

LABOR SECTOR STRATEGIES 2021

GO Virginia Region 9

Data driven strategies developed
by business, education, community
stakeholders, and economic developers
to drive sector growth in Central Virginia



Central Virginia Partnership for
Economic Development

1001 Research Park Blvd., Suite 301
Charlottesville, VA 22911

centralvirginia.org

ACKNOWLEDGEMENTS

Project Lead

Candace Spence, Economic Development Director, Central Virginia Partnership

Thanks to the following partners for contributions

- GO Virginia Region 9
- Spectrum Growth Solutions
- Chmura Economics
- Central Virginia Partnership's Economic Development Partners
- VCW-Piedmont Region
- Germanna Community College
- Laurel Ridge Community College (formerly Lord Fairfax Community College)
- Piedmont Virginia Community College
- Target Sector Employers

This project was funded in part by the GO Virginia Region 9 Council.

Icon images used for industries sourced from flaticon.com and designed by SRIP, freepik, and surang.

CONTENTS

ACKNOWLEDGEMENTS.....	1
EXECUTIVE SUMMARY	4
Sector Strategies Summary	5
BACKGROUND	7
METHODOLOGY.....	8
SECTOR-WIDE OPPORTUNITIES	10
TARGET SECTOR STRATEGIES	13
MANUFACTURING	13
Sector Definition and Regional Overview	13
Industry Employment Trends and Forecasts	14
Primary Employers – Manufacturing Sector	16
In-Demand Occupations	16
Industry Certifications and Education Profile	17
Training and Education Partner Opportunities.....	20
Industry Stakeholder Findings	21
Sector Strategy Recommendations	21
BUSINESS AND FINANCIAL SERVICES	24
Sector Definition and Regional Overview	24
Industry Employment Trends and Forecasts	24
Primary Employers – Business and Financial Services Sector	27
In-Demand Occupations	28
Industry Certifications and Education Profile	28
Training and Education Partner Opportunities.....	30
Industry Stakeholder Findings	31
Sector Strategy Recommendations	31
INFORMATION TECHNOLOGY	32
Sector Definition and Regional Overview	32
Industry Employment Trends and Forecasts	32
Primary Employers – Information Technology Sector	35
In-Demand Occupations	35
Industry Certifications and Education Profile	36
Training and Education Partner Opportunities.....	38
Industry Stakeholder Findings	39

Sector Strategy Recommendations	39
FOOD AND BEVERAGE MANUFACTURING	40
Sector Definition and Regional Overview	40
Industry Employment Trends and Forecasts	40
Primary Employers – Food and Beverage Manufacturing Sector	43
In-Demand Occupations	44
Industry Certifications and Education Profile	44
Training and Education Partner Opportunities.....	47
Industry Stakeholder Findings	47
Sector Strategy Recommendations	48
APPENDICES.....	49

EXECUTIVE SUMMARY

The US Department of Labor defines sector strategies as a partnership of multiple employers within a specific industry sector that brings together businesses, education, economic development, workforce systems, and community organizations to identify and collaboratively meet the workforce needs of that industry within a regional labor market.¹

The goal of this project was to recommend sector strategies for increasing the workforce capabilities and pipeline of GO Virginia Region 9's (Region 9) primary industries - Light Manufacturing ("Manufacturing"), Business and Financial Services, Information Technology/Communications ("Information Technology/IT"), and Food and Beverage Manufacturing. While the Growth and Diversification Plan for Region 9 also includes the Biomedical and Biotechnology industry, the Charlottesville Bio Hub (CvilleBioHub) is undertaking separate and focused activities for growing all aspects of this sector; thus, that industry is not a focus of this report.

This Labor Sector Strategies initiative was accomplished through business engagement, data analysis, and collaboration with area employers and training partners over a 15-month period. The process first entailed identification of common challenges and workforce concerns within each of the sectors. These issues have been summarized for each sector and are presented here as industry stakeholder findings. Wherever possible, solutions to address root causes have been proposed and are outlined in this report as strategies. While the level of effort, resources, and details for executing some of these strategies will vary, the region's long history of innovation and commitment to working together will be critical.

Each of the strategies offer recommended solutions that can be implemented with the continued collaboration of business stakeholders and other partners; however, the particulars on how these ideas are carried out is best left to workforce and training experts, with business leaders actively engaged. A summary of the strategies for each sector is outlined below. In addition, several overarching actions -- relevant to all sectors -- have been defined and will be key to a successful, sustainable implementation plan:

- ❖ Establish coalitions for each of the sectors. These coalitions, comprised of business, workforce, and education stakeholders, will collaborate to determine solutions and develop ideas to promote their industries. For example, CvilleBioHub is a private sector led nonprofit organization with a mission to strengthen the biotechnology industry. Through engagement, resourcing, and advocacy, it supports internship placement and job matching efforts.
- ❖ Market VCW-Piedmont Region (VCW-Piedmont) and community college workforce services more broadly across all sectors, to enhance awareness of business-focused programs offered by these groups. As community colleges and businesses build relationships, a natural outcome will be a

¹ US Dept of Labor, ETA Sector Strategies Technical Assistance Initiative, *Sector Strategy Implementation Framework (Working Version 2.1)*, retrieved August 3, 2021.

better understanding of credentialing requirements versus skills-based training -- a frequent request of area businesses.

- ❖ Create a career readiness program to help employees, both newly hired and seasoned workers, understand workplace courtesies and fundamental protocols typically associated with soft skills.

SECTOR STRATEGIES SUMMARY

LIGHT MANUFACTURING (MANUFACTURING)

- ❖ Initiate targeted employee recruitment efforts both inside and outside the region to expand the pool of applicants.
- ❖ Promote the manufacturing industry to K-12 students and their parents.
- ❖ Partner with area businesses to create and offer “career readiness” (soft skills) programs.
- ❖ Work with manufacturers and service providers to address transportation challenges.
- ❖ Establish and utilize a regional manufacturing coalition to identify childcare solutions for working parents.

BUSINESS AND FINANCIAL SERVICES

- ❖ Expand education and training opportunities around specific job skills, allowing employers to hire and retain workers demonstrating strong potential for growth but weak in distinct areas.
- ❖ Create mentorship programs using retired industry executives and senior staff to work with entry-level and other new employees in relationship-oriented positions.

INFORMATION TECHNOLOGY/COMMUNICATIONS (INFORMATION TECHNOLOGY/IT)

- ❖ Initiate targeted recruiting efforts towards desirable talent pools and sector-focused activities targeting IT professionals.
- ❖ Utilize education partners and business expertise to create “Customer Service 101” and career preparedness training programs.

FOOD AND BEVERAGE MANUFACTURING

- ❖ Utilize workforce development partners to create customer service workshops and leadership training programs for industry employees.
- ❖ Engage sector-focused resources in employment and recruitment activities.

As implementation plans and teams are defined over the coming months, the Region 9 Council is encouraged to take an active role in prioritizing these Labor Sector Strategies. This will help to identify

potential GO Virginia grant opportunities, funding timelines, and ultimate development of applications by partnering organizations.

BACKGROUND

This project was led by the Central Virginia Partnership for Economic Development (CVPED, also referred to as “the [Partnership](#)”) through a grant from the [GO Virginia \(Growth & Opportunity\) Region 9 Council](#) (Region 9). With a goal of enhancing the talent pipeline for employers in four of the region’s target sectors, the Partnership engaged Spectrum Growth Solutions (a Richmond-based Economic Development Consultant) to assist with data analysis and facilitate stakeholder engagement in order to formulate the industry-specific strategies presented in this report.

The Central Virginia Partnership for Economic Development, a regional public/private partnership formed in 1995 to help create new jobs and investment, released the *Comprehensive Target Markets Report* in April 2012. The report presents regional target industry groups for the overall Central Virginia Partnership region and also identifies target industry groups for each jurisdiction. The optimal targets were developed by analyzing industry groups currently in the region’s economy and identifying those with the strongest local support and best industry outlook for Central Virginia. These target markets were identified as Agribusiness (including Food Processing and Technology), Bioscience and Medical Devices, Business and Financial Services, Defense and Security, Information Technology, and Manufacturing.

More recently in 2017, GO Virginia Region 9 released the *Economic Growth and Diversification Plan (Growth Plan)* based on research and analysis by Camoin Associates. In this plan, five target markets were identified for future focus on economic development initiatives within Region 9. These target markets are Biomedical and Biotechnology, Financial and Business Services, Food and Beverage Manufacturing, Information Technology/Communications, and Light Manufacturing. A 2019 update to the *Growth Plan* reaffirmed these target markets as the region’s focus for economic development.

TARGET SECTOR FOOTPRINT

For the purposes of this Labor Sector Strategies report, the Partnership focused on the Virginia Career Works (VCW) - Piedmont Region, also called Local Workforce Development Area-6, which matches the GO Virginia Region 9 footprint. The Local Workforce Development Area incorporates two planning districts: Rappahannock-Rapidan Planning District (PD9) and Thomas Jefferson Planning District (PD10). This area includes the Counties of Albemarle, Culpeper, Fauquier, Fluvanna, Greene, Louisa, Madison, Nelson, Orange, and Rappahannock, along with the City of Charlottesville.



METHODOLOGY

For this project, input was solicited from a wide array of stakeholders: business leaders in each of the target sectors, community and education partners, regional workforce development teams, and local economic development professionals. Since the timing of this project coincided with the COVID-19 pandemic, unemployment data and situational challenges, such as working from home and reduced childcare options, influenced early business stakeholder discussions. That said, the focus was to create data-driven, business informed labor force strategies that could be implemented regardless of an economic disruption.

Company Engagement-Round 1: The Partnership worked with local economic developers in GO Virginia Region 9 to identify business contacts in the four sectors. During the course of the project, this business contact list was expanded and refined. Business roundtable discussions were held in the summer of 2020 with a focus on recent unemployment increases and hiring challenges. Problems identified were lack of transportation, failure to show for interviews, lack of communication, need for entry level workers, increased turnover, apathetic work ethic, companies poaching from similar industries, and the need for increased technological aptitude for higher level positions.

Labor Force Data Collection: To better understand the composition of the region's workforce, skills gaps and current trends, data used for this project was sourced from Chmura JobsEQ®, a proprietary tool which pulls data from the Quarterly Census of Employment and Wages report from the Bureau of Labor Statistics. Job postings data was also sourced from Chmura JobsEQ® RTI (Real Time Information), to identify employment opportunities and in-demand skills as presented through job boards, job aggregators, and individual companies.

Data was compiled and analyzed for time periods covering the early onset of the COVID-19 pandemic, as well as a more recent timeframe (4th Quarter 2020). The data consisted of employment by industry, average wages, industry employment increases and decreases, forecasted employment by industry, employment by occupation, occupation employment increases and decreases, forecasted employment by occupation, and location quotient (a measure of the relative size of the selected region's industry employment compared to the national average). The graphs shared in this report (see Appendix 2) were presented to community college and career and technical education (CTE) representatives for their feedback.

Sector-focused Surveys: The data was then shared with 168 regional businesses across the four sectors, as part of a survey instrument sent in May 2021. The data was included to validate it was an accurate reflection of what businesses were actually experiencing and, with little exception, the data matched real time scenarios. The survey responses were then used to shape the subsequent business roundtable presentations and discussions.

Company Engagement-Round 2: The Partnership reconvened roundtable discussions for business stakeholders in each of the sectors in June 2021. Many of the participants in the original roundtables

attended. Participants reacted to the survey results and provided valuable experiential feedback, further solidifying the emerging strategies and recommendations. In addition, roundtable attendees, survey recipients, and the VCW-Piedmont's Business and Education Outreach Committee were invited to provide input to the final strategies presented in this report.

SECTOR-WIDE OPPORTUNITIES

In addition to the sector-specific challenges and experiences presented in each of the roundtable groups, there were some common “themes” across all sectors that are worth noting:

1. The majority of participants think ongoing interaction between industry representatives would be helpful in enhancing sector relationships and furthering the efforts of this project. As such, creating a “coalition” around each sector -- comprised of stakeholders in business, education, workforce development, and other community partners -- can provide for a sustainable process to address businesses concerns and collaborate on solutions. One recommendation for doing this is for VCW-Piedmont or similar organization to coordinate regular coalition meetings (e.g., quarterly or twice a year for each sector) at different (sector-specific) companies around the region. This will allow each hosting company to “feature” their operations, facilitating the exchange of ideas or partnering opportunities between businesses.
2. Many employers in the region are unaware of the valuable resources and services available through VCW-Piedmont and the community colleges, yet many of those surveyed expressed a strong desire to work with them for workforce training and internship opportunities. There are three excellent community colleges in Region 9: Piedmont Virginia Community College (Charlottesville), Germanna Community College (Orange), and Laurel Ridge Community College (formerly Lord Fairfax) (Fauquier). Subsequently, workforce development organizations should aggressively and proactively engage in company outreach, in order to learn about critical business needs and showcase how they can help area employers. Since community colleges need to be a coalition team member (as noted above), this alliance could develop naturally in that platform; however, to ensure maximum participation and interaction, it is recommended that workforce partners visit employers at their facilities, rather than hosting them at VCW-Piedmont or college offices. In addition, the Communications and Business Engagement Specialist being added to the VCW-Piedmont staff can lead the efforts to expand relationships with regional businesses.
3. Deficiencies in career readiness, or soft skills development, have long been a challenge for employers. Feedback from businesses typically points to lack of communication skills, disregard for timeliness, difficulty following directions, and understanding the value of being a team player. Most recently, neglecting to show for scheduled interviews, not returning calls to schedule an interview, and failing to show up for the first day of work after being hired are common occurrences. In the workplace, employees are walking off the job, not notifying management if they're unable to make it in, or feeling entitled to paid time off soon after being hired. While some may argue soft skills learning begins at home, there are some basic, reasonable protocols that can be introduced in an educational environment or work site training. Ideally, these concepts would be incorporated into all academic and training curricula, especially at an early age. As part of the sector strategies, it is highly recommended that the implementation team work with businesses to create and offer “career readiness” programs to VCW clients,

credentialing program participants, and incumbent workers as a way of improving soft skills in the region's labor force. Securing commitments from employers to grant interviews to applicants completing the program (when vacant positions are available) could be an added incentive to those participating.

4. Community colleges should consider offering workshop-oriented classes to address specific skills, as opposed to just occupational/program-based curriculum. Since it's more efficient and affordable for a company to support an employee's participation in a two-day workshop than a semester-long class, these short-term training opportunities can prove quite useful in addressing worker deficiencies or strengthening existing skills. This may also help to overcome a common perception from some employers that community colleges are more focused on students completing degrees rather than workforce solutions.
5. As employers in Region 9 (and across the country) revisit their business and human capital strategies in the months ahead -- particularly how best to attract and retain workforce talent -- it may be necessary to embrace an emerging trend in workplace philosophy: "invest in the person, not the position."

SECTOR PARTNERSHIPS OR COALITIONS

An important "by-product" of the COVID-19 pandemic has been the way in which companies have modified their operations and managed their employees. Despite the hesitancy to initiate change in many organizations, the pandemic has enabled (and required) many employers to rethink their workplaces, workforces, and even the work itself. While primarily driven by necessity to keep businesses alive, most companies have learned that flexibility and adaptability to new processes and practices can actually be beneficial. More importantly, the challenges of the past 18 months have provided opportunities for collaboration and innovation across business and education platforms that, in turn, are changing industry culture. With many of the roundtable participants expressing a strong interest in coming together to address workforce issues, formalizing collaboration around industry concerns is a prime opportunity for the region.

Successful models for establishing sector-based partnerships have been implemented in several communities and should be considered for Region 9. Two notable examples are discussed below.

The Colorado Workforce Development Council commissioned development of the "Colorado Regional Sector Partnership Convener Training Workbook" (Appendix 4), which details how to establish a collaborative sector partnership (coalition). An excellent resource for Region 9, this guide describes the team make-up, solutions-based approaches, as well as step-by-step instructions for launching a sector-based coalition. As these coalitions start to organize, an important factor to a successful outcome is for non-employer collaborators to encourage employers to rethink existing processes. The "same old same old" attitudes and work habits no longer achieve desired results as they relate to workforce. Thus, a

paradigm shift needs to occur among company management and talent development leaders to think of people first, and what motivates them to remain with a company.

While originally focused on and developed to address organizational “crisis” resulting from the Pandemic, a Deloitte study reminds leaders that organizations must prepare for unexpected events, as well as different outcomes. Therefore, being adaptable to a variety of situations and redefining priorities and options -- particularly with respect to the workplace -- will be key to both the recovery and the ability to attract (and retain) top talent in the future. The “Workforce Strategies for a Post-COVID-19 Recovery” study suggests a five-part strategy: Reflect, Recommit, Re-engage, Rethink, and Reboot.²

ROAD TO ECONOMIC GROWTH & PROSPERITY



Deloitte, retrieved July 2021

² Deloitte, “Workforce strategies for a post-COVID-19 recovery”, retrieved July 26, 2021, <https://www2.deloitte.com/ch/en/pages/human-capital/articles/workforce-strategies-for-a-post-covid-19-recovery.html#>

TARGET SECTOR STRATEGIES



MANUFACTURING

SECTOR DEFINITION AND REGIONAL OVERVIEW

The Manufacturing³ sector comprises establishments engaged in the mechanical, physical, or chemical transformation of “raw materials” -- materials, substances, or components -- into new products. These establishments are often described as plants, factories, or mills and characteristically use power-driven machines and materials-handling equipment. However, establishments that transform materials or substances into new products by hand or in the worker’s home, as well as those engaged in selling to the general public products made on the same premises from which they are sold (e.g. furniture), are generally included. Manufacturing establishments may process materials or contract with other businesses to process their materials for them, but both are considered in the Manufacturing definition.

The subsectors in the Manufacturing sector generally reflect distinct production processes related to material inputs, production equipment, and employee skills.

The materials, substances, or components transformed by manufacturing establishments are raw materials that are products of agriculture, forestry, fishing, mining, or quarrying, as well as products of other manufacturing establishments. The materials used may be purchased directly from producers, obtained through customary trade channels, or secured without recourse to the market by transferring the product from one establishment to another, under the same ownership.

In the machinery area, where assembling is a key activity, parts and accessories for manufactured products are classified in the industry of the finished manufactured item when they are made for separate sale.

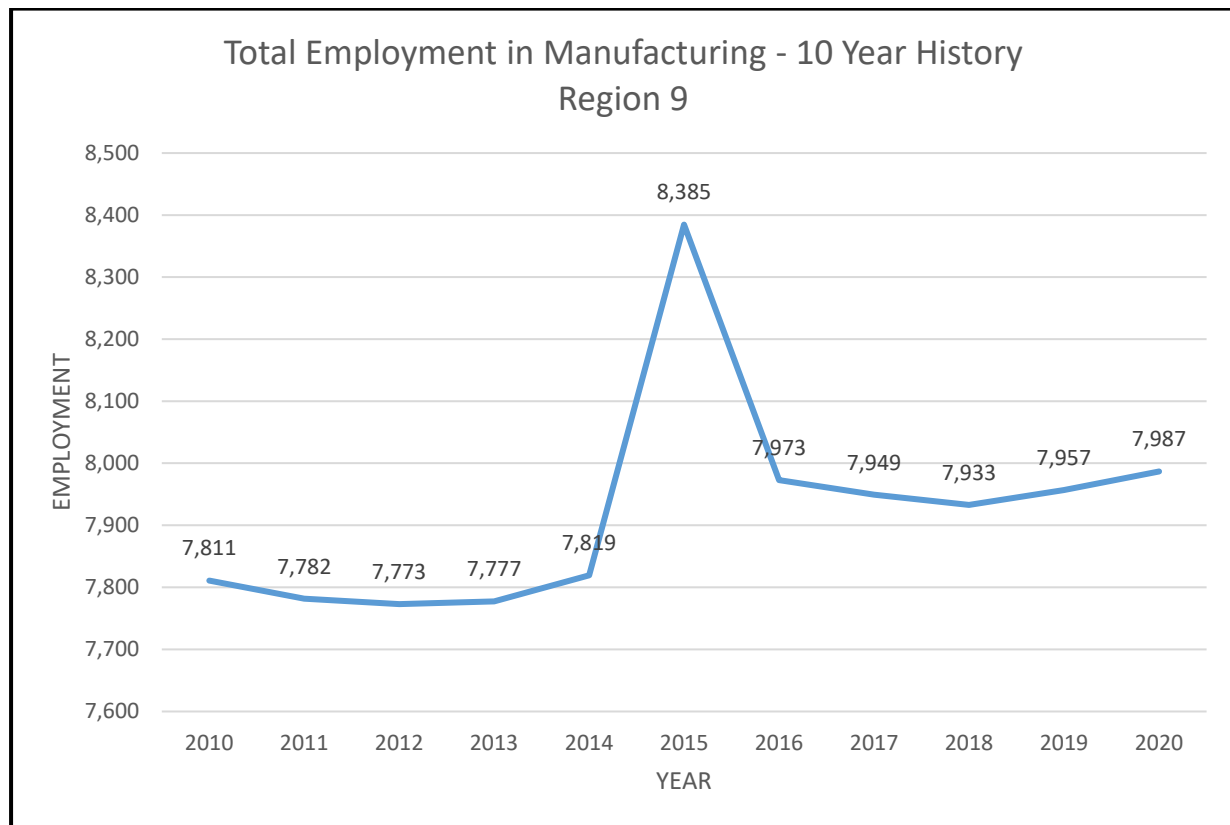
Since the region distinguishes between Light Manufacturing and Food and Beverage Manufacturing as separate target sectors, data relating to Food and Beverage subsectors have not been included in this section but, rather, are presented separately later in this document. Specific NAICS codes used in this report for this sector are listed in Appendix 1.

³ U.S Census Bureau, Last Revised December 19, 2018

INDUSTRY EMPLOYMENT TRENDS AND FORECASTS

TOTAL INDUSTRY EMPLOYMENT

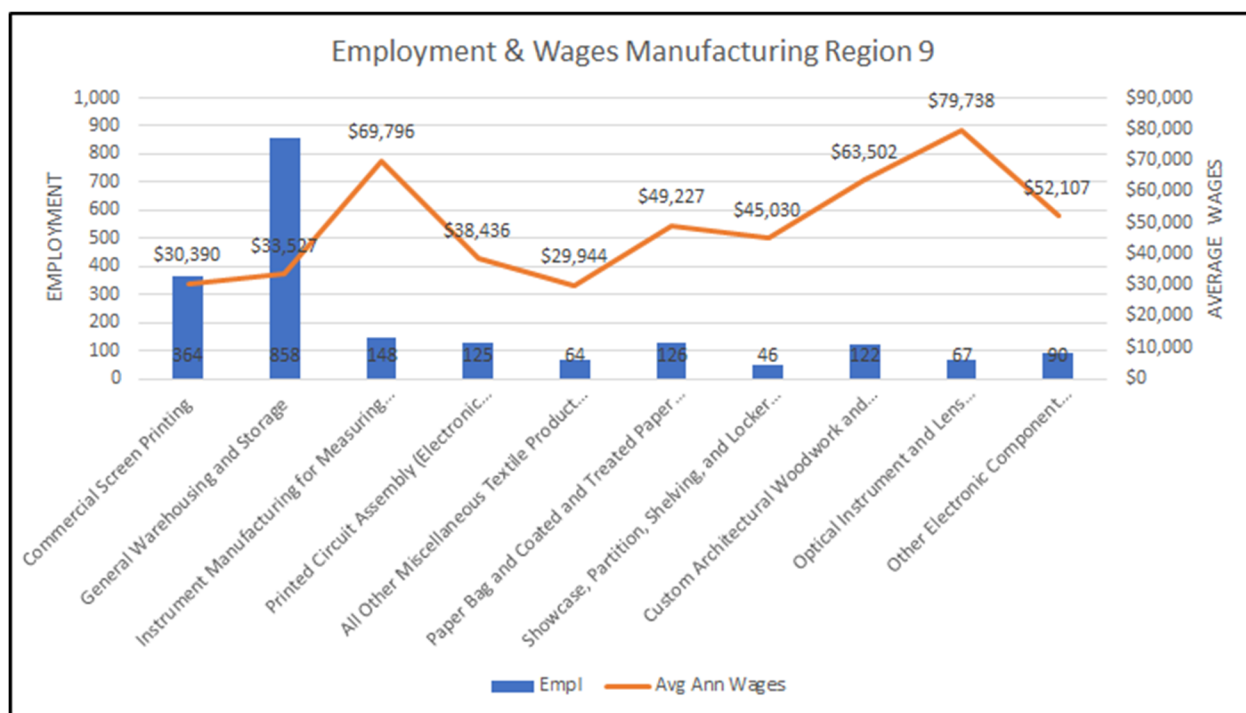
Nationally, the rate of job loss across all industries was steadily slowing until March 2020 with the economic disruptions associated with the COVID-19 pandemic. Over the past 10 years, the highest Manufacturing employment in Region 9 was in 2015 at 8,385. In spite of the pandemic, total employment numbers increased slightly from 2019 to 2020.



JobsEQ, retrieved May 2021, data as of 2020Q4

CURRENT INDUSTRY EMPLOYMENT AND WAGES

The region's top subsector in Manufacturing is General Warehousing & Storage (NAICS 493110), which employs 858 people. This subsector ranks among the lowest of the top 10 subsectors in average annual wages at \$33,527. A close second top-employing subsector in the region is Search, Detection, Navigation, Guidance, Aeronautical, and Nautical System and Instrument Manufacturing (NAICS 334511) at 502, with a much higher annual average wage of \$76,427. The highest annual wage in Manufacturing at \$151,731 applies to Electronic Computer Manufacturing (NAICS 334111) but doesn't rank in the top 10 in employment levels.



JobsEQ, retrieved May 2021, data as of 2020Q4

INDUSTRY EMPLOYMENT HISTORY

Over the past five years, Manufacturing employment in Region 9 has decreased by 453 jobs. The subsector with the largest decrease occurred in Motorcycle, Bicycle, and Parts Manufacturing (NAICS 336991) with a reduction of 150 jobs, followed by Other Industrial Machinery Manufacturing (NAICS 333249) with a loss of 149 jobs. The largest increase occurred in Commercial Screen Printing (NAICS 323113), which increased by 287 jobs, followed by General Warehousing and Storage (NAICS 493110) with an increase of 179 jobs (Appendix 2, Figure 1).

INDUSTRY EMPLOYMENT FORECAST

Over the next five years, General Warehousing and Storage (NAICS 493110) is projected to have the highest workforce demand in Region 9. The second highest in-demand job is Search, Detection, Navigation, Guidance, Aeronautical, and Nautical System and Instrument Manufacturing (NAICS 334511), followed by Unlaminated Plastics Film and Sheet (except Packaging) Manufacturing (NAICS 326113). Overall, Manufacturing jobs in Region 9 is forecasted to show an annual decrease of 0.1% (Appendix 2, Figure 2).

PRIMARY EMPLOYERS – MANUFACTURING SECTOR

Below are the region’s top Manufacturers by planning district and locality.

Rappahannock-Rapidan Planning District		Thomas Jefferson Planning District	
Culpeper	Bingham & Taylor Cabinetworks Group Continental Corporation USA Euro-Composites Corporation TE Connectivity	Albemarle	Custom Ink MicroAire Surgical Instruments Mikro Systems Inc. Northrop Grumman
Fauquier	Capitol Building Supply, Inc. CHEMetrics Inc. Gaithersburg Cabinetry Ross Industries Inc. Smith-Midland Corporation	Fluvanna	Carbon-Core Corporation Silk City Printing
Madison	Madison Wood Preservers	Greene	Luck Stone Corporation Performance Signs Williams Brothers' and Sons Inc.
Orange	Aerojet Rocketdyne American Woodmark Corporation Green Applications Homestead Building Systems Lohmann USA MPS RIDGID Zamma Corporation	Louisa	BIO-CAT BOSS Instruments Ltd. Inc. Busada Manufacturing Corporation Har-Tru Klockner Pentaplast Patriot Aluminum Products Tetra Pak Tri-Dim Filter Corporation
		Nelson	Alberene Soapstone Company California Sidecar / Escapade Trailer Inc.

IN-DEMAND OCCUPATIONS

OCCUPATION FORECAST

Critical demand occupations are considered to be those most needed over the next five years. Occupation demands are calculated differently than industry needs because occupations can stretch across various industries. For example, office assistants will be needed in almost all industry sectors; therefore, the number of office assistants will be higher when looking through the “occupation” lens than if looking through the “industry” lens. The following data is sourced from an industry and occupation mix, which is considered by many to be the most accurate representation of current and future job demand. All the data in this section reflect the top 10 in-demand occupations in Manufacturing.

The Manufacturing occupation forecasted to be the most in-demand is for Laborers and Freight, Stock, and Material Movers, Hand, followed by Team Assemblers, and Industrial Stockers and Order Fillers.

OCCUPATION HISTORY

Among Region 9's top ten critical demand occupations, there was an increase of 169 Laborers and Freight, Stock, and Material Movers, Hand over the past five years, followed by an increase of 102 in Stockers and Order Fillers. It is important to note that both occupations have the lowest average annual wages at \$28,300 and \$29,600, respectively. The third highest increase in these critical demand occupations was in Heavy and Tractor-Trailer Truck Drivers at 39 new jobs (Appendix 2, Figure 3). Interestingly, almost half of the critical demand jobs now being projected actually decreased over the past five years yet, overall, the critical demand Manufacturing occupations grew at an annual rate of 0.4% during this period.

INDUSTRY CERTIFICATIONS AND EDUCATION PROFILE

In-demand skills and certifications can help inform post-secondary development programs, as well as provide a comparison of the needs of regional employers. While they vary from one sector to another, aligning training and educational programs with employer requirements is essential to providing a robust applicant pool for any company coming to the region. The data below represents the most requested skills/abilities and certifications from Manufacturing employers according to job postings from the last two quarters of 2020.

HARD SKILLS

Hard Skills	
Skill Name	Total Ads
Ability to Lift 51-100 lbs.	283
Tractor-Trailer Trucks	281
Ability to Lift 21-30 lbs.	217
Ability to Lift 41-50 lbs.	196
Forklifts	189
Tankers	130
Pallet Jacks	74
Microsoft Office	68
Hand Trucks	62
Manufacturing	51

JobsEQ, retrieved January 2021

SOFT SKILLS

The top three requested soft skills in Manufacturing job postings were Customer Service, Communication (Verbal and written skills), and Organization.

Soft Skills	
Skill Name	Total Ads
Customer Service	586
Communication (Verbal and written skills)	583
Organization	307
Adaptability/Flexibility/Tolerance of Change and Uncertainty	304
Detail Oriented/Meticulous	282
Cooperative/Team Player	273
Self-Motivated/Ability to Work Independently/Self Leadership	226
Ability to Work in a Fast Paced Environment	188
Integrity/Honesty	160
Punctual	151

JobsEQ, retrieved January 2021

CERTIFICATIONS

Certification and credentialing requirements indicate opportunities for training to advance employees in their careers, leading to higher wages. Employees and job seekers who strive to earn certifications are more committed to their professions, have a competitive edge over others without certifications, and are more marketable for higher paying jobs. Nevertheless, with the significant demand for good employees across many business sectors, employers are more focused on tangible experience and learning potential over industry credentials. The top three desired certifications in Manufacturing were Class-A Commercial Driver's License (CDL-A), Commercial Driver's License (CDL), and HAZMAT for Region 9.

Certifications		
Certificate Name	Total Ads	
Class A Commercial Driver's License (CDL-A)	389	
Commercial Driver's License (CDL)	69	
HAZMAT	46	
Driver's License	28	
Forklift Certified	20	
Transportation Worker Identification Credential (TWIC)	15	
Class B Commercial Driver's License (CDL-B)	9	
Secret Clearance	3	
Advanced Cardiac Life Support Certification (ACLS)	2	
Basic Life Support (BLS)	2	

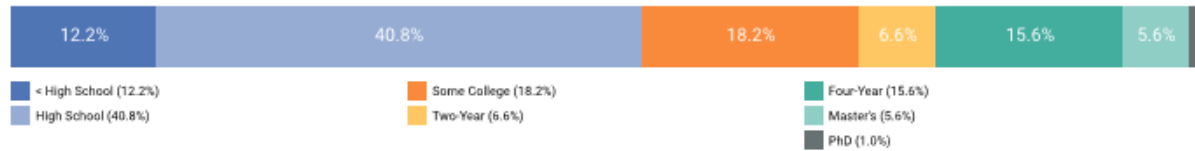
JobsEQ, Retrieved January 2021

EDUCATION PROFILE

While some critical demand occupations in Manufacturing require certifications, others require a bachelor's degree and most occupations require at least a high school diploma or equivalent. The below graph shows the current education mix in this industry for Region 9. A little less than half of the employees in this occupation have at least some college or greater. The chart shows the education requirements for each of the top 10 critical demand jobs in Manufacturing.

Education Profile

Educational Attainment



Occupation	Typical Entry-Level Education	Previous Work Experience	Typical On-the-Job Training
Stockers and Order Fillers	High school diploma or equivalent	None	Short-term on-the-job training
General and Operations Managers	Bachelor's degree	5 years or more	None
Laborers and Freight, Stock, and Material Movers, Hand	None	None	Short-term on-the-job training
Construction Laborers	None	None	Short-term on-the-job training
Maintenance and Repair Workers, General	High school diploma or equivalent	None	Moderate-term on-the-job training
Heavy and Tractor-Trailer Truck Drivers	Postsecondary non-degree award	None	Short-term on-the-job training
Carpenters	High school diploma or equivalent	None	Apprenticeship
Project Management Specialists and Business Operations Specialists, All Other	Bachelor's degree	None	None
First-Line Supervisors of Construction Trades and Extraction Workers	High school diploma or equivalent	5 years or more	None
Light Truck Drivers	High school diploma or equivalent	None	Short-term on-the-job training

JobsEQ, retrieved February 2021

TRAINING AND EDUCATION PARTNER OPPORTUNITIES

This workforce region benefits from three strong community colleges with workforce development departments: Germanna Community College (GCC), Laurel Ridge Community College (formerly Lord Fairfax Community College (LRCC), and Piedmont Virginia Community College (PVCC). Many programs offered at one school are shared with other community colleges, allowing most of the region to benefit from a variety of programs. For example, a commercial driver's license (CDL) is a state requirement for commercial truck drivers; thus, the Virginia Community College System has implemented a shared training program administered by all of the state's community colleges.

Additionally, public high schools offer CTE programs that empower students to achieve workplace readiness in certain career tracks by the time they graduate from high school. Often these CTE programs "bridge" to community college programs promoting a more advanced path to technical instruction.

PVCC has begun to infuse a module that supports basic learning skills (an example of soft skills training) into healthcare focused classes - Learning Support Module - and plans to expand to other programs. During the first week of the program, students are offered guidance on how to learn, how to study, where to find online resources, how to dress, and communication skills. GCC incorporates soft skills training into all of its programs. Soft skills are best taught “hands-on”, which has been a challenge during the pandemic.

PVCC is also the host of the Network2Work (NW2W) program. This grassroots effort finds ways to eliminate any barrier to employment for the chronically unemployed. Candidates referred to the program are offered training, assistance with childcare, transportation, groceries, or housing. After completing the training, NW2W job seekers are guaranteed an interview with participating businesses. To date, 85% of job seekers completing the NW2W program have found jobs.

INDUSTRY STAKEHOLDER FINDINGS

A robust discussion with area manufacturers identified three primary areas of concern in recruiting and retaining workers to effectively run their operations:

- 1) The applicant pool for manufacturing jobs is very limited, particularly for smaller companies.
- 2) Many employees lack basic soft skills (i.e., communication, timeliness, commitment).
- 3) Childcare and transportation issues are primary barriers to both hiring and retaining workers.

SECTOR STRATEGY RECOMMENDATIONS

- 1) *Initiate targeted employee recruitment efforts both inside and outside the region -- particularly in those areas with similar industry targets -- to expand the pool of applicants.*
 - Coordinate a jointly funded, external “media campaign” between CVPED, VCW-Piedmont, and area manufacturers highlighting leading companies, career opportunities, and livability/quality of life assets in the region;
 - Encourage local employers to consider creative hiring incentives geared towards entry-level positions (e.g., housing/rent subsidies);
 - Facilitate the development of formalized career pathways, internships, apprenticeships, and other on-the-job training opportunities between area employers, VCW, and community college training partners.
- 2) *Actively promote the manufacturing industry to K-12 students and their parents.*
 - Work with area manufacturers to create/sponsor career day “field trips” for middle school-aged children;
 - Engage local companies in hosting “open houses” for area students and parents;
 - Invite key industry stakeholders to serve on CTE boards and advisory committees;

- Offer industry-produced videos (e.g., National Association of Manufacturing) to school systems and workforce partners involved in outreach efforts;
 - Coordinate with workforce partners and area manufacturers to participate in community events (e.g., county fairs), business expos, and family-focused activities to highlight manufacturing careers;
 - Enlist local manufacturers in developing and sponsoring summer STEM programs for both students and teachers (e.g., teachers participate as “paid interns” at area companies to learn about the operation and advocate for career opportunities in manufacturing environments).
- 3) *Partner with area businesses to create and offer “career readiness” programs to VCW-Piedmont clients, credentialing program participants, and incumbent workers as a way of improving soft skills in the region’s labor force.*
- Encourage area manufacturers to guarantee interviews to applicants completing the program;
 - Work with local high schools and community colleges to incorporate basic “career readiness” elements into all academic curricula.
- 4) *Work with manufacturers and service providers in the region to develop solutions for addressing transportation challenges for current and prospective employees.*
- Explore flexible shift schedules among manufacturers in each sub-region, particularly for non-serial manufacturing positions (e.g., coordinate/stagger arrival and departure times with shift start/stop times);
 - Research public transportation and van service options to explore customized, shared routes within a given area;
 - Educate businesses on the advantages of employing family members and neighbors to facilitate carpooling opportunities and identify partners for developing outreach efforts;
 - Encourage businesses to create incentive programs to cost share a vehicle purchase with employees;
 - Connect employees with the “Driving Lives Forward” initiative and encourage area employers to contribute financially to the program;
 - Pursue opportunities to utilize school buses and drivers “off hours” to provide transportation for working parents.
- 5) *Establish and utilize a regional manufacturing coalition to identify childcare solutions for working parents.*
- Explore state grant programs to help employers offset or share in childcare costs for employees through benefits packages;

- Engage assistance from Genedge to help employers redefine serial manufacturing processes that can accommodate shorter employee workdays (i.e., schedule aligns with school day hours) or job-sharing;
- Undertake discussions with area childcare providers to deliver services at a “special rate” that is supplemented by nearby manufacturing companies for their employees;
- Explore partnerships and funding options with local school systems to provide “onsite” childcare during pre- and post-school hours;
- Pursue partnerships with area non-profit organizations (e.g., YMCA, Boys & Girls Clubs) to expand childcare assistance programs at nearby facilities.



BUSINESS AND FINANCIAL SERVICES

SECTOR DEFINITION AND REGIONAL OVERVIEW

According to the U.S. Census North American Industry Classification System (NAICS), the Finance and Insurance sector⁴ comprises establishments primarily engaged in financial transactions (transactions involving the creation, liquidation, or change in ownership of financial assets) and/or in facilitating financial transactions. Three principal types of activities are identified:

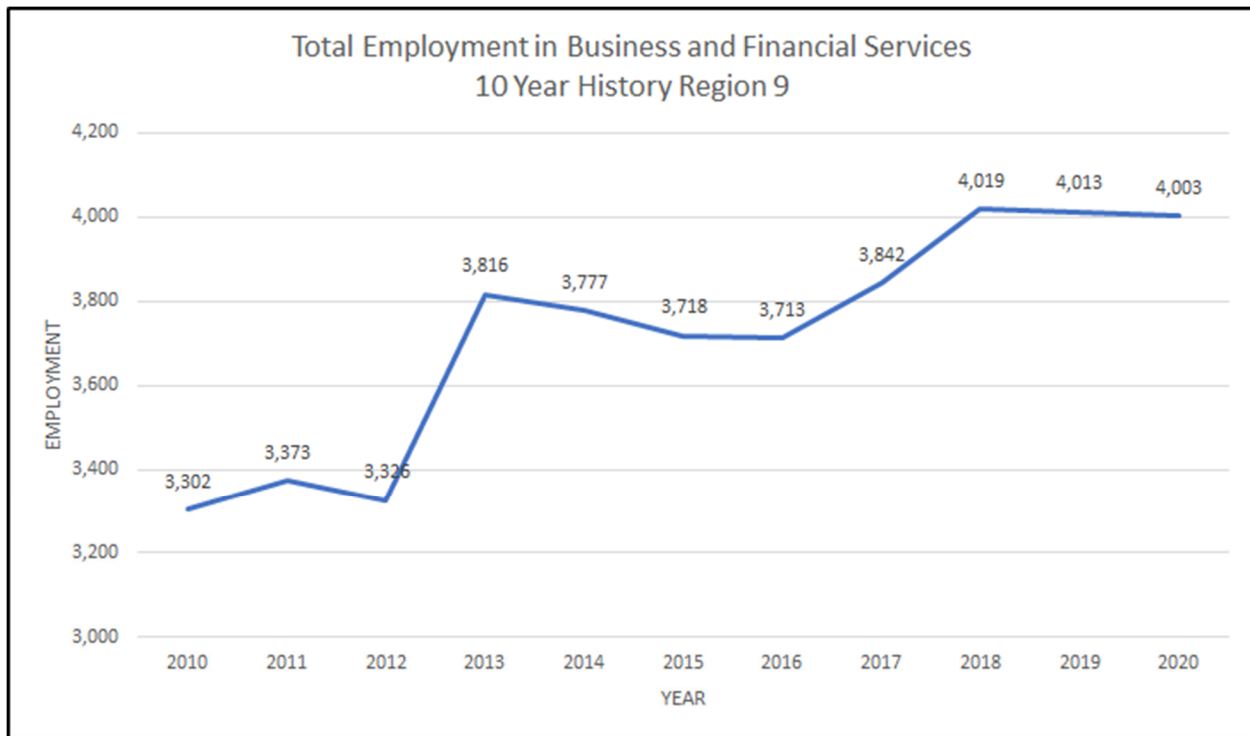
- ❖ Raising funds by taking deposits and/or issuing securities and, in the process, incurring liabilities. Establishments engaged in this activity use raised funds to acquire financial assets by making loans and/or purchasing securities. Putting themselves at risk, they channel funds from lenders to borrowers and transform or repackage the funds with respect to maturity, scale, and risk. This activity is known as financial intermediation.
- ❖ Pooling of risk by underwriting insurance and annuities. Establishments engaged in this activity collect fees, insurance premiums, or annuity considerations; build up reserves; invest those reserves; and make contractual payments. Fees are based on the expected incidence of the insured risk and the expected return on investment.
- ❖ Providing specialized services facilitating or supporting financial intermediation, insurance, and employee benefit programs.

INDUSTRY EMPLOYMENT TRENDS AND FORECASTS

TOTAL INDUSTRY EMPLOYMENT

Over the past 10 years, the highest level of employment in the Business and Financial Services sector in Region 9 occurred in 2018 at 4,019. The lowest employment during that time frame was in 2010 (following the Great Recession) at 3,302.

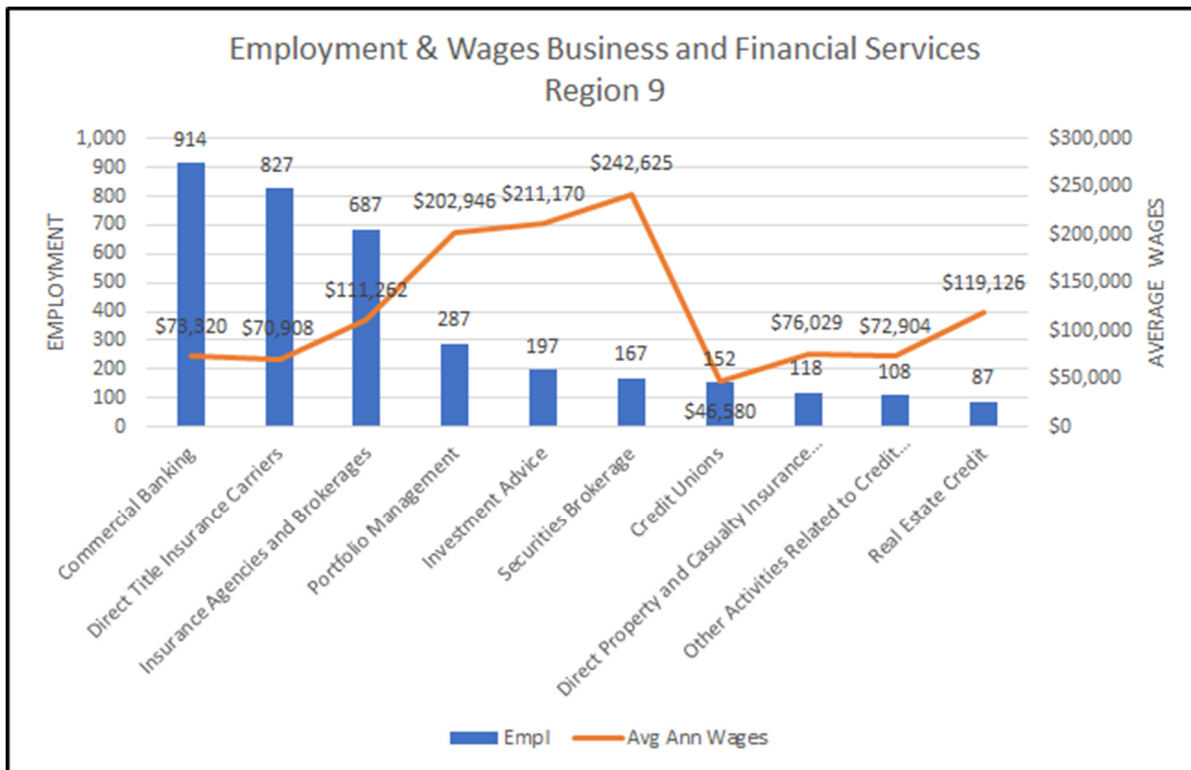
⁴ NAICS Association, *NAICS Code Description – 52-Finance and Insurance*, 2018, retrieved from <https://www.naics.com/naics-code-description/?code=52>



JobsEQ, retrieved May 2021

CURRENT INDUSTRY EMPLOYMENT AND WAGES

The top subsector in Business and Financial Services is Commercial Banking (NAICS 522110), which employs 914 people in Region 9 at an average annual wage of \$73,320. Direct Title Insurance Carriers (NAICS 524127) and Insurance Agencies and Brokerages (NAICS 524210) are the next highest subsectors in employment at 827 and 687, respectively. The highest average annual wage in Business and Financial Services at \$264,220 applies to Miscellaneous Financial Investment Activities (NAICS 523999).



JobsEQ, retrieved May 2021, data as of 2020Q4

INDUSTRY EMPLOYMENT HISTORY

Over the past five years, Business and Financial Services employment in Region 9 has increased by 275 jobs. The subsector with the largest increase occurred in Direct Title Insurance Carriers (NAICS 524217) with an increase of 270 jobs. Other Activities Related to Credit Intermediation (NAICS 522390) and Credit Unions (NAICS 522130) followed with slight employment increases of 47 and 36, respectively. The subsector with the largest decrease in employment was Commercial Banking (NAICS 522110) with a reduction of 110 employees (Appendix 2, Figure 5).

INDUSTRY EMPLOYMENT FORECAST

Ironically, Commercial Banking (NAICS 522110) is projected to have the largest increase in this sector in Region 9 over the next five years. The second highest employment projection is in Insurance Agencies and Brokerages (NAICS 524210), followed by Direct Title Insurance Carriers (NAICS 524127) (Appendix 2, Figure 6).

PRIMARY EMPLOYERS – BUSINESS AND FINANCIAL SERVICES SECTOR

Below are the region's top Business and Financial Services companies by planning district and locality.

Top Business/Financial Services Companies

Rappahannock-Rapidan Planning District

Culpeper	Lendmark Financial Services LLC
	Mid-Atlantic Securities Inc.
	SWIFT Inc.
Madison	Lohr & Company

Thomas Jefferson Planning District

Albemarle	Atlantic Union Bank
	Blue Ridge Bank
	Carter Bank & Trust
	First Citizens Bank
	Fulton Bank
	Northwestern Mutual
	Pioneer Bank
	United Bank
Charlottesville	Bank of America
	CFA Institute
	Davenport & Company
	Hantzmon Wiebel
	S&P Global Market Intelligence
	Truist Bank
	UVA Community Credit Union
	Virginia National Bank
	Wells Fargo

IN-DEMAND OCCUPATIONS

OCCUPATION FORECAST

As explained previously (in the Manufacturing section), critical demand occupations are considered to be the most needed occupations over the next 10 years, particularly those that may be needed in multiple business sectors. Based on data sourced from an industry and occupation mix, Insurance Sales Agents and Customer Service Representatives will be the most in-demand positions in this sector. The top 10 occupations in Business and Financial Services projected to increase in Region 9 are shown in Appendix 2, Figure 7.

OCCUPATION HISTORY

In Region 9, there was an increase of 315 Customer Service Representatives over the past five years, with an average wage of \$35,200 -- the second lowest in mean annual wages. The next highest growth in Business and Financial Services was for Financial Managers (55 jobs) and First-Line Supervisors of Office and Administrative Support Workers (40 jobs), with average wages of \$145,800 and \$55,700, respectively (Appendix 2, Figure 8). Overall, these Business and Financial Services occupations grew at an annual rate of 1.6%.

INDUSTRY CERTIFICATIONS AND EDUCATION PROFILE

The data below represents the most-requested skills/abilities and certifications from Business and Financial Services employers according to job postings from the last two quarters of 2020.

Hard Skills		
Skill Name	Total Ads	
Microsoft Office	154	<div></div>
Microsoft Excel	125	<div></div>
Cash Handling	98	<div></div>
Sales	84	<div></div>
Finance	64	<div></div>
Ability to Lift 41-50 lbs.	63	<div></div>
Microsoft Word	62	<div></div>
Microsoft Outlook	44	<div></div>
Banking	43	<div></div>
Keyboarding/Typing	43	<div></div>

JobsEQ, retrieved February 2021

SOFT SKILLS

Soft Skills		
Skill Name	Total Ads	
Communication (Verbal and written skills)	644	
Customer Service	585	
Cooperative/Team Player	326	
Self-Motivated/Ability to Work Independently/Self Leadership	320	
Organization	222	
Adaptability/Flexibility/Tolerance of Change and Uncertainty	219	
Detail Oriented/Meticulous	217	
Problem Solving	193	
Ability to Work in a Fast Paced Environment	182	
Listening	174	

JobsEQ, retrieved February 2021

CERTIFICATIONS

In Region 9, the top three desired certifications in Business and Financial Services are Certified Public Accountant (CPA), Driver's License, and Certification in Cardiopulmonary Resuscitation (CPR).

Certifications		
Certificate Name	Total Ads	
Certified Public Accountant (CPA)	20	
Driver's License	17	
Certification in Cardiopulmonary Resuscitation (CPR)	5	
Series 65	4	
Certification in Health Insurance (Licensed Health Insurance Agent)	3	
Certified Management Accountant (CMA)	3	
First Aid Certification	3	
Secret Clearance	3	
Series 63	3	
Accredited Adviser in Insurance (AAI)	2	

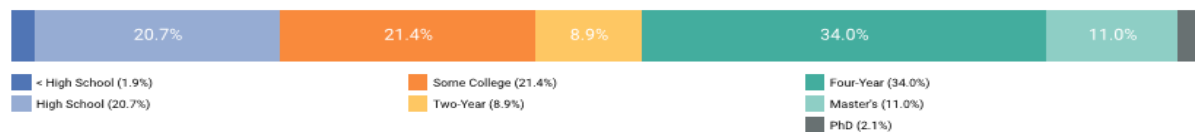
JobsEQ, retrieved February 2021

EDUCATION PROFILE

The graph below indicates that the majority of those employed in Business and Financial Services have at least some college or more. The chart reflects educational requirements for this industry's critical demand occupations.

Education Profile

Educational Attainment



Occupation	Typical Entry-Level Education	Previous Work Experience	Typical On-the-Job Training
Customer Service Representatives	High school diploma or equivalent	None	Short-term on-the-job training
First-Line Supervisors of Office and Administrative Support Workers	High school diploma or equivalent	Less than 5 years	None
Financial Managers	Bachelor's degree	5 years or more	None
Insurance Sales Agents	High school diploma or equivalent	None	Moderate-term on-the-job training
Securities, Commodities, and Financial Services Sales Agents	Bachelor's degree	None	Moderate-term on-the-job training
Tellers	High school diploma or equivalent	None	Short-term on-the-job training
Personal Financial Advisors	Bachelor's degree	None	Long-term on-the-job training
Insurance Claims and Policy Processing Clerks	High school diploma or equivalent	None	Moderate-term on-the-job training
Loan Officers	Bachelor's degree	None	Moderate-term on-the-job training
Loan Interviewers and Clerks	High school diploma or equivalent	None	Short-term on-the-job training

JobsEQ, retrieved February 2021

TRAINING AND EDUCATION PARTNER OPPORTUNITIES

Feedback from the three community colleges, particularly as it relates to credentialing, indicated a need to establish an industry standard and the importance of employers aligning recruitment notices directly to the skill set(s) needed for the position. Job postings that require “some college” are difficult to interpret; thus, workforce educators suggest defining explicit qualifications and skills in job announcements (e.g., CPA required, QuickBooks required, etc.).

Workforce educators also indicated that businesses in this sector infrequently reach out to community colleges for training assistance. This is likely because employees wanting to advance in Business and

Financial Services typically complete a four-year degree program (or even an advanced degree). Regardless, companies in this sector noted their employees could still benefit from skills-based training where a “refresher” is needed, or when an otherwise good employee needs to hone a specific skill.

INDUSTRY STAKEHOLDER FINDINGS

Survey and roundtable participants offered candid and critical feedback to summarize the two primary challenges in their recruitment efforts:

- 1) Finding candidates with an aptitude for interpreting financial statements is very difficult.
- 2) Relationship management skills are key in the Business and Financial Services industry but are often lacking in younger employees.

SECTOR STRATEGY RECOMMENDATIONS

- 1) *Expand education and training opportunities around specific job skills, allowing employers to hire and retain workers demonstrating strong potential for growth but weak in distinct areas.*
 - Facilitate discussions with local financial institutions and community colleges to create a banking/finance curriculum that addresses deficient skill sets in, otherwise, good employees and job candidates;
 - Work with UVA and community colleges to create “real life,” problem-based learning projects around risk assessment and financial analysis for business students (similar to Virginia Tech’s Credit Corp program);
 - Encourage local employers to invest in company-based professional development and employee training, particularly through the American Bankers’ Association extensive portfolio of programs;
 - Initiate discussions between UVA and local financial services companies to explore jointly funded development and delivery of on-site, customized training by University faculty focused on critical skills.
- 2) *Create mentorship programs using retired industry executives and senior staff to work with entry-level hires and other new employees in relationship-oriented positions.*
 - Engage VCW-Piedmont and workforce development partners to design mentorships and shadowing opportunities for younger staff to learn from seasoned and experienced industry veterans;
 - Explore opportunities to incorporate communication, conflict resolution, and relationship management training into Career Readiness programs offered through VCW-Piedmont and other workforce partners.



INFORMATION TECHNOLOGY

SECTOR DEFINITION AND REGIONAL OVERVIEW

The U.S. Census North American Industry Classification System (NAICS) does not include an industry with the title Information Technology. For this reason, a combination of the below subsectors was used for data collection⁵.

- Computer Systems Design and Related Services (NAICS 5415)
- Telecommunications (NAICS 517)
- Data Processing, Hosting, and Related Services (NAICS 518)
- Software Publishers (NAICS 5112)
- Internet Publishing and Broadcasting and Web Search Portals (NAICS 51913)

This industry comprises establishments primarily engaged in providing expertise in the field of information technologies through one or more of the following activities: (1) writing, modifying, testing, and supporting software to meet the needs of a particular customer; (2) planning and designing computer systems that integrate computer hardware, software, and communication technologies; (3) on-site management and operation of clients' computer systems and/or data processing facilities; and (4) other professional and technical computer-related advice and services.

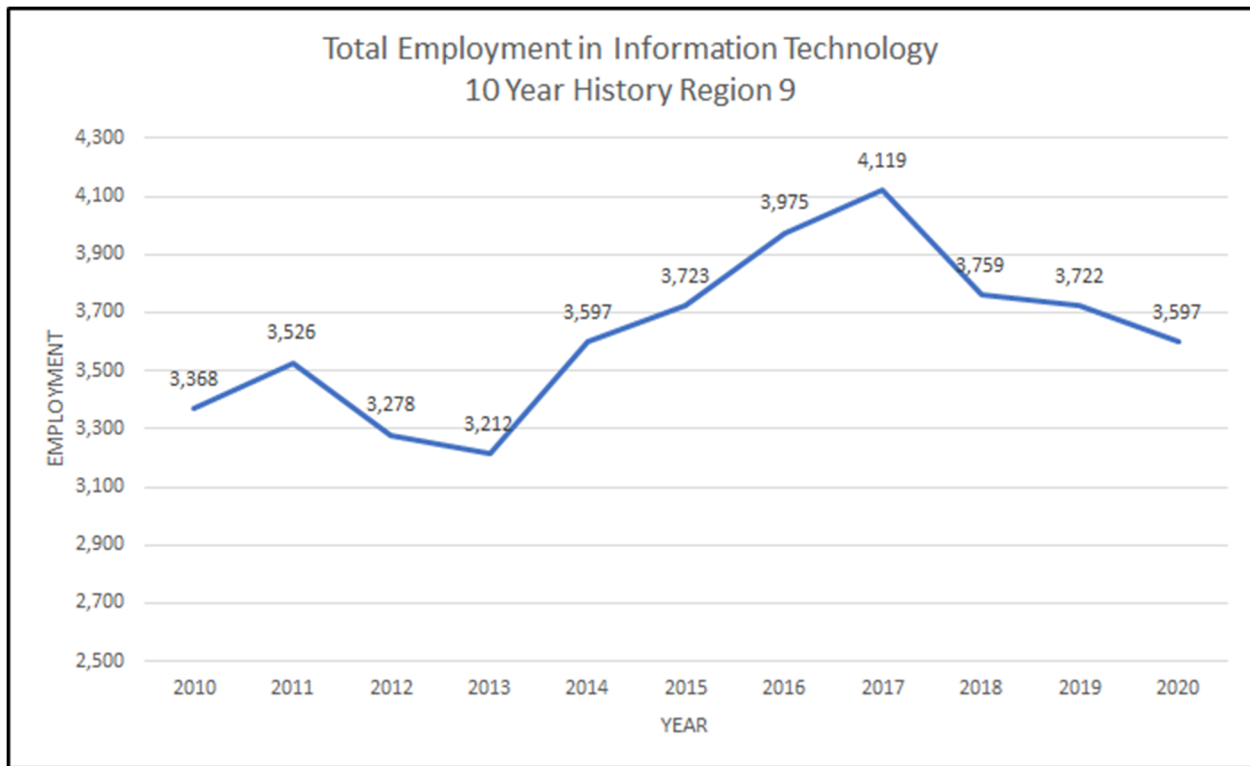
Industries in the Telecommunications (NAICS 517) subsector group establishments that provide telecommunications and services related to that activity (e.g., telephony, including Voice over Internet Protocol (VoIP); cable and satellite television distribution services; Internet access; telecommunications reselling services). The Telecommunications subsector is primarily engaged in operating, and/or providing access to facilities for the transmission of voice, data, text, sound, and video. Transmission facilities may be based on a single technology or a combination of technologies.

INDUSTRY EMPLOYMENT TRENDS AND FORECASTS

TOTAL INDUSTRY EMPLOYMENT

Over the past 10 years, the highest employment in Information Technology in Region 9 was in 2017 at 4,119. The lowest employment during that time frame occurred in 2013 at 3,212.

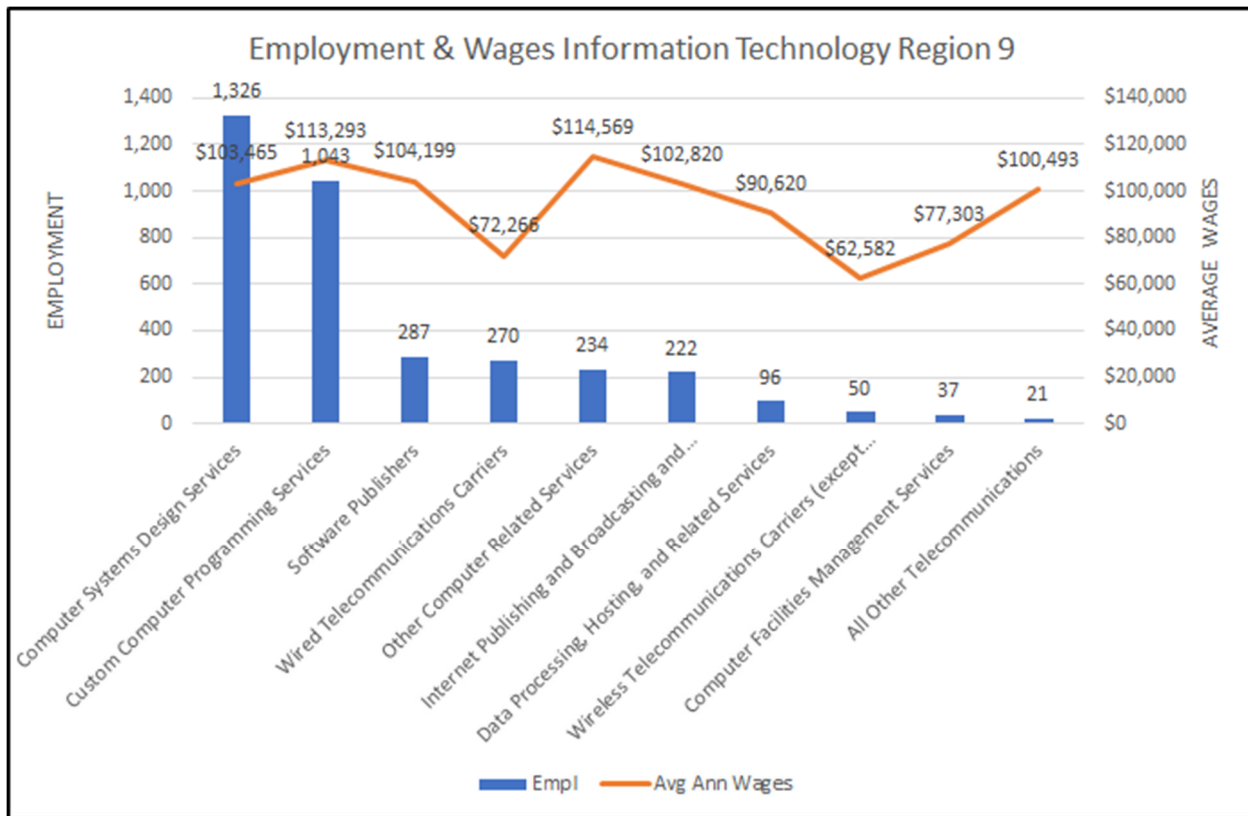
⁵ U.S Census Bureau, Last Revised December 19, 2018



JobsEQ, retrieved May 2021, data as of 2020Q4

CURRENT INDUSTRY EMPLOYMENT AND WAGES

The Information Technology subsector employing the most people in Region 9 is Computer Systems Design Services (NAICS 541512) with 1,326 people. This subsector ranks fourth among the highest of the top 10 subsectors in average annual wages at \$103,465. A close second leading employment subsector in the region is Custom Computer Programming Services (NAICS 541511) at 1,043, with a slightly higher annual average wage of \$113,293. The highest annual wage in Information Technology at \$114,569 applies to Other Computer Related Services (NAICS 541519), which ranks as the fifth highest in employment in Information Technology for this region.



JobsEQ, retrieved May 2021, data as of 2020Q4

INDUSTRY EMPLOYMENT HISTORY

Over the past five years, Information Technology employment in Region 9 has decreased by 124 jobs. The subsector with the largest decrease occurred in Data Processing, Hosting, and Related Services (NAICS 518210) with a loss of 235 jobs, followed by Wired Telecommunications Carriers (NAICS 517311), losing 131 jobs. The largest increase occurred in Internet Publishing and Broadcasting and Web Search Portals (NAICS 519130) with an increase of 151 jobs. Computer Systems Design Services (NAICS 541512) and Software Publishers (NAICS 511210) followed with employment increases of 126 and 60, respectively (Appendix 2, Figure 9).

INDUSTRY EMPLOYMENT FORECAST

During the next 10 years, Computer Systems Design Services (NAICS 541512) is projected to increase further to a total demand of 1,439 jobs in Region 9. The second highest in-demand job is in the Custom Computer Programming Services (NAICS 541511) subsector, followed by Software Publishers (NAICS 511210), with a total demand of 1,079 and 321, respectively (Appendix 2, Figure 10). Overall, Information Technology jobs are forecasted to show an annual increase of 1.7%.

PRIMARY EMPLOYERS – INFORMATION TECHNOLOGY SECTOR

Below are the region’s top Information Technology companies by planning district and locality.

Top Information Technology Companies

Rappahannock-Rapidan Planning District

Culpeper	Equinix, Inc. SWIFT Inc.
----------	-----------------------------

Thomas Jefferson Planning District

Albemarle	CACI Inc. Castle Hill Gaming CoConstruct Frontline Test Equipment Inc. Musictoday Perrone Robotics PunchOut2Go WillowTree	Charlottesville	Apex Clean Energy Astraea, Inc. Elder Research Inova Solutions SHINE Systems Silverchair Tech Dynamism Ting Inc. VividCortex, Inc.
Fluvanna	Spire Collective Firefly Fiber	Greene	Insurance Institute for Highway Safety - Highway Loss Data Institute Parasense
Nelson	Firefly Fiber		

IN-DEMAND OCCUPATIONS

OCCUPATION FORECAST

The following data is sourced from an industry and occupation mix, which is considered by many to be the most accurate representation of current and future job demand.

The Information Technology occupation forecasted to be the most in-demand over the next five years is Software Developers and Software Quality Assurance Analysts and Testers (408 jobs), followed by Sales Representatives of Services, Except Advertising, Insurance, Financial Services, and Travel (106 jobs), and Computer User Support Specialists (98 jobs) (Appendix 2, Figure 11).

OCCUPATION HISTORY

In Region 9, there was an increase of 315 Customer Service Representatives over the past five years, with an average wage of \$35,200 -- the lowest of the top ten mean annual wages. The next highest growth in Information Technology occupations was for Software Developers and Software Quality Assurance Analysts and Testers (238 jobs) and Sales Representatives of Services, Except Advertising, Insurance, Financial Services, and Travel (196 jobs), with average wages of \$107,300 and \$61,600, respectively (Appendix 2, Figure 12). Overall, these IT occupations grew at an annual rate of 2.5% over the past five years.

INDUSTRY CERTIFICATIONS AND EDUCATION PROFILE

The data below represents the most-requested skills/abilities and certifications from employers in the Information Technology sector according to job postings during the past two quarters of 2020.

HARD SKILLS

Online job postings show that the most sought-after hard skill for Information Technology was Agile, followed by Linux and Computer Programming/Coding. The below figure shows the top 10 hard skills most requested in online job postings for Region 9.

Hard Skills	
Skill Name	Total Ads
Agile	365
Linux	343
Computer Programming/Coding	298
Microsoft Office	289
Structured Query Language (SQL)	276
Microsoft Excel	267
Amazon Web Services (AWS)	260
Python	241
Java	221
Computer Networking	192

JobsEQ, retrieved January 2021

SOFT SKILLS

Over the past six months, the top three requested soft skills for critical demand Information Technology occupations were Communication (Verbal and written skills), Cooperative/Team Player, and Self-Motivated/Ability to Work Independently/Self-Leadership.

Soft Skills		
Skill Name	Total Ads	
Communication (Verbal and written skills)	1,522	
Cooperative/Team Player	883	
Self-Motivated/Ability to Work Independently/Self Leadership	711	
Customer Service	693	
Problem Solving	380	
Adaptability/Flexibility/Tolerance of Change and Uncertainty	349	
Detail Oriented/Meticulous	338	
Interpersonal Relationships/Maintain Relationships	301	
Organization	285	
Ability to Work in a Fast Paced Environment	277	

JobsEQ, retrieved January 2021

CERTIFICATIONS

The Information Technology sector is one where industry credentials and certifications are most meaningful -- particularly in positions where employees deal with sensitive information. The top three desired certifications in Region 9 for Information Technology positions were Secret Clearance, CompTIA Security+ CE (Continuing Education) Certification, and Certified Information Systems Security Professional (CISSP).

Certifications		
Certificate Name	Total Ads	
Secret Clearance	156	
CompTIA Security+ CE (Continuing Education) Certification	92	
Certified Information Systems Security Professional (CISSP)	74	
Cisco Certified Network Associate (CCNA)	60	
Driver's License	32	
Project Management Professional (PMP)	31	
Systems Security Certified Practitioner (SSCP)	25	
CompTIA Advanced Security Practitioner (CASP)	24	
Cisco Certified Network Professional (CCNP)	19	
Certified Ethical Hacker (C/EH)	17	

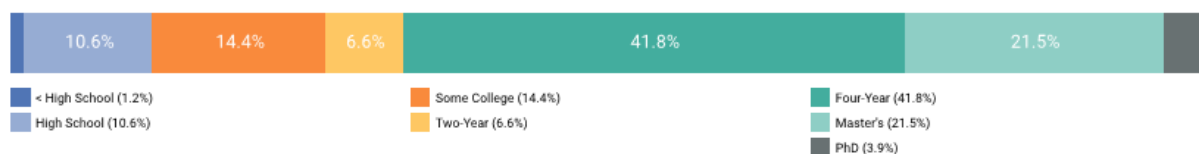
JobsEQ, retrieved January 2021

EDUCATION PROFILE

While some critical demand occupations in Information Technology require certifications, most of them require a bachelor's degree and some occupations require at least a high school diploma or equivalent. More than 85% of employees in this occupation have at least some college or greater. The chart shows the education requirements for each of the top 10 critical demand jobs in Information Technology.

Education Profile

Educational Attainment



Occupation	Typical Entry-Level Education	Previous Work Experience	Typical On-the-Job Training
Customer Service Representatives	High school diploma or equivalent	None	Short-term on-the-job training
Software Developers and Software Quality Assurance Analysts and Testers	Bachelor's degree	None	None
Management Analysts	Bachelor's degree	Less than 5 years	None
Sales Representatives of Services, Except Advertising, Insurance, Financial Services, and Travel	High school diploma or equivalent	None	Moderate-term on-the-job training
Computer Systems Analysts	Bachelor's degree	None	None
Computer User Support Specialists	Some college, no degree	None	None
Network and Computer Systems Administrators	Bachelor's degree	None	None
Computer and Information Systems Managers	Bachelor's degree	5 years or more	None
Computer Occupations, All Other	Bachelor's degree	None	None
Information Security Analysts	Bachelor's degree	Less than 5 years	None

JobsEQ, retrieved February 2021

TRAINING AND EDUCATION PARTNER OPPORTUNITIES

Information Technology (IT) programs in Virginia have recently been impacted by Amazon's additional headquarters locating to Arlington, VA. Cybersecurity tops IT offerings at the Northern Virginia community colleges, as well as other community colleges in the state. Furthermore, security clearances often align with IT positions in the northern part of Region 9. Germanna Community College is certified by the NSA as a Center of Academic Excellence for homeland security. This designation resonates with employers because it speaks to the quality of their programs. PVCC indicated there has not been significant demand for IT programs; however, it does offer Coding Camps as part of their Kids College program.

INDUSTRY STAKEHOLDER FINDINGS

While the IT sector has long been a natural fit for remote workers, employers in the region still face challenges in recruiting the ideal employee, particularly with senior level positions. The two primary issues are:

- 1) Finding talent within the region is very difficult, so companies must recruit from outside and often pay more.
- 2) Technical capabilities may be good, but customer service skills and other industry requirements (e.g., security clearances) are often lacking.

SECTOR STRATEGY RECOMMENDATIONS

- 1) *Initiate targeted recruiting efforts towards desirable talent pools (e.g., active duty and retiring military personnel) and sector-focused activities targeting IT professionals.*
 - Engage the Charlottesville Regional Chamber of Commerce’s Defense Affairs Committee (DAC) to create a veteran’s talent pipeline;
 - Coordinate and contribute to the cost of local companies’ participation in job fairs, social media advertising, and recruitment events that are focused on communities home to military installations and colleges and universities;
 - Invite and sponsor local IT businesses to host and staff trade show booths at industry-focused conferences and educational seminars attended by technology professionals;
 - Explore a cost-sharing arrangement with IT companies interested in hiring a benefits consultant to structure a “cafeteria plan” with options better suited to ex-military hires and young professionals.
- 2) *Utilize education partners and business expertise to create “Customer Service 101” and career preparedness training programs.*
 - Convene IT companies to better understand their soft skills requirements and engage VCW-Piedmont and other workforce development professionals to provide needed workshops and training;
 - Create a knowledge-sharing program between business sectors to “exchange” expertise and cross-train one another in deficient skills (e.g., banking and financial services companies provide customer service training to IT employees, and IT employees provide technology training to banking and financial services teams);
 - Work with technology and cybersecurity companies to develop a security clearance “checklist” for high school, community college and university students interested in IT careers.



FOOD AND BEVERAGE MANUFACTURING

SECTOR DEFINITION AND REGIONAL OVERVIEW

The U.S. Census North American Industry Classification System (NAICS) does not have a specific category for Food and Beverage Manufacturing. Both of these categories fall under NAICS 31, Manufacturing. For the purposes of this report, Food and Beverage Manufacturing is comprised of the below NAICS categories:

- Food Manufacturing (NAICS 311)
- Beverage Manufacturing (NAICS 3121)

Industries in the Food Manufacturing subsector transform livestock and agricultural products into products for intermediate or final consumption. The industry groups are distinguished by the raw materials (generally of animal or vegetable origin) processed into food products. The food products manufactured in these establishments are typically sold to wholesalers or retailers for distribution to consumers, but establishments primarily engaged in retailing bakery and candy products made on the premises, not for immediate consumption, are included.⁶

The Beverage Manufacturing group comprises establishments primarily engaged in manufacturing soft drinks and ice; purifying and bottling water; and manufacturing brewery, winery, and distillery products.⁷

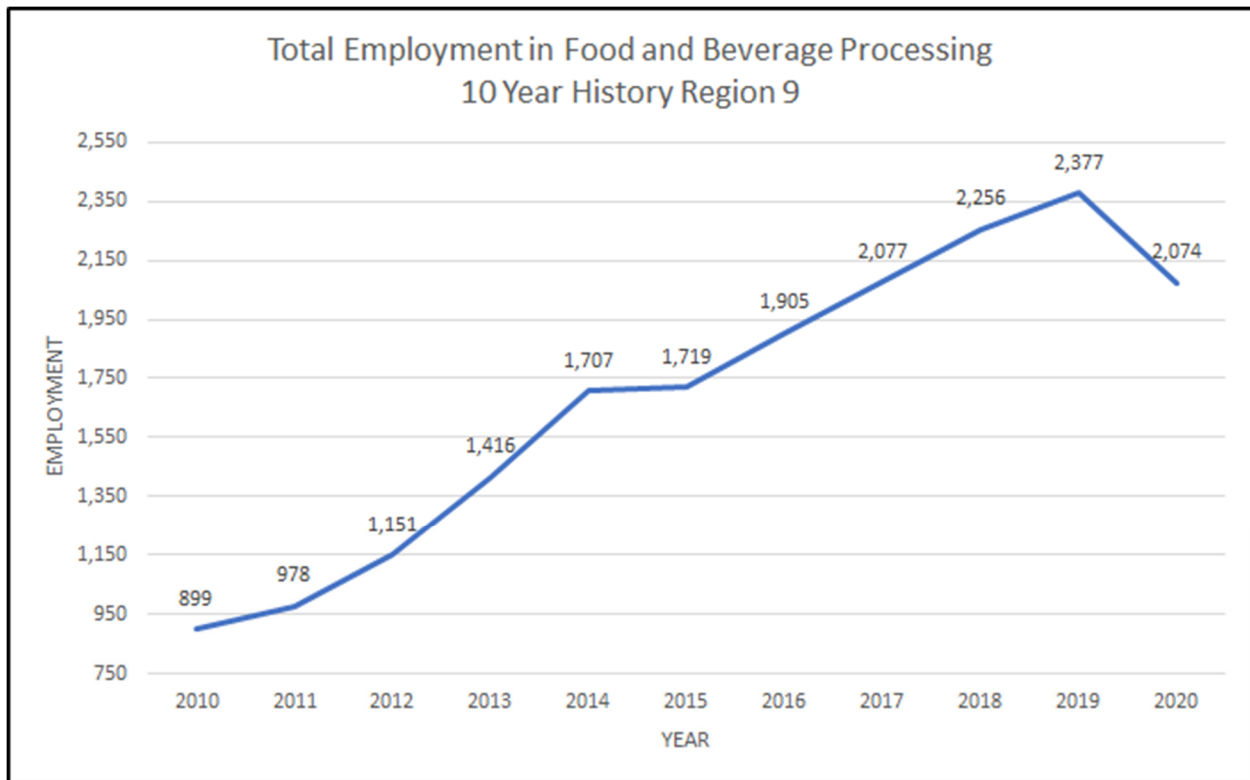
INDUSTRY EMPLOYMENT TRENDS AND FORECASTS

TOTAL INDUSTRY EMPLOYMENT

Over the past 10 years, employment levels have steadily increased across the region, except for 2014-2015 when levels were primarily flat. Otherwise, Food and Beverage Manufacturing had been steadily rising prior to a sharp downturn resulting from the pandemic.

⁶ US Bureau of Labor Statistics, *About the Food Manufacturing Subsector*, retrieved February 9, 2021, from <https://www.bls.gov/iag/tgs/iag311.htm>

⁷ NAICS Association, *3121-Beverage Manufacturing*, retrieved February 9, 2021, from <https://www.naics.com/naics-code-description/?code=3121>

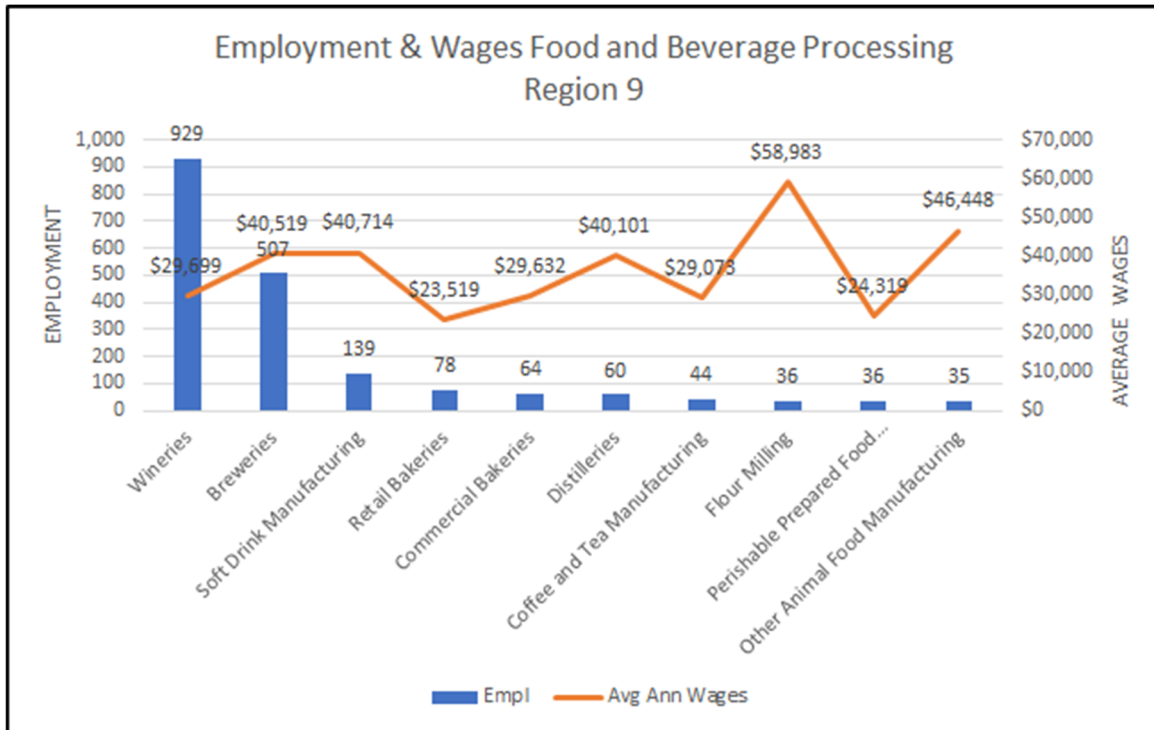


JobsEQ, retrieved May 2021, data as of 2020Q4

CURRENT INDUSTRY EMPLOYMENT AND WAGES

Across the region, Wineries and Breweries are the top two in employment numbers; however, Wineries rank among the lowest in average annual wages at \$29,699.

The Wineries subsector (NAICS 312130) employs the most people (929) in Region 9, followed by Breweries (NAICS 312120) at 507. While the Breweries subsector has a higher annual average wage (\$40,519), the highest wage level in this region is \$58,983 and applies to Flour Milling (NAICS 311211). Unfortunately, this subsector ranks among the lowest in employment with just 36 employees.



JobsEQ, retrieved May 2021, data as of 2020Q4

INDUSTRY EMPLOYMENT HISTORY

Over the past five years, Food and Beverage Manufacturing employment in Region 9 has increased by 341 jobs. The subsector with the largest increase occurred in Breweries (NAICS 312120) with growth of 201 jobs. Wineries (NAICS 312130) and Distilleries (NAICS 312140) followed with employment increases of 120 and 49, respectively. The Soft Drink Manufacturing subsector (NAICS 312111) experienced the largest reduction with a loss of 33 employees (Appendix 2, Figure 13).

INDUSTRY EMPLOYMENT FORECAST

Over the next five years, the Wineries subsector (NAICS 312130) is projected to have the largest increase in employment, followed by Breweries (NAICS 312120) and Soft Drink Manufacturing (NAICS 312111) (Appendix 2, Figure 14); however, overall, Food and Beverage Manufacturing jobs in Region 9 are only expected to grow at an annual rate of 0.3%.

PRIMARY EMPLOYERS – FOOD AND BEVERAGE MANUFACTURING SECTOR

Below are the region's major Food and Beverage Manufacturers by planning district and locality.

Rappahannock-Rapidan Planning District			
Culpeper	Ardent Mills	Fauquier	Arterra Wines
	Bell Nursery USA		Barrel Oak Winery
	Bright Farms		Desert Rose Ranch & Winery
	Color Orchids		Junco Hill Farm
	Merchant's Grocery Company, HQ		Locust Hill Farm LLC
	Moerings USA		Morais Vineyard and Winery
	Willow Run Greenhouse Corporation		Narmada Winery LLC
Madison	Wollam Gardens	Orange	Pearmund Cellars
	Bald Top Brewery		Philip Carter Winery
	Blue Quartz Winery & Shotwell Run Brewery		Slater Run Vineyards
	Early Mountain Vineyards		Vint Hill Craft Winery
	Prince Michel Winery		
	Revelation Vineyards		
	ZD Rock River Farm		
Rappahannock	Copper Fox Distillery		
	Gadino Cellars		
	Glengary Tree Farm		
	Rappahannock Cellars		

Thomas Jefferson Planning District			
Albemarle	Adventure Farm & Vineyard	Nelson	12 Ridges Vineyard
	Caromont Farm		Afton Mountain Vineyards
	Carter Mountain Orchard		Blue Mountain Brewery
	Castle Hill Cider		Blue Toad Hard Cider
	Crown Orchard Co		Bold Rock
	Kings Family Vineyards		Brent Manor Vineyards
	Pepsi-Cola Bottling of Central VA		Brewing Tree Beer Co
	Starr Hill Brewery		Bryant's Cider
Charlottesville	Albemarle Baking Company		Cardinal Point Winery
	Champion Brewery		Delfosse Vineyards & Winery
	NoBull Burger		Devils Backbone Brewing Company
	Three-Notch'd Brewery		Hill Top Berry Farm & Winery
Fluvanna	Antioch Brewing		Lovington Winery
	Cunningham Creek Winery		Mountain Cove Vineyards
	Modesto Farms		Silverback Distillery
	Thistle Gate Vineyard		Veritas Vineyards & Winery
Louisa	53rd Winery & Vineyard	Greene	Virginia Distillery Company
	Cavalier Produce		Wild Wolf Brewing Company
	Cooling Pond Brewery		WildmanDan Brewery
	Coyote Hole Ciderworks		Wood Ridge Farm Brewery
			Blue Ridge Natural Beef
			The Farm at South River
			Stone Mountain Winery

IN-DEMAND OCCUPATIONS

OCCUPATION FORECAST

The following data is sourced from an industry and occupation mix and reflects the top 10 occupations projected to increase in Food and Beverage Manufacturing across Region 9.

The occupation expected to be the most in-demand over the next 10 years is Packaging and Filling Machine Operators and Tenders, followed by Bartenders, and Separating, Filtering, Clarifying, Precipitating, and Still Machine Setters, Operators, and Tenders (Appendix 2, Figure 15).

OCCUPATION HISTORY

In Region 9, and similar to the rest of the country, many occupations associated with Food and Beverage Manufacturing have been severely impacted by the COVID pandemic. Over the past five years, the critical demand occupations in this industry have decreased at an annual rate of 1.4%; however, in spite of this downward trend, the industry is forecasted to grow at a rate of 0.3% over the next 10 years.

In Appendix 2, Figure 16 shows the sharp decline in wait staff occupations, which have been most affected by the pandemic. Not surprisingly, Waiter and Waitress (SOC 35-3031) occupations fell significantly, followed by Bartenders (SOC 35-3011). The occupation with the greatest increase was Laborers and Freight, Stock, and Material Movers, Hand (SOC 53-7062). All of these occupations are some of the lowest paying at \$26,800, \$27,000, and \$28,300, respectively. Over the past five years, the occupation with the highest average wage in this industry was Separating, Filtering, Clarifying, Precipitation, and Still Machine Setters, Operators, and Tenders (SOC 51-9012) with an average annual wage of \$43,500.

INDUSTRY CERTIFICATIONS AND EDUCATION PROFILE

The below data represent the most employer requested skills/abilities and certifications according to job postings from the past six months.

HARD SKILLS

Online job postings from the past six months show the most sought-after requirement for Food and Beverage Manufacturing was Ability to Lift 51-100 lbs., followed by Retail Sales and Cash Handling. The below figure shows the top 10 hard skills most requested in online job postings in Region 9.

Hard Skills		
Skill Name	Total Ads	
Ability to Lift 51-100 lbs.	588	
Retail Sales	536	
Cash Handling	426	
Cash Registers	400	
Ability to Lift 21-30 lbs.	317	
Calculators	297	
Merchandising	289	
Sales	276	
Ability to Lift 41-50 lbs.	237	
Plumbing	179	

JobsEQ, retrieved February 2021

SOFT SKILLS



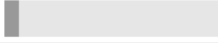
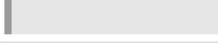
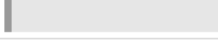
Over the past six months, the top three requested soft skills for critical demand Food and Beverage Manufacturing occupations in Region 9 were Customer Service, Communication (Verbal and written skills), and Cooperative/Team Player.

Soft Skills		
Skill Name	Total Ads	
Customer Service	1,611	
Communication (Verbal and written skills)	1,471	
Cooperative/Team Player	574	
Coachable/Willingness to Learn	564	
Enthusiastic/Energetic	481	
Interpersonal Relationships/Maintain Relationships	441	
Adaptability/Flexibility/Tolerance of Change and Uncertainty	383	
Ability to Work in a Fast Paced Environment	373	
Organization	293	
Self-Motivated/Ability to Work Independently/Self Leadership	290	

JobsEQ, retrieved February 2021

CERTIFICATIONS

In Region 9, the top three desired certifications in Food and Beverage Manufacturing were Driver's License, ServSafe Food Protection Manager Certification, and Commercial Driver's License (CDL).

Certifications		
Certificate Name	Total Ads	
Driver's License	29	
ServSafe Food Protection Manager Certification	6	
Commercial Driver's License (CDL)	2	
Forklift Certified	1	
Licensed Practical Nurse (LPN)	1	

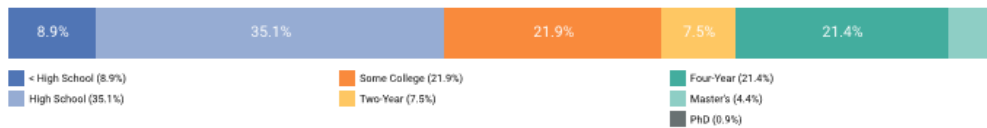
JobsEQ, retrieved February 2021

EDUCATION PROFILE

While some critical demand occupations in Food and Beverage Manufacturing require certifications, none of them require even a two-year degree and many occupations do not require a high school diploma. The below graph shows the region's current education mix, as well as education requirements in this industry for each of the top 10 critical demand jobs in Food and Beverage Manufacturing.

Education Profile

Educational Attainment



Occupation	Typical Entry-Level Education	Previous Work Experience	Typical On-the-Job Training
Retail Salespersons	None	None	Short-term on-the-job training
Waiters and Waitresses	None	None	Short-term on-the-job training
Laborers and Freight, Stock, and Material Movers, Hand	None	None	Short-term on-the-job training
Sales Representatives, Wholesale and Manufacturing, Except Technical and Scientific Products	High school diploma or equivalent	None	Moderate-term on-the-job training
Bartenders	None	None	Short-term on-the-job training
Packaging and Filling Machine Operators and Tenders	High school diploma or equivalent	None	Moderate-term on-the-job training
Bakers	None	None	Long-term on-the-job training
Demonstrators and Product Promoters	None	None	Short-term on-the-job training
Separating, Filtering, Clarifying, Precipitating, and Still Machine Setters, Operators, and Tenders	High school diploma or equivalent	None	Moderate-term on-the-job training
Food Batchmakers	High school diploma or equivalent	None	Moderate-term on-the-job training

JobsEQ, retrieved February 2021

TRAINING AND EDUCATION PARTNER OPPORTUNITIES

PVCC is one of the few community colleges in the country that offers various training for both winemakers and craft brewers. These programs were paused during the pandemic but are poised to resume as in-person options become available. PVCC benefits from a strong curriculum, access to good facilities, and the availability of industry experts to provide instruction and bring relevant experience to engage adult learners. Germanna would like to duplicate PVCC's programs, as the winery and brewery industry expands into the communities it serves.

INDUSTRY STAKEHOLDER FINDINGS

The Food and Beverage Manufacturing sector encompasses a mixture of hospitality, tourism, and manufacturing-oriented entities; thus, their workforce needs and operating concerns don't easily align, so getting area businesses to participate in surveys and roundtable discussions can be challenging.

Nevertheless, one common concern -- and one that seems to be “universal” to other sectors -- is outlined below.

- 1) Finding good employees, particularly those with customer service and leadership skills, is very difficult.

SECTOR STRATEGY RECOMMENDATIONS

- 1) *Utilize workforce development partners to create customer service workshops (e.g., half-day sessions) and leadership training programs for industry employees.*
 - Explore opportunities for grant funding or cost-sharing arrangements with sector employers to cover the cost of having workforce partners (or consultants) develop and deliver customer service training or onboarding “basics” for new employees;
 - Expand existing community college brewing and viticulture programs to include a management training component.
- 2) *Engage sector-focused resources in employment and recruitment activities.*
 - Partner with industry resources and associations (e.g., Virginia Farm Bureau, Virginia Craft Brewers Guild, Virginia Wineries Association) to promote job openings and opportunities for hard-to-fill positions (e.g. horticulturist, vineyard manager).

APPENDICES

Appendix 1 – Manufacturing NAICS Codes

Appendix 2 – Support Graphs

Appendix 3 – Survey Responses and Graphs

Appendix 4 – Colorado Regional Sector Partnership Convener Training Workbook

Appendix 1

Manufacturing NAICS Codes

MANUFACTURING NAICS CODES

2131	Support Activities for Mining
3131	Fiber, Yarn, and Thread Mills
3132	Fabric Mills
3133	Textile and Fabric Finishing and Fabric Coating Mills
3141	Textile Furnishings Mills
3149	Other Textile Product Mills
3151	Apparel Knitting Mills
3152	Cut and Sew Apparel Manufacturing
3159	Apparel Accessories and Other Apparel Manufacturing
3161	Leather and Hide Tanning and Finishing
3162	Footwear Manufacturing
3169	Other Leather and Allied Product Manufacturing
3211	Sawmills and Wood Preservation
3212	Veneer, Plywood, and Engineered Wood Product Manufacturing
3219	Other Wood Product Manufacturing
3221	Pulp, Paper, and Paperboard Mills
3222	Converted Paper Product Manufacturing
3231	Printing and Related Support Activities
3241	Petroleum and Coal Products Manufacturing
3251	Basic Chemical Manufacturing
3252	Resin, Synthetic Rubber, and Artificial Synthetic Fibers and Filaments Manufacturing
3253	Pesticide, Fertilizer, and Other Agricultural Chemical Manufacturing
3254	Pharmaceutical and Medicine Manufacturing
3255	Paint, Coating, and Adhesive Manufacturing
3256	Soap, Cleaning Compound, and Toilet Preparation Manufacturing
3259	Other Chemical Product and Preparation Manufacturing
3261	Plastics Product Manufacturing

3262 Rubber Product Manufacturing

3271 Clay Product and Refractory Manufacturing

3273 Glass and Glass Product Manufacturing

3273 Cement and Concrete Product Manufacturing

3274 Lime and Gypsum Product Manufacturing

3279 Other Nonmetallic Mineral Product Manufacturing

3311 Iron and Steel Mills and Ferroalloy Manufacturing

3312 Steel Product Manufacturing from Purchased Steel

3313 Alumina and Aluminum Production and Processing

3314 Nonferrous Metal (except Aluminum) Production and Processing

3315 Foundries

3321 Forging and Stamping

3322 Cutlery and Handtool Manufacturing

3323 Architectural and Structural Metals Manufacturing

3324 Boiler, Tank, and Shipping Container Manufacturing

3325 Hardware Manufacturing

3326 Spring and Wire Product Manufacturing

3327 Machine Shops; Turned Product; and Screw, Nut, and Bolt Manufacturing

3328 Coating, Engraving, Heat Treating, and Allied Activities

3329 Other Fabricated Metal Product Manufacturing

3331 Agriculture, Construction, and Mining Machinery Manufacturing

3332 Industrial Machinery Manufacturing

3333 Commercial and Service Industry Machinery Manufacturing

3335 Metalworking Machinery Manufacturing

3336 Engine, Turbine, and Power Transmission Equipment Manufacturing

3339 Other General Purpose Machinery Manufacturing

3341 Computer and Peripheral Equipment Manufacturing

3342 Communications Equipment Manufacturing

3342 Audio and Video Equipment Manufacturing

3344 Semiconductor and Other Electronic Component Manufacturing

3345 Navigational, Measuring, Electromedical, and Control Instruments Manufacturing

3346 Manufacturing and Reproducing Magnetic and Optical Media

3351 Electric Lighting Equipment Manufacturing

3352 Household Appliance Manufacturing

3353 Electrical Equipment Manufacturing

3359 Other Electrical Equipment and Component Manufacturing

3361 Motor Vehicle Manufacturing

3362 Motor Vehicle Body and Trailer Manufacturing

3363 Motor Vehicle Parts Manufacturing

3364 Aerospace Product and Parts Manufacturing

3365 Railroad Rolling Stock Manufacturing

3366 Ship and Boat Building

3369 Other Transportation Equipment Manufacturing

3371 Household and Institutional Furniture and Kitchen Cabinet Manufacturing

3372 Office Furniture (including Fixtures) Manufacturing

339 Other Furniture Related Product Manufacturing

3391 Medical Equipment and Supplies Manufacturing

3399 Other Miscellaneous Manufacturing

4831 Deep Sea, Coastal, and Great Lakes Water Transportation

4931 Warehousing and Storage

11311 Timber Tract Operations

11321 Forest Nurseries and Gathering of Forest Products

11331 Logging

Appendix 2

Supporting Graphs

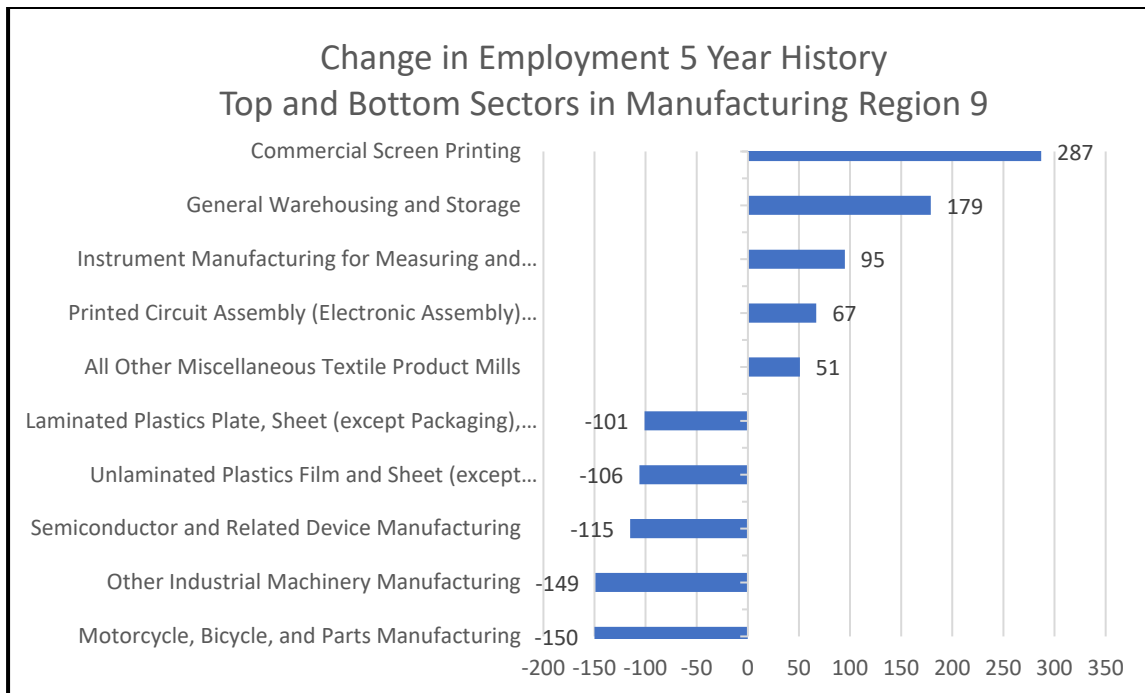


Figure 1 - JobsEQ, retrieved May 2021, data as of 2020Q4

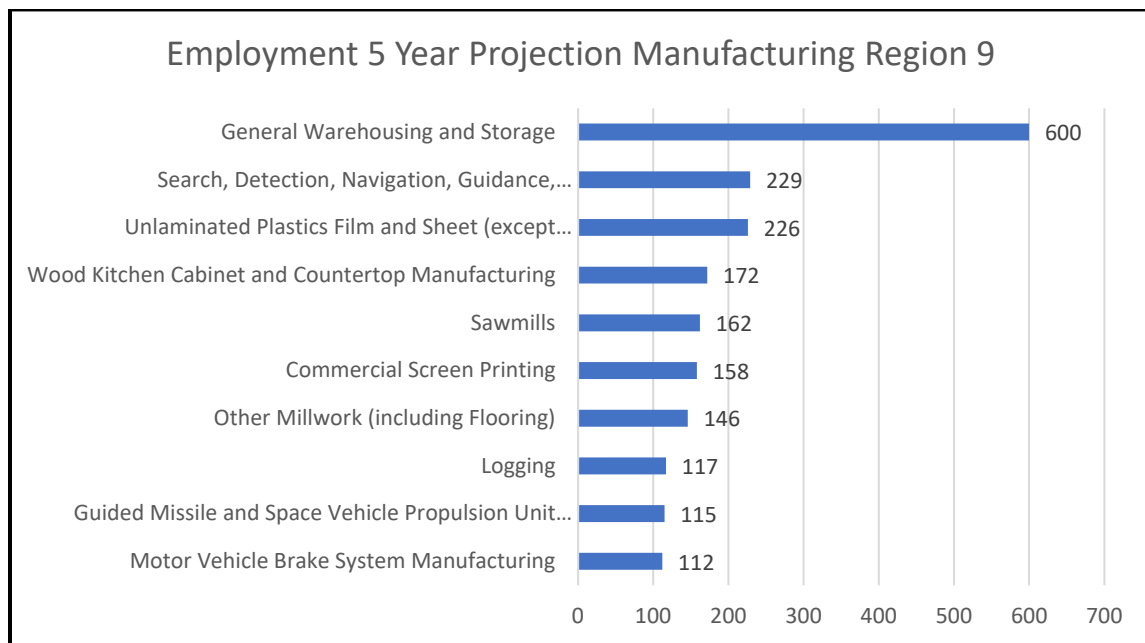


Figure 2 - JobsEQ, retrieved May 2021, data as of 2020Q4

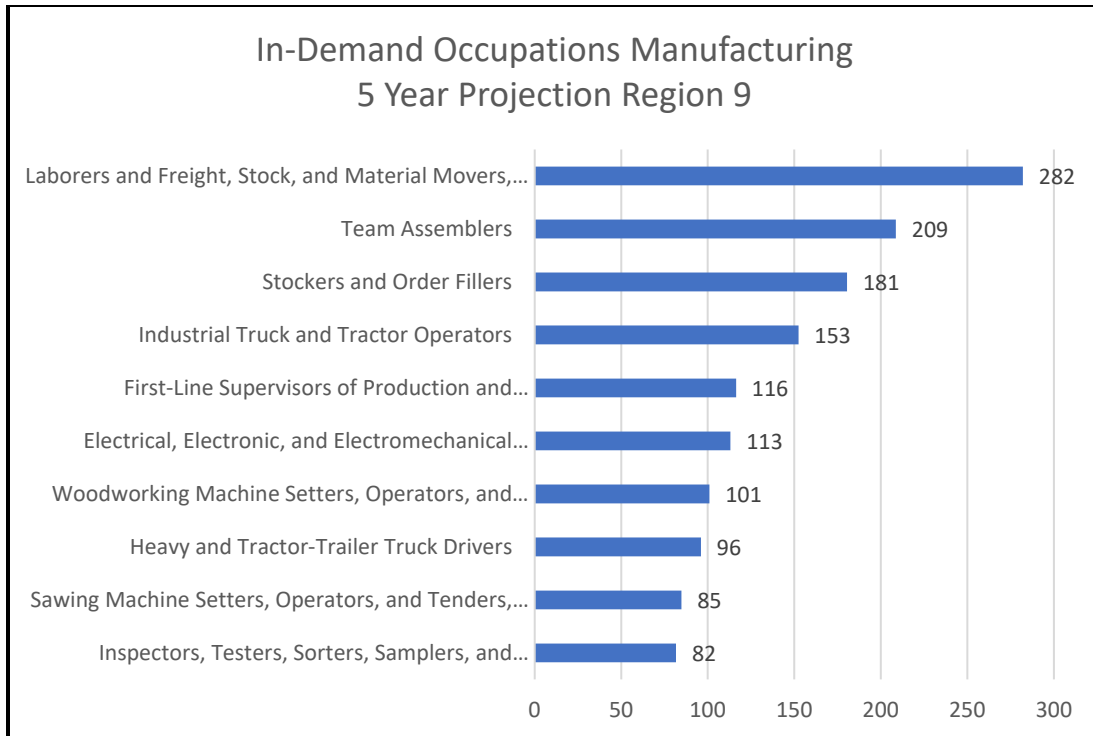


Figure 3 - JobsEQ, retrieved May 2021, data as of 2020Q4

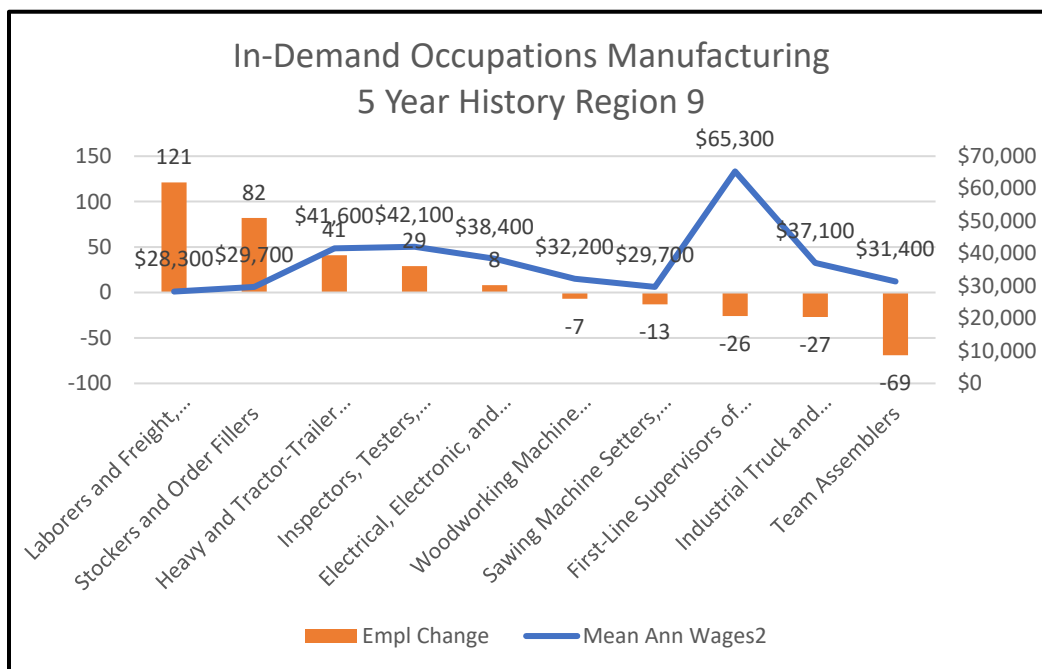


Figure 4 - JobsEQ, retrieved May 2021, data as of 2020Q4

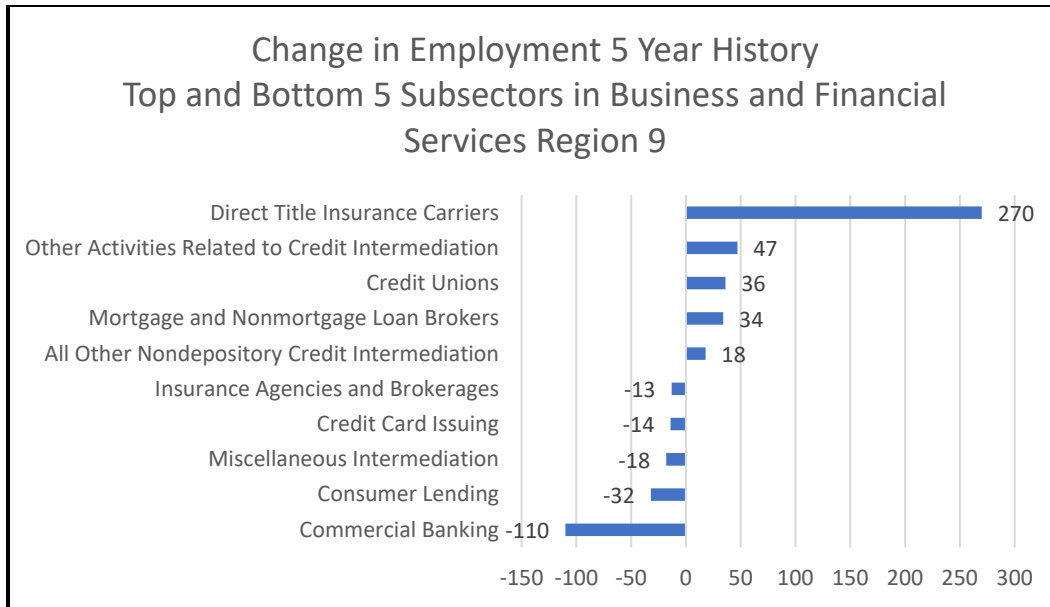


Figure 5 - JobsEQ, retrieved May 2021, data as of 2020Q4

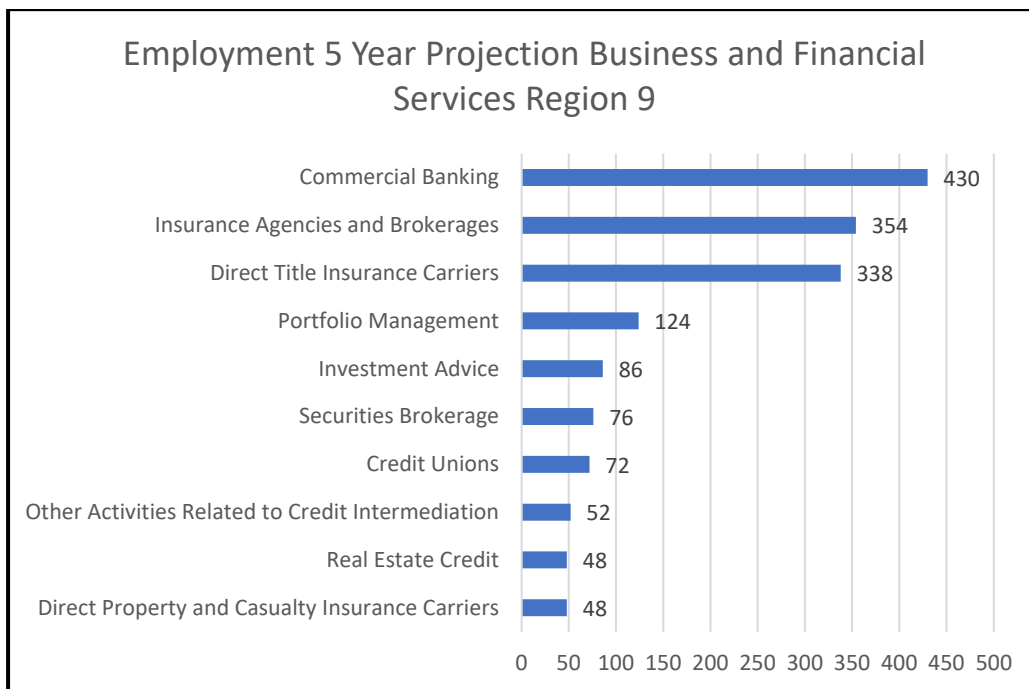


Figure 6 - JobsEQ, retrieved May 2021, data as of 2020Q4

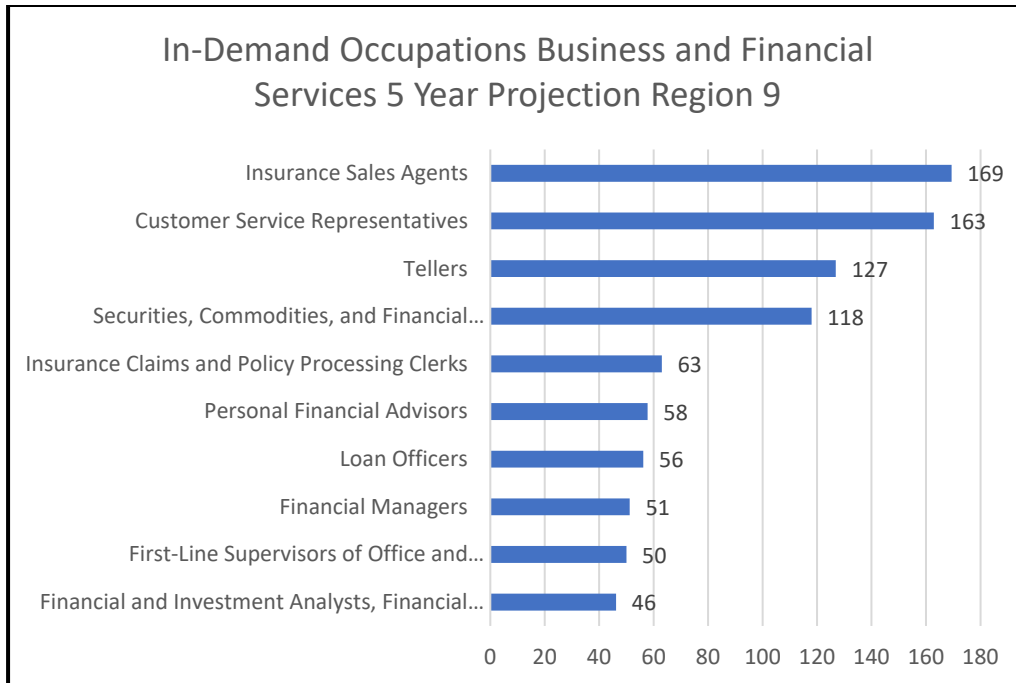


Figure 7 - JobsEQ, retrieved May 2021, data as of 2020Q4

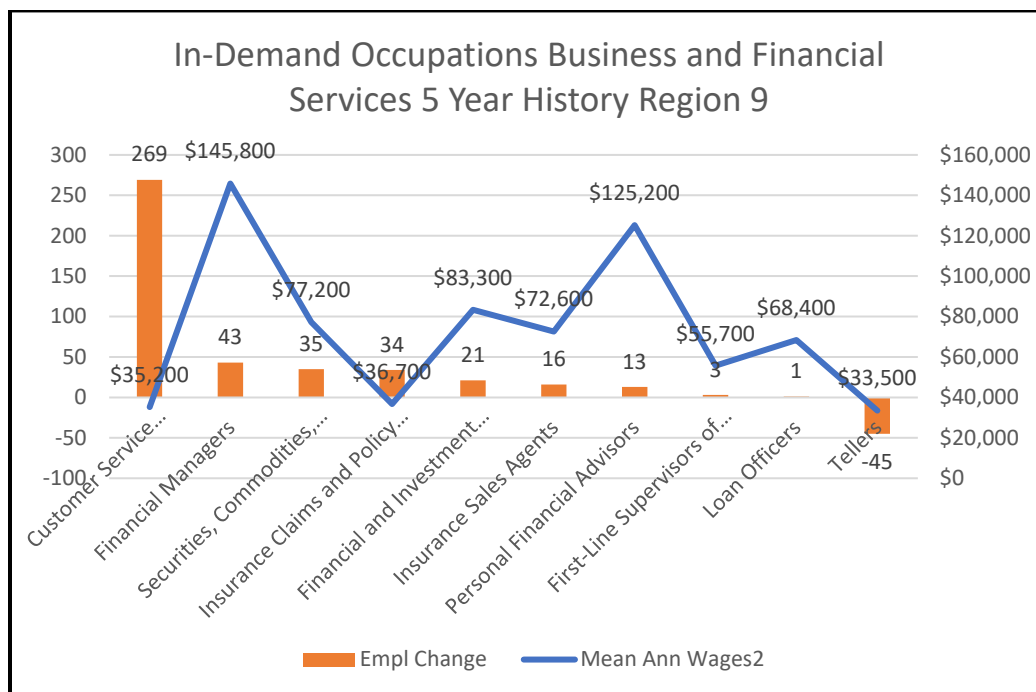


Figure 8 - JobsEQ, retrieved May 2021, data as of 2020Q4

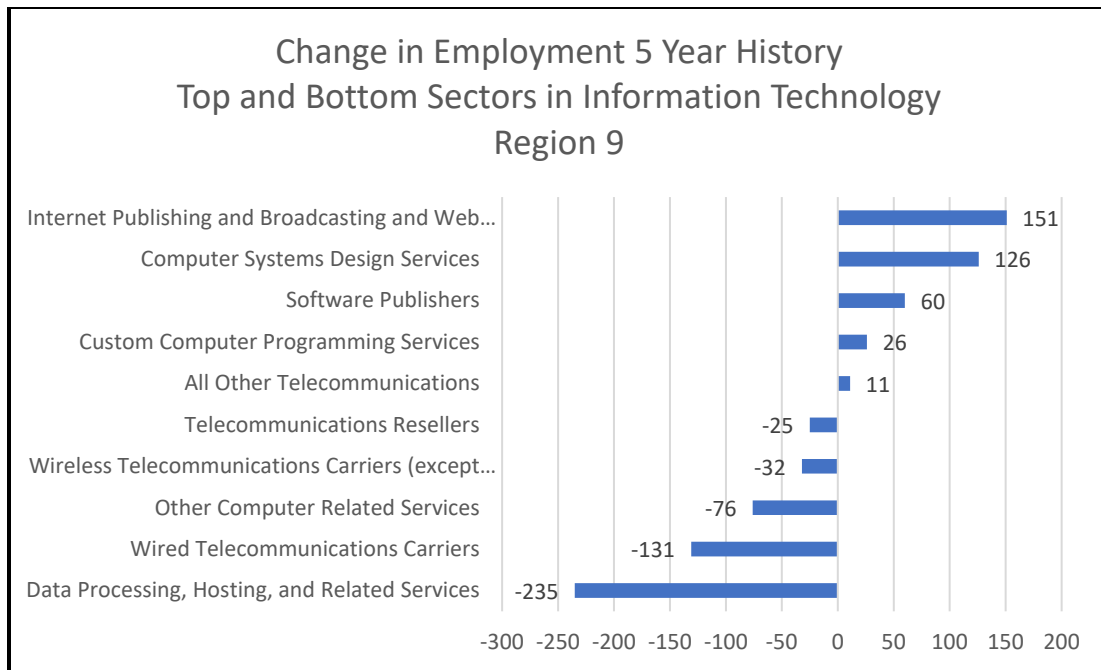


Figure 9 - JobsEQ, retrieved May 2021, data as of 2020Q4

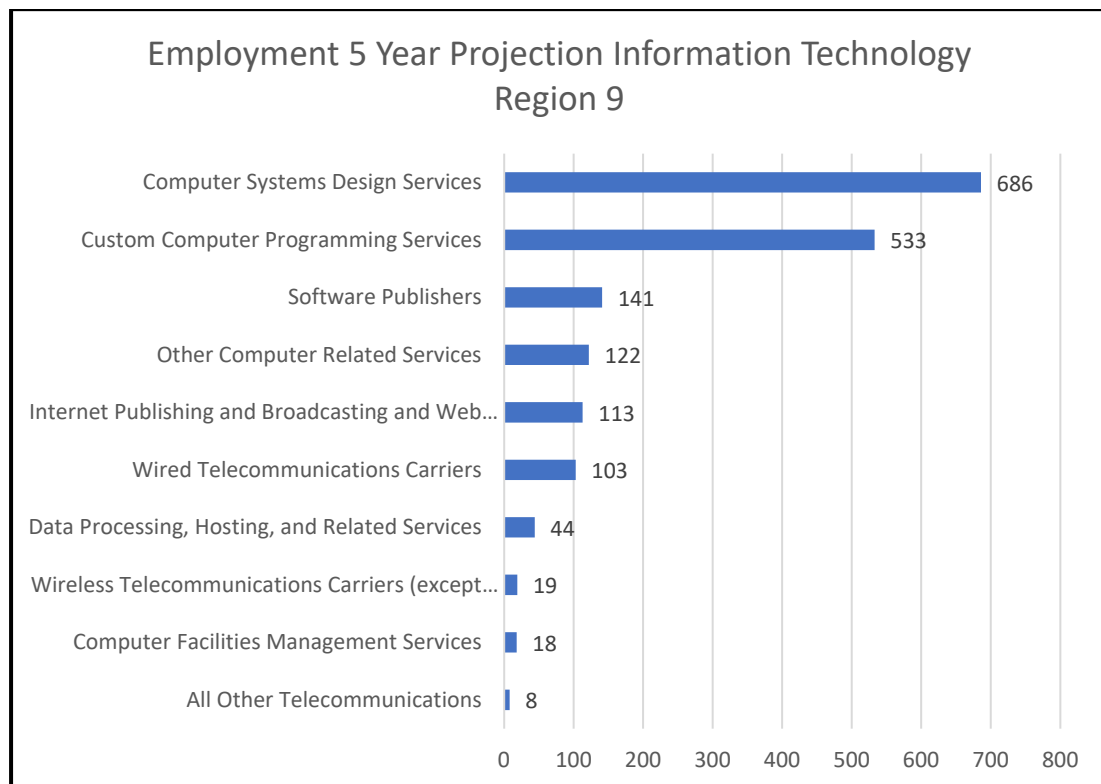


Figure 10 - JobsEQ, retrieved May 2021, data as of 2020Q4

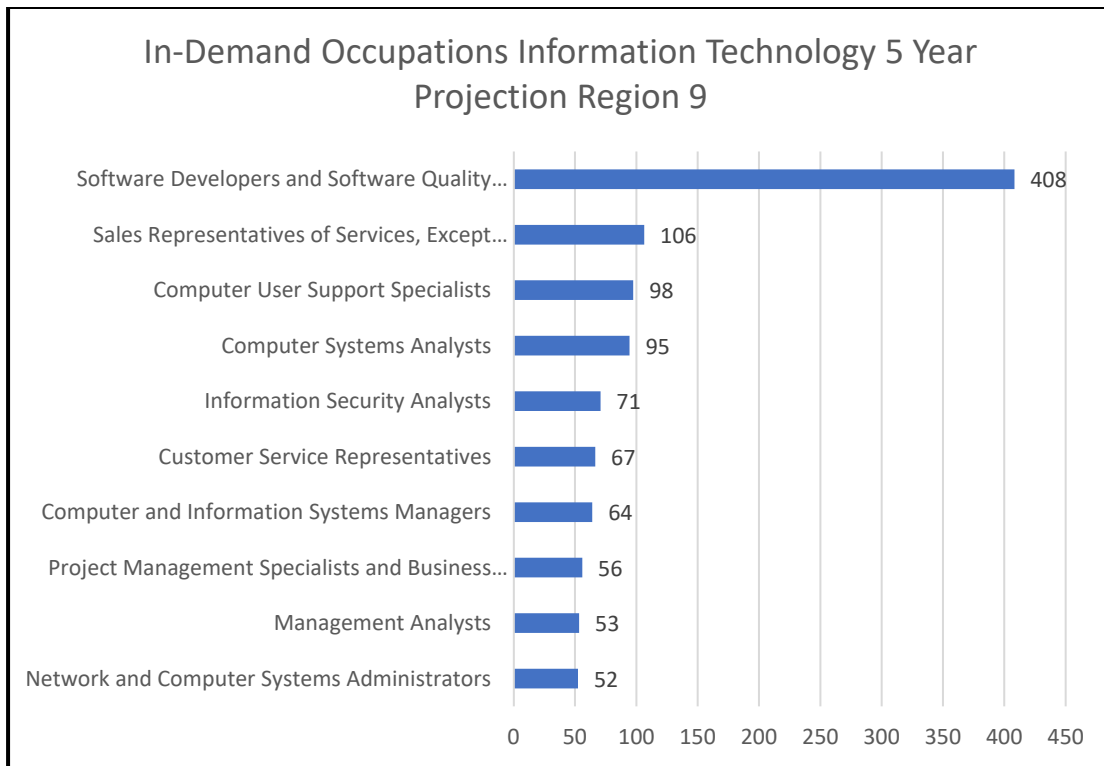


Figure 11 - JobsEQ, retrieved May 2021, data as of 2020Q4

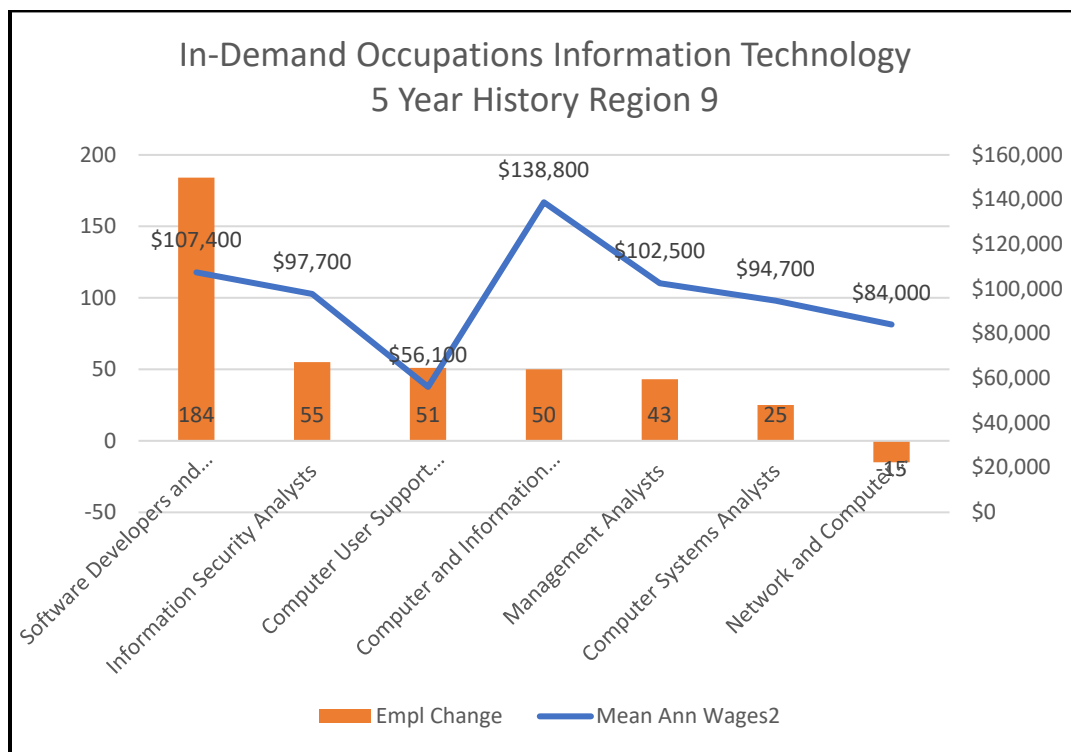


Figure 12 - JobsEQ, retrieved May 2021, data as of 2020Q4

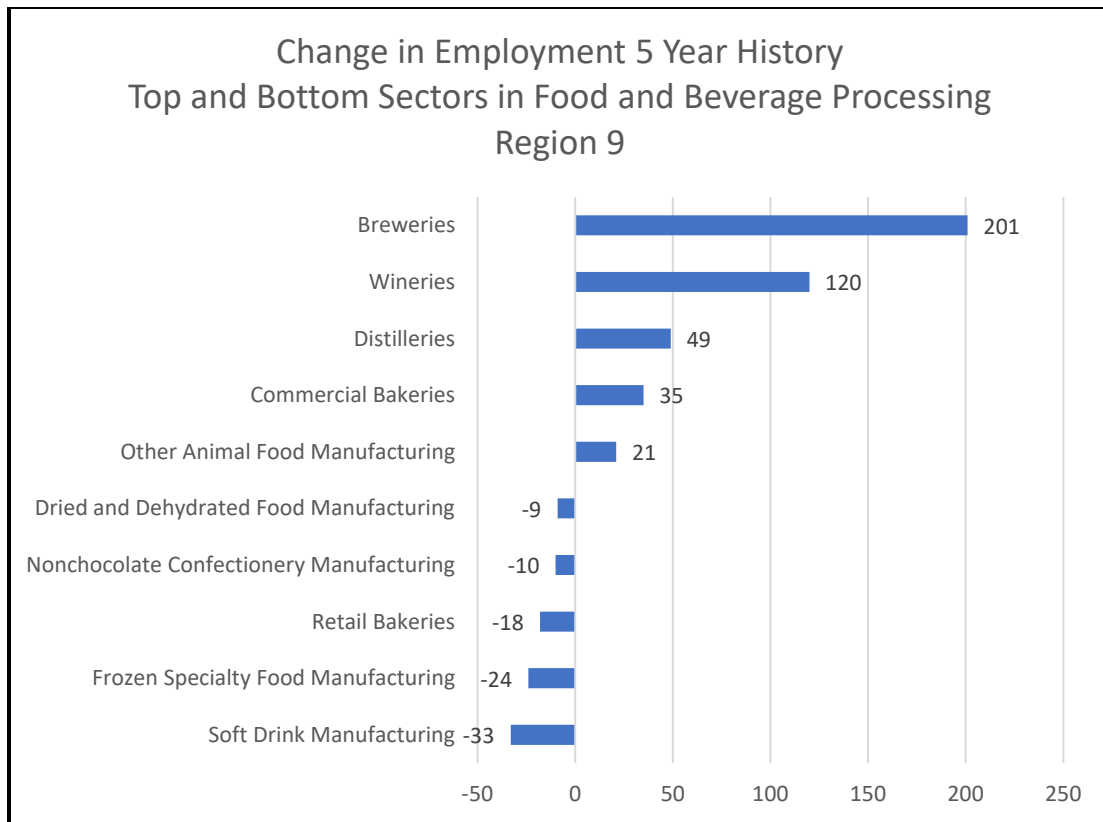


Figure 13 - JobsEQ, retrieved May 2021, data as of 2020Q4

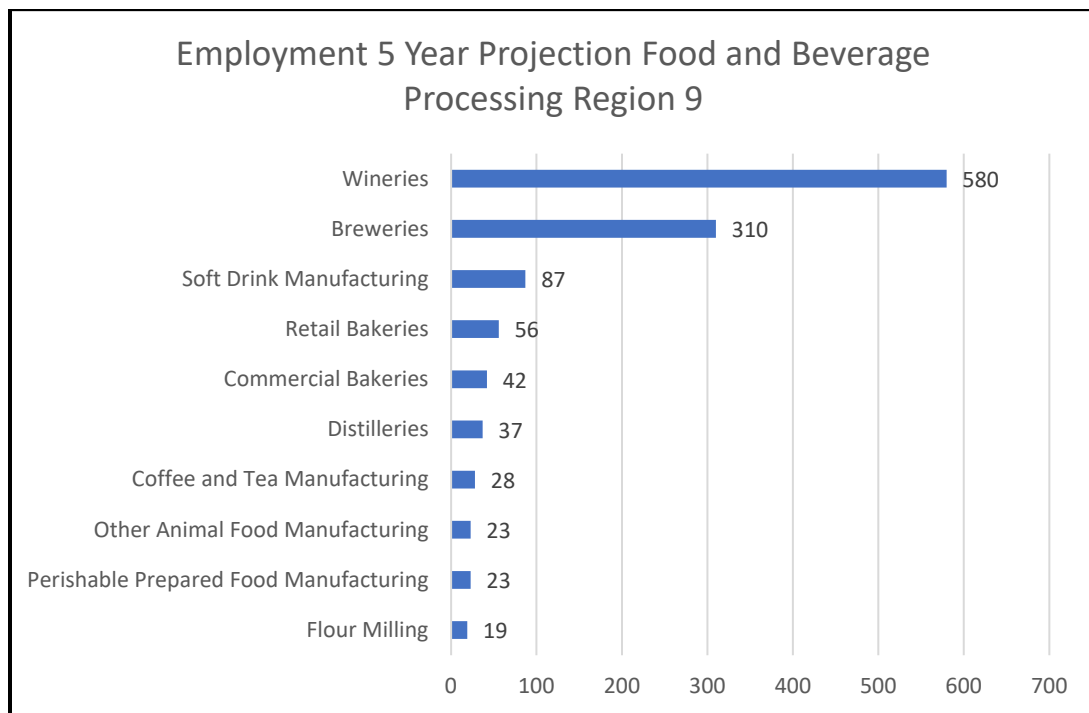


Figure 14 - JobsEQ, retrieved May 2021, data as of 2020Q4

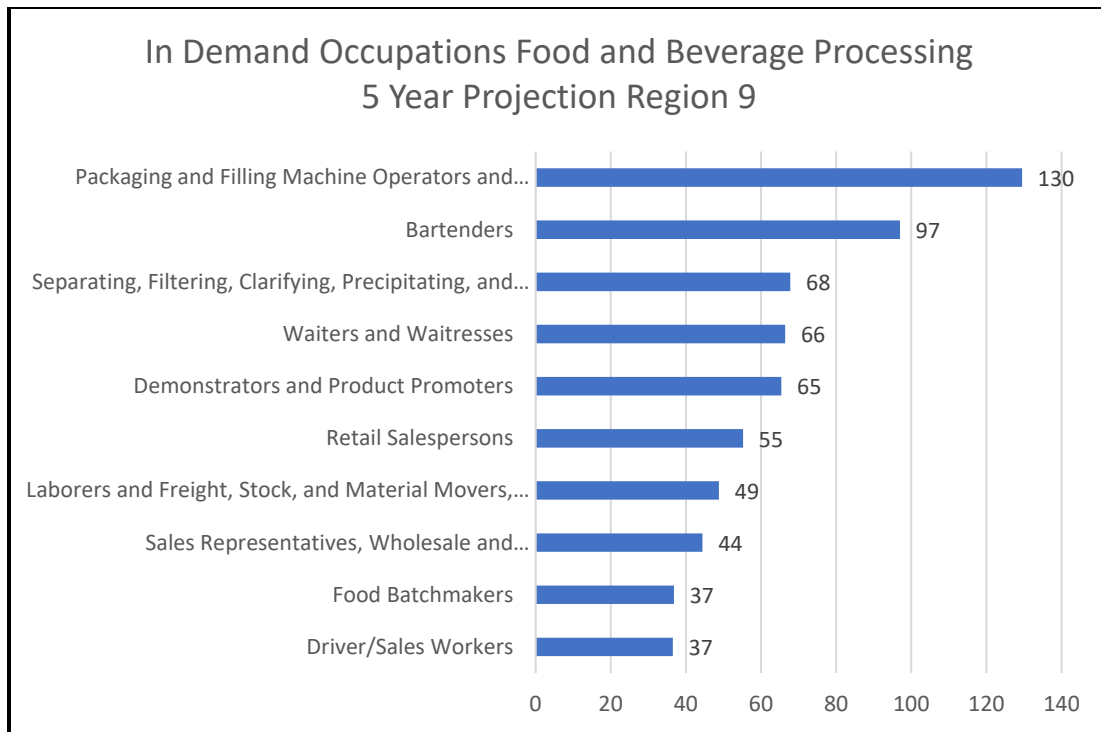


Figure 15 - JobsEQ, retrieved May 2021, data as of 2020Q4

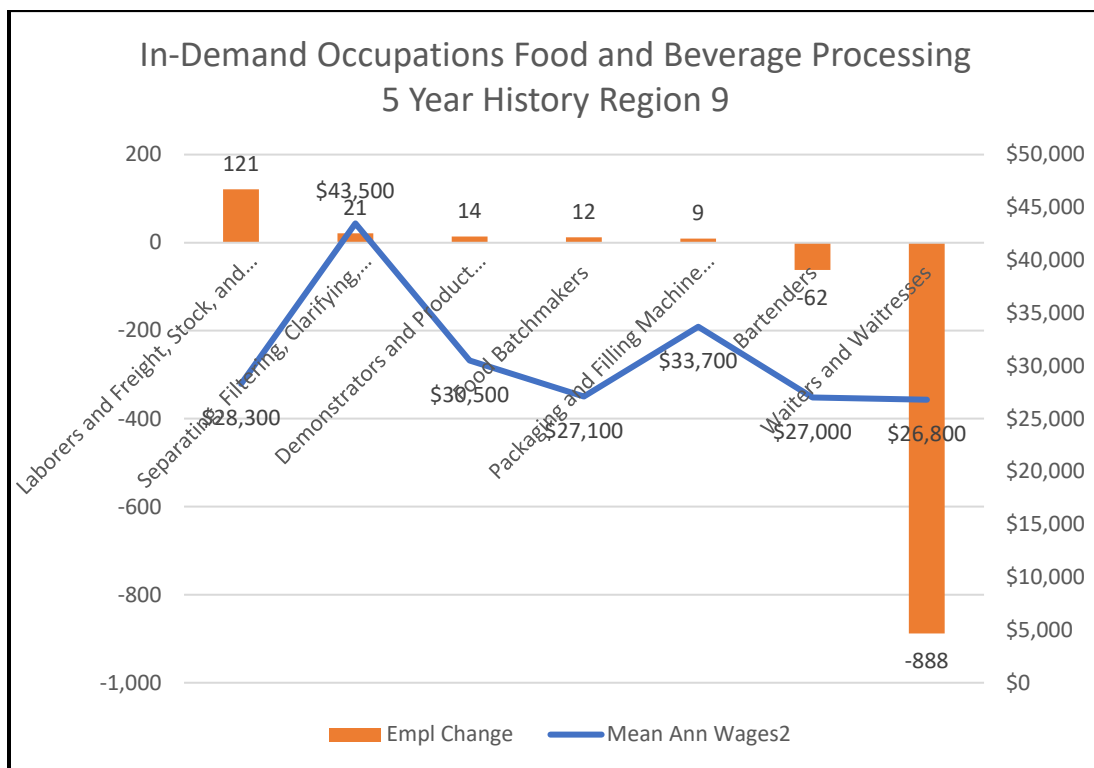


Figure 16 - JobsEQ, retrieved May 2021, data as of 2020Q4

Appendix 3

Survey Responses

Sector Strategies Survey 2021 - Light Manufacturing

Q1. What is the number of employees at this facility?	
Answer Choices	Responses
200+	35%
150-199	9%
100-149	4%
50-99	35%
20-50	17%
Less than 20	0%

Q2. What positions in your organization are the most difficult to fill. Select all that apply.	
Answer Choices	Responses
Administrative	5%
Management	24%
Machine Operators	57%
First-line Supervisors	19%
Plumbers	0%
Mechanics	19%
Training Specialists	0%
Warehousing - Stockers/Order Fillers	57%
Laborers, Freight, Material Movers	71%
Truck Drivers	19%
Other (please specify)	see below
<i>Experienced senior sales</i>	
<i>Sheet Metal Mechanics, Machinists, Welders,</i>	
<i>Assemblers</i>	
<i>Engineers</i>	
<i>Stackers and Assemblers</i>	
<i>Forklift Drivers, Maintenance Technicians</i>	
<i>Quality Department all levels</i>	

Q3. Is there a particular recruiting tool/job board that provides you with better candidates than another? Select all that apply.	
Answer Choices	Responses
Indeed	94%
LinkedIn	35%
Monster	0%
Glassdoor	0%
FlexJobs	0%
Professional Association	6%
Other (please specify)	see below
<i>we currently use 3 temp to hire companies</i>	
<i>facebook</i>	
<i>NBC 29 Job Spot</i>	
<i>We use all of them and some are better than others depending on the role</i>	
<i>Flyers, signs, college job boards, staff agencies, lead generating</i>	
<i>We cant get anyone to work</i>	
<i>we currently use indeed and linkedin. however, difficulty finding adequate help in this region.</i>	

Q4. How would you rate the quality of candidates applying for positions in your organization?	
Answer Choices (1=poor / 5=excellent)	Responses
1	14%
2	59%
3	9%
4	14%
5	0%

Q5. Does your onboarding and/or training of new hires include any of the following? Select all that apply.

Answer Choices	Responses
None of the above	0%
Emphasis on company/organizational values	78%
Expectation of the job	100%
Attendance policies	100%
Company Culture	74%

Q6. From where are the majority of your new hires coming?

Answer Choices	Responses
Within the region (30-minute or less commute)	43%
Within the region (30-60 minute commute)	52%
Outside of the region (e.g. Richmond, Lynchburg, Fredericksburg or other in-state location)	4%
Outside of Virginia	0%

Q7. Are there any particular issues or challenges specific to the region that make it difficult for you to recruit employees to the area? Select all that apply.

Answer Choices	Responses
None of the above	0%
Cost of living too high	43%
Lack of affordable housing	24%
Lack of public transportation	29%
Compete with similar businesses for the same labor pool	76%
Other (please specify)	see below
<i>lack of similar businesses to draw employees, lack of trade schools to provide employees</i>	
<i>unemployment benefits</i>	
<i>Cant get anyone to apply. No one seems to want to work</i>	

Q8. The Q4 2020 data from the Bureau of Labor Statistics (BLS) suggests the greatest demand for workers in Manufacturing is in the areas listed below. Given your company's plans or expected trends in this industry, do you anticipate the demand for these positions will change over the next three years?

Answer Choices	Increase	Decrease	No change	Not applicable
Machine Operators	82%	0%	9%	9%
First-line Supervisors	50%	0%	44%	6%
Plumbers	0%	0%	14%	86%
Mechanics	59%	0%	29%	12%
Training Specialists	14%	0%	43%	43%
Warehousing - Stockers/Order Fillers	71%	0%	24%	5%
Laborers, Freight, Material Movers	85%	0%	15%	0%

Q9. Does your company have a career pathway for each position? If so, when is it shared with the employee?

Answer Choices	Responses
Pre-hire	26%
During onboarding/training period	9%
During performance evaluations	13%
Not applicable	52%

Q10. Do you utilize or interface with Virginia Career Works (VCW) for recruiting?

Answer Choices	Responses
Yes, for assistance with job fairs	30%
Yes, to advertise our job openings	48%
No, but I would like to engage with VCW	13%
No, I don't plan to engage with VCW	13%
I am not familiar with Virginia Career Works	26%

Q11. Would your HR team utilize assistance from workforce development and training partners in writing recruitment notices?

Answer Choices	Responses
Yes	57%
No	43%

Q12. Does your company provide on-the-job training?

Answer Choices	Responses
Yes, provided in-house	96%
Yes, provided through an outside partner	0%
Yes, both in-house and through an outside partner	0%
Not provided	4%

Q13. Has your company previously worked with any of the community colleges' workforce development and training teams? If so, in what capacity? Select all that apply.

Answer Choices	Responses
Recruitment and hiring events	61%
Industry-related curriculum development	9%
Job-specific training programs	4%
Creation of apprenticeships	9%
Not applicable/Never used	35%

Q14. How often does your organization meet or talk with workforce development teams from your local community college?

Answer Choices	Responses
None of the above	61%
Once a year	9%
More than once a year	4%
Quarterly	9%
Never, but we plan to engage community colleges	35%

Q15. How would your company rate the value of training and credentialing programs offered by the community colleges?

Answer Choices (1=poor / 5=excellent)	Responses
1	28%
2	17%
3	22%
4	28%
5	6%

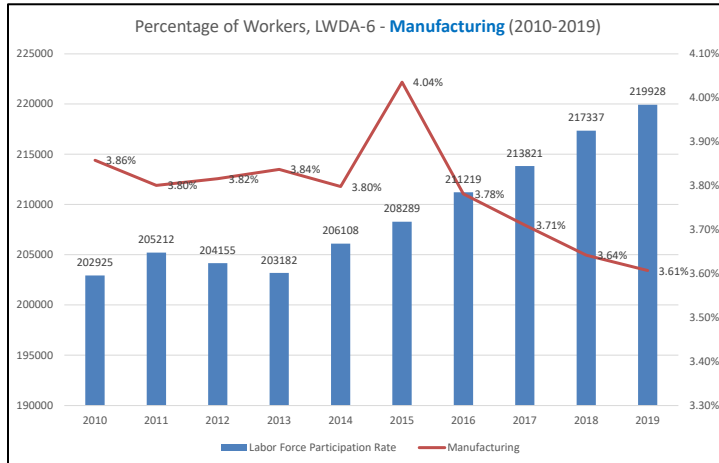
Q16. The Central Virginia Partnership is hosting a virtual Manufacturing Roundtable Discussion and invites you to participate. Would you be willing to participate on Tuesday, June 8, 1:00-2:30 pm?

Answer Choices	Responses
Yes	81%
No	19%

Q17. Are there other non-workforce or operational resources needed to support your industry in this region? If so, please describe.

Responses	
Wage studies, best practices, etc.	
We need more vocational school options.	
Virginia should reduce unemployment benefits to encourage people to go back to work.	
public-based transportation is really key	

Manufacturing Labor Force

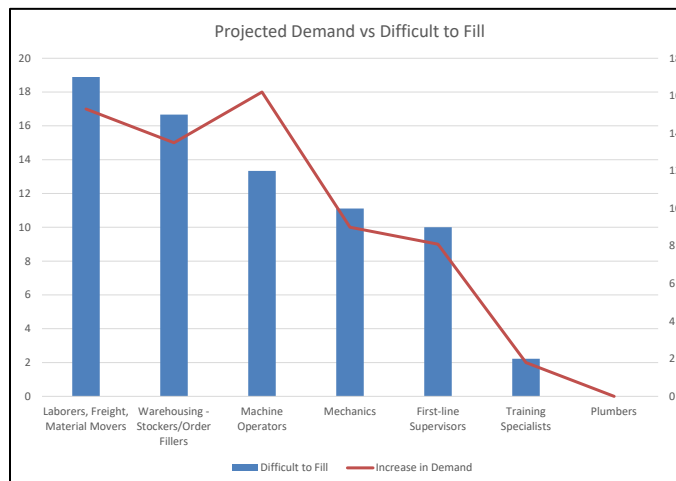


Source: JobsEQ®, American Community Survey, 2015-2019; excludes Food/Beverage Manufacturing



1

Demand

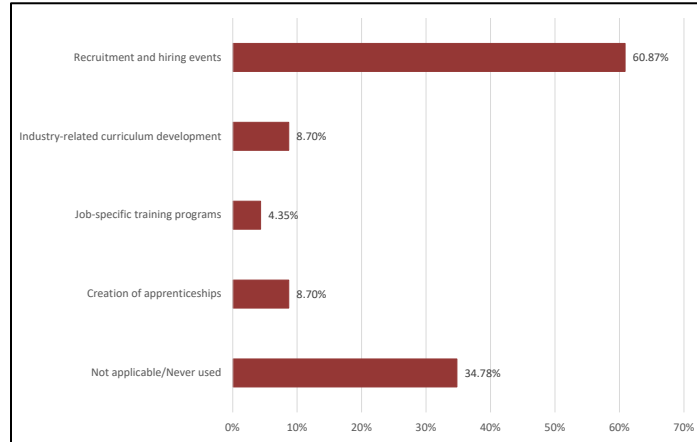


Source: Survey questions
 Q2. What positions in your organization are the most difficult to fill? (21 responses)
 Q8. The Q4 2020 data from the Bureau of Labor Statistics (BLS) suggests the greatest demand for workers in Manufacturing is in the areas listed below. Given your company's plans or expected trends in this industry, do you anticipate the demand for these positions will change over the next three years? (23 responses)



2

Community College Engagement



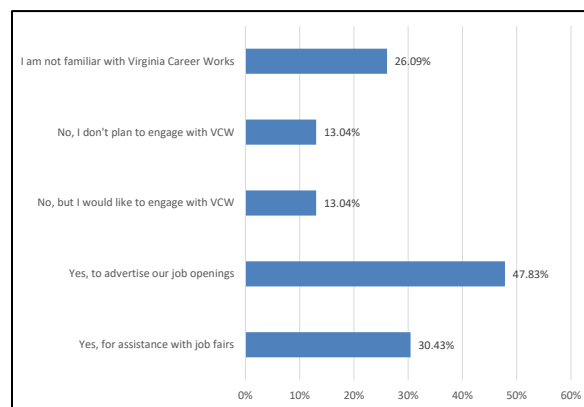
Source: Survey questions

Q13. Has your company previously worked with any of the community colleges' workforce development and training teams? If so, in what capacity? (23 responses)



3

Workforce Development Partnerships



Source: Survey questions

Q10. Do you utilize or interface with Virginia Career Works (VCW) for recruiting? (23 responses)



4

Sector Strategies Survey 2021 - Business & Financial Services

Q1. What is the number of employees at this facility?	
Answer Choices	Responses
200+	25%
150-199	25%
100-149	0%
50-99	38%
20-50	0%
Less than 20	13%

Q2. What positions in your organization are the most difficult to fill. Select all that apply.	
Answer Choices	Responses
Administrative	14%
Management	29%
Office Clerks	29%
Customer Service Representatives	43%
Operations Managers	14%
Training and Development Specialists	29%
Other (please specify)	see below
Tellers	

Q3. Is there a particular recruiting tool/job board that provides you with better candidates than another? Select all that apply.	
Answer Choices	Responses
Indeed	43%
LinkedIn	57%
Monster	0%
Glassdoor	0%
FlexJobs	0%
Professional Association	29%
Other (please specify)	
Company Job Posting Site	

Q4. How would you rate the quality of candidates applying for positions in your organization?	
Answer Choices (1=poor / 5=excellent)	Responses
1	13%
2	38%
3	38%
4	13%
5	0%

Q5. Does your onboarding and/or training of new hires include any of the following? Select all that apply.	
Answer Choices	Responses
None of the above	0%
Emphasis on company/organizational values	100%
Expectation of the job	86%
Attendance policies	71%
Company Culture	100%

Q6. From where are the majority of your new hires coming?	
Answer Choices	Responses
Within the region (30-minute or less commute)	57%
Within the region (30-60 minute commute)	14%
Outside of the region (e.g. Richmond, Lynchburg, Fredericksburg or other in-state location)	14%
Outside of Virginia	14%

Q7. If your employees work remotely, what percentage will continue to work remotely after COVID restrictions are lifted?	
Answer Choices	Responses
100%	0%
75-99%	29%
50-74%	14%
Less than 50%	29%
None of our employees work remotely	29%

Q8. Are there any particular issues or challenges specific to the region that make it difficult for you to recruit employees to the area? Select all that apply.	
Answer Choices	Responses
None of the above	0%
Cost of living too high	40%
Lack of affordable housing	40%
Lack of public transportation	20%
Compete with similar businesses for the same labor pool	0%
Other (please specify)	see below
Access to affordable international travel routes	
Making more money on unemployment, not desiring to go back to office work	

Q9. The Q4 2020 data from the Bureau of Labor Statistics (BLS) suggests the greatest demand for workers in Business & Financial Services is in the areas listed below. Given your company's plans or expected trends in this industry, do you anticipate the demand for these positions will change over the next three years?				
Answer Choices	Increase	Decrease	No change	Not applicable
Office Clerks	20%	20%	40%	20%
Customer Service Representatives	57%	14%	29%	0%
Operations Managers	14%	14%	71%	0%
Administrative Support	14%	14%	57%	14%
Training and Development Specialists	43%	0%	57%	0%

Q10. Does your company have a career pathway for each position? If so, when is it shared with the employee?	
Answer Choices	Responses
Pre-hire	14%
During onboarding/training period	29%
During performance evaluations	43%
Not applicable	14%

Q11. Do you utilize or interface with Virginia Career Works (VCW) for recruiting?

Answer Choices	Responses
Yes, for assistance with job fairs	14%
Yes, to advertise our job openings	0%
No, but I would like to engage with VCW	0%
No, I don't plan to engage with VCW	43%
I am not familiar with Virginia Career Works	43%

Q12. Would your HR team utilize assistance from workforce development and training partners in writing recruitment notices?

Answer Choices	Responses
Yes	43%
No	57%

Q13. Does your company provide on-the-job training?

Answer Choices	Responses
Yes, provided in-house	71%
Yes, provided through an outside partner	0%
Yes, both in-house and through an outside partner	14%
Not provided	14%

Q14. Has your company previously worked with any of the community colleges' workforce development and training teams? If so, in what capacity? Select all that apply.

Answer Choices	Responses
Recruitment and hiring events	43%
Industry-related curriculum development	14%
Job-specific training programs	0%
Creation of apprenticeships	14%
Not applicable/Never used	57%

Q15. How often does your organization meet or talk with workforce development teams from your local community college?

Answer Choices	Responses
None of the above	57%
Once a year	0%
More than once a year	29%
Quarterly	14%
Never, but we plan to engage community colleges	0%

Q16. How would your company rate the value of training and credentialing programs offered by the community colleges?

Answer Choices (1=poor / 5=excellent)	Responses
1	0%
2	0%
3	40%
4	40%
5	20%

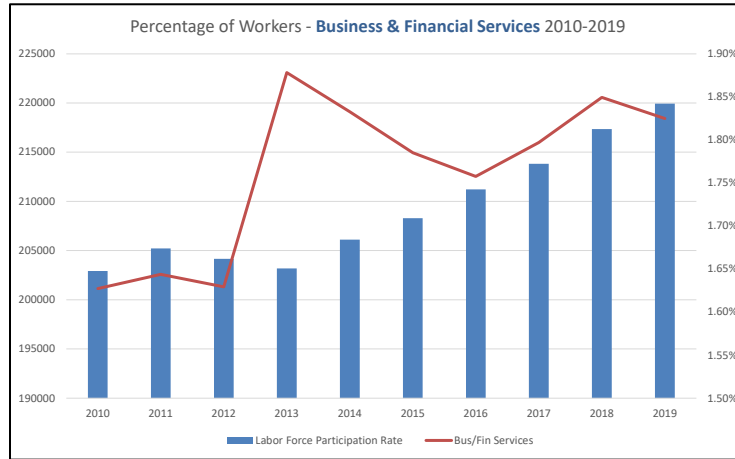
Q17. The Central Virginia Partnership is hosting a virtual Business & Financial Services Roundtable Discussion and invites you to participate. Would you be willing to participate on Thursday, June 17, 10:00-11:30 am?

Answer Choices	Responses
Yes	43%
No	57%

Q18. Are there other non-workforce or operational resources needed to support your industry within the region? If so, please describe.

Responses	None
------------------	------

Business & Financial Services Labor Force

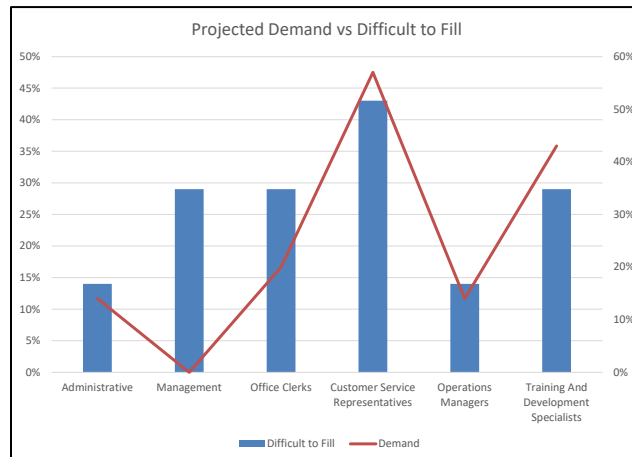


Source: JobsEQ®, American Community Survey, 2015-2019



1

Demand



Additional Difficult to Fill From Survey:

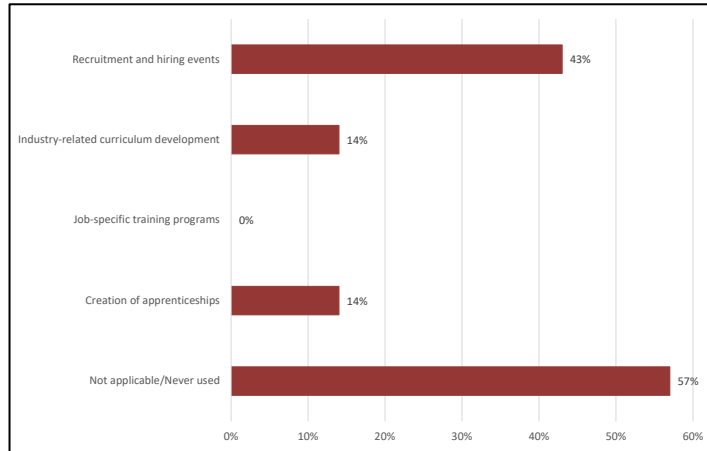
- Tellers

Source: Survey questions
 Q2. What positions in your organization are the most difficult to fill? (7 responses)
 Q9. The Q4 2020 data from the Bureau of Labor Statistics (BLS) suggests the greatest demand for workers in Business/Financial Services is in the areas listed below. Given your company's plans or expected trends in this industry, do you anticipate the demand for these positions will change over the next three years? (7 responses)



2

Community College Engagement



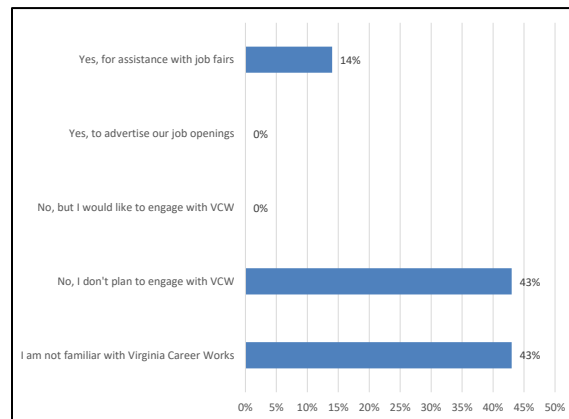
Source: Survey questions

Q14. Has your company previously worked with any of the community colleges' workforce development and training teams? If so, in what capacity? (7 responses)



3

Workforce Development Partnerships



Source: Survey questions

Q11. Do you utilize or interface with Virginia Career Works (VCW) for recruiting? (7 responses)



4

Sector Strategies Survey 2021 - Information Technology

Q1. What is the number of employees at this facility?	
Answer Choices	Responses
200+	0%
150-199	0%
100-149	0%
50-99	29%
20-50	57%
Less than 20	14%

Q2. What positions in your organization are the most difficult to fill. Select all that apply.	
Answer Choices	Responses
Administrative	0%
Management	0%
Software Developers	100%
Quality Assurance Engineers	33%
Management Analysts	17%
Computer User Support / Help Desk	17%
Computer Systems Analysts	17%
Computer and Information Systems Managers	17%
Other (please specify) - see below	see below
<i>Robotics specialists</i>	
<i>Technicians</i>	
<i>Data Scientists</i>	

Q3. Is there a particular recruiting tool/job board that provides you with better candidates than another? Select all that apply.	
Answer Choices	Responses
Indeed	33%
LinkedIn	67%
Monster	0%
Glassdoor	0%
FlexJobs	0%
Professional Association	50%
Other (please specify) - see below	see below
<i>Lever</i>	
<i>Currently using a national vendor</i>	
<i>Personal networks</i>	
<i>ClearanceJobs</i>	

Q4. How would you rate the quality of candidates applying for positions in your organization?	
Answer Choices (1=poor / 5=excellent)	Responses
1	0%
2	14%
3	57%
4	29%
5	0%

Q5. Does your onboarding and/or training of new hires include any of the following? Select all that apply.

Answer Choices	Responses
None of the above	0%
Emphasis on company/organizational values	100%
Expectation of the job	100%
Attendance policies	71%
Company Culture	100%

Q6. From where are the majority of your new hires coming?

Answer Choices	Responses
Within the region (30-minute or less commute)	43%
Within the region (30-60 minute commute)	29%
Outside of the region (e.g. Richmond, Lynchburg, Fredericksburg or other in-state location)	0%
Outside of Virginia	29%

Q7. If your employees work remotely, what percentage will continue to work remotely after COVID restrictions are lifted?

Answer Choices	Responses
100%	0%
75-99%	0%
50-74%	57%
Less than 50%	43%
None of our employees work remotely	0%

Q8. Are there any particular issues or challenges specific to the region that make it difficult for you to recruit employees to the area? Select all that apply.

Answer Choices	Responses
None of the above	0%
Cost of living too high	86%
Lack of affordable housing	43%
Lack of public transportation	0%
Compete with similar businesses for the same labor pool	57%
Other (please specify)	0%

Q9. The Q4 2020 data from the Bureau of Labor Statistics (BLS) suggests the greatest demand for workers in Information Technology is in the areas listed below. Given your company's plans or expected trends in this industry, do you anticipate the demand for these positions will change over the next three years?

Answer Choices	Increase	Decrease	No change	Not applicable
Software Developers	50%	0%	50%	0%
Quality Assurance Engineers	80%	0%	20%	0%
Management Analysts	40%	0%	40%	20%
Computer User Support / Help Desk	17%	0%	83%	0%
Computer Systems Analysts	33%	0%	50%	17%
Computer and Information Systems Managers	50%	0%	33%	17%

Q10. Does your company have a career pathway for each position? If so, when is it shared with the employee?	
Answer Choices	Responses
Pre-hire	0%
During onboarding/training period	17%
During performance evaluations	33%
Not applicable	50%

Q11. Do you utilize or interface with Virginia Career Works (VCW) for recruiting?	
Answer Choices	Responses
Yes, for assistance with job fairs	0%
Yes, to advertise our job openings	14%
No, but I would like to engage with VCW	43%
No, I don't plan to engage with VCW	14%
I am not familiar with Virginia Career Works	43%

Q12. Would your HR team utilize assistance from workforce development and training partners in writing recruitment notices?	
Answer Choices	Responses
Yes	50%
No	50%

Q13. Does your company provide on-the-job training?	
Answer Choices	Responses
Yes, provided in-house	57%
Yes, provided through an outside partner	0%
Yes, both in-house and through an outside partner	29%
Not provided	14%

Q14. Has your company previously worked with any of the community colleges' workforce development and training teams? If so, in what capacity? Select all that apply.	
Answer Choices	Responses
Recruitment and hiring events	71%
Industry-related curriculum development	29%
Job-specific training programs	14%
Creation of apprenticeships	29%
Not applicable/Never used	29%

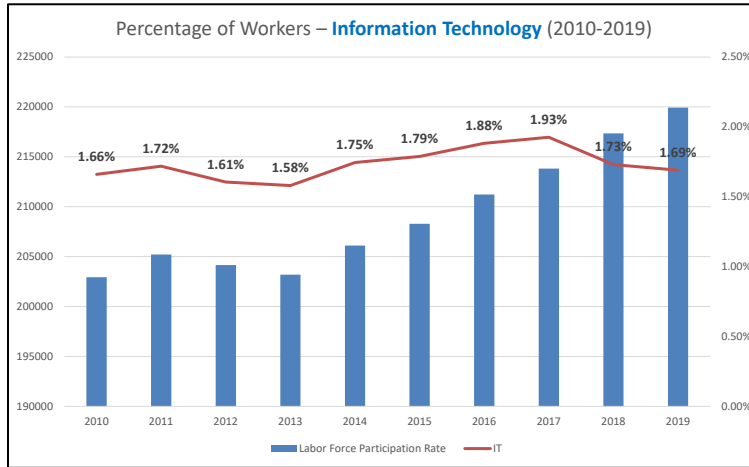
Q15. How often does your organization meet or talk with workforce development teams from your local community college?	
Answer Choices	Responses
None of the above	43%
Once a year	0%
More than once a year	43%
Quarterly	0%
Never, but we plan to engage community colleges	14%

Q16. How would your company rate the value of training and credentialing programs offered by the community colleges?	
Answer Choices (1=poor / 5=excellent)	Responses
1	14%
2	0%
3	57%
4	14%
5	0%

Q17. The Central Virginia Partnership is hosting a virtual Information Technology Roundtable Discussion and invites you to participate. Would you be willing to participate on Monday, June 14, 1:00-2:30 pm?	
Answer Choices	Responses
Yes	71%
No	29%

Q18. Are there other non-workforce or operational resources needed to support your industry in this region? If so, please describe.	
Responses	
<i>Funding from the County and State for a new site for business operations</i>	

Information Technology Labor Force

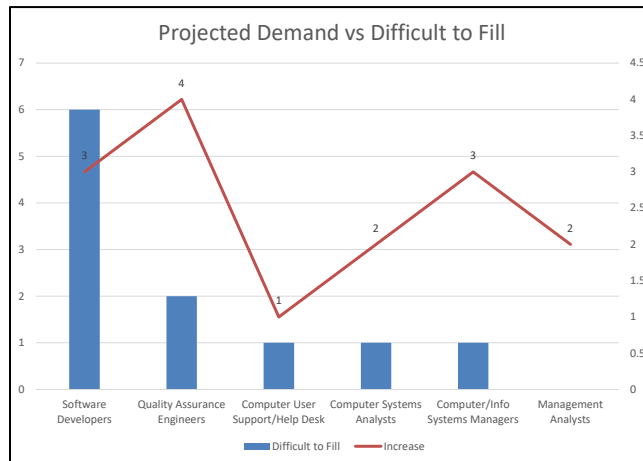


Source: JobsEQ®, American Community Survey, 2015-2019



1

Demand



Additional Difficult to Fill (from survey):

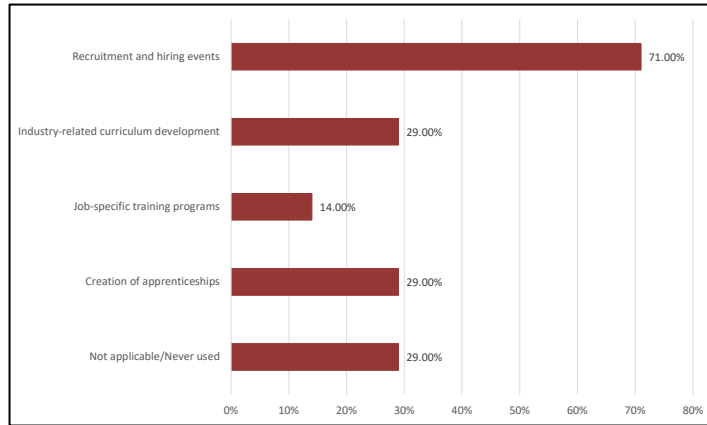
- Technicians-2
- Robotics Specialists-1
- Data Scientists-1

Source: Survey questions
 Q2. What positions in your organization are the most difficult to fill? (6 responses)
 Q8. The Q4 2020 data from the Bureau of Labor Statistics (BLS) suggests the greatest demand for workers in Information Technology is in the areas listed below. Given your company's plans or expected trends in this industry, do you anticipate the demand for these positions will change over the next three years? (6 responses)



2

Community College Engagement



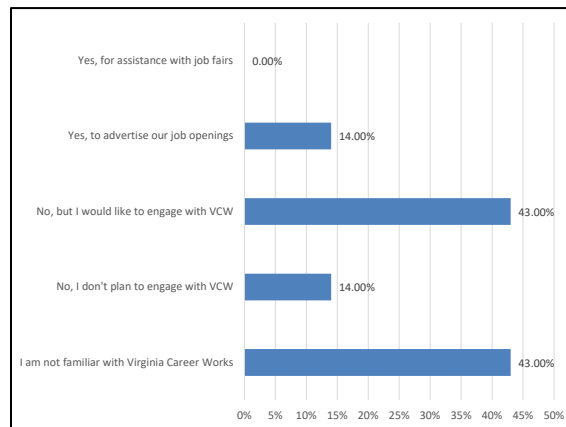
Source: Survey questions

Q14. Has your company previously worked with any of the community colleges' workforce development and training teams? If so, in what capacity? (7 responses)



3

Workforce Development Partnerships



Source: Survey questions

Q11. Do you utilize or interface with Virginia Career Works (VCW) for recruiting? (6 responses)



4

Sector Strategies Survey 2021 - Food & Beverage Processing

Q1. What is the number of employees at this facility?	
Answer Choices	Responses
200+	8%
150-199	8%
100-149	8%
50-99	8%
20-50	23%
Less than 20	46%

Q2. What positions in your organization are the most difficult to fill. Select all that apply.	
Answer Choices	Responses
Administrative	0.00%
Management	8.33%
Counter Workers	33.33%
Stockers and Order Fillers	16.67%
Janitors and Cleaners	16.67%
First-line Supervisors	8.33%
Customer Service Representatives	0.00%
Agricultural Managers	41.67%
Other (please specify)	see below
<i>BOH Skilled Staff</i>	
<i>Field worker</i>	
<i>Carpenter</i>	
<i>Agricultural workers</i>	
<i>Horticulturalists (Growers of Plants)</i>	

Q3. Is there a particular recruiting tool/job board that provides you with better candidates than another? Select all that apply.	
Answer Choices	Responses
Indeed	67%
LinkedIn	17%
Monster	0%
Glassdoor	0%
FlexJobs	0%
Professional Association	33%
Other (please specify)	see below
<i>Facebook</i>	
<i>winejobs.com</i>	
<i>Our Instagram has worked well. We have almost 10,000 followers</i>	
<i>word of mouth</i>	
<i>Hortjobs.com, hirehorticulture.com</i>	

Q4. How would you rate the quality of candidates applying for positions in your organization?	
Answer Choices (1=poor / 5=excellent)	Responses
1	8%
2	54%
3	15%
4	15%
5	8%

Q5. Does your onboarding and/or training of new hires include any of the following? Select all that apply.

Answer Choices	Responses
None of the above	0%
Emphasis on company/organizational values	92%
Expectation of the job	92%
Attendance policies	85%
Company Culture	85%

Q6. From where are the majority of your new hires coming?

Answer Choices	Responses
Within the region (30-minute or less commute)	54%
Within the region (30-60 minute commute)	38%
Outside of the region (e.g. Richmond, Lynchburg, Fredericksburg or other in-state location)	0%
Outside of Virginia	8%

Q7. Are there any particular issues or challenges specific to the region that make it difficult for you to recruit employees to the area? Select all that apply.

Answer Choices	Responses
None of the above	15%
Cost of living too high	15%
Lack of affordable housing	38%
Lack of public transportation	23%
Compete with similar businesses for the same labor pool	69%
Other (please specify)	see below
Labor costs	

Q8. The Q4 2020 data from the Bureau of Labor Statistics (BLS) suggests the greatest demand for workers in Food & Beverage Processing is in the areas listed below. Given your company's plans or expected trends in this industry, do you anticipate the demand for these positions will change over the next three years?

Answer Choices	Increase	Decrease	No change	Not applicable
Counter Workers	75%	0%	8%	17%
Stockers and Order Fillers	45%	0%	36%	18%
Janitors and Cleaners	45%	0%	36%	18%
First-line Supervisors	64%	0%	27%	9%
Customer Service Representatives	36%	0%	27%	36%
Agricultural Managers	45%	0%	36%	18%

Q9. Does your company have a career pathway for each position? If so, when is it shared with the employee?

Answer Choices	Responses
Pre-hire	15%
During onboarding/training period	15%
During performance evaluations	31%
Not applicable	38%

Q10. Do you utilize or interface with Virginia Career Works (VCW) for recruiting?	
Answer Choices	Responses
Yes, for assistance with job fairs	15%
Yes, to advertise our job openings	8%
No, but I would like to engage with VCW	15%
No, I don't plan to engage with VCW	8%
I am not familiar with Virginia Career Works	69%

Q11. Would your HR team utilize assistance from workforce development and training partners in writing recruitment notices?	
Answer Choices	Responses
Yes	50%
No	50%

Q12. Does your company provide on-the-job training?	
Answer Choices	Responses
Yes, provided in-house	69%
Yes, provided through an outside partner	0%
Yes, both in-house and through an outside partner	31%
Not provided	0%

Q13. Has your company previously worked with any of the community colleges' workforce development and training teams? If so, in what capacity? Select all that apply.	
Answer Choices	Responses
Recruitment and hiring events	8%
Industry-related curriculum development	23%
Job-specific training programs	8%
Creation of apprenticeships	15%
Not applicable/Never used	54%

Q14. How often does your organization meet or talk with workforce development teams from your local community college?	
Answer Choices	Responses
None of the above	38%
Once a year	15%
More than once a year	8%
Quarterly	0%
Never, but we plan to engage community colleges	38%

Q15. How would your company rate the value of training and credentialing programs offered by the community colleges?	
Answer Choices (1=poor / 5=excellent)	Responses
1	33%
2	25%
3	8%
4	8%
5	25%

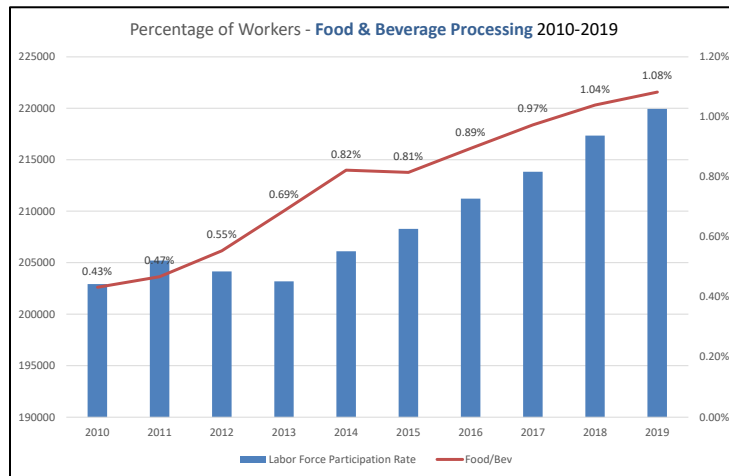
Beverage Processing Roundtable Discussion and invites you to participate. Would you be willing to participate on Wednesday, June 16, 2:00-3:30 pm?

Answer Choices	Responses
Yes	42%
No	58%

Q17. Are there other non-workforce or operational resources needed to support your industry in this region? If so, please describe.

Responses	None
------------------	------

Food & Beverage Processing Labor Force

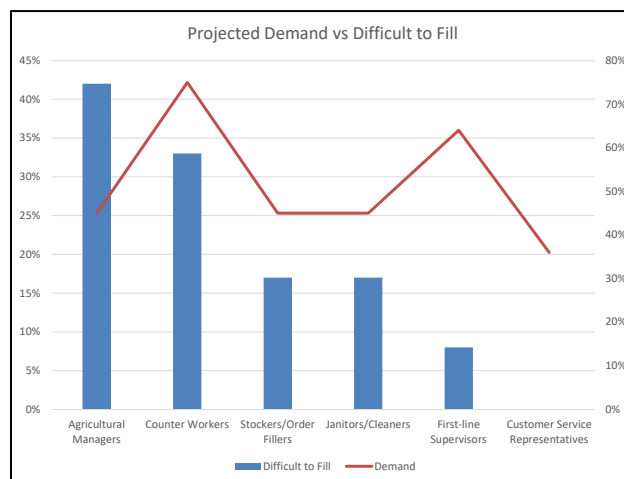


Source: JobsEQ®, American Community Survey, 2015-2019



1

Demand



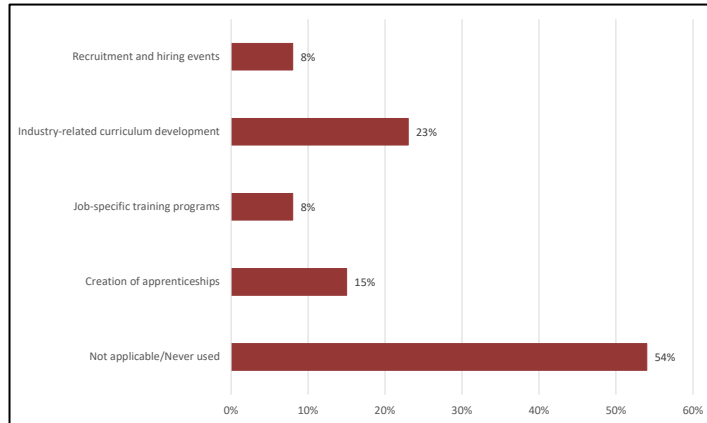
Additional Difficult to Fill From Survey:

- Field Workers
- Carpenters
- Agricultural Workers
- Horticulturalists
- BOH Skilled Staff

Source: Survey questions
 Q2. What positions in your organization are the most difficult to fill? (13 responses)
 Q8. The Q4 2020 data from the Bureau of Labor Statistics (BLS) suggests the greatest demand for workers in Food/Beverage Processing is in the areas listed below. Given your company's plans or expected trends in this industry, do you anticipate the demand for these positions will change over the next three years? (13 responses)

2

Community College Engagement



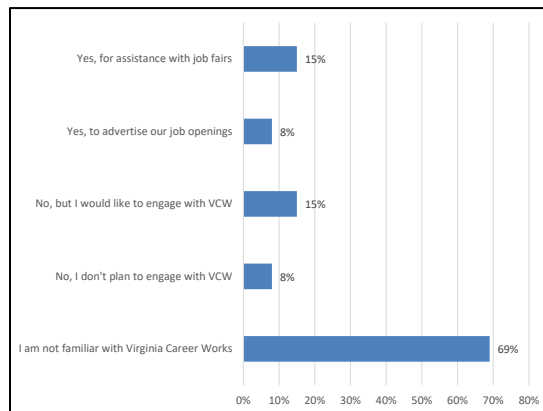
Source: Survey questions

Q13. Has your company previously worked with any of the community colleges' workforce development and training teams? If so, in what capacity? (13 responses)

The Ivy Group, Ltd. 2012

3

Workforce Development Partnerships



Source: Survey questions

Q10. Do you utilize or interface with Virginia Career Works (VCW) for recruiting? (12 responses)



4

Appendix 4

Colorado Regional Sector
Partnership Convener Training
Workbook (2013)

COLORADO REGIONAL SECTOR PARTNERSHIP CONVENER TRAINING WORKBOOK



April 29-May 1, 2013

Prepared by Collaborative Economics
and the Woolsey Group, LLC

CONTENTS

A. Defining the Scope of Your Sector Partnership.....	4
Exhibits	
<i>Sector Partnerships: What Works Well (And Not So Well).....</i>	<i>6</i>
<i>The Sector-Cluster Connection.....</i>	<i>6</i>
<i>Getting The Scope Just Right.....</i>	<i>7</i>
B. Preparing to Launch Your Sector Partnership.....	8
Exhibits	
<i>Civic Entrepreneurs are the Key.....</i>	<i>10</i>
<i>Roles Played by Civic Entrepreneurs.....</i>	<i>10</i>
<i>Sample Sector Partnership Launch Invitation – Non-Employer Partners.....</i>	<i>11</i>
<i>Sample Sector Partnership Launch Invitation – -Employer.....</i>	<i>12</i>
C. Holding The Launch Meeting.....	13
Exhibits	
<i>Sample Meeting Setup.....</i>	<i>15</i>
<i>Sample Agenda For Launch Meeting.....</i>	<i>16</i>
D. Organizing The Aftermath.....	17
Exhibits	
<i>Sample Meeting Summary.....</i>	<i>19</i>
<i>The Green Alliance Committee.....</i>	<i>20</i>

A

DEFINING THE SCOPE OF YOUR SECTOR PARTNERSHIP

MAKE THE CASE FOR A NEW APPROACH

Launching a sector partnership often represents a break from tradition. It challenges the status quo, requires a much deeper level of employer engagement, demands a much greater commitment to collaboration, and can deliver remarkable results. But, it does require that you make the case for a new approach, not just a tweak to existing efforts, to prepare people for a very different kind of partnership. Use examples from other places, and the talk through “what works well and not so well” when it comes to sector partnerships. Draw from the sector partnership toolkit.

CREATE A REGIONAL SECTOR STRATEGY TEAM

Those who answer the call for a new approach will become the core of your regional sector strategy team. Some or many of these team members attended the Sector Strategy Summit in January, while others have been brought on board since then, and still others have yet to be recruited. It is important to include not only partners from workforce development, but also economic development and other segments of the community that could be called on to collaborate with employers. When assembling the team, remember to recruit for “champions” not “representatives”, and for “doers” not “talkers.” Set the tone early that a sector partnership is about what you can contribute to the effort, not what you resources you can access or what product you can sell. The result will be a coalition of the willing.

ASSEMBLE A SHARED SET OF FACTS

Decisions-making should be data-driven, not anecdote inspired or politically influenced. If you are to work collaboratively, you must have a shared set of facts from which you operate. In the case of sector partnerships, this means a good quantitative profile of the regional economy that enables your team to identify key sectors and clusters, and assess them in terms of job growth, wages, specialization, and other factors. The key here is working through the shared facts together, and then surfacing different perspectives and interpretations from your diverse team. But it must be one more thing: you must collectively assess “readiness” factors of a target industry in your region. This is where your anecdotal knowledge does come into play.

NOTES

FOCUS ON WORKING DEFINITIONS

As you determine the scope of your sector partnership, keep in mind the strong benefits of “working definitions.” A common pitfall at this juncture can be paralysis by analysis, where the perfect becomes the enemy of the good. In other words, as you identify the sector or sectors as the focus for your efforts, remember that you are developing a working definition that is always evolving to some degree, especially at the margins. That goes for the specific industry segments that you target, the geographic scope of your sector partnership, and the composition of your sector team.

DEVELOP WORKABLE SOLUTIONS

While you need to be satisfied with working definitions to avoid paralysis, you must also focus on specific obstacles that could compromise your efforts, and develop workable solutions so you can move forward. These will be in situations in which there are no single right answers. The key here is to talk through options, define the best path, and move ahead, while revisiting your assumptions and decisions periodically. Common areas where you may need workable solutions: how to overcome long distances when engaging employers, how big to build your sector partnership, and how to build on existing efforts and avoid turf battles.

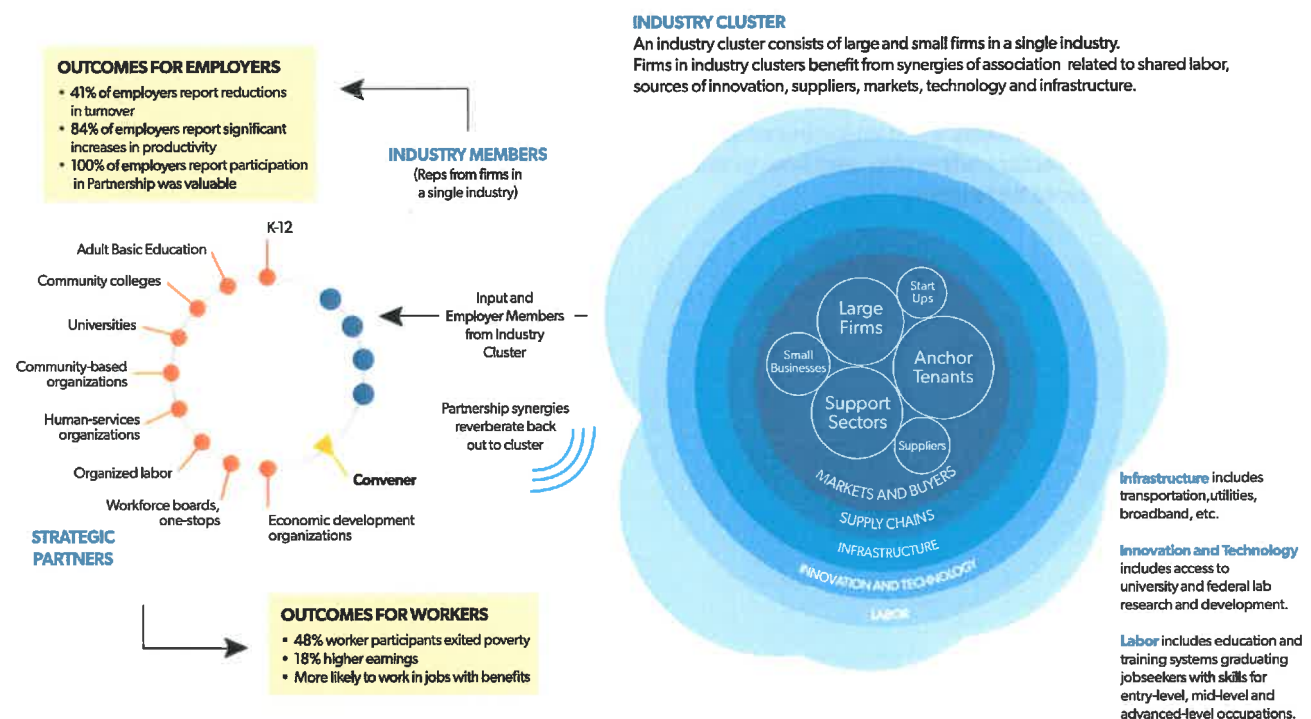
NOTES

SECTOR PARTNERSHIPS: WHAT WORKS WELL (AND NOT SO WELL)

Clusters of Companies
Employers as Partners
Industry Driven
Regionally Based
Existing Industry Strength or Emerging Speciality
Focus on Industry Competitiveness and Growth
Opportunity Focused
Employer Priorities First
Champion Driven
Coalitions of the Willing
People and Relationships
A Disciplined, Replicable Process

Individual Firms
Employers as Customers
System or Institution Driven
Statewide Top-Down or Too Local
Wishful Thinking
Focus on Workforce Only
Problem Driven
Target Populations First
Representation Oriented
Futile Search for Consensus
Organizations and Jurisdictions
A Mysterious, Unique Occurrence

THE SECTOR-CLUSTER CONNECTION



Adapted from National Governors Association, The Woolsey Group

GETTING THE SCOPE *JUST RIGHT*

Ask yourself:

Is the Geography right for this partnership? Too big, too small? Just right?

- Too big: A whole state. Half a state. (Hint: put some parameters on your geographic reach like: strong identity for this industry in a particular area, like along a Highway corridor? Is this reach manageable, i.e. will we actually interact and encourage interaction?)
- Too small: A neighborhood (Why not? Because you won't get the depth and breadth you need to really address a target industry's needs)
- Just right: Start with your target industry's natural labor market region with parameters that will actually allow for a collective identity and employer-to-employer interaction. The geographic reach may expand or narrow over time.

Is the Scope of Industry right? Too broad, too narrow? Just right?

- Too broad: "Advanced Industries" defined as any industry that uses some advanced technology (bioscience + aerospace + IT, etc). (Why not? You're taking on the world!)
- Too narrow: Tortilla Manufacturers. Physical Therapy providers. Trucking companies. (Why not? You'll end up with one short-term solution, not a partnership.)
- Just right: Advanced Manufacturing. Food & Beverage Manufacturing. Healthcare providers. Transportation and Logistics. (Why? Breadth and Depth)

What about employer champions? Membership? What is too big, too small? Just right?

- Too big: 150 employer champs at your launch meeting!
- Too small: 2 employer champs at your launch meeting! (if this happens, just have a conversation with them, ask them to help you build an invite list).
- Just right: Aim for 25-30 champs at your launch meeting, be happy if you get 10 or more. Aim for a broader employer membership of much bigger: 30-80 members, and over time expect to reach all or most of companies in your region and target industry, even if they are not active champs or members.

Are we expanding beyond our own jurisdictional boundaries?

- Don't just be a LWIB, economic development agency, college or single organization doing this work.
- Do expect that your support or partner team will be multiple lwibs, economic development agencies, colleges and other organizations.
- Do expect to cross city and county lines (no sector partnership is actually in just one if they're really looking at their natural labor market).

B

PREPARING TO LAUNCH YOUR SECTOR PARTNERSHIP

DESIGNATE A SECTOR STRATEGY CONVENER TEAM

While your regional sector strategy team may be much larger, you will need a smaller core group that takes responsibility for convening employers. This is an essential task that will determine the success of your sector partnership. It requires **people who are collaborative, disciplined, and are “finishers.”** The convener team must be able to do the job or be able to **find the right people to get the job done. They must be able** to put aside personal biases and organizational agendas to facilitate and support the deep engagement of employers that will be the key to launching a sector partnership.

FOCUS ON CIVIC ENTREPRENEURS

Engaging employers for a sector partnership involves much more than creating a list and sending an invitation to the company, asking for a representative to attend a meeting. **Instead, you are on a mission to find a certain kind of leader, one who not only understands the strategic direction and has decision-making authority at his or her business, but who also has demonstrated the characteristics of a “civic entrepreneur.”** A civic entrepreneur is driven by opportunity, entrepreneurial in approach (both risk-taking and persistent), operates collaboratively, and is motivated by the belief that the long-term success of his/her company and prosperity of the community are interdependent.

IDENTIFY AND RECRUIT EMPLOYER CHAIRS

With your focus on civic entrepreneurs, it is now critical that you identify and secure employer chairs. Your goal should be to identify one or more civic entrepreneurs who will agree to, at a minimum, chair the launch meeting for a sector partnership. If you can secure the commitment of employer chairs who are willing to lead the launch phase (say three to six months), that is even better. Ideally, one of your employer chairs should host the meeting at their place of business, with one or more of them working with you to tap their networks to identify other civic entrepreneurs in their industry, sign the invitation letter, and send an encouraging reminder email to invitees. Also, it can work well to secure both an established civic entrepreneur and an emerging leader as co-chairs.

NOTES

BUILD THE LIST OF POTENTIAL EMPLOYER CHAMPIONS

Working with your civic entrepreneur employer chair(s), create a list of sector employers and civic entrepreneur leaders from those employers. Your goal is to create a critical mass of civic entrepreneur leaders to ensure that there will be enough champions to step forward to drive a sector partnership. Our experience is that a core of 15-25 works well, but even 5-10 of the right people can catalyze a sector partnership. Once a critical core is identified, then you can build out the list with business leaders who may or may not be civic entrepreneurs yet, but who are from important employers and could be positively influenced by the civic entrepreneur leaders you have identified.

MAKE THE RIGHT ASK AND FOLLOW UP

The best ask is employer-to-employer, civic entrepreneur-to-civic entrepreneur. The ask should be straightforward: it is essential that we as an industry work together on key issues and opportunities, and team up with community partners who want our industry to be successful for the good of our region. And, we want your personal involvement because you are a leader in our industry. Note what is not part of the ask: an invitation focused on identifying workforce needs or another specific pre-determined topic, or an invitation that treats the employer as a customer. This is about convening employers on their terms, without a preconceived notion of what the outcome will be. That means that you and the employers will need to have a tolerance for ambiguity, because until the employers have an opportunity to identify their priorities, it would be premature to pre-judge the outcomes.

NOTES

CIVIC ENTREPRENEURS ARE THE KEY

FUNDAMENTAL LESSONS

Regions Take Responsibility
(Collaborate to Compete)

Sectors/Clusters Drive Regional Economies
(Build on Strength)

Collaboration Links Economies and Communities
(Feed the Vital Cycle)

Recipe More Important Than the Ingredients
(Every Region Can Succeed)

Civic Entrepreneurs are the Catalyst for Progress
(Focus on People and Relationships)



ROLES PLAYED BY CIVIC ENTREPRENEURS

STAGE 1: INITIATION (Motivators, Networkers)

Civic entrepreneurs **motivate** themselves and others to look at their community differently. They personally demonstrate for others a new level of responsibility for the future direction of their community. They **network** among their friends and then move beyond their comfort zone to connect with other leaders in the community who are critical to starting a process of change.

STAGE 2: INCUBATION (Teachers, Conveners)

Civic entrepreneurs help **educate** their community, preparing it for participating effectively in a collaborative process of change. Once a foundation is built, some become **conveners** of a fair and effective decision-making or incubation process, ensuring that it involves a diverse cross-section of the community and operates according to clear rules and with a strong discipline that drives for results.

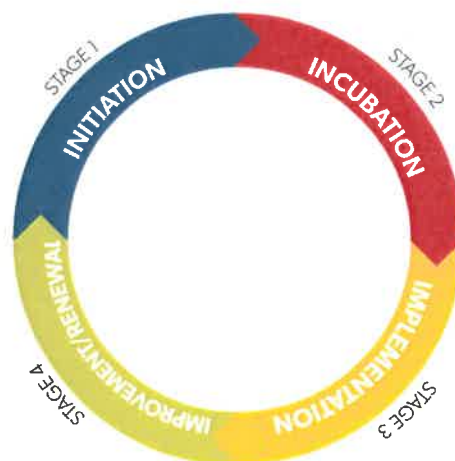
STAGE 3: IMPLEMENTATION (Recruiters, Drivers)

As **integrators**, civic entrepreneurs recruit expertise, locate resources, and otherwise assemble the necessary ingredients for successful implementation of tangible initiatives. As **drivers**, they ensure that measurable objectives are set and reached, that implementation efforts avoid fragmentation, duplication or rigidity in approach, and that the focus remains on challenging objectives.

STAGE 4: IMPROVEMENT/RENEWAL

(Mentors, Agitators)

As **mentors**, civic entrepreneurs help establish organizational platforms for the community to continue working together on important issues. As **agitators**, they fight complacency by constantly reminding people that change is a continuous process.



Adapted from Doug Henton, John Melville, Kim Welsh, *Grassroots Leaders for a New Economy*, pp. 75-79

SAMPLE SECTOR PARTNERSHIP LAUNCH INVITATION – NON-EMPLOYER PARTNERS

Dear Sector Strategy Partners,

As you know, as a result of the teamwork at the CO Sectors Summit in January this year, we are **targeting manufacturing, healthcare and tourism/hospitality for new sector partnerships in 2013**. Now that we have Energy already up and running, it's time to tackle our next target industry. That will be manufacturing. Thanks to all of you who have already given us input and commitments to make this launch a success.

Lisa McCabe, Gary Kellogg, Ed Roe and I have worked out a plan for **May 9th at the Springfield Valley Chamber to launch the new Advanced Manufacturing Partnership**. We have arranged for Gary and Ed will make opening remarks, including presenting some key (but short) data related to the strength of manufacturing in our region, and including an overview of what a sector partnerships is and can be for our region's manufacturing. Lisa will facilitate the meeting, and will help make sure that employers in the room do most of the talking. This partnership is about their needs.

The time for the **launch meeting will be 2-5:00 pm**. I've attached a draft invite to company partners that we are using to recruit participants, and that we hope you can use (feel free to tweak) to help us out.

We need your support to make this successful. A number of CEO's have been contacted already including Rick Carter (Valley View), Alex Villa (WARMC), Dana Ellerby (HRMC) and Brian Turney (KRMC). These individuals will help identify and recruit other companies to participate. We have also created lists of companies in our area to contact based on the NAICS codes we are using to define advanced manufacturing in our area. We'll need your help to do outreach and issue invitations. Our goal is to issue 50 invitations, and have 25 confirmed participants by April 25th. Lisa and I will follow up with you individually to ask for help with specific companies and to find out which companies you already have in your rolodex.

Your role at the Launch meeting will be 1) to represent your program and organization, simply by being there; and 2) to listen. This meeting, and the ongoing meetings and activities of the partnership, will be employer-driven. Our goal will also be to encourage employers to be active partners going forward. Our collective role as non-employer partners will be to listen and understand the biggest growth opportunities for advanced manufacturing in our region, and coordinate to tackle strategy areas that will yield the highest impact for companies and workers. This partnership is not a one-time deal; it is intended to be a long-term approach to working with our manufacturers.

Please let me know if you would like to discuss further, and if you can attend. I can be reached at (234) 765-9876 or jen.dorrey@cityofspringfield.gov. I look forward to hearing from you regarding Springfield Valley AMP participation.

Warm regards,
Jen

SAMPLE SECTOR PARTNERSHIP LAUNCH INVITATION – EMPLOYER PARTNERS

Dear Brian,

This is a follow up to the message I left earlier about the launch meeting of our new Springfield Valley Advanced Manufacturing Partnership. The AMP is being co-sponsored by a collaborative group of private and public organizations that have joined together to facilitate the growth of our region's manufacturing industry. Here are some details about the agenda and outcomes.

The May 9th meeting is intended to "launch" a public-private partnership focused on manufacturing for Springfield, Jones and Macomb Counties. This stems from the realization that manufacturing in our area is a critical driver of our economy. Manufacturing provides X jobs to our community, shows considerable staying power based on past and projected growth, and a relatively high concentration of firms than other areas around the country. We want to explore this, and find ways to collaboratively leverage the growth opportunities for your industry.

We are modeling our partnership after successful sector partnerships around the State and across the country. Sector partnerships can be a place for companies to collectively address issues related to competitiveness and growth; a single table at which to work with multiple public programs; and an opportunity to help create solutions to pressing issues. They are among the few initiatives with evidence showing benefits to companies and firms, as well as workers and jobseekers. Companies report increased networking power within their cluster, increased productivity, reduced turnover, and even new product lines or innovative business ideas. These partnerships often focus on workforce development issues, and where that happens workers tend to benefit from accurate training for the job, increased attachment to jobs, and better earnings.

The anticipated outcome for the Launch is to come away with industry-determined priorities for action and formation of teams to pursue these priorities with community partners. Industry leaders will determine the priorities and champion the teams. Community partners such as workforce development, education, economic development, and others will be there too. They will be in "listening" mode. I know they will appreciate hearing and better understanding the growth opportunities, and needed actions to leverage those opportunities, directly from you.

This partnership will be all about action. We anticipate that workforce issues may be targeted, but also expect an array of other priorities related to business growth to emerge. We expect to come out of the meeting with an industry-stakeholder team ready to collaborate on next steps. None of this can happen without industry input.

The May 9th meeting will be a 3-hour commitment, from 2:00 to 5:00 at the Springfield Chamber. We realize this is a big ask. We think this is a big opportunity. We hope you join us.

Please let me know if you would like to discuss further, and if you can attend. I can be reached at (234) 765-9876 or jen.dorrey@cityofspringfield.gov. I look forward to hearing from you regarding Springfield Valley AMP participation.

Warm regards,
Jen



HOLDING THE LAUNCH MEETING

CHOOSE A DISCIPLINED PROCESS (THE HOOK)

There is no one right process to use in the employer launch meeting. However, do spend time on this choice, and choreograph how it will play out. Choose a disciplined process that allows the collective employer voice to emerge. This first meeting is the hook—employers must see a reason to commit to a next step. Based on years of experience with many different processes, we offer a set of design criteria and a preferred approach. Whatever approach you choose, it should be designed to have employers identify opportunities for sector growth, priority requirements for capitalizing on these opportunities, and employer champions for those priorities, who are willing to take a next step after the launch meeting. It is essential that by the end of the meeting, there is a shared product (priority opportunities, requirements, and champions) that is the employers—and not anyone else’s agenda. To this end, it is best if community partners are good listeners during this meeting, giving employers the opportunity to be heard. Our preferred approach—which we will simulate in this training—combines these elements in a way that has proven to be effective with civic entrepreneurs.

START WITH OPPORTUNITY

Always lead with opportunity. By starting the launch meeting with a focus on opportunities to grow our industry in this region, employers are immediately put in a frame of mind that is conducive to working together on shared aspirations. In contrast, if the launch meeting starts with a listing of problems or needs, it can trigger the “blame game” or position employers as customers who are being asked to purchase solutions to their problems from the community. It can also trigger non-employer partners to try to answer all their questions (“We have a program for that.”). This is not the time for that conversation. What is on their horizon, what are they working towards as a business, what forces are at work that are creating opportunities for growth in this region? Opportunities can come in many forms (and it is okay to provide examples): new and expanding markets, new technologies and products, changes in government policy. Remember: the focus should be on opportunities first, before deciding on actions. A collective view of opportunities becomes the rationale for working together with the community on ways to unleash the potential for business growth and community prosperity.

NOTES

MOVE TO REQUIREMENTS FOR ACTION

Identifying opportunities is a necessary but insufficient condition for the successful launch of a sector partnership. After establishing that there is a strong rationale for action through the identification of opportunities, employers should then be asked to focus on the top requirements to capitalize on those opportunities. This discipline focuses them on the most important actions, not just “nice to have” changes or secondary issues. Again, you can provide examples: workforce/talent, infrastructure, innovation, capital access, regulatory process, export assistance, and others. The focus should be on priority actions that they could take in partnership with the community, not on actions that public or community programs should take independently or that someone else should take outside the community (e.g., federal or state government).

ASK FOR CHAMPIONS AROUND PRIORITIES

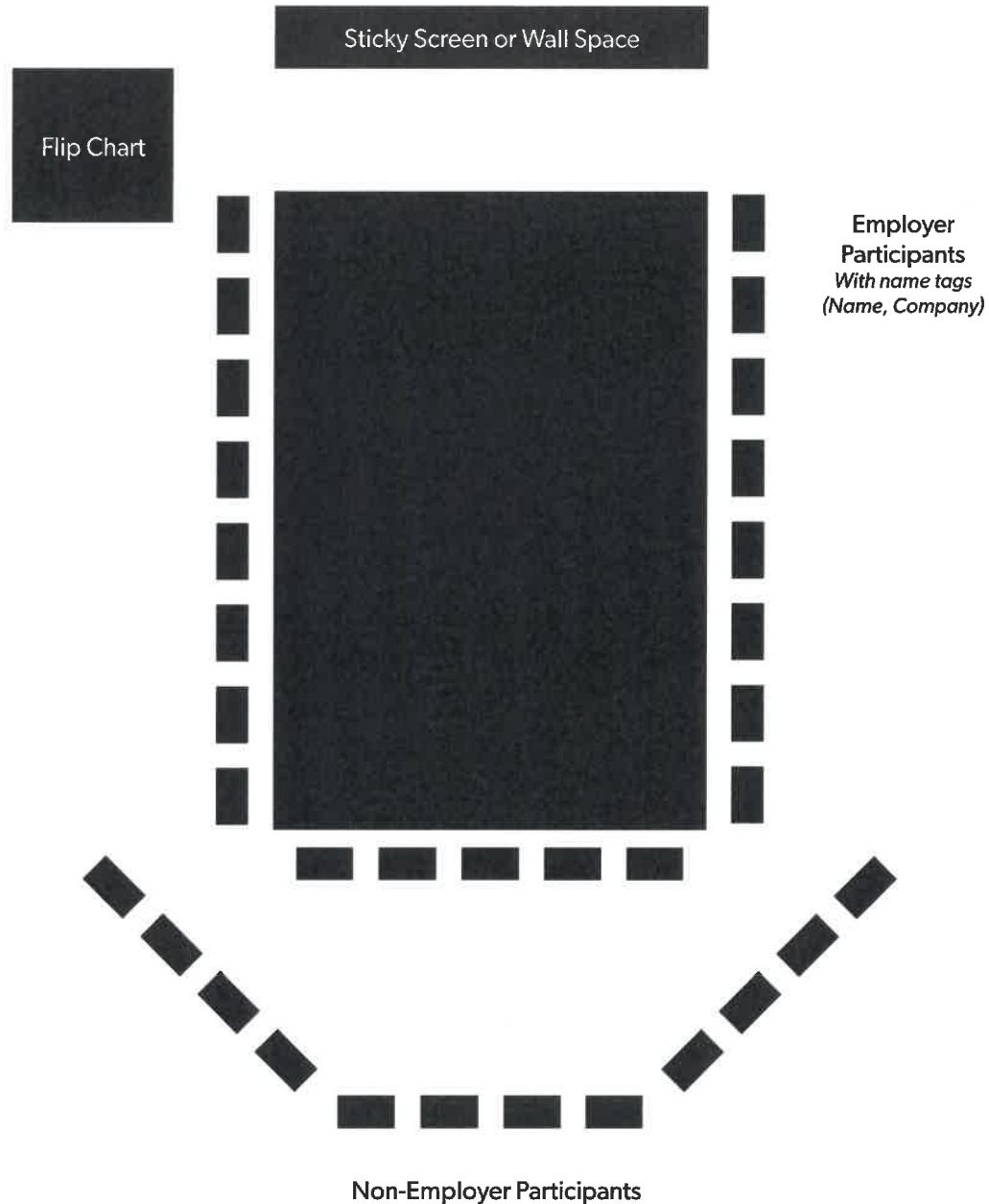
If the priority opportunities and requirements have been effectively identified, then the employers have created a shared rationale for collaboration and set of priority actions to be taken. It is typically at this point when employers start seeing a real vision for change and support. It is at this point therefore where there needs to be a call for champions. This launch meeting was not a paper exercise, but rather a necessary first step towards action. The next step is for individuals to volunteer to flesh out major priorities for action, get more specific about actions and measurable outcomes, and agree to bring back these refinements at a second meeting. This step also is a further reality check on what employers really believe is most important. Make clear that the sector partnership will only proceed with what the employers agree to help champion. No champions, no initiative. Also, make the point here that the convening team will now help identify the appropriate community partners who are willing to work with employers on specific priorities.

AGREE ON A CLEAR NEXT STEP

There are many next steps that are possible and effective, but most importantly the next step should be clear and immediate. In fact, saving a few minutes at the end of the meeting to clarify the best next step is a good idea. A next step will include a meeting summary (i.e., their shared product of priority opportunities, requirements for action, and champions). It should include an in-person or virtual meeting by conference call of champions focused on specific action priorities--something that should happen within 30 days. Line up an employer champion who will host the call or meeting, and help record the results. Then, within 60 days, hold a second sector partnership meeting.

NOTES

SAMPLE MEETING SETUP



ROOM SET-UP

- Employer participants should sit at the big table or at the front or at the center somehow
- All non-employer partners should sit around the employers – this matters.
- The conversation at this meeting is about employers, by them. Public partners are listeners.

MATERIALS

- Colored markers
- ½ sheet and full sheets of paper (colored paper works best)
- Flip charts, easels
- Tape or an adhesive to stick papers on wall to display
- Large sticky notes

SAMPLE AGENDA FOR LAUNCH MEETING

Please use this sample agenda exactly as is, or just for inspiration! Don't be nervous about asking employers to roll up their sleeves! This exercise is pretty refreshing and engaging to them.

5 minutes

WELCOME

- a. Name your facilitator
- b. Thank everyone for being here and having a certain "tolerance for ambiguity"
- c. Round of introductions

5-10 minutes

BRIEFLY DESCRIBE WHAT YOU'RE UP TO

- a. You are launching a sector partnership in this industry, in our region because this industry really matters to our regional economy... (Use your "Sector Partnership Primer" from your Summit materials for talking points)
- b. Important talking points

This only happens with industry engagement!

We can only focus on your industry with your help to drive and champion the agenda, and to implement the strategies developed collectively to support the growth of your industry.

30-60 minutes TALKING ABOUT OPPORTUNITIES

- a. What are the big opportunities for your industry?
- b. Push the conversation to what are the big opportunities "in our region specifically", i.e. what are the big opportunities for this specific industry (sector) here in our region.
- c. Discuss openly, energetically for 10 minutes, then start writing them down.
- d. Your Choice (you will need markers):

Write for all to see on flip chart; or

Have participants write their big opportunities on a 1/2 sheet or whole sheet of paper and actually stick them up on a wall (you can use a giant piece of parachute fabric sprayed with adhesive spray and tape to the wall – it's very useful). As the papers go up on the wall, cluster together the ones that are similar. You'll end up with 4-5 clusters of big opportunities.

30-60 minutes TALKING ABOUT REQUIREMENTS - What is it that we need to collectively tackle to leverage these opportunities? What would matter most? What would warrant our collective action? What can we do?

- a. Discuss openly for 10 minutes, and then start getting them in writing.
- b. Write requirements down! Flip chart these or write on paper and post to the sticky wall. Ask them to come up with 2-3 or more if they can. Cluster the similar requirements together again. You'll end up with 4-5 strategy areas.
- c. 10 minutes- Discussion about the strategy areas

30 minutes

THEN MOVE INTO COMMITMENTS - Use big sticky notes for this and one person at a time

- a. Ask them to stick their names on strategy areas that they can "champion" – i.e. help drive what happens in that area. They can choose more than one!
- b. Then with a different color sticky note, ask them to list out peers, other companies, names of people that should definitely be involved that aren't here today – stick those up on the wall. This is about getting them to help with recruitment.

You may end up with a strategy area with no names, no commitments. This is telling! It means it's not a priority right now. It may come back later, but right now this is not an area to be championed and prioritized. This is a good thing! This is a way to naturally prioritize and cull the initial workload.

10 minutes

WRAP-UP, NEXT STEPS & THANK YOU (BE EXCITED!)

Next steps

Those whose names are on strategy areas should get together, discuss a course of action, and present it back at the next meeting

Send invitations to those missing from the table

Set a date for next meeting

D

ORGANIZING THE AFTERMATH

IMMEDIATELY EXPAND THE CIRCLE OF EMPLOYERS

Despite your best efforts, some civic entrepreneurs on your list will not be able to make the launch meeting due to scheduling conflicts. You should reconnect with them, and give them a chance to see the results and join others as a champions. For those who did attend the meeting, ask them to identify at least one more civic entrepreneur like them, so they can be recruited to the effort. In fact, you might ask them when they volunteer as champions at the launch meeting to identify one additional civic entrepreneur they know who would be a good fit and that they will help recruit as a champion.

GIVE SPACE FOR THE EMPLOYER VOICE TO EMERGE

There will be a tendency at this point for community partners, with the best of intentions, to take over and drive action, not wanting to impose on the employers. While well-intentioned, this is a formula for failure. If community partners exert themselves too much, employers will recede in terms of engagement. At this critical moment, community partners must give enough space for the employer voice to emerge and solidify their engagement as partners, not customers.

BUILD COALITIONS OF THE WILLING AROUND PRIORITIES

While expanding the employer circle and giving space for the employer voice to emerge, you should also be identifying community partners willing to work with employers on their terms. Not every potential community partner is well suited to this role. Some want to sell employers a product or solution, others push their own agenda, and still others are not willing to do the sustained work necessary to follow-through to action. Fortunately, your goal is to assemble “coalitions of the willing” around the priority areas for action. Don’t waste your time trying to repeatedly convince people or institutions to participate. They may come along later anyway when the sector partnership begins to show some success. In fact, they might even say it was originally their idea! You may also find that some employers originally at the table drop off. When this happens, don’t panic, but keep them informed of your progress. Be mindful that your sector partnership will not be all things to all people, and some will opt out. Others will opt in. Your goal is to keep the priorities and actions focused on what the collective employer group wants to focus on.

NOTES

STAY AGILE AND OPPORTUNISTIC

Once the sector partnership gets rolling, you will be surprised what opportunities for action will present themselves. The challenge will be to remain agile and opportunistic without losing focus and dissipating your momentum. Try to prioritize opportunities to leverage current priorities over completely new initiatives. Continue to be employer-driven and community-supported, a partnering arrangement that will help maintain discipline in considering new opportunities. Build teams of civic entrepreneurs that can weather changes better than super-champions that provide most of the leadership but would seriously compromise the effort if they for some reason could not continue.

CREATE JUST ENOUGH ORGANIZATION

Form should always follow function. Or, put another way: create only just enough organization for your current stage of implementation. If you over-reach, and spend more time on organization than action, you risk inciting turf wars, resource struggles, and other distractions from the most important tasks at hand. You risk driving away the employer civic entrepreneurs, who will sense the dysfunction and move on. Put more positively: you attend to organization, but do so in a measured, demand-driven way, consulting with your employer partners and being open to continuous improvement.

NOTES

SAMPLE MEETING SUMMARY

Region X Light Manufacturing Sector Strategy

The Region X Light Manufacturing Sector Strategy Team met on December 18, 2012, identifying priority opportunities and requirements to grow the sector in Region X. The Team identified the following priority opportunities to grow the sector:

- Serve growing, diverse markets for recreation equipment, wine industry equipment, machine tools, mining equipment, and others
- Capitalize on existing strengths and growing market for unmanned aircraft systems (UAS)
- Capitalize on new opportunities for re-shoring manufacturing from abroad, expansion of firms headquartered outside region, new entrepreneurial manufacturing firms, and integrated teams of local firms to compete for large procurements.

To capitalize on these promising opportunities to grow the sector in Region X, the Team then identified three priority areas for action, with private sector individuals volunteering to be initial champions in each area;

- *Expand the local pool of qualified manufacturing workers:* Focus on both top-level talent development (e.g., senior avionics engineers, managers) and mid- and entry level workers (e.g., cnc machine tool operators, welders, machinists), creating integrated approach to preparing the local manufacturing workforce (high schools, Region X College, Embry Riddle) and attracting and retaining talent (e.g., job fair). **Initial champions: Karen, Ginger, Norela, Lane, Paul, Robin.**
- *Promote manufacturing entrepreneurship:* Encourage young entrepreneurs with new/creative ideas, helping them access to investment capital. **Initial champions: Robin, Jim, Al, Casey.**
- *Promote Region X as a manufacturing hub:* Research and determine the nature and size of each niche manufacturing segment, develop regional develop regional marketing to get the County on the map, and create an ongoing mechanism for manufacturing sector communication and collaboration. **Initial champions: Tom, Robin.**

Next Steps: 1) Priority teams refine action areas, including short term and long term actions with measurable goals that can be taken; 2) Conference call January 21st at 3:00 p.m. to assess priority refinements and determine immediate action; 3) Next meeting February 26th, 3:00 p.m.

THE GREEN ALLIANCE COMMITTEE

In a rural area of western Pennsylvania, the Private Industry Council of Westmoreland-Fayette convenes the Green Alliance Committee, a sector partnership focused on energy efficiency related manufacturing. The partnership began with eight employers. Their immediate shared priority was the immediate training needs of solar, wind, and geothermal component parts manufacturing, as well as a growing commercial and residential retrofitting sector. Over the course of one year, employer members brought other employers to the table, and the number of companies involved grew to more than 40. It is now an active sector partnership including elected officials, economic development entities from four counties, and local community colleges. Its primary areas of focus are:

1. Training new and incumbent workers and
2. The growth of the regional energy-related manufacturing cluster.

Private sector members report that the committee's value is its networking power. It is a forum for sharing, joint policy creation, and practical problem solving related to common issues of competitiveness. Participating companies have entered into shared purchasing agreements that reduce costs for local materials, significantly increasing the market for local suppliers.

- Retrofitting companies have added new positions based on their ability to secure contracts for retrofitting schools and hospitals because of their newly trained workers. A small commercial HVAC company quadrupled its workforce as a result of expanded connections to residential retrofitting needs.
- A manufacturer of vermiculite, a material used to insulate batteries, discovered through the alliance that the material could be used in retrofitting insulation, as well as in green soil for potted plants and gardens.
- A steel fabricator discovered an expanded market in windmill towers, based on new connections with wind power parts suppliers.
- A small woodstove pellet manufacturer connected with oil and gas drilling companies via the alliance and proceeded to research uses of wood pellets as an absorber of waste products, thereby creating an entirely new product line in a significant market. That firm expanded from five employees to almost 30 and now purchases sawdust from sawmills in three counties.
- Another member makes Pyrex glass for solar panels. Via the alliance he added an entirely new production line to meet regional demand, creating 60 new jobs. In its first 18 months, over 150 new jobs were created out of a sector partnership originally focused on short term training issues.

