annualized average growth rate of 3.3% over the past 5 years and is expected to grow once again at 0.7% this year. The LQ is at a rate above 1.25 making it a competitive advantage in the region, yet the region imports all of its talent with awards from outside the region, and likely employs individuals in this occupation without a certificate or award. With an employment rate of 1.4%, and 185 unique current job postings, the need is great. Further the mean wage is \$84,900 that's 42% more than the average annual rate of \$59,700 for all occupations in the region.

Diagnostic Medical Sonographers in GoVirginia - Region 2, 2024Q3¹

CLIP

EXPORT

SOC	Occupation	CURRENT			5-YEAR HISTORY				1-YEAR FORECAST					
		Empl	Mean Ann Wages ²	LQ	Unempl	Unempl Rate	Online Job Ads ³	Empl Change	Ann %	Total Demand	Exits	Transfers	Empl Growth	Ann % Growth
29-2032	Diagnostic Medical Sonographers	240	\$84,900	1.27	3	1.4%	185	36	3.3%	14	6	6	2	0.7%

There are no higher educational institutions in Region 2 that are offering awards for the sonographer occupation. Below are the entities offering across the Commonwealth along with the total awards.

Virginia Diagnostic Medical Sonography/Sonographer and Ultrasound Technician (51.0910)

Title	Certificates and 2yr Awards				Total Awards
	Awards	4yr Awards	Postgraduate Awards		
ECPI University	39	0	0		39
Northern Virginia Community College	19	0	0		19
Piedmont Virginia Community College	13	0	0		13
Tidewater Community College	12	0	0		12
Southside College of Health Sciences	8	0	0		8
Riverside College of Health Careers	0	0	0		0
Sovah School of Health Professions	0	0	0		0
Total	91	0	0		91

Meanwhile, the demand for sonographers in Region 2 based on online job ads (exclusive of staffing agencies for the previous 12 months) outpaces the average region in the US with a job posting location quotient (JPLQ) of 1.65. These job postings are posted on average for 16 days offering a median starting wage of \$73,000.



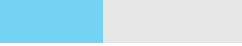
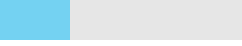
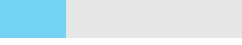
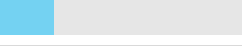

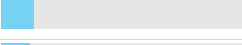
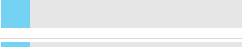
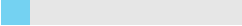
Occupations						
SOC	Occupation	Median Duration	Ads Closed	Median Wage	JPLQ	Active Job Ads
29-2032.00	Diagnostic Medical Sonographers	16	255	\$73,000	1.65	326

Source: [JobsEQ®](#)

Data reflect online job postings that were active from 3/24/2024 to 3/24/2025

See JobsEQ online Help for important Technical Notes.

Further, here are the Top 10 employers in the region who have posted the most jobs online for a sonographer for the previous 12 months with the largest employer in the region leading the way.

Employer Name	Employers				Active
	Median Duration	Ads Closed	Median Wage	Job Ads	
Carilion Clinic	83	34	n/a	60	
Centra Health	22	13	n/a	25	
Vetted Health	5	25	n/a	25	
Health Carousel Nursing & Allied Health	8	16	n/a	17	
Host Healthcare, Inc.	6	16	n/a	16	
AMN Healthcare Allied	9	11	n/a	13	
Access Healthcare LLC	21	7	n/a	8	
Planet Healthcare	10	8	n/a	8	
Medstaff Solutions Inc	8	6	n/a	7	
Triage Consulting Group, an R1 company	8	5	n/a	7	

Source: [JobsEQ®](#)

Data reflect online job postings that were active from 3/24/2024 to 3/24/2025

See JobsEQ online Help for important Technical Notes.

Therefore, based on the above supply and demand information and conversations with talent partners, pursuit of developing award programs in the region is a key opportunity for the RHEC.

6.6. Exploring Alternative Models to Support Enrollment for Off-Site Educational Programs

Perhaps there is an alternative model for supporting educational partners that are struggling to recruit participants for their programs such as offering marketing and enrollment assistance using existing student databases to help fill program cohorts that are not physically hosted at the higher education center.

For instance, there are many pure online certification and award programs. Walden University and other for-profit entities have invested heavily into selling their model to potential prospective students. Their sheer marketing expertise and process have enrolled many who prefer a different training model.

USA, Walden University

✕ CLIP

EXPORT

CIP Code	Title	Certificates and 2yr Awards	4yr Awards	Postgraduate Awards	Total Awards
> 51.3801	Registered Nursing/Registered Nurse	0	465	4,083	4,548
> 44.0701	Social Work	0	168	1,149	1,317
> 13.0101	Education, General	0	0	1,035	1,035
> 52.0201	Business Administration and Management, General	0	159	758	917
> 51.1508	Mental Health Counseling/Counselor	0	0	775	775
> 42.0101	Psychology, General	0	148	331	479
> 13.1210	Early Childhood Education and Teaching	0	97	176	273
> 44.0000	Human Services, General	0	75	172	247
> 51.2201	Public Health, General	0	37	207	244

Further, there are existing organizations who have received grants to create certification programs in fields such as food security (BioAg), cybersecurity (Radford), and customer service (Ferrum) that provide no cost training to students. Yet each of these organizations have failed to yield a full cohort of students to participate in the fully funded program.

Additional discussions and analysis must be evaluated internally to determine the viability of this recommendation.

Appendix: Definitions

Location Quotient (LQ) is a measurement of concentration in comparison to the nation. All Location Quotients are calculated based upon employment. An LQ of 1.00 indicates a region has the same concentration of an industry (or occupation) 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.

Total Demand is the sum of the annual projected growth demand and 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. Growth demand is the increase or decrease of jobs expected due to expansion or contraction of the overall number of jobs.

Exits are demand from separations due to workers leaving the workforce for reasons such as retirement (defined by the BLS as "labor force exits").

Transfers are the demand (over the number of projection years selected by the user) from separations due to workers moving into different occupations (defined by the BLS as "occupational transfers").

Employment Growth is often used to describe the net number of jobs added (or subtracted) from an industry or occupation during a queried time period. Total demand is equal to employment growth plus separation demand.

Separation Demand is the number of jobs required due to separations—labor force exits (including retirements) and transfers (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, or when employers leave the region altogether.

Target Range is the range between Annual Demand and the US Awards Benchmark.

US Awards Benchmark is the average occupation demand adjusted for the occupation employment level of the region being analyzed.

Turnover is calculated by taking the average of New Hires + Separations and dividing by "Full Quarter" Employment. An unusually high turnover rate may indicate a recent expansion or contraction within a given industry. This is a four-quarter moving average.

Stable Jobs include employees who worked with the same firm throughout the quarter. **New Stable Jobs** are full quarter employees who were new hires with a firm in the previous quarter. They are a subset of all "stable jobs."

Separations are the estimated number of workers whose job with a given employer ended in the specified quarter. This is a four-quarter moving average.