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Shenandoah Valley Partnership: Growing and Enhancing the Food and Beverage Manufacturing Industry

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Shenandoah Valley PARTNERSHIP

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Table of Contents

List of Tables

List of Maps

List of Figures

List of Graphs

Introduction

Plan Purpose

Shenandoah Valley's food and beverage industry provides thousands of jobs, and it has the potential to be a significant cluster for the region. A *cluster* is a geographic concentration of interconnected businesses and institutions in a particular field (Porter, 1990). For example, the California wine cluster includes many wineries, independent wine grape growers, different suppliers, and advertising businesses. Moreover, local universities assist the cluster by providing programs geared on viticulture. Other famous examples of clusters are Silicon Valley, financial services in New York City, and biopharmaceuticals in Boston. With the extensive literature on the benefits of clusters and the global competition to attract businesses, regions have made a substantial effort to understand how to grow and enhance their industries to become clusters. In the Shenandoah Valley, food and beverage manufacturing is one of the industries they are growing and enhancing. This plan aims to help the Shenandoah Valley Partnership (SVP), Shenandoah Valley's regional economic development agency, continue to grow and enhance its food and beverage manufacturing industry by interviewing and surveying the business to understand their needs. Also, interview service providers to understand their relationship with the businesses.

Client Description

The client of this plan is Dr. Jay Langston, the executive director of SVP. SVP is Shenandoah Valley's regional economic development agency. It serves 12 localities, seven counties: Augusta, Bath, Highland, Page, Rockbridge, Rockingham, and Shenandoah, and five independent cities: Buena Vista, Harrisonburg, Lexington, Staunton, and Waynesboro. SVP aims to connect businesses, governments, institutions, and state-wide strategic partners to boost economic development and job growth (Shenandoah Valley Partnership, 2021).

Map 1: The Localities SVP serves

They accomplish this by encouraging businesses to locate in the Shenandoah Valley, advocating for current business expansions, and assisting with regional workforce development initiatives (Shenandoah Valley Partnership, 2021).

Plan Outline

Literature Review

The literature review provides background knowledge on clusters and the role of the government in helping and growing a cluster. The literature review has three simple sections: what is a cluster, why do businesses cluster, and what is the role of the government in a cluster.

Existing Conditions

The existing conditions outline the economic environment of the food and beverage manufacturing in the Shenandoah Valley.

Methodology

The methodology details the research questions, data collection process, and analytical approach of the plan.

Findings

Findings outline the results from the survey and interviews.

Recommendations

This section provides goals, objectives, and actions based on findings and additional information.

Implementation Plan

The implementation section outlines a timeline for when to complete each action from the previous section.

Literature Review

What Is A Cluster

As mentioned in the introduction, clusters are geographic concentrations of interconnected businesses and institutions in a particular field (Porter, 1990). Famous examples of clusters are Hollywood's movie production and Las Vegas's casinos and amusements. Figure 1 shows a cluster's components: the trading sector, other related sectors, and supporting institutions. The trading sector is the primary driver of the cluster; it is the sector that sells goods and services outside the region. The other related sectors are also an essential part of the cluster because they constitute the local suppliers to the trade sector (Kures, 2014).

Figure 1: An Overview Of A Cluster

For example, in a tourism cluster, visitors' experience depends not only on the primary attraction (example: casino) but also on the complimentary attractions like hotels and restaurants. In other words, the complementary attraction supports and helps the primary attraction. The supporting institutions also play an important role in the cluster because they comprise consultants, investors, marketing and advertising businesses, universities, and government agencies that help with research, labor training, and advocacy (Rosenfeld, 2005).

Why Do Businesses Cluster
Businesses gain a competitive advantage by hiring specialized workers (Marshall, 1890).

Specialized Workers

Location theory suggests that businesses choose their location based on the area that will maximize their profit. A key determining factor for businesses is labor productivity; therefore, a location with a higher level of labor productivity would be preferred over a location with lower wages (Doeringer and Terkla, 1996). Businesses value workers with high productivity because these workers can produce products more efficiently. Additionally, having a plethora of skillful workers at a business's disposal is an advantage because it gives them the ability to replace an inferior worker with a more productive one (Wolman and Hincapie, 2015). In manufacturing, workers gain productivity-building skills on-the-job, which means that the skills of the labor force are related to the existing cluster in a region. Due to this, a new business located in an area will have the opportunity to hire workers with the necessary skills for their job (Doeringer and Terkla, 1996).

Knowledge Spillover
Businesses can also gain a competitive advantage with knowledge spillover. Knowledge spillover is the involuntary leakage and the voluntary exchange of useful information (Dumont and Meeusen, 2000). An example of knowledge spillover is when an individual gains knowledge from a job and uses it to create a business. Knowledge is particularly valuable in a knowledge-based economy, where local knowledge and "collective learning" help a business gain competitive advantage rather than natural advantages (Bekele and Jackson, 2006). Imagine a dairy business in Richmond, VA, with competitors in the Madison, WI region, one of the most prominent dairy clusters. The Richmond dairy business is at an enormous disadvantage because it does not have access to the same information compared to its competitors in Madison. In such cases, an emphasis on tacit knowledge spillover—face-to-face interaction—can overcome the deficiencies of "codified" knowledge (Bekele and Jackson, 2006).

Knowledge spillover helps spur innovation, which is crucial to high productivity and the survival of a cluster (Porter, 1998). It spillover leads to innovation by employees from different businesses in the same field exchanging ideas on how to improve their field (Carlino, 2001). Moreover, the denser the concentration of employees in a field, the likelihood innovation. (Carlino, 2001). Innovation also creates competitive and peer pressure, resulting in constant improvement so that competitors do not gain a competitive advantage (Porter, 1998). One of the

best benefits of knowledge spillover is innovation, which is essential to high productivity, and innovation helps the survival of a cluster (Porter, 1998).

Other Benefits Of Clustering

Specialized workers and knowledge spillover are not the only reasons why businesses cluster. Clustering helps businesses with input cost, economies scales, productivity, venture capital, and enhanced interaction between local suppliers and customers (Marshall 1890; Ellison, Glaeser, and Kerr, 2007; Maden, Smith, and Hansen, 2003; Kolympiris, Kalaitzandonakes, and Miller, 2011; Ohlin, 1935). Furthermore, clusters help create strong networks (Arzaghi and Henderson, 2008). With the numerous case studies and empirical evidence of the cluster's benefits, governments have struggled to understand their role in an industry cluster.

Role Of The Government In An Industry Cluster

Why Do Governments Care About Economic Development?

Governments have always had a role in economic development, regardless of the results. From an economic perspective, governments increased their economic activity because of labor mobility and global competition (Clarke and Gaile, 1989). Furthermore, for the local governments to have a healthy, skilled, and reliable workforce, they must address the needs of their citizens with public health, education, housing, local transportation services, cultural and recreational facilities, and childcare (UCLG, 2014). From a political standpoint, the health of the local economy is a major factor in voting. Government officials can influence voting behavior by promoting innovative policies, for instance through major land-use projects (Elkin, 1987). As an example, influencing the transportation budget is important; however, it does not get the same recognition or voting impact as economic development activities like bringing a fortune 500 business or building a convention center.

Why Too Much Government Involvement In Cluster Management Is Not Ideal

Although the government plays a role in helping to grow and enhance a cluster, too much government involvement can hinder competition and competitive advantage (Porter 1990). As clusters succeed, some governments have tried to force their creation which goes against the tenets of clusters. Clusters are naturally formed by businesses, not governments (UCLG, 2014). The formation of a cluster might take decades to form. Since decades are a lifetime in politics, we see governments try to speed up clustering by incentivizing and subsidizing businesses (Porter, 1998).

Subsidizing businesses delays innovation and creates an attitude of dependency; businesses would not invest and take a risk and focus their attention on their subsidies (Porter, 1998). Also, governments impose their biases on which clusters should exist based on their understanding of their community or the newest industry trends (ex: "We are Coal Miners," or "Our area is a Tech Hub") (Guidehouse, 2019). For example, with the success of Silicon Valley, localities want to be the "next Silicon Valley," which have unintended consequences because (a) it undermines the

idea of competitive advantage and (b) mirroring a locality without making it clear how they are different from the original gives the original locality the "first-mover advantage." (Hospers, Desrochers, and Sautet, 2008). Moreover, what works in one locality is not necessarily successful in another because of differences in laws, culture, knowledge, and workers.

Why Minor Government Involvement Is Not Feasible In Cluster Management

On the other hand, insufficient government help can prevent a cluster from reaching a competitive advantage (Porter, 1990). There are many advantages for a business when it is in a cluster, such as the availability of specialized workers and infrastructure. That would change if the government did not help or provide certain amenities to the clusters. Given the number of costs and uncertainties of businesses, it would not be feasible or realistic for them to provide all the necessary amenities to gain a competitive advantage. For instance, building an interstate highway to transport goods, training every worker, promoting the cluster, connecting with universities, and protecting the environment are impossible to be provided artificially (Saylor Academy, 2012).

The Government Role In A Cluster

According to Porter (1990), the role of the government is to create a good business environment so businesses can gain a competitive advantage. Porter (1990) explains that governments can create a good business environment by **(a)** *Focusing on specialized factor creation***:** The government must focus its attention on factors that contribute to competitive advantage: specialized apprenticeships programs, connecting universities with industries, trade associations, and helping facilitate private investment in businesses. **(B)** *Enforce strict product, safety, and environmental standards:* Strict standards for product, safety, and environment help with a competitive advantage because it forces businesses to make better quality products, at the same time, these standards should not absorb resources and cause production delays. **(C)** *Promote goals that lead to sustained investment:* Encourage sustained investment in human skills, innovation, and physical assets, and this could be done by tax incentives for long-term capital gains restricted to new investment in corporate equity.

Further, in his 2009 paper, Porter expanded on how governments can help clusters: Governments can collect and gather information about the cluster, which can help increase the efficiency of private sector investment and foster new business formation. Additionally, the government should provide adequate public infrastructure, such as improving highways, plus, help assemble cluster participants if private sector institutions have not done so. This helps the government to know local constraints to productivity and to identify gaps and weaknesses in clusters (Porter, 2009). The government policies should be neutral and pro-competition because all clusters are good, and competition promotes more innovation. Thus, the government should not choose among clusters but create policies that support upgrading in every cluster present in a location (Porter, 2009).

Existing Conditions

Study Area

As previously mentioned, Shenandoah Valley Partnership serves 12 localities: five independent cities (Lexington, Waynesboro, Staunton, Harrisonburg, and Buena Vista) and seven counties (Rockbridge, Bath, Highland, Shenandoah, Page, Rockingham, and Augusta). The region is in west-central Virginia and is 4,264-square miles. With Harrisonburg as the central location, Richmond, VA is roughly 130 miles away, Washington DC is roughly 145 miles away, Virginia Beach, VA is roughly 220 miles away, and Charlotte, NC is roughly 330 miles away as shown in Map 2. As of 2020, the population of the Shenandoah Valley is 370,620.
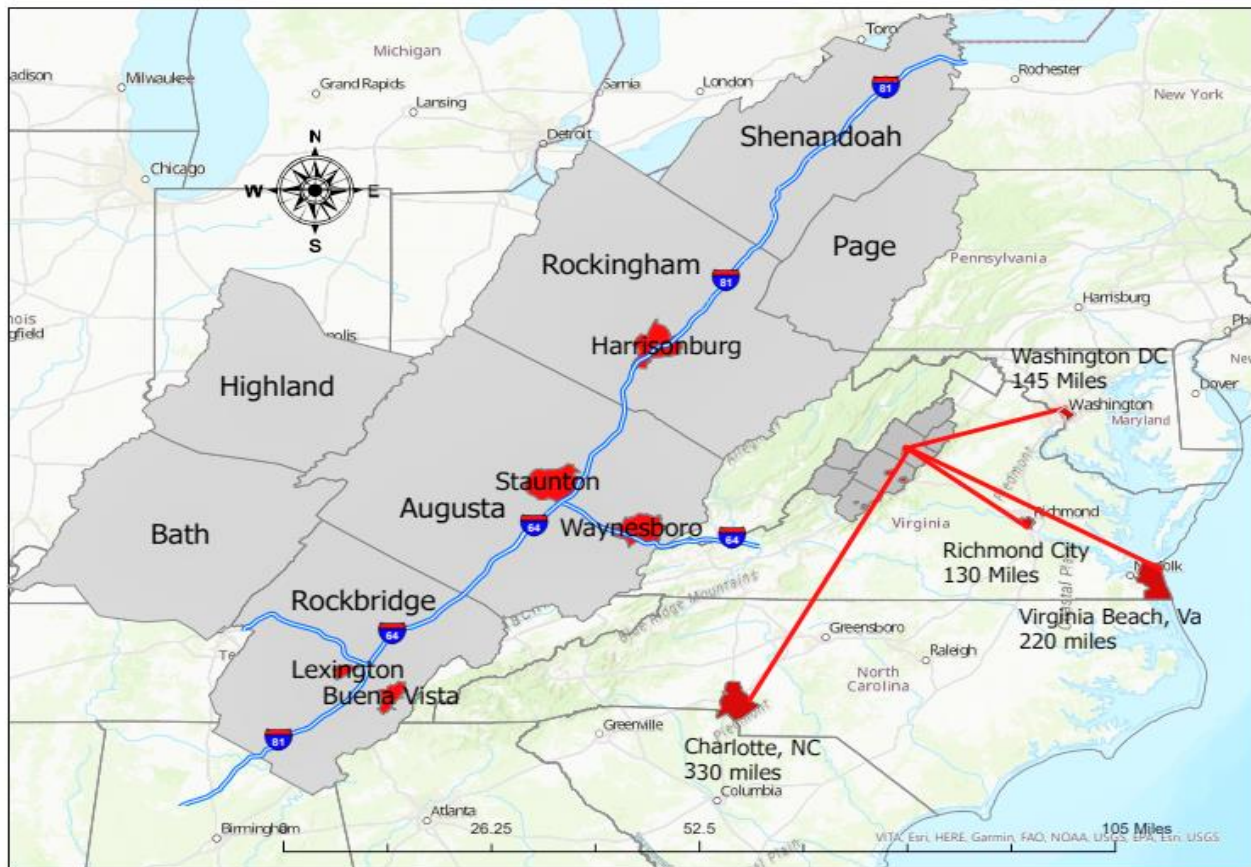
Map 2: Map of Shenandoah Valley and a map of the distance from Shenandoah Valley to Richmond, VA, Virginia Beach, VA, Washington, DC, and Charlotte, NC

The Cluster's Employment and Businesses

Businesses

There are over 100 businesses in the Shenandoah Valley's food and beverage manufacturing cluster. The major employers are Perdue, Cargill, Hershey, McKee, and Pilgrim Pride. Most businesses are concentrated in Harrisonburg-Rockingham MSA, Augusta County, and Shenandoah County, as shown in Table 1. Furthermore, most of the businesses are in "Animal Slaughtering and Processing," "Bakeries and Tortilla," and "Winery" as shown in Table 2. "Animal Slaughtering and Processing" sector is highly concentrated in the Shenandoah Valley (25 businesses). Businesses in "Animal Slaughtering and Processing" range from large corporations like Perdue and Pilgrim Pride to smaller businesses such as Black Oak Processing and Smoking and Bobby and Pj's Jerky Shack. Most of these businesses are in Rockingham and Shenandoah Counties. The second most concentrated subsector is "Bakeries and Tortillas," with 22 businesses in most are in Harrisonburg MSA. Most of the businesses are in "retail bakeries" like Sweet Treats and Bittersweet Bakery and a large corporate, McKee Food. The third most concentrated industry is winery with 17 businesses. There are no large corporations, and the wineries are spread out across the Shenandoah Valley with wineries in Page County, Rockbridge County, Harrisonburg MSA, Shenandoah County, and Augusta County.

Table 1: The Number of Businesses in Each County	
Localities	**Number of Businesses**
Augusta	12
Bath	1
Buena Vista	1
Harrisonburg City	16
Highland	5
Lexington City	7
Page	8
Rockbridge	5
Rockingham	29
Shenandoah	21
Staunton City	5
Waynesboro	7
Source: Dun and Bradstreet	

Table 2: The Number of Businesses in Each subsector	
Subsectors of Food and Beverage Manufacturing	**The Number of Businesses**
Animal Food Manufacturing	1
Animal Slaughtering and Processing	29
Bakeries and Tortilla	22
Bottled Water Manufacturing	2
Breweries	14
Carbonated soft drink	3
Dairy Processing	2
Food Distribution	2
Fruit and Vegetable Preserving and Specialty Food Manufacturing	5
Grain and Oilseed Milling	2
Grocery and Related Product Merchant Wholesalers	1
Malt Beverages	3
Manufacturing Ice	1
Other Food Manufacturing	12
Sugar and Confectionery Product Manufacturing	1
Winery	19
Source: Dun and Bradstreet	

Employment

There are nearly 10,000 workers in the Shenandoah Valley's food and beverage manufacturing cluster, with an average earning of $62,621. 51% of those individuals are in production occupations, as shown in Table 3. Moreover, based on the four-digit SOC code, the top occupations in the cluster are "Meat, Poultry, and Fish Cutters and Trimmers," "Packaging and Filling Machine Operators and Tenders," and "Laborers and Freight, Stock, and Material Movers, Hand." The "Meat, Poultry, and Fish Cutters and Trimmers" and "Food Batchmakers" occupations had significant job loss from 2017 to 2020 (52 jobs and 366 jobs); even though the number of jobs increased in the cluster from 2017 to 2020 (8,672 jobs to 9,448 jobs). The "labor and freight" did gain 299 jobs between those years.

Table 3: The Percentage of Individuals in Each occupation in Shenandoah Valley Partnership's Food Manufacturing	
Occupation	**Percentage**
Production	51.7%
Transportation and Material Moving	19.8%
Other	9.4%
Installation, Maintenance, and Repair	7.9%
Office and Admin Support	5.5%
Building and Grounds Cleaning and Maintenance	3%
Management	2.6%
Source: Industry Snapshot Report Food Manufacturing in Shenandoah Valley Partnership Region	

Economic Analysis of The Cluster

Location Quotient (LQ)

The food and beverage industry has a location quotient of 5.67 (Emsi, 2021), indicating it is a trade sector for the Shenandoah Valley and shows a high concentration of employment compared to the nation's food and beverage manufacturing employment. In the Harrisonburg MSA (City of Harrisonburg and Rockingham County) "Food Process and Manufacturing" sector LQ is 1.88, and the "Livestock Processing" sector is 28.12 (The U.S. Cluster Mapping 2018). Within the MSA, Rockingham County's "Live Processing" LQ is 18.77 with over 3200 employment which is the highest employment in the county, and out of the 12 localities that Shenandoah Valley Partnership serves, five of them have an LQ over 1 in either "Food Process and Manufacturing" and "Livestock Processing."

Industry Requirements

This section shows an estimate of purchases subsection made in the Shenandoah Valley food and beverage manufacturing. The estimates are in three categories, in-region purchases (bought within the Shenandoah Valley), imported purchases (bought outside of the Shenandoah Valley), and total purchases. The estimates are shown in Table 4. The biggest takeaway is that most of their poultry processing and animal slaughtering purchases come within the region, while animal production purchases come outside the region.

Table 4: Industry Purchases			
Purchases from	In-region Purchases	Imported Purchases	Total Purchases
Animal Production	$178,185,823	$608,508,150	$786,396,973
Poultry Processing	$209,461,051	$2,887,188	$212,48,238
Corporate, Regional Managing Offices	$23,250,537	$160,555,376	$183,805,913
Soybean and Other Oilseed Processing	$0	$84,774,038	$84,774,038
Animal (except Poultry Slaughtering)	$55,560,148	$21,017,028	$76,577,176
Source: Emsi			

Precedent Plans

The two precedent plans relevant to this professional plan are "2021 Shenandoah Valley Manufacturing Workforce Needs" and "Shenandoah Valley Partnership 2019 Economic Development Strategic Plan." The purpose of the "2021 Shenandoah Valley Manufacturing Workforce Needs" is to understand the workforce problems in the manufacturing sector. SVP interviewed 11 businesses from different sub-sectors in manufacturing, including food and beverage manufacturing. The key findings from the interview are that the participants are having difficulty hiring workers, but workers do not have the requisite skills for the job when they do hire. A lack of skilled workers is not the only problem; the participants feel that employees do not understand the required work ethic.

SVP interviewed two food and beverage manufacturing businesses for their study, and one of the main issues was staffing, specifically, the "mini-manager role," despite offering a six-figure salary. The other challenges were skill gaps and lack of work ethic. The following steps SVP wants to take are to have a marketing campaign for manufacturing, manufacturing community dialogue with area politicians, panel discussions around workforce needs, and discussion around how to leverage GO Virginia and other funding opportunities.

The second precedent plan is the "Shenandoah Valley Partnership 2019 Economic Development Strategic Plan." A key goal of the plan is to provide strategies on how SVP can help businesses trade locally and internationally. The strategic plan centers around workforce, target sectors (agribusiness, manufacturing, transportation and logistics, and IT), quality of life, and business climate. To achieve its purpose, SVP wants to fill in the gaps in the supply chain and seek a

closer working relationship with VEDP International Trade. They also want to study the potential development of a regional business park in conjunction with GO Virginia Region 8 and improve the quality of life by increasing tourism and improving workforce housing.

Methodology

Research Questions

The framing of the interview research questions is important because it helps spark conversation and provoke substantial answers. It was ideal to ask open-ended questions because this led to conversations that would not have happened if they were too rigid. Therefore, the first question was: *"What needs do your business have?"* Using this question as a first question ensured there was no preconceived notion regarding the business's needs and helped gain insight into their issues.

Table 5 shows the next set of questions. Each topic of interest has a topic question for the businesses to answer. These are some topics that the Shenandoah Valley Partnership feels are essential to know about the cluster. Additionally, each topic of interest provided information on different aspects of the cluster, and their answers helped gain a clear understanding of their needs.

The framing of the survey was based on the interview results. The survey questions were more direct and closed-ended because there was no opportunity to ask follow-up questions, and it was likely that the survey participants had the same needs as the participants in the interviews. Therefore, the survey was used to ask direct questions based on the needs that the participants had stated during the interviews. There were 34 questions asked in the survey. Following the demographic's questions, the first 12 questions were about capital needs: eight questions asked the participants if they had any challenges gaining access to capital, and four questions asked the participants if they had more funding to invest in their business, what would they spend it on? The following 12 questions were about the participants' workforce. Five survey questions asked the participants about their challenges with their workforce, and Four survey questions asked the participants about their relationship with the local learning institutions. The last set of questions asked the participants about their logistical needs. The questions can be found in the appendix.

Table 5: Research Questions (Interview)	
Research Question	
Big Picture Question	
What needs do your business have?	
Topics of Interest and Topic Question	
Topics of Interest	Topic Question
Business Climate	What is your opinion of Shenandoah Valley as a place to conduct business, and why?
Suppliers	What supplies do you purchase outside the region you wish were in the region?
Workforce	How is your business workforce
Potential needs	Are there future needs for your business you foreshadow?
Other services	Are there any other needs for your business?
	Are there any businesses you recommend I talk to?

Table 6: Research Questions (Survey)
What challenges do you have in gaining access to capital?
If you had more funding to invest in their business, what would you spend it on?
What challenges do you have with your workforce?
What is your relationship with the local learning institutions?
What are your logistical needs

Data Collection

Finding The Businesses
Dun and Bradstreet business directory, local Shenandoah Valley's economic development, and Google were used to create a food and beverage manufacturing business list

Instruments That Were Used

Interviews and surveys are the two instruments used to collect the data. The interviews were semi-structured, which means there were set questions asked to all participants, with additional questions asked during the interviews to clarify or further explain specific issues (Interviews, 2021). A semi-structured interview was ideal because it is not too rigid like structured interviews, nor is it unorganized or biased like an unstructured interview. Interviews are one of the best qualitative tools because it achieves the highest response rate (The Louisiana Community Network, 2021). Furthermore, it presents the opportunity to ask follow-up questions, and it allows the business to know that SVP has a vested interest in their well-being.

An online survey was used to conduct the surveys because it is relatively inexpensive, not time-consuming, and provides many responses in a short time frame. Interviews and Surveys are standard approaches when individuals and organizations want to know information about businesses.

When And How The Interviews And Surveys Were Conducted

The interview process started on December 13th and lasted until January 21st. The interviews were either over the phone or via Zoom. The survey was from February 15th-March 1st, and it was sent via email to the 85 businesses, excluding the interviewed businesses. 20 businesses participated in the whole study; 10 were interviewed and 10 took the survey. The participants came from nearly all of the counties that SVP serves, the three majorities were Rockingham County (five participants) and the City of Harrisonburg and Rockbridge County—both had three participants respectively. Most of the participants' industries were animal processing (four participants), brewery (four participants), winery, (four participants), and non-animal processing (four participants).

In terms of the survey, eight of the participants had less than 40 million in gross revenues in the most recent fiscal year. In other words, the vast majority of the participants were small business owners.

The Next Stage

In response to the survey and interview results, representatives from JMU, Virginia Tech, University of Richmond, local high schools in the Shenandoah Valley, GoVirginia, and USDA were interviewed to understand their involvement with the food and beverage manufacturing cluster. The interviews were via zoom and phone from March 21st-31st.

Analysis Method

The interviews and surveys were transcribed digitally, and because this is a qualitative study, thematic content and narrative analysis tools were used. The thematic content analysis helped establish an overarching understanding of the data and help identify common themes in the interviews and surveys. Then narrative analysis helped highlight and make sense of the businesses' critical parts of their answers.

Findings

The results from the findings can be found in the appendix.

The Findings Results

Table 7: Participation Rate		
Questions	**Ns**	**Interview or Survey**
What needs does your business have	10	Interview
What is your opinion of Shenandoah Valley as a place to conduct business, and why?	10	Interview
How is your business workforce	10	Interview
Are there future needs for your business you foreshadow?	10	Interview
Are there any other needs for your business?	10	Interview
Are there any businesses you recommend I talk to?	4	Interview
What challenges do you have in gaining access to capital?		
On a scale from 1 to 5, with 5 being extremely difficult, how difficult has it been to obtain funds/financing in the past 2 years?	10	Survey
On a scale from 1 to 5, with 5 being extremely difficult, how difficult has it been to obtain funds/financing from financial services in the Shenandoah Valley.	9	Survey
What types of financing has your business used within the last 2 years to meet your capital needs? (Select all that apply)	10	Survey
Rate your experience when trying to receive funds from any financial services listed below. (Virginia Agencies, Feder Government Agencies, Large bank, Small community bank, Angel or Venture Capital, Payday Lenders, any other financial services	10	Survey
If you answered below average or poor on any financial services, please explain why.	3	Survey
If you have been turned down for funding in the last two years, what were the reasons given? (Select all that apply)	6	Survey

Do you plan in the future to consider outside investors?	10	Survey
If yes, from who?	3	Survey
If you had more funding to invest in their business, what would you spend it on?		
If you had more capital/funds to invest in your business, what would you spend them on? (Check the three most important choices)	9	Survey
Does your current business location provide enough opportunities for future expansion?	10	Survey
If you could not expand at your current site, where would you consider expanding?	8	Survey
If you answered "Outside the Shenandoah Valley," please explain why.	2	Survey
What challenges do you have with your workforce?		
Where do your new hires come from? (Select the 3 most common)	9	Survey
What challenges have you encountered when hiring workers? (Select all that apply)	10	Survey
At this current moment, what is the most difficult position to fill?	5	Survey
What technical skills would you like incoming workers to have?	6	Survey
In the next 3-5 years, what type of workers will you most need?	7	Survey
In the next 3-5 years, what technical skills will workers need to have to help your company be successful?	6	Survey
Would you be interested in partnering with other businesses and the local institutions to train the local workforce?	10	Survey
What was your relationship with the local learning institutions?		
How would you rate your relationship with the local institutions listed below? (High school technical centers, Community colleges, Universities)	10	Survey
If you answered below average or poor on any institutions, please explain why.	1	Survey
Do you think the training given to individuals at the local institutions needs to improve? (High school technical centers, Community college certificate programs, Community colleges, Universities)	9	Survey

If you answered somewhat or strongly agree, what issues are you having with the training?	3	Survey
Name 2 specific technical skills you will like the institutions to teach.	2	Survey
logistical needs		
What type of businesses would you like Shenandoah Valley to attract? (Select all that apply)	17	Survey and Interview
How would you rate your logistics situation?	9	Survey
If you answered below average or poor on any of the choices, please explain why.	1	Survey
Has your location in Shenandoah Valley made it difficult to receive and deliver products?	8	Survey
In which regions of the U.S. has your business been most impacted by logistical issues and disruptions.	6	Survey

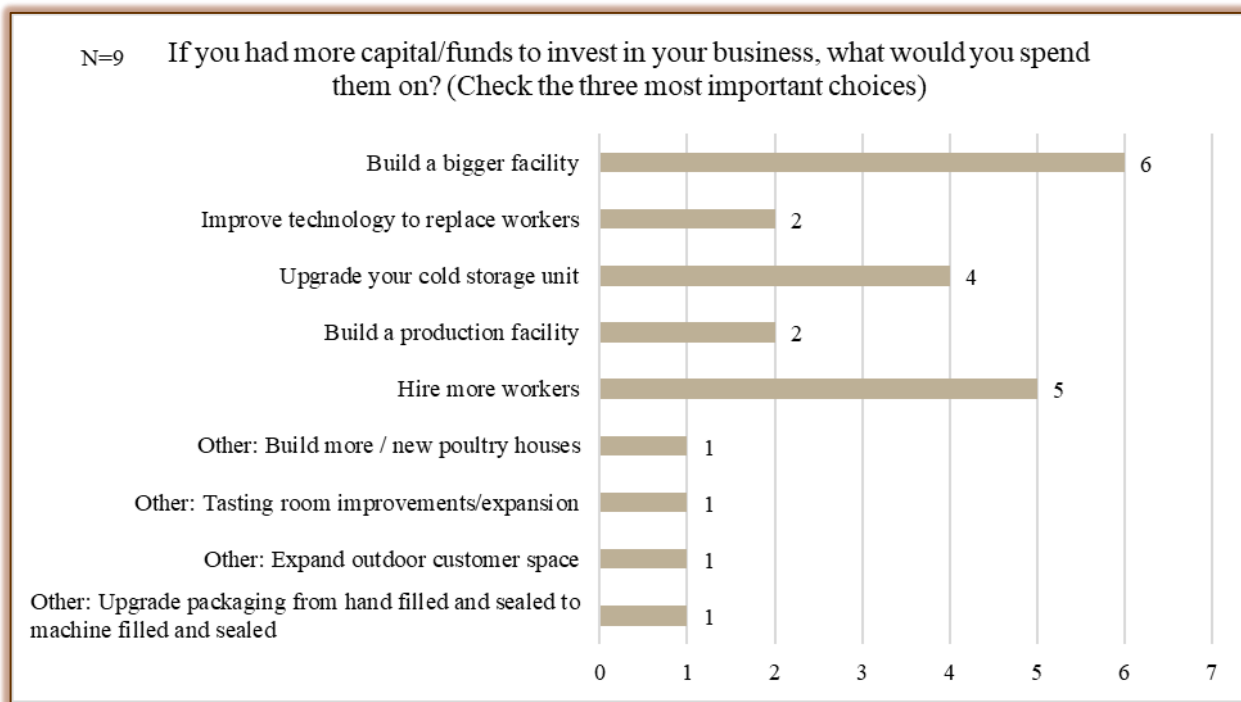## THEME I: The need for more capital

Access to Capital

The main takeaway from this section is that most of the participants did not have a relationship with financial institutions. Six participants did not have any experience with either Virginia grant and loan agencies or small community banks, seven did not have experience with large banks, and none had any experience with either venture capitalists or payday lenders. The only financial institutions that most participants had experience with were Federal grant and loan agencies. Nevertheless, three participants said they had an average experience with them, and four said they did not have any experience with them. However, the participants did not have trouble obtaining funding in the past two years; yet, when asked how difficult it has been to obtain funding from financial services in the Shenandoah Valley, there was no clear census. The three most common ways the participants obtained financing to meet their capital needs were "earnings of the business," "private loans," and "credit cards." The last question asked the participants whether they plan to consider outside investors in the future, and eight said no.

Table 8: How would you rate your relationship with the local institutions listed below.							
Institution	Great	Above Average	Average	Below Average	Poor	No Relationship	Ns

High school technical centers	0	0	2	1	0	6	8
Community colleges	0	1	4	1	0	3	9
Universities	0	2	5	1	0	2	10

If the participants had the funding

The biggest result from this section is that the participants would "build a bigger facility," "upgrade your cold storage unit," and "hire more workers" if they had the necessary capital (Graph 1). The participants were fairly split regarding whether their current business location provides enough opportunities for future expansion (six said yes, and four said no). Of the participants who said no, five said they would consider expanding in the Shenandoah Valley. For the participants who said no, some of the reasons were the lack of access to capital and the need for a bigger market.

Graph 1: If you had more capital/funds to invest in your business, what would you spend them on?

THEME II: The need for more labor

Where hires come from
Most of the participant's hirings come from "family or friends" and "individuals with only a high school diploma in the Shenandoah Valley

Challenges with Labor

The key point from this section is that the three most common challenges when hiring workers were "cannot find motivated workers," "local competition for in-demand workers," and "not enough people in the labor force/Too few applicants." (Graph 2) Interestingly enough, businesses that participated in the 2021 Shenandoah Valley Manufacturing Workforce Needs Report had the same challenges, especially finding motivated workers. Furthermore, both groups of participants most needed workers at this moment and in the future were maintenance mechanics, electricians, and jobs involving processing. From a macro viewpoint, the labor shortage is causing an enormous impact on the Shenandoah Valley economy. A 2022 Economic Impact of Filling Vacancies in the NAICS 31 Sector (Food, Textile, and Related Products Manufacturing) in Shenandoah Valley showed that filling 2,823 current vacancies could provide a direct impact of approximately 512 million and a total impact of 782 million. In other words, because of the 2,823 current vacancies, Shenandoah Valley cannot benefit from a 782 million total economic impact. From a micro viewpoint, the labor shortage is forcing employers to hire anyone. When asked what they are looking for in a candidate, one participant replied that they would hire anyone with a pulse. Even when some of the participants used federal programs such as the H-2A program to find workers, they still did not have a full staff, and some of the foreign workers did not speak English, thus creating another challenge.
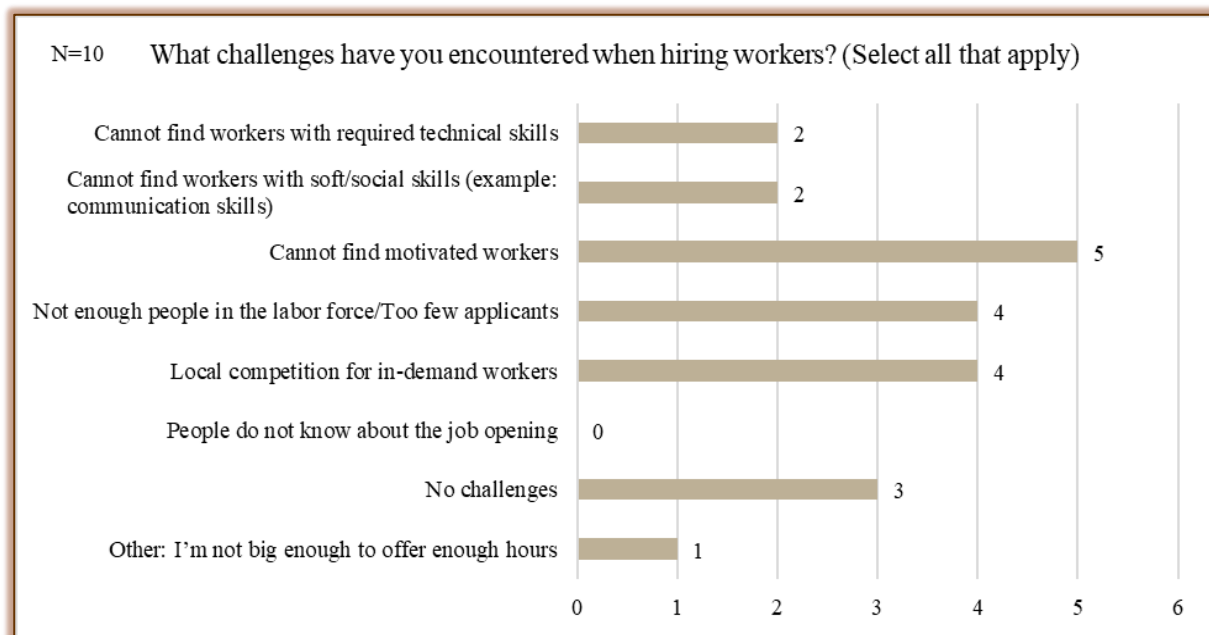

Graph 2: What challenges have you encountered when hiring workers? (Select all that apply)

Relationship with Learning Institutions

The major takeaway from this section is that either the participants have an average relationship or no relationship with learning institutions (Graph 3). Six participants do not

have a relationship with local technical centers; however, six of the participants have a relationship with the local community colleges, and eight of them have a relationship with the local universities. Unfortunately, four participants have an average relationship with the community colleges, and five have an average relationship with the Universities. One of the participants believes they do not have a better relationship with the local learning institutions because, in the participant's opinion, they (learning institutions) do not have an interest in placing workers in the poultry industry. Moreover, more than 50% of the participants are neutral on whether training given to individuals at all local learning institutions needs to improve. One of the participants who agreed that the training needs to improve said they believe it does not apply to real-world environments. Furthermore, some of the skills the participants want the learning institutions to teach are mechanical and electrical skills.
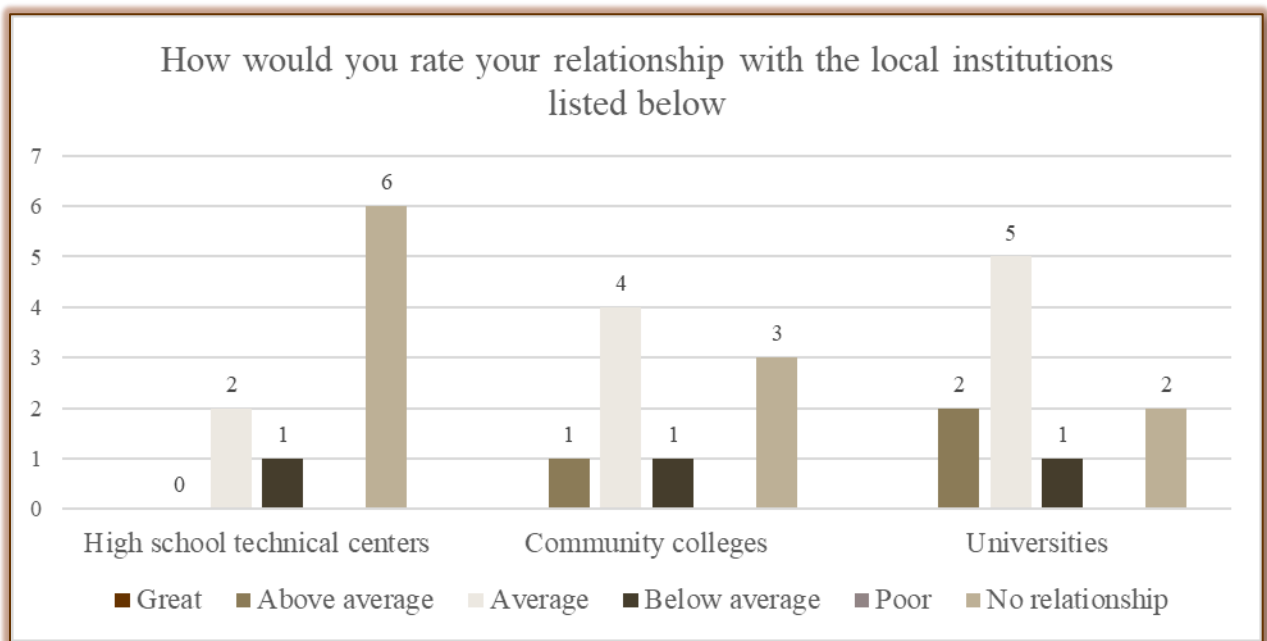
Graph 3: How would you rate your relationship with the local institutions listed below

THEME III: Good logistical capabilities
The participants were pleased with their logistical needs in the Shenandoah Valley. The participants were asked has their location in Shenandoah Valley made it difficult to receive and deliver products: three participants strongly disagreed, two answered somewhat disagree, one answered neutral, and two answered somewhat agree (Graph 4). There is no clear consensus on which U.S. region it has been difficult to get and receive products. A big issue has been the cost of getting glass bottles. A majority of participants must purchase glass bottles overseas, which is expensive given the item's weight.

Nevertheless, the participants enjoy their location in the Shenandoah Valley; they raved about the closeness to I-81 and its excellent distribution location. They would like to add a large supplying and packing company in the region. A constant sentiment was that buying supplies from more prominent companies is more reliable and cheaper. One participant said that purchasing from the big suppliers was like shopping at Walmart; they could get all their materials in one place, so price comparison is unnecessary. Some have used local suppliers; however, they did not have a good experience. In one instance, a participant said they bought cheese from a local supplier, and, upon arrival, the cheese was spoiled.
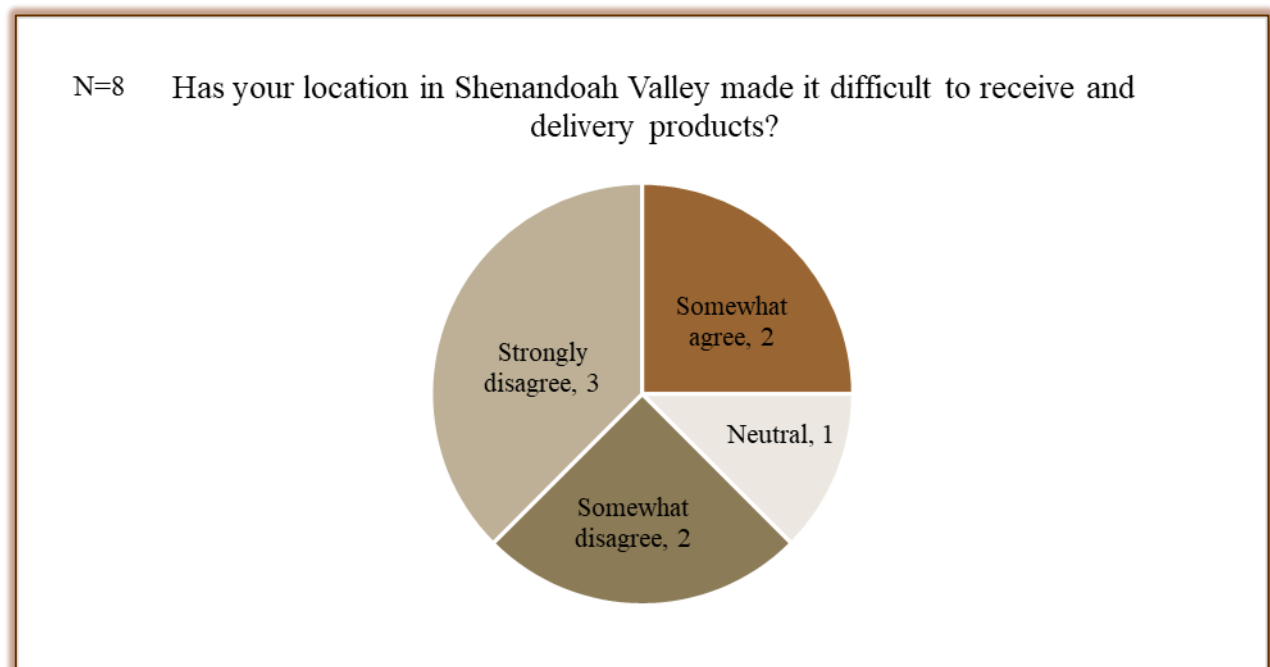
Graph 4: Has your location in Shenandoah Valley made it difficult to receive and delivery products?

THEME IV: Disconnect between the businesses and service providers
Learning Institutions
The main takeaway is that there is a disconnect between the services that participated in the study and the food and beverage manufacturing businesses. As mentioned earlier, representatives from JMU, Virginia Tech, University of Richmond, local high schools, Piedmont, GoVirginia, and USDA participated in the study. A high school agriculture teacher in the Shenandoah Valley said they do not have a relationship with the food businesses. Furthermore, the students feel that a career in food and beverage manufacturing is not ideal. A similar comment was made by an instructor at Virginia Tech's Animal and Poultry Science Department. They said two percent of students in Virginia Tech's Meat Center—a center that teaches students to process, sanitation, and sell animal meat–go into animal processing. This is due to the students feeling that animal processing does not pay enough, they can get a less labor-intensive job, and their degree can be better served in another career field.

An educator at Piedmont College's Viticulture and Enology program said no wineries or breweries had approached them to talk to their students about job opportunities in the Shenandoah Valley. The school of professional and continuing studies at the University of Richmond does not have a relationship with the breweries in the Shenandoah Valley, and the school does not have a brewery program in the region, despite having programs in Roanoke, Richmond, and Northern Virginia. They would, however, love to have a brewery program in the Shenandoah Valley. There is also a lack of a partnership with the cluster and high education institutions in the Shenandoah Valley. The cluster does not have a relationship with JMU's School of Professional & Continuing Education. Like the School of Professional and Continuing Studies at the University of Richmond, they would love to have a partnership similar to the one they have with Merck pharmaceuticals. They offer JMU's School of Professional & Continuing Education guidance on what skills are essential to their profession.

Financial Institutions

Region 8 GoVirginia does have a relationship with the food and beverage manufacturing businesses because it is a targeted industry sector for them. Their interactions have been mainly about financing. GoVirginia cannot reward grants to one business; however, what they can do is cost sharing, but it has to be for a multi-businesses initiative. Additionally, they have rewarded learning institutions grants for a variety of projects. For example, JMU received a grant to study the impact and opportunities of the hemp industry.

USDA rural development does not work with the businesses; they mainly deal with agricultural businesses. USDA rural development does offer small businesses guarantee lending.

Recommendations

The recommendations were based on the interviews and survey results as well as the interviews with representatives from JMU, Virginia Tech, University of Richmond, local high schools in the Shenandoah Valley, GoVirginia, and USDA with their involvement with the food and beverage manufacturing industry. The three goals of this plan are: "Increase the supply and decrease the demand for food and beverage manufacturing human labor," "Create more opportunities for the cluster to receive capital," and "Keep the Shenandoah Valley at the forefront of logistics."

Goal I: Increase the supply of human labor and improve technology enhancement (e.g., through "upskilling") to address labor force issues.

Objective I.I: Change the perception of food and beverage manufacturing jobs.

There is a negative perception of food and beverage manufacturing careers among young adults (<25) in Virginia, which is negatively impacting the labor supply in the Shenandoah Valley. As mentioned earlier, young adults do not feel that a career in food and beverage manufacturing is not ideal because animal processing does not pay enough, they can get a less labor-intensive job, and their degree can be better served in another career field. Therefore, the food and

beverage manufacturing cluster must fix its perception to get young individuals applying to their jobs.

Action I.I.I: Develop a program in which the local high schools take field trips to the businesses' facilities, businesses visit the high schools and tell them about the benefits of food and beverage manufacturing, and businesses hire high school interns. Additionally, the high schools create a curriculum centered around food manufacturing.

Action I.I.II: Facilitate a program where the businesses visit different colleges outside of the Shenandoah Valley to talk to students about the technical careers

Action I.I.III: Partner with the businesses on a regional campaign highlighting the technical careers they offer and the technological advances the industry has made.

Action I.I.IV: Foster a business initiative to revamp their work environment.

Objective I.II: Create better relationships with higher education in Virginia.

The businesses have issues recruiting talent, so it is ideal for the Shenandoah Valley Partnership to facilitate a partnership with them and higher education in Virginia. Different institutions said that they do not have a relationship with the food and beverage manufacturing industry; even though they would love to form a partnership. Additionally, some students do not stay in the area where they went to college due to the lack of jobs in the food and beverage industry. This could be an excellent opportunity for the Shenandoah Valley to recruit highly skilled people in Virginia. Thus, creating a relationship with higher education should be a priority.

Action I.II.I: Develop an organization of businesses and educators from JMU and Blueridge Community College that addresses the full range of in-demand skills gaps.

Action I.II.II: Work with the state government and business partners to create a food and beverage production and technology center at JMU.

Action I.II.III: Create a quarterly networking event where businesses and learning institutions meet to discuss what skills are needed in the market.

Action I.II.IV: Form a physical space where the local institutions and business leaders can interact daily.

Action I.II.V: Partner with JMU and the businesses to create a University of Richmond brewery certificate extension in the Shenandoah Valley.

Action I.II.VI: Market Shenandoah Valley as a place for recent graduates to live.

Objective I.III: Improve technology enhancement to address labor force issues

Due to the labor shortage and young adults not seeking food and beverage manufacturing careers, the cluster will need to develop ways to improve technology advances. JMU and Virginia tech engineering professors have not discussed alternative solutions to human

labor. The cluster does want to decrease the demand for human labor, but they want the state agencies to help with financing. The Virginia Economic Development Partnership (VEDP) does provide grants and loan opportunities for research and development, while GoVirginia can assist with cost-sharing; however, both agencies require a multi-business initiative. Therefore, creating a public-private relationship can help with the demand for human labor.

Action I.III.I: Design a grant matching program with GoVirgina and VDEP to support innovation initiatives done by the businesses.

Action I.III.II: Facilitate a partnership with the JMU integration center, Virginia Tech, and the businesses to lead the research in automating food and beverage manufacturing

Action: I.III.II: Coordinated a business initiative to help business plans to finance alternative solutions for human labor.

Goal II: Create more opportunities for the business to receive capital

Objective II.I: Active engagement with the businesses
The lack of capital is an issue for the cluster; also, some of the cluster members do not have a relationship with many financial institutions. So, the financial institutions need to have an open dialogue with the cluster about financial opportunities.

Action II.I.I: Create a regional organization composed of food and beverage manufacturing businesses whose goal is to improve the advancement of the industry.

Action II.I.II: Organize an annual national summit that brings together all involved in the food and beverage manufacturing industry to promote various investments in technology.

Action II.I.III: Host a quarterly meeting with the businesses and invite experts from financial institutions to speak to them about gaining capital.

Action II.I.IV: Spearhead a regional initiative with Shenandoah Valley Business Development Center to help the businesses create business plans for pursuing financial opportunities.

Objective II.II: Provide more information about financial opportunities
Providing financial information to the cluster is vital since businesses do not have a great relationship with the financial institutions; they are likely missing out on great opportunities on grant and loan opportunities. Therefore, Shenandoah Valley Partnership has a great opportunity to fill in the missing gap of information in the cluster.

Action II.II.I: Recruit an intermediary whose job is to connect business owners to sources of growth capital, business acceleration services, and other networks.

Action: II.II.II: Invest in hiring an intern to revamp the grant and loan section of the Shenandoah Valley Partnership website.

Action II.II.III: Send emails anytime there has been a new grant and loan opportunity, and a new site available.

Goal III: Make Shenandoah Valley one of the leaders in logistics

Objectives III.I: Fill in the missing gap
Even though the participants were satisfied with their logistical needs, there were still gaps in logistics that SVP infill.

Action III.I.I: Recruit a well-established supplying company

Action III.I.II: Partner with consultants and business developers to help local suppliers improve their product quality

Action III.I.III: Partner with Central Shenandoah Planning District Commission, Northern Shenandoah Planning District Commission, and VDOT to monitor the sustainability of all major highways and airports that the businesses used to transport and receive products.

Objectives III.II: Take advantage of the Shenandoah Valley distribution location

Action III.II.I: Use I-81 and Shenandoah Valley location to promote the region as a logistical hub.

Implementation Table

Table 9: Implementation Table				
	Short-Term (0-2 Years)	Middle-Term (2-4 Years)	Long-Term (5+ Years)	Responsibility
Goal I: Increase the supply of human labor and improve technology enhancement (e.g., through "upskilling") to address labor force issues.				
Objective I.I: Change the perception of food and beverage manufacturing jobs.				
Action I.I.I: Develop a program in which the local high schools take field trips to the businesses' facilities, businesses visit the high schools and tell them about the benefits of food and				Local high schools The F&B industry

	Short-Term (0-2 Years)	Middle-Term (2-4 Years)	Long-Term (5+ Years)	Responsibility
beverage manufacturing, and businesses hire high school interns. Additionally, the high schools create a curriculum centered around food manufacturing.		▨		
Action I.I.II: Facilitate a program where the businesses visit different colleges outside of the Shenandoah Valley to talk to students about the technical careers	▨			The F&B industry Virginia Colleges
Action I.I.III: Partner with the businesses on a regional campaign highlighting the technical careers they offer and the technological advances the industry has made.	▨			The F&B industry SVP
Action I.I.IV: Foster a business initiative to revamp their work environment.		▨		The F&B industry SVP
Objective I.II: Create better relationships with higher education in Virginia.				
Action I.II.I: Develop an organization of businesses and educators from JMU and Blueridge Community College that addresses the full range of in-demand skills gaps.		▨		JMU The F&B industry Blueridge Community College
Action I.II.II: Work with the state government and business partners to create a food and beverage production and technology center at JMU.			▨	JMU VDEP

	Short-Term (0-2 Years)	Middle-Term (2-4 Years)	Long-Term (5+ Years)	Responsibility
			▓	The F&B industry SVP
	Short-Term (0-2 Years)	Middle-Term (2-4 Years)	Long-Term (5+ Years)	Responsibility
Action I.II.III: Create a quarterly networking event where businesses and learning institutions meet to discuss what skills are needed in the market.	▓			SVP Blueridge Community College JMU The F&B industry
Action I.II.IV: Form a physical space where the local institutions and business leaders can interact daily.			▓	JMU The F&B industry
Action I.II.V: Partner with JMU and the businesses to create a University of Richmond brewery certificate extension in the Shenandoah Valley.		▓		U of R SVP JMU
Action I.II.VI: Market Shenandoah Valley as a place for recent graduates to live.	▓			SVP Local EDOs
Objective I.III: Improve technology enhancement to address labor force issues				
Action I.III.I: Design a grant matching program with GoVirginia and VDEP to support innovation initiatives done by the businesses.		▓		GoVirginia VDEP SVP
Action I.III.II: Facilitate a partnership with the JMU integration center, Virginia Tech, and the businesses to lead			▓	Virginia Tech JMU F&B industry

	Short-Term (0-2 Years)	Middle-Term (2-4 Years)	Long-Term (5+ Years)	Responsibility
the research in automating food and beverage manufacturing.			▓	
Action: I.III.III: Coordinated a business initiative to help business plans to finance alternative solutions for human labor.			▓	SBDC SVP F&B industry

Goal II: Create more opportunities for the business to receive capital

Objective II.I: Active engagement with the businesses

	Short-Term (0-2 Years)	Middle-Term (2-4 Years)	Long-Term (5+ Years)	Responsibility
Action II.I.I: Create a regional organization composed of food and beverage manufacturing businesses whose goal is to improve the advancement of the industry.		▓		The F&B industry SVP
Action II.I.II: Organize an annual national summit that brings together all involved in the food and beverage manufacturing industry to promote various investments in technology.			▓	SVP The F&B industry Local EDOs
Action II.I.III: Host a quarterly meeting with the businesses and invite experts from financial institutions to speak to them about gaining capital.	▓			SVP The F&B industry Local EDOs
Action II.I.IV: Spearhead a regional initiative with Shenandoah Valley Business Development Center to help the businesses create business plans for pursuing financial opportunities.		▓		SBDC SVP The F&B industry

	Short-Term (0-2 Years)	Middle-Term (2-4 Years)	Long-Term (5+ Years)	Responsibility
Objective II.II: Provide more information about financial opportunities				
Action II.II.I: Recruit an intermediary whose job is to connect business owners to sources of growth capital, business acceleration services, and other networks.				SVP
Action: II.II.II: Invest in hiring an intern to revamp the grant and loan section of the Shenandoah Valley Partnership website.				SVP
Action II.II.III: Send emails anytime there has been a new grant and loan opportunity, and a new site available.				SVP
Goal III: Make Shenandoah Valley one of the leaders in logistics				
Objectives III.I: Fill in the missing gap in food and beverage manufacturing logistics				
Action III.I.I: Recruit a well-established supplying company				SVP VDEP
Action III.I.II: Partner with consultants and business developers to help local suppliers improve their product quality				SBDC SVP Local ESOs
Action III.II.II: Partner with Central Shenandoah Planning District Commission, Northern Shenandoah Planning District Commission, and VDOT to monitor the sustainability of all major highways and airports that the businesses used to transport and receive products.				VDOT CSPDC NSPDC SVP

Objectives III.II: Utilize Shenandoah Valley				
Action III.II.I: Use I-81 and Shenandoah Valley location to promote the region as a logistical hub.				SVP Local ESOs VDEP

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Appendix

Survey Questions

In what city or county in the Shenandoah Valley is your business located?

- ○ Augusta County

- ○ Bath County

- ○ Highland County

- ○ Page County

- ○ Rockbridge County

- ○ Rockingham County

- ○ Shenandoah County

- ○ City of Buena Vista

- ○ City of Harrisonburg

- ○ City of Lexington

- ○ City of Staunton

- ○ City of Waynesboro

Which category does your business fall under?

○ Winery

○ Brewery

○ Cidery

○ Animal Processing

○ Non-Animal Processing (example: fruit processing)

○ Bakery

○ Other...

What were the gross revenues for your most recent fiscal year?

○ Less than 40 million

○ Greater than 40 million

On a scale from 1 to 5, with 5 being extremely difficult, how difficult has it been to obtain funds/financing in the past 2 years?

	1	2	3	4	5	
Not difficult	○	○	○	○	○	Extremely difficult

On a scale from 1 to 5, with 5 being extremely difficult, how difficult has it been to obtain funds/financing from financial services in the Shenandoah Valley.

	1	2	3	4	5	
Not difficult	○	○	○	○	○	Extremely difficult

What types of financing has your business used within the last 2 years to meet your capital needs? (Select all that apply)

- ☐ Revolving line of credit from a bank

- ☐ Credit cards

- ☐ Earnings of the business

- ☐ Bank loan

- ☐ Private loan (friends or family)

- ☐ State/Regional loans and grants

- ☐ Angel or Venture Capitalist

- ☐ Other...

Rate your experience when trying to receive funds from any financial services listed below.

	Great	Above avera...	Average	Below avera...	Poor	No experience
Virginia agen...	○	○	○	○	○	○
The Federal ...	○	○	○	○	○	○
Large bank	○	○	○	○	○	○
Small comm...	○	○	○	○	○	○
Angel or Ven...	○	○	○	○	○	○
Payday lend...	○	○	○	○	○	○
Any other fin...	○	○	○	○	○	○

If you answered below average or poor on any financial services, please explain why.

Long answer text

If you have been turned down for funding in the last two years, what were the reasons given? (Select all that apply)

☐ My business did not have enough years of history

☐ My business' sales were too low

☐ They did not lend to my industry

☐ I did not have enough collateral

☐ My credit score was too low

☐ I received financing

☐ I have not applied for financing

☐ I do not know

☐ Other...

Do you plan in the future to consider outside investors?

○ Yes

○ No

○ Maybe

If yes, from who?

○ Angel or Capital investor

○ Family and friends

○ Other business

○ Other...

If you had more capital/funds to invest in your business, what would you spend them on? (Check the three most important choices)

☐ Build a bigger facility

☐ Improve technology to replace workers

☐ Upgrade your cold storage unit

☐ Build a production facility

☐ Hire more workers

☐ Other...

Does your current business location provide enough opportunities for future expansion?

○ Yes

○ No

If you could not expand at your current site, where would you consider expanding?

○ In the Shenandoah Valley

○ Outside Shenandoah Valley

If you answered "Outside the Shenandoah Valley," please explain why.

Long answer text

Where do your new hires come from? (Select the 3 most common)

☐ Family or friends

☐ Individuals with only a high school diploma (In the Shenandoah Valley)

☐ Individuals with only a high school diploma (Outside of the Shenandoah Valley)

☐ High school technical centers (In the Shenandoah Valley)

☐ High school technical centers (Outside of the Shenandoah Valley)

☐ Community college certificate programs (In the Shenandoah Valley)

☐ Community college certificate programs (Outside of the Shenandoah Valley)

☐ Community college associate degree programs (In the Shenandoah Valley)

☐ Community college associate degree programs (Outside of the Shenandoah Valley)

☐ Universities (ex: JMU, EMU, and etc.) (In the Shenandoah Valley)

☐ Universities (Outside of the Shenandoah Valley)

☐ Other...

What challenges have you encountered when hiring workers? (Select all that apply)

☐ Cannot find workers with required technical skills

☐ Cannot find workers with soft/social skills (example: communication skills)

☐ Cannot find motivated workers

☐ Not enough people in the labor force/Too few applicants

☐ Local competition for in-demand workers

☐ People do not know about the job opening

☐ No challenges

☐ Other...

How would you rate your relationship with the local institutions listed below.

	Great	Above average	Average	Below average	Poor	No relationship
High school technical centers	○	○	○	○	○	○
Community colleges	○	○	○	○	○	○
Universities	○	○	○	○	○	○

If you answered below average or poor on any institutions, please explain why.

Your answer

At this current moment, what is most difficult position to fill?

Your answer

What technical skills would you like incoming workers to have?

Your answer

In the next 3-5 years, what type of workers will you most need?

Your answer

Would you be interested in partnering with other businesses and the local institutions to train the local workforce?

○ Yes

○ No

○ Maybe

Do you think the training given to individuals at the local institutions needs to improve?

	Strongly agree	Somewhat agree	Neutral	Somewhat disagree	Strongly disagree
High school technical centers	○	○	○	○	○
Community college certificate programs	○	○	○	○	○
Community colleges	○	○	○	○	○
Universities	○	○	○	○	○

If you answered somewhat or strongly agree, what issues are you having with the training?

Your answer

Name 2 specific technical skills you will like the institutions to teach.

Your answer

What type of businesses would you like Shenandoah Valley to attract? (Select all that apply)

☐ A large packaging and supply company

☐ A raw materials company for your specific industry (example: a grape grower for the wine industry)

☐ Other:

What do you think is the best way for Shenandoah Valley Partnership and the local economic agencies to attract new consumers and people to the region?

Your answer

How would you rate your logistics situation?

	Great	Above average	Average	Below average	Poor
Inputs: getting materials, supplies, equipment, etc.	○	○	○	○	○
Getting products to market and getting paid	○	○	○	○	○
Other	○	○	○	○	○

If you answered below average or poor on any the choices, please explain why.

Your answer

Has your location in Shenandoah Valley made it difficult to receive and delivery products?

○ Strongly agree

○ Somewhat agree

○ Neutral

○ Somewhat disagree

○ Strongly disagree

In which regions of the U.S. has your business been most impacted by logistical issues and disruptions.
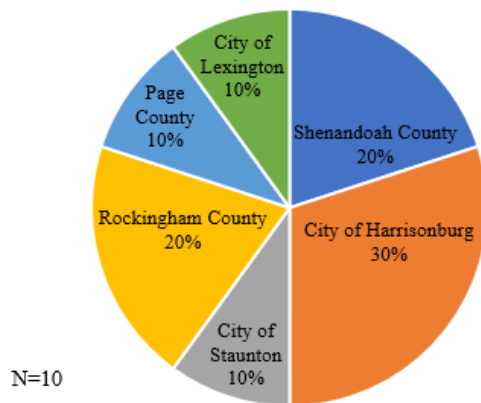
○ Northeast

○ South

○ Midwest

○ West
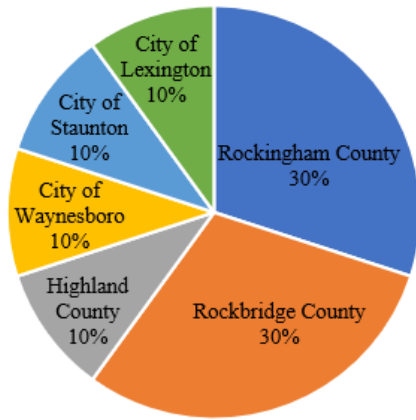
Other comments you would like to share.
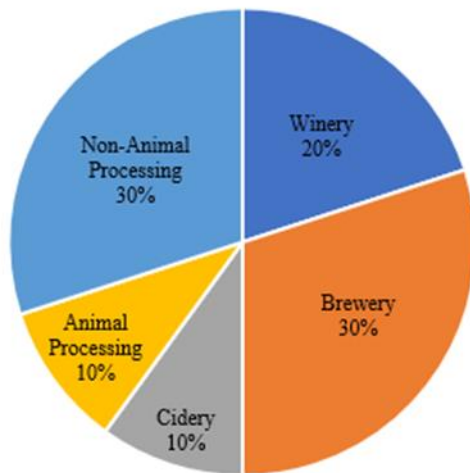
Your answer

Survey Results

Interview: In what city or county in the Shenandoah Valley is your business located?

N=10

Survey: In what city or county in the Shenandoah Valley is your business located?
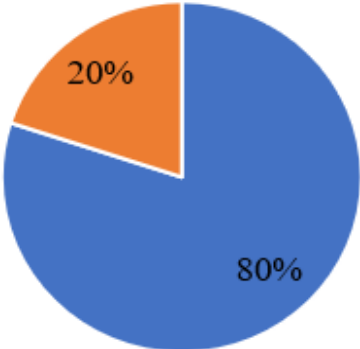

Survey: Which category does your business fall under?

N=10

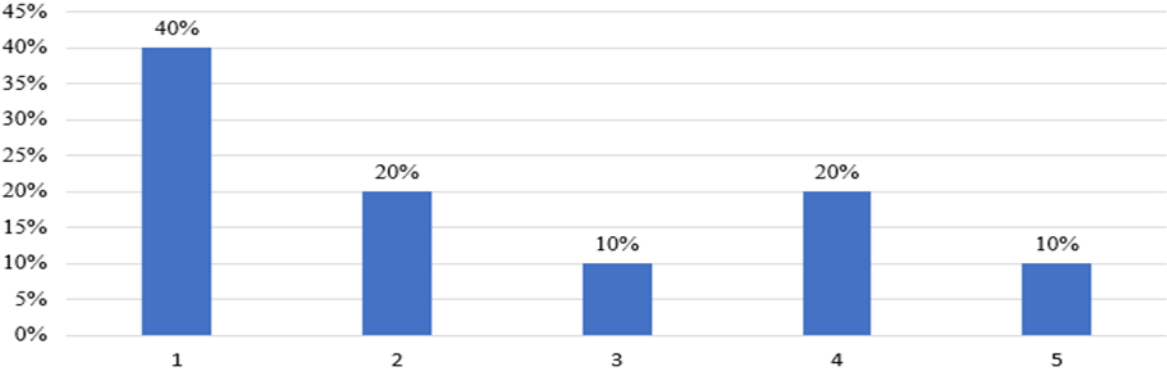## What were the gross revenues for your most recent fiscal year?

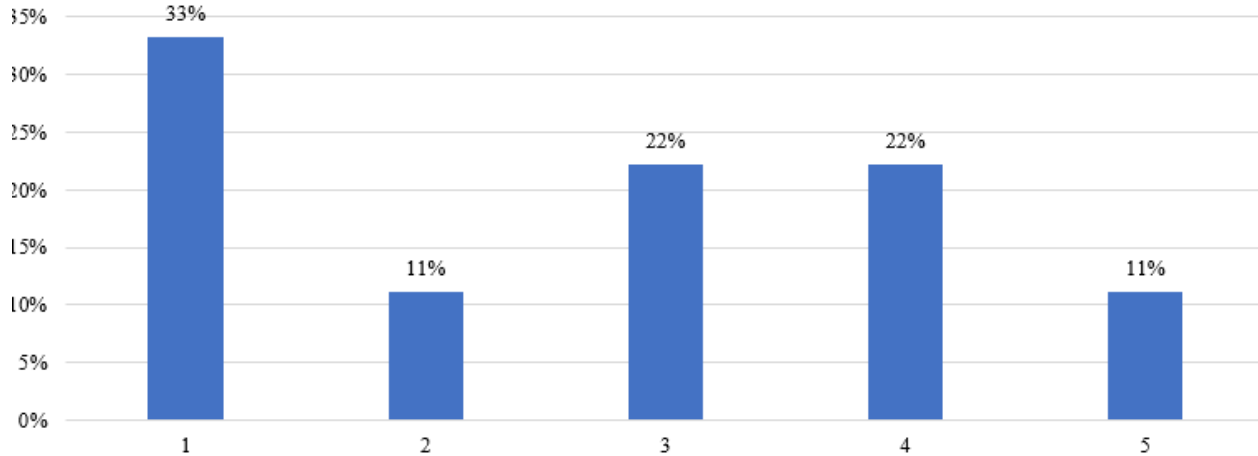■ Less than 40 million   ■ Greater than 40 million

20%

80%

N=10

On a scale from 1 to 5, with 5 being extremely difficult, how difficult has it been to obtain funds/financing in the past 2 years?
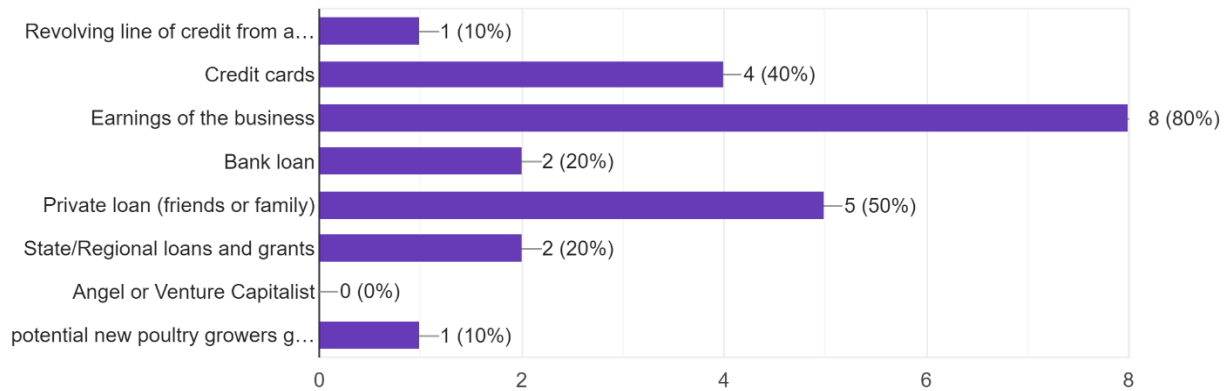
d

On a scale from 1 to 5, with 5 being extremely difficult, how difficult has it been to obtain funds/financing from financial services in the Shenandoah Valley.
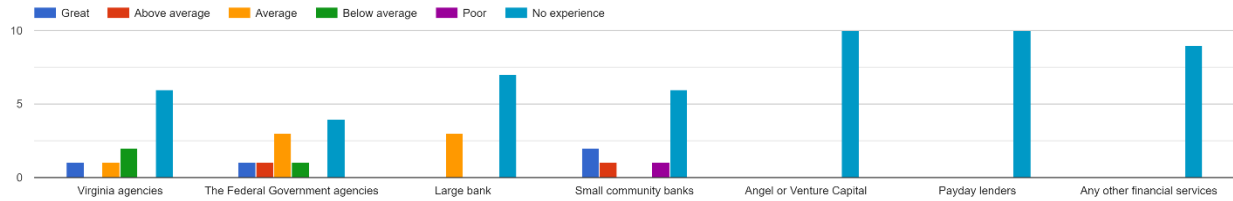

What types of financing has your business used within the last 2 years to meet your capital needs? (Select all that apply)

10 responses

Rate your experience when trying to receive funds from any financial services listed below.

If you have been turned down for funding in the last two years, what were the reasons given? (Select all that apply)

6 responses

My business did not have enou…	2 (33.3%)
My business' sales were too low	0 (0%)
They did not lend to my industry	1 (16.7%)
I did not have enough collateral	0 (0%)
My credit score was too low	0 (0%)
I received financing	1 (16.7%)
I have not applied for financing	2 (33.3%)
I do not know	0 (0%)
N/A	1 (16.7%)
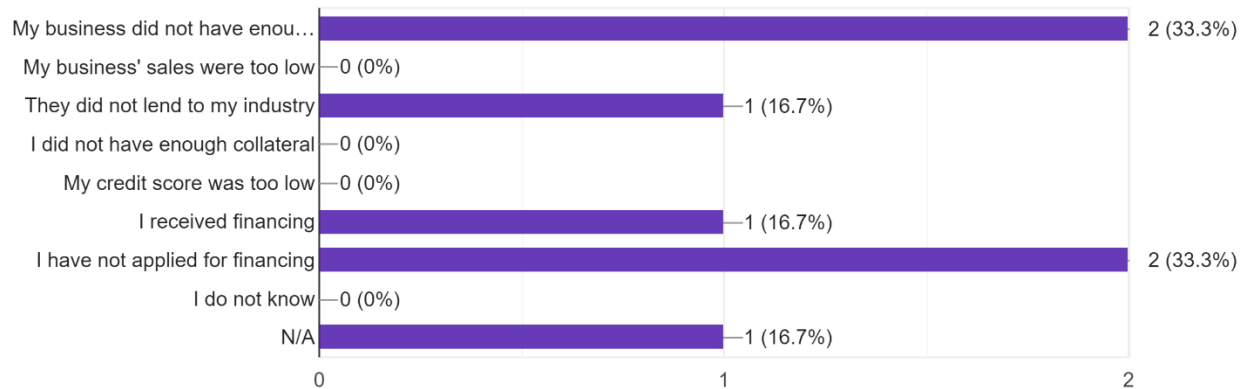
Do you plan in the future to consider outside investors?

10 responses

- Yes
- No
- Maybe

80%   10%   10%
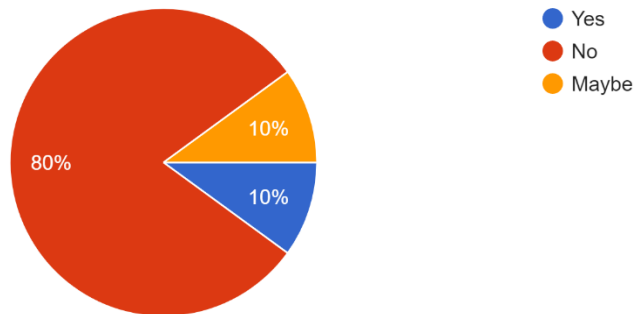
If yes, from who?
3 responses
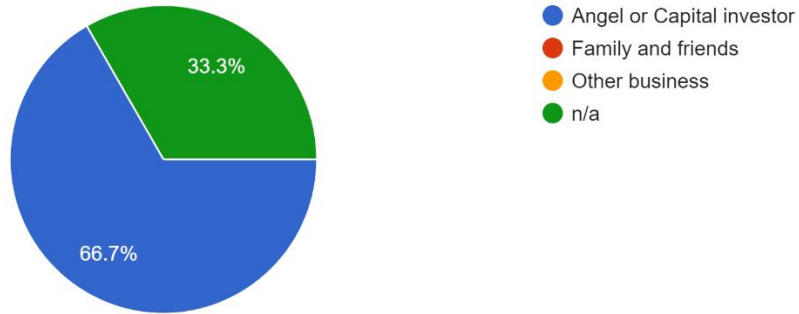
- ● Angel or Capital investor
- ● Family and friends
- ● Other business
- ● n/a

33.3%

66.7%

If you had more capital/funds to invest in your business, what would you spend them on? (Check the three most important choices)
9 responses
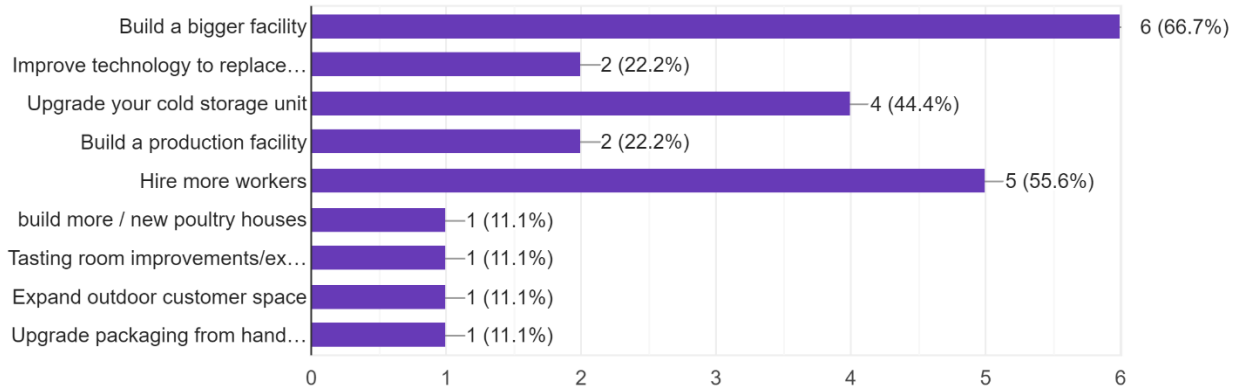
Option	Value
Build a bigger facility	6 (66.7%)
Improve technology to replace…	2 (22.2%)
Upgrade your cold storage unit	4 (44.4%)
Build a production facility	2 (22.2%)
Hire more workers	5 (55.6%)
build more / new poultry houses	1 (11.1%)
Tasting room improvements/ex…	1 (11.1%)
Expand outdoor customer space	1 (11.1%)
Upgrade packaging from hand…	1 (11.1%)

Does your current business location provide enough opportunities for future expansion?

10 responses

Legend:
- Yes (blue)
- No (red)

40%
60%
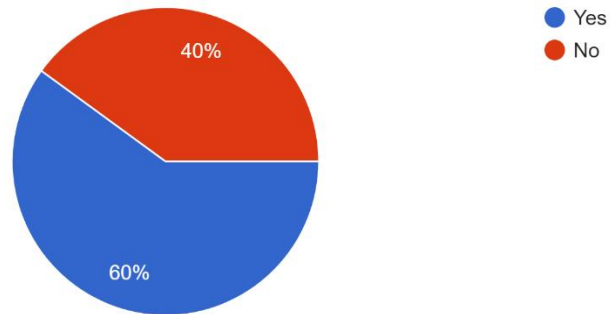
If you could not expand at your current site, where would you consider expanding?

8 responses

Legend:
- In the Shenandoah Valley (blue)
- Outside Shenandoah Valley (red)

37.5%
62.5%

J. Williams 56
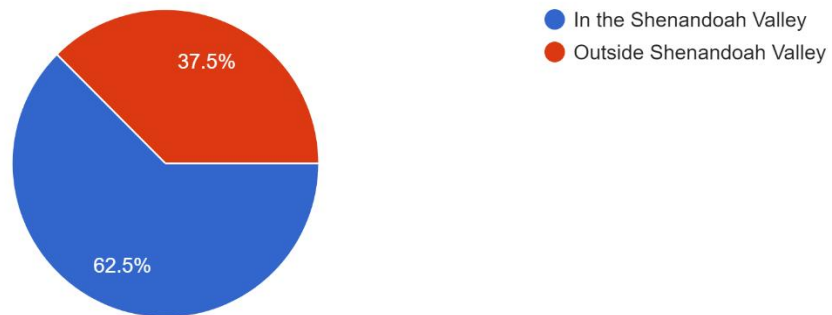
Where do your new hires come from? (Select the 3 most common)

9 responses

Category	Value
Family or friends	5 (55.6%)
Individuals with only a high s…	5 (55.6%)
Individuals with only a high s…	3 (33.3%)
High school technical center…	0 (0%)
High school technical center…	0 (0%)
Community college certificat…	0 (0%)
Community college certificat…	0 (0%)
Community college associat…	0 (0%)
Community college associat…	0 (0%)
Universities (ex: JMU, EMU,…	0 (0%)
Universities (Outside of the…	1 (11.1%)
Retirees	1 (11.1%)
Individuals with specific inter…	1 (11.1%)
Local individuals	1 (11.1%)

What challenges have you encountered when hiring workers? (Select all that apply)

10 responses

Category	Value
Cannot find workers with requir…	2 (20%)
Cannot find workers with soft/s…	2 (20%)
Cannot find motivated workers	5 (50%)
Not enough people in the labor…	4 (40%)
Local competition for in-deman…	4 (40%)
People do not know about the j…	0 (0%)
No challenges	3 (30%)
I'm not big enough to offer eno…	1 (10%)

How would you rate your relationship with the local institutions listed below.

At this current moment, what is most difficult position to fill?

5 responses

Maintenance Mechanic

electricians / mechanic tech's / general labor

unskilled gardening

No openings now

Salesperson

What technical skills would you like incoming workers to have?

6 responses

Maintenance

mechanical skills / electrical skills

Beer processing, wine processing, vineyard/farm experience

Familiarity with diverse skill needs of small manufacturing (able to swing from production, to marketing, packing, cleaning and paperwork, etc)

Speak English

Understanding of fermentation.

In the next 3-5 years, what type of workers will you most need?

7 responses

Production workers

all types.

Tasting room associates

retail sales

I don't know how much we plan to grow in the next 3-5

Vineyard workers
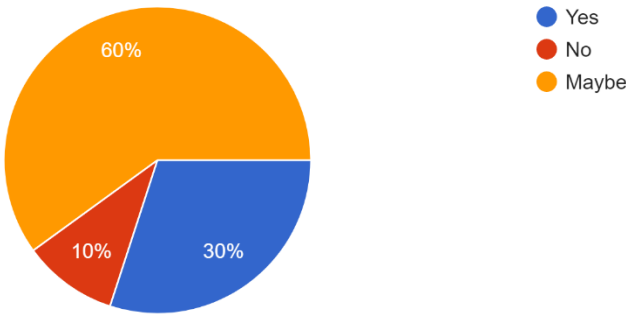
Cidermaker/manager of business

In the next 3-5 years, what technical skills will workers need to have to help your company be successful.
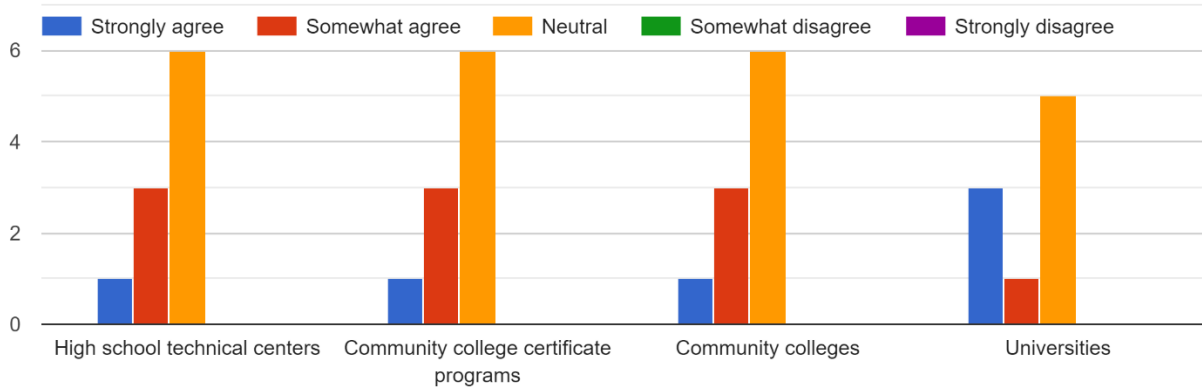
6 responses

mechanical skills / electrical skills

Beer processing, wine processing, vineyard/farm experience

basic computer/retail skills

Computer literate, Spanish speaking a plus, commitment to long term team work

Understand English, to be able to follow instruction

Knowledge of fermentation

Would you be interested in partnering with other businesses and the local institutions to train the local workforce?
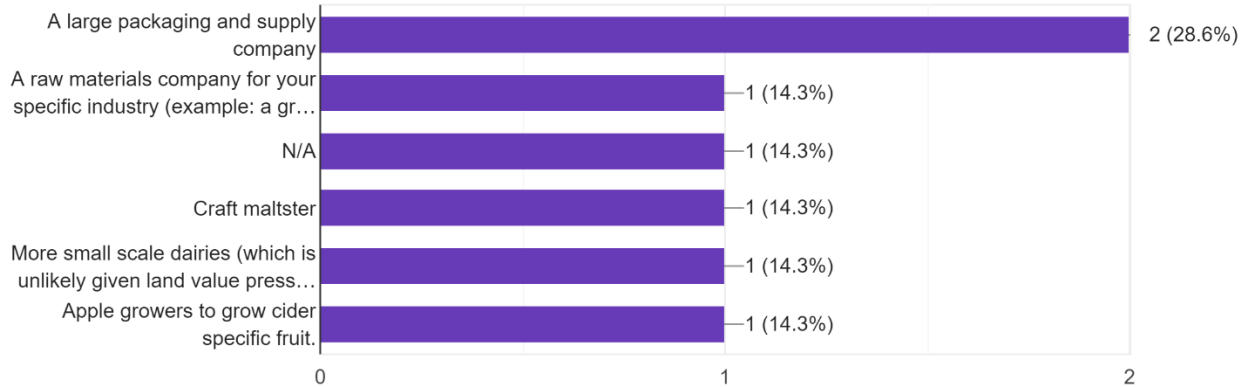
10 responses

- Yes
- No
- Maybe

60%
10%
30%

Do you think the training given to individuals at the local institutions needs to improve?

Legend: Strongly agree, Somewhat agree, Neutral, Somewhat disagree, Strongly disagree

Category	Strongly agree	Somewhat agree	Neutral	Somewhat disagree	Strongly disagree
High school technical centers	1	3	6	0	0
Community college certificate programs	1	3	6	0	0
Community colleges	1	3	6	0	0
Universities	3	1	5	0	0

What type of businesses would you like Shenandoah Valley to attract? (Select all that apply)
7 responses
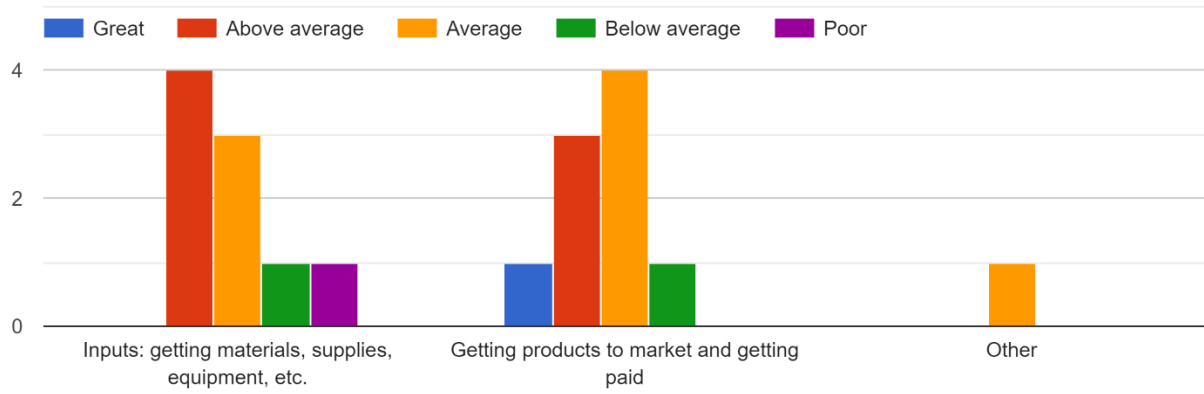
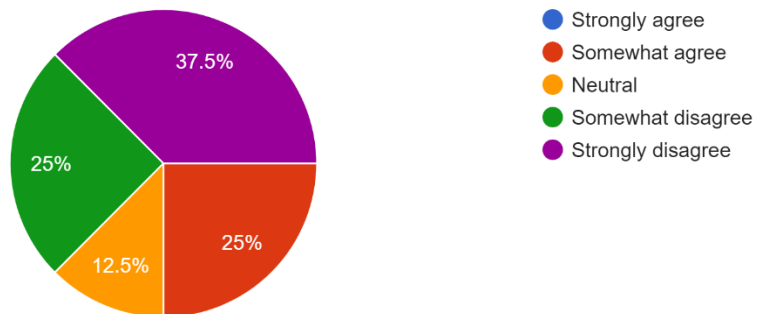| Option	Count
A large packaging and supply company	2 (28.6%)
A raw materials company for your specific industry (example: a gr…	1 (14.3%)
N/A	1 (14.3%)
Craft maltster	1 (14.3%)
More small scale dairies (which is unlikely given land value press…	1 (14.3%)
Apple growers to grow cider specific fruit.	1 (14.3%)

How would you rate your logistics situation?

Has your location in Shenandoah Valley made it difficult to receive and delivery products?

8 responses

- Strongly agree
- Somewhat agree
- Neutral
- Somewhat disagree
- Strongly disagree

37.5%

25%

25%

12.5%

In which regions of the U.S. has your business been most impacted by logistical issues and disruptions.

6 responses