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Final Performance Report
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An Outline of the Issue or Problem:

The majority of Virginia’s farms are small, with 41,800 grossing less than \$50,000 and 77% operating on less than 180 acres (40% on less than 50 acres). Yet, Virginia is recognized for leadership in its efforts to develop a strong local food system (Denckla Cobb, 2011), and has a solid agricultural base that supports more than 334,000 jobs, including 44,800 farms (USDA, May 2014). Annual household expenditures for food are over \$19 billion per year, with an unprecedented consumer demand for Virginia-identified foods (Virginia Farm to Table Team, 2011). There is also strong statewide public support for access to fresh local produce to improve public and economic health of communities. These factors have led to the proliferation of farmers markets for direct consumer access to local food, propagation of supply chain intermediaries such as food hubs to facilitate producer access to larger institutional markets, and increased demand from conventional distributors for local food. Despite the growing demand and support for local food, there are barriers related to increased wholesale and institutional buyer expectations, which producers must meet to satisfy various food safety requirements.

Challenges of Meeting Food Safety Requirements

Nationally, produce-related food safety concerns have been on the rise due to reported large-scale outbreaks related to a wide variety of leafy greens, fruits, and other vegetables (Gould et al., 2013; FDA, 2008). Outbreaks associated with leafy greens alone have almost doubled in the past decade – from 6% to 11% (1998-2008). An estimated 46% of foodborne illnesses associated with outbreaks are attributed to produce (Painter et al., 2013). With increasing concerns regarding these risks, Congress enacted the Food Safety Modernization Act (FSMA) and the U.S. Food and Drug Administration (FDA) proposed science-based standards for growing, harvesting, packing and holding produce on farms to further strengthen the safety of produce, known in short as the FSMA Rule on Produce Safety (FDA, 2015). The Produce Safety

Rule, which takes a proactive, preventive approach to food safety, was finalized in November 2015. While many small and mid-sized farms are exempt from these new regulatory food safety requirements, heightened marketplace awareness of food safety concerns has increased requirements for greater assurance of the safety of produce. Whether or not a farm falls under the new regulation, the Final Rule on Produce Safety is acting as a potent driver of stiffer food safety policies in the marketplace.

Apart from the Final Produce Rule regulations, producers are often required by buyers to obtain Good Agricultural Practices (GAP) certification as a matter of doing business with them. GAP certification entails creating a written food safety plan and implementing targeted best practices aimed at reducing on-farm food safety risks. However, there is a lack of uniformity among produce buyer food safety requirements and what, if any, audits are needed. Additionally, there are different audit schemes (i.e. USDA-based, GFSI-benchmarked, etc.), making the playing field challenging to navigate by producers. Furthermore, some buyers are unfamiliar with specific on-farm food safety practices, or how GAP certification translates into practices that are in place on the farm. Institutional buyers often also inadvertently favor larger farms that can readily achieve GAP certification, especially since many small and mid-sized producers are not able to readily achieve this certification because of associated costs, extensive record keeping requirements, and time constraints.

In Virginia, this situation has made it difficult for farmers to make informed market access decisions, for buyers to effectively communicate their requirements, and for state agencies and service providers to offer strategic support to producers. Given that new farmers often produce on smaller acreages and have fewer resources for infrastructure and machinery, they are more likely to face market barriers, and need statewide support to help mitigate these barriers. Not only do they require knowledge about marketplace expectations regarding food safety in order to inform their business development, but they also need a well-defined quality assurance framework that is appropriate to their smaller scale, is recognized throughout the state and across sectors, and provides increased market access in certain cases.

Engaging Stakeholders to Promote a Robust Food Safety Culture in Virginia

Food safety culture is an organizational culture of food safety that is made up of knowledge reflected in behaviors of the organization (Yiannas, 2009; Powell et al., 2011). The effectiveness can be determined by the amount of support a farmer or producer receives on a particular guideline (Chapman et al., 2005). Alignment of on-farm food safety practices, quality assurance expectations in the marketplace, and state-wide programs and policy implementation, can create an opportunity to strengthen Virginia agriculture and provide significant economic development while encouraging the production and consumption of locally produced food. Improved understanding of specific market sector knowledge, needs, and expectations for on-farm food safety practices is fundamental to further strengthen its agricultural base and support a local food

system (Harvard Food Law and Policy Clinic, 2013). Likewise, support at the state level is crucial to support and maintain alignment of a robust food safety culture.

Building on several previous efforts conducted in Virginia (Harrison et al., 2012; Virginia Beginning Farmer and Rancher Coalition, 2014; Virginia Farm to Table Team, 2011), Virginia Tech, Virginia Cooperative Extension, Virginia Department of Agriculture and Consumer Services, and Local Food Hub proposed a strategic and unified approach to address market access issues head-on, thereby advancing a more robust food safety culture in Virginia. Given that no comprehensive market data existed, the overall goal of this project was to mitigate market barriers associated with procurement of local and regional produce distributed throughout the fresh produce market chain in Virginia by improving market-wide understanding and expectation for scale-appropriate, on-farm food safety practices.

Goals and Objectives:

Project Goals

- Assist local and regional producers in addressing market barriers through improved alignment of food safety training and resources with market expectations, to ensure that the marketing of agricultural products meets specific market sector expectations generated by increased food safety awareness and regulatory requirements, including those resulting from the Food Safety Modernization Act 21 U.S. Code 2201.
- Increase institutional knowledge of food safety regulations resulting from The Food Safety Modernization Act 21 U.S. Code 2201, as well as scale appropriate on-farm food safety practices and certifications to support further support flexibility in procurement from small and mid-sized farms.
- Provide state agencies, food system non-profits, and private industry with comprehensive market data on food safety knowledge and needs to guide policies, practices, and market incentives essential to the development of a strong food safety culture in Virginia.

Project Objectives and Work Plan

1. Build vital stakeholder participation with statewide Advisory (Working) Group. At the start of the project, the core project team members developed a strategy for moving forward on project goals, as well as creating descriptive materials for the larger advisory group, also known as the Working Group (WG) structure. Materials included a recruitment letter for WG members; a schematic of the WG structure with objectives; a textual description detailing WG structure, roles and expectations of WG members, and a summary of project objectives, deliverables, and timeline; and an infographic of project phases based on the timeline (see “Additional Information”, Attachments 1, 2). Building on initial commitment made by individuals willing to serve on the Working Group (when the proposal was submitted), WG members were contacted to update them on the reception of grant funding, and additional WG members were also recruited. Subsequently, within the first six months, a WG Kick-Off Conference Call Meeting was held to provide in-depth project context and to disseminate and discuss the above prepared

materials. Additional meetings with the project team and WG were held periodically via conference calls or WebEx to complete activities outlined in the plan of work. Meeting notes and updates were provided to maintain effective communication.

As a means to create stakeholder buy-in, we ‘piggybacked’ on existing programs of WG members, so as to minimize project and planning costs. Some of the project team co-presented at the Virginia Association of Biological Farming (2015), VA Farm-to-School Conference (2015), VA Beginning Farmer & Rancher Coalition Program meeting (2015), and the “Sustainable Food Systems Symposium” (2016), in which we discussed our work with the project. The relationships nurtured with WG members also helped to foster stronger ties with groups already engaged in food safety education in VA (i.e. VCE, Local Food Hub, Appalachian Harvest, and Virginia State University).

2. Conduct a market assessment for food procurement by various market sectors in Virginia. Based on established methodologies for food system market assessment (Maples et al., 2013; Oger et al., 2001; Pirog & Larson, 2007), we collected data on individuals’ perceptions of food safety issues related to local produce production and procurement. To accomplish this objective, we used a mixed method design—specifically, a modified exploratory sequential design in which the mixing serves the purposes of both development and complementarity (Creswell & Clark, 2011). Our design and methods were submitted for review and approval by Virginia Tech’s Institutional Review Board for Research Involving Human Subjects.

The core project team held a series of conference calls and email communication related to survey development. After we reviewed existing literature of food safety surveys, we developed and shared an exploratory *qualitative* interview guide with Working Group (WG) members via email and a follow-up conference call in spring of the first funding year (Attachment 3). The intent of the guide was that WG members would complete the questions in order to provide feedback for developing the quantitative survey instrument. Using responses from the qualitative survey and the literature review of food safety surveys, a *quantitative* survey draft was created and refined by the project team, then shared with the larger WG, refined, and finalized (Attachment 4).

The survey design and online implementation followed a widely accepted method (Dillman et al., 2008) for internet-based data collection, including a systematic approach to piloting the instrument. The targeted market sectors were: 1) farmers markets; 2) public schools (K-12); 3) restaurants; 4) retailers; 5) hospitals; 6) universities; and 7) regional wholesalers. Within these target sectors, we used cluster sampling to balance validity and feasibility and to increase the extent to which we could generalize findings across geographic and institutional differences. Drawing on WG and project team members, we compiled a list of contacts for each of the market sectors to be surveyed. In addition to the Qualtrics-based online assessment, the survey tool was

made available as a paper copy version. The assessment was launched in the beginning of the second funding year.

Subsequent to the online administration of the survey, an additional round of purposefully sampled focus groups were conducted to gain further insights about buyers' decisions around fresh produce (Attachment 5). There were seven instances of qualitative data collection: one one-on-one interview (one participant), two paired interviews (two participants in each), and four group interviews (three to five participants in each), with a total of 20 individuals participating. All interviews were conducted virtually, recorded via WebEx, and transcribed (spring/summer of the second funding year). Subsequent to transcription, the project team conducted a 'data party' to work through the transcripts, code key emerging themes, and identify purchasing priorities and barriers. Focus Group data were then analyzed, interpreted, and summarized.

In the second half of Year 2 and into Year 3 (no-cost extension), we conducted a literature review of purchasing policies and guidelines for those market sectors with low response rates-- universities, hospitals, and retailers. Websites for these market sectors were searched, catalogued, and, where food safety policies were available, record copies were downloaded. Additionally, key themes were coded similar to the Focus Group work (Attachment 6). To corroborate our literature review and provide recommendations, especially since these studies were conducted elsewhere in the U.S. and not in Virginia, we also conducted follow-up face-to-face or phone call interviews with informants in these sectors.

3. Develop a baseline understanding of Virginia's market sector perceptions, knowledge, and expectations related to locally-sourced fresh produce. Quantitative data on respondents' perceptions, knowledge, and expectations related to locally-sourced fresh produce were analyzed using descriptive statistics. Additionally, items and subscales of the survey were analyzed in disaggregated form to assess any potential within- and between-group differences using both geographical and institutional difference as potentially interesting variables. These quantitative analyses were complemented by the results of the targeted focus groups. Together, these mixed methods analyses provided a unique and timely perspective and were used to create initial cross sector and within sector graphic profiles (Attachments 7-14), which formed our initial summary and were coupled with our other efforts to further develop producer and buyer recommendations.

4. Formulate recommendations for growers, market sector representatives, and decision makers. Building on the initial summary, literature review, and interviews, we discussed and developed finalized recommendations, retooled our profiles into various resources, and created a simplified guide to provide a context for tapping into markets. Additionally, an overview factsheet about accessing Virginia markets, as well as sector-specific factsheets were developed (Attachments 15-23); the factsheets were then used to create web-based content. Infographics were created from condensed versions of the factsheets, along with a separate infographic specifically geared to buyers (Attachments 24-26).

5. Develop stakeholder strategy for improving alignment between market sector food safety expectations and needs and producer practices. While we initially proposed participation in various conferences as a means for project dissemination, we determined that a more effective and efficient strategy would be to use web-based avenues of outreach. The Virginia Fresh Produce Food Safety website, a comprehensive clearinghouse of on-farm food safety materials, provides a primary location for our market-related materials and a wealth of other information and guidance related to on-farm risk assessment, direct market food safety, GAPs, food safety certifications, and FSMA. Target audiences are VCE extension agents, produce growers, market representatives, and consumers (<http://www.hort.vt.edu/producesafety/index.html>). In addition, the nine marketing factsheets and other similar materials are also available on the VCE public website (<http://pubs.ext.vt.edu/>). While the content is mainly housed on these websites, links are also posted to our Facebook page and to other existing websites such as WG member organizations (<https://www.facebook.com/VirginiaFreshProduceFoodSafetyTeam/>). These linkages will allow for broader dissemination and use by a variety of stakeholders. Factsheets were also disseminated at the Virginia Farm to Table Conference (2017) and the “Virginia Higher Education Sustainable Food Supply Chain Symposium” (2017). We also will share with VCE agents at the annual winter professional development conference (2018).

Contribution of Project Partners:

Virginia Tech is a public land-grant university serving the Commonwealth of Virginia, the nation, and the world community. The university’s mission focuses efforts not only on teaching and research, but also outreach. Extension efforts are led by **Virginia Cooperative Extension (VCE)**. There are roughly 240 Extension agents across the state of Virginia. The extensive, comprehensive infrastructure of VCE have and will continue to aid in the dissemination components of this project. Three members of the project team and several Working Group individuals from Virginia Tech and VCE participated in the project work, representing four departments in Virginia Tech’s College of Agriculture and Life Sciences and four other organizations at the university.

The **Fresh Produce Food Safety Team (FPFST)** is an interdisciplinary team comprised of VCE specialists and agents, and spearheads statewide VCE efforts in providing comprehensive food safety education from farm to fork. The team is working to increase and strengthen internal capacity within VCE, as well as developing a solid educational programming plan for external stakeholders. The Coordinator of the FPFST has served as project manager and lead.

Virginia Department of Agriculture and Consumer Services works in cooperation with Virginia State University, Virginia Tech, and the Virginia Cooperative Extension Service on research, education, and marketing projects. VDACS Division of Marketing serves producers, commodity boards and associations, retailers and buyers by providing marketing assistance. Outreach in Agricultural Marketing includes regional marketing development managers who are located in six designated regions of the state to provide assistance in marketing commodities and

enhancing agricultural economic development within those regions. Regional managers provide assistance, advice and counsel to agricultural producers, industry representatives, and organizations through individual consultations, public presentations, newsletters, and the media in order to enhance and influence marketing efforts. A member of the project team was from VDACS and provided important support in the market assessment development and administration work.

Local Food Hub (LFH) is a non-profit organization that works with over 80 farms in Virginia and exists as a corollary to traditional agribusiness models by reinstating small farms as the food source for the community. Local Food Hub is a regional leader in ensuring that small farms regain their economic foothold in the marketplace, and that the knowledge and choice of local food becomes the norm, not the exception, for all segments of the community. The Director of Grower Services from LFH was a key project team member and was involved in all facets of the project, providing vital contributions to the efforts.

Project Advisory (Working) Group

A fundamental strategy of this project was to develop a Working Group comprised of individuals who have a close relationship with key stakeholders representing the diversity of growers, market sectors, and demographics. The advisory group provided expertise and guidance on the development of the market assessment questions, and played a key role in assisting in data collection, interpretation of results, and subsequent recommendations. Working Group members included the following organizations and their areas of expertise:

- AgrAbility Virginia (farmers and ranchers with disabilities, veterans)
- Appalachian Foodshed Project (civic agriculture, sustainable food systems, nutrition)
- Appalachian Harvest (wholesale distribution, retail, on-farm food safety education)
- Clyde's Restaurant Group (restaurants)
- Farm Credit of Virginias, Knowledge Center (farmer loans and resources)
- Harrisonburg City Schools (public schools K-12)
- K-VAT Food Stores, Inc. (retail stores, grocers)
- Local Food Hub (wholesale distribution, food safety and other related producer training)
- Produce Source Partners (wholesale distribution, retail)
- Shenandoah Valley Produce Auction (direct market sales, wholesale, retail)
- UVA Medical Center, Food Services (hospitals, Farm to Institution)
- UVA Sustainable Food Strategy Task Force (colleges/universities, Farm to Institution)
- Virginia Beginning Farmer & Rancher Coalition Program (new & beginning farmers, Appalachian Foodshed Project, local and regional food systems, producer training)
- Virginia Farmers Market Managers Association (farmers markets, direct sales)
- Virginia Food System Council (community viability and food systems)

- Virginia Representative for National Farm to School Committee (K-12 schools, Farm to School)
- Virginia Small Farm Outreach Program (minority and limited resource farmer training, restaurants)
- Virginia Tech Agricultural & Applied Economics (women farmers, ‘Market Ready’ training for small/ mid-sized farms, consumer demand, restaurants)
- Virginia Tech Dining Services (colleges/universities, sustainability)
- Wholefoods (retail)

Results, Conclusions, and Lessons Learned:

Out of 577 individuals given the assessment, 46 responses were received, representing a response rate of 8%. While the overall response rate was not as large as expected, the data provided many valuable insights to us related to data collection limitations, poor communication and transparency of market procurement policies, and nuances of different market systems. Our mixed method strategy proved to be a critical approach to gain further data.

The fact that public information regarding procurement policies for certain sectors was difficult to obtain indicates that buyers need to be more transparent and better communicate their food safety requirements to producers. Further, a lack of available information may also indicate that there are certain markets that are challenging for Virginia producers to tap into, assuming these markets may instead be sourcing produce through larger suppliers and broad-line distributors. In some cases, information was non-existent.

As noted earlier, results from the market survey and focus group sessions were initially compiled into a cross-sector comparison report, which spanned all surveyed market sectors. Additionally, each market sector was broken down into sector-specific profiles that included supplementary information in the form of results, recommendations, and resources. While the cross-sector comparison report allowed us to aggregate data and trends, the sector-specific profiles detailed trends and themes by sector, thereby showing sector-specific similarities and nuances. Since we recognized that our audiences vary greatly in terms of how they prefer to access information, we repurposed these preliminary results into different formats such as web-based content, factsheets, and shorter infographics, versus a more academic report.

In meeting and discussing with extension agents in the field, they recommended a future expansion of our work would be to develop additional handouts to reflect their unique markets within their area/region. Thus, subsequent to project completion, it is anticipated that the preliminary report and profiles, along with the factsheets and infographics, can be further used by local extension agents to develop more place-based resources. The infographics provide local growers with a format that is appealing, captivating, and summarizes the most important aspects of our research for their benefit. Further, buyers representing different market outlets can build upon our recommendations to foster greater transparency for producers.

Cross-sectional Comparison Considerations

72% of respondents view buying local produce as important, with quality, availability, and price identified as the top three purchasing priorities. More than half (59%) of respondents do not currently require a third-party food safety audit from their suppliers and food safety was listed as seven out of the ten top purchasing priorities. Since data from each sector was not weighted for its contribution to the whole, those sectors that had a higher survey response rate had a greater influence on the ranking of purchasing priorities. For example, farmers markets, which do not require a third party audit, had one of the highest response rates, whereas hospitals and colleges, which both require third party audits, had the lowest responses. Survey respondents largely represented purchasing channels that functioned outside of corporate or institutional structures, which tend to have more defined policies and restrictions. Although the survey was specifically targeted at food safety perceptions and expectations, other constraints (e.g. logistics, variety, price, volume, seasonality) related to purchasing from local farms were viewed as critical. Given that most respondents communicate their standards to suppliers verbally, there is likely little consistency across sectors on the message growers are receiving related to quality assurance. Consistent themes across sectors demonstrated the importance of relationship building and communication between producers and buyers. Given the complexities inherent in fresh produce supply chains, these factors were emphasized repeatedly.

Requirements for food safety certification were represented in the wholesale, institutional, and public school (K-12) market sectors. In other sectors like retail and restaurants, distributors were often relied upon to verify supplier (producer) adherence to food safety practices and to overcome common logistical challenges, whereas in farmers markets, managers of those markets primarily relied on verbal assurances and established relationships with producers to address food safety and quality assurances. The complexity of supply chains was evident, given the varied and inconsistent procurement strategies in place. Across all market sectors, purchasing direct from the grower was prioritized, presumably linked to the value of relationships and support of local food systems. However, the logistical hurdles faced were also substantial, with a perceived need for more intermediaries like food hubs to streamline access to local foods.

While the data indicate that certain market sectors do not have defined food safety requirements and instead base procurement decisions largely on relationships and verbal agreements, growers should prioritize creating food safety plans with verification and documentation of their practices. Market sectors would benefit greatly with producers having increased access to education about on-farm risk assessment and food safety practices, and market-specific procurement policies, especially given the demand for locally grown produce. Additionally, several buyers suggested the creation of a statewide database of various markets that would convey buyer needs/requirements and better link buyers to producers and their products. This idea could be an excellent opportunity for Virginia stakeholders to pursue.

Sector-Specific Profiles

Colleges and Universities

The college and university sector represented a greater level of complexity in the actual procurement of food as compared to many other sectors. Across Virginia, there are about 60 public and private universities, excluding community colleges. This sector was the most scantily represented of the seven market sectors. Purchasing priorities for this sector were price, availability, liability insurance, food safety certifications, quantity/volume and quality of product delivered, and delivery capabilities of the produce supplier. Barriers to purchasing from local sources were insufficient volume, lack of intermediaries like food hubs, brokers, etc., delivery capabilities, and grower lack of understanding of buyer requirements, needs, and processes. Since larger institutions, like colleges and universities, are typically connected to larger, broad-line, food service companies, the survey indicated less than 10% of produce was sourced locally. Because of existing relationships to larger food service companies and distributors, and other major hurdles faced were volume, deliverability of product, and food safety policies, these institutions were limited in their ability to make business connections with local producers. In cases where institutions had greater flexibility and commitment to sourcing more locally produced food, they were open to establishing new ties. Growers would need to talk to the directors of dining services to figure out who their current suppliers are, as well as what interest lay in outsourcing from a local grower. Further, additional certifications, such as “Fair Trade” and “National Organic Program”, were seen as desirable to boost marketability.

Direct-to-Consumer Markets (Farmers Markets)

In Virginia, there are 235 farmers markets spanning from rural to urban environments (VDACS, 2017). While many other market sectors may be limited in the types of produce that they will purchase, farmers markets often lend themselves to being an outlet for a diverse array of products. Further, selling in a rural market is very different than selling in an urban market. Many of the pros and cons of farmers markets apply to other direct markets as well, including the fact that producers are the sole operators, meaning they don't have to worry about having an integrated format in their supply chain.

As food safety laws continue to develop, along with the general public's health concerns, it is important that local growers intending on selling directly in this sector familiarize themselves with current food safety practices, laws, and regulations. Local growers may need to comply with state and local laws, health department certifications, insurance regulations, business license requirements, and individual market rules and conventions. This includes how produce is packaged and labeled, marketplace handling, and participating in market events. Additionally, operating costs for farmers markets are usually lower than a retail storefront, but higher than street vending. Many farmers markets charge a flat fee anywhere from \$20 to \$100 per day, with higher fees in urban markets.

In terms of GAP certification, food safety audits for farmers markets are not typically required.

In our work, many markets required some sort of verification of on-farm practices and safe produce handling. There was a mixture of how food safety practices were verified. This included verbal assurances, written agreements, and site visits. One respondent reported that they did require a third-party food safety audit, whereas another respondent reported that they did not require any verification. It is important to note that the findings in this survey reflected both buyer and producer respondents. Five respondents were familiar with the Food Safety Modernization Act (FSMA), but were not sure how it might affect their organizations. Given the disparity we saw between survey responses, it would behoove local producers, who intend on selling to farmers markets, to familiarize themselves with current food safety practices and implement them into their respective farm operations.

Hospitals

In Virginia, there are 92 acute care hospitals, with over 18,000 staffed beds (American Hospital Directory, 2017). Urban hospitals (100+ staffed beds) have much higher patient volumes, as compared to rural hospitals (<100 staffed beds), thereby necessitating a higher number of meals served daily. Hospitals can vary greatly in terms of food service operations. Some hospitals prepare foods on site, while others prepare food off-site and ship it in, therefore only needing to heat and serve the food. Additionally, many hospitals have cafeterias or snack bars for visitors and staff.

Another level of complexity with hospitals is how they manage their food service. Some hospitals are self-operated, while others are managed by food service contractors—companies like Sodexo, Inc., Aramark Corp., and Compass Group North America. Add to this complexity the fact that many larger hospitals are in a group purchasing organization (GPO), which oversees all food procurement, typically working through broad-line distributors. These corporate contracts provide a consistent, reliable supply of food that meets specific sanitary and safety standards, often including rebates for large volume purchases. Thus, while there is a growing trend for patients desiring more fresh local produce, even food service directors wishing to purchase from local producers often find it challenging, if not impossible, to do so.

This market represented the most complex and challenging sector for producers to access and develop a fruitful business relationship. In fact, the low rate of responses in our market research were due to limitations in finding points of contact at these institutions, suggesting the complexity and hierarchical management levels in place regarding food procurement. Respondents strongly emphasized the necessity for mandatory adherence to food safety requirements—in fact, GAP certification was essential, as was liability insurance. While all respondents reported that they would increase local procurement if more local producers could meet requirements for food safety, they also stated that consistency in volume and deliverability were often constraints faced with local producers. Given the necessity of these large institutions meeting these food safety requirements and maximizing the value of every dollar spent, primary channels for local food procurement included regional distributors like food hubs.

Restaurants

The restaurant market sector is one of the most diverse sectors when it comes to food procurement practices. Each restaurant has its own style, theme, cuisine, targeted palette, and atmosphere. There are many competitors in this market sector and a broad variety of options. For example, at a sit-down restaurant, customers are essentially paying for both a good and a service, whereas fast-food restaurants eliminate the extra costs of service by allowing food purchases to have near-instant delivery. There is also a heavy amount of direct and indirect competition. Indirect competition is the conflict between vendors whose products or services are not the same but that could satisfy the same consumer need, whereas direct competition is when businesses are selling products or services that are essentially the same.

There are a plethora of options available to the consumer, such as food trucks, diners, fast-food restaurants, and bars. The challenge for producers comes in meeting both the demand and differentiating themselves and their products. High-end restaurants are willing to pay a higher price for fresh, local, unique produce. Certain restaurant chains, however, have local produce featured in their menus, as well as highlighting the farms from which the produce came.

In the survey, respondents indicated produce was purchased primarily from farmers markets, distributors, and direct from growers, and secondarily from food hubs and food service providers. All respondents were principal buyers for their organizations, with one respondent also being in charge of creating policies and procedures related to the procurement of fresh produce. All respondents reported purchasing produce daily during the peak season. Most reported also buying daily during the remainder of the year, whereas one reported buying bi-weekly. There is clearly stratification within the restaurant sector; thus, it is important for producers to be aware of the type of restaurant (i.e. localized “mom and pop” vs. chain) and their readiness to source locally. This includes corporate policies as well as the volume needed. Chain restaurants are inherently more stringent on food safety regulation, so access to these restaurants may be far more challenging than selling to a local/regional type restaurant.

Retailers

The retail market sector often has the most convenient locations, longest duration of operating hours, and the lowest, and therefore, most competitive prices. Retail powerhouses that carry produce, such as Walmart and Target, purchase the goods they’re selling from wholesalers and sell those goods at a higher price. The main operating format for retailers is to sell directly to consumers rather than producers or intermediaries. Local retail businesses support local growers since they are smaller scale operations that can rely largely on the local produce they purchase for their inventory. Other larger retailers, however, such as Kroger, often do supply local produce, but with limited variety.

In the survey, respondents stated that produce was purchased from distributors, food hubs, direct from growers, farmers markets, and food service providers. Some respondents were principal

buyers; all were in charge of creating policies and procedures related to the procurement of fresh produce. Most respondents reported purchasing produce daily during the peak season as well as the remainder of the year, whereas others reported buying weekly all year long. Most respondents were unfamiliar with the Food Safety Modernization Act (FSMA). Of those who were familiar with the FSMA, they were not sure how it affected their organization. None of the respondents anticipated their food safety requirements changing as a result of the act. It is important to note the type of retailer (independent vs. chain stores) and their readiness, or willingness to source locally. This includes corporate policies as well as size limitations of the produce being sold.

Public Schools (K-12)

Similar to hospitals, public schools have contracts with vendors already set in place. Like college and university students, children in public schools can also put money towards a “meal plan”. Most public schools offer both breakfast and lunch and change the menu weekly. A growing number of schools are gradually transitioning from pre-made foods to more fresh, scratch cooked options. Given the emphasis on fresh fruits and vegetables, there is an opportunity for local growers to gain greater access to public school systems. According to the Virginia Department of Education, there are currently 1,822 K-12 schools in Virginia as of the 2017-2018 school year (2017). The USDA has been encouraging school districts to use locally-produced foods in school meals and to use "farm-to-school" activities to spark students' interest in trying new foods. In an article published by NPR, they mentioned that more than a third—36 percent—of U.S. school districts reported serving local foods in the 2011-12 and 2012-13 school years (McMillan, 2017)). Buying local became more feasible with federal legislation that passed in 2008 and again in 2010, when the U.S. Department of Agriculture created the Farm to School program to get more healthful food in schools and link smaller U.S. farmers with a steady market of lunchrooms (USDA, April 2014).

This market sector represented the highest response rate of any sector surveyed, perhaps because of established farm-to-school programs across the state and the likelihood that school nutrition directors are more aware of food safety concerns due to the population they serve. Although the Public School market sector operates under significant constraints in terms of pricing and logistical challenges, it is a sector with significant growth potential for Virginia farms since many school systems make it a priority to spend commodity money on fresh fruits and vegetables. While accessing this market largely depends on the size and policies of a particular school system, more than half of respondents indicated that they would increase local purchasing of produce if food safety requirements were met, representing an area of opportunity for Virginia producers.

In particular, focus group participants mentioned the USDA pilot procurement program, designed to increase procurement of local produce in schools, but they faced challenges due to a lack of approved suppliers that would need to meet Good Agricultural Practices (GAP)

certification requirements in order to participate. Thus, the primary channel for school produce procurement is through distributors, since they handle both logistical hurdles, as well as food safety verification. For those schools buying direct from growers, fulfillment of food safety expectations varied widely from verbal assurances to written agreements to document reviews to site visits to third party food safety audits. Thus, while not all schools may require food safety certification at this point in time, there is increased pressure to do so, and those producers having GAP certification may gain greater access to selling their produce in schools.

Regional Wholesalers

A regional wholesaler is a centrally located facility with a business management structure facilitating the aggregation, storage, processing, distribution, and/or marketing of locally/regionally produced food products. A regional food hub is a business or organization that actively manages the aggregation, distribution, and marketing of source-identified food products primarily from local and regional producers to strengthen their ability to satisfy wholesale, retail, and institutional demand. Regional food hubs are beneficial because they provide an integrated approach with many potential benefits, including expanded market opportunities for agricultural producers, job creation in rural and urban areas, and increased access of fresh healthy foods for consumers, with strong potentials to reach underserved areas.

All of the respondents reported that they procure produce daily during peak seasons. The main purchasing priorities for wholesalers were quality, third party food safety audits, availability, adequate liability insurance, and delivery capabilities. The barriers identified with this sector included insufficient volume of deliverable produce, as well as corporate restrictions that would otherwise hinder the sale of produce to the institution. Maintaining third-party food safety certification is often standard practice in the wholesale market, although with food hubs there is more flexibility and room for on-boarding. With on-boarding policies, producers are able to sell their non-certified product to the food hubs, while gradually developing a written food safety plan, incorporating food safety practices, and obtaining GAP certification. Non-GAP certified products is channeled to buyers not requiring certification, then, once these producers become certified, their product can then be sold to buyers with more stringent requirements. Additionally, we saw that wholesalers and aggregators would likely increase their purchase of Virginia-grown produce if more Virginia growers could meet requirements for food safety and provide proof of liability insurance.

This sector in particular may be of interest to local producers who lack adequate means to transport their product, or to maintain proper temperature control in relation to food safety regulation. Distributors often have access to advanced food delivery logistics, and in many cases can circumvent some of the hurdles that a local producer may encounter. Since product is being aggregated, uniformity and consistency can be streamlined and maintained—something that is especially important for certain market sectors like schools and institutions. The wholesale route can also remove much of the hassle factor felt by producers when conducting multiple direct

transactions with buyers.

Lessons Learned

Advisory (Working) Group Participation and Attrition

Although initially we had diverse stakeholder involvement on the WG, who represented various market and service sectors, the greatest challenge we faced was attrition of WG members. Some members felt too pressed with other time demands to continue to participate in the WG, while others left the state for new job opportunities. Others failed to participate in conference calls or reply to email requests. From project inception, we were diligent to minimize phone call times, emails, and to explicitly define WG member roles and time commitment required, always recognizing that being in the WG was voluntary. When new gaps in the WG emerged (in terms of particular market sector engagement), we tried to recruit new members from those vital targeted market channels. This proved to be challenging within some sectors like hospitals, in which we had no point of contacts. While we remained convinced that a robust WG was critical to provide the needed framework and input to accomplish our project goals and keep us tuned to broader stakeholder perspectives, challenges, and needs represented, a lack of engagement by some WG members proved frustrating.

- A key lesson learned is that, given informants are very busy and pressed for time, achieving voluntary stakeholder involvement may necessitate some sort of an incentive simply beyond their interest in contributing to a project or their knowledge gained. In other initiatives in Virginia, like the Virginia Beginning Farmer and Rancher Coalition Program, money was budgeted for face-to-face meetings and participant travel, which would have been beyond the reach of the grant dollars available in this project. Nonetheless, *even if incentives are offered*, getting participation can be a huge challenge given people's stressful schedules and the fact that individuals willing to participate often are also giving of their time elsewhere!
- Another key lesson is the importance of fostering and nurturing relationships. In the end, the most important element to WG participation and input was building upon established connections and trust. Where relationships were already strong, individuals seemed more eager and willing to contribute. Further, they were more likely to provide additional contacts for expanding our network.
- This leads to a critical observation: one-on-one conversations (calls, face-to-face interviews, etc.) may be far more effective than group conference calls. While definitely more time consuming for the project team members, it is easier to juggle everyone's time and also provides a good way to focus in on discrete aspects of the project work. Although both one-on-one and group work was clearly necessary, incorporating this strategy proved extremely helpful to achieve our objectives.

Survey Design

In spite of sending the online survey to over 570 people, we only had an 8% return rate. The project team discussed potential reasons for the low return rate, which included: survey fatigue;

survey length; survey format; survey administration timing; inappropriate contact information; and a lack of providing some sort of incentive. In considering the various possibilities, survey fatigue is a possibility, since individuals are often inundated with requests to fill out survey instruments. The length of the survey could have also been a deterrent; however, since our goal was to better understand market perceptions and requirements, we did not want to administer a survey that was of little substance. In the project design phase, we grappled with a fine balance between sufficient thoroughness and survey length. We provided easy-to-use formats, in online and paper versions, so we do not think that contributed to lower response rate. The survey was administered in mid-October, with ample time allotted to complete (a 3-week window, with one reminder email). Scanty contact information could have contributed to low responses for certain sectors (see below).

- A primary take-home lesson was how vital a mixed methods approach proved to be a critical design strategy. Focus Groups and follow-up interviews gleaned excellent data, especially audio recording and transcribing the interviews. Although the number of participants in the focus groups and interviews were small, the insights and anecdotal material added greatly to our understanding of the assessment results. In fact, given the excellent quality of the data from the focus groups, we decided to incorporate interviews as noted below.
- When obstacles were faced in terms of survey responses, using adaptive management strategies were crucial for us to find alternative information sources. Using literature searches and corroborating the literature with follow-up interviews, was an excellent way to further obtain data and ensure place-based accuracy (versus extrapolating information!) The face-to-face interview was an excellent format, though more time consuming, and provided an opportunity for relationship building and seeing the marketplace up close (institution and university).
- Since one of the greatest challenges was retention of WG members, the attrition of WG members from certain market sectors meant identifying and finding new contacts responsible for food procurement in certain market sectors. The project team had difficulty obtaining sufficient contact information for those sectors, especially hospitals; however, building on our existing networks greatly helped us to find and make appropriate new contacts! This speaks to the crucial nature of having participation of the right project partners, and being flexible when obstacles arise.

Difficulty in Accessing Buyer Requirement Information in Some Markets

It is important to recognize that different market sectors use different titles for their food procurement personnel. For example in schools, ‘nutrition directors’ are often the individuals creating menus and placing purchasing orders for their schools, whereas in colleges and universities the ‘dining services manager’ *might* be responsible for food procurement. In other settings, like hospitals, the food manager may be referred to as a ‘food service director’. While they may be responsible for making buying decisions, they often are not the person putting in the purchase orders for food or creating menus (i.e. dietitian). Add to this confusion the fact that in

many health institutions the food service personnel rarely determine actual food procurement *policies*.

- The ‘take-home’ message is that *even if* producers can find an appropriate point of contact in an institution, developing a relationship and getting access to that market is not guaranteed!
- It is important for producers to recognize that market access in some instances is largely determined by company policy, which may prohibit or greatly limit procurement of locally sourced produce. Thus, market access may have very little to do with the attributes of a grower’s products. Given the challenge for producers to access buyer information and specific contact information, means different marketplace sectors-- especially institutions—need to be fully transparent in articulating their requirements and policies. This is true since policy information is often only accessible to existing vendors; thus, new vendors may be unable to find specific criteria for the vending of their products. Thus, if certain marketplaces desire to procure locally sourced products, they need to make sure they are conveying that information in ways that are easily accessible and understandable.

Project Time Challenges

While in our initial proposal we outlined what we projected to be a reasonable work timeline, the challenges that materialized, such as Working Group attrition and difficulty finding appropriate points of contact in certain sectors, necessitated flexibility. Our desire as a project team was to obtain the most robust data set that we could in order to offer valuable recommendations and guidance to producers, buyers, and other relevant stakeholders. This meant needing additional time to conduct this work, thereby setting our timeline behind. We requested a one-year no-cost extension, which greatly helped us achieve our goals.

- While the initial proposed timeline of outcomes was a roadmap, using an adaptive management and developmental evaluation (Patton, 2001) strategy was important so internal working processes of the project could be evaluated in light of external factors that were encountered. Rather than being constrained by our timeline when obstacles arose, finding creative alternatives for addressing those challenges was vital to project success.
- Another valuable lesson was engaging our Working Group and field agents as to their input about avenues for outreach efforts. Their feedback was invaluable as we considered our different target audiences and how best to reach them with our results.

Interdisciplinary Collaborations

One of the greatest strengths of the project team and Working Group was having individuals from diverse disciplines and areas of expertise. The wide array of stakeholders represented contributed to more robust project outcomes.

- Having a diversity of stakeholders is critical to project success. In this project, we had academia, extension, state and local agencies, non-profits, and businesses represented.

Our project drew upon stakeholders in the ‘trenches’, thereby grounding our work in the realities of the field. Doing so was critical.

- Working with Local Food Hub as part of the project team proved to be vital to our work. Not only did LFH provide an accurate pulse of the challenges being faced by producers and regional wholesalers in the field, but they also contributed significantly to every aspect of the work objectives. One strategy that worked well was to have regular face-to-face work meetings with LFH to focus on development of the project report and resources. These work sessions were fruitful and an excellent use of funds.
- In addition to the main project team and WG, we also had graduate and undergraduate student involvement, which brought fresh perspective and energy to the project. As part of graduate studies, an MA student contributed to the market assessment and focus group administration, data analyses, and initial report and sector profile drafts. Additionally, undergraduates helped with the focus group transcriptions, literature review, and interview work. The project lead conducted an independent study class, in which some of these undergraduate students focused on the development of resources and the final project report. Not only were these students a part of an applied project relevant to both of their fields of study (food science technology, agricultural marketing/ horticulture), but they were provided the opportunity to be co-authors of the factsheets and infographics—a benefit that they found desirable at this point in their professional life.

Evaluation:

As a reminder, our approach to evaluation of this project was sensitive to the expected long-term impacts of the project, including those that will accrue beyond the life of the grant. Those desired impacts are as follows:

- Improved alignment between on-farm practices and sector-specific market expectations for food safety assurance to support market access and farm viability (especially for small and mid-sized farms);
- Informed statewide food safety training for farmers that meets both shifting regulatory requirements (e.g., move toward harmonized Good Agricultural Practices and integration of requirements as a result of FSMA) and is tailored for farmers to meet specific market sector expectations and requirements;
- Guided education and outreach to each market sector to increase understanding and support for science-based food safety practices used by producers, including those used on small and mid-sized farms; and
- Creation and strengthening of Virginia’s farm-to-fork food safety culture, in which there are clearly defined food safety practice parameters that meet quality assurance standards, while creating wealth and economic opportunity across Virginia communities.

On a periodic basis throughout the life of the project, we collected data on outputs designed to serve as proxy measurements of progress towards these desired long-term impacts. The primary

measurable outcomes at the center of these evaluative efforts, and our data and findings relative to each outcome, are summarized below:

1. ***All milestone dates are met successfully.*** As discussed in the “Lessons Learned” section above, the project encountered a number of unforeseen variables that led us to apply an adaptive management approach to the timeline. As such, not all milestone dates were met, yet our developmental evaluation approach allowed us to respond to changing factors and ensure that the primary goals of the project could be met on an adapted timeline. Some reasons for the need to adapt the project milestone dates are present above in the “Lessons Learned” section.
2. ***The assessment is rated as high-quality by the Advisory Group using an established rubric of assessment quality.*** We elected to use the Advisory Group as a panel to establish the face validity and the expert validity of the tool, rather than a rubric, since that approach could be better tailored to the specific context of this particular assessment. On those criteria of quality, we received formative feedback from the panel to improve the working of numerous items on the assessment, ultimately yielding a higher-quality tool. Another criterion of quality related to the implementation of the assessment is the response rate. As stated above, our response rate of 8% was low, which introduced a threat to the validity of the assessment overall. However, depending on the sample size and the purposes of an assessment, 10% response rate is sometimes seen as acceptable and is relatively common (e.g., Duncan, 2008). The most important considerations are the purposes of the assessment and the size of the population of interests, more so than the response rate. Also, since we had stratified sampling by sector, our relative population size varied, which means that the response rate and the relative importance of those that responded varied by sector. In that sense, while we did further adjust our assessment to control for the low response rate in some sectors, this does not call the overall validity and credibility of the assessment into question.
3. ***The resulting information guides the creation of one new outreach or education material for each of the target sectors.*** This outcome was met with a high degree of success. As demonstrated by the materials included in Attachments 7 – 26, the project led to the creation of numerous outreach and education products (20 in total). The number, type, and focus of products also evolved through our formative cycles of evaluative feedback, to increase the likelihood that the resources would meet the informational needs of key stakeholders.
4. ***At least 25 key market sector and other food system stakeholders increase their involvement in enhancing market access and a food safety culture in Virginia.*** Inasmuch as more than 25 individuals were involved in providing input on the assessment and on the resulting tools, we thus achieved this outcome. What’s more, although data of the ripple effects of the products of this project are still limited, there is initial evidence that VCE agents view these tools in a positive light and are excited to disseminate them widely. In this

way, the outputs of this project will continue to engage stakeholders in efforts to enhance market access and a food safety culture in Virginia for years to come.

Current or Future Benefits/Recommendations for Future Research:

- At present, we have the multiple factsheets, infographics, and web content that we have developed. These materials have been disseminated via the websites we mentioned. Additionally, we are sharing our work with other producer-related websites in the state and larger Mid-Atlantic region. This approach allows for greater dissemination of our project results.
- In addition to web content, we are also sharing our project research in various capacities, building upon and expanding our networks and the deliverables of this project:
 - One example is the Virginia 2017 Farm to Table Conference, in which we connected with farm to hospital stakeholders, shared our accessing hospitals factsheet, and discussed opportunities for further collaboration. As a result of this connection, we were added to the "Chesapeake Farm to Institution Work Group", a collaboration of Health Care Without Harm and the Mid-Atlantic Chesapeake Foodshed Network. The ultimate goal of that effort is to strengthen collaboration between farm to school, farm to college, and farm to hospital initiatives and more efficiently utilize resources and support each other in accomplishing similar goals.
 - We also participated in the Virginia Higher Education Sustainable Food Supply Chain Symposium at UVA Morven Farm. As part of an existing effort of several universities, as well as several other stakeholders, to promote greater access by producers for universities and colleges, the project lead shared the results of our work about the colleges and universities sector (factsheet, infographics), as well as continues to be involved in this on-going initiative (Attachment 27).
 - Another example is involvement by the project lead and LFH with a USDA Farm to School project led by the Virginia Department of Education (DOE), to promote greater procurement of locally sourced produce in Virginia K-12 public schools. As a part of this new project, we will be building upon the knowledge gained from this present project, especially as it relates to overcoming barriers and meeting food safety requirements by producers for access to public schools (Attachment 28). As a part of our involvement, our work will comprise creation and delivery of a food safety talk that will be presented in early 2018 in eight VA regions. Additionally, we will involve VCE agents when possible to build greater capacity.
 - There are also other opportunities with Working Group colleagues, particularly with the Virginia Tech Department of Agricultural Economics and Business, that are currently being considered. While some of these efforts are still in the early planning phases, the results of this present project have already provided an excellent foundation on which to expand efforts, gain interest, and provide greater evidence of the challenges faced by producers and buyers in the marketplace. We

are eager to engage in opportunities where we can continue building upon the work we completed here.

- We will also be sharing our work at the VCE 2018 Winter Professional Development Conference so as to make agents and specialists aware of the work we have done, and to foster continued efforts as mentioned in the next bulleted point.
- These varied examples demonstrate the credibility gained through this project, and clearly our efforts here have opened doors to further expansion and longer term impacts described in our “Evaluation” section.
- While our research focused on understanding different markets at a statewide level, a reasonable next step would be to investigate particular regions of Virginia and marketplace nuances, and for our materials to be further developed into region-based materials. For example, Southwest Virginia is a very different landscape than Northern Virginia (NOVA), not just in terms of geography, but in terms of demographics, economics, types and number of markets, etc.. Given the urban sprawl in NOVA and encroachment of farmland, the urban versus rural contrast of these two regions is striking. In addition to these contrasts, there may be other factors that influence market access, such as smaller institutional systems, human capital, laws and regulations, cost of living, and transport and delivery options. These future efforts should be grassroots and community-driven, making sure all relevant stakeholders are involved. Given VCE’s presence and credibility in communities across Virginia, they could play a vital role in bringing stakeholders together and contributing to the process. In fact, this ‘next step’ is corroborated in the approach that the Virginia DOE is taking with the Farm to School efforts mentioned above—providing farm to school education adapted to each of the eight targeted statewide regions.

Project Beneficiaries:

Since many of our resources are web-based and were recently uploaded, we do not have concrete metrics at this point. However, we do know that the websites will have a wide reach for the following target groups in Virginia, Mid-Atlantic, and beyond (numbers represent estimates of a conservative estimate if stakeholders in each target group):

- Small-medium-, and larger-scale Produce Growers (750+)
- Buyers and other key stakeholders:
 - Colleges & Universities (60)
 - Direct Markets (240)
 - Hospitals (10)
 - Public Schools (1500+)
 - Restaurants (20)
 - Retailers (10)
 - Wholesalers (10)
- Academia (50)

- Trainers (VCE, non-profit groups) (50+)
- Agencies (VDACS, DOE, etc.) (20+)

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Additional Information:

Project Materials and Website Links

Advisory (Working) Group (Obj. 1)

- Working Group Schematic (Attachment 1)
- Project Phases Milestones (Attachment 2)

Market Assessment (Obj. 2)

- Qualitative Interview Guide (Attachment 3)
- Qualtrics Online Survey (Attachment 4)
- Focus Group Questions (Attachment 5)
- Literature Review and Coding Themes (Attachment 6)

Develop Baseline Understanding (Obj. 3)

- Cross-Comparison Report (Attachment 7)
- Colleges and Universities Sector Profile (Attachment 8)
- Direct Market Sector Profile (Attachment 9)
- Hospitals Sector Profile (Attachment 10)
- Public Schools (K-12) Sector Profile (Attachment 11)
- Restaurants Sector Profile (Attachment 12)
- Retailers Sector Profile (Attachment 13)
- Wholesale Distributors Sector Profile (Attachment 14)

Formulate Recommendations (Obj. 4)

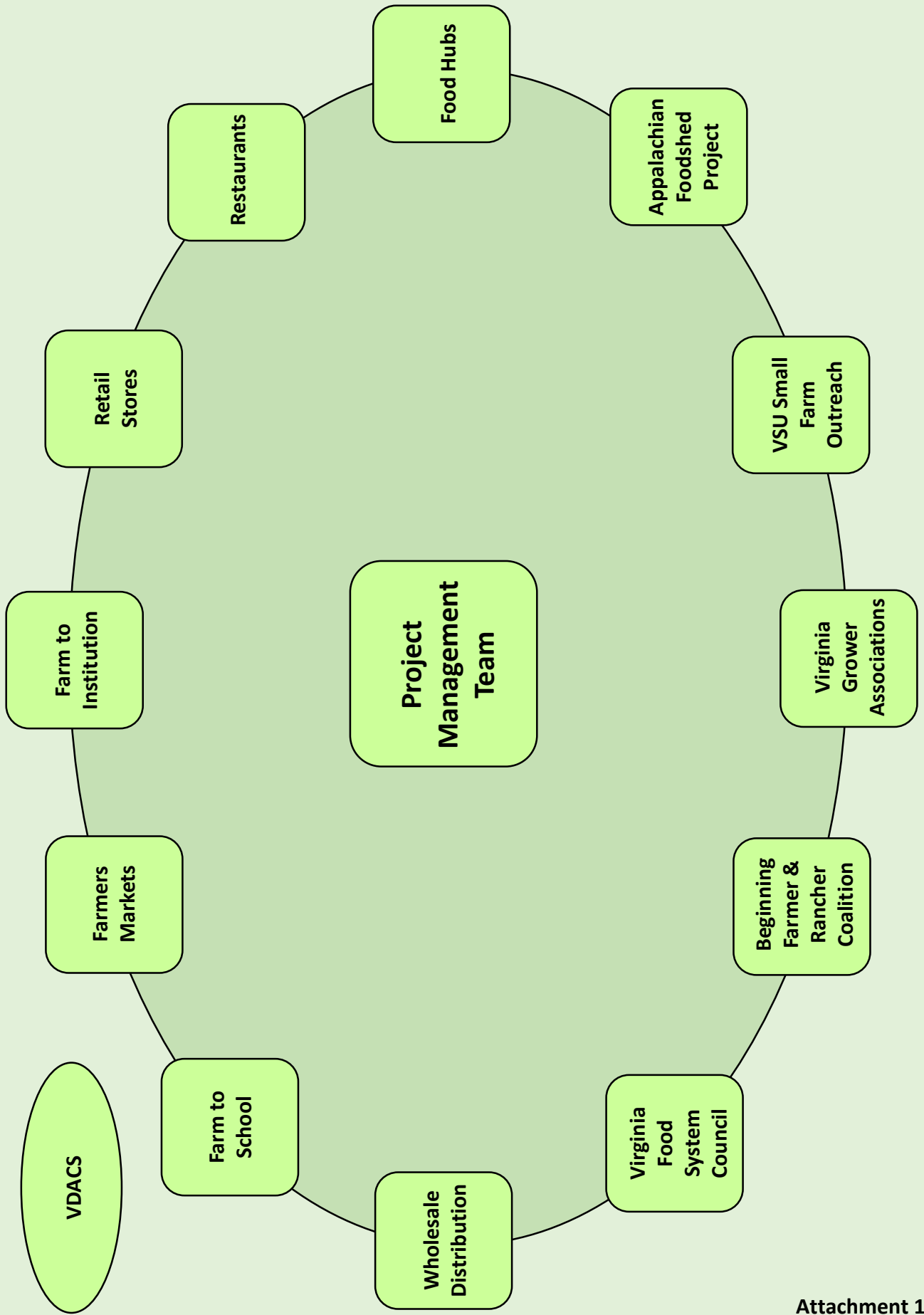
- Establishing a Market Perspective Factsheet (Attachment 15)
- Accessing Virginia Markets Factsheet (Attachment 16)
- Colleges and Universities Sector Factsheet (Attachment 17)
- Direct Market Sector Factsheet (Attachment 18)
- Hospitals Sector Factsheet (Attachment 19)

- Public Schools (K-12) Sector Factsheet (Attachment 20)
- Restaurants Sector Factsheet (Attachment 21)
- Retailers Sector Factsheet (Attachment 22)
- Wholesale Distributors Sector Factsheet (Attachment 23)
- Establishing a Market Perspective Infographic (Attachment 24)
- Market Sector Infographics (Attachment 25)
- Buyer Points for Local Suppliers Infographic (Attachment 26)

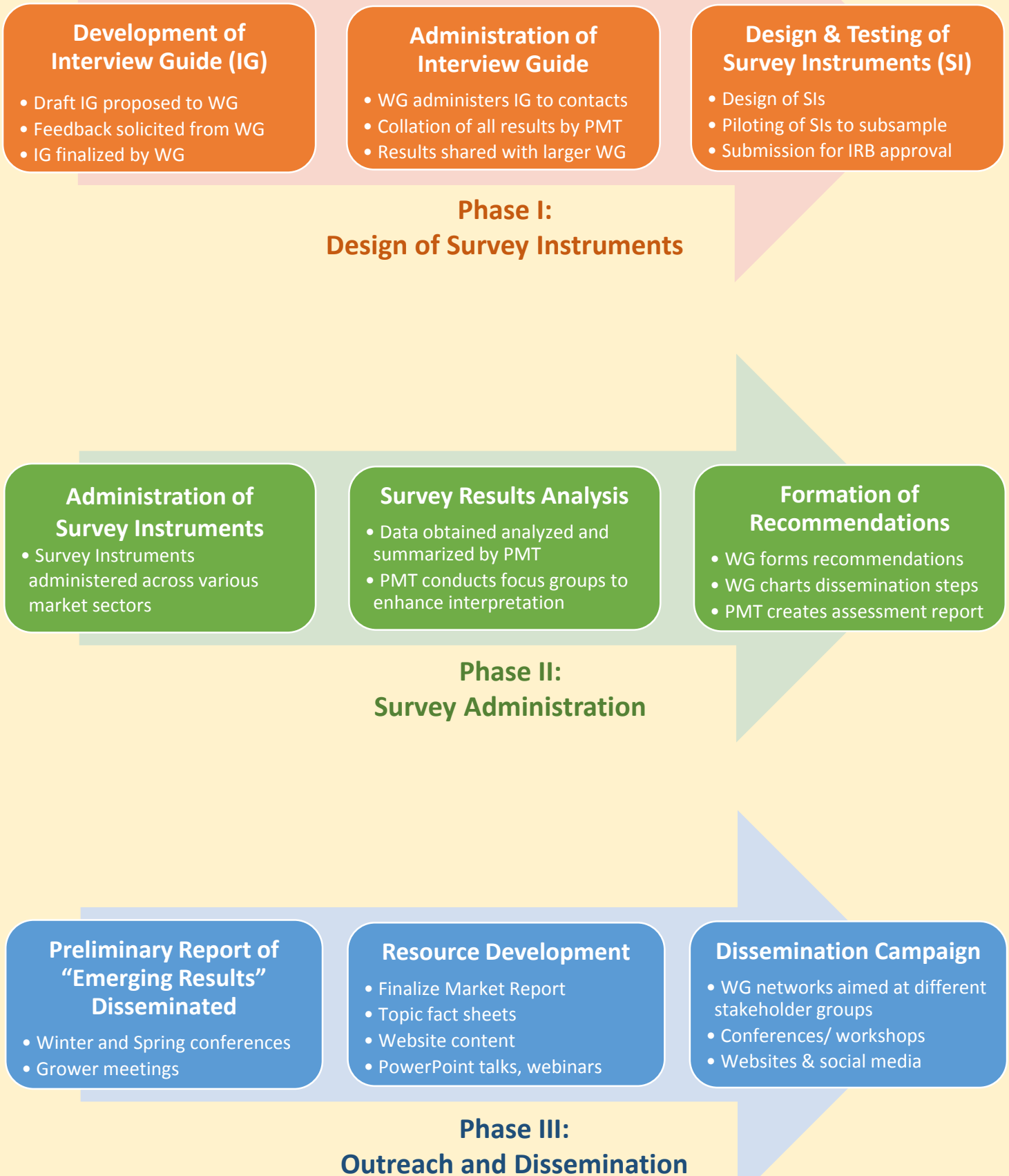
Develop Stakeholder Strategy (Obj. 5)

- Virginia Cooperative Extension website, <http://pubs.ext.vt.edu/>
- Virginia Fresh produce Food Safety Website, <http://www.hort.vt.edu/producesafety/index.html>
- Virginia Fresh Produce Food Safety Team Facebook Page, <https://www.facebook.com/VirginiaFreshProduceFoodSafetyTeam/>
- Virginia Higher Education Sustainable Food Supply Chain Symposium Agenda (Attachment 27)
- Virginia Department of Education Inquiry (Attachment 28)

Virginia Food Safety Market Assessment Working Group



Virginia Food Safety Market Assessment Working Group Project Milestones



Virginia Food Safety Market Assessment Working Group
“Market Conversations” Interview Guide (DRAFT)
January 26, 2015

Below, you will find a series of questions you could use to structure or direct your conversations with key stakeholders in the Virginia fresh produce marketing chain. This interview guide is meant to be informal. Perhaps you already discuss some of these questions with people you interact with. The goal of this guide is to help you be more systematic and intentional about gathering data through those discussions.

Suggested steps to follow:

1. Identify 2-3 people in your professional network who are involved in the fresh produce marketing chain in Virginia, especially as pertains to local and regional foods. Ideally, you will not need to go out of your way to find people to talk with (which should keep this activity from being too time-consuming for you); we hope you can use your current professional networks to identify and interview pertinent stakeholders.
2. Either arrange a time to meet with them (roughly 20 minutes per person should suffice) to ask them some or all of the questions below, or informally pose question such as these in the normal course of conversation with them. Keep track of who you end up talking with, and note their role in the fresh produce marketing chain (e.g., grower, farmers’ market vendor, distributor, grocery store purchaser, etc.). The people’s names or identities will be kept completely confidential.
3. Have a conversation based on these questions.
4. Either during the conversation or right after it, write down a few bullet point notes on their responses. If feasible, also try to note any salient statements word for word.

Suggested questions:

In answering the following questions, please think about the local and regional fresh produce marketing chain in terms of the following considerations:

- On-farm food safety practices
 - Quality assurance expectations
 - Certification requirements (e.g., GAP and others)
 - Organizational policies and procedures
 - Risk Management (e.g. liability insurance)
1. What format/mode of survey administration would best fit your needs? (e.g., web link, paper, phone etc.)?
 2. We are interested in assuring market access for a diversity of producers in VA – small, mid-size, and large farms. Please consider the following questions for all farm sizes you work with.

- a. Currently, what are some aspects of the local/regional fresh produce marketing chain in Virginia that are strong, or that are working well?
 - b. What are some aspects that are weak, or that are not working well?
 - c. What opportunities do you currently see for strengthening or improving the local/regional fresh produce marketing chain in Virginia?
 - d. What barriers related to food safety regulations, policies, procedures, norms, expectations, etc. do you see keeping some producers and others out of the fresh produce market chain?
3. How do the people you work with perceive local/regional fresh produce?
 4. What is the current level of understanding among the people you work with on issues related to local/regional fresh produce in the marketing chain?
 5. What programs and/or services would you like to see offered to enhance access and reduce barriers to the procurement of local/regional fresh produce?

Background Profile

The purpose of this study is to generate new knowledge about market barriers associated with procurement of local and regional produce distributed throughout the fresh produce market chain in Virginia. In turn, this knowledge will be used to help mitigate those market barriers. We expect to find specific information about the current knowledge, perceptions, and attitudes regarding fresh produce food safety rules and regulations among individuals involved in the fresh produce value chain in Virginia. People who are involved in fresh produce purchasing for/at farmers markets, schools (K-12), restaurants, retailers, other institutions (hospitals, universities, elder care), and distributors are invited to participate. Results will be shared via Extension publications and programs, white papers, social media, and peer-reviewed articles.

A. Background information on your fresh purchasing role

Which of the following best describes your primary affiliation? *Check one.*

- Wholesale distribution or aggregator
- Farmers market, CSA, You Pick, or roadside stand
- School (K-12)
- College/University
- Hospital, elderly care, or prison facility
- Chain restaurant

- Local restaurant
- Food Service Management Company
- National/chain retailer
- Locally/ regionally owned retailer
- Other

Are you the principle buyer of produce for your organization? *Check one.*

- Yes
- No
- I don't know

If "No" or "I don't know," please describe your role:

Are you in charge of creating policies and procedures related to the procurement of fresh produce? *Check one.*

- Yes
- No
- Not Applicable; We do not have formal policies or procedures

What channels do you use to purchase fresh produce? *Check all that apply.*

- Auctions
- Direct from growers
- Distributors
- Food Service
- Food Hub
- Farmers Markets
- Other

Approximately how often do you or your organization place fresh produce orders...

During the peak growing season (May-October)?

Daily

Weekly

Bi-Weekly

Monthly

Other

During the remainder of the year (November-April)?

Daily

Weekly

Bi-Weekly

Monthly

Other

What was the approximate value of your organization's fresh produce purchases in 2014? *Check one.*

- Less than \$5,000

- \$5,000 - \$24,999
- \$25,000 - \$99,999
- \$100,000 - \$249,999
- \$250,000 - \$499,999
- \$500,000- \$999,999
- Over \$1,000,000
- I don't know

Approximately what percentage of your fresh produce purchases in 2014 was sourced from Virginia farms? Check one.

- 0%
- 1 - 9%
- 10 - 19%
- 20 - 29%
- 30 - 39%
- 40 - 49%
- 50 - 59%
- 60 - 69%
- 70 - 79%
- 80 - 89%
- 90 - 99%
- 100%
- I don't know

How important is each of the following attributes to you when you are purchasing fresh fruits and vegetables? Please rate each attribute on a 5 point scale, from "Very Unimportant" to "Very important."

	Very Unimportant	Unimportant	Neither Unimportant Nor Important	Important	Very Import
Quality	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Availability	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Delivery	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Grower/ producer liability insurance	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Food Safety Certification	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Price	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Quantity/volume	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Proximity of grower/ producer to buyer (local, regional,etc.)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Variety/ product diversity	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Current Requirements and Expectations

B. Information on your current fresh produce food safety requirements and expectations

Do growers/vendors need to have passed a third party food safety audit before you purchase from them?

- Yes
- No
- I don't know

Which audit(s) do you accept? Check all that apply.

- USDA Good Agricultural Practices (GAP)
- USDA Harmonized GAP
- Global Food Safety Initiative (GFSI)-approved audit
- Other (Please describe):

Please check the sections of USDA GAP that you require:

- Part 1: Farm Review
- Part 2: Field Harvest and Field Packing Activities
- Part 3: House Packing Facility
- Part 4: Storage and Transportation
- Part 5: Wholesale Distribution Center/ Terminal Warehouse
- Part 6: Preventative Food Defense
- All applicable to the operation
- I don't know

If you accept a GFSI-approved audit, what type of GFSI-audit do you accept?

Check all that apply. Leave blank if you do not accept a GFSI-audit.

- Primus GFS
- Global GAP
- SQF Institute
- Other (please describe):

- I don't know

For third party audits do you allow a graduated process for “on-boarding” new growers/vendors? (For example, you ultimately require Harmonized GAP certification but will start purchasing product with a USDA GAP audit.) *Check one.*

- Yes
- No
- I don't know

When purchasing fresh produce from growers/producers, do you require any of the following? *Check all that apply.*

- Verbal assurance of incorporating food safety practices
- Attendance at an on-farm food safety training
- A written on-farm food safety plan
- Liability insurance
- Water test analysis results
- Use of new boxes for packed produce
- Refrigerated transportation
- Documentation and record keeping
- A working traceability system
- Use of sanitizers in post-harvest water process
- We do not require anything
- Other (Please describe):
- I don't know

How do you verify adherence to requirements? *Check all that apply.*

- Verbal assurance

- Written agreement
- Document review
- Site visit
- We do not verify
- Other (Please describe):

- I don't know

How do you communicate your food safety standards to your producers?
Check all that apply.

- Website
- Printed materials
- Verbally
- Not applicable; we have no requirements
- Other (Please describe):

- I don't know

In developing your standards or requirements, what source(s) did you use for guidance? *Check all that apply.*

- Produce industry associations
- Global Food Safety Initiative (GFSI)
- Federal level (USDA/ FDA)
- State level (VDACS)
- Virginia Cooperative Extension
- Virginia Department of Health (VDH)
-

Independent consultants

- Suppliers
- Not applicable; We have no requirements
- Not applicable; We received no guidance
- Other (Please describe):

Do you want or need additional/improved guidance for implementing food safety policy/ standards? Check one.

- Yes
- No

Please describe what areas/issues/topics you would like guidance:**How familiar are you, if at all, with the Food Safety Modernization Act?**

Check one.

- Not at all familiar; I have not heard of it
- Somewhat familiar; I know about it but do not know details
- Fairly familiar; I know something about how it will affect me/my organization
- Very familiar; I know a great deal about it and how it will affect me/my organization

Do you anticipate your food safety requirements changing as a result of the implementation of the Food Safety Modernization Act?

- Yes
- No
- I don't know

What is your target timeline for vendor compliance with the new regulations?
Check one.

- 1 year or less
- 2 - 4 years
- 5 - 7 years
- 8 - 10 years
- More than 10 years

Challenges/ Opportunities

C. Challenges and opportunities in your fresh produce market context

What barriers to purchasing more Virginia-grown fresh produce do you encounter? *Check all that apply.*

- Corporate requirements/ policies for food safety not met by growers
- Cost of product
- Insufficient volume of product
- Lack of intermediaries (food hubs, brokers, etc.)
-

Consistency of product (quality, size, ripeness)

- Lack of variety/product diversity
- Delivery capabilities (timing, flexibility, etc.)
- Growers lack understanding of buyer needs/ processes
- Not applicable; We do not experience any barriers
- Other (Please describe):

Based on your experience, in what areas do the growers/producers from whom you purchase fresh produce seem to most need assistance? Please check all the options that apply, or leave blank if none apply.

- I don't know enough about their needs to answer

Operationalizing on-farm food safety production practices:

- Manure/ compost use
- Water treatment
- Water testing
- Animal exclusion

On-farm infrastructure:

- Refrigeration
- Storage
- Other

Additional areas:

- Availability of efficient transportation networks
- Having reliable labor force
- Understanding buyers' needs and preferences
- Minimizing costs associated with upgrading their farm and facilities to reflect best practice guidelines
- Having technical assistance to help them go through the certification preparation process
- Minimizing costs associated with audit/ certification process

Educating/ training around best practices:

- Can't find classes in geographic region
- Classes offered at inconvenient times
- Classes not publicized widely enough
- Not enough classes offered
- Classes are too expensive
- Other

As a buyer, what investments would you be willing to make to improve on-farm food safety for your growers? *Check all that apply.*

- Time (i.e., serve on a fresh produce food safety working group)
- Pay for my growers to attend training
- Host/ present at a grower workshop
- Money (i.e., share the cost of an audit)

- Not applicable
- None; I would not invest in any of the above ways
- Other (Please describe):

Previously on this survey, you were asked approximately what percentage of Virginia-grown produce was currently purchased by your organization. If requirements/ expectations for food safety could be met by more Virginia growers, would you increase your purchasing of VA grown produce?

- Yes
- No
- I don't know

Estimate how much increase (percentage increase)

What else do you want us to know about related to fresh produce food safety issues that could help Virginia growers access the marketplace more successfully?

Thank you!

Fresh Produce Focus Group Questions (Updated)

1. Please tell me a little bit about your organization's fresh produce purchasing, especially in regard to sourcing VA grown produce.
2. What barriers exist around purchasing fresh produce in your market sector?
3. How do you work through or overcome these barriers?
4. What food safety requirements would need to be met in order for your organization to purchase *more* VA grown fresh produce?
5. When you approach producers about food safety expectations or requirements, are they usually aware of what you are talking about?
6. What assistance do you think suppliers need to be able to provide more fresh produce to your organization?
7. What role can VDACS play in the supply of fresh produce?
8. What role can VCE play in the supply of fresh produce?
9. What best practices do suppliers need to follow to entice your organization purchase fresh produce? (question 16 in qualtrics)

For later in the focus group: Show some of the results from the survey (e.g., priorities in purchasing, type of GAP required, familiarity with new regulation, etc.)

Literature Review of Food Procurement Policies

8/31/16

As part of the USDA AMS FSMIP project, we are conducting a literature review of purchasing policies and guidelines for specific market sectors, for which our survey and Focus Group data sets were scanty. Primarily, the review focuses on institutions (colleges & universities, hospitals), retailers (grocers), restaurants, and wholesale distributors.

1. Search for websites for specific entities which we are limited in data (see above categories) and previous contact lists.
2. Use 'Market sector spreadsheet' to catalogue information for each specific market sector entry.
3. Information should include company name, website link (url), contact person, contact info, Virginia sourcing, and food safety requirements (as detailed).
4. Download file of policy for record copy.
5. Using our theme codes below, skim each document and notate to all themes, practices, requirements, key words, phrases, etc.. . Use a highlighter to note any salient points that can be used as part of our summary report info.
6. Notate any interesting inconsistencies or observations (i.e. stated policy vs on-the-ground practices such as corporate headquarters requires GAP, but local buyer accepts non-GAP certified product in order to purchase local produce).
- 7.

Theme Codes

1 Assistance	2 Producer Best Practices	3 Local/VA-grown
3b Non-VA grown	4 Communication	5 Relationships (customer)
6 Third party Audits	7 Markets	8 Demographics (role, location)
9 Economic Opportunity	10 Recommendations	11 Untapped market potential
12 Expectations	13 Seasonality	14 Produce type
15 Unforeseen challenges	16 Unawareness	17 Roles
18 Existing resources	19 FSMA*	20 Purchasing Priorities*
21 Barriers*	22 Requirements*	23 Industry Standards
24 Resistance in Attitude		

***a priori codes**

Non-bolded are emergent codes

Virginia Fresh Produce Food Safety Market Survey Results

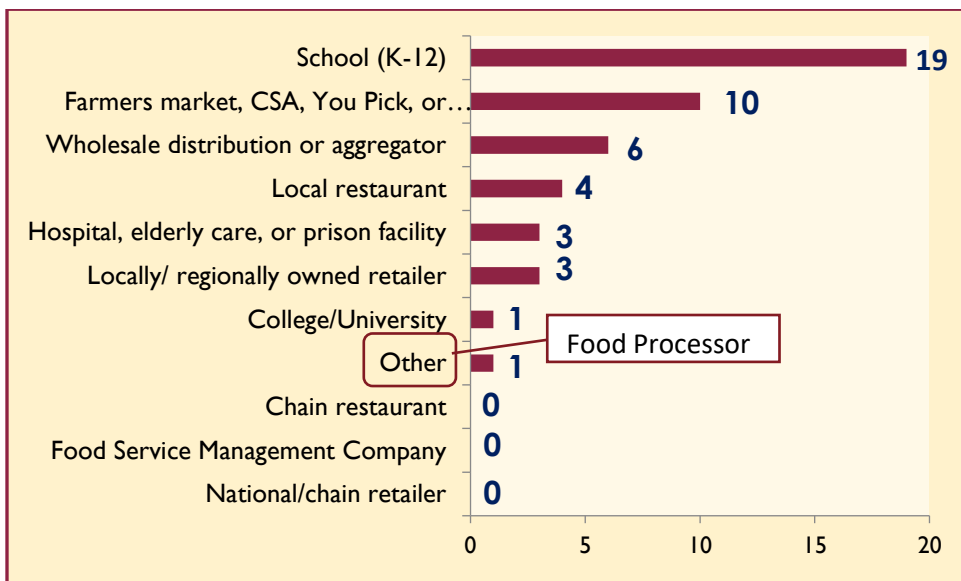
CROSS-SECTOR COMPARISONS

Amber Vallotton, Adrianna Vargo, Thomas Archibald, Renee Boyer, Natalie Cook, Tiffany Drape, Ryan Knox

This report reflects data from **46 participants** (of 550 invited) who completed the Fresh Produce Food Safety Market Survey online via Qualtrics (8.4% response rate). A paper version was also available, but 100% of surveys were completed online. This report also includes qualitative data collected via five focus groups.

RESPONDENT SURVEY DEMOGRAPHICS

Representation of Market Sectors



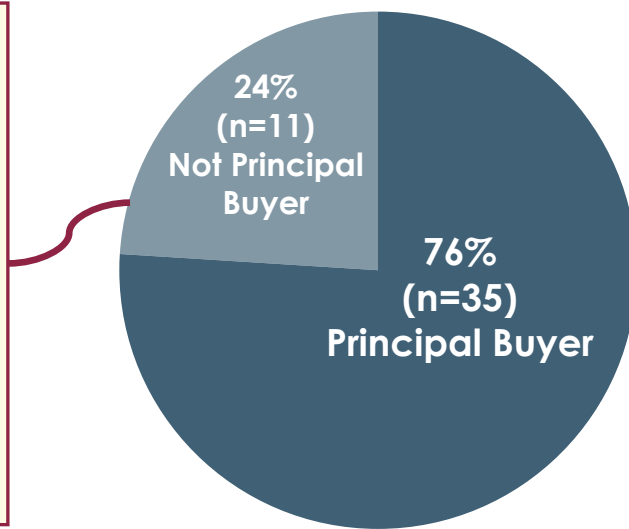
Over half (61%) of the 46 respondents represented two sectors: **K-12 Schools** and **Farmers markets**.

Sectors not represented by respondents included: food service management companies, national retailers, and chain restaurants.

Respondents Representing Principal Produce Buyer for their Organization

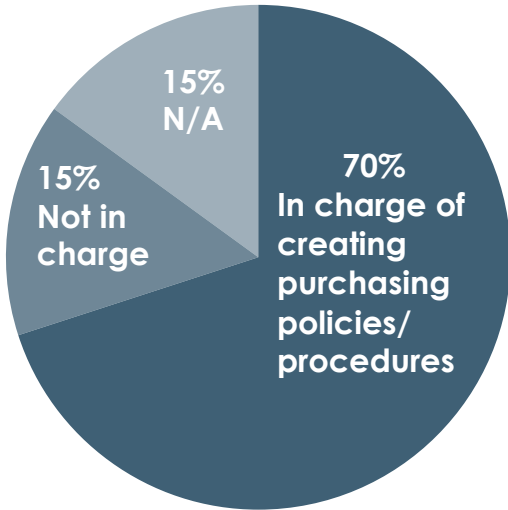
Roles of Non-Principal Buyers (n=11)

- Owner (2)
- Farmers Market Manager (2)
- Food Safety Manager
- Associate Director for Dining
- Unspecified (5)
 - 5 buyers; 2 with local experience
 - Managers purchase from identified distributors
 - Chef purchases all produce
 - Producer-only Farmers Market

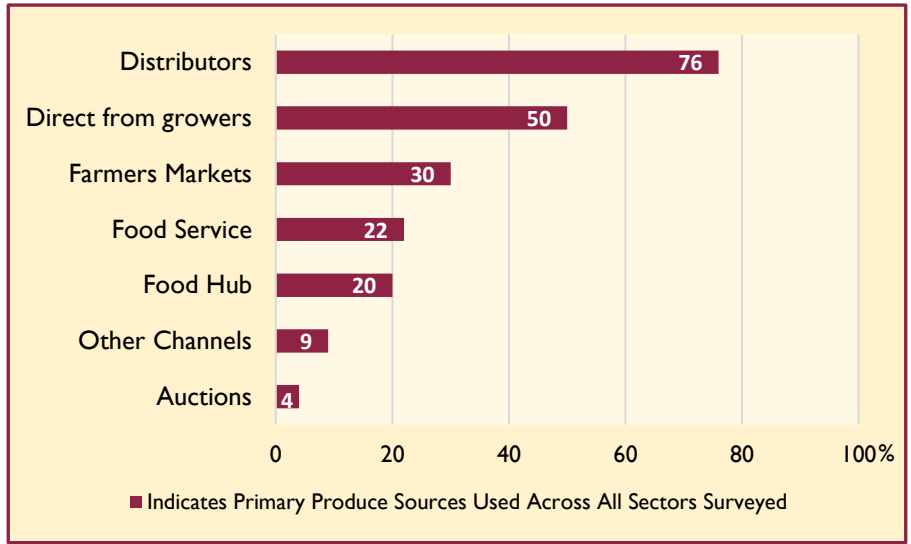


RESPONDENT FRESH PRODUCE PURCHASING BEHAVIOR

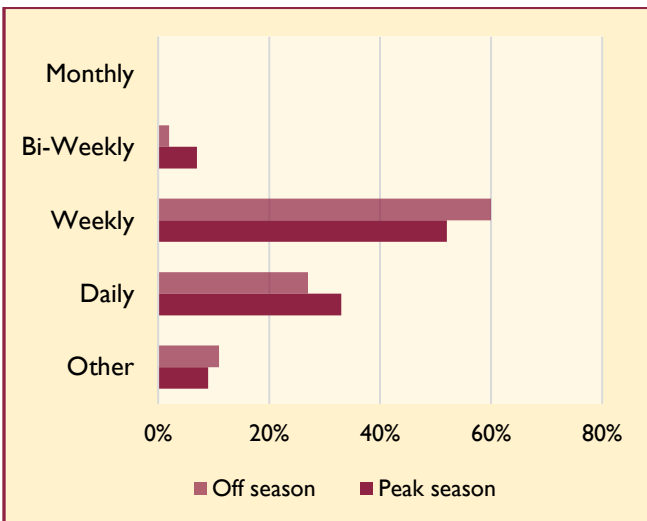
Purchasing Roles



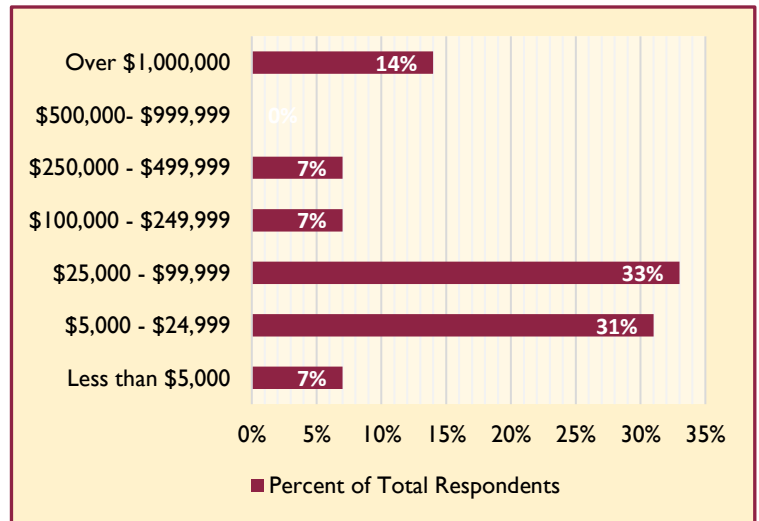
Produce Sources Used by Respondents



Frequency of Purchasing



Fresh Produce Expenditures



Virginia-Grown Produce Sourcing



Three-quarters of respondents purchased at least 70% of their produce from VA farms.

One-fourth of respondents purchased less than 50% from VA farms

72% of respondents view buying local produce as important.

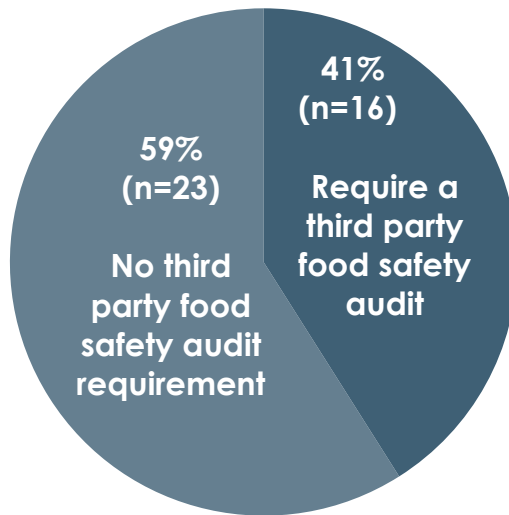
RESPONDENT PURCHASING PREFERENCES AND POLICIES

Purchasing Priorities

(Ranked most to least important)

1. Quality
2. Availability
3. Price
4. Delivery
5. Product Variety
6. Quantity
7. Food Safety Certification
8. Grower Proximity to Buyer
9. Producer Liability Insurance

Food Safety Requirements



- ◆ Most respondents communicate their food safety standards to producers **verbally**, while others share this information via **printed materials** and **online**.
- ◆ While some respondents **do not have any requirements**, most respondents verify adherence to requirements using **verbal assurances** and **site visits**.

- ◆ For those buyers requiring a food safety audit, 41% accept USDA GAP and HGAP audits; 15% accept Global Food Safety Initiative (GFSI) audits; 7% require other inspections (health department sanitation or food service company quality inspections).
- ◆ While 30% of these buyers allow a graduated process for “on-boarding” new growers/vendors in terms of food safety practices and certifications—i.e. obtaining a USDA Good Agricultural Practices (GAP) audit prior to a Harmonized GAP audit—65% did not know whether their organizations permitted this option.
- ◆ Key on-farm food safety practices buyers would like to see are water testing, safe manure/compost use, animal exclusion, and water treatment (when needed), along with refrigeration and storage of product.
- ◆ In developing buyer standards or requirements, 39% to 56% of the respondents have relied on federal and state agencies for support, such as USDA, FDA, Virginia Department of Health (VDH), and Virginia Department of Agriculture and Consumer Services (VDACS). 17-20% have relied on Virginia Cooperative Extension (VCE), produce industry associations, suppliers, and other industry food safety organizations.
- ◆ When buyers were asked about familiarity with the Food Safety Modernization Act (FSMA), 34% (14/41) of respondents were not familiar (had not heard of it); 51% (21/41) of respondents were somewhat familiar (knew about it but did not know details); and 15% (6/41) were fairly familiar (knew about how it would affect their organization).
- ◆ 65% (11/17) of respondents anticipate their food safety requirements changing due to the FSMA.
- ◆ Over 35% of the buyers said they would be willing to provide their time by serving in a fresh produce food safety working group and/or hosting/presenting at a grower workshop.

PURCHASING BARRIERS: RESPONDENT QUOTES

- ✓ *“I would maximize my money on Virginia Grown produce if it was available. I tried to utilize the Pilot Farm to School program, but only one producer was qualified by USDA standards to participate in VA.”*
- ✓ *“I think the farmers don’t think that we have the money—I think there’s a [mis]conception that we can’t pay them fair market value. And sometimes we can’t, but a lot of times we can and are willing to them fair market value.”*
- ✓ *“Our biggest barrier is quantity, especially for some types of produce.”*
- ✓ *“Peak growing season is in the summer when school is not in session.”*
- ✓ *“Seasonality... Sometimes things just aren’t ready when people want them to be ready.”*
- ✓ *“Aggregation is a hard business, especially perishable foods. ... I don’t think everyone is working off of the same playbook.”*
- ✓ *“Food safety is a pretty big barrier to the smaller farmers which make it harder for the suppliers.”*
- ✓ *“The biggest problem for us is finding farmers with GAP certification and farmers that can deliver to our site.”*
- ✓ *“It takes us two days out of the week to get all of our ordering done [be]cause we do it one person at a time, and we will never not support small producers. ... It’s an inefficient system.”*

RESPONDENT RECOMMENDATIONS

- ◆ Provide technical assistance and grant money for extended season production. Not enough farmers doing season extension because: a) they can’t afford it, and b) they don’t have the technical expertise to write a grant.
- ◆ Have producers reach out to the extension office as a resource. I like when a grower has the relationship with their extension office.
- ◆ We should educate the public about what FSMA and other regulations are requiring of farms so they can understand why the costs for Virginia-grown produce purchased from smaller farms may be higher. More FSMA education needs to be easily available.
- ◆ Develop a system connecting farmers, producers, and suppliers, perhaps housed statewide. This system could be a real-time database that includes producer inventory and delivery capability.
- ◆ It would be helpful for producers to have a ‘grow list’ that indicates produce type and variety needed. Also, there should be specification sheets with pictures.
- ◆ VDACS may be able to serve as a “middle kind of meeting point” between producers and retailers.
- ◆ General education to the public about seasonality is important.

This project was made possible by funding through USDA AMS Award# 14-FSMIP-VA-0013.

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Virginia Fresh Produce Food Safety Market Study Sector Profile

COLLEGES & UNIVERSITIES

Amber Vallotton, Adrianna Vargo, Thomas Archibald, Renee Boyer, Natalie Cook, Tiffany Drape, Ryan Knox

This report reflects data from 1 respondent who completed a 2016 Fresh Produce Food Safety Market Survey, as well as qualitative input from other study participants. Purchasing channels for produce was from broad-line distributors, food service companies, a university farm, and direct from growers.

HIGHLIGHTS OF SURVEY FINDINGS

- ◇ The respondent was not the principal buyer but was in charge of creating policies and procedures related to the procurement of fresh produce.
- ◇ The respondent reported purchasing produce daily during the peak season as well as during the remainder of the year.
- ◇ The respondent indicated that the organization's 2015 spending on fresh produce was over \$1,000,000.
- ◇ The participant reported buying less than 10% of their fresh produce from Virginia farms.
- ◇ The respondent reported that they require a third party food safety audit from growers/vendors (USDA Good Agricultural Practices, GAP) and that they allow a graduated process for "on-boarding" new growers/ vendors."
- ◇ The respondent indicated being somewhat familiar with the Food Safety Modernization Act (FSMA) but was not sure how it affects the organization. The respondent does not anticipate their food safety requirements changing as a result of the act.

PURCHASING PRIORITIES

- ◇ Price
- ◇ Availability
- ◇ Grower/Producer Liability Insurance
- ◇ Food Safety Certification
- ◇ Quantity/Volume
- ◇ Quality/ Consistency of Product
- ◇ Delivery

BARRIERS TO PURCHASING

- ◇ Insufficient Volume
- ◇ Lack of Intermediaries like food hubs, brokers, etc.
- ◇ Delivery Capabilities (Timing, Flexibility, etc.)
- ◇ Grower Lack of Understanding of Buyer Requirements, Needs, and Processes

RECOMMENDATIONS

- ◆ Colleges and universities often work with food service companies that follow strict corporate parameters on procurement. In rare cases, institutions may not be tied to a large food service company such as Sodexo and Aramark, thus, it may be easier to tap into this market.
- ◆ To determine what universities need, it is imperative to establish effective communication to understand the necessities of the institutions.
- ◆ Be cognizant of large volume needs of particular institutions since selling to them means being able to provide a consistent flow of product and meeting quality standards.
- ◆ Maintaining third-party food safety certification is often standard practice in the institutional market, so it is likely more Virginia-grown produce would be purchased if food safety requirements were met by more Virginia growers.
- ◆ It is important to ask a potential buyer specific questions about what audit schemes they require, and whether they have an onboarding policy that allows for transition time to achieve higher levels of certification.
- ◆ More colleges and universities want to purchase locally-sourced product. Additional certifications, such as “Fair Trade” and “National Organic Program”, may boost your marketability as a local producer.
- ◆ You may need to be flexible on your delivery schedule, making sure to accommodate the institution’s needs and timetables, especially since doing so can give you an advantage.

RESOURCES

Farm to Institution New England (FINE)

<http://www.farmtoinstitution.org/>

Learn more about the many initiatives taking place in New England.

Some of the exciting FINE work relevant to market access include:

Campus Dining 101: A Benchmark Study on Farm to College in New England

http://www.farmtoinstitution.org/sites/default/files/imce/uploads/FINE%20Farm%20to%20College%20Report_1.pdf

Getting it There: Understanding the Role of New England Food Distributors in Providing Local Food to Institutions.

http://www.farmtoinstitution.org/sites/default/files/imce/uploads/FINE%20Distributor%20Report_3.pdf

Producer Perspectives: The New England Farm-to-Institution Market

<http://www.farmtoinstitution.org/sites/default/files/imce/uploads/FINE%20Producer%20Report.pdf>

Virginia Fresh Produce Food Safety

<http://www.hort.vt.edu/producesafety/>

A comprehensive website providing a range of resources for producers, consumers, and trainers.

This project was made possible by funding through USDA AMS Award# 14-FSMIP-VA-0013.

Virginia Fresh Produce Food Safety Market Study Sector Profile

DIRECT-TO-CONSUMER

Amber Valлотton, Adrianna Vargo, Thomas Archibald, Renee Boyer, Natalie Cook, Tiffany Drape, Ryan Knox

This report reflects data from 9 respondents who completed a 2016 Fresh Produce Food Safety Market Survey, as well as qualitative input from other study participants. It is important to note that the findings in this sector profile reflect the fact that some respondents were buyers of product (i.e. market managers or owners), as well as producers. Produce was sometimes purchased from outside channels such as auctions, distributors, food hubs, and direct from the farm to be resold, as a result of product shortages, or to increase product selection.

HIGHLIGHTS OF SURVEY FINDINGS

- ◇ 4 respondents were principal buyers while 5 were not. 7 of the 9 were in charge of creating policies and procedures related to the procurement of fresh produce.
- ◇ 3 of 9 respondents reported purchasing produce weekly during the peak season, whereas 2 reported buying bi-weekly, and 1 daily. 3 respondents also reported buying produce weekly during the remainder of the year, whereas 1 made daily purchases.
- ◇ 3 of the 7 respondents reporting their organization's spending on fresh produce indicated spending between \$5,000 and \$24,999 for the year of 2014. 2 reported spending less than \$5,000. 1 reported spending between \$25,000 and \$99,999. 1 reported spending over \$1,000,000.
- ◇ 4 participants reported buying 100% of their fresh produce from Virginia farms. 2 respondents reported buying between 80 and 99% from Virginia farms. 2 respondents reported buying between 30 and 49% from Virginia farms.
- ◇ 1 respondent reported that they require a third party food safety audit from growers/vendors (USDA Good Agricultural Practices, GAP).
- ◇ 2 respondents indicated that they require verbal assurances of food safety practices. 1 reported that they require the use of new boxes for packed produce. 1 reported requiring the use of sanitizers in post-harvest water process. 2 indicated that they do not have requirements.
- ◇ 2 respondents verify adherence to requirements with verbal assurances and 2 use site visits. 1 respondent uses written agreements and 1 does not verify adherence to requirements.
- ◇ 5 respondents were familiar with the Food Safety Modernization Act (FSMA) but were not sure how it affects their organizations. 2 respondents anticipate their food safety requirements changing as a result of the act.

PURCHASING PRIORITIES

- ◇ Quality
- ◇ Availability
- ◇ Product Variety and Diversity
- ◇ Proximity of Producer to Buyer
- ◇ Delivery Capabilities

BARRIERS TO PURCHASING

- ◇ Insufficient Volume of Product
- ◇ Grower Lack of Understanding of Buyer Requirements
- ◇ Lack of Variety/ Product Diversity
- ◇ Product Consistency
- ◇ Cost of Product
- ◇ Delivery Timing, Flexibility, etc.

RECOMMENDATIONS

- ◆ Several respondents suggested creating a statewide system that connects farmers, producers, and suppliers. The Virginia Market Maker was recently established as part of the national Market Maker program. Tap into this valuable resource as a way to promote your business (see resources).
- ◆ Consider using season extension as a way to offer a more consistent supply of product, and also as a way to provide more niche products.
- ◆ Recognize that selling to direct markets can often lead to other opportunities, including scaling up to larger markets. Having a simple written food safety plan and practices in place is important to demonstrate your awareness of the importance of food safety and a commitment to produce quality and freshness. It also makes it easier if you need to pursue a food safety certification.

QUOTES FROM FOCUS GROUPS

- √ *“It [would] be nice to have across the board standards for all growers. They are all selling to the public no matter if it's farmers markets or school systems, so safety needs to be a number one concern.”*
- √ *“Our biggest barrier is quantity, especially for some types of produce (berries).”*
- √ *“We don't have any explicit food safety requirements. We want to make sure we know which product came from which farmer, but right now we can just do that through our invoicing system...The aggregator we work with had food safety requirements for all the farms they work with. And all the other farmers we work with, we have a long, personal relationship with them.”*

RESOURCES

Enhancing the Safety of Locally Grown Produce

<https://pubs.ext.vt.edu/category/on-farm-food-safety.html>

A series of fact sheets providing an introduction to best practices in the cultivation, harvest, transport, and marketing of fresh produce. Companion training is available through Cooperative Extension.

Going to Market

http://pubs.ext.vt.edu/content/dam/pubs_ext_vt_edu/ANR/ANR-46/FST-273.pdf

A guide to selling raw, processed and prepared food products at farmers' markets, stores & roadside stands in Virginia.

Virginia Fresh Produce Food Safety

<http://www.hort.vt.edu/producesafety/>

A comprehensive website providing a range of resources for producers, consumers, and trainers.

Virginia Market Maker

<http://ext.vt.edu/agriculture/market-maker.html>

The MarketMaker portal is the largest and most in-depth national database for the agricultural industry. The portal provides a simple search tool to connect buyers, farmers/ranchers, fisheries, farmers markets, processors/packers, wineries, restaurants and more.

This project was made possible by funding through USDA AMS Award# 14-FSMIP-VA-0013.

Virginia Fresh Produce Food Safety Market Study Sector Profile

HOSPITALS

Amber Valotton, Adrianna Vargo, Thomas Archibald, Renee Boyer, Natalie Cook, Tiffany Drape, Ryan Knox

This report reflects data from 3 respondents who completed a 2016 Fresh Produce Food Safety Market Survey, as well as qualitative input from other study participants. Respondents purchased from broad-line distributors, local distributors (food hubs), and auctions.

HIGHLIGHTS OF SURVEY FINDINGS

- ◇ 1 of the 3 respondents was the principal buyer. None of the 3 were in charge of creating policies and procedures related to the procurement of fresh produce.
- ◇ 2 of 3 respondents reported purchasing produce weekly during the peak season as well as during the remainder of the year.
- ◇ 2 respondents reported that their organization's 2014 spending on fresh produce was between \$25,000 and \$99,999.
- ◇ 2 respondents reported that they require a third party food safety audit from growers/vendors (such as USDA Good Agricultural Practices, GAP and Global Food Safety Initiative, GIFSI)
- ◇ 1 participant reported needing additional/ improved guidance on implementing food safety policy/ standards.

PURCHASING PRIORITIES

- ◇ Quality
- ◇ Food Safety Certification
- ◇ Availability
- ◇ Product Variety and Diversity
- ◇ Proximity of Producer to Buyer
- ◇ Delivery Capabilities

BARRIERS TO PURCHASING

- ◇ Corporate Requirements/ Policies for Food Safety Not Met by Growers
- ◇ Cost of Product
- ◇ Insufficient Volume of Product
- ◇ Lack of Intermediaries (Food Hubs, Brokers, etc.)
- ◇ Product Consistency (Quality, Size, Ripeness)
- ◇ Delivery Capabilities (Timing, Flexibility, etc.)

RECOMMENDATIONS

- ◆ Hospital food procurement is one of the most complex purchasing systems, with an extensive hierarchy of management, personnel, and policy hurdles. Recognize that the person responsible for food procurement may not be flexible in their purchasing capabilities due to stringent corporate policies.
- ◆ Given the target population is immunocompromised, best on-farm food safety practices are critical and having third-party food safety certification is probably mandatory to access this market sector.
- ◆ Be open to supplying rural hospitals and elder care facilities, since smaller institutions may have less hurdles, thereby making it easier for local farmers to tap into.
- ◆ Another consideration is whether or not food is prepared on site, or brought in 'ready-to-eat'. Typically, ready-to-eat produce is procured from broad-line distributors or processors.
- ◆ Given the complexity of these institutional systems, it can be challenging to find contact names of pertinent personnel using a simple google search. The possibility for a direct relationship with a hospital can be slim; therefore, you will likely need to work through an intermediary such as a local aggregator or food hub. These entities often have established relationships, and can also provide food safety verification and the minimum volume of product needed. In some cases, local aggregators may even go through a larger distributor who is servicing the institution.
- ◆ If personal contact is possible, consistent communication with the hospital purchasing personnel is crucial. Building personal relationships will vastly increase your opportunity to establish successful business relationships.
- ◆ Whatever the relationship, remember your delivery capabilities and product consistency are vital!

RESOURCES

Emerging Local Food Purchasing Initiatives in Northern California Hospitals

<http://asi.ucdavis.edu/programs/sarep/publications/food-and-society/farmtohospitalinitiativesweb.pdf>

Learn how California Bay Area hospitals pioneered local food purchasing in healthcare institutions. This paper presents a cross-section of current farm-to-hospital initiatives in the region, in order to demonstrate what has been accomplished and how.

Sustainable Farm to Hospital Toolkit: Hospital Food Purchasing for North Central Region Sustainable Farmers/Producers

https://www.iatp.org/sites/default/files/2013_12_11_Toolkit12_HospitalFoodPurchasing.pdf

Understand some of the principles of local food procurement by a hospital, based on a study in the North Central United States.

Sustainable Farm to Hospital Toolkit: Ten Steps to Creating Mutually Beneficial Relationships with Local, Sustainable Farmers, Producers

https://www.iatp.org/sites/default/files/2013_12_11_Toolkit11_TenSteps.pdf

Learn about the steps for establishing a successful business relationship with hospitals.

VCE Fresh Produce Food Safety Team

<http://www.hort.vt.edu/producesafety/>

A comprehensive website providing a range of resources for producers, consumers, and trainers.

This project was made possible by funding through USDA AMS Award#14-FSMIP-VA-0013.

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Virginia Fresh Produce Food Safety Market Study Sector Profile

PUBLIC SCHOOLS (K-12)

Amber Vallotton, Adrianna Vargo, Thomas Archibald, Renee Boyer, Natalie Cook, Tiffany Drape, Ryan Knox

This report reflects data from 19 respondents who completed a 2016 Fresh Produce Food Safety Market Survey, as well as qualitative input from other study participants. Respondents purchased produce from distributors, food service providers, direct from growers, farmers markets, food hubs, and auctions.

HIGHLIGHTS OF SURVEY FINDINGS

- ◇ 18 respondents were principal buyers while 1 was not. 13 of the 19 were in charge of creating policies and procedures related to the procurement of fresh produce.
- ◇ 18 of 19 respondents reported purchasing produce daily during the peak season. 19 respondents reported buying produce weekly during the remainder of the year.
- ◇ 5 respondents indicated that their organization's 2015 spending on fresh produce was between \$5,000 and \$24,999. 9 reported spending between \$25,000 and \$99,999. 2 reported spending between \$100,000 and \$249,999. 2 more reported spending between \$500,000 and \$999,999.
- ◇ 11 participants reported buying less than 30% of their fresh produce from Virginia farms. 1 respondent reported buying between 40 and 49% from Virginia farms.
- ◇ 6 respondents reported that they require a third party food safety audit from growers/vendors (USDA Good Agricultural Practices, GAP) while 7 reported that they do not.
- ◇ 4 respondents reported relying on verbal assurances and documentation for verification of adherence to food safety requirements.
- ◇ 4 respondents verify adherence to requirements with verbal assurances and 4 use site visits. 3 use document reviews. 2 respondents reported using written agreements and 1 does not verify adherence to requirements.
- ◇ 8 respondents were not at all familiar with the Food Safety Modernization Act (FSMA). 7 respondents were familiar with the FSMA but were not sure how it affects their organizations. 3 respondents anticipate their food safety requirements changing as a result of the act.

PURCHASING PRIORITIES

- ◇ Quality
- ◇ Availability
- ◇ Delivery Capabilities
- ◇ Price
- ◇ Food Safety Certification

BARRIERS TO PURCHASING

- ◇ Cost of Product
- ◇ Delivery Capabilities (Timing, Flexibility, etc.)
- ◇ Lack of Intermediaries (Food Hubs, etc.)
- ◇ Insufficient Volume of Product
- ◇ Grower Lack of Understanding of Buyer Requirements
- ◇ Product Consistency
- ◇ Corporate Requirements/Policies

RECOMMENDATIONS

- ◆ Be aware of the size of the school district and the amount of flexibility they may or may not have to procure locally sourced products. Smaller school districts are generally easier to tap into.
- ◆ Establishing and fostering relationships with school foodservice staff is vital, because they will be aware of the school system's budget and how much is allotted for local food procurement. They will also know about Federal regulations that dictate the bidding process to ensure free and open competition between vendors.
- ◆ While having a written food safety plan in place is a great idea, at a minimum you should be able to effectively communicate the food safety practices you have in place. Demonstrating your awareness of the importance of food safety is critical.
- ◆ Work with schools in close proximity to your farm to mitigate issues related to delivery and low-volume orders. Understand that consistent transport of your product to the school is important to maintaining a good working relationship.
- ◆ Be aware that schools struggle to find fresh produce during the school year, and they may have limited storage and cooking options. Season extension could be a way to open up some opportunities with schools.
- ◆ Be willing to join in-school events during Farm to School Week, or at other times.
- ◆ Explore whether schools / PTOs in your area have, or are interested in establishing, a "snack-program" where fresh fruits and vegetables are provided to students. There may be grant funding or PTO funding available for this type of program.

QUOTES FROM FOCUS GROUPS

- √ *"The biggest problem for us is finding farmers with GAP certification and farmers that can deliver to our site."*
- √ *"I have definitely met farmers who have zero interest in getting GAP certified. And I don't think they realize the potential and the amount [of money] we have to spend."*
- √ *"Food safety ... is one of the main reasons I go through a vendor."*
- √ *"It is our priority to spend [our commodity money] on fresh fruits and vegetables."*
- √ *"Over the years there's been a lot of trust built up between us so that we feel comfortable using [a farmer who is not GAP certified]."*
- √ *"All providers have to be GAP certified for us to use our commodity money used under the DOD's pilot program."*
- √ *"I think the farmers don't think that we have the money—I think there's a conception that we can't pay them fair market value. And sometimes we can't, but a lot of times we can and are willing to them fair market value."*
- √ *We are there for farmers. The happier they are, the more they can grow, the happier we are. And we aren't trying to shaft them. Just opening up the dialogue sometimes I think would help."*

RESOURCES

USDA Farm to School Program

<http://www.fns.usda.gov/farmtoschool/farm-school-resources>

Provides resources on a wide range of topics, including food safety resources that are frequently accessed by food service professionals at school systems across the country.

USDA GAP/GHP Audit Program

<https://www.ams.usda.gov/services/auditing/gap-ghp>

A voluntary audit program to verify that fruits and vegetables are produced, packed, handled, and stored as safely as possible to minimize risks of microbial food safety hazards.

USDA Pilot Procurement Program

<https://www.ams.usda.gov/selling-food/pilot-project>

A pilot program farms and school systems can sign up for that supports the use of locally-grown foods in school meal programs using entitlement funds.

Virginia Farm to School Program

<http://www.vdacs.virginia.gov/marketing-virginia-farm-to-school-program.shtml>

A program within the VA Dept. of Agriculture to cultivate market opportunities, and increase the volume of locally grown foods served in schools at all levels of education.

Virginia Farm to School Resource Guide

<http://www.pubs.ext.vt.edu/AEE/AEE-77/AEE-77-PDF.pdf>

A toolkit with research-based information, resources, and advice to support the development of farm to school connections and procurement.

Virginia Fresh Produce Food Safety

<http://www.hort.vt.edu/producesafety/>

A comprehensive website providing a range of resources for producers, consumers, and trainers.

This project was made possible by funding through USDA AMS Award# 14-FSMIP-VA-0013.

Virginia Fresh Produce Food Safety Market Study Sector Profile

RESTAURANTS

Amber Valлотton, Adrianna Vargo, Thomas Archibald, Renee Boyer, Natalie Cook, Tiffany Drape, Ryan Knox

This report reflects data from 4 respondents who completed a 2016 Fresh Produce Food Safety Market Survey, as well as qualitative input from other study participants. Respondents purchased produce primarily from farmers markets, distributors, and direct from growers, and secondarily from food hubs and food service pro-

HIGHLIGHTS OF SURVEY FINDINGS

- ◇ 4 of the 4 respondents were principal buyers for their organizations. 1 was in charge of creating policies and procedures related to the procurement of fresh produce.
- ◇ All 4 respondents reported purchasing produce daily during the peak season. 3 reported also buying daily during the remainder of the year, whereas 1 reported buying bi-weekly.
- ◇ 2 of the 4 respondents reported their organization's spending on fresh produce being between \$5,000 and \$24,999 for the year of 2014. 1 reported spending between \$25,000 and \$99,999. 1 reported spending between \$100,000 and \$249,000.
- ◇ The number of participants reporting percentage of fresh produce they purchased from Virginia farms to be: 1 at 90-99%; 1 at 80-89%; 1 at 40-49%; and 1 at 30-39%.
- ◇ All 4 of the respondents reported that they do not require a third party food safety audit from growers/vendors.
- ◇ 1 respondent indicated that they require verbal assurances of food safety practices. 1 reported that they require water test analysis results. 1 reported requiring refrigerated transportation. 1 indicated that they require a working traceability system. 2 indicated that they do not have requirements.
- ◇ 2 respondents verify adherence to requirements with verbal assurances and 1 uses site visits. 2 do not verify adherence to requirements.
- ◇ 2 respondents were familiar with the Food Safety Modernization Act (FSMA) but were not sure how it affects their organizations. 2 respondents were not at all of the FSMA. None of the respondents anticipate their food safety requirements changing as a result of the act.

PURCHASING PRIORITIES

- ◇ Quality
- ◇ Availability
- ◇ Proximity of grower to buyer
- ◇ Product variety/ diversity
- ◇ Delivery

BARRIERS TO PURCHASING

- ◇ Insufficient Volume
- ◇ Cost of Product
- ◇ Delivery Capabilities such as Timing, Flexibility, etc.
- ◇ Lack of Availability (Seasonality)

RECOMMENDATIONS

- ◆ Build relationships with purchaser and establish a regular communication schedule that takes into account the daily work-flow at the restaurant operation.
- ◆ It could be helpful to have a real-time statewide database, which includes producer inventory and delivery capability. This would allow for more effective communication between both parties on the product being sold.
- ◆ Given VDACS statewide support for farming businesses, they might be able to serve as a middle point between producers and restaurants.
- ◆ It's important to be aware of the type of restaurant (i.e. "mom and pop" vs. chain) and their readiness to source locally. This includes corporate policies as well as the volume needed. Just because some restaurants are chains, does not mean they will not source locally.
- ◆ Chain restaurants are inherently more stringent on food safety policies, so make sure to ask about vendor food safety requirements. Also keep in mind liability insurance requirements.
- ◆ Since restaurants can gain greater marketability by sourcing locally, this can work in your favor. Being able to tell your unique farm story and product characteristics is a great marketing technique! Personal farm tours highlighting your product with the chef can be particularly effective!
- ◆ Keep in mind that marketing yourself through a distributor may mitigate challenges presented by selling directly to the restaurant, such as storage, temperature control, and transportation.
- ◆ Be open to new product ideas in order to fill special unique niches that the restaurant marketplace is looking for.
- ◆ Remember product quality is important, so always sell the best product to your buyer—this is not the place to get rid of excess produce or seconds!

RESOURCES

Enhancing the Safety of Locally Grown Produce

<https://pubs.ext.vt.edu/category/on-farm-food-safety.html>

A series of fact sheets providing an introduction to best practices in the cultivation, harvest, transport, and marketing of fresh produce. Companion training is available through Cooperative Extension.

Grower's Manual: A Template for Grower Cooperatives

http://lib.dr.iastate.edu/leopold_pubspapers/80/

Guidance on standards for pre-harvest and post-harvest practices and product specifications used with local foodservice establishments.

Market Ready™ Checklist for Direct Sales to Restaurants Business Practice Summary

<https://rvs.umn.edu/Uploads/EducationalMaterials/d10ebe7e-8944-4092-9884-3fb76953a2a7.pdf>

A list of best practices outlining ideal starting points restaurant buyers would like to see regarding grower preparedness.

Market Ready™ for Restaurant Sales Full Report

<http://www.uky.edu/Ag/AgEcon/pubs/extMRRest45.pdf>

A report by University of Kentucky detailing 'best practices' for producers to access the restaurants market.

Virginia Fresh Produce Food Safety

<http://www.hort.vt.edu/producesafety/>

A comprehensive website providing a range of resources for producers, consumers, and trainers.

This project was made possible by funding through USDA AMS Award#14-FSMIP-VA-0013.

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Virginia Fresh Produce Food Safety Market Study Sector Profile

RETAILERS

Amber Vallotton, Adrianna Vargo, Thomas Archibald, Renee Boyer, Natalie Cook, Tiffany Drape, Ryan Knox

This report reflects data from 3 respondents who completed a 2016 Fresh Produce Food Safety Market Survey, as well as qualitative input from a focus group participant. Respondents purchased produce from distributors, direct from growers, farmers markets, food hubs, and food service providers.

HIGHLIGHTS OF SURVEY FINDINGS

- ◇ 2 of the respondents were principal buyers while 1 was not. 3 of the 3 were in charge of creating policies and procedures related to the procurement of fresh produce.
- ◇ 2 of 3 respondents reported purchasing produce daily during the peak season as well as the remainder of the year, whereas 1 reported buying weekly all year long.
- ◇ 2 respondents indicated spending between \$5,000 and \$24,999 on fresh produce for the year of 2014. 1 reported spending between \$25,000 and \$99,999.
- ◇ 2 respondents reported buying between 20 and 39% of their fresh produce from Virginia farms. 1 respondent reported buying between 70 and 79% from Virginia farms.
- ◇ 1 respondent reported that they require a third party food safety audit from growers/vendors (USDA Good Agricultural Practices, GAP or Global Food Safety Initiative, GFSI) while 2 reported that they do not.
- ◇ 2 respondents indicated that they do not verify adherence to food safety requirements.
- ◇ 2 respondents were unfamiliar with the Food Safety Modernization Act (FSMA). 1 was somewhat familiar with the FSMA but was not sure how it affects their organization. None of the respondents anticipate their food safety requirements changing as a result of the act.

PURCHASING PRIORITIES

- ◇ Availability
- ◇ Quality
- ◇ Price
- ◇ Quantity/ Volume
- ◇ Product Variety and Diversity

BARRIERS TO PURCHASING

- ◇ Grower Lack of Understanding of Buyer Requirements
- ◇ Delivery Capabilities (Timing, Flexibility, etc.)
- ◇ Product Consistency (Quality, Size, etc.)
- ◇ Lack of Intermediaries like food hubs, brokers, etc.
- ◇ Insufficient Volume of Product
- ◇ Cost of Product

RECOMMENDATIONS & QUOTES FROM FOCUS GROUPS

- ◆ Build relationships with purchaser and establish a regular communication schedule that takes into account the daily work-flow at the retail operation.
- ◆ Be aware of the type of retailer (i.e. “mom and pop” stores vs. chain stores) and their readiness to source locally. This includes corporate policies as well as size limitations of the produce being sold. Just because some retailers are larger does not mean they will not source locally. However, these stores typically do require liability insurance and food safety certifications, so make sure to ask about vendor requirements.
- ◆ Remember that it is likely retailers would increase purchasing VA-grown produce if more producers met food safety requirements. At minimum, it is important to have training and a written food safety plan in place to demonstrate your awareness of the importance of food safety, and your commitment to produce quality and freshness.
- ◆ Telling your story is a great marketing technique, such as providing farm photographs, product information, and personal insights into your farming operation and what sets you apart. This information can be used by the retailer to add to the marketability of your product.
- ◆ Keep in mind that marketing yourself through a distributor may mitigate challenges presented by selling directly to the retailer, such as storage, temperature control, and transportation.
- ◆ It could be helpful to have a real-time statewide database, which includes producer inventory and delivery capability. This would allow for more effective communication between both parties on the product being sold.
- ◆ Given VDACS statewide support for farming businesses, they might be able to serve as a middle point between producers and retailers.
- √ *“Efficiency in getting things to markets could be improved for everybody.”*
- √ *“I have been to many of the farms. If there were ever any problem like an outbreak, I would change my priorities. I have taken it for granted so far.”*

RESOURCES

Grower’s Manual: A Template for Grower Cooperatives

http://lib.dr.iastate.edu/leopold_pubspapers/80/

Guidance on standards for pre-harvest and post-harvest practices and product specifications used with local foodservice establishments.

Wholesale and Retail Product Specifications: Guidance and Best Practices for Fresh Produce

<https://www.cefs.ncsu.edu/ncgt/wholesale-and-retail-product-specs.pdf>

A publication developed by the North Carolina Growing Together Project to provide small farms and food hubs with guidance on common product specifications to sell into wholesale and retail markets.

Virginia Fresh Produce Food Safety

<http://www.hort.vt.edu/producesafety/>

A comprehensive website providing a range of resources for producers, consumers, and trainers.

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Virginia Fresh Produce Food Safety Market Study Sector Profile

REGIONAL WHOLESALE DISTRIBUTORS

Amber Vallotton, Adrianna Vargo, Thomas Archibald, Renee Boyer, Natalie Cook, Tiffany Drape, Ryan Knox

This report reflects data from 5 respondents who completed a 2016 Fresh Produce Food Safety Market Survey, as well as qualitative input from other study participants. Respondents purchased produce direct from growers, farmers markets, food hubs, and other distributors.

HIGHLIGHTS OF SURVEY FINDINGS

- ◇ 3 respondents were principal buyers while 2 were not. 4 of the 5 were in charge of creating policies and procedures related to the procurement of fresh produce.
- ◇ 5 of 5 respondents reported purchasing produce daily during the peak season. 4 respondents also reported buying produce daily during the remainder of the year, whereas 1 made weekly purchases.
- ◇ 4 of the 4 respondents reporting their organization's spending on fresh produce indicated spending over \$1,000,000 for the year of 2015.
- ◇ 3 of 5 participants reported buying 30% or less of their fresh produce from Virginia farms. 1 respondent reported buying between 70 and 79% from Virginia farms. 1 respondent reported buying 100% of their fresh produce from Virginia farms.
- ◇ 4 of 5 respondents reported requiring a third party food safety audit from growers/vendors, e.g., USDA Good Agricultural Practices (GAP) and Global Food Safety Initiative (GFSI). 3 of 5 report allowing a graduated process for "on-boarding" new growers/vendors.
- ◇ 5 of 5 respondents indicated that they communicate food safety standards verbally. 4 also use printed materials. 1 also uses a website and another offers GAP training classes.
- ◇ 4 of 5 respondents are familiar with the Food Safety Modernization Act (FSMA) and how it affects their organizations. 1 respondent has heard of it but is unsure of its implications for their organization. 3 of 5 respondents anticipate their food safety requirements changing as a result of the act. 3 of the 5 respondents have a target timeline of 2-4 years for vendor compliance with the new regulations.

PURCHASING PRIORITIES

- ◆ Quality
- ◆ Food Safety Certification
- ◆ Availability
- ◆ Grower/Producer Liability Insurance
- ◆ Delivery

BARRIERS TO PURCHASING

- ◆ Insufficient Volume
- ◆ Corporate Requirements/Policies
- ◆ Product Consistency
- ◆ Lack of Product Diversity
- ◆ Grower Lack of Understanding of Buyer Requirements

RECOMMENDATIONS

- ◆ Maintaining third-party food safety certification is often standard practice in the wholesale market. It is likely wholesalers and aggregators would increase their purchase of Virginia grown produce if requirements for food safety could be met by more Virginia growers.
- ◆ It is important to ask a potential buyer specific questions about what audit schemes or parts they require, and whether they have an onboarding policy that allows for transition time to achieve higher levels of certification.
- ◆ Some buyers may provide assistance to growers in the form of audit cost-share or training opportunities.
- ◆ Larger distributors may work with smaller, local aggregators or food hubs to source locally-grown food from small farms.

QUOTES FROM FOCUS GROUPS

- √ *“Aggregation is a hard business, especially perishable foods. ... I don’t think everyone is working off of the same playbook.”*
- √ *“Communication is really, really, really powerful.”*
- √ *“We hope that any good business has its own insurance.”*
- √ *“When we first started learning about the new [Food Safety Modernization Act] requirements, that’s when we started requiring our produces to be GAP certified. We were headed in that direction anyway, but we made it mandatory.”*

RESOURCES

National GAPs Program

<http://gaps.cornell.edu/educational-materials>

Resources, decision-making tools, and food safety plan templates to assist in the development of a food safety plan.

USDA GAP/GHP Audit Program

<https://www.ams.usda.gov/services/auditing/gap-ghp>

Extensive resources and guidance on USDA’s GAP/GHP audit services, including forms and state contacts for requesting an audit.

Wholesale and Retail Product Specifications: Guidance and Best Practices for Fresh Produce

<https://www.cefs.ncsu.edu/ncgt/wholesale-and-retail-product-specs.pdf>

A publication developed by the North Carolina Growing Together Project to provide small farms and food hubs with guidance on common product specifications to sell into wholesale and retail markets.

Virginia Fresh Produce Food Safety

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Accessing Virginia Market Sectors: Establishing a Marketing Perspective

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For a new business enterprise idea, thoroughly understanding the market you wish to enter **before** you actually invest a lot of effort, time, and money is crucial! Any new business start-up or market expansion involves a lot of considerations:

- What opportunities in this market exist?
- What are the barriers to entering that market and/or scaling up?
- What are your farming operation and proposed product strengths and weaknesses?
- Who are the competitors in the marketplace? If the market is already saturated, how do you propose to set yourself apart from other competitors?
- Do you need potential business partners to make the idea materialize?
- How will you finance the venture?
- Are there any laws, regulations, and food safety requirements to tap into the market? If so, how much will it cost to satisfy the requirements?

While these are just a few of the questions you should ask, there are many more considerations. The pyramid concept illustrated below is one way for you to further consider some of the key elements involved as you move forward. The suggestions are based on the assumption that your product idea has already been established.



Consider Target Market Sectors.

Your target market is the specific type of consumer that your product is being provided for. The variety of people groups that you are aiming to provide for can be as specific or as vast as you see fit.



Determine Market Potential and Trends.

Before entering a specific marketplace (area of the economy that you are looking to penetrate) as a local grower, it is critical that you consider what the recent trends have been, what future trends are projected to be, and what competition exists in the marketplace.



Identify Purchasing Priorities and Market Barriers.

Purchasing Priorities: How are you delivering your good? What inputs are you required to obtain in order to provide your good/service? What volume are you operating at?

Market Barriers: What is potentially standing in your way as far as actually providing your good? Have you looked at pertaining FDA and/or USDA regulations? Are you familiar with new FSMA regulations?



Develop Business Plan. This is probably the most important big picture item to consider. For any potential producer's business plan, the following need to be considered:

Business Description: What type of local grower are you? What are your goals? This doesn't have to be too lengthy, just long enough to get your point across to anyone who comes across it.

Products & Services: Give details on everything you are bringing to the table.

Sales and Marketing: Just because you can pay for something, doesn't mean you can afford it. Be very strategic and thoughtful about this portion of your business plan; consult an ag-lender or a financial advisor before moving forward with your business to make sure your operation is feasible (provide them with a financial summary). Consider how you will be marketing your product, especially at the beginning, to get the word out (flyers in local, grower-friendly grocery stores, banners at farmer's markets, etc.).

Operations: Define and outline the details of your operation such as where your headquarters are, where and how you can be contacted, your employees, legal relationships/partners, suppliers, credit policies, etc..

Contingency Plan: This is also a profoundly important part of your business plan. Contingency plans project future circumstances that may arise. Example, in the event that you do meet your sales goals, what are the next steps? Or alternatively, in the event you do not meet your sales goals, how do you plan to recuperate, do better next time, and account for that loss? You can never be over prepared.



Market Penetration. You made it! You're finally out there providing your good/service. How are you going to maintain your setup? After being in the marketplace, are there things you've discovered you don't need, things you should have established, etc.? Now is the time to make note of what you can do better for the upcoming seasons.



Sustain Buyer Relationships. In other words, establish customer loyalty and define what is necessary for you to maintain the relationships you've developed. On the other hand, there will be times when you need to compromise with a buyer agreement. Be sure you are taking all factors into consideration and don't be afraid to have to move on from a relationship that just isn't feasible anymore.

Resources

Food Innovations Program

The Food Innovations Program at Virginia Tech provides assistance for Virginia's food processing industry to produce high quality, safe, and innovative food products. The FIP provides guidance and resources on matters of food safety, pertinent food regulations, and general concerns associated with starting a food business.

<https://ext.vt.edu/food-health/food-innovations.html>

Virginia Cooperative Extension Resources for Entrepreneurship

Publications related to various entrepreneurial enterprises.

http://pubs.ext.vt.edu/tags.resource.html/pubs_ext_vt_edu:entrepreneurship

Virginia Beginning Farmer & Rancher Coalition Program

Links to the work of the VABFRCP, with many excellent resources for beginning farmers (defined by USDA as anyone within the first 10 years of operation).

<https://ext.vt.edu/agriculture/beginning-farmer.html>

Virginia Beginning Farmer and Rancher Program Whole Farm Planning Curriculum

As a part of the larger work of this excellent initiative, the curriculum offers guidance for holistically exploring farming ventures. Includes an introduction to whole farm planning, land tenure and acquisition, business plan development, marketing, and sustainable farming practices. See also more information on the main program website.

<https://vabeginningfarmer.alce.vt.edu/planning/WFP-Curriculum.html>

Virginia Market Maker

The Market Maker portal is the largest and most in-depth national database for the agricultural industry. The portal provides a simple search tool to connect buyers, farmers/ranchers, fisheries, farmers markets, processors/packers, wineries, restaurants and more.

<http://ext.vt.edu/agriculture/market-maker.html>

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Accessing Virginia's Market Sectors: Fresh Produce Purchasing Considerations

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Despite the growing demand and support for local food, there can often be significant barriers for growers trying to tap into new markets, given specific food safety expectations, policies, and requirements. This trend is particularly true for institutional buyers, who are often constrained by far-reaching institutional and/or corporate policies. While there are lots of market opportunities in Virginia, navigating the landscape for growers can be daunting, since buyer food safety requirements are not a “one size fits all” standard for all markets. To better understand current expectations and perceptions across multiple market sectors in Virginia, and help producers better align their on-farm practices with these marketplaces, the Fresh Produce Food Safety Team conducted a state-wide market assessment survey in 2015-2016. Sectors surveyed included colleges/universities, direct-to-consumer markets, hospitals, public schools (K-12), restaurants, retailers, and regional wholesalers. The purpose of this factsheet is to better understand overall trends across all of the market sectors we surveyed.

Fresh Produce Purchasing Behavior

Public information regarding procurement policies for certain sectors was difficult to obtain, which may indicate that buyers need to be more transparent and better communicate

their food safety requirements to producers. Further, a lack of available information may indicate that there are certain markets that are challenging for Virginia producers to tap into, assuming these markets may instead be sourcing produce through larger suppliers and broad-line distributors.



Of the 46 survey respondents, 72% view buying local produce as important, with quality, availability, and price identified as the top three purchasing priorities. Although the survey was specifically targeted at food safety perceptions and expectations, other constraints (e.g. logistics, variety, price, volume, seasonality) related to purchasing from local farms featured more prominently. Given that most respondents communicate their standards to suppliers verbally, there is likely little consistency across sectors on the message growers are receiving related to quality assurance. Consistent themes across sectors demonstrated the importance of relationship building and communication

between producers and buyers. Given the complexities inherent in fresh produce supply chains, these factors were emphasized repeatedly.

Purchasing Priorities

Buyers ranked various purchasing priorities as noted below. Given the wide variation in the number of survey participants representing each market sector, and the fact that some sectors had very few participants who took the survey, the ranking of priorities may be less helpful when comparing across the sectors. Further, it was clear particular sectors placed more weight on certain priorities as compared to other sectors. For example, in looking at the ranking below, food safety certification and producer liability insurance ranked lower; however, when looking at rankings *within* a sector, such as colleges & universities or hospitals, these characteristics were more important to those market sectors. Thus, when considering what a particular sector values when purchasing your product(s), it is always important to make sure to communicate with the buyer to find out their requirements and priorities.

Product characteristics ranked from most to least important

- ◆ Quality
 - ◆ Availability
 - ◆ Price
 - ◆ Delivery Consistency
 - ◆ Product Variety
 - ◆ Quantity
 - ◆ Food Safety Certification
 - ◆ Grower Proximity to Buyer (market)
 - ◆ Producer Liability Insurance
- ◆ **Quality-** Features and desirable product characteristics in terms of handling and customer expectations. This includes consistent size, shape, color, level of ripeness, freshness, taste, nutrition, etc..

- ◆ **Availability-** Denotes the timing or seasonality of when a given amount of a product will be available. This priority is especially important so buyers can plan and determine reliability of given products for their particular market. Additionally, seasonal availability can have a large influence on product prices obtained.
- ◆ **Price-** The quantity of payment or compensation given by one party to another in order to acquire a given quantity of goods or services. Many factors can influence the prices obtained by the producer.
- ◆ **Deliverability-** Buyers of your products have formed a relationship with you and expect you to be reliable in terms of your business operations and services. In terms of delivery, this means providing the type and amount of product as agreed upon at the time business transactions were made. When applicable it also means dependability in transporting and transferring your product to the buyer.
- ◆ **Product Variety-** The ability to provide various types of produce for purchase. While this can mean a diverse array of different types of vegetables or fruits, it could also mean several types of something within the same category, i.e. cherry, grape, plum, slicing, and heirloom tomatoes.
- ◆ **Quantity-** The deliverable volume or amount of actual produce transferred from producer to buyer. This can either refer to a specified unit or by set weight of product.
- ◆ **Food Safety Certification-** This refers to the food safety certifications obtained by the producer to demonstrate their knowledge and implementation of sound on-farm food safety principles, as well as post-harvest handling practices. In some cases, this may mean a USDA Good Agricultural Practices

(GAP) audit. In other cases, certifications benchmarked against the Global Food Safety Initiative (GFSI) requirements are necessary. Additionally, growers selling processed produce may need to have a Hazard Analysis and Critical Control Points (HACCP) plan. Since there is not a ‘one size fits all’, it is crucial to communicate with your buyer as to what they require!

- ◆ **Grower Proximity to Buyer-** Refers to the physical distance between the producer and the buyer. This factor can have a large bearing on operational costs and feasibility for accessing a particular market.
- ◆ **Product Liability Insurance-** Liability coverage provides payments to an injured party, and to defend a producer against lawsuits. It can provide protection in the event a consumer becomes ill from eating or using your product. This can also refer to the coverage of the product if there were to be any damage or circumstantial matter that caused the agreed upon volume or quality of product to not be delivered to the buyer.

Food Safety Requirements and Policies

Requirements for food safety certification were represented in the wholesale, institutional, and K-12 market sectors. In other sectors there was an indication that distributors are relied upon to verify supplier adherence to food safety practices and overcome logistical challenges, while some rely solely on verbal assurances and established relationships to address food safety and quality assurances. The complexity of supply chains was evident, given the varied and inconsistent procurement strategies in place. Across all market sectors, purchasing direct from the grower was prioritized, presumably linked to the value of relationships and support of local food systems. However, the logistical hurdles faced were also substantial, with a

perceived need for more intermediaries like food hubs to streamline access to local foods.

- ◆ For those buyers requiring a food safety audit, 41% accept USDA GAP and HGAP audits; 15% accept Global Food Safety Initiative (GFSI)-benchmarking audits; 7% require other inspections (health department sanitation or food service company quality inspections).
- ◆ While 30% of these buyers allow a graduated process for “on-boarding” new growers/vendors in terms of food safety practices and certifications—i.e. obtaining a USDA Good Agricultural Practices (GAP) audit prior to a Harmonized GAP audit—65% did not know whether their organizations permitted this option.
- ◆ Key on-farm food safety practices buyers would like to see are water testing, safe manure/compost use, animal exclusion, and water treatment (when needed), along with refrigeration and storage of product.
- ◆ In developing buyer standards or requirements, Up to 56% of the respondents have relied on federal and state agencies for support, such as USDA, FDA, Virginia Department of Health (VDH), and Virginia Department of Agriculture and Consumer Services (VDACS). 20% have relied on Virginia Cooperative Extension (VCE), produce industry associations, suppliers, and other industry food safety organizations.
- ◆ When buyers were asked about familiarity with the Food Safety Modernization Act (FSMA), 34% of respondents were not familiar (had not heard of it); 51% of respondents were somewhat familiar (knew about it but did not know details); and 15% were fairly familiar (knew about how it would affect their organization).

- ◆ 65% of respondents anticipate their food safety requirements changing due to the FSMA.
- ◆ Over 35% of buyers said they would be willing to provide their time by serving in a fresh produce food safety working group and/or hosting/presenting at a grower workshop.

While the data indicates that certain market sectors do not have defined food safety requirements and base procurement decisions largely on relationships and verbal agreements, it would be ill-advised for growers to not prioritize food safety plans and verification given the lack of general knowledge and consistency in the marketplace. There appears to be an area of opportunity to address food safety, along with logistical challenges that buyers face, building these values and strategies into a local brand development. In addition, market sectors would benefit from increased access to education related to on-farm food safety practices, and procurement policies, especially given the growth in supply of locally grown produce.

Resources

Accessing Virginia Market Sectors: Fresh Produce Food Safety Considerations Series

Based upon our assessment, learn more about each market sector, survey findings, purchasing priorities and barriers, and recommendations for market access:

Accessing Virginia's College & University Market Sector

<https://pubs.ext.vt.edu/HORT/HORT-278/HORT-278.html>

Accessing Virginia's Direct-to-Consumer Market Sector

<https://pubs.ext.vt.edu/HORT/HORT-277/HORT-277.html>

Accessing Virginia's Hospital Market Sector

<https://pubs.ext.vt.edu/HORT/HORT-276/HORT-276.html>

Accessing Virginia's Public School (K-12) Market Sector

<https://pubs.ext.vt.edu/HORT/HORT-275/HORT-275.html>

Accessing Virginia's Restaurant Market Sector

<https://pubs.ext.vt.edu/HORT/HORT-274/HORT-274.html>

Accessing Virginia's Retail Market Sector

<https://pubs.ext.vt.edu/HORT/HORT-273/HORT-273.html>

Accessing Virginia's Regional Wholesale Market Sector

<https://pubs.ext.vt.edu/HORT/HORT-271/HORT-271.html>

Establishing a Marketing Perspective

<https://pubs.ext.vt.edu/HORT/HORT-279/HORT-279.html>

Managing Legal Liability Series: How Much Liability Insurance Coverage Should I Have?

<http://pubs.ext.vt.edu/CV/CV-17/CV-17-PDF.pdf>

Managing Legal Liability Series: Questions to Ask When Comparing Insurance Coverage.

<http://pubs.ext.vt.edu/CV/CV-19/CV-19-PDF.pdf>

Managing Liability

A nice booklet covering basic liability principles for direct market and agritourism operations.

https://pubs.ext.vt.edu/content/dam/pubs_ext_vt_edu/CV/CV-25/CV-25-PDF.pdf

Virginia Fresh Produce Food Safety

A comprehensive website providing a range of resources for producers, consumers, and trainers.

<http://www.hort.vt.edu/producesafety/>

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Accessing Virginia's College & University Market Sector: Fresh Produce Food Safety Considerations

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College & University Market Sector

The College and University market sector is very unique in the sense that it can charge what it wants while still maintaining a steady demand. Why? Most freshmen at colleges and universities are required to both live on campus

and purchase a meal plan, a meal plan of which has a fixed amount, and the plan only binding itself to the dining hall(s) on campus. In lieu of this required purchase, universities like Virginia Tech both ask for and attentively listen to the student's responses about their dining experiences and requests. With the current millennial generation being the majority in



Photo: Alexandra Battah

colleges and universities today, we can assume one thing: a greater demand for healthier, locally grown, “natural” foods. The millennial generation today not only takes up the majority of the United States’ population by composing 26% of it, but they’re also the most health-conscious and active generation, meaning demands for healthier foods. To the average consumer, healthier foods are often perceived to be locally grown foods. Knowing this demand, growers like you can perhaps penetrate the market sector for universities and colleges in order to meet the demand of millennials in one way or another.

Through a research study conducted through Harvard’s Food Law and Policy Clinic, the contributors highlight the importance of how universities and colleges should be capitalizing on the increasing demand of buying and eating local. They recommend that state colleges and universities gain a “competitive edge” by being more transparent with their food procurement practices. This in turn could raise the colleges’ and universities’ public ranking and would therefore give themselves a competitive edge in student recruitment. Collaborations, in which institutions grow a part of their produce at campus facilities, not only provide a fresh source of local foods for the dining hall, but also



Students harvesting broccoli at Virginia Tech’s Dining Services acreage at Kentland farm. (Photo: The Dining Services Farm at Kentland Facebook Page)

offer a great opportunity for students to gain farming and food production experience at colleges and universities.

Survey Highlights

This sector represented a greater level of complexity in the actual procurement of food. Since larger institutions, like colleges and universities, are typically connected to larger, broad-line, food service companies, the survey showed that less than 10% of produce was sourced locally. Because of these existing relationships and other major hurdles, like volume, deliverability of product, and food safety policies, these institutions were limited in their ability to make business connections with local producers. In cases where institutions had greater flexibility and commitment to sourcing more locally produced food, they were open to establishing new ties.

Purchasing Priorities

- ◆ Price
- ◆ Availability
- ◆ Grower/Producer Liability Insurance
- ◆ Food Safety Certification
- ◆ Quantity/Volume
- ◆ Quality/Consistency of Product
- ◆ Deliverability of Product

Barriers to Purchasing

- ◆ Insufficient Volume of Product
- ◆ Lack of Intermediaries (Food Hubs, etc.)
- ◆ Delivery Capabilities (Timing, Flexibility, etc.)
- ◆ Grower Lack of Understanding of Buyer Requirements, Needs, and Processes

Recommendations

- ◆ Colleges and universities often work with large nationwide food service companies that follow strict corporate parameters on food procurement. In rare cases, where institutions may not be tied to a food service

company, such as Sodexo or Aramark, it may be easier to tap into this market.

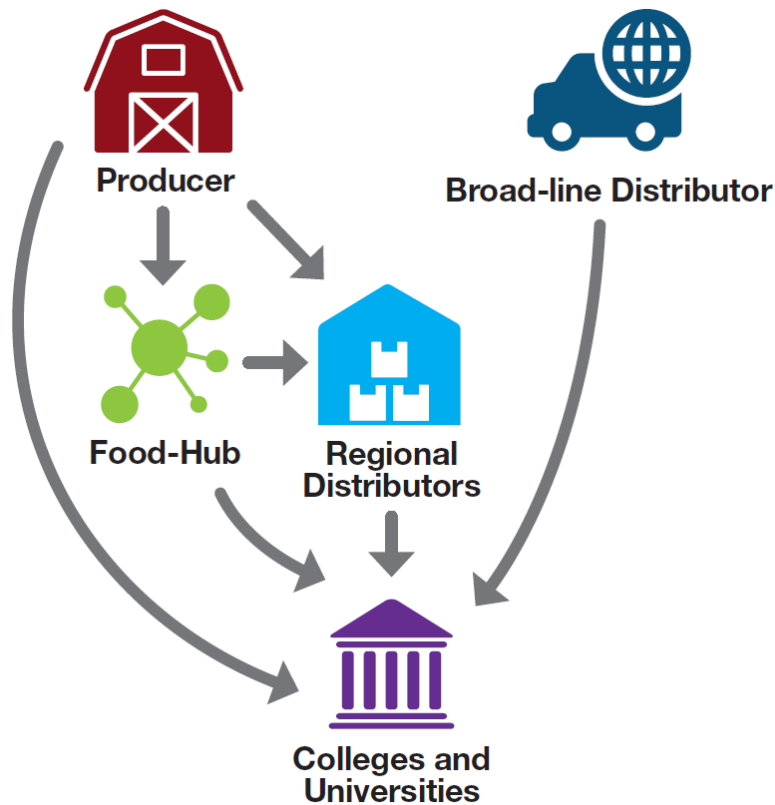
- ◆ To determine what universities need, it is imperative to establish effective communication.
- ◆ Be cognizant of large volume needs of particular institutions, since selling to them means being able to provide a consistent flow of product and meet exacting quality standards.
- ◆ Obtaining and maintaining third-party food safety certification is often standard practice in the institutional market, so it is likely more Virginia-grown produce would be purchased if food safety certification requirements were met by more Virginia growers.
- ◆ It is important to ask a potential buyer specific questions about what audit schemes they require, and whether they have an onboarding policy that allows for transition time to achieve higher levels of certification.
- ◆ Be aware that comprehensive liability insurance may also be a necessity in this market.
- ◆ Become familiarized with FSMA produce safety regulations and understand how they affect you as a local producer.
- ◆ More colleges and universities want to purchase locally-sourced product. Thus, additional certifications, such as “Fair Trade” and “National Organic Program”, may boost your marketability as a local producer.
- ◆ You may need to be flexible on your delivery schedule, making sure to accommodate the institution’s needs and timetables, especially since doing so can give you a competitive advantage.

Producer Checklist

- ◆ Does the institution have a contract with a larger food service company?
- ◆ Are you able to meet the volume demands of the college or university?
- ◆ If meeting volume demands is challenging, have you considered using a local food hub or other intermediaries to better meet the volume needs and also alleviate possible logistic issues such as transport and delivery?
- ◆ Do you need a 3rd party food safety audit, such as Good Agricultural Practices (GAP) certification in order to sell your product to this institution? GAP certification is the biggest one when it comes to produce.
- ◆ Are there are food safety requirements such as needing to have a HACCP (hazard analysis and critical control point) plan implemented in your operation?
- ◆ Is a minimum level of liability insurance required?
- ◆ Are you able to be punctual in terms of delivery, should you choose to transport your own produce?



Photo: Alexandra Battah



Sources of fresh produce for colleges and universities showing various access routes for producers.
Graphic by Sarah Gugercin, Department of Horticulture, Virginia Tech.

Resources

Farm to Institution New England (FINE)
<http://www.farmtoinstitution.org/>

FINE work relevant to market access include:
Campus Dining 101: A Benchmark Study on Farm to College in New England
http://www.farmtoinstitution.org/sites/default/files/imce/uploads/FINE%20Farm%20to%20College%20Report_1.pdf

Getting it There: Understanding the Role of New England Food Distributors in Providing Local Food to Institutions.
http://www.farmtoinstitution.org/sites/default/files/imce/uploads/FINE%20Distributor%20Report_3.pdf

Producer Perspectives: The New England Farm-to-Institution Market
<http://www.farmtoinstitution.org/sites/default/files/imce/uploads/FINE%20Producer%20Report.pdf>

Harvard Food Law and Policy Clinic
<https://www.farmtoinstitution.org/sites/default/files/imce/uploads/Increasing%20Local%20Food%20Procurement%20by%20State%20Agencies,%20Colleges%20and%20Universities.pdf>

State Council of Higher Education for Virginia
<http://www.schev.edu/index/students-and-parents/explore/virginia-institutions>

Virginia Fresh Produce Food Safety
<http://www.hort.vt.edu/producesafety/>

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Accessing Virginia's Direct-to-Consumer Market Sector: Fresh Produce Food Safety Considerations

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Despite the growing demand and support for local food, there can often be significant barriers for growers trying to tap into new markets, given specific food safety expectations, policies, and requirements. This trend is particularly true for institutional buyers, who are often constrained by far-reaching institutional and/or corporate policies. While there are lots of market opportunities in Virginia, navigating the landscape for growers can be daunting, since buyer food safety requirements are not a “one size fits all” standard for all markets. To better understand current expectations and perceptions across multiple market sectors in Virginia, and help producers better align their on-farm practices with these marketplaces, the Fresh Produce Food Safety Team conducted a state-wide market assessment survey in 2015-2016. The purpose of this factsheet is to provide you with the results of that work, especially if you are considering selling produce to direct markets.

Direct-to-Consumer Sector

Communicating directly to consumers is one of the most effective ways to advertise your business operation. Fortunately, consumer interest in locally produced foods marketed directly through local food networks has been increasing. In a direct market that revolves around food procurement, producers and consumers interact (you guessed it) directly.

But what does this look like? Local food networks utilize local supply chains such as direct market sales to consumers through CSAs, agritourism, farmers markets, farm stands, and other alternative outlets (see below). Additionally, the direct market sector offers feedback far more quickly than most other sectors, and is therefore a great choice for any beginning growers looking to get their feet wet and experiment. It's important to note, however, that as food safety laws continue to develop along with the general public's concerns with food safety, it is profoundly important that the local growers intending on selling directly in this sector familiarize themselves with current food safety practices, laws, and regulations.



Photo: Radell Shrock (Season's Bounty Farm, Harrisonburg, Virginia)

Using a farmers market for example, though it seems simpler than going through a large contractor, still has its requirements. Farmers markets help sustain Virginia's working farms by keeping your food dollars in your community, which in turn is good for your local economy. While this is exciting and a great market to be apart of, you may need to comply with state and local laws, health department certifications, insurance regulations, business license requirements, and individual market rules and conventions. You should anticipate that you will be told exactly how you can operate, which may include how you should package and label your produce, ensuring customer safety, providing samples, and participating in market events. Additionally, to give you an estimate on operating costs, for farmers markets they are usually lower than a retail storefront, but higher than street vending. Many farmers markets charge a flat fee anywhere from \$20 to \$100 per day, and much higher in some markets (usually urban markets are higher). A plus side to selling at a farmers market however is that since you are providing "fresher" ingredients locally, you can factor transportation costs out of your expenses (mainly shipping costs, you of course have to consider driving to and from market).

There is also a large diversity of product and niche markets that farmers markets provide, which is a main reason why they draw in so many people. Note that all farmers markets are not the same; entering to sell in a rural market will be very different than entering to sell in an urban market. Many of the pros and cons to farmers markets apply to other direct markets as well, including that fact that you are the sole operator, meaning you don't have to worry about having an integrated format in your supply chain. In Virginia, there are about 235 farmers markets to choose from, so there are plenty of opportunities to enter the market!

Examples of Direct-to-Consumer Markets

- ◆ Farmers markets operate year round or seasonally as a venue for farmers to sell their fresh fruits and vegetables.
- ◆ Roadside markets are often located on a farm or orchard. Products are typically sold directly to consumers near the farm roadway. They may be operated from a year-round permanent structure, a truck, trailer, or tent during the harvest period.
- ◆ On-farm stores are located in a permanent structure on the farmer's property. May operate year-round, and are subject to more regulations than a roadside stand.
- ◆ PYOs or U-pick operations are places where consumers harvest fruits and vegetables themselves.
- ◆ Community Supported Agriculture (CSA) members or "share holders" cover the costs of the community farm operation and in return they receive shares of the seasonal foods throughout the farming season.
- ◆ Other: Mail order sales and internet marketing, mobile markets

Survey Highlights

This sector was more robustly represented through our surveys with nine respondents. While within this market it is easier to bypass typical regulation seen in most other markets, there is also a smaller chance for a larger profit for the grower. This is simply due to the number of actual buyers and the given competition that comes in most direct-to-consumer markets, as well as the likelihood that these buyers are procuring for a limited number of people. It is important to note that the findings in this survey reflected the fact that some respondents were buyers of product, as well as producers. One respondent reported that they require a third-party food safety audit from growers/vendors. Five respondents were familiar with the Food Safety Modernization Act (FSMA), but were not sure how it affects

their organizations. With the advancement of food safety legislation, as well as increasing public awareness of food safety concerns, it would behoove the local growers that intend on selling direct to familiarize themselves with current food safety practices.

Purchasing Priorities

- ◆ Quality
- ◆ Availability
- ◆ Product Variety and Diversity
- ◆ Proximity of Producer to Buyer
- ◆ Delivery Capabilities

Barriers to Purchasing

- ◆ Insufficient Volume of Product
- ◆ Grower Lack of Understanding of Buyer Requirements
- ◆ Lack of Variety/ Product Diversity
- ◆ Product Consistency
- ◆ Cost of Product
- ◆ Delivery Timing, Flexibility, etc.

Recommendations

- ◆ Several respondents suggested creating a statewide system that connects farmers, producers, and suppliers. The Virginia Market Maker was recently established as part of the national Market Maker program. Tap into this valuable resource as a way to promote your business (see resources).
- ◆ Consider using season extension as a way to offer a more consistent supply of product, and also as a way to provide more niche products.
- ◆ Recognize that selling to direct markets can often lead to other opportunities, including scaling up to larger markets. Having a simple written food safety plan and practices in place is important to demonstrate your awareness of the importance of food safety and a commitment to produce quality and

freshness. It also makes it easier if you need to pursue a food safety certification.

- ◆ *“It [would] be nice to have across the board standards for all growers. They are all selling to the public no matter if it's farmers markets or school systems, so safety needs to be a number one concern.”*
- ◆ *“Our biggest barrier is quantity, especially for some types of produce (berries).”*
- ◆ *“We don't have any explicit food safety requirements. We want to make sure we know which product came from which farmer, but right now we can just do that through our invoicing system...The aggregator we work with had food safety requirements for all the farms they work with. And all the other farmers we work with, we have a long, personal relationship with them.”*

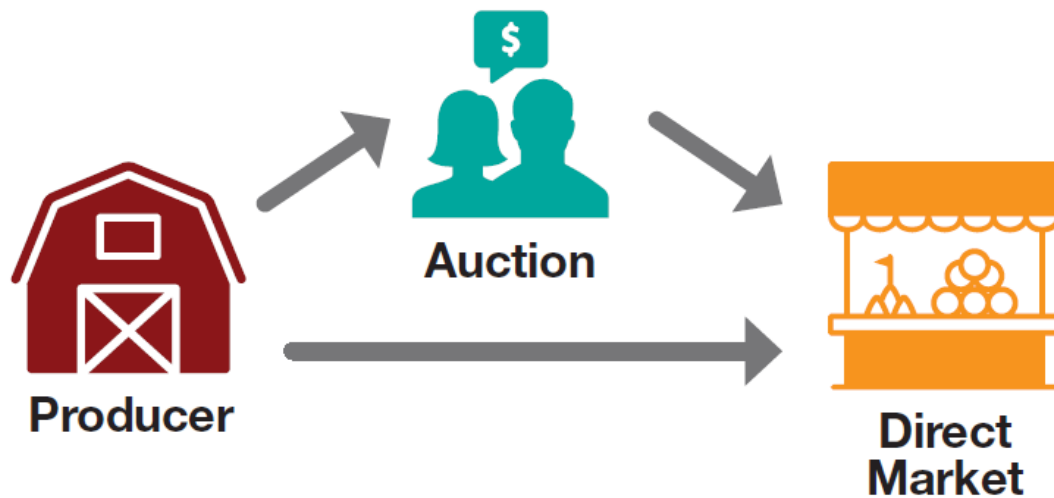
Producer Checklist

- ◆ Have you contacted the manager of the market you are interested in selling at?



Photo: Radell Shrock (Season's Bounty Farm, Harrisonburg, Virginia)

- ◆ Have you studied vendor rules and regulations of the market so that you are aware of specific requirements you need to meet?
- ◆ Does the market require food safety training, documentation, and practices both on-farm and at the market? If so, how does the market verify adherence to their food safety rules?
- ◆ Have you attended any food safety training, and do you have a simple written food safety plan that may boost your marketability, as well as your credibility as a local producer?
- ◆ Have you considered logistical hurdles of selling your produce, such as handling practices, storage, transport, and holding at the market?



Sources of fresh produce for direct-to-consumers showing various access routes for producers.
Graphic by Sarah Gugercin, Department of Horticulture, Virginia Tech.

Resources

Direct Marketing

<https://attra.ncat.org/attra-pub/viewhtml.php?id=263>

Direct Marketing Channels & Strategy for Organic Products

<http://articles.extension.org/pages/18381/direct-marketing-channels-strategy-for-organic-products>

Enhancing the Safety of Locally Grown Produce

<https://pubs.ext.vt.edu/category/on-farm-food-safety.html>

Going to Market

http://pubs.ext.vt.edu/content/dam/pubs_ext_vt_edu/ANR/ANR-46/FST-273.pdf

Virginia Department of Agriculture and Consumer Services

<http://www.vdacs.virginia.gov/vagrown/index.shtml>

Virginia Market Maker

<http://ext.vt.edu/agriculture/market-maker.html>

Virginia Fresh Produce Food Safety

<http://www.hort.vt.edu/producesafety/>

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Accessing Virginia's Hospital Market Sector: Fresh Produce Food Safety Considerations

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Hospital Market Sector

In Virginia, there are 92 acute care hospitals, with over 18,000 staffed beds (https://www.ahd.com/state_statistics.html). Urban hospitals (100+ staffed beds) have much higher patient volumes, as compared to rural hospitals (<100 staffed beds), thereby necessitating a higher number of meals served daily. Hospitals can vary greatly in terms of

food service operations. Some hospitals prepare foods on site, while others prepare food off-site and ship it in, therefore only needing to heat and serve the food. Additionally, many hospitals have cafeterias or snack bars for visitors and staff.

Another level of complexity with hospitals is how they manage their food service. Some hospitals are self-operated, while others are managed by food service contractors—companies like Sodexo, Inc., Aramark Corp., and Compass Group North America. Add to this complexity the fact that many larger hospitals are in a group purchasing organization (GPO), which oversees all food procurement, typically working through broad-line distributors. These corporate contracts provide a consistent, reliable supply of food that meets specific sanitary and safety standards, often including rebates for large volume purchases.

Survey Highlights

While there is a growing trend for patients desiring more fresh local produce, even food service directors wishing to purchase from local producers often find it challenging, if not impossible, to do so. It is no surprise this market represented the most complex sector, making it very challenging for a local producer to access and develop a fruitful business

relationship. In fact, the low rate of responses in our market research were due to limitations in finding points of contact at these institutions, suggesting the complexity and hierarchical management levels in place regarding the procurement of produce. Respondents strongly emphasized the necessity for mandatory adherence to food safety requirements—in fact, GAP certification was essential, as we liability insurance. While all respondents reported that they would increase local procurement if more local producers could meet requirements for food safety, they also stated that consistency of volume and deliverability were often constraints faced with local producers. Given the necessity of these large institutions meeting these needs and maximizing the value of every dollar, primary channels for local food procurement included regional distributors.



Photo: jayneandd
<https://www.flickr.com/photos/jayneandd/3628600694>

Purchasing Priorities

- ◆ Quality
- ◆ Food Safety Certification
- ◆ Availability
- ◆ Product Variety and Diversity
- ◆ Proximity of Producer to Buyer
- ◆ Delivery Capabilities

Barriers to Purchasing

- ◆ Corporate Requirements/ Policies for Food Safety Not Met by Growers
- ◆ Cost of Product
- ◆ Insufficient Volume of Product
- ◆ Lack of Intermediaries (Food Hubs, Brokers, etc.)
- ◆ Product Consistency (Quality, Size, Ripeness)
- ◆ Delivery Capabilities (Timing, Flexibility, etc.)

Recommendations

- ◆ Hospital food procurement is one of the most complex purchasing systems, with an extensive hierarchy of management, personnel, and policy hurdles. Recognize that the person responsible for food procurement may not be flexible in their purchasing capabilities due to stringent corporate policies.
- ◆ Given the target population is immune-compromised, best on-farm food safety practices are critical! Third-party food safety certification is likely mandatory to access this market sector.
- ◆ Be open to supplying rural hospitals, since smaller institutions may have less hurdles, thereby making it easier for local farmers to tap into these smaller hospitals.
- ◆ Another consideration is whether or not food is prepared on site, or brought in 'ready-to-eat'. Typically, ready-to-eat produce is procured from broad-line distributors or processors. Further, ready-to-eat food requires another entire level of food safety considerations due to the processing steps.
- ◆ Given the complexity of hospital systems, it can be challenging to find contact names of pertinent personnel using a simple google search. The possibility for a direct

relationship with a hospital can be slim; therefore, you will likely need to work through an intermediary such as a local aggregator or food hub. These entities often have established relationships, and can also provide food safety verification and the minimum volume of product needed. In some cases, local aggregators may even go through a larger distributor who is servicing the institution.

- ◆ If personal contact is possible, consistent communication with the hospital purchasing personnel is crucial. Building personal relationships will vastly increase your opportunity to establish successful business relationships.
- ◆ Whatever the relationship, remember your delivery capabilities and product consistency are vital!

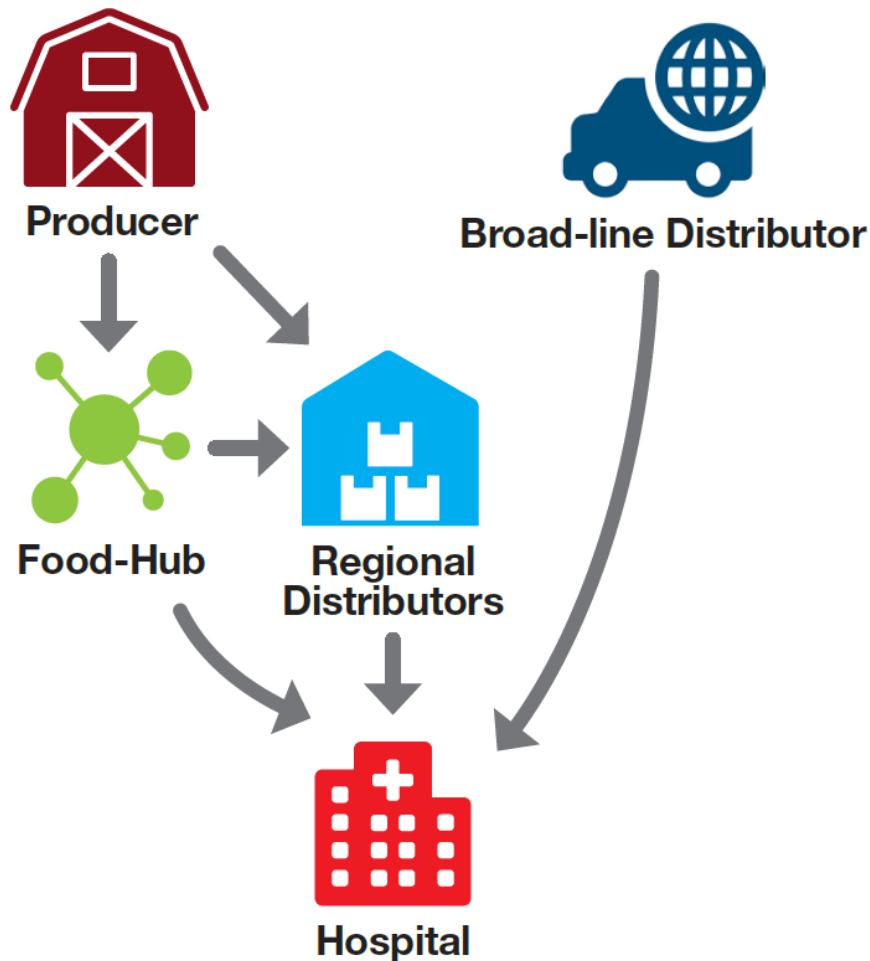
Producer Checklist

- ◆ What is the size of the hospital? Is it a private hospital or part of a larger corporate structure?
- ◆ Have you considered using a local food-hub or other intermediaries to be able to tap into this market? In many cases, selling directly to a hospital is impossible since they may only go through broad-line distributors. If this is the case, check into regional possibilities of wholesale aggregators and distributors, who may already have established relationships with hospitals.
- ◆ If selling to hospitals is a possibility, have you considered how you will get in touch with the right person in regards to selling to a hospital? Often finding the key point of contact is very difficult, so you may need to tie into existing local initiatives that are trying to provide an increased amount of locally sourced produce.

- ◆ Since the majority of people receiving your produce have a weakened immune system, have you obtained and are you maintaining third-party food safety certification?
- ◆ Is a minimum comprehensive liability insurance required? If so, how much?
- ◆ Are you able to meet the volume demands of the hospital? If not, can you go through an aggregator, or are there smaller rural hospitals that may be more inclined to purchase smaller volumes of produce?
- ◆ Are there are food safety requirements such as needing to have a HACCP (Hazard Analysis and Critical Control Point) plan implemented in your operation?
- ◆ Are you able to be punctual in terms of delivery, should you choose to transport your own produce.



Hospital food service preparation area. (Photos: Frank Keillor, <https://www.flickr.com/photos/frankkeillor/albums/72157625151424350>)



Sources of fresh produce for hospitals showing various access routes for producers.
Graphic by Sarah Gugercin, Department of Horticulture, Virginia Tech.

Resources

American Hospital Directory

https://www.ahd.com/state_statistics.html

Emerging Local Food Purchasing Initiatives in Northern California Hospitals

<http://asi.ucdavis.edu/programs/sarep/publications/food-and-society/farmtohospitalinitiativesweb.pdf>

Sustainable Farm to Hospital Toolkit: Hospital Food Purchasing for North Central Region Sustainable Farmers/Producers

https://www.iatp.org/sites/default/files/2013_12_11_Toolkit12_HospitalFoodPurchasing.pdf

Sustainable Farm to Hospital Toolkit: Ten Steps to Creating Mutually Beneficial Relationships with Local, Sustainable Farmers, Producers

https://www.iatp.org/sites/default/files/2013_12_11_Toolkit11_TenSteps.pdf

Virginia Fresh Produce Food Safety

<http://www.hort.vt.edu/producesafety/>

Acknowledgements

Special thanks to members of our project Working Group for their contributions to the project design, assessment creation, and summary report. This work was made possible through USDA AMS Award #14-FSMIP-VA-0013.

Accessing Virginia's Public School (K-12) Market Sector: Fresh Produce Food Safety Considerations

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Despite the growing demand and support for local food, there can often be significant barriers for growers trying to tap into new markets, given specific food safety expectations, policies, and requirements. This trend is particularly true for institutional buyers, who are often constrained by far-reaching institutional and/or corporate policies. While there are lots of market opportunities in Virginia, navigating the landscape for growers can be daunting, since buyer food safety requirements are not a "one size fits all" standard for all markets. To better understand current expectations and perceptions across multiple market sectors in Virginia, and help producers better align their on-farm practices with these marketplaces, the Fresh Produce Food Safety Team conducted a state-wide market assessment survey in 2015-2016. The purpose of this factsheet is to provide you with the results of that work, especially if you are considering selling produce to public schools.

Public School (K-12) Sector

Similar to hospitals, public schools have contracts with vendors already set in place. Like college and university students, children in public schools can also put money towards a "meal plan". Most public schools offer both breakfast and lunch and change the menu weekly. A growing number of schools are

gradually transitioning from pre-made foods to more fresh, scratch cooked options. Given the emphasis on fresh fruits and vegetables, there is an opportunity for local growers to gain greater access to public school systems. According to the Virginia Department of Education, there are currently 1,822 K-12 schools in Virginia as of the 2017-2018 school year. The USDA has been encouraging school districts to use locally-produced foods in school meals and to use "farm-to-school" activities to spark students' interest in trying new foods. In an article published by NPR, they mentioned that more than a third—36 percent—of U.S. school districts reported serving local foods in the 2011-12 or 2012-13 school years. Buying local became more feasible with federal legislation that passed in 2008 as well as 2010, when the U.S. Department of Agriculture created the



Photo: Andrea Early (Harrisonburg City Schools, Virginia)

Farm to School program to get more healthful food in schools and link smaller U.S. farmers with a steady market of lunchrooms.

Survey Highlights

This market sector represented the highest response rate of any sector surveyed, perhaps because of established farm-to-school programs across the state and the likelihood that school nutrition directors are more aware of food safety concerns due to the population they serve. Although the Public School market sector operates under significant constraints in terms of pricing and logistical challenges, it is a sector with significant growth potential for Virginia farms since many school systems make it a priority to spend commodity money on fresh fruits and vegetables. While accessing this market largely depends on the size and policies of a particular school system, more than half of respondents indicated that they would increase local purchasing of produce if food safety requirements were met, representing an area of opportunity for Virginia producers.

In particular, focus group participants mentioned the USDA pilot procurement program, designed to increase procurement of local produce in schools, but they faced challenges due to a lack of approved suppliers, who would need to meet Good Agricultural Practices (GAP) certification requirements in order to participate. Thus, the primary channel for school produce procurement is through distributors, since they handle both logistical hurdles, as well as food safety verification. For those schools buying direct from growers, fulfillment of food safety expectations varied widely from verbal assurances to written agreements to document reviews to site visits to third party food safety audits. Thus, while not all schools may require food safety certification at this point in time, there is increased pressure to do so, and those producers having GAP certification tend to gain greater access to selling their produce.

Purchasing Priorities

- ◆ Quality
- ◆ Availability
- ◆ Delivery Capabilities
- ◆ Price
- ◆ Food Safety Certification

Barriers to Purchasing

- ◆ Cost of Product
- ◆ Delivery Capabilities (Timing, Flexibility, etc.)
- ◆ Lack of Intermediaries (Food Hubs, etc.)
- ◆ Insufficient Volume of Product
- ◆ Grower Lack of Understanding of Buyer Requirements
- ◆ Product Consistency
- ◆ Corporate Requirements/Policies

Recommendations

- ◆ Be aware of the size of the school district and the amount of flexibility they may or may not have to procure locally sourced products. Smaller school districts are generally easier to tap into.
- ◆ Establishing and fostering relationships with school foodservice staff is vital, because they will be aware of the school system's budget and how much is allotted for local food procurement. They will also know about Federal regulations that dictate the bidding process to ensure free and open competition between vendors.
- ◆ Recognize that food safety certifications like GAP may be mandatory for accessing some school systems, whereas other schools may be more flexible. While having a written food safety plan in place is a great idea, at a minimum, you should be able to effectively communicate the food safety practices you have in place. Demonstrating your awareness of the importance of food safety is critical!

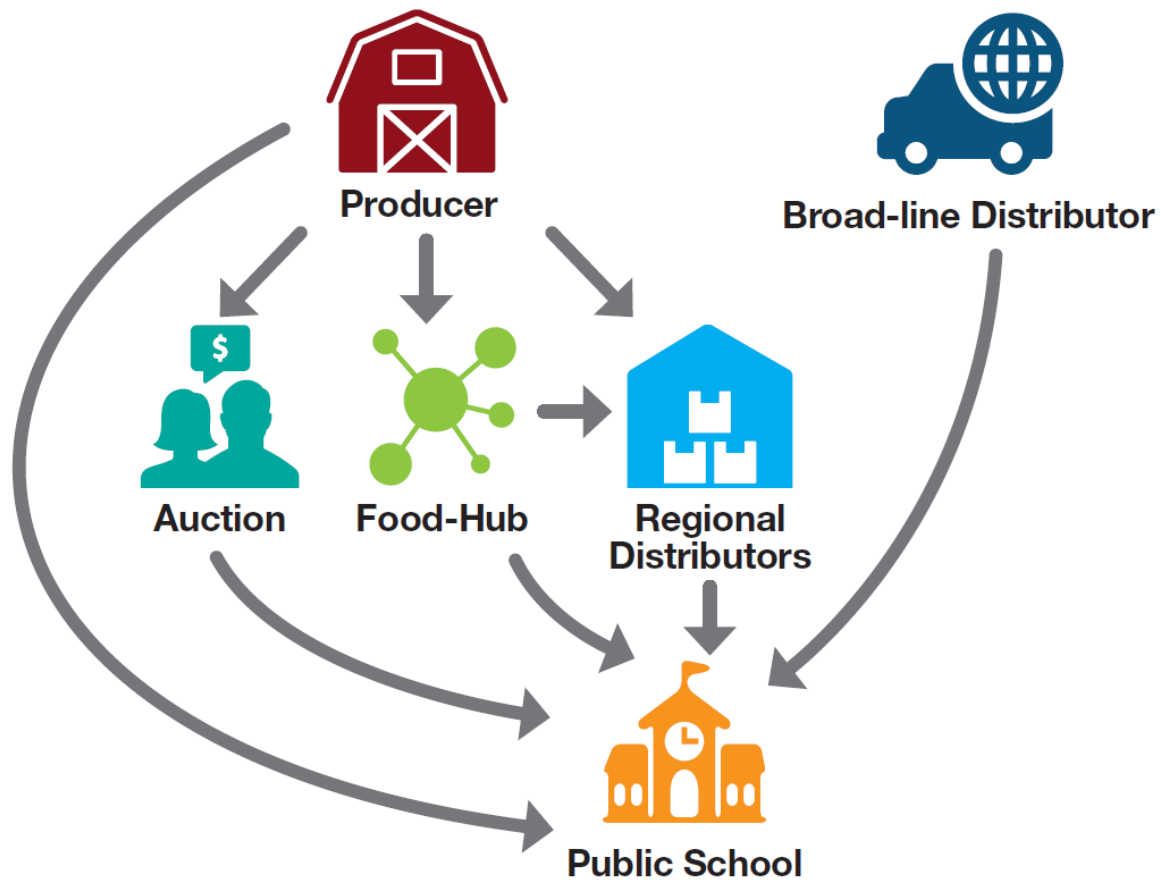
- ◆ Be aware that comprehensive liability insurance may also be a necessity in this market.
- ◆ Work with schools in close proximity to your farm to mitigate issues related to delivery and low-volume orders. Understand that consistent delivery of your product to the school is important to maintaining a good working relationship.
- ◆ Be open to selling to a local food hub or distributor, who may already have a business relationship with the school system.
- ◆ Be aware that schools struggle to find fresh produce during the school year, and they may have limited storage and cooking options. Season extension could be a way to open up some opportunities with schools.
- ◆ Be willing to join in-school events during Farm to School Week, fresh fruit/vegetable program, or at other times.
- ◆ Explore whether schools / PTOs in your area have, or are interested in establishing, a “snack-program” where fresh fruits and vegetables are provided to students. There may be grant funding or PTO funding available for this type of program.
- ◆ Consistent communication with your prospective buyer is critical to your success as a local producer.
- ◆ The bottom line is that while food safety certification may not be a firm requirement, farms wanting to increase their reach and impact in school settings should consider taking the extra steps toward certification, in order to broaden their markets and, more importantly, to provide more avenues of distribution through traditional and non-traditional distribution chains.

Producer Checklist

- ◆ What is the size of the school system?
- ◆ Is the school open to sourcing locally produced food? If so, do you know who to contact to explore possibilities for being a vendor?
- ◆ Does this school system have programs, such as Thanksgiving, Farm-to-School month celebrations, or fresh fruits and vegetable initiative, which may open up opportunities for selling produce from your farm?
- ◆ Do you need a 3rd party food safety audit, such as Good Agricultural Practices (GAP) certification in order to sell your product to the school system?
- ◆ Are there are other food safety requirements such as needing to have a HACCP (hazard analysis and critical control point) plan implemented in your operation?
- ◆ Is a minimum level of liability insurance required?
- ◆ Are you able to offer consistent and reliable delivery to the school system to meet their needs and timing?
- ◆ Are there regional food-hubs or other intermediaries that might have established working relationships with the school system, that would alleviate possible logistical issues such as transport or meeting volume needs?



Photo: Andrea Early (Harrisonburg City Schools, Virginia)



Sources of fresh produce for public schools (K-12) showing various access routes for producers.
Graphic by Sarah Gugercin, Department of Horticulture, Virginia Tech.

Resources

USDA Farm to School Planning Toolkit

https://www.fns.usda.gov/profiles/fns_gov/themes/fns/farm_to_school/toolkit/F2S_Planning_Kit.pdf

USDA Farm to School Program

<http://www.fns.usda.gov/farmtoschool/farm-school-resources>

USDA GAP/GHP Audit Program

<https://www.ams.usda.gov/services/auditing/gap-ghp>

USDA Pilot Procurement Program

<https://www.ams.usda.gov/selling-food/pilot-project>

Virginia Farm to School Program

<http://www.vdacs.virginia.gov/marketing-virginia-farm-to-school-program.shtml>

Virginia Farm to School Resource Guide

<http://www.pubs.ext.vt.edu/AEE/AEE-77/AEE-77-PDF.pdf>

Acknowledgements

Special thanks to Andrea Early for review of this factsheet, and for members of our project Working Group for their contributions to the project design, assessment creation, and summary report. This work was made possible through USDA AMS Award #14-FSMIP-VA-0013.

Accessing Virginia's Restaurant Market Sector: Fresh Produce Food Safety Considerations

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Despite the growing demand and support for local food, there can often be significant barriers for growers trying to tap into new markets, given specific food safety expectations, policies, and requirements. This trend is particularly true for institutional buyers, who are often constrained by far-reaching institutional and/or corporate policies. While there are lots of market opportunities in Virginia, navigating the landscape for growers can be daunting, since buyer food safety requirements are not a “one size fits all” standard for all markets. To better understand current expectations and perceptions across multiple market sectors in Virginia, and help producers better align their on-farm practices with these marketplaces, the Fresh Produce Food Safety Team conducted a state-wide market assessment survey in 2015-2016. The purpose of this factsheet is to provide you with the results of that work, especially if you are considering selling produce to restaurants.

Restaurant Market Sector

The restaurant market sector is one of the most diverse sectors when it comes to food procurement practices. As you've noticed, each restaurant has its own style, theme, cuisine, targeted palette, atmosphere, and so on. There are many competitors in this market sector and a broad variety of options. For example, when you dine-in at a [sit-down] restaurant, you are

essentially paying for both a good and a service, whereas fast-food restaurants eliminate the extra costs of service by allowing food purchases to have near-instant delivery. There is also a heavy amount of direct and indirect competition, which is simply as follows: indirect competition is the conflict between vendors whose products or services are not the same but that could satisfy the same consumer need. Direct competition, however, is when businesses are selling products or services that are essentially the same. Using fast-food as an example, Wendy's and McDonald's would be considered direct competitors with one another, whereas Taco Bell and Wendy's would be considered indirect competitors.

With the restaurant sector, you have food trucks, diners, fast-food restaurants, bars, and a plethora of other options all available to the consumer. The challenge for you as a producer comes in meeting both the demand and differentiating yourself and your products. The good news is that restaurants interested in purchasing your goods are [usually] high-end and are willing to pay a higher price for fresh, local, unique produce. Certain restaurant chains, however, have local produce featured in their menus, as well as the farms from which the produce came. An example would be the popular breakfast/brunch/lunch chain, First Watch. At First Watch they feature the farms and their

growers that are a part of their menu, as well as which ingredients come from each farm. Featuring contributing growers adds a personal touch to the consumer's dining experience, which is just as important as the food since the cost to the consumer reaches beyond the plate.



Besides selling produce that is more commonplace, crops such as microgreens can offer producers a special niche market with restaurants looking for unique, special ingredients. (Photo: Gwynn Hamilton, Stonecrop Farm, Newport, Virginia)

Survey Highlights

In the survey we conducted to gain more insight into the involvement with local growers and restaurant markets, respondents indicated produce was purchased primarily from farmers markets, distributors, and direct from growers, and secondarily from food hubs and food service providers. All respondents were principal buyers for their organizations, with one respondent also being in charge of creating policies and procedures related to the procurement of fresh produce. All respondents reported purchasing produce daily during the peak season. Most reported also buying daily during the remainder of the year, whereas one reported buying bi-weekly. Overall, it is important to be aware of the type of restaurant (i.e. “mom and pop” vs. chain) and their readiness to source locally. This includes corporate policies as well as the volume needed.

Just because some restaurants are chains, does not mean they will not source locally. Furthermore, chain restaurants are inherently more stringent on food safety regulation; therefore, it is important to consider these when a local producer is intending on approaching a restaurant for business purposes.

Purchasing Priorities

- ◆ Quality
- ◆ Availability
- ◆ Proximity of grower to buyer
- ◆ Product Variety/Diversity
- ◆ Delivery Capabilities

Barriers to Purchasing

- ◆ Insufficient Volume of Product
- ◆ Cost of Product
- ◆ Delivery Capabilities (Timing, Flexibility, etc.)
- ◆ Lack of Availability (Seasonality)

Recommendations

- ◆ Build relationships with purchaser and establish a regular communication schedule that takes into account the daily work-flow at the restaurant operation.
- ◆ It's important to be aware of the type of restaurant (i.e. “mom and pop” vs. chain) and their readiness to source locally. This includes corporate policies as well as the volume needed. Just because some restaurants are chains, does not mean they will not source locally.
- ◆ Chain restaurants are inherently more stringent on food safety policies, so make sure to ask about vendor food safety requirements. This might include a 3rd party food safety audit and/or HACCP (Hazard Analysis and Critical Control Point) plan. Also keep in mind liability insurance requirements.

- ◆ Since restaurants can gain greater marketability by sourcing locally, this can work in your favor. Being able to tell your unique farm story and product characteristics is a great marketing technique! Personal farm tours highlighting your product with the chef can be particularly effective!
- ◆ Keep in mind that marketing yourself through a distributor may mitigate challenges presented by selling directly to the restaurant, such as storage, temperature control, and transportation.
- ◆ Be open to new product ideas in order to fill special unique niches that the restaurant marketplace is looking for.
- ◆ Remember product quality is important, so always sell the best product to your buyer—this is not the place to get rid of excess produce or seconds!
- ◆ Given VDACS statewide support for farming businesses, they might be able to serve as a middle point between producers and restaurants.
- ◆ It could be helpful to have a real-time statewide database of producers, which includes producer inventory and delivery capability. This would allow for more effective communication between both parties on the product being sold.

Producer Checklist

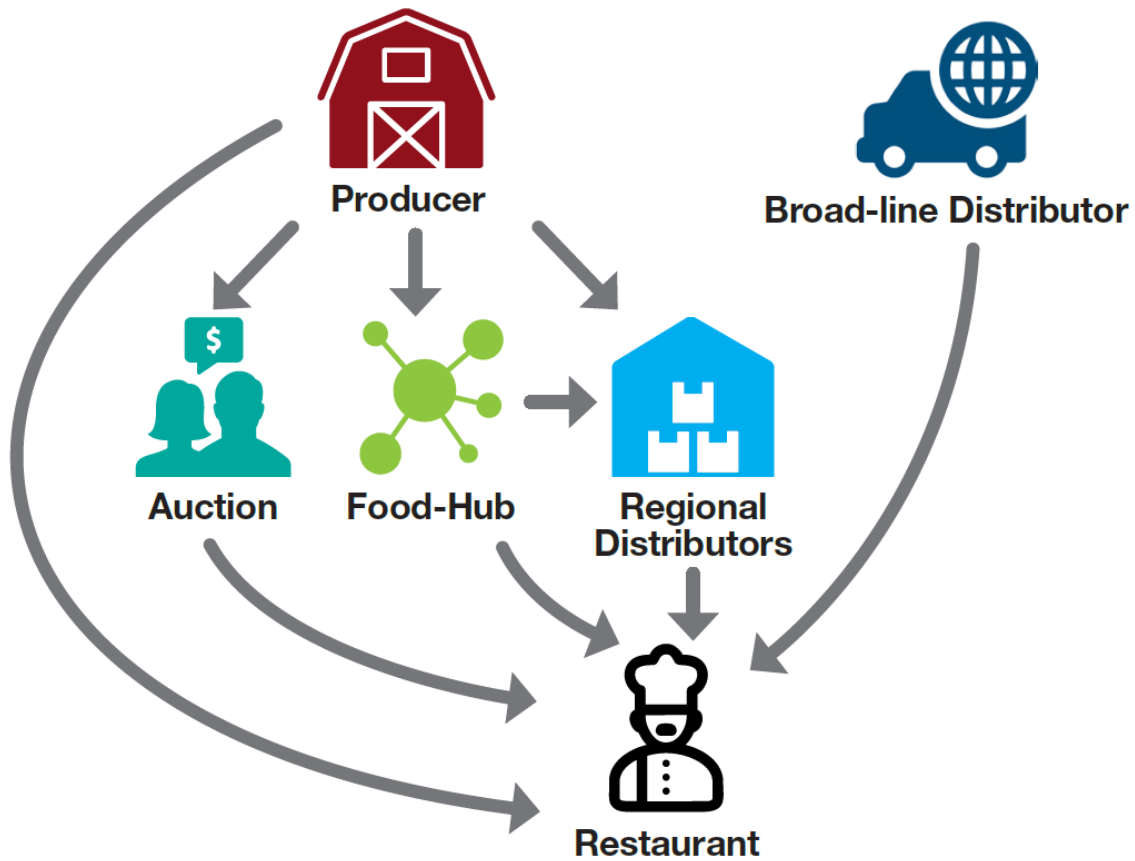
- ◆ Is the restaurant a “mom & pop” or chain restaurant?
- ◆ Is the restaurant interested in sourcing locally grown produce? If so, who is the point of contact for purchasing product?
- ◆ What food safety policies do they have? Do they require a 3rd party food safety audit,

such as Good Agricultural Practices (GAP) certification? Are there other food safety considerations that your buyer requires, such as a HACCP (Hazard Analysis and Critical Control Point) plan implemented in your operation?

- ◆ What are their needs in terms of volume and product characteristics, handling such as pre-washing, storage, and transport, and delivery schedule? Are you able to meet all these needs?
- ◆ How will payment be handled—COD (cash on delivery) or invoicing—in order to allow greater cash flow?



Restaurants are often looking for crops that can be used for turning the ordinary into something eye-catching, appealing, and tasty! A great example is hydroponically-grown Bibb lettuce used as a sandwich “wrap”. (Photos: Amber Vallotton)



Sources of fresh produce for restaurants showing various access routes for producers.
Graphic by Sarah Gugercin, Department of Horticulture, Virginia Tech.

Resources

Enhancing the Safety of Locally Grown Produce
<https://pubs.ext.vt.edu/category/on-farm-food-safety.html>

Grower's Manual: A Template for Grower Cooperatives
http://lib.dr.iastate.edu/leopold_pubs/papers/80/

Market Ready™ Checklist for Direct Sales to Restaurants Business Practice Summary
<https://rvs.umn.edu/Uploads/EducationalMaterials/d10ebe7e-8944-4092-9884-3fb76953a2a7.pdf>

Market Ready™ for Restaurant Sales Full Report
<http://www.uky.edu/Ag/AgEcon/pubs/extMRRest45.pdf>

Virginia Fresh Produce Food Safety
<http://www.hort.vt.edu/producesafety/>

Virginia Market Maker
<http://ext.vt.edu/agriculture/market-maker.html>

Acknowledgements

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Accessing Virginia's Retail Market Sector: Fresh Produce Food Safety Considerations

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Despite the growing demand and support for local food, there can often be significant barriers for growers trying to tap into new markets, given specific food safety expectations, policies, and requirements. This trend is particularly true for institutional buyers, who are often constrained by far-reaching institutional and/or corporate policies. While there are lots of market opportunities in Virginia, navigating the landscape for growers can be daunting, since buyer food safety requirements are not a “one size fits all” standard for all markets. To better understand current expectations and perceptions across multiple market sectors in Virginia, and help producers better align their on-farm practices with these marketplaces, the Fresh Produce Food Safety Team conducted a state-wide market assessment survey in 2015-2016. The purpose of this factsheet is to provide you with the results of that work, especially if you are considering selling produce to retailers.

Retail Market Sector

The retail market sector often has the most convenient locations, longest duration of operating hours, and the lowest price (and therefore the most competitive price). Retail powerhouses that carry produce, such as Walmart and Target, purchase the goods they're selling from wholesalers and sell those goods at a higher price. Clever, right? The main

operating format for retailers is to sell directly to consumers rather than producers or intermediaries; note that there are several different types of retail markets.



Photo: Amber Vallotton

The Specialty Crops Market News through the USDA surveys over 400 retailers, comprising over 30,300 individual stores, with online weekly advertised features in the nation. It's important to note that just because a retailer supports local growing, there's no guarantee that it's as easy to enter as other markets. Local retail businesses such as *Eats* and *Oasis*, both located in Blacksburg, Virginia, support local growers since they are smaller scale operations that can rely largely on the local produce they purchase for their inventory. Other larger retailers, however, such as Kroger, often do

supply local produce, but with the types of produce being limited given the number of consumers they provide for. While there are more opportunities in this sector relating to the number of retail markets, you have to know what the food requirements are. The Virginia Department of Agriculture and Consumer Services (VDACS) offers information on food safety regulations pertaining to each market sector, so be sure to read up on what applies to you as a potential retail supplier so you can understand and comply with what's expected.

Survey Highlights

In the survey we conducted to gain more insight into the involvement with local growers and retail markets, respondents mentioned that produce was purchased from distributors, food hubs, direct from growers, farmers markets, and food service providers. Some respondents were principal buyers; all were in charge of creating policies and procedures related to the procurement of fresh produce. Most respondents reported purchasing produce daily during the peak season as well as the remainder of the year, whereas others reported buying weekly all year long. Most respondents were unfamiliar with the Food Safety Modernization Act (FSMA). Of those who were familiar with the FSMA, they were not sure how it affected their organization. None of the respondents anticipated their food safety requirements



Photo: Amber Vallotton

changing as a result of the act. Overall, be aware of the type of retailer (independent vs. chain stores) and their readiness, or willingness to source locally. This includes corporate policies as well as size limitations of the produce being sold. Just because some retailers are larger does not mean they will not source locally, but it is imperative that the local growers effectively communicate with their respective buyers.

Purchasing Priorities

- ◆ Availability
- ◆ Quality
- ◆ Price
- ◆ Quantity/Volume
- ◆ Product Variety and Diversity

Barriers to Purchasing

- ◆ Grower Lack of Understanding of Buyer Requirements
- ◆ Delivery Capabilities (Timing, Flexibility, etc.)
- ◆ Product Consistency (Quality, Size, etc.)
- ◆ Lack of Intermediaries (Food Hubs, etc.)
- ◆ Insufficient Volume of Product
- ◆ Cost of Product

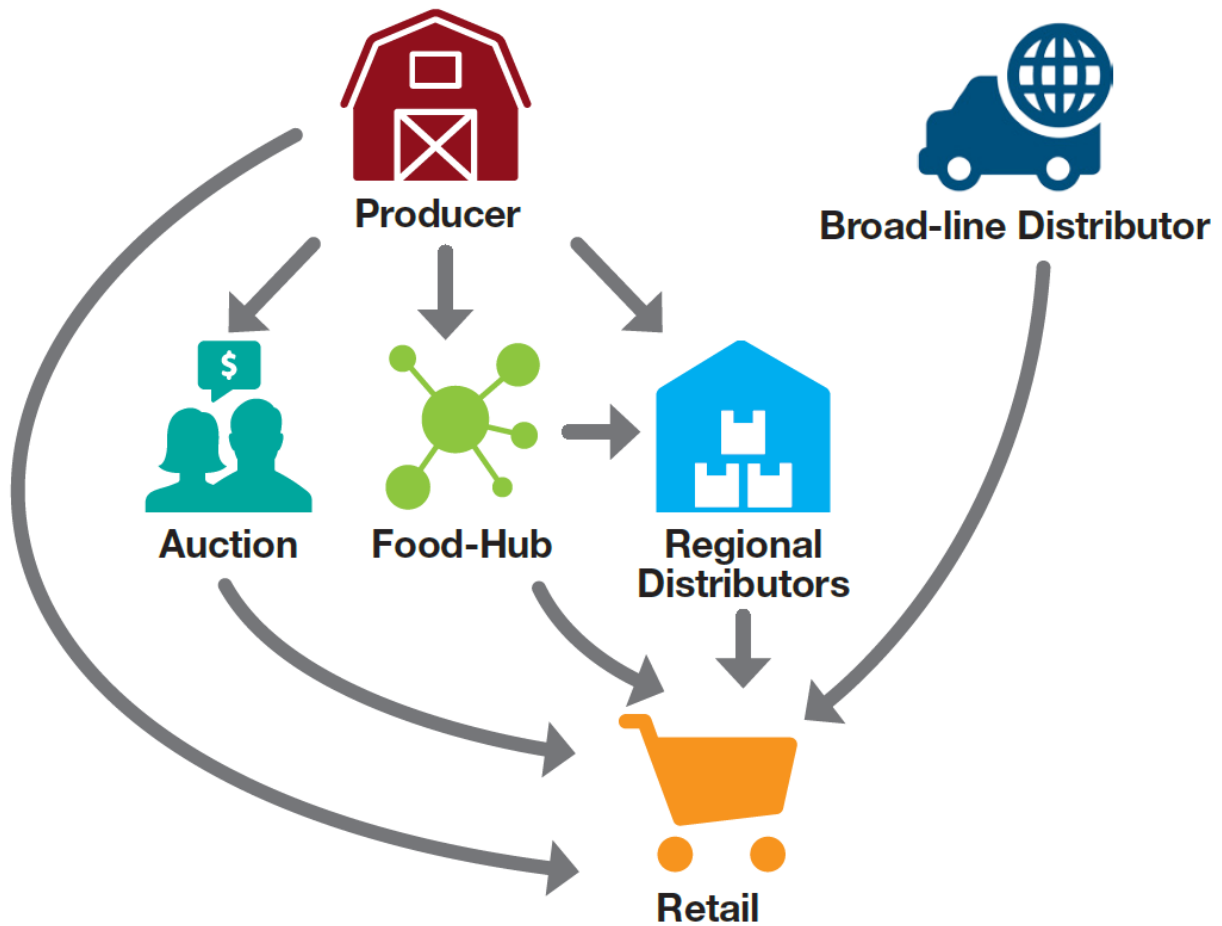
Recommendations

- ◆ Build relationships with purchaser and establish a regular communication schedule that takes into account the daily work-flow at the retail operation.
- ◆ Be aware of the type of retailer (i.e. independent vs. chain stores) and their readiness to source locally. This includes corporate policies as well as size limitations of the produce being sold. Just because some retailers are larger does not mean they will not source locally. However, these stores typically do require liability insurance and food safety certifications, so make sure to ask about vendor requirements.

- ◆ Remember that it is likely retailers would increase purchasing Virginia-grown produce if more producers met food safety requirements. At minimum, it is important to have training and a written food safety plan in place to demonstrate your awareness of the importance of food safety, and your commitment to produce quality and freshness.
- ◆ Make sure you are familiar with the Food Safety Modernization Act (FSMA) Produce Safety Rule (PSR) regulations and how they affect you as a producer. In many cases, retailers may want you to receive PSR training, along with meeting any GAP certification requirements.
- ◆ Telling your story is a great marketing technique, such as providing farm photographs, product information, and personal insights into your farming operation and what sets you apart. This information can be used by the retailer to add to the marketability of your product.
- ◆ Marketing yourself through a distributor may mitigate challenges presented by selling directly to the retailer, such as storage, temperature control, and transportation, especially since deliverability between the producer and retailer is often inefficient.
- ◆ Given VDACS statewide support for farming businesses, they might be able to serve as a middle point between producers and restaurants.
- ◆ It could be helpful to have a real-time statewide database of producers, which includes producer inventory and delivery capability. This would allow for more effective communication between both parties on the product being sold.

Producer Checklist

- ◆ Is the retailer independent or part of a regional or national chain?
- ◆ Does the retailer advertise its interest in sourcing locally grown produce? If so, who is the point of contact for purchasing your product—is the person located locally/regionally or at a corporate headquarters?
- ◆ What food safety policies does the retailer have? Do they require a 3rd party food safety audit, such as Good Agricultural Practices (GAP) certification? If so, which specific audit scheme is required (USDA GAP, Harmonized GAP, other)?
- ◆ Are there other food safety considerations that your buyer requires, such as a HACCP (Hazard Analysis and Critical Control Point) plan implemented in your operation?
- ◆ If training and/or audits are required, does the retailer provide any sort of incentive or cost share to support producers?
- ◆ Have you considered acquiring a certification such as Certified Organic or fair trade in order to boost your marketability?
- ◆ What are their needs in terms of volume and product characteristics, handling such as pre-washing, storage, and transport, and delivery schedule? Are you able to meet all these needs?
- ◆ Have you considered using a local food-hub or other intermediaries to alleviate possible logistic issues such as transport or meeting volume needs?



Sources of fresh produce for retailers showing various access routes for producers.
Graphic by Sarah Gugercin, Department of Horticulture, Virginia Tech.

Resources

Grower's Manual: A Template for Grower Cooperatives

http://lib.dr.iastate.edu/leopold_pubs/papers/80/

National Retail Report - Specialty Crops

<https://www.ams.usda.gov/mnreports/fvwretail.pdf>

Virginia Department of Agriculture and Consumer Services (VDACS)

<http://www.vdacs.virginia.gov/food-food-safety-and-consumer-protection.shtml>

Virginia Market Maker

<http://ext.vt.edu/agriculture/market-maker.html>

Wholesale and Retail Product Specifications: Guidance and Best Practices for Fresh Produce

<https://www.cefs.ncsu.edu/ncgt/wholesale-and-retail-product-specs.pdf>

Virginia Fresh Produce Food Safety

<http://www.hort.vt.edu/producesafety/>

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Accessing Virginia's Regional Wholesale Market Sector: Fresh Produce Food Safety Considerations

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Despite the growing demand and support for local food, there can often be significant barriers for growers trying to tap into new markets, given specific food safety expectations, policies, and requirements. This trend is particularly true for institutional buyers, who are often constrained by far-reaching institutional and/or corporate policies. While there are lots of market opportunities in Virginia, navigating the landscape for growers can be daunting, since buyer food safety requirements are not a “one size fits all” standard for all markets. To better understand current expectations and perceptions across multiple market sectors in Virginia, and help producers better align their on-farm practices with these marketplaces, the Fresh Produce Food Safety Team conducted a state-wide market assessment survey in 2015-2016. The purpose of this factsheet is to provide you with the results of that work, especially if you are considering selling produce to wholesalers.

Regional Wholesale Sector

If you're looking into selling to regional food hubs and wholesale market distributors, this information is for you! Let's start off by clarifying the difference between a wholesale distributor and a food hub: A regional wholesaler is a centrally located facility with a business management structure facilitating the aggregation, storage, processing, distribution, and/or marketing of locally/ regionally produced

food products. On the other hand, a regional food hub is a business or organization that actively manages the aggregation, distribution, and marketing of source-identified food products primarily from local and regional producers to strengthen their ability to satisfy wholesale, retail, and institutional demand. Regional food hubs provide an integrated approach with many potential benefits, including expanded market opportunities for agricultural producers, job creation in rural and



Photo: Amber Vallotton

urban areas, and increased access of fresh healthy foods for consumers, with strong potentials to reach underserved areas and food deserts.

As an example of a Virginia food hub operation, we've featured the Local Food Hub here (see our resources listing for the Local Food Hub and other similar aggregators in Virginia). The Local Food Hub aims to partner with Virginia farmers in order to increase community access to local food; reaching out to them may be a good place to start! The Local Food Hub currently partners with more than 60 small family farmers throughout Virginia and believes that paying a fair price is the most important thing they can do for farmers. They also emphasize the importance of how both themselves and the growers should know that training, technical assistance, cost-share opportunities, and networking are all critical to helping reinstate small farms as the food source for the community. Through the Local Food Hub, Charlottesville schools were able to provide monthly lunches from the local farmers partnered with Local Food Hub. While starting off small in their produce supply to local schools, the Local Food Hub has a goal of growing that supply each year. Because of the aggregation of products and their branding, the Local Food Hub has been able to tap into many other markets, which might have been inaccessible for producers unable to meet volume demands and other important logistical considerations.



Photo: Amber Vallotton

As a producer, sourcing through a food hub or distributor can be a great way to go since it provides many advantages.

Many farmers and ranchers are challenged by the lack of distribution and processing infrastructure of appropriate scale that would give them wider access to retail, institutional, and commercial foodservice markets, where demand for local and regional foods continues to rise. Regional food hubs have emerged as an effective way to overcome these infrastructural and market barriers. For those smaller and mid-sized producers who wish to scale up their operations or diversify their market channels, food hubs offer a combination of production, distribution, and marketing services that allows them to gain entry into new and additional markets that would be difficult to access on their own. For larger producers, food hubs can provide product-differentiation strategies and marketing services that ensure the highest price in the market place. Moreover, for wholesalers, distributors, retailers, and foodservice buyers who would like to purchase larger volumes of locally and regionally grown products, food hubs lower the transaction costs by providing a single point of purchase for consistent and reliable supplies of source-identified products from local and regional producers."

James Barham, USDA Agricultural Marketing Service, *Regional Food Hubs: Understanding the Scope and Scale of Food Hub Operations*.

Survey Highlights

All of the respondents reported that they procure daily during peak seasons for various produce items. The main purchasing priorities for wholesalers were quality, third party food safety audits, availability, adequate liability insurance, and delivery capabilities. The barriers identified with this sector included insufficient volume of deliverable produce, as well as corporate restrictions that would otherwise hinder the sale of produce to the institution. Maintaining third-party food safety certification is often standard

practice in the wholesale market, although with food hubs, there is more flexibility and room for on-boarding. It is likely wholesalers and aggregators would increase their purchase of Virginia-grown produce if more Virginia growers could meet requirements for food safety and provide proof of liability insurance. This sector in particular may be of interest to local producers who lack adequate means to transport their product, or to maintain proper temperature control in relation to food safety regulation. Distributors often have access to advanced food delivery logistics, and in many cases can circumvent some of the hurdles that a local producer may encounter. Since product is being aggregated, uniformity and consistency can be streamlined and maintained—something that is especially important for certain market sectors like schools and institutions. The wholesale route can also remove much of the hassle factor felt by producers when conducting multiple direct transactions with buyers.

Purchasing Priorities

- ◆ Quality
- ◆ Food Safety Certification
- ◆ Availability
- ◆ Grower/Producer Liability Insurance
- ◆ Delivery Capabilities

Barriers to Purchasing

- ◆ Insufficient Volume
- ◆ Corporate Requirements/Policies
- ◆ Product Consistency
- ◆ Lack of Product Diversity
- ◆ Grower Lack of Understanding of Buyer Requirements

Recommendations

- ◆ Larger distributors may work with smaller, local aggregators or food hubs to source locally-grown food from small farms. Thus, consider working through a smaller intermediary aggregator.

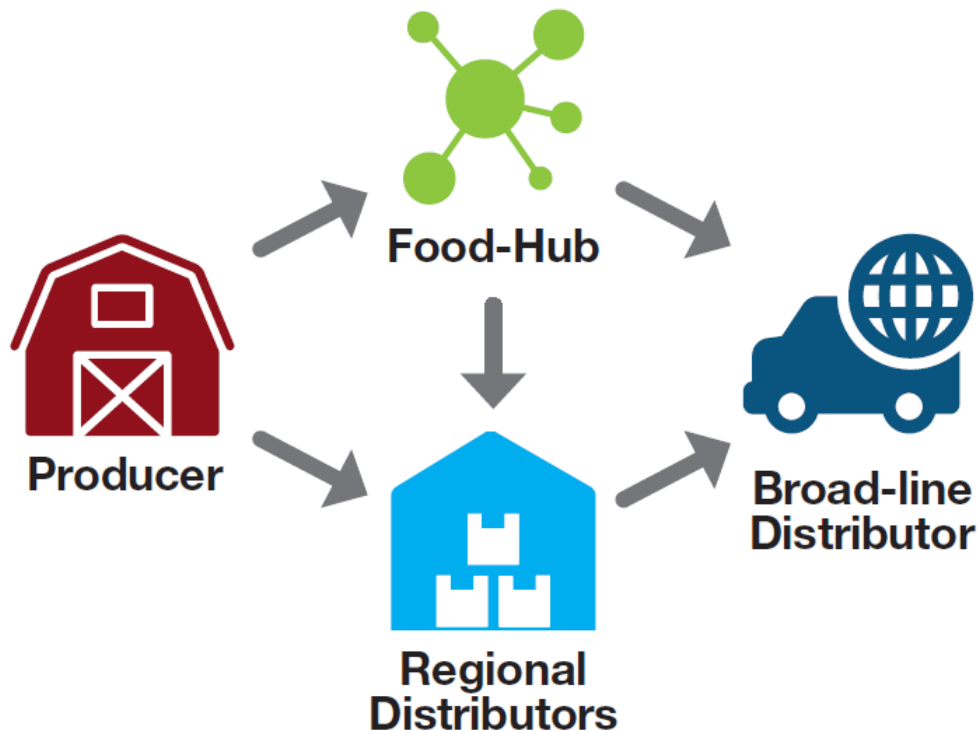
- ◆ Consistent communication with your prospective wholesale buyer is critical to your success in this market sector.
- ◆ Maintaining third-party food safety certification is often standard practice in the wholesale market. It is likely wholesalers and aggregators would increase their purchase of Virginia-grown produce if requirements for food safety could be met by more Virginia growers.
- ◆ It is important to ask a potential buyer specific questions about what audit schemes or sections of particular audits they require, and whether they have an on-boarding policy that allows for transition time to achieve higher levels of certification.
- ◆ Remember that some buyers may provide assistance to growers in the form of audit cost-share or training opportunities, so be sure to ask!
- ◆ Make sure you are familiar with the Food Safety Modernization Act (FSMA) Produce Safety Rule (PSR) regulations and how they affect you as a producer. In many cases, wholesalers may want you to receive PSR training, along with any GAP certification requirements.



Photo: Mark Sutphin

Producer Checklist

- ◆ Have you considered the pros and cons by choosing to sell your product to a regional wholesaler or food hub? While there are many advantages to selling via a wholesaler, there can also be disadvantages like obtaining a lower price per unit. Since there is less or no direct end-user interaction, explore whether or not that aspect of marketing is valuable to you—some producers love the face-to-face relationships, whereas others are happy to let someone else handle that part of the process!
- ◆ What food safety policies does the wholesaler have?
- ◆ Do they require a 3rd party food safety audit, such as Good Agricultural Practices (GAP) certification? If they do not, are there other food safety requirements such as implementation of particular GAPs like regular water testing, handling, traceability, worker training, packaging, etc.? If they do require an audit, which particular scheme?
- ◆ Do they require training in the Produce Safety Rule?



Sources of fresh produce for wholesalers showing various access routes for producers. While product may move from a regional food hub or wholesaler to a broad-line distributor, typically product is distributed to other markets, such as public schools, institutions, restaurants, and retailers.

Graphic by Sarah Gugercin, Department of Horticulture, Virginia Tech.

Resources

Food Hubs

Clarifying the Regional Food Hub Concept

https://wrdc.usu.edu/files-ou/publications/pub_4203234.pdf

National Good Food Network

<http://www.ngfn.org/resources/food-hubs>

Regional Food Hubs

<https://www.uky.edu/Ag/CCD/marketing/foodhubs.pdf>

Regional Food Hubs Resource Guide

<https://www.ams.usda.gov/publications/content/regional-food-hub-resource-guide>

Regional Food Hubs: Understanding the Scope and Scale of Food Hub Operations

https://www.dvrpc.org/food/pdf/2011-05-06_barham_supplementalmaterial.pdf

Wholesale Markets

How to Sell Produce Wholesale

<http://asi.ucdavis.edu/programs/sarep/research-initiatives/fs/supply/breaking-into-selling-wholesale>

Wholesale and Retail Product Specifications: Guidance and Best Practices for Fresh Produce

<https://www.cefs.ncsu.edu/ncgt/wholesale-and-retail-product-specs.pdf>

Wholesale Success

<http://www.familyfarmed.org/publications/wholesale-success/>

Some Virginia Wholesale Markets

Appalachian Harvest

Appalachian Sustainable Development's rural food hub that sources local produce from southwest Virginia and northeastern Tennessee.

<http://asdevelop.org/ah/>

Local Food Hub

Located in Charlottesville, Virginia, the Local Food Hub sources locally produced foods to institutions, retailers, restaurants, and schools in the region.

<https://www.localfoodhub.org/>

Produce Source Partners

Virginia's largest independent produce distributor with expertise in procurement and a commitment to supporting local growers.

<http://producesourcepartners.com/>

Southwest Farmers Market

This GAP-certified market distributes local produce to regional grocery store chains. Located in Hillsville, VA.

<http://swvafarmersmarket.org/wholesale/>

On-Farm Food Safety and Certifications

National GAPs Program

<http://gaps.cornell.edu/educational-materials>

USDA GAP/GHP Audit Program

<https://www.ams.usda.gov/services/auditing/gap-ghp>

Virginia Fresh Produce Food Safety

<http://www.hort.vt.edu/producesafety/>

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Disclaimer: Commercial businesses are named in this publication for informational purposes only. Virginia Cooperative Extension does not endorse these businesses over other ones, nor does it intend discrimination against other businesses which also may be applicable.

ESTABLISHING A MARKET PERSPECTIVE

Preface: The following pyramid suggestions are provided based on the assumption that your product idea has already been established.



Your target market is the specific type of consumer that your product is being provided for. The variety of people groups that you are aiming to provide for can be as specific or as vast as you see fit.



Before entering a specific marketplace (area of the economy that you are looking to penetrate) as a local grower, it is critical that you consider what the recent trends have been, what future trends are projected to be, and what competition exists in the marketplace.



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IDENTIFY PURCHASING PRIORITIES & MARKET BARRIERS

Purchasing Priorities: how are you delivering your good, what inputs are you required to obtain in order to provide your good/service, what volume are you operating at, etc.?

Market Barriers: what is potentially standing in your way as far as actually providing your good? Have you looked at pertaining FDA and/or USDA regulations? Are you familiar with new FSMA regulations?



DEVELOP BUSINESS PLAN

This is probably the most important big picture item to consider. For any potential producer's business plan, the following need to be considered:

Business Description: what type of local grower are you? What are your goals? This doesn't have to be too lengthy, just long enough to get your point across to anyone who comes across it.

Products & Services: give details on everything you are bringing to the table.

Sales and Marketing: just because you can pay for something, doesn't mean you can afford it. Be very strategic and thoughtful about this portion of your business plan; consult an ag-lender or a financial advisor before moving forward with your business to make sure your operation is feasible (provide them with a financial summary). Consider how you will be marketing your product, especially at the beginning, to get the word out (flyers in local-grower-friendly grocery stores, banners at farmer's markets, etc.)

Operations: define and outline the details of your operation such as where your headquarters are, where and how you can be contacted, your employees, legal relationships/partners, suppliers, credit policies, etc.

Contingency Plan: this is also a profoundly important part of your business plan. Contingency plans project future circumstances that may arise. Example, in the event that you do meet your sales goals, what are the next steps? Or alternatively, in the event you do not meet your sales goals, how do you plan to recuperate, do better next time, and account for that loss? You can never be over prepared.



MARKET PENETRATION

You made it! You're finally out there providing your good/service. How are you going to maintain your setup? After being in the marketplace, are there things you've discovered you don't need, things you should have established, etc.? Now is the time to make note of what you can do better for the upcoming seasons.



SUSTAIN BUYER RELATIONSHIPS

In other words, establish customer loyalty and define what is necessary for you to maintain the relationships you've developed. On the other hand, there will be times when you need to compromise with a buyer agreement. Be sure you are taking all factors into consideration and don't be afraid to have to move on from a relationship that just isn't feasible anymore.

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Colleges and Universities Sector

OVERVIEW

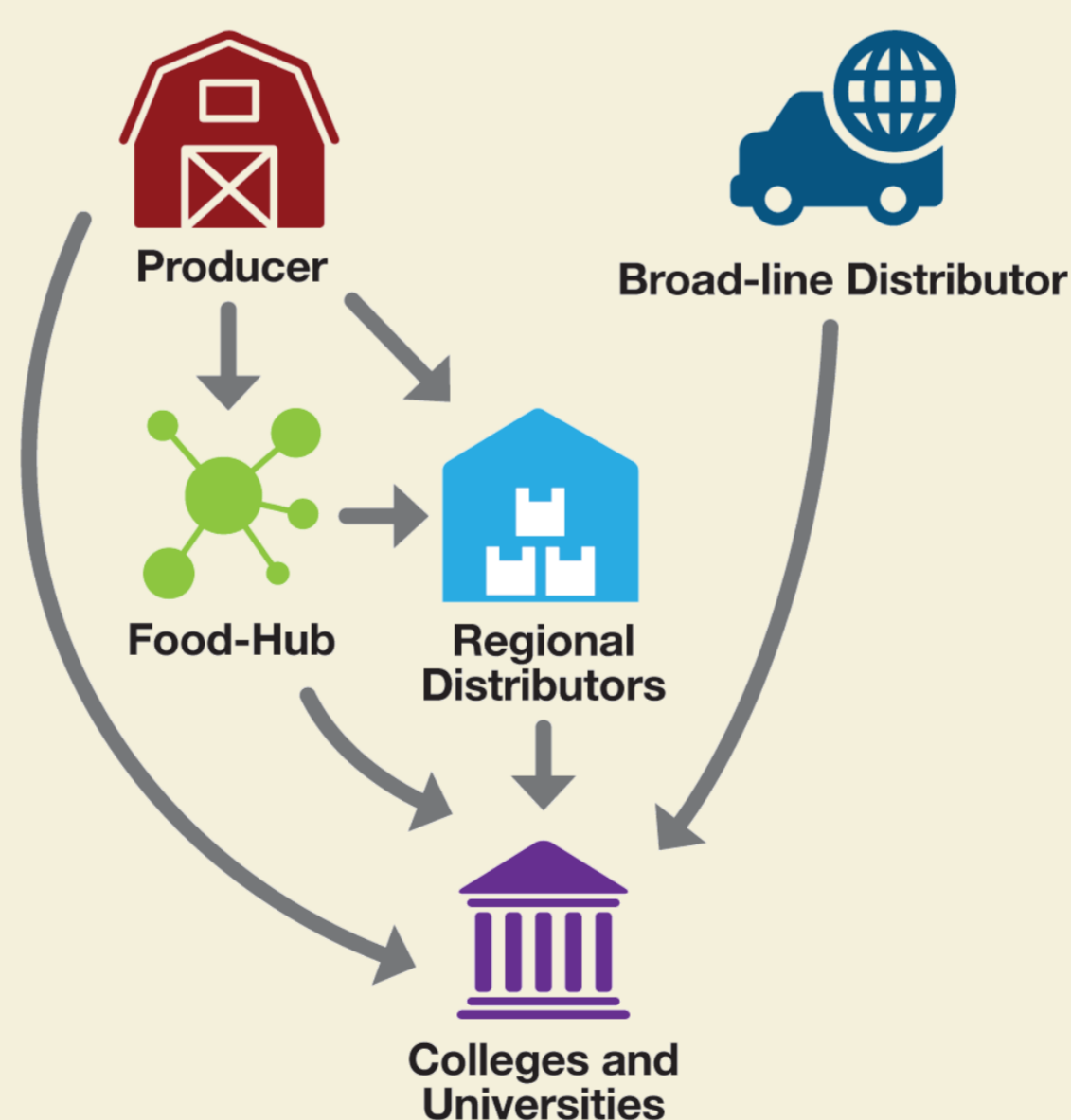
The College and University market sector is very unique in the sense that it can charge what it wants while still maintaining a steady demand. Why? Most freshmen at colleges and universities are required to both live on campus and purchase a meal plan, a meal plan of which has a fixed amount, and the plan only binding itself to the dining hall(s) on campus. In lieu of this required purchase, universities like Virginia Tech both ask for and attentively listen to the student's responses about their dining experiences and requests. With the current millennial generation being the majority in colleges and universities today, we can assume one thing: a greater demand for healthier, locally grown, "natural" foods.

BARRIERS TO PURCHASING

- Insufficient volume of product
- Lack of intermediaries (Food Hubs, etc.)
- Delivery capabilities (Timing, Flexibility, etc.)
- Grower lack of understanding
- Failure to meet buyer requirements, needs, and processes, especially food safety

RECOMMENDATIONS

- Establish effective communication.
- Be cognizant of large volume needs of particular institutions; selling to them means being able to provide a consistent flow of product and meet exacting quality standards.
- Obtain and maintain third-party food safety certifications.
- Be aware that comprehensive liability insurance may also be a necessity in this market.
- Become familiarized with FSMA produce safety regulations and understand how they affect you as a local producer.



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Hospital Sector

OVERVIEW

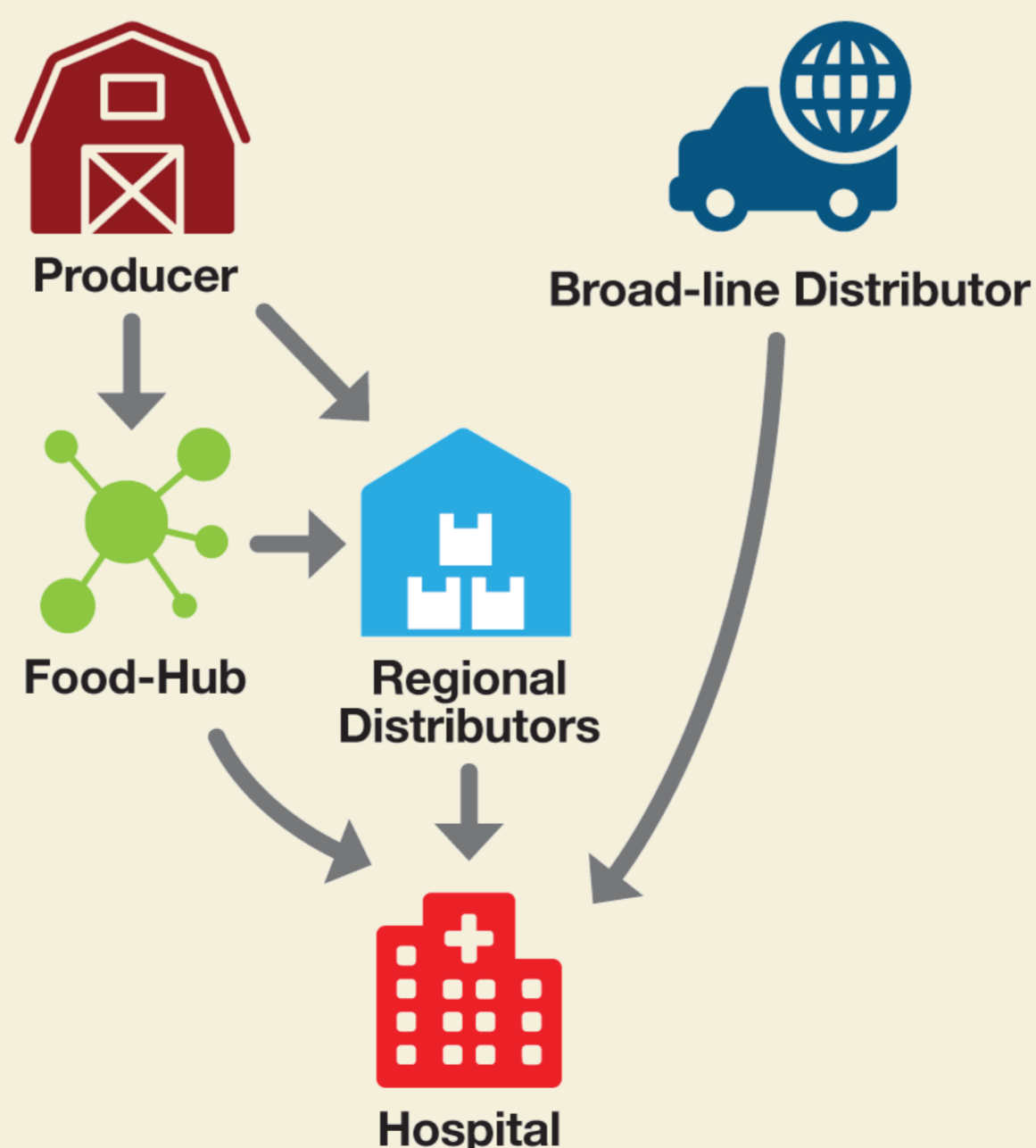
In Virginia, there are 92 acute care hospitals, with over 18,000 staffed beds. Urban hospitals (100+ staffed beds) have much higher patient volumes, as compared to rural hospitals (<100 staffed beds), thereby necessitating a higher number of meals served daily. Hospitals can vary greatly in terms of food service operations. Some hospitals prepare foods on site, while others prepare food off-site and ship it in, therefore only needing to heat and serve the food. Additionally, many hospitals have cafeterias or snack bars for visitors and staff.

ITEMS TO CONSIDER

- What is the size of the hospital? Is it a private hospital or part of a larger corporate structure?
- Have you considered how you will get in touch with the right person in regards to selling to a hospital?
- Have you considered using a local food-hub or other intermediaries to be able to tap into this market?
- Since the majority of people receiving your produce have a weakened immune system, have you obtained and are you maintaining third-party food safety certification?

RECOMMENDATIONS

- Hospital food procurement is one of the most complex purchasing systems, with an extensive hierarchy of management, personnel, and policy hurdles. Recognize that the person responsible for food procurement may not be flexible in their purchasing capabilities due to stringent corporate policies.
- Best on-farm food safety practices are critical!
- Be open to supplying rural hospitals, since smaller institutions may have less hurdles, thereby making it easier for local farmers to tap into these smaller hospitals.



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Direct-to-Consumer Sector

OVERVIEW

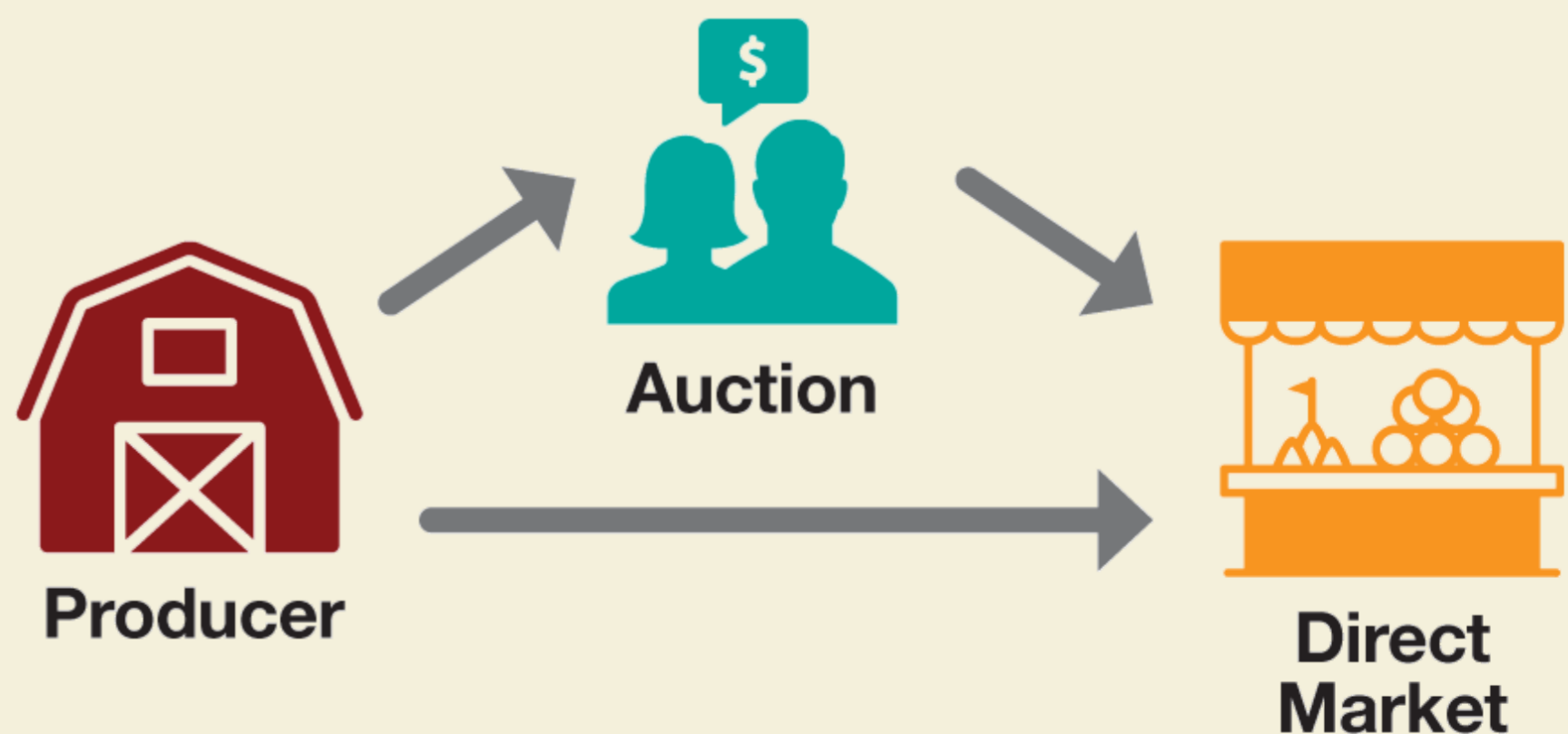
Fortunately, consumer interest in locally produced foods marketed directly through local food networks has been increasing. In a direct market that revolves around food procurement, producers and consumers interact (you guessed it) directly. But what does this look like? Local food networks utilize local supply chains such as direct market sales to consumers through CSAs, agritourism, farmers markets, farm stands, and other alternative outlets (see below). Additionally, the direct market sector offers feedback far more quickly than most other sectors, and is therefore a great choice for any beginning growers looking to get their feet wet and experiment. It's important to note, however, that as food safety laws continue to develop along with the general public's concerns with food safety, it is profoundly important that the local growers intending on selling directly in this sector familiarize themselves with current food safety practices, laws, and regulations.

PRODUCER CHECKLIST

- Have you met the regulations of the market you'd like to sell too?
- Have you contacted the supervisor of the market?
- Do you have a written food safety plan that may boost your marketability, as well as your credibility as a local producer?
- Have you considered the logistical hurdles of selling your own produce, such as safe transport, etc.?
- Are you capable of direct interaction with customers, the people who will be consuming your produce?

RECOMMENDATIONS

- Consider using season extension as a way to offer a more consistent supply of product, and also as a way to provide more niche products.
- The Virginia Market Maker was recently established as part of the national Market Maker program. Tap into this valuable resource as a way to promote your business (see resources).
- Having a simple written food safety plan and practices in place is important to demonstrate your awareness of the importance of food safety and a commitment to produce quality and freshness.



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Public School (K-12) Sector

OVERVIEW

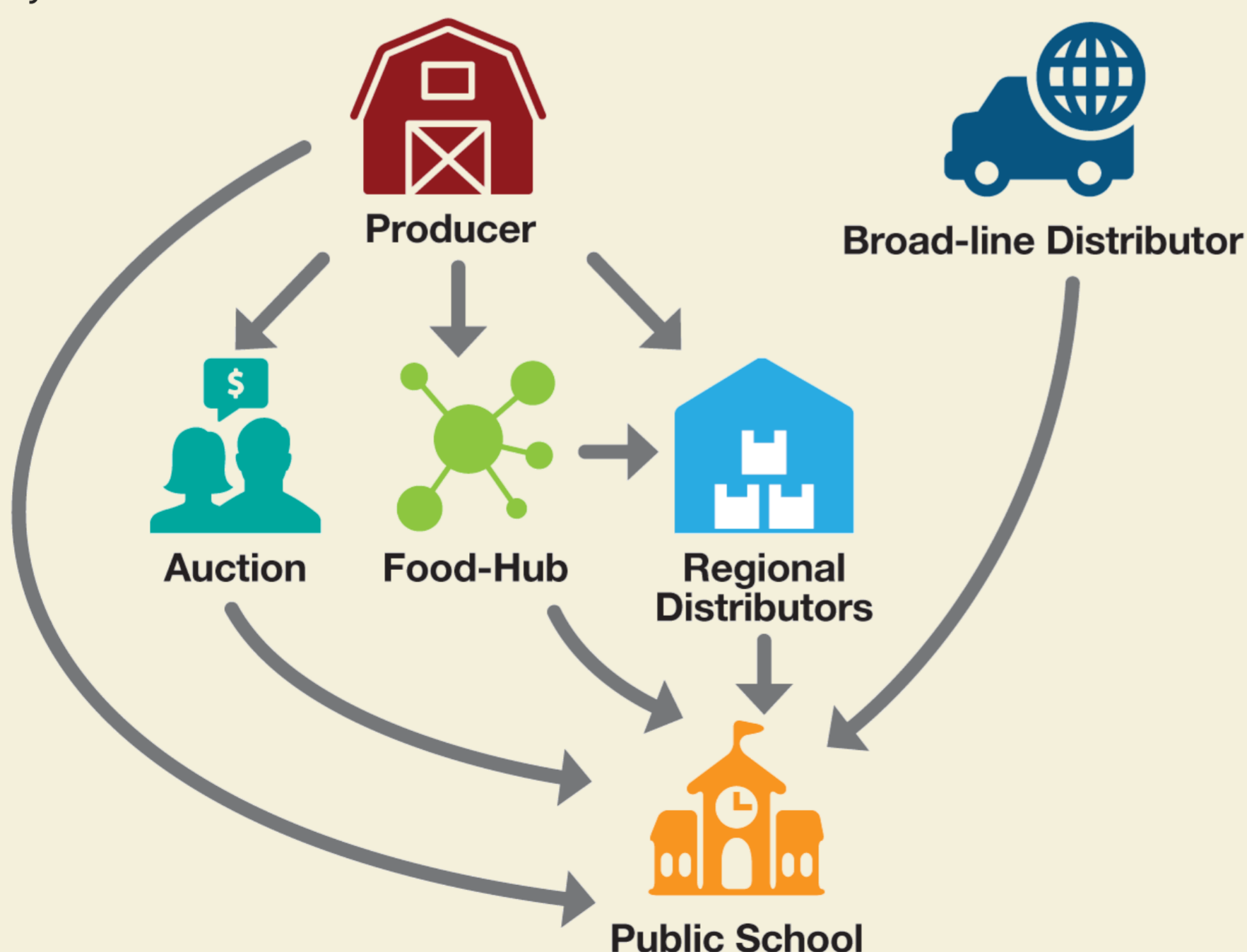
Similar to hospitals, public schools have contracts with vendors already set in place. Like college and university students, children in public schools can also put money towards a “meal plan”. Most public schools offer both breakfast and lunch and change the menu weekly. A growing number of schools are gradually transitioning from pre-made foods to more fresh, scratch cooked options. Given the emphasis on fresh fruits and vegetables, there is an opportunity for local growers to gain greater access to public school systems.

RECOMMENDATIONS

- Be aware of the size of the school district and the amount of flexibility they may or may not have to procure locally sourced products; smaller school districts are generally easier to tap into.
- Work with schools in close proximity to your farm to mitigate issues related to delivery and low-volume orders.
- Be open to selling to a local food hub or distributor, who may already have a business relationship with the school system.

PRODUCER CHECKLIST

- Have you considered the size of the school system?
- Have you considered if the school system has a contract with a larger food service company?
- Do you need a 3rd party safety audit, such as GAP, or Good Agricultural Practices certification?
- Do you know if the school would like you to have a HACCP plan implemented in your operation?
- Have you considered using a local food-hub or other intermediaries to alleviate possible logistic issues such as transport or meeting volume needs?
- Have you considered taking part in various programs such as a fresh fruit and vegetable initiative, Farm-to-School month, etc.?



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Restaurant Sector

OVERVIEW

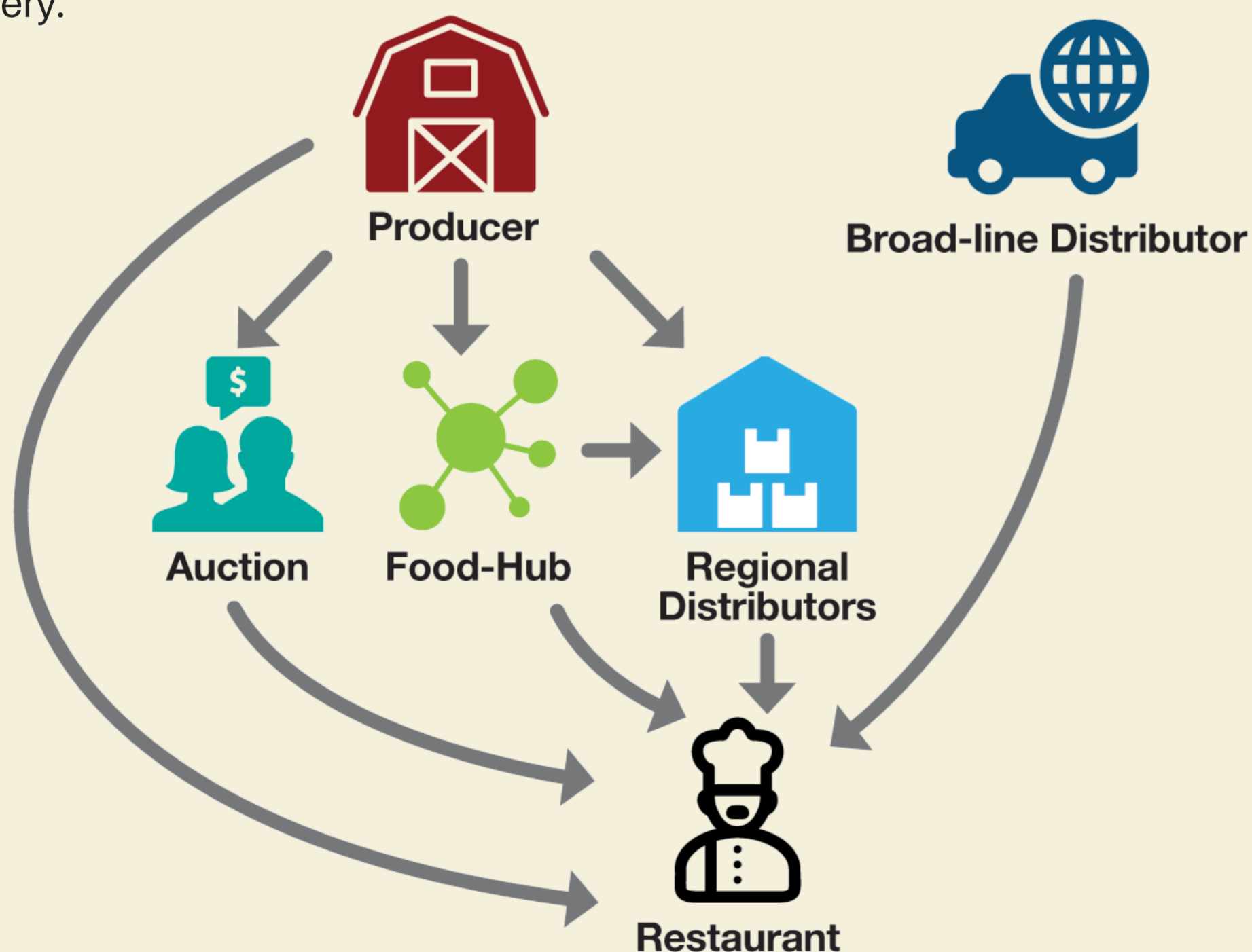
The restaurant market sector is one of the most diverse sectors when it comes to food procurement practices. As you've noticed, each restaurant has its own style, theme, cuisine, targeted palette, atmosphere, and so on. There are many competitors in this market sector and a broad variety of options. For example, when you dine-in at a [sit-down] restaurant, you are essentially paying for both a good and a service, whereas fast-food restaurants eliminate the extra costs of service by allowing food purchases to have near-instant delivery.

RECOMMENDATIONS

- Build relationships with purchaser and establish a regular communication schedule that takes into account the daily work-flow at the restaurant operation.
- It's important to be aware of the type of restaurant (i.e. "mom and pop" vs. chain).
- Chain restaurants are inherently more stringent on food safety policies, so make sure to ask about vendor food safety requirements. Yet just because some restaurants are chains, does not mean they will not source locally.

PRODUCER CHECKLIST

- Is the restaurant a "mom & pop" or chain restaurant?
- Is the restaurant interested in sourcing locally grown produce? If so, do they require a 3rd party food safety audit, such as Good Agricultural Practices (GAP) certification?
- Are there other food safety considerations that your buyer requires, such as a HACCP (hazard analysis and critical control point) plan implemented in your operation?
- Are you able to be punctual in terms of delivery, should you choose to transport your own produce?
- What are the restaurant's needs in terms of volume and product characteristics, handling such as pre-washing, storage, and transport, and delivery schedule? Are you able to meet all these needs?



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Retail Sector

OVERVIEW

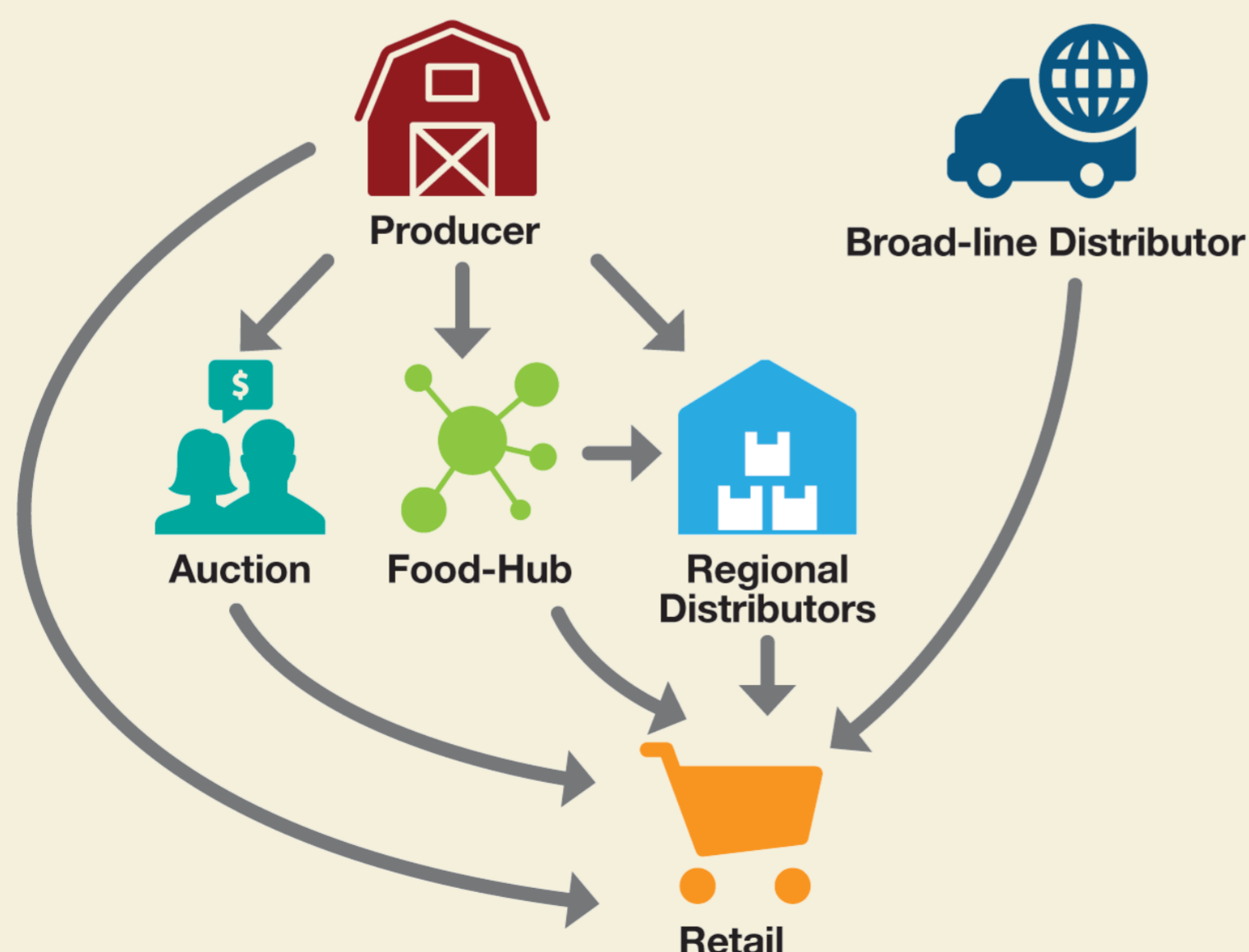
The retail market sector often has the most convenient locations, longest duration of operating hours, and the lowest price (and therefore the most competitive price). Retail powerhouses that carry produce, such as Walmart and Target, purchase the goods they're selling from wholesalers and sell those goods at a higher price. Clever, right? The main operating format for retailers is to sell directly to consumers rather than producers or intermediaries; note that there are several different types of retail markets.

RECOMMENDATIONS

- Be aware of the type of retailer (i.e. "mom and pop" stores vs. chain stores) and their readiness to source locally. This includes corporate policies as well as size limitations of the produce being sold.
- Remember that it is likely retailers would increase purchasing VA-grown produce if more producers met food safety requirements.
- Given VDACS statewide support for farming businesses, they might be able to serve as a middle point between producers and retailers.

PRODUCER CHECKLIST

- Have you looked into whom you have to get in touch with in order to sell your product to a retailer?
- Have you considered acquiring a certification such as Certified Organic or fair trade in order to boost your marketability?
- Have you considered selling to stores that advertise themselves as selling local fresh produce?
- Have you considered if you need a 3rd party safety audit, such as GAP, or Good Agricultural Practices certification?
- Have you considered if your buyer requires, or would like you to have a HACCP (hazard analysis and critical control point) plan implemented in your operation?



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Wholesale Distributor Sector

OVERVIEW

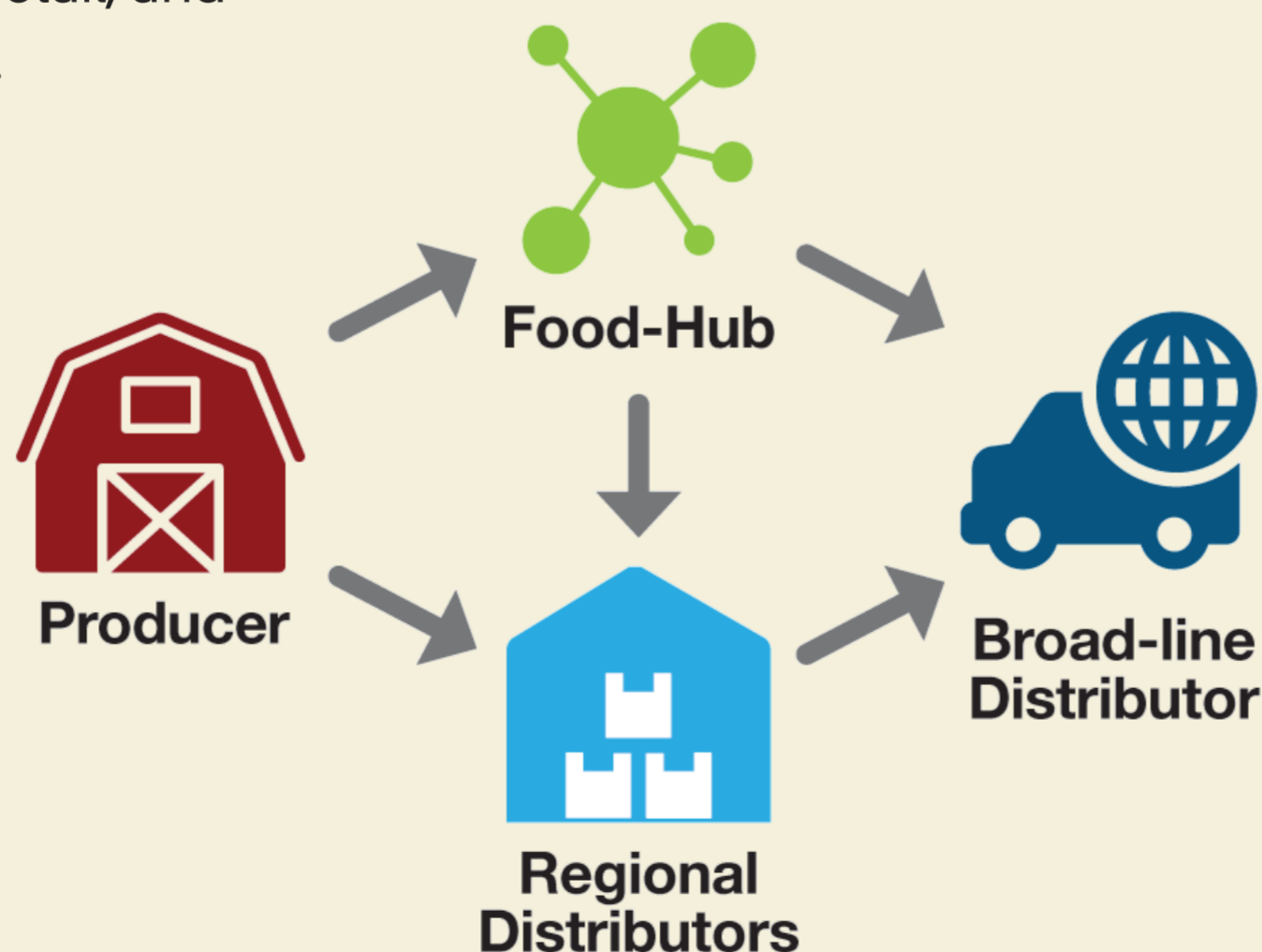
If you're looking into selling to regional food hubs and wholesale market distributors, this information is for you! Let's start off by clarifying the difference between a wholesale distributor and a food hub: A regional wholesaler is a centrally located facility with a business management structure facilitating the aggregation, storage, processing, distribution, and/or marketing of locally/ regionally produced food products. On the other hand, a regional food hub is a business or organization that actively manages the aggregation, distribution, and marketing of source-identified food products primarily from local and regional producers to strengthen their ability to satisfy wholesale, retail, and institutional demand.

ITEMS TO CONSIDER

- Have you considered if you need a 3rd party safety audit, such as GAP certification?
- Have you considered if your buyer requires, or would like you to have a HACCP (hazard analysis and critical control point) plan implemented in your operation?
- Have you considered the logistical issues alleviated by choosing to sell your product to a distributor or wholesaler?
- Have you considered that you may have to display your knowledge of sound food safety practices?

RECOMMENDATIONS

- It is likely wholesalers and aggregators would increase their purchase of Virginia grown produce if requirements for food safety could be met by more Virginia growers.
- Ask a potential buyer specific questions about what audit schemes or parts they require, and whether they have an onboarding policy that allows for transition time to achieve higher levels of certification.
- Make sure you are familiar with the new FSMA regulations and how they affect you as a producer.
- Consistent communication with your prospective buyer is critical to your success as a local producer.



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WHAT YOUR PRODUCE SUPPLIERS NEED TO KNOW

Sourcing locally grown produce has increased among many market sectors. Conveying to producers the different priorities that you have as a buyer is critical. Some of the important factors that will help them know what you need are highlighted below.



COMMUNICATION

Make sure all your expectations, needs, and requirements are clearly conveyed, and encourage the producer to do the same. Good communication will foster strong relationships and keep everyone involved on the same page.



PRODUCT VOLUME

The deliverable volume or amount of actual produce you need is important to state, and also related to the specified units or way you prefer to have the product packaged and delivered.



PRICE POINT

Many factors can influence the prices you agree upon with the producer. Make sure to provide a mutually agreed upon form of compensation and manner in which that payment will be provided.



DELIVERABILITY

Communicating the transport logistics such as timing, location, holding, and transfer of product is vital to the business relationship. Having back-up plans for any unforeseen circumstances is also very important.



FOOD SAFETY

Food Safety standards and verification are often non-uniform in different market sectors, so make sure you clearly state your required food safety practices, certifications, and documentation.



LIABILITY

Closely related to food safety requirements is whether or not a producer must have liability coverage. Make sure to communicate the minimum amount, if any, that is needed for you to purchase their products.

Written and designed by Alexandra Battah, Ryan Knox, and Amber Vallotton.

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Virginia Higher Education Symposium on Sustainable Food Supply Chains

University of Virginia Morven Farm

December 8, 2017

Sponsored by

UVA Dining

UVA Sustainable Food Strategy Task Force

UVA Sustainable Research Development Grant

Desired Symposium Outcomes:

- Increased understanding of the barriers and possible strategies to overcome the barriers to university purchase of sustainable foods
- An action research agenda to be pursued by participating universities, individually or jointly
- Specific partnerships between institutions to work together to develop a supply chain for specific sustainable foods
- Pilot projects that may be undertaken individually or jointly
- Commitments by individual participants to work together to advance the goals of increasing university sustainable food purchase

9:00	Networking Reception and Posters
10:00	Welcome, Symposium Goals, Agenda, Introductions
10:10	Special Guest Speaker: Dr. Basil I. Gooden, Secretary of Agriculture and Forestry
10:35	What is AASHE STARS?
	<ul style="list-style-type: none"> • <i>Samantha Jameson, Sustainability Coordinator, UVA and JMU, Aramark</i> • <i>Nina Morris, Program Manager of Outreach and Engagement, Office of Sustainability, UVA</i> • <i>Andrea Trimble, Director of the Office of Sustainability, UVA</i>
10:50	4VA – Background and Accomplishments
	<ul style="list-style-type: none"> • <i>Andrew Wingfield, Director of Environmental and Sustainability Studies, School of Integrative Studies, George Mason University</i> • <i>Paul Freedman, Professor of Politics, University of Virginia</i>
11:10	Sustainable Food Supply Chain Success Stories
	<ul style="list-style-type: none"> • <i>Matt Rogers, Residential District Manager, University of North Carolina – Wilmington, Aramark</i> • <i>Participant Success Stories</i>
12:00	Special Guest Speaker: Dorothy McAuliffe, First Lady of Virginia
12:30	Collaboration and Networking Lunch
1:15	Developing Options for Partnerships, Pilot Projects and Action Research
	<i>Carousel process with three small groups, facilitated with recorders</i>
2:15	Developing and Refining University Collaboration Action Plan
	<i>Small group work with strategic planning worksheets</i>
2:45	Sharing Final Collaboration Plan
3:10	Next Steps for Sustaining the Collaboration
3:30	Adjourn

Hello all:

To help strengthen ties between food producers, distributors, and schools, VDOE and supporting partners plan to sponsor regional networking meetings over the winter. As a component of the USDA Farm to School grant, there is funding available to help us implement these trainings. I can develop MOUs to help guide your respective contributions. Would you be interested in helping grow Farm to School and market opportunities to support rural sustainability throughout Virginia?

I would like to find a time to brainstorm the meeting agenda the training workshops. Will you please note your availability in this Doodle poll and then we can plan a conference call.

<https://doodle.com/poll/gub9nr7tgh2qt3np>

Thank you!

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