

# VALUE-ADDED AGRICULTURE

## A REGIONAL FOCUS



Baltimore  
Metropolitan  
Council

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## Executive Summary

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Value-added agriculture (VAA) is a growing component of Maryland's agricultural landscape in the Baltimore metropolitan area (BMA), incorporating the City of Baltimore and Anne Arundel, Baltimore, Carroll, Harford and Howard Counties. VAA—the business of transforming a raw agricultural material into a product with much more value—is considered both agricultural processing and manufacturing, and yields the additional benefits of job creation and tourism in unique locations.

In May 2016 Grow & Fortify, LLC was retained by the Baltimore Metropolitan Council to conduct a qualitative analysis of the economic impact and opportunities of VAA in the BMA, with a focus on the labor market. An advisory committee of nine representatives from county and city agencies, organizations, and businesses was established from the outset to provide feedback and guidance on the project.

Through surveys, interviews and focus groups, case studies and recommendations were developed to highlight the opportunities—and many challenges—facing this rapidly evolving industry. The case studies portray the breadth of the industry, while the recommendations provide a precise path forward for jurisdictions to better accommodate the industry and facilitate its growth.

### RECOMMENDATIONS

**Recommendation #1:** Collaboration among government and educational sectors to conduct a semi-annual study to assess the potential and growth of VAA businesses by developing a comprehensive database of these businesses, and through the collection of employment data.

**Recommendation #2:** Work with local agricultural leaders and support organizations—such as soil conservation, agricultural marketing, economic development, farm bureau—to emphasize the need for locally sourced raw ingredients.

**Recommendation #3:** Encourage property owners (and would-be property owners) to utilize the use of open space and land preservation programs to expand the inventory of raw agricultural ingredients within the BMA needed to support VAA and food entrepreneurs.

**Recommendation #4:** Create VAA and food entrepreneurship development and incubation zones where startups can co-locate, share costs and test products.

**Recommendation #5:** Create policies through legislative and regulatory action that encourage growth and expansion of food and agricultural business opportunities, including defining sales of VAA products as accessory retail instead of “commercial,” and allowing visitors and promotional events.

**Recommendation #6:** Convene a meeting at least once annually to collaborate among city, county and state agencies to encourage the establishment of food and agricultural support businesses, such as malting, milling, canning, and co-packing, animal processing, cooperages, etc.

**Recommendation #7:** Connect businesses to existing grant, loan and tax credit incentive resources and programs.

**Recommendation #8:** Tailor grant, loan and tax credit incentive programs to incorporate the size and scale of VAA and food businesses.

**Recommendation #9:** Evaluate requirements of programs against those offered by private banks to simplify and streamline the application process.

**Recommendation #10:** Create promotional guides to generate awareness of VAA and food-processing businesses through the jurisdictional tourism or economic development agencies.

**Recommendation #11:** Create and fund grant/loan programs for farmers (new, beginning, value-added and diversifying), and incorporate matching funds through MARBIDCO, where applicable.

**Recommendation #12:** Fund and support an Agricultural Economic Development Specialist in every jurisdiction.

**Recommendation #13:** Create annual tours of VAA operations by elected officials, administrative and regulatory staff to gain greater understanding and appreciation for local food and agriculture businesses and the challenges they face.

**Recommendation #14:** Through training, develop consistency among state and county inspectors to streamline inspection and permitting processes.

**Recommendation #15:** Clearly outline expectations via written checklists prior to inspections.

**Recommendation #16:** Designate a permitting navigator to guide new and expanding value-added producers through the review process.

**Recommendation #17:** Work with local and state agencies (including Agriculture, Planning, Health & Mental Hygiene, Environment, Fire Marshal) to resolve difficult permitting situations through alternative means and exceptions, where appropriate.

**Recommendation #18:** Establish definitions and uses in zoning code for value-added processing and food production businesses in appropriate zones, including agricultural, manufacturing, commercial/retail.

**Recommendation #19:** Create a culture of business development within various permitting agencies to ensure all staff, processes, policies and programs—from intake through permitting and inspections—are working to support businesses while fulfilling their regulatory responsibilities.

**Recommendation #20:** To the extent practicable, routinely evaluate and work to streamline the timeline of the permit processes and procedures to support business development.

**Recommendation #21:** Create allowances for secondary use of on-farm public and private promotional events and tours to encourage the promotion and sale of products produced on the farm.

**Recommendation #22:** Create workforce development and training programs tailored to food and VAA businesses.

## SECTION I: Project Development and Objectives

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### OVERVIEW

In May 2016 Grow & Fortify, LLC was retained by the Baltimore Metropolitan Council to conduct a qualitative analysis of the economic impact and opportunities of value-added agriculture (VAA) in the Baltimore Metropolitan Area (BMA)—the City of Baltimore and Anne Arundel, Baltimore, Carroll, Harford and Howard Counties—with a focus on the labor market. An advisory committee of nine representatives from county and city agencies, organizations, and businesses was established from the outset to provide feedback and guidance on the project. Members include:

- Lisa Barge, Agricultural Business Development, Anne Arundel County Economic Development Corporation
- Lynda Eisenberg, Chief, Bureau of Comprehensive Planning, Carroll County
- Bruce England, Executive Director, Susquehanna Workforce Network, Inc.
- Alex Galbreath, Owner, Falling Branch Brewery, Harford County
- Jason Gallion, Agricultural Specialist, Harford County
- Kathy Johnson, Agricultural Development Manager, Howard County Economic Development Authority
- Dan McNeill, Owner, MISCellaneous Distillery, Carroll County
- Kedrick Smith, Chief Operating Officer, Huckle's Brand, Baltimore City
- Sara Trener, Business Development Representative, Baltimore County Department of Economic and Workforce Development

## OBJECTIVES

The study has several objectives:

- Measure the impact of products developed from agriculture grown in Maryland where the value-add occurs in the BMA;
- Quantify the number of producers that utilize at least one Maryland grown ingredient in their products;
- Identify the potential opportunities for VAA producers and small food businesses in the BMA;
- Outline the ways in which county and regional agencies and organizations might continue to, or better support these sectors of the local agriculture and food economies.

## SCOPE OF THE STUDY

The study will:

- Develop a VAA industry profile, including documenting and analyzing current labor market conditions and the economic impact to the BMA;
- Include a diverse cross-section (both geographically and in size) of businesses/producers;
- Document and analyze challenges to—and projected growth of—VAA in the BMA, including opportunities to source new or additional raw agricultural ingredients locally;
- Document available government subsidies or programs that support the VAA industry, as well as statutory or regulatory restrictions at the County and State level; and
- Develop recommendations for local and state government to support the growth of VAA in the BMA.

Although there were limitations on available data, the use of existing data, surveys, the advisory committee, and case studies helped to determine labor profiles, formulate recommendations and develop an overall understanding of the industry.

## DEFINITION OF VALUE-ADDED AGRICULTURE

For purposes of this study, value-added agriculture will be defined as follows:

*The adding of value to raw agricultural products by producers, processors, and/or small food business owners who use at least one Maryland grown ingredient, and where said processing is done in the BMA. Value is added by business practices that include:*

- *The segregation of products along identity and/or production characteristics;*
- *The physical change and /or repackaging of a product through processing activities;*
- *Agritourism ventures that provide an educational and/or interactive component to the public in connection with the production and/or processing of agricultural products;*
- *Forestry and energy industries that convert raw products into biofuels and/or consumer goods.*

*All of which add additional value to raw agricultural products from Maryland producers and meet a demand by consumers.*

## SECTION II: Maryland's Agricultural Industry

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### A SNAPSHOT OF MARYLAND AGRICULTURE

Maryland is often described as America in miniature, and for good reason. With 10,460 square miles of land and water, the state's agricultural diversity is one of its strengths. Although poultry is the largest sector of Maryland's farming industry, a sampling of almost every major crop grown in the United States can be found somewhere in the state. Even though Maryland's land mass is small in comparison to neighboring states, the geography is diverse, which helps create the right growing environments for a wide variety of products, giving credence to the "America in Miniature" moniker. The range of animals and seafood produced alone is impressive; it includes horses, chickens, cattle, hogs, goats

and sheep, emus, alpacas, rabbits, turkey, fish and crustaceans. According to data from the Center for a Livable Future, the total number of farms in Maryland in 2012 amounted to 12,256.<sup>1</sup> Poultry is the heavyweight of Maryland agriculture, ranking eighth in the nation for selling 304.7 million broilers, and 40.6 percent of the market value of Maryland agriculture products sold comes from poultry and eggs.<sup>2</sup> The chickens produced in Maryland account for nearly \$1 billion in sales, and make up 41 percent of Maryland farm cash receipts.<sup>3</sup> These sales include all types of poultry products, but Maryland’s greatest strength in this area is in the sale of “broilers,” or chickens intended to be eaten for their meat.

Although poultry is the largest industry, approximately 69 percent of Maryland farmland is in crops. According to the 2012 USDA Census of Agriculture, Maryland produces more grains than any other food product. Leading the pack is corn for grain, with 2.8 billion pounds produced each year. The majority of this is used for livestock feed, seed, and industrial uses; very little is used for direct human consumption. Table 1 shows the acreage dedicated to grain:

Table 1: 2013 Harvested Grain and Soybeans Acreage in Maryland

Acres	Product
480,000	Soybeans
420,000	Corn
260,000	Wheat
52,000	Barley

(Source: NASS USDA, 2013 Statistics)

As one of the state’s most important economic sectors, farming and forestry directly contributes more than \$8.25 billion annually. Although the poultry industry is the largest single component to the state’s agricultural economy, Maryland’s numerous industries have a significant impact overall, according to a study published by the Department of Agricultural and Resource Economics in the College of Agricultural and Natural Resources at the University of Maryland.<sup>4</sup>

“Using input-output analysis, the study takes into account the numerous industries that provide supplies and services necessary to process, manufacture and package products grown and harvested from Maryland’s farms and forests. UMD researchers found that for every dollar generated directly by agriculture or forestry industries, 45 cents was added to other sectors in the state; and, for every five jobs generated in these industries, three additional jobs were created around the state. The total economic impact of Maryland agriculture amounted to \$8.25 billion annually and 45,600 jobs.”<sup>5</sup>

Along with traditional crops, the nursery/greenhouse and equine industries, agritourism, dairy, livestock, fruit and vegetable production, forestry and the development of niche market products demonstrate the diversity and innovation of Maryland farmers. As a result, agriculture is one of the state’s most important economic sectors, vital to Maryland’s quality of life, as well as its social, economic, and environmental well-being.

## AGRICULTURAL TRENDS

At the same time that agriculture’s importance to the state’s bottom line is recognized, there are also negative trends, nationally, related to agriculture’s potential future. In recent years, economic pressures have caused farms and small-food businesses across the United States to struggle.<sup>6</sup> *The Washington Post* - using data from the United States Department of Agriculture (USDA), and the Agricultural Marketing Resource Center (AgMRC) - reported that mid-size farms are closing throughout the country. “The top 10% of farms in terms of size account for more than 70% of cropland in the United States; the top 2.2 percent alone takes up more than a third,” wrote author Ferdman.<sup>7</sup> Despite this, the amount of land dedicated to farming has not drastically diminished; meaning farmland is increasingly being managed by large business operations.<sup>8</sup> This consolidation of farms has been occurring over the past several decades.<sup>9</sup>

Data also shows that farmers earn much less from the final sale of products than they did in past decades.<sup>10</sup> In 2014, the *farm share* (the amount received by farmers from the sales of raw food commodities) of the food dollar was 17.2

percent. The remaining 82.8 percent, the *marketing share*, accrues to food supply chain industries involved in all post-farm activities that culminate in final market food dollar sales.<sup>11</sup>

The University of Maryland College of Agriculture and Natural Resources produced a report, "The Impact of Agriculture on Maryland's Economy," which details the importance of agriculture and forestry to the state's bottom line. In 2012, farm sales totaled approximately \$2.3 billion.

- In 2010, the agricultural sector accounted for over \$4.7 billion in direct output and more than 22,000 jobs. Indirect and induced impacts from the agricultural sector added another \$2.03 billion to the Maryland economy.
- In 2010, the forestry sector accounted for over \$877.5 million in direct output and over 2,000 jobs. Indirect and induced impacts from the forestry sector added another \$446 million to the Maryland economy.<sup>12</sup>

## AGRICULTURE IN THE BMA

The challenges facing American farmers and food businesses also impact the state of Maryland. According to a 2013 study on Maryland's agricultural industry by the National Agriculture Statistics Service (NASS), the number of farms across the state fell between 2007 and 2012, showing a 5 percent decline.<sup>13</sup> Data from the NASS, excluding Baltimore City, shows that this statewide trend can be seen in the BMA as well, with four of the five counties experiencing farm loss during the same period.<sup>14</sup> Agriculture plays an important part in these counties, and as such, rural communities in the BMA have been seeking ways to maintain the farmland and small-food businesses that are an essential part of their local economies.

Broadly stated, the BMA's agriculture has historically benefitted from its proximity to the City of Baltimore, established in 1729. The northern counties, and their network of streams and rivers leading into the Chesapeake Bay, encouraged the growing, milling and transportation of wheat to the city, for export to European and West Indies markets. Canning, which began with oysters in the 1840s, expanded to fruits and vegetables during the Civil War. While the canning was primarily done by Eastern Shore counties, fruits and vegetables

from BMA counties went directly to canning operations. In 1933, Baltimore had 36 canneries, and was one of the chief canning cities in the United States.<sup>15</sup>

Agriculture has played an essential role in the history of the BMA and continues to be a vital component of the region's economy today. County statistics are available thanks to the work of the Johns Hopkins Center for a Livable Future Maryland Food System Map Project, along with a joint 2013 study between the Maryland Department of Agriculture and the NASS. Individual county profiles and statistics can be found in Appendix 1.

According to 2012 data, farm numbers and product value, per BMA county, are<sup>16</sup>:

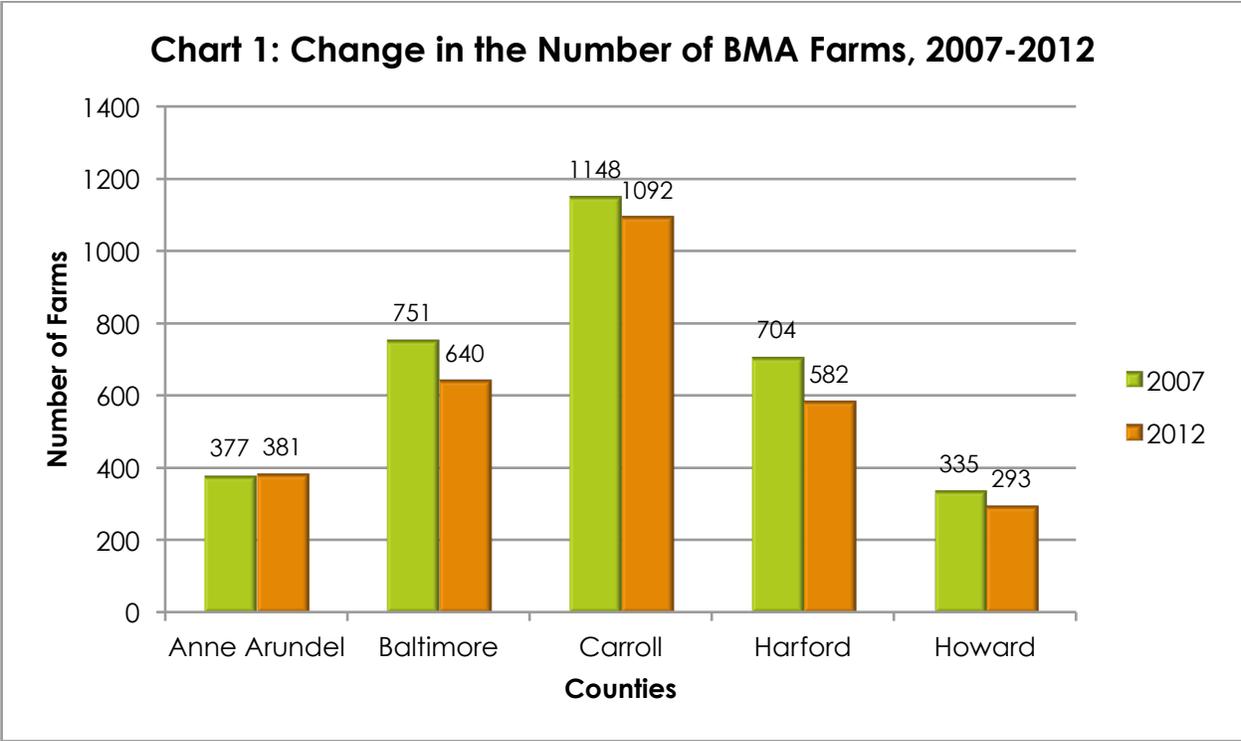
Table 2: Farm Numbers and Product Value

County	Farms	Product Value
Anne Arundel	381	\$19,670,000
Baltimore	640	\$76,306,000
Carroll	1092	\$111,637,000
Harford	582	\$46,002,000
Howard	293	\$32,883,000

(Source: USDA NASS, 2012 Census of Agricultural County Data)

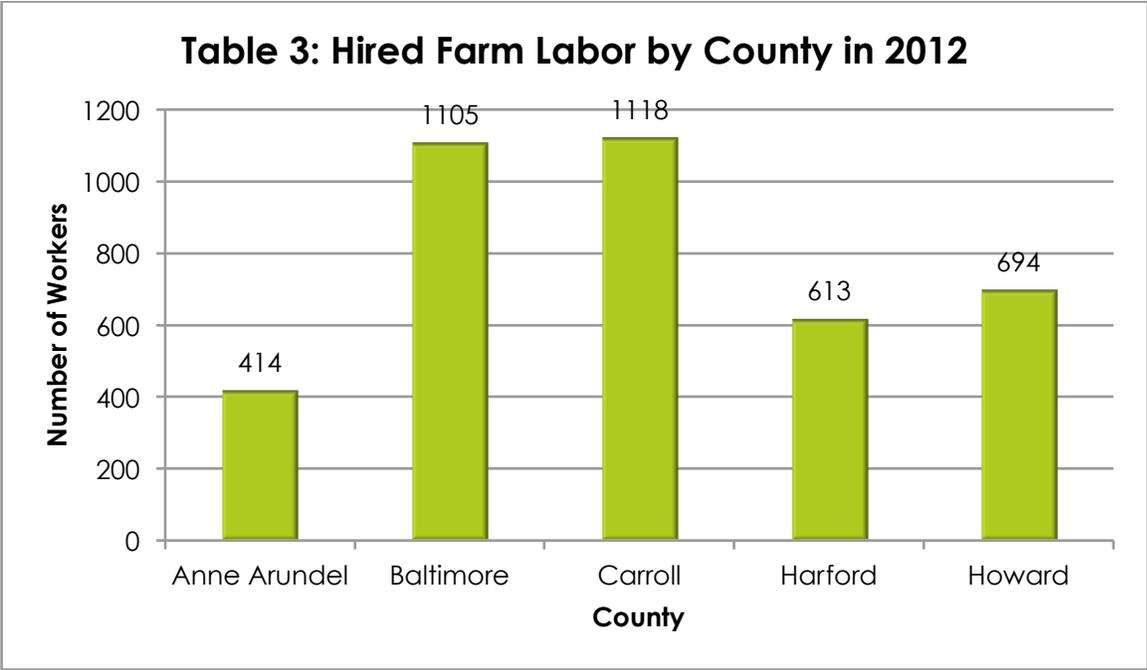
Appendix 2 provides context for the number of farms and value of products sold in the BMA counties; paired with the Maryland Department of Planning Land Use maps it is easier to see where agriculture operations are located, or clustered, in each county.

The 2013 NASS study's data contains the same figures for number of farms by county as of 2012, but also provides figures for 2007. According to their data, the total number of farms has fallen within four out of the five counties from 2007 to 2012. Chart 1 reflects this change.



Source: USDA National Agricultural Statistical Service and Maryland Department of Agriculture. *Agriculture in Maryland, Summary for 2013*

The Center for a Livable Future also provides labor figures based on the “total number of hired workers” per county as of 2012. According to their data, there were 14,705 workers throughout Maryland hired for agricultural work in 2012. Within this figure, Carroll County has the largest amount of labor at 1,118 workers. Following Carroll County are Baltimore County and Howard County at 1,105 and 694 workers respectively. Harford County and Anne Arundel County follow with 613 and 414 workers respectively.<sup>17</sup>



Source: USDA, NASS, 2012 Census of Agricultural County Data

The available statistics reveal that agriculture plays a pivotal role in the counties in the BMA. Thousands of jobs are provided by the industry and it is important to seek ways to support the local food producers that play an important part in the region's local economy.

The Center for a Livable Future does not include a profile for Baltimore City as it does for the other counties, but has done extensive research on food access challenges for city residents and identifying "food deserts". Baltimore City defines food deserts as an area where residents must travel more than one-quarter of a mile to reach a supermarket; the median household income is at or below 185 percent of the federal poverty level; over 30 percent of households lack access to a vehicle; and the supply of healthy food is low.<sup>18</sup>

The City of Baltimore's Office of Sustainability does gather data on urban agriculture in the city. In 2016 there were seventeen urban farms in Baltimore City, and fifty hoop houses (temporary structures covered in plastic that extend the growing season<sup>19</sup>) in operation, growing quality ingredients for the immediate area. Baltimore City also hosts 17 farmers markets, along with other

Community Supported Agriculture (CSA)\* programs<sup>20</sup> that meet the definition for VAA,<sup>21</sup> confirming that VAA plays an important role in all BMA localities.

Also, while the equine industry was not included in the scope of the study, it is important to recognize the role it has played in the BMA agricultural economy. The Maryland Jockey Club, created in 1743, is reputed to be the oldest turf horse racing organization in continuous existence in the country.<sup>22</sup> The impact of this industry can be seen in 2010 Equine Census numbers, the most recent statistics available.

Table 4: 2010 Maryland Equine Census<sup>23</sup>

COUNTY	Total Equine Inventory	Total Value Equine Inventory	Number of Equine Places	Total Equine Relates Acres	Total Number of People Involved	Total Assets (not including inventory value)	Total Capital Expenditure
Anne Arundel	4,500	\$39,773,000	1,690	10,200	2,050	\$252,207,000	\$39,994,000
Baltimore	8,950	\$100,389,000	1,540	20,500	3,030	\$828,953,000	\$13,145,000
Carroll	6,050	\$30,690,000	1,710	18,400	2,850	\$577,482,000	\$9,856,000
Harford	6,200	\$42,213,000	1,140	15,900	1,830	\$491,099,000	\$7,119,000
Howard	4,350	\$35,881,000	1,020	8,900	1,950	\$413,754,000	\$5,838,000

\* Community Supported Agriculture (CSA) consists of a community of individuals who pledge support to a farm operation so that the farmland becomes, either legally or spiritually, the community's farm, with the growers and consumers providing mutual support and sharing the risks and benefits of food production. Typically, members or "share-holders" of the farm or garden pledge in advance to cover the anticipated costs of the farm operation and farmer's salary. In return, they receive shares in the farm's bounty throughout the growing season, as well as satisfaction gained from reconnecting to the land and participating directly in food production. Members also share in the risks of farming, including poor harvests due to unfavorable weather or pests. By direct sales to community members, who have provided the farmer with working capital in advance, growers receive better prices for their crops, gain some financial security, and are relieved of much of the burden of marketing.

## SECTION III: Value-Added Agriculture

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### WHAT IS VALUE-ADDED AGRICULTURE?

Broken down to its simplest form, VAA is essentially altering or processing a raw agricultural product in a way to increase its worth to the consumer, and in turn, bring more revenue to the farmer, producer or processor. Adding value to agricultural products may be enticing to producers for three general reasons: (1) the higher returns that come with the investment; (2) the opportunity to open new markets and extend the producer's marketing season; (3) creating greater visibility and business opportunities for the farm operation.

Value-added products have increasingly entered the local market as producers take advantage of high-demand product niches. This is the key to success in value added agriculture: niche markets where smaller producers can be most successful in creating value and growing a potentially profitable business. However, as explained by researchers Ruoxi Lu and Rebekka Dudensing, "Traditionally, VAA was associated with the processing of raw products."<sup>24</sup> Because the notion of VAA is relatively new, multiple, albeit similar, definitions are currently available.<sup>25</sup> The Agricultural Marketing Resource Center (AgMRC) defines VAA as:

- A change in the physical state or form of the product (such as milling wheat into flour or making strawberries into jam).
- The production of a product in a manner that enhances its value, as demonstrated through a business plan (such as organically produced products).
- The physical segregation of an agricultural commodity or product in a manner that results in the enhancement of the value of that commodity or product (such as an identity preserved marketing system).

As a result of the change in physical state or the manner in which the agricultural commodity or product is produced and segregated, the customer base for the commodity or product is expanded and a greater portion of revenue derived from the marketing, processing or physical segregation is made available to the producer of the commodity or product.<sup>26</sup>

VAA serves as a possible opportunity for farmers and processors to increase profitability, engage additional generations of family into the business, and keep agricultural lands in agriculture. It's no secret that the average age of a farmer is on the rise. In fact, over the past 30 years, it has risen by nearly eight years to 59.2.<sup>27</sup> This presents both a challenge and an opportunity. There exists an opening for a new generation of farmers, but farming must prove profitable. According to a Farm Credit Council report, "Young, beginning and small farmers are well matched for meeting the demand for value-added, organic, and locally/regionally sourced foods."<sup>28</sup>

The AgMRC definition is comprehensive and addresses the various characteristics often used to identify a product as value-added, such as the production, segregating/marketing, or processing of a raw agricultural product to create the extra value for which consumers are willing to pay. Researchers Lu & Dudensing also explain that the United States Department of Agriculture (USDA) uses another definition for its "Value-Added Producer Grant Program," in which VAA is defined as:

- (1) The Agricultural Commodity must meet one of the following five value-added methodologies:
  - Has undergone a Change in Physical State;
  - Was Produced in a Manner that Enhances the Value of the Agricultural Commodity;
  - Is Physically Segregated in a manner that results in the enhancement of the value of the Agricultural Commodity;
  - Is a source of Farm-or Ranch-based Renewable Energy, including E-85 fuel;
  - Is aggregated and marketed as a Locally-Produced Agricultural Food Product.

(2) As a result of the Change in Physical State or the manner in which the Agricultural Commodity was produced, marketed, or segregated:

- The Customer base for Agricultural Commodity is expanded and;
- A greater portion of the revenue derived from the marketing, processing, or physical segregation of the Agricultural Commodity is available to the producer of the commodity.<sup>29</sup>

While definitions vary, it is clear there are common characteristics associated with value-added products such as physical changes to the product, production, and or identity/marketing characterizations like certified organic or labeling products as local. These various definitions may place characterizations in different categories, but all include similar qualities associated with value-added agricultural products.<sup>30</sup>

These common traits are included in the definition of VAA for this study, but with the requirement that processors or small food businesses source at least one raw ingredient from Maryland farmers, and processing takes places in the BMA.

## OUR DEFINITION OF VAA

As mentioned in the Scope of Work, using information from Lu and Dudensing, the AgMRC and USDA, VAA for the purpose of this study is defined as:

The adding of value to raw agricultural products by producers, processors, and/or small food business owners who use at least one Maryland grown ingredient, and where said processing is done in the BMA. Value is added by business practices that include:

- The segregation of products along identity and/or production characteristics.
- The physical change and/or repackaging of a product through processing activities.
- Agritourism ventures that provide an educational and/or interactive component to the public in connection with the production and/or processing of agricultural products.
- Forestry and energy industries that convert raw products into biofuels and/or consumer goods.

All of which add additional value to raw agricultural products from Maryland producers and meet a demand by consumers.

Although restaurants are an important outlet for Maryland grown ingredients, and chefs do turn a raw agricultural product into something of greater value, they were not included in the definition, because of the difficulty inherent in quantifying, and confirming, the actual number of restaurants sourcing local ingredients. For the same reason, although there are a number of large food processors in the region, it would be difficult to identify, and verify, how many were sourcing local ingredients. As a result, these businesses were also excluded from the definition.

In order to better explain how a value-added product is made, Graphics 1 and 2 illustrate the general process of making beer and producing cheese. Other VAA products may have fewer, or a great, number of steps, but these examples are designed to clearly outline the value-added process.



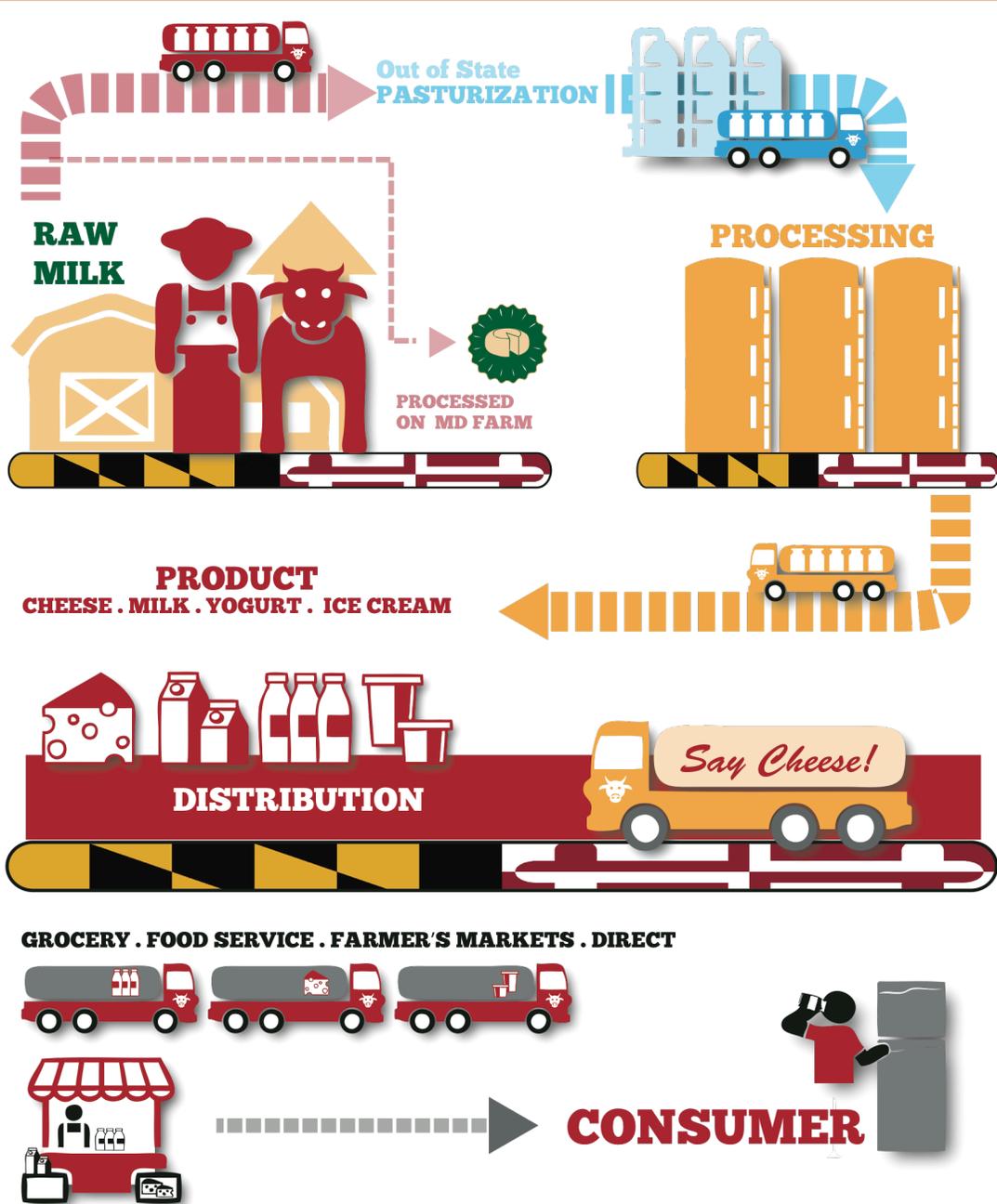
## Graphic 1: The Process of Making Beer

*Beer generally includes two key ingredients grown from the ground: barley and hops. Barley, which is allowed to germinate and then heated through a process known as "malting," gives beer its color, sweetness and even smoky or coffee-like characteristics. Hops give beer its bitterness and also lend floral, citrusy and piney flavors to the brew. Due to the limited number of malting facilities located in Maryland, most barley is grown and malted in other states. Only a small amount of barley is grown and malted in Maryland. Similarly, much of the hops used by Maryland brewers are imported from states on the West Coast, where climate and coordination of growers has created a consistent, affordable supply. By growing more hops and malting more barley locally, the beer production stream could retain additional economic value here in the BMA and Maryland.*

## Graphic 2: The Process of Making Cheese

*Much like beer production, the processing of raw milk into yogurt, some cheeses and other consumable dairy products requires pasteurization. Pasteurization is the partial sterilization of a substance and especially a liquid (as milk) at a temperature and for a period of exposure that destroys objectionable organisms without major chemical alteration of the substance<sup>31</sup>. Because of the regulations, and start-up costs related to dairy production facilities, many dairy farmers ship their raw milk to neighboring states to be pasteurized, and made into cheese, before the final product is returned to Maryland to be sold. By working with government to more strongly support the creation of Maryland dairy production facilities, the industry could retain more economic benefits locally.*

# MILK: IT DOES AN ECONOMY GOOD.



## BENEFITS AND OPPORTUNITIES FOR VALUE-ADDED AGRICULTURE

VAA is an emerging market that offers real opportunities to farmers, processors and small food businesses to grow their businesses and find financial stability. According to the AgMRC, “By adding value to farm products, this food processing sector is seen by some analysts as a key element in rural growth, as well as a way to enhance farm income and provide rural jobs.”<sup>32</sup> Consumers have been able to spend increasingly less on food, down to nine percent of their income in 2004, and appear willing to put more money towards higher quality, value-added foods.<sup>33</sup> About 75 percent of consumers consume locally produced food at least once per month, and almost 90 percent think local foods are very or somewhat important<sup>34</sup>. The motivations for local purchasing, according to a number of surveys, are freshness/superior quality, support for the local economy and local farms, and knowing the source of a product (Martinez et al., 2010).<sup>35</sup> The Global Food Forum compiles a list of the top food, beverage and nutritional product trends, including data from a dozen sources. The majority of lists include food products, or agricultural production methods (organic and local) that intersect with the definitions of value-added agriculture discussed in this report.<sup>36</sup>

This information indicates the potential tangible benefits VAA might have on BMA producers and small business owners who seek ways to expand their operations and ensure longevity.

The study, “The Effects of Agriculture on Maryland’s Economy” conducted by University of Maryland agricultural economists clearly identified the direct, indirect and induced impacts that agriculture has on the state economy. Indirect beneficiaries of a farm’s impact include suppliers of trucks, farm equipment, farm materials (fencing and other supplies). The indirect beneficiaries and agricultural workers then spend earnings on goods and services, such as housing, medical care, and haircuts, generating what Ferriss and Lynch term “induced jobs.”<sup>37</sup> Given that value-added agriculture is a component of the larger agricultural economy, we know that this sector contributes indirect and induced impacts. Because small food businesses that source local products—businesses not accounted for in the Ferriss and Lynch study—are also included in the study’s scope, their induced and indirect

impacts would also contribute positively impact to the state, and BMA, economy.

While small food businesses have traditionally been able to take advantage of county and state economic development programs, farm-based business loans and grant programs have been slower to establish support for the value-added component of agricultural based businesses. The USDA's Know Your Farmer, Know Your Food initiative, launched in 2009, was specifically designed to address the needs, of small- and mid-sized, new, beginning and direct-to-consumer famers.<sup>38</sup> Part of its mission was to adapt existing grant and loan programs, typically aimed at larger farms, and make these smaller agricultural-based businesses eligible for a greater percentage of Farm Bill funds.

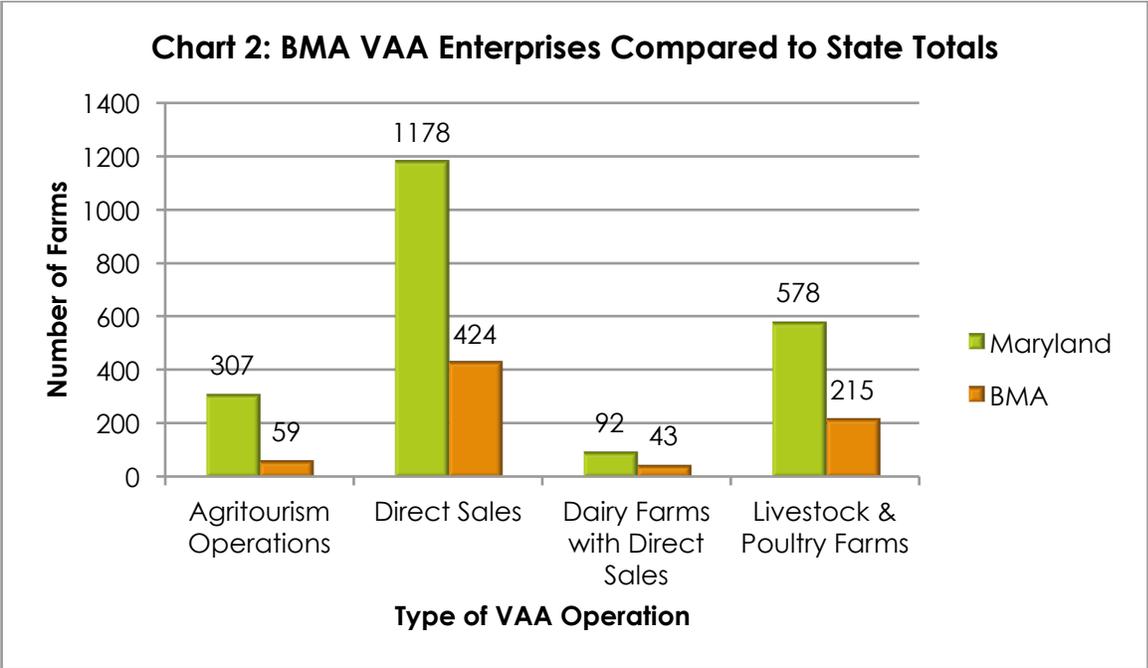
At the state level, in 2004 the General Assembly established the Maryland Agricultural and Resource-Based Investment Development Corporation (MARBIDCO) as a quasi-public corporation broadly authorized to: develop agricultural industries and markets; support appropriate commercialization of agricultural processes and technology; assist with rural land preservation efforts; and alleviate the shortage of nontraditional capital and credit available at affordable interest rates for investment in agricultural and resource-based businesses.<sup>39</sup> Additionally, in some cases, county level funding has also been dedicated to these businesses. Appendix 3 includes a chart of federal, state and local grant and loan programs that may be accessed by food businesses and/or agricultural producers. Eligibility may, or may not, be available to both.

## VALUE-ADDED AGRICULTURE IN THE BALTIMORE METROPOLITAN AREA

Beyond understanding agriculture from a state perspective, it is vital to look at VAA in the BMA to obtain a fuller grasp of the role these local producers, food processors and small-businesses play in their respective sectors, counties or City, and the region. Recommendations can then be made about ways to support these businesses and provide opportunities for growth.

Looking at county profiles, we are able to get a sense of the value-added industry in the BMA. In total, Maryland had a total of \$28,038,000 in direct sales of

farm products in 2012, with \$9,218,000 of those sales reported from farms in the BMA. Chart 2 gives an idea of how businesses within the BMA compare to Maryland totals.



Source: USDA, NASS, 2012 Census of Agriculture County Data, Table 6

### DATA AND METHODOLOGY

This study is a qualitative regional analysis on VAA in the BMA. The lack of available data from other studies on this relatively new industry prevented a quantitative approach. No studies on the industry have been conducted in Maryland, much less at a regional or county level. Quantitative studies on Maryland’s agricultural industry exist and include the impact on the state’s economy, along with profiles on agriculture in various counties. The information from these studies provides an overview of the role agriculture plays in Maryland and the BMA region, and is included as necessary.

Various methodological approaches were used to obtain data for a VAA industry profile, including:

- A thirty-four (34) question survey sent out to businesses throughout the BMA on questions about revenue, number of employees, and in what value-added practices they engaged. Surveys were disseminated by advisory committee members, local food and agricultural organizations, county agricultural economic development specialists, the Maryland Department of Agriculture, the Brewers Association of Maryland, the Maryland Distillers Guild, the Maryland Wineries Association. See Appendix 4 for the list of survey questions.
- Eighteen (18) one-on-one interviews and case studies were completed on three value-added producers or processors within each sector represented in Table 5. Similar questions from the surveys were used, but the focus was on discussions with the operators to provide an intimate look at value-added businesses and their products. Efforts were taken to ensure participants varied geographically for a diverse cross section of producers/businesses representation.
- Four (4) focus groups were also held at different locations around the BMA for value-added producers, processors and small food businesses to openly discuss their operations.
- Advisory Committee interviews were conducted to get as complete an overview as possible of all sides of this growing industry, as well as for direction of the study itself.

The information provided from these approaches gave valuable insight into the role VAA plays in the BMA. Combining the information gathered for this report with the data available from other studies on the Maryland agricultural industry as a whole, we are able to begin to understand the role VAA plays in the BMA.

## CASE STUDIES - A REGIONAL PROFILE

This study focuses largely on consumable products. Although both equine and greenhouse/nursery activities are considered important components of the BMA's agricultural economy, they were not included, in order to keep the study's focus on consumable products.

Because limited quantitative data is available, surveys and case study interviews were identified as the best ways to start to define, and understand, VAA in the

region. We hope this profile creates a framework upon which more in-depth quantitative studies may occur in the future.

Table 5 below shows value-added characteristics and how they were categorized for analysis. The classifications are not mutually exclusive, nor their examples entirely comprehensive. Producers, processors and small food businesses often fall within multiple categories and engage in VAA in a variety of ways.

Each category features three case studies, and survey data – both quantitative and qualitative – will be discussed for each category, as well as for the industry as a whole.

Table 5: Categories or “Buckets” of Value-Added Agriculture

<p><b>Farms/Agricultural Producers that Sell Products Segregated by Identity and/or Production Characteristics</b></p>	<ul style="list-style-type: none"> <li>● Local</li> <li>● Regional</li> <li>● Direct sales through farm stand or farm store</li> <li>● Sales through farmers markets</li> <li>● Community Supported Agriculture (CSA)</li> <li>● Third-Party Certifications (ie. USDA Certified Organic, Animal Welfare Approved, Non-GMO Verified, Demeter, Certified Naturally Grown, etc.)</li> <li>● Grass-fed (third-party certified or labeling claim)</li> </ul>
<p><b>Processors/ Small Food Businesses: Meat, Fruit and Vegetables</b></p>	<ul style="list-style-type: none"> <li>● Poultry (chickens, turkeys, quail, etc.)</li> <li>● Livestock (beef, hogs, sheep, goats, rabbits)</li> <li>● Butchers/Livestock Processors</li> <li>● Kosher</li> <li>● Halal</li> <li>● Fruit Processors (jams/jellies, pickled/fermented canned/jarred, dried/frozen, etc.)</li> <li>● Vegetable processors (canned/jarred, pickled/fermented, dried/frozen, etc.)</li> <li>● Honey</li> <li>● Baked goods</li> </ul>

<b>Processors/ Small Food Businesses: Repackaging</b>	<ul style="list-style-type: none"> <li>● Cleaning</li> <li>● Packaging</li> <li>● Drying</li> <li>● Milling</li> <li>● Malting</li> <li>● Pelletizing</li> </ul>
<b>Processors/ Small Food Businesses: Dairy</b>	<ul style="list-style-type: none"> <li>● Cheese</li> <li>● Ice Cream</li> <li>● Butter</li> <li>● Yogurt</li> <li>● Milk (fluid, on-farm processed and sold, flavored, etc.)</li> </ul>
<b>Processors/ Small Food Businesses: Beverages</b>	<ul style="list-style-type: none"> <li>● Beer</li> <li>● Wine</li> <li>● Distilled spirits</li> <li>● Ciders</li> <li>● Meads</li> <li>● Non-alcoholic beverages (soda, kombucha, etc.)</li> </ul>
<b>Other</b>	<ul style="list-style-type: none"> <li>● Agritourism</li> <li>● Energy</li> <li>● Forestry</li> </ul>

***Farms/Agricultural Producers that Sell Products Segregated by Identity and/or Production Characteristics***

These activities were grouped together in order to differentiate farms that sell directly to the public from farms that sell through wholesale avenues only. Additionally, production characteristics—USDA certified organic, grass-fed, Certified Naturally Grown—were also included in this category.

This category of farmers were the most likely to identify themselves as participating in more than one category or “bucket” of VAA: Of the 18 respondents who identified with this category, six fell into one category, eight fell

into two categories, three fell into three categories, and one with four categories of VAA activities. The most selected second category was Processors of Meats, Fruits, Vegetables, Honey, Baked Goods.

The majority of farmers in this category also reported that they sold their products through a minimum of two avenues; this diversification of sales outlets is a common characteristic of this category of agricultural producer, and provides safeguards against threats such as oversaturation in a particular market, an outlet not ending up being financially viable, or changes in product offerings.

Case Study 1:

## Calvert's Gift Farm: Baltimore County

Farms/Agricultural Producers: Products segregated by identity or production characteristics



**Owners:** Jack & Becky Gurley

**Employees:** 2 FT, 6 PT  
Equivalent/Seasonal staff.

**Skills Needed:** A willingness to learn and work hard; ability to sell product to customers; good service skills; and an understanding of how the produce is used and cooked.

**Location/Zone:** Baltimore County/Agricultural

**Sales:** Farmers Markets (45%),  
Chesapeake Farm to Table to  
restaurants (35%), CSA (15%)

**Source local:** Yes

**Produce local:** Yes

**Uniquity:** Oldest continually  
operating CSA in the state.

**Founded in 1996, Calvert's Gift Farm operates the oldest continually operating Community Supported Agriculture (CSA) program in the state. While listening to the radio, Jack heard about the concept of customers paying in advance for shares of a farm's products grown throughout the season. It seemed like a good idea, so they decided to give it a try.**

Because the Gurleys did not have experience with raising conventional produce, organic certification seemed a natural decision. In the initial years, they grew what they liked, but as time has gone by they have adapted their offerings to what customers want, which changes from year to year. In order to remain successful as a farmers market or CSA farmer, they believe they have to remain differentiated from grocery stores so customers find continued value in purchasing their products.

One hundred percent of their income is derived from VAA activities, which have recently expanded to include a new venture - Chesapeake Farm to Table - that offers chefs the ability to order local farm products online, and have them delivered right to their door. Their goal is to shift time and energy in that direction, as the demand for this service continues to grow.

The Gurleys would like to see more efforts to get small farmers the resources they need, especially on the marketing, promotion and pricing of products. They feel fortunate that the only loan they have taken out for the farm is for trucks and delivery vehicles. Expansion over the years has happened only as their personal finances allowed.

Case Study 2:

## Love Dove Farm: Howard County

Farms/Agricultural Producers: Products segregated by identity or production characteristics



**Owners:** John & Courtney Dove

**Founded:** 2010

**Acres:** 10

**Employees:** 1 FT/3 PT. Also offer farm internships. Hope to bring on a full-time farm manager within the next year.

**Skills Needed:** Positive attitude; agricultural experience preferred, but not required;

**Location/Zone:**  
Woodbine/Agricultural

**Sales:** Farmers Markets (80%), wholesaler (15%), CSA (5%).

**Source local:** Yes

**Produce local:** Yes

**As a fourth generation farmer on his Howard County family farm, John Dove set out to meet the needs of his community and support local agriculture. John was always passionate about farming, and after years of producing conventional crops, including hay, he took an interest in diversifying the family farm operation. After working on an organic farm, John adapted organic farming techniques and developed a new vision for his family farm.**

During year one of production, John and Courtney worked one acre of land. Every year they doubled their operation, and now work on a little over ten acres of land. They've also built five high tunnels to increase their production, and put up deer fencing to protect their produce.

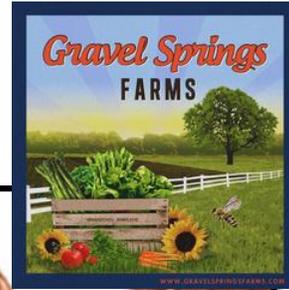
Currently their three sales outlets – farmers markets, wholesale and CSA – are not enough to sell and distribute everything that they grow. As a result, they're looking to potentially sell through local grocery stores. They sell to the Howard county Roving Radish meal preparation program, and the Chesapeake Farm to Table online platform, which connects farmers to restaurants, and allows for easier access and delivery options. If they move into the wholesale market they will need additional part time staff.

Love Dove was able to take advantage of MARBIDCO programs, as well as conducting their own crowdsourcing campaign to help fund their operation. As their market opportunities change, the Doves are keeping their business model flexible to be able to adapt from season to season.

Case Study 3:

## Gravel Springs Farm: Carroll County

Farms/Agricultural Producers: Identity or production characteristic



**Owners:** Paul & Emma Sorenson

**Founded:** 2010

**Employees:** 3 FT Seasonal

**Skills Needed:** Hard-work, understanding good agricultural and harvesting practices, how to market and display for retail markets.

**Location/Zone:** Union Bridge/Agricultural Zone

**Sales:** CSA, Farmers markets, restaurants. Grain sold to mill and directly to distillery.

**Source local?** Yes, when available.

**Produce local?** Yes

**Uniquity?** Growing rye for local distiller.

**Paul Sorenson, and his wife, Emma, moved from Capitol Hill in Washington DC, to Union Bridge when the opportunity to purchase Emma's family's farm became available. They had always been interested in gardening, and growing organic food, and Paul was ready to leave the political world behind.**

Their 80-acre operation includes certified organic vegetables and flowers, sold through a Community Supported Agriculture (CSA) program; corn and soybeans sold to a local mill; and rye, sold directly to another Carroll County business, MISCellaneous Distillery.

Most challenging to their business? Finding reliable, hard-working labor, and being able to make the financial investment in the good quality equipment needed to make growing a little easier and faster. Additionally, they continue to try to identify the most profitable niches in the marketplace; Paul sees malting grains (barley and rye) as a potential growth opportunity, as there is unmet demand from craft beverage producers.

With a farm location that can access the Baltimore-Washington marketplace, Paul sees tremendous opportunities for his business, as well as for value-added agriculture businesses across the state. To help those businesses, he would like to see stronger county and state support for agricultural businesses, such as the programs and incentives provided in Virginia, Pennsylvania and Vermont.

### ***Processors Small Food Businesses: Meat, Fruit and Vegetables***

This category includes livestock producers, animal processing facilities, kosher and halal certifications, fruit processors, vegetable processors, honey producers and bakeries/baked goods. It was intended to capture agricultural producers and businesses that transform raw agricultural goods, and/or livestock, into a value-added final product.

In several cases, there was overlap with the Identity/Production Characteristic category, which would be expected as many livestock and fruit and vegetable producers sell through the outlets identified in the first category, as well as use third-party certification programs to differentiate their products. Livestock producer respondents were the most likely in this category to have their product (live animals) sent outside of the state for processing. Reasons ranged from difficulty scheduling with Maryland processing facilities, ease of going to Pennsylvania and Delaware facilities, and a higher level of satisfaction with the quality of the processing, labeling and product quality.

Case Study 4:

## En-Tice-Ment Farm Meats: Anne Arundel County

Processors/Small Food Business: Meats



**Owners:** Deana, Joe, Jay, Brittany, Josh, Justin, Cody Tice

**Founded:** 1990

**Employees:** 8 PT

**Skills Needed:** Animal husbandry, managerial, accounting, organizational skills, long-term planning for animals & processors, customer service, able to sell product to the public.

**Location/Zone:**

Harwood/Agriculture

**Sales:** Farmers markets, on-farm.

**Source local?** Yes

**Produce local?** Yes

**Uniquity?** Raise livestock, and also have a horse boarding/riding operation.

**The Tices will tell you that it was 4-H that got them into the livestock business. Then one day Deana decided that cows would be a nice addition to some of the empty pastures around the farm. None of them expected for it to grow and to still be growing into the business it is today.**

Located on 80 acres in Harwood, the animals are raised naturally, although not organically. What started as raising animals for home consumption has expanded into a business that continues to grow, as more customers seem to want meat products from local farms. In fact, business is so strong at the retail level that they have given up wholesale sales in order to maintain the quality and quantity that their direct sales customers demand.

Breeding animals, and broiler chicks, come from both in- and out-of state sources, because no broiler hatcheries exist in Maryland. After trying Maryland processors, all of their meats are now processed at USDA facilities in Pennsylvania and Delaware because of the consistent processing, labeling, and final product quality.

Case Study 5:

## Atwater's Bakery: Baltimore City

Processor/Small Food Business: Bakery



**Owner:** Ned Atwater

**Founded:** 1999

**Employees:** Production Kitchen: 40, Retail locations: 210. 25 FT staff; 150 PT staff; 30 of the PT staff are seasonal.

**Skills Needed:** Culinary, customer service.

**Location/Zone:** 1 production kitchen, 6 retail stores, 1 farm

**Sales:** Retail stores, farmers markets, wholesale, online.

**Source local?** Yes

**Produce local?** Yes

**Uniquity?** Was local before local was a “thing”

**It started with Ned Atwater's love of baking, and seeing an opportunity at the burgeoning farmers markets in the Baltimore-Washington area to sell his breads. Fast forward 17 years; Atwater's now has a production kitchen, a small farm at that kitchen, six retail locations, stands at thirteen area farmers markets, and a growing online presence.**

They now make a variety of value-added products using local ingredients, including bread, baked goods, soup, ice cream, salad dressings, jams and fermented foods. Additionally, they also resell products from other farms and local food businesses in their retail stores.

Because they have such large grain needs, 70% of their bulk flour comes from outside the Mid-Atlantic region; 30% is sourced from regional farmers, with a small percent coming from Maryland. Challenges to sourcing in state include climate issues with growing the kind of wheat they need, lack of certified organic flour and milling facilities, and finally, shipping or pick up capability. They source almost all of their fruit, vegetables and berries from Maryland farmers, however.

The addition of the production kitchen was a large step forward for the business' ability to expand; the Baltimore City Economic Development Corporation was extremely supportive, and helped finance the purchase of the kitchen. Additionally, MARBIDCO and Mid-Atlantic Farm Credit provided loans to purchase 2 greenhouses to grow herbs and greens for making value-added products.

## Case Study 6:

### Local Homestead Products: Carroll County

#### Processors/Small Food Business: Meat, Fruit and Vegetables



**Owners:** Trevor Hoff and Victoria Robinson

**Founded:** 2011

**Employees:** 2 FT

**Skills Needed:** Work ethic and dependability are huge factors and hard to find. Customer service and the ability to sell product to the public are also needed.

**Location/Zone:** New Windsor/Agriculture

**Sales:** Produce, meats, pick-your-own, dairy & eggs, fresh chicken CSA

**Source local?** Yes

**Produce local?** Yes

**Uniquity?** On farm store sells product year round, and sources some from nearby farms.

**Trevor and Victoria want folks to know that just because farmers markets close, that does not mean that their cows stop producing milk. Their farm is open every weekend, all year, because farming is a year-round occupation.**

Located on just over 100 acres in New Windsor, the land has been farmed for over 100 years by five generations of families. Local Homestead Products began as a small produce stand that highlighted the importance of local products and supporting small family farms. They have since become a convenient, local, stop for many folks in the Carroll County area.

Today they work more as an aggregator. Meaning, not only do they sell their products, but they also sell some products from farmers nearby. This is a win-win, because Local Homestead Products is taking all the risk. They pay the other farmers up front for their goods, and then sell them at their market. For Trevor, developing a business model like this, just makes sense. "Selling only what you grow isn't sustainable. For example, when we don't have beef of our own, we turn to our neighbor, Spinning Wheel, who only sells through us."

With more and more folks moving into the rural areas, and their increasing desire to know where their food comes from, Local Homestead Products sees nothing but opportunity - especially with a location an hour from Baltimore and an hour from DC.

### ***Processors/ Small Food Businesses: Repackaging***

This category includes businesses that undertake the cleaning, packaging, drying, milling, malting or pelletizing of raw agricultural products.

As a category, this appears to hold the most potential for growth. Survey respondents who grow and raise raw agricultural products spoke of the difficulty of finding processing facilities within the state. The number of livestock processors has dropped statewide, almost no processing infrastructure exists for milling and malting, dairy producers opt to send their fluid milk out of state for processing into cheese, and bakers looking for milled flour for their goods tend to purchase out of state. These support businesses are an important part of the network of agricultural businesses that make up a robust agricultural economy. Without them, other states benefit financially from Maryland producers' efforts.

Case Study 7:

## Black Locust Hops: Baltimore County

Processors/Small Food Business: Repackaging



**Owners:** Che and Lisa Carton

**Employees:** Seasonal, part-time. Lisa works off-farm part time, Che works full-time on the farm. Volunteers help fill the gaps.

**Skills Needed:** Agriculture, engineering, mechanical, welding.

**Location/Zone:**  
Freeland/Agricultural

**Sales:** Direct to breweries.

**Source local:** No. Rhizomes and starter plants come from Michigan and Colorado. All testing (soil, water, hop) sent out of state. None of the facilities or services are available in Maryland.

**Produce local:** Yes

**Uniquity:** First commercial hop producer and processor in Maryland.

**What started out as a love of home brewing beer has turned into a full-time operation for Che and Lisa Carton, hop growers and processors. In 2006, when a hops shortage occurred, the Cartons grew some to meet their home brewing needs. The head brewer of DuClaw tried their hops, liked the quality and encouraged them to grow more. They planted 400 Cascade hop plants for DuClaw, who took everything that they produced in both 2006 and 2007.**

Because the market for wet hops (freshly harvested hops) is so limited, the Cartons knew that the ability to dry and pelletize hops was critical to being able to sell their product. Their goal - with their mechanized picker, multiple driers and a pelletizer - is to process 30-40 acres of hops each season. This requires close collaboration with other local hop growers who don't have this equipment, which is also part of their business strategy: to encourage a strong community of growers and processors to meet the needs of local brewers.

Their business relies on mechanical, engineering and welding skills; they are critical to maintain everything from irrigation systems and trellising out in the field, to the harvesting and processing machinery to get the hop into its final form. And hop plants are picky: they have very specific seasonal needs that cannot be put off if the weather is not good, so agriculture knowledge and a willingness to be outside and get dirty are also required.

Additional needs as their business grows: Help financing the venture, more comprehensive crop insurance for hop producers, and more educational support for new businesses like theirs.

Case Study #8:

## Old Line Custom Meat Company

Other: Processor/Small Food Businesses: Meat



**Owners:** Edward A. Burchell & William Ruppensberger, Jr., Edward A Burchell, Jr.

**Founded:** 2011, merger of Roseda Beef, LLC and Geo. G. Ruppensberger & Sons, founded in 1866

**Sales:** Wholesale beef, veal, lamb, retail

**Employees:** 48 FT

**Skills Needed:** Butchering, compliance

**Location/Zone:** Baltimore City, manufacturing

**Source local:** Yes

**Produce local:** Yes

**Uniquity:** Largest meat processor in Mid-Atlantic; also serving kosher market.

**Old Line Meat Company (OLMC) was formed in 2011 after Baltimore natives and business owners Ed Burchell and Bill Ruppensberger decided to join forces to create what has become—in only five years—the largest producer of beef in the Mid-Atlantic, with over \$17 million in sales.**

The company was built on the strong reputation of hometown companies Ruppensberger & Sons' meat processing (founded in Baltimore in 1866) and Roseda Beef, LLC, located in Baltimore County. The company has two locations: a slaughter plant on Pennsylvania Ave, and a processing plant on S. Monroe St.

The market has been growing for locally-sourced and produced meats. Over 95% of OLMC's products are sold through wholesale, with the remaining sold via walk-up retail at their S. Monroe St. location. The company is also one of the only certified kosher processors in the region.

The market is hot, and the compliance challenges are ever growing, as well. "Current regulations aren't as economically inspiring as they could be," says Burchell. OLMC is strongly committed to food safety and providing high-quality beef products. However, compliance inspections and paperwork are always challenging; USDA, FDA, DHMH, OSHA and others.

In the coming years, OLMC will consolidate operations and add jobs. "We are proud of Baltimore and have roots here," says Burchell. "We want to stay and grow in the City if we can."

Case Study 9:

## Chesapeake Malting Company: Harford County

Processors/Small Food Business: Repackaging



**Owner:** Aaron Hopkins

**Founded:** 2015

**Employees:** 1 PT

**Skills Needed:** Mechanical, electrical, agricultural, machinery, and accounting.

**Location/Zone:**  
Farm/Agricultural Zone

**Sales:** Will be 100% wholesale.

**Source local?** Yes

**Produce local?** Yes

**Uniquity?** First commercial malting facility in the state.

**Aaron Hopkins has his father, David, to thank for his new venture. The Hopkins family has grown produce since 1979, but the elder Hopkins, encouraged Aaron, then a brewer at DuClaw, to consider a malting facility, as Maryland had no commercial malting facilities.**

With the explosive growth of the Maryland craft beer businesses, as well as an unused dairy barn, the suggestion made sense. Now David Hopkins grows the two- and six-row barley; Aaron – with business partner Kevin Gilbert - are getting ready to malt the barley, and sell it to local brewers. The farm, located in Havre de Grace, also grows Chinook and Cascade hops, which are currently being sold to Independent Brewing in Bel Air.

Aaron currently works part-time for the business; he is also the brewer at Independent Brewery, and still works for the family farm. Goals for the business include in Year 1, selling 100% of the malted farm barley to local brewers. Another goal is to source, and malt, rye and local wheat from other Maryland producers. Years 2-3 include expanding out to other growers, and securing more customers.

The current business model is to meet the malting demands of Maryland brewers. A potential longer-term goal includes a farm brewery. Chesapeake Malting was the recipient of the Harford County Agricultural Marketing Cooperative, Inc. grant that helped offset some of the startup costs of purchasing their steam tank equipment.

***Processors/ Small Food Businesses: Dairy***

This category includes the production of cheese, ice cream butter, yogurt and fluid milk (plain or flavored) that is processed and sold directly from the farm to the public.

Case Study 10:

## Prigel Family Creamery at Bellevale Farm: Baltimore County

**Farm/Agricultural Producer: Identify or Production Characteristics and Processor/Small Food Business: Livestock and Processor/Small Food Business: Dairy**



**Owners:** The Prigel Family

**Sales:** Farm store, Maryland grocery stores and restaurants.

**Employees:** 6 FT/5-6 Year-Round PT; 12-13 seasonal PT.

**Skills Needed:** Food knowledge, hard work and customer service.

**Location/Zone:** Glen Arm/Agricultural

**Source local:** Some cream for ice cream

**Produce local:** Yes

**Uniquity:** "Cream & Sugar" frozen treats catering.

**Founded in 1895, the Prigel family has been dairy farming in the Long Green Valley for more than five generations. The family switched from solely producing certified organic milk for sale to Horizon Dairy to shifting some of that milk to ice cream and yogurt to be sold directly to the public in order to diversify their operation to help the farm stay viable.**

Their initial goal when developing value-added products was to make cheese, yogurt and ice cream, but two lawsuits filed against the farm when they made their intent known to build a farm store derailed the plan. Instead, in 2010 they started with ice cream, because it was the easiest – and fastest – to get up and running so they could create income while dealing with the lawsuits. Yogurt was more recently added, and a near-term goal is to produce cheese.

Additionally, they sell some of their organic milk at the farm store, and also raise grass-fed beef and pork, which are sold directly to the public. In order to finance the business, they "sold anything that wasn't nailed down, including some land, timber and animals." Baltimore County provided them with a loan; disappointingly, loans from other farm lending organizations fell through because of the lawsuits.

The biggest opportunity they see for their family, and other farms like theirs, is to get customers to the farm to educate them about agriculture, entertain them, and get local value-added products into customers' hands.

Case Study 11:

## Bowling Green Farm: Howard County

Processors/Small Food Business: Dairy



**Owners:** The Jones Family

**Founded:** 1938

**Employees:** 3, PT/Seasonal

**Skills Needed:** Ice cream and cheese making (willing to learn or already have the skills; bookkeeping.

**Location/Zone:** Sykesville /Agricultural

**Sales:** Farmers markets, local festivals, wholesale and grocery stores.

**Source local?** Yes

**Produce local?** No

**Uniquity:** 10<sup>th</sup> Generation Family Farm

**The Jones family has been raising Holstein dairy cows since 1938. As a 10th generation family farm they take the care and stewardship of their land and resources seriously. In 1986 the family entered into an agreement with Howard County ensuring that the 625-acre farm will never be developed, or used for any purpose other than agriculture.**

Producing cheese, versus selling fluid milk, was developed as a way to provide the farm with financial stability, and create a business line that could be passed on the next generations of family members who were interested, and help continue to preserve the farmland. The family milks cows at the farm, and the milk is shipped to PA, where their more than one dozen hard cheeses, and a half-dozen soft cheese spreads are made by a skilled local cheese-maker.

Moving forward with the business has its challenges. For instance, fluid milk is regulated by the Maryland Department of Agricultural, while processed food (cheese) is regulated by the Department of Health. Having to work through two entirely different agencies has been both time-consuming and cumbersome. In addition, because the farm is under easement, concerns have been raised on the local level regarding allowed uses, such as processing.

Lastly, transportation has always been an issue. Transportation of the milk - even if you are transporting the milk 50ft across a farmyard, needs to be done so in an approved vehicle - meaning a nice stainless steel tanker truck. So one of the advantages of the off-site (out-of-state) cheese maker is they have an approved milk transport vehicle to pick up the milk and take to their plant.

Case Study 12:

## Shepherd's Manor Creamery: Carroll County

Processors/Small Food Business: Dairy



**Owners:** Colleen & Michael Histon

**Founded:** 2011

**Employees:** 0 FT / Several PT (HS & College Students)

**Skills Needed:** Farm equipment, animal husbandry, hospitality, retail, sales.

**Location/Zone:** New Windsor/Agricultural Zone

**Sales:** Farmers markets, wineries, restaurants, small amount through distributor.

**Source local?** Yes

**Produce local?** Yes

**Uniquity?** Only sheep milk creamery in the state.

**Colleen and Michael moved to Mount Airy 21 years ago. Their children spent several years in the Carroll County 4-H program, raising livestock to show at the county fair. In 2006 Colleen and Michael's research began to find an agricultural business that would satisfy their joy of animal husbandry, as well as Colleen's interest in food.**

They traveled to several sheep dairy farms and decided to embark on raising dairy sheep and producing farmstead sheep milk cheeses. With much help from friends, family and neighbors, they moved to their New Windsor farm in January 2010. They built the dairy in 2011, began milking in May that same year, and started making cheese in August.

Because they are the only producers of sheep milk cheese in Maryland, the opportunities are endless. They are constantly asked for additional products, as well as requested to be at multiple venues.

Current challenges include labor, as well as maintaining product quality control. Another challenge has been to explain to customers why their product is more expensive than cows' milk products, which is a result of more expensive production costs. Additionally, they are a pure farmstead operation; the entire process happens on their farm, which Colleen states is, "wonderful and stressful, all at the same time."

### ***Processors/ Small Food Businesses: Beverages***

This category includes both alcoholic and non-alcoholic beverages, including beer, wine, distilled spirits, ciders, meads and non-alcoholic beverages like soda, kombucha, lemonades, etc.

Beverage producers were the most likely to say that they engaged in only one component of VAA activities; 12 of 18 respondents indicated that they didn't undertake other components of VAA. Because start-up costs for this category can be expensive, due to equipment, infrastructure and licensing costs, it makes sense that their businesses are more stand-alone than other categories. Additionally, this category is more likely to be located in a storefront, or manufacturing zone, versus agricultural.

Case Study 13:

## The Vineyards at Dodon: Anne Arundel County

Processor/Small Food Business: Beverages



**Owners:** Polly Pitman and Tom Croghan

**Founded:** 2007

**Sales:** Farmers markets, local festivals, wholesale and grocery stores.

**Employees:** 3 FT/4 Seasonal

**Skills Needed:** Bilingual language (English & Spanish)

**Location/Zone:** Harwood/Agricultural

**Sales:** On Farm, Maryland Retail, Out of State

**Source local:** Yes

**Produce local:** Yes

**Uniquity:** Utilizing the diverse soil profiles in Anne Arundel County combined with Maryland climate to make several different kinds of high quality wine.

**The Vineyards at Dodon, owned by the Pittman family, have a long, important history to Maryland, dating back to 1725 when it was a tobacco farm. In the 20th century the farm moved away from tobacco and began producing crops; in 2005 Polly Pittman, and husband Tom Croghan, decided to begin working on the farm with the rest of Polly's family.**

In 2007 Tom and Polly became interested in wine production and decided to begin field trials to test the viability of a vineyard in the region. They quickly found that the many different soils and profiles make Anne Arundel County an interesting and promising place to make wine.

Their operation currently has three full time staff and they hope to hire more staff soon. Additionally, they need vineyard workers during the growing season who have dual English and Spanish language skills.

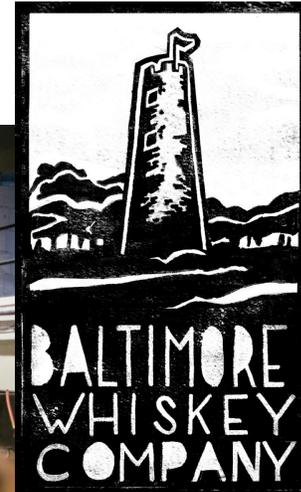
At Dodon they combine their insight and thoughtfulness in their operation with a deep care for the environment in an effort to make great wine while promoting a balanced ecosystem. Croghan believes misunderstandings around this are one of the challenges currently facing farmers today. He hopes state and county regulators will listen when farmers want to make changes they feel will help their product, and the ecosystem, long term. However, unclear regulations and zoning requirements stifle projects and growth.

Despite these challenges, the Vineyards at Dodon believe they have many opportunities before them in terms of utilizing the great natural resources found on their farm to create high-quality wines that are uniquely Maryland.

Case Study 14:

## Baltimore Whiskey Company: Baltimore City

Processor/Small Food Business: Beverages



**Owners:** Eli Breitburg-Smith, Max Lents, Ian Newton,

**Founded:** 2015

**Sales:** Wholesalers/Bars, Farmers Markets, On-Site Facility

**Employees:** 3 FT

**Skills Needed:** Beverage Industry, Distilling, Brewing, Warehouse, Sales

**Location/Zone:** Baltimore City/Manufacturing

**Source local:** Yes, fruit

**Produce local:** Yes

**Uniquity:** One of few Baltimore area distilleries offering high quality spirits that showcase the city.

**After thinking of many projects over the years, founders Breitburg-Smith, Lents and Newton decided on the idea of a distillery, seeing there was an open market, and great potential to produce high quality spirits from Baltimore. They are passionate about Baltimore and wanted to give back to the city they love and in which they live.**

As a new operation, the current employees consist only of the founders working full time. However, the company is hoping to expand soon and hire local workers. Sourcing their raw agricultural products from Maryland is very important to the company, but one of their challenges is the lack of Maryland rye to meet all of their current needs.

Along with this, the challenges of a small business include high tax rates that make it hard to compete with larger, more established companies. The high rates limit the revenue that can be put back into the businesses to expand and hire more employees. Despite some challenges, Baltimore Whiskey Company sees a lot of great opportunities. The demand for craft spirits only continues to grow.

If state and county legislators support local distillers by allowing them to sell their products to more places directly, the Baltimore Whiskey Company believes they can capitalize even further on local farmers markets and festival events. This will not only support the growth of their small business, but also falls in line with their goal of helping Baltimore by bringing more money into the city and their communities.

Case Study 15:

## Independent Brewing: Harford County

Processor/Small Food Business: Beverages



**Owner:** Phil Rhudy

**Founded:** 2015

**Employees:** 4 FT / 9 PT

**Skills Needed:** Brewing, chemistry, plumbing, welding, hospitality, retail, sales.

**Location/Zone:** Bel Air/Retail Zone

**Sales:** 98% on-site, 2% wholesale

**Source local:** Yes

**Produce local:** Yes

**Uniquity:** Produces gluten-free beer.

**Independent Brewing opened in 2015 in a converted garage on Main Street in Bel Air. The business – situated on the Ma and Pa Trail – has become a community gathering place in an area not previously known for its local foot traffic.**

Owner Phil Rhudy sources local inputs where possible - including grains and hops from Harford County - and sees an increased demand for locally-sourced grain, malts and hops in the region. He cites a lack of infrastructure (processors and malting houses) and education about demand as reasons why more brewing ingredients are not available locally.

Rhudy noted that when the brewery opened, it became a center for community in the town; local art adorns the walls, community organizations regularly hold meetings at the brewery, yoga classes are held each Sunday, and road bikers using the Trail now make the brewery a regular stop. Local food trucks also set up shop outside the brewery most days that they're open.

The brewery's taproom was busy immediately upon opening, and Rhudy has expansion plans, potentially including a farm brewery.

The brewery donates its spent grains to local farms to feed animals, attends numerous farmers markets and events, and collaborates with other area breweries.

Rhudy's business was funded through local investors.

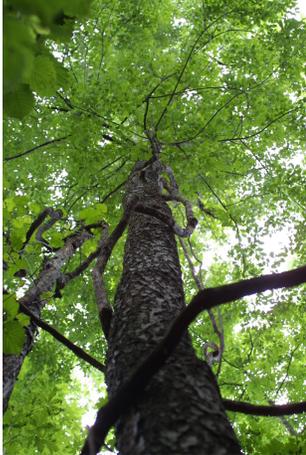
***Other: Agritourism, Energy and Forestry***

These three types of businesses were grouped together because they are primarily non-consumption components of agriculture. Many agricultural-based businesses incorporate agritourism as an accessory, or secondary, component of their main farm business.

Case Study #16:

## Garman Brother Inc: Anne Arundel County

Other: Agritourism, Energy, Forestry



**Owner:** Gary F. Garman

**Founded:** 1946

**Sales:** Hardwood Lumber, Timbers, Bark Mulch, Sawdust, Firewood

**Employees:** 8 FT

**Skills Needed:** Dependability

**Location:** Crownsville

**Source local:** Yes

**Produce local:** Yes

**Uniquity:** It has been a family-run industry for nearly 100 years and both of Gary's sons are currently working in the mill, with no plans to leave.

**Garman Brother Inc was formed in 1946, though owner Gary Garman said that technically his grandfather started the company in 1917, calling it The Royal Lumber Company. Gary's father changed the name in 1946. The forestry industry is the fifth largest industry in the State, bringing in \$26 million from the sale of goods and services.**

The Garman's produce many products, the largest being rough sawn lumber. A lot of this kind of wood is used underground, in a structural capacity. According to Gary "there is a whole city beneath Washington DC, and its supported by a whole lot of our lumber". In addition to this, they also provide sawdust for bedding for many horse and cow operations in Maryland as well as the wood for fencing. Garman noted that much of the timber received, comes from these same farmers. Trees are seen as a crop to many of them, and with a Forestry Management Plan in place, these trees (which grow 8% a year) are thin cut. Meaning that the bigger ones are cut down, leaving more room for the little ones to continue to thrive. Just about all of the timber that comes to the mill, comes from Maryland. And of that, everything leaves as a product – there is zero waste.

Labor can be an issue for the sawmill. "I'm not really looking for a certain skill, everyone is teachable. What can't be taught is dependability, and that is extremely rare to find these days". Garman also sites the things that can't be controlled (taxes, insurance, and regulations), as a consist challenge for the business. Although he pays between about 27 diffident taxes and fees, it's the workman's compensation that is the most debilitating. "If we could manage to secure a lower rate, that would mean being able to hire 2-3 more people". For now, the plan is to continue to slowly expand.

Case Study 17:

## Clark's Elioak Farm: Howard County

**Farms/Agricultural Producers: Products segregated by identity or production characteristics and Other: Agritourism**



**Owner:** Martha Clark

**Founded:** 2002

**Acres:** 540

**Sales:** Farm (98%), wholesale (2%).

**Employees:** 55, full time and seasonal

**Skills Needed:** Agriculture (specifically the vegetable side of business, management (to take over farm stand and CSA sides of the business))

**Location/Zone:** Ellicott City/ agricultural

**Source local:** Sweet corn, watermelon, cantaloupe, peaches

**Produce local:** Yes

**Uniquity:** Farming in Howard County since 1797.

**The memorial stone in their front yard gives the Clarks the "etched in stone" instruction: Never Sell The Land. The family has been farming in Howard County since it was actually Anne Arundel County. Over those years they have raised crops and a variety of animals and run a dairy operation, but the main link between the seven generations of farmers in their branch of the Clark family has been raising beef cattle.**

In addition to the beef operation, the agritourism side of the business has been critical for getting people to the farm to enjoy the petting farm, farm tours, pumpkin patch and Enchanted Forest. The reason is two-fold: by getting the public to the farm, they can better understand, and appreciate, agriculture. Additionally, it also brings potential and new customers to the farm for the primary mission of the farm: grass-fed beef, eggs, and pork, the vegetable Community Supported Agriculture (CSA) program and farm store.

Some of their greatest challenges come from local residents and neighbors who object to their business model, and county regulations. But at the same time, they have appreciated the support of the Howard County Economic Development Authority. They would like to see stronger Right to Farm laws, which provide a measure of security for the established farmer who practices sound best management principles in the day-to-day operation of his/her farm. Such laws also put the non-farming community on notice that agriculture is a vital component of the region's economy, character and culture. They hope that such laws will continue to encourage young people who are trying to come back to family farms, or get into farming for the first time. The ongoing demand for local foods is also an encouraging sign to the Clark family.

Case Study 18:

## Lohr's Orchard: Harford County

Other: Agritourism / Farm Market & Cider



**Owners:** Andrew & Zandra Lohr, Candace Lohr-Pearce & Darryl Pearce

**Founded:** 1928

**Sales:** Retail apples, cider, vegetables via farm stand, wholesale cider and other products

**Employees:** 3 Family, 6 PT/seasonal staff

**Skills Needed:** Farming, retail, management

**Location/Zone:** Harford Co. / Agriculture

**Source local:** Yes

**Produce local:** Yes

**Uniquity:** Multi-generation farm producing cider for 50 years; processor of cider for regional apple growers.

**“People enjoy getting out and bringing the family,” says Andrew Lohr, Jr. about his family’s farm market and agritourism destination. Families come to the farm not just to buy their famous apple cider, but to pick-their-own apples and other crops. Lohr’s Orchard invested in refrigeration and cider-making equipment many years ago, and it has paid off.**

“I guess you’d call us ‘diversified,’” says Lohr, who—along with his wife Zandra, daughter Candace, and son-in-law Darryl—created an operation that thrives not just on retail, but also on custom processing and wholesale sales to other farms and chain retailers.

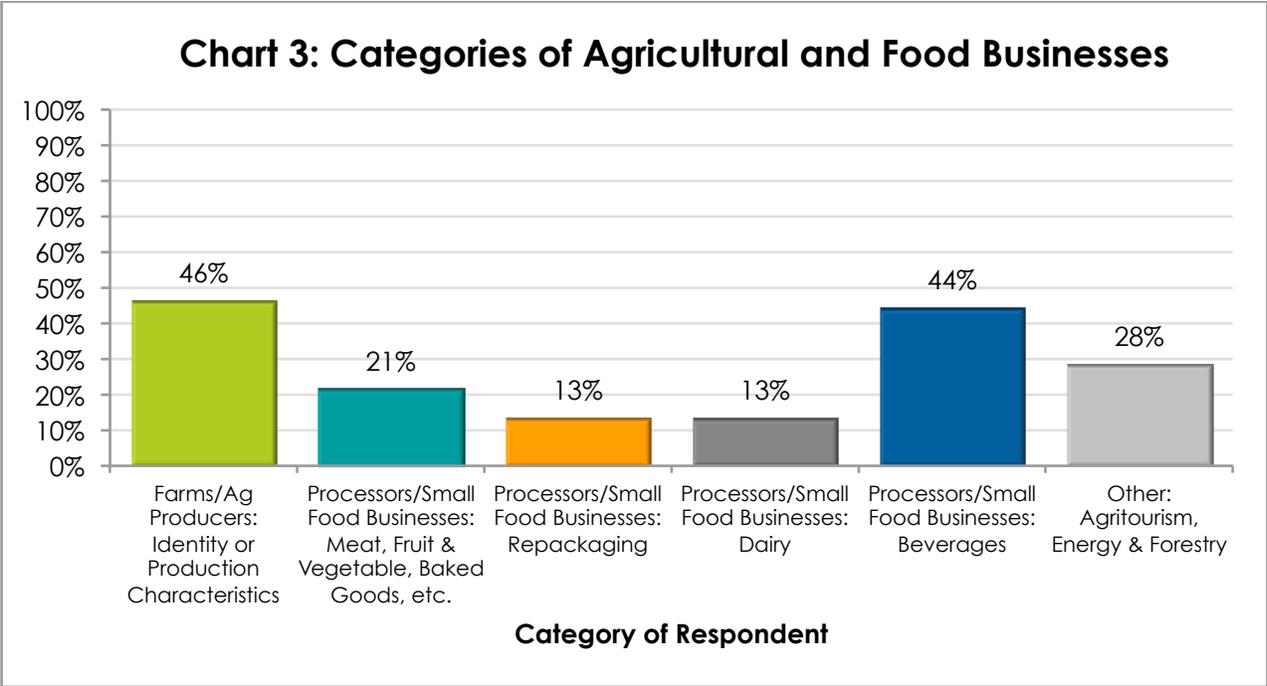
Lohr notes that while Harford County has been supportive of their operation, he has never assimilated to the regulatory environment. Because of the apple processing, Lohr’s Orchard is regulated by MDA, DHMH and FDA. FDA and DHMH inspect for the exact same things, and each take hours—sometimes days—to inspect the operation and review receipts, invoices and records. “There’s a sense that often inspectors and regulators are in the business of checking boxes rather than understanding the operation... and if they’re both inspecting the same thing, you’d think we could save a lot of time and taxpayer dollars by the agencies sharing their reports.”

From strawberries to peaches, vegetables to 10 acres of pick your own (PYO) pumpkins and many more acres devoted to apples, “Lohr’s is PR for agriculture,” says Lohr. The direct market of their cider (50% of revenue) and other farm-grown products—along with wholesale to neighboring farms and Shop-Rite stores—has kept three generations of the Lohr family on the farm, with the next generation in training.

## ANALYSIS

Using data from these organizations, only those businesses fitting this study's definition have been considered when trying to determine the possible number of value-added operations in the region. An estimate is that there are at least 311 value-added producers, processors, and small food businesses within the BMA that grow, raise or use raw agricultural products from Maryland farmers.<sup>40</sup> This number is not definitive, but when combined with the data gathered from the survey responses, it allows a preliminary analysis of the possible impact value-added businesses have on the BMA economy. It is hoped this information and analysis gives an idea of said impact, while encouraging the funding of studies geared specifically towards developing a more comprehensive quantitative analysis.

Fifty-eight (58) agricultural and food businesses responded to the survey. Because certain questions were farm specific, each question did not necessarily receive a response from each survey respondent. All of the sectors, counties and Baltimore City were represented by the respondents. Chart 3 shows the categories into which the respondents classified their business operations. The sectors are not mutually exclusive, however, and many businesses identified with more than one sector in their operation.



Source: BMC Survey Results, 2016.

The survey responses revealed that the majority of VAA producers and processors participated in three sectors of VAA. Value-added production methods and identity characterizations was used by 46 percent of operations, whether through growing or using organic food, using local ingredients, or farmers selling directly to the consumers. This is also the broadest category of operations, with the largest umbrella of activities under which a business could fall.

As this category includes direct sales (farmers markets, CSA, farm stands) and third-party certification programs, the number may reflect that the current demand for transparency of production and labeling practices. Consumers are increasingly seeking out relationships with growers themselves, while also looking for high quality products that use local ingredients or specific production methods, such as USDA certified organic. According to Maryland Department of Agriculture Secretary, Joe Bartenfelder, “there is a tremendous marketing opportunity for Maryland farmers interested in transitioning from conventional to organic agriculture,” but unfortunately, “supply is not currently meeting that demand.”<sup>41</sup>

The other sectors in which the majority of producers and processors participate are beverage processing and agritourism. Beverage processors include breweries, distilleries, cideries, meaderies, wineries and producers of other craft beverages. The survey data reflects the growth seen in Maryland's craft beverage industry over the past several years.

The size and scope of VAA operations from the survey differ throughout the region in terms of farm size and reported revenue earnings. Thirty-five (35) farms responded providing the size and acreage of their farms. The total numbers of acres owned and/or operated by respondent farmers totaled 5,364 acres, or an average of 158 acres per farm. Included in the representation is a farm of one-acre in size, to the largest operation, of about 1,000 acres, which highlights the size diversity in the region. Table 6 illustrates the range of farm sizes on which respondents operate. This number reflects both owned, and rented, acreage.

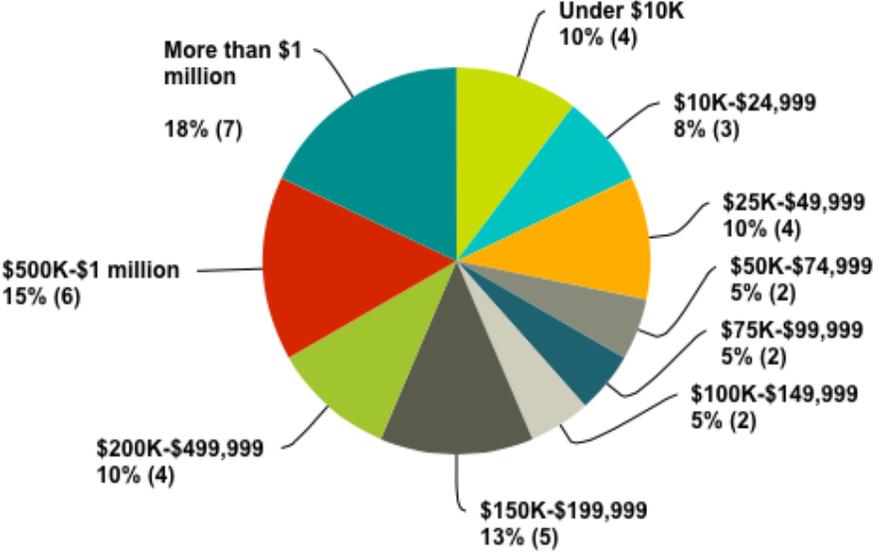
Table 6: Range of Acreage Size

<b>Respondents</b>	<b>Acres</b>
7	Less than 20
9	21-50
7	51-100
4	101-300
5	301-500
3	More than 500

Source: BMC Survey Results, 2016.

The product sales reported by respondents also varied, ranging from less than \$10,000 to over \$1 million, annually. Exact figures were not provided, but annual ranges are shown in Chart 4 below.

Chart 4: Product Sales



Source: BMC Survey Results, 2016.

The survey data illustrates the diversity in size of value-added operations in the BMA region. The range of businesses falls in between startups or small businesses that make up the lowest revenue figures, to large operations that have been established for many years. This insight is important for understanding that VAA is not a one-size-fits-all characterization of this sector of the agricultural industry. The majority of respondents also said that VAA products provided most of their own personal annual income. It is important to place this response in context; some respondents indicated that they were not able to pay themselves, others used grants and loans to supplement their income, and some farm businesses had wholesale outlets for raw agricultural products.

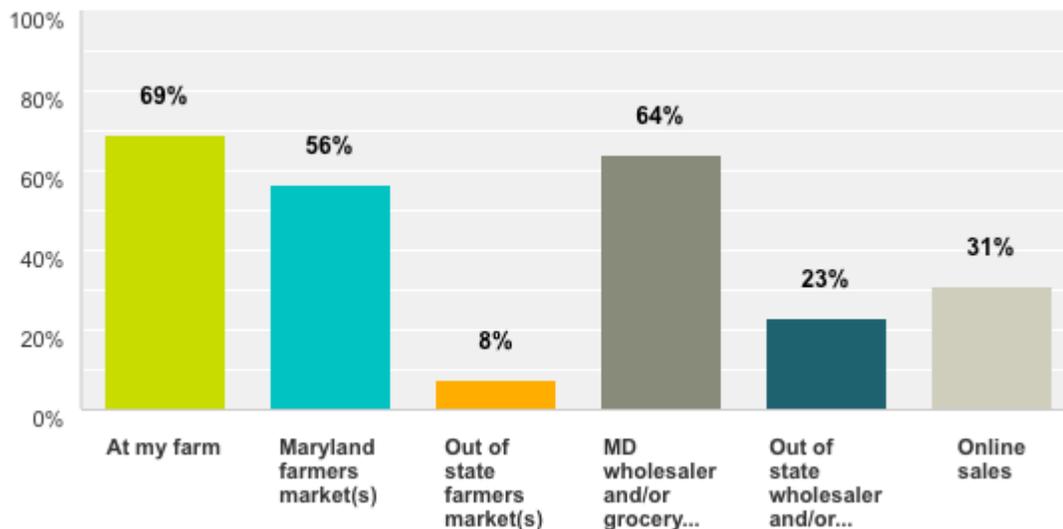
On the other hand, many respondents stated that VAA was the only way to maintain their farm, because of the greater revenue it provided their bottom line. A much more in-depth examination of sales revenue and income sources needs to occur. Although the AgMRC recommends VAA as a way for businesses to grow and find stability<sup>42</sup> there are financial risks involved with transitioning to, or adding, these new activities.

## SALES OUTLETS

Survey responses showed that VAA producers and processors use a variety of outlets to sell their products. Often businesses use more than one method to get their products to the public. The majority of sales came from three categories: on farm sales, farmers markets, and in-state wholesalers or grocery stores. The diversity in the graph illustrates the variety of ways VAA businesses sold their products.

Businesses that sell at both farmers markets and through a wholesaler can potentially find much more opportunity for growth, as well as reducing risk inherent in selling exclusively through one channel.

Chart 5: Sales Outlets



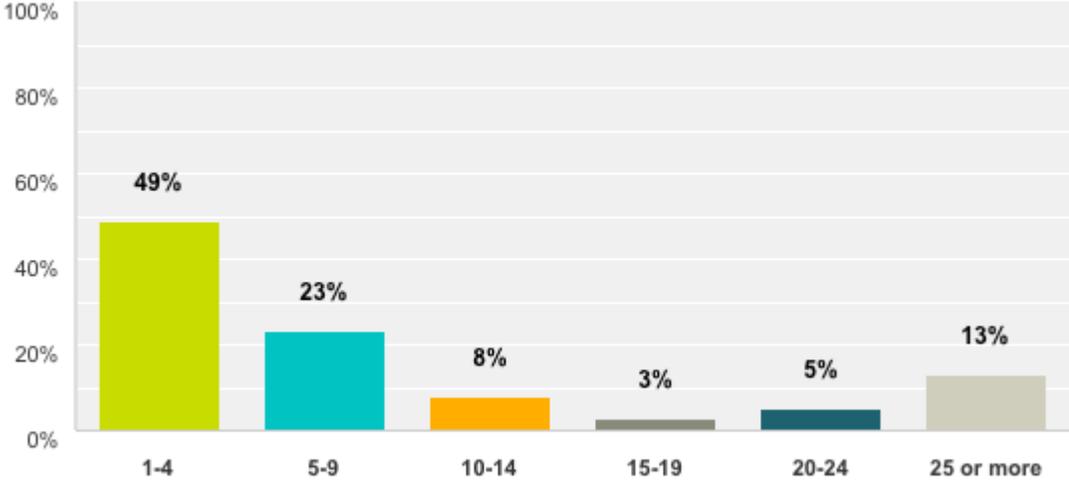
Source: BMC Survey Results, 2016.

## LABOR FIGURES

The survey responses also reveal optimistic labor figures for VAA operations. Based upon the range of “number of employees” choices offered in the survey, the total number of individuals employed among the 39 business respondents spanned from 224 on the low end, to 341 on the high end. The numbers comprised the entire spectrum of full time, part time and seasonal employment.

As previously mentioned, there are approximately 331 VAA operations in the BMA, including farmers, processors, and small food businesses. This estimate is representative of the industry; there are further VAA businesses in the region that can fall into the into this study, but when extrapolating this figure from the average number of employees from the survey responses it is estimated there are potentially 3,000+ employees working in VAA businesses across the BMA region.

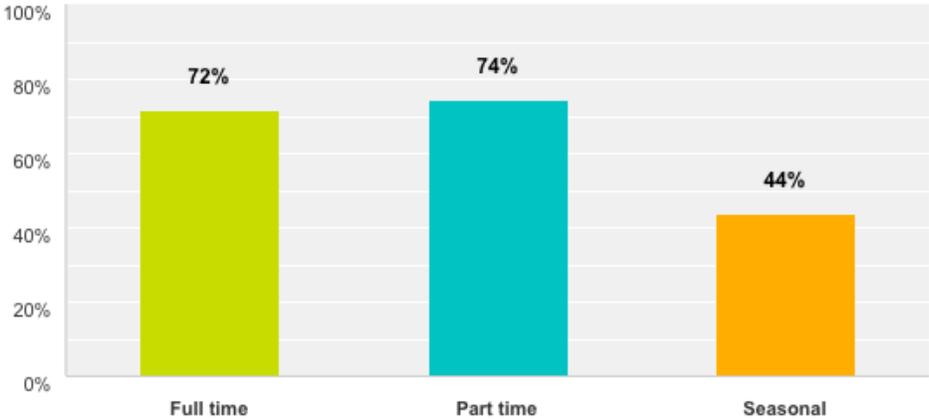
Chart 6: Number of Employees



Source: BMC Survey Results, 2016.

Nineteen respondents reported that they employed no more than four employees, including themselves. Twenty-eight (28) people, or 72% of respondents operate businesses that employ fewer than ten employees. These numbers also do not speak to the variability in the type of employment - full, part time, or seasonal. Some respondents indicated that they have full-time staff on a seasonal basis, and very little, or no, staff during other times of the year. Many respondents did not not account for their own labor among their employment figures. Chart 7 reflects that these businesses use a combination of all three options, since they could select all options that applied.

Chart 7: Employment Status of Business Employees



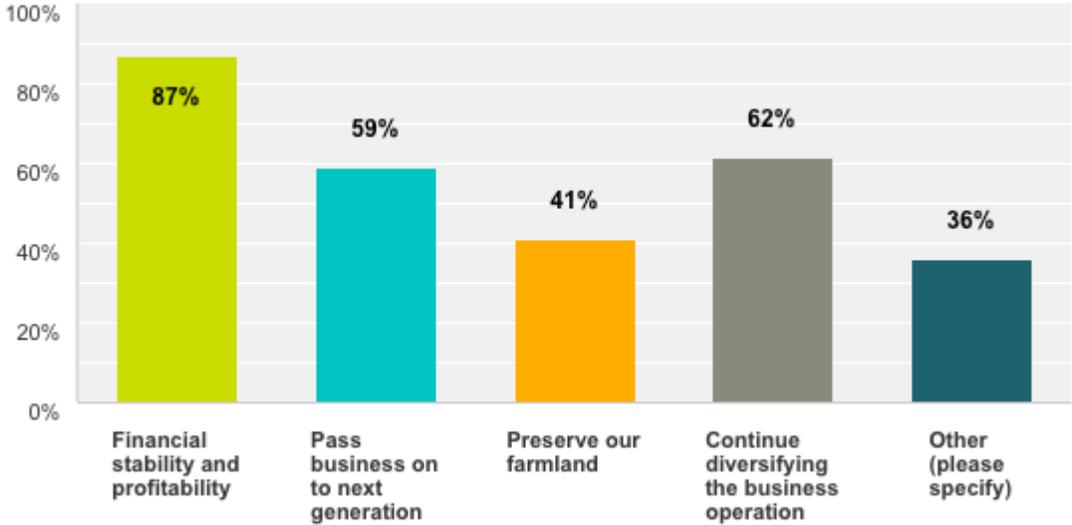
Source: BMC Survey Results, 2016.

The surveys were not able to take into account the indirect impact that VAA has as it relates to jobs associated with these businesses. As VAA grows, and continues to be seen as a viable way to grow, or diversify, investigation into the businesses that support VAA food and farm operations would provide a more robust picture of the economic, and employment, opportunities in this sector.

*Long-Term Goals*

The survey respondents had multiple long-term goals for their businesses; not surprisingly, financial stability ranked the highest. Continued diversification and the hope to pass the business on to the next generation of family members ranked second and third, respectively.

Chart 8: Long-Term Goals



Source: BMC Survey Results, 2016.

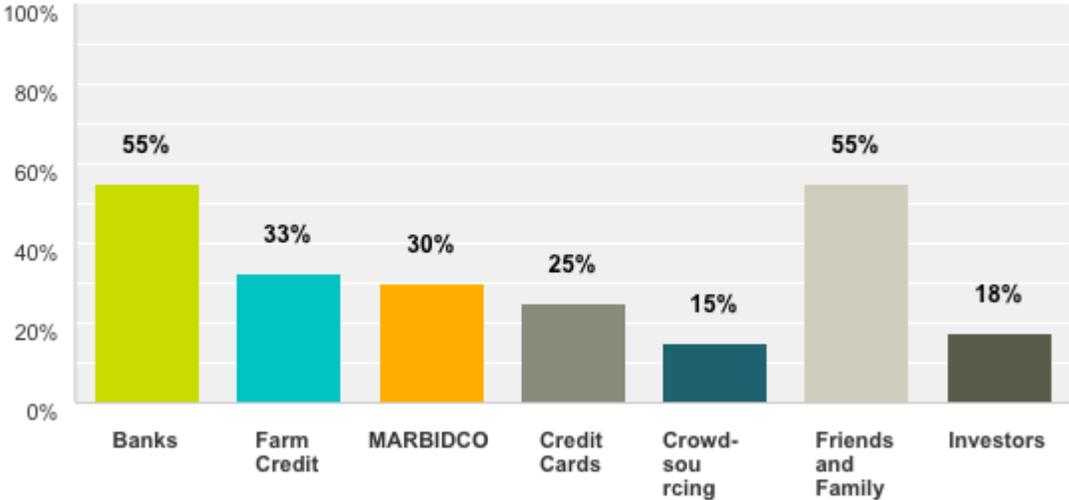
“Other” responses included:

- Making the farm a destination by adding more agritourism components, because we have to get our product directly to customers to be profitable;
- Solidifying relationships with other hop growers to create a strong growing and processing network;
- Figuring out our niche in the marketplace;
- Reducing the amount of work we're putting into the business. If one of our children wanted to get involved with the farm, we'd welcome it;
- Reducing the number of retail outlets, and farmers markets, in which we participate. Create more online sales;
- Community participation and job creation;
- Turn this, or the next location, into a teaching farm;
- Become a nationally recognized brand;
- Creating a sustainable environment, making great wine; and
- Raising the public consciousness about rustic ciders.

## FINANCING THE BUSINESS

In order to start up, diversify or expand their operations, businesses need access to capital. Chart 9 showed that businesses used a wide variety of tools to fund their operations. The 40 respondents had the opportunity to select more than one option, and as a result, using one to two sources was the most common answer, at thirteen respondents each. A limitation of the survey question was that self-funded was not included as an option; seven respondents stated that they self-funded their operations over the years, only expanding as personal funds were available. Four respondents used four or more sources of funding for their operations.

Chart 9: Sources Used to Gain Access to Capital

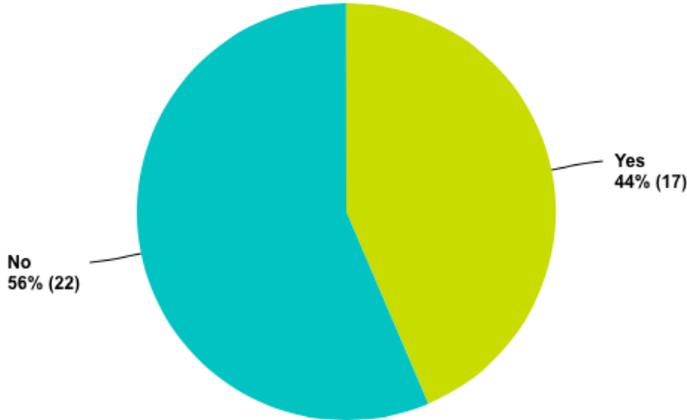


Source: BMC Survey Results, 2016.

### Economic Development Support Programs

Chart 10 reflects that a little more than half of the respondents are not taking advantage of county or state economic development programs. Only six (6) respondents stated that they were not aware of program availability. The rest of the respondents knew that programs existed, but reasons for not taking advantage of them included the hassle involved; collateral requirements; time commitment to find, and apply for, programs; and the impression that the programs were not well targeted to businesses of their size.

Chart 10: Economic Development Support Programs



Source: BMC Survey Results, 2016.

Additional sources utilized, but not included in survey choices, were USDA Farm Service Agency loans, the USDA hoop house grant, a Baltimore County Economic and Workforce Development loan, Howard County’s Agricultural Grant, Harford County’s Marketing Co-Op Grant, suppliers offering long-term credit, and the USDA Value-Added Producer Grant.

## SECTION IV: Challenges

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Survey respondents, case study interviewees and listening session participants reported common challenges: availability of raw materials, access to capital, and regulatory restrictions across county agencies. The identified challenges were not ranked, therefore their order does not indicate whether the challenge was the most, or least, important to the businesses.

“The Future of Sustainable Farming and Forestry in Maryland”<sup>43</sup>, published in 2016, also identifies challenges to the state agricultural and forestry industries; where appropriate, the report’s challenges will also be included, as they corroborate that these issues are common statewide.

## AVAILABLE DATA

The most immediate challenge, for both this report, and the VAA industry as a whole, is the lack of data. In order to make concrete recommendations or requests of local and state agencies, funders, and elected officials, comprehensive and accurate data needs to be collected. Earlier sections of the report have already discussed the lack of a single, agreed-upon definition of VAA; the overlap of these businesses into several different sectors of agriculture and food production; and a dearth of local, state and federal level surveys that capture the wide range of information required.

As a result, the survey data offered the most concrete and useful information, because it included questions designed to identify farm and food business challenges, as well as affording respondents the opportunity to write in potential challenges not identified through close-ended, or multiple choice, questions.

In order to identify, and create a database of the businesses that fall under the scope of this study, multiple sources were used, including county level agricultural marketing and economic development staff spreadsheets of county businesses; the Maryland Department of Agriculture's Maryland's Best database, the Maryland Department of Agriculture's Farmers Market Program lists, the Center for a Livable Future's mapping databases, and the Maryland Farmers Market Association vendor lists. While there was a good amount of overlap, every list had inconsistencies with the other lists. This illustrates the challenge of collecting and maintaining accurate and current data. Additionally, it was difficult to gather data on retail food businesses that are making value-added products using Maryland ingredients. While multiple sources were able to identify a number of businesses—especially those that sell at farmers markets—none provided a complete list.

## ACCESS TO INGREDIENTS

Access to raw ingredients was stated as a challenge for farmers, but also for beverage producers. According to 57 survey responses, the vast majority (68%) of the businesses sourced the majority of their ingredients from Maryland farms. Given that a large percentage of Maryland's agricultural production is poultry,

and grains and soybeans to support poultry production, this indicates that there may be enough Maryland raw agricultural products grown, and breeding stock raised, to meet value-added agricultural producer and food business needs.

However, about 32% sought the majority of their ingredients from outside Maryland, and from a wide variety of other states. This discrepancy indicates that some respondents are sourcing from both inside, and outside, the state. The need to source from outside Maryland is not surprising, as many craft beverage businesses are unable to source enough Maryland-grown grapes, hops, malting barley and rye to make their products.

Class 4 Limited Winery licensees, for example, are required by Maryland law to use agricultural products grown in Maryland, unless the Secretary of Agriculture declares an insufficient supply<sup>44</sup>. Each year, the Governor's Advisory Commission on Maryland Wine & Grape Growing collects data from the Maryland Wineries Association (demand) and the Maryland Grape Growers Association (supply) to determine if sufficient supply exists. If a sufficient supply does not exist, wineries are allowed to bring grapes, grape juice, fruit or honey in from outside the state. Every year, the Maryland Secretary of Agriculture has issued a letter stating that sufficient supply does not exist. Breweries—both farm- and non-farm based—also reported an insufficient supply of hops and malting grains. With an estimated 25 acres of farmland in hops production statewide, the demand for local hops far outweighs the availability. Although the demand for Maryland hops is high, growers – and potential growers – face a number of challenges. The cost of a trellis system, needed to grow hops, and the rootstock alone is about \$10,000. And according to Ron Godin, a hops specialist with Colorado State University Extension, “Equipment to pick, bale and dry hops costs tens of thousands of dollars more, putting the initial investment for a 10-acre farm close to \$250,000.”<sup>45</sup> Additionally, most grains currently grown in the state—which are adequate for animal feed—are not the varieties required by the state's craft brewers and distillers.

## PROCESSING INFRASTRUCTURE

Value-added agricultural businesses also send their raw ingredients, or animals, outside of the state for processing, which accounts for both lost revenue and lost opportunity for Maryland businesses. Several reasons exist for this. While animal processing businesses do exist in Maryland, scheduling is often difficult because the demand for USDA-certified processors has increased as more customers want to purchase locally-raised meats. Bowen, Tassone and Baird, the authors of “The Future of Sustainable Farming and Forestry in Maryland”, also identify this as a statewide problem:

“The Maryland Agriculture Commission livestock representative, Bill Edwards, commented that producers of cattle, sheep, goats and hogs who are actively trying to increase local retail sales face impediments to expanding what is otherwise a promising market. He cites a decrease in USDA-inspected meat slaughtering and processing facilities in Maryland due to increased costs from state and federal health and zoning regulations. More livestock producers now haul their livestock out of state, at greater expense and missing opportunities to grow the industry at home. Two information sources show a total of 22 slaughtering facilities in Maryland in 2009 and 13 in 2014.”<sup>46</sup>

Depending upon a farm's location, in some cases it may be a shorter distance to take animals to a Pennsylvania or Delaware processor, versus a state slaughter facility. However, even when an in-state processor is closer, or available, some producers choose to take their animals to Virginia, Delaware or Pennsylvania because they find the processing, labeling and final product to be of higher quality. As one livestock producer stated, “frankly, my processor in Pennsylvania makes the best barbeque product, and scrapple, around.”

Until 2016, no commercial malting facilities existed in the state to serve the 23 breweries and eight distilleries in the BMA. Today, two small malting operations are about to start up, in Howard and Harford counties. In 2016 Virginia helped bring a Michigan malting company, Pilot Malt House, to Loudon County to help

support its fast-growing, and state supported, craft beverage industry. Delaware also signed an agreement with Wisconsin-based Proximity Malt to bring a malting plant to Laurel to serve the Mid-Atlantic brewing and distilling industries. Governor Jack Markell stated that he “is pleased that Proximity has chosen Delaware to locate their production facility. Delaware has a skilled base of small grains producers to support their raw material requirements. We welcome their decision to locate in Sussex County.” The plant is expected to have a production capacity of 25,000 tons of malted grain a year, and employ 20-25 people.<sup>47</sup>

Pennsylvania had approximately \$2 billion in dairy sales, according to the 2012 USDA agricultural census, putting it in the top five U.S. producers.<sup>48</sup> It is an important industry, supported by both agencies and elected officials. Cheese-making facilities are readily available for fluid milk producers who want cheese made. Until Maryland—under the regulation of the Maryland Department of Health and Mental Hygiene—established the Farmstead Cheese Pilot Study Program in 2007, raw milk cheeses could not be produced in the state<sup>49</sup>. As a result, Maryland dairy producers who wanted raw milk cheese products had to drive their milk to Pennsylvania, where it could legally be made into cheese, aged for a minimum of 60 days, and then brought back into the state. It is now legal to make raw milk cheese in Maryland, but the start-up costs of a cheese facility, and the state regulatory requirements to do so, still make it easier, and more economical, to take fluid milk to Pennsylvania to be made into pasteurized, and/or raw milk cheeses.

## CAPITAL

Another challenge many of the VAA operations identified was the availability of capital. Survey responses show that respondents already use a wide variety of means to fund their businesses, including self-financing, grant programs, banks, and investors. Twenty-six percent (26%) of respondents stated that access to capital, and funding their businesses, was a challenge.

While this response is expected, the greater lost opportunity is that 57% of respondents stated that they do not take advantage of local or state economic

development programs; approximately one-third indicated that they were not aware of county- and state-level programs. Some BMA counties offer agricultural grant programs; this is not consistent across BMA members, however. And while Maryland Agricultural and Resource-Based Investment Development Corporation (MARBIDCO) and Mid-Atlantic Farm Credit offer loan and grant programs to agricultural and forestry producers, small food businesses that source local ingredients are not eligible for their programs. These businesses do have access to other local and state economic development programs, however. Because they run time and labor-intensive businesses, some respondents explained that the aggravation involved in applying for grants was enough to deter them.

A few farms that grew organic vegetables and sold through CSA programs indicated that they self-financed all of their operation, except for vehicles like trucks. Whereas businesses that required higher levels of infrastructure—food processors, bakeries, and craft beverages producers—utilized a wider variety of capital by necessity. One food business respondent stated that they ended up locating their business in Baltimore City because they were not able to receive the same level of financial support, and economic development staff assistance, from a surrounding county. Without this financial support, the purchase of the building and the equipment necessary to run the business would not have been possible.

## GOVERNMENT & AGENCY REGULATIONS & SUPPORT

The most commonly expressed challenge (33% of respondents) to growth by value-added producers and processors are restrictive county and state regulatory frameworks. Many survey respondents and case study interviews specified regulations by county agencies - Planning & Zoning, Health, Fire & Life Safety—as particular impediments to new, and existing, business operations because of their strict, and at times changing, requirements. Many business owners think that local elected officials and agency representatives are out of touch with their businesses practices and draft, and implement, regulations that create hardship. Not only can the actual text of the law or regulations vary from county to county, but more commonly the same language is interpreted vastly differently across counties. BMA farmers and processors must familiarize elected

and agency officials with their business practices to create working, common sense laws that meet necessary health guidelines, protect the public, but do not unnecessarily overburden businesses. Once a cooperative relationship is in place, VAA industry representatives need to work with counties throughout the state to conform regulations. This will allow VAA operations to easily expand into new markets and grow.

Overwhelmingly, respondents explained that regulations got in the way of their business development efforts, often wasting time and money, due to regulatory agencies misunderstanding the needs and requirements of these businesses, and the enforcement of laws or codes written before VAA's emergence. In some cases, owners lost customers due to the difficulties encountered. Health regulations proved to be one of the biggest complaints expressed in survey responses and interviews; while the State Department of Health and Mental Hygiene establishes regulations, county Health Departments have local authority to interpret and administer more strict interpretations. Because of this, navigating regulations, and receiving licensing or permitting approvals, can quickly become costly, taking valuable time and resources away from the actual operation of the business. Additionally, respondents reported receiving varying answers to the same questions, or different regulatory interpretation, within the same county agency.

This problem is compounded when other county agencies, such as Planning and Zoning, are also involved in the business process, as discussed in Bowen and Tassone's study, "Each Maryland municipality has its own comprehensive plans and zoning regulations to govern land use and development. Most were adopted in the 1960s and 1970s. In many ways, old zoning ordinances treated agricultural zoning districts as leftover zones. Residential zones were for residential uses. Commercial zones were for commercial uses. Industrial zones were for industrial uses. Agricultural zones were for agriculture, forestry and all uses that did not fit in the other categories, such as landfills, churches, schools, sewage treatment plants, etc. Low density residential development was also allowed."<sup>50</sup>

Compounding the problem for agricultural-based businesses is the variation in interpretation of what is considered “agriculture.” Because VAA requires the processing of a raw agricultural ingredient, and can include the public coming to the farm to purchase the product, county interpretations often categorize these activities as commercial or industrial. Given this interpretation, based upon existing zoning language and use tables, many businesses are deemed non-allowed uses.

## LABOR

Most of the businesses did not state they had unfilled positions beyond some farmers who use seasonal employees. However, many of these operations are looking to expand in the future and it is essential they have skilled workers that meet their requirements, otherwise there may be serious challenges to growth. As this occurs it is important to consider the skills prospective employees need to fill future positions. For VAA businesses this is a difficult question as the range of operations varies widely. The variety of trades required allow for a wide range of skills that workers can learn without competing with each other.

One farmer mentioned in the survey that English and Spanish language skills was a requirement he looked for in seasonal workers. Beyond this, farm workers need knowledge of crops, regulation requirements, and experience with farm equipment. This expands even further when considering the growth of Maryland wineries and the state’s craft beverage industry, overall. Wineries, breweries and distilleries require skills including engineering, chemistry, and regulatory and business knowledge to produce and market their products. Food processors also require a range of skills from prospective employees depending on the type of product they make. Butchers need individuals knowledgeable about health regulations, meats and cuts. Dairy processors also need workers that are familiar with health regulations. This list only bifurcates further when taking into account the needs of many other types of VAA businesses. Because the majority of VAA businesses sell directly to the public many survey respondents and case study interviewees stated that, while they would be willing to train employees on some of the specific tasks related to their particular business, that a strong work ethic and good customer service skills were essential and often difficult to find.

## SECTION V: Opportunities & Recommendations

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The rapid pace at which VAA is evolving creates incredible challenges for those tasked with regulating the industry. Though for many value-added producers and small food businesses in the BMA, there is nothing but opportunity.

### AVAILABLE DATA

As noted throughout this report, data regarding VAA and food entrepreneurs is difficult to find. In part, this is due to the rapidly evolving nature of the industry, but also the lack of definitive operational categories from which to collect that data. Jurisdictions have an opportunity to gather more detailed data on VAA businesses annually or semi-annually to track employment numbers, economic impact and general impact on the VAA's surrounding community.

- **Recommendation #1:** Collaboration among government and educational sectors to conduct a semi-annual study to assess the potential and growth of VAA businesses by developing a comprehensive database of these businesses, and through the collection of employment data.

### ACCESS TO INGREDIENTS

A majority of VAA producers involved in this study noted a desire to source more inputs locally. With the state's strong land preservation programs and preponderance of agricultural lands, growers could easily plant and supply greater quantities of raw agricultural ingredients for local production. Twenty-three percent of survey respondents noted that the increase in quantity of quality local ingredients was their greatest opportunity in their business. This is especially true for the craft beverage industry, where the demand for local grapes, hops and malting grains is nowhere near being met by current production levels. As a greater incentive, these specialized crops often yield greater revenue to a farmer than their existing crops.

- **Recommendation #2:** Work with local agricultural leaders and support organizations—such as soil conservation, agricultural marketing, economic development, farm bureau—to emphasize the need for locally sourced raw ingredients.
- **Recommendation #3:** Encourage property owners (and would-be property owners) to utilize the use of open space and land preservation programs to expand the inventory of raw agricultural ingredients within the BMA needed to support VAA and food entrepreneurs.
- **Recommendation #4:** Create VAA and food entrepreneurship development and incubation zones where startups can co-locate, share costs and test products.

## PROCESSING INFRASTRUCTURE

Perhaps the most impactful change to be made to Maryland's value-added agricultural landscape would be an investment in supporting infrastructure. A good amount of the VAA products that are sold in Maryland were transported outside of Maryland at one point during the process, before returning to Maryland to be sold. In fact, we were not able to include a number of VAA producers in the study because in some cases the added value happened outside of the BMA.

Agricultural support businesses—milling, animal processing, malting—that provide processed ingredients or products to VAA businesses, should be encouraged in the BMA region. Virginia—which has a stated goal of supporting the craft beverage industry—has put forth tax incentives and financing to bring these industries to their state, recognizing their positive financial and tourism benefits. Because these support businesses do not need to be located in every county, a regional approach should be taken to attract these businesses, as these businesses provide support to food and agriculture producers at both the county and state level.

Looking at the craft beverage industry alone, there is currently a need for malting houses, pickers, dryers and processing equipment for the growing hops

and grain industries, as well as a need for a grape crushing facility. Meat processing facilities, food aggregation centers, commercial or shared-use kitchens and co-packing facilities rank high on the list as well.

- **Recommendation #5:** Create policies through legislative and regulatory action that encourage growth and expansion of food and agricultural business opportunities, including defining sales of VAA products as accessory retail instead of “commercial,” and allowing visitors and promotional events.
- **Recommendation #6:** Convene a meeting at least once annually to collaborate among city, county and state agencies to encourage the establishment of food and agricultural support businesses, such as malting, milling, canning, and co-packing, animal processing, cooperages, etc.

## CAPITAL

Jurisdictional grant, loan and incentive programs must be better promoted to—and tailored directly for—VAA businesses to ensure proper awareness and enrollment in the programs. Survey respondents noted burdensome applications or information requirements as reasons why they did not apply to county/city programs.

- **Recommendation #7:** Connect businesses to existing grant, loan and tax credit incentive resources and programs.
- **Recommendation #8:** Tailor grant, loan and tax credit incentive programs to incorporate the size and scale of VAA and food businesses.
- **Recommendation #9:** Evaluate requirements of programs against those offered by private banks to simplify and streamline the application process.

## MARKETPLACE DEMAND

For several years, the thought was that the local food movement was only a fad, soon to disappear. The proliferation of farmers’ markets, increasing requests made to grocers for local products, and growing interest among restaurants in

having farmers' names on their menus are all symptoms of this increasing trend. Around the country, there is a growing demand for locally sourced food, where customers know exactly where their food has come from, even down to the name of the farmer. Nationally, local foods generated \$11.7 billion in sales in 2014, and will climb to \$20.2 billion by 2019.<sup>51</sup>

Not only has there been a huge increase in the number of farmers markets and farm-to-table restaurants, now larger establishments and big-box stores are continuing to add local products to the shelves. Locally sourced ingredients have never been in more demand. Sixty-two percent of survey respondents saw their location in the region, and demand for locally produced products, as their greatest opportunities.

The greatest challenge is still awareness. Local governments have provided general promotional opportunities for their VAA businesses to great effect. These include Frederick County's recently published guide to wineries, breweries and distilleries; and, Howard County's *Harvest* magazine.

- **Recommendation #10:** Create promotional guides to generate awareness of VAA and food-processing businesses through the jurisdictional tourism or economic development agencies.

## GOVERNMENT & AGENCY REGULATIONS & SUPPORT

Maryland is a small state and although it is recognized for its farmland preservation efforts, American Farmland Trust notes, "Maryland has the third highest rate of farmland loss in the country, losing nearly 20,000 acres of farmland a year to development."<sup>52</sup> Counties should treat valuable agricultural land as an asset and ensure the continued viability of the agricultural industry while designating areas for micro-manufacturing and allowing VAA and small food businesses to flourish.

Farms are thriving and growing within the BMA in new and exciting ways. Many farmers have capitalized on the demand and offer a bounty of healthy, fresh food and tourism opportunities to local consumers. Farms are an integral part of many communities, and residents are increasingly interested in learning about the source of their food and now visit neighboring farms regularly.

County governments, recognizing these trends, and seeing the importance of agriculture to economic growth, are doing more to protect and promote these important assets. While farmland preservation efforts continue throughout the state (when funding is available), protecting farmland from development alone does not guarantee that the land will be actively and viably farmed. Actively formulating strategies to address farming as an economic sector will support farmland preservation efforts and strengthen the local food economy.

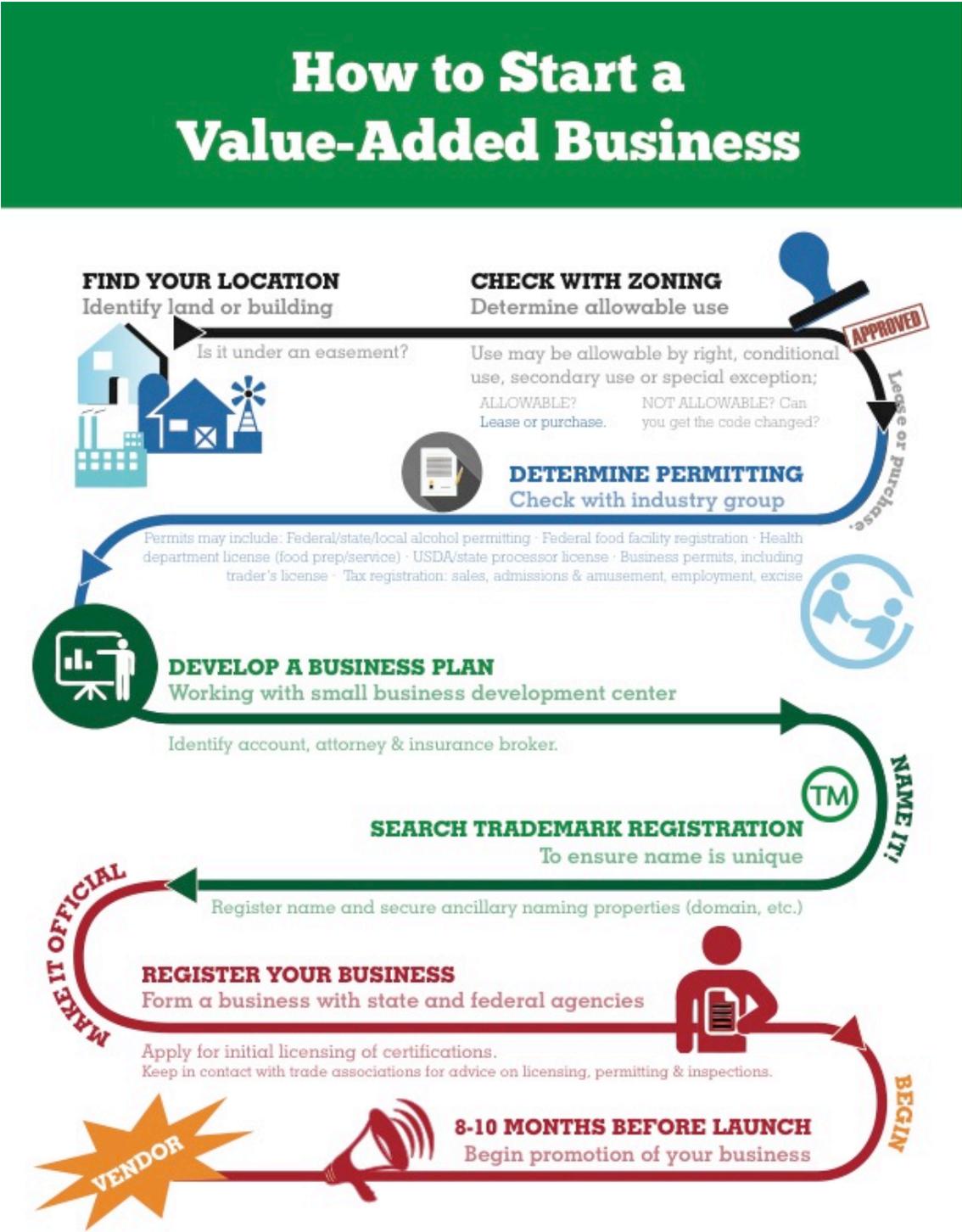
While support exists for these businesses at varying levels in the BMA region, there is not consistent funding, or training programs, for agricultural-based businesses. Both Harford and Howard Counties offer an Agricultural Grant, as did Carroll County. These types of grants should be offered in every county and Baltimore City with consistent annual funding.

Most VAA operations are new or small businesses. These entrepreneurs need support and resources from their county or local government representatives when trying to navigate the difficult regulatory and business waters, as illustrated in Graphic 3 below. Currently, Anne Arundel, Carroll, Harford and Howard Counties have Agricultural Economic Development and Marketing staff in county agency offices. The City of Baltimore, which implemented a Homegrown Baltimore campaign to “Grow Local, Buy Local and Eat Local”<sup>53</sup> employs a Food Policy Director who works with urban agriculture producers. These staff members are a critical liaison between the agricultural and small food business communities and other agency offices. Additionally, they have knowledge of agriculture, and ties to the agricultural community, that make them a trusted resource.

The Maryland Agriculture & Resource-Based Industry Development Corporation (MARBIDCO) offers matching funding for grants and loans secured through county, state, federal and organizational avenues, and should be employed wherever possible to extend opportunities to VAA operators.

- **Recommendation #11:** Create and fund grant/loan programs for farmers (new, beginning, value-added and diversifying), and incorporate matching funds through MARBIDCO, where applicable.
- **Recommendation #12:** Fund and support an Agricultural Economic Development Specialist in every jurisdiction.

Graphic 3: Start-Up Process



The permitting and regulatory process was cited almost unanimously as a major impediment to the success and growth of VAA businesses. Anecdotal tales of the ease at which Virginia VAA businesses are permitted angers many Maryland startups, and has led a number Marylanders to locate their businesses to across the Potomac. Much of the consternation expressed by VAA businesses in the survey resulted from unclear permitting processes, a lack of—or unclear—definitions of uses and allowances, varied expectations or interpretations among inspectors and permitting officers, a lack of coordinated and comprehensive guidance from the various agencies, and a lack of executive decision-making by agency staff. Frederick County, for example, has developed a brochure to outline the startup/permitting process for new businesses, which allows a new business to chart a course for permitting. This is an option that jurisdictions should consider to provide a pathway on what is an otherwise unwieldy process. As best practices are developed, they can be shared through collective organizations, such as BMC and Maryland Association of Counties (MACo).

- **Recommendation #13:** Create annual tours of VAA operations by elected officials, administrative and regulatory staff to gain greater understanding and appreciation for local food and agriculture businesses and the challenges they face.
- **Recommendation #14:** Develop and outline clear, concise permitting and application approval processes.
- **Recommendation #15:** Through training, develop consistency among state and county inspectors to streamline inspection and permitting processes.
- **Recommendation #16:** Clearly outline expectations of applicants via written checklists prior to inspections.
- **Recommendation #17:** Designate a permitting navigator to guide new and expanding value-added producers through the review process.
- **Recommendation #18:** Work with local and state agencies (including Agriculture, Planning, Health & Mental Hygiene, Environment, Fire Marshal) to resolve difficult permitting situations through alternative means and exceptions, where appropriate.

- **Recommendation #19:** Establish definitions and uses in zoning code for value-added processing and food production businesses in appropriate zones, including agricultural, manufacturing, commercial/retail.

A number of VAA survey respondents noted the excessive time it took to get through county/city permitting. Much of the delay is attributed to confusion around the complexity of the project. Often times, agency staff have not had appreciation for the negative financial impact the delays have on startup VAA businesses.

- **Recommendation #20:** Create a culture of business development within various permitting agencies to ensure all staff, processes, policies and programs—from intake through permitting and inspections—are working to support businesses while fulfilling their regulatory responsibilities.
- **Recommendation #21:** To the extent practicable, routinely evaluate and work to streamline the timeline of the permit processes and procedures to support business development.

Events are used as a promotional tool by many VAA businesses throughout the state. These events—whether public or private, ticketed or open to the public in nature—provide an invaluable marketing and sales opportunity to VAA businesses. When a value-added producer is located on a farm, events have become a point of contention, as they bring potentially large crowds down rural roads, eliciting neighbor concern. Most counties do not have clear rules or allowances for events on productive farms.

- **Recommendation #22:** Create allowances for secondary use of on-farm public and private promotional events and tours to encourage the promotion and sale of products produced on the farm.

## WORKFORCE DEVELOPMENT

The vast array of VAA businesses and skills associated with these businesses presents a unique opportunity for state and local governments. The many different sectors involved in VAA means there are multiple different trades individuals can learn to competitively enter the workforce. What is required is

helping businesses and workers connect with each other while ensuring employees have the skills sought after by businesses. It is recommended that local governments in the BMA provide resources for workers to learn applicable skills—including farming, food safety, manufacturing, chemistry—and enter the workforce. Maryland has an existing program—the Maryland Apprenticeship and Training Program (MATP)—that could potentially be expanded to fill this need.<sup>54</sup> Additionally, a greater exposure to agricultural and food careers and opportunities at the school level might encourage students to develop some of the skills required at an earlier age. Programs such as Curriculum for Agricultural Science Education (CASE), developed by the National Council for Agricultural Education (NCAE), provide materials that offer a high level of educational experiences to students to enhance agriculture, food, and natural resources subject matters. According to NCAE, there are at least twenty-five (25) CASE certified teachers in the BMC.<sup>55</sup> VAA producers and processors can work with local officials in developing positions to train unskilled workers, while workers in the BMA region can develop a skill set that makes them competitive in the labor market.

Based on information obtained from personal interviews for the case studies of VAA businesses, the greatest potential for job growth appears to come from the beverage-processing sector. Craft alcohol producers within the BMA have seen remarkable growth in demand for their product in recent years. Charm City Meadworks of Baltimore has seen great interest in their product and are soon expanding; they are moving to a new location in Baltimore that will provide them with greater room to expand operations. They anticipate they will need to hire three more people – a combination of full and part time - to meet their goals. These jobs will fill different roles and thus require a wide range of skills. The Vineyards at Dodon is another BMA beverage-processor that specifically needs farm labor. As a vineyard, seasonal farm work is often important to the operation and there is a real need for reliable, bilingual farm labor that has vineyard skills.

- **Recommendation #23:** Create workforce development and training programs tailored to food and VAA businesses. For example, consider ways to incorporate and encourage the development of agricultural curricula at multiple levels in the public education system, including primary, secondary and specialized schools.

## LIST OF RECOMMENDATIONS

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**Recommendation #1:** Collaboration among government and educational sectors to conduct a semi-annual study to assess the potential and growth of VAA businesses by developing a comprehensive database of these businesses, and through the collection of employment data.

**Recommendation #2:** Work with local agricultural leaders and support organizations—such as soil conservation, agricultural marketing, economic development, farm bureau—to emphasize the need for locally sourced raw ingredients.

**Recommendation #3:** Encourage property owners (and would-be property owners) to utilize the use of open space and land preservation programs to expand the inventory of raw agricultural ingredients within the BMA needed to support VAA and food entrepreneurs.

**Recommendation #4:** Create VAA and food entrepreneurship development and incubation zones where startups can co-locate, share costs and test products.

**Recommendation #5:** Create policies through legislative and regulatory action that encourage growth and expansion of food and agricultural business opportunities, including defining sales of VAA products as accessory retail instead of “commercial,” and allowing visitors and promotional events.

**Recommendation #6:** Convene a meeting at least once annually to collaborate among city, county and state agencies to encourage the establishment of food and agricultural support businesses, such as malting, milling, canning, and co-packing, animal processing, cooperages, etc.

**Recommendation #7:** Connect businesses to existing grant, loan and tax credit incentive resources and programs.

**Recommendation #8:** Tailor grant, loan and tax credit incentive programs to incorporate the size and scale of VAA and food businesses.

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**Recommendation #10:** Create promotional guides to generate awareness of VAA and food-processing businesses through the jurisdictional tourism or economic development agencies.

**Recommendation #11:** Create and fund grant/loan programs for farmers (new, beginning, value-added and diversifying), and incorporate matching funds through MARBIDCO, where applicable.

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**Recommendation #13:** Create annual tours of VAA operations by elected officials, administrative and regulatory staff to gain greater understanding and appreciation for local food and agriculture businesses and the challenges they face.

**Recommendation #14:** Through training, develop consistency among state and county inspectors to streamline inspection and permitting processes.

**Recommendation #15:** Clearly outline expectations via written checklists prior to inspections.

**Recommendation #16:** Designate a permitting navigator to guide new and expanding value-added producers through the review process.

**Recommendation #17:** Work with local and state agencies (including Agriculture, Planning, Health & Mental Hygiene, Environment, Fire Marshal) to resolve difficult permitting situations through alternative means and exceptions, where appropriate.

**Recommendation #18:** Establish definitions and uses in zoning code for value-added processing and food production businesses in appropriate zones, including agricultural, manufacturing, commercial/retail.

**Recommendation #19:** Create a culture of business development within various permitting agencies to ensure all staff, processes, policies and programs—from intake through permitting and inspections—are working to support businesses while fulfilling their regulatory responsibilities.

**Recommendation #20:** To the extent practicable, routinely evaluate and work to streamline the timeline of the permit processes and procedures to support business development.

**Recommendation #21:** Create allowances for secondary use of on-farm public and private promotional events to encourage the promotion and sale of products produced on the farm.

**Recommendation #22:** Create workforce development and training programs tailored to food and VAA businesses.

## SECTION VI: Appendices

### Appendix 1: County and City Profiles

Source: Johns Hopkins Center for a Livable Future, "Maryland Food System Profile II: Individual County Profiles."

AGRICULTURE - GENERAL CHARACTERISTICS	Anne Arundel	Maryland	% of MD Total	County Ranking
Total Number of Farms, 2012 <sup>n</sup>	381	12,256	3.11%	15
Acres of Land in Farms, 2012 <sup>n</sup>	28,111	2,030,745	1.38%	23
% of Land in Farms, 2012 <sup>n</sup>	10.60%	32.50%		22
Average Farm Size (Acres), 2012 <sup>n</sup>	74	166		23
Acres of Cropland Harvested, 2012 <sup>n</sup>	13,362	1,280,965	1.04%	21

AGRICULTURE - ECONOMICS	Anne Arundel	Maryland	% of MD Total	County Ranking
Number of Small Farms (Market Value <\$50,000), 2012 <sup>n</sup>	347	9,190	3.78%	10
Number of Mid-Sized Farms (\$50,000 - \$499,999), 2012 <sup>n,10</sup>	27	1,851	1.46%	20
Number of Large Farms (\$500,000 or more), 2012 <sup>n</sup>	7	1,215	0.58%	17
Total Market Value of Agricultural Products Sold, 2012 <sup>n</sup>	\$19,670,000	\$2,271,397,000	0.87%	19
■ Average Per Farm	\$51,628	\$185,329		18

AGRICULTURE - GENERAL CHARACTERISTICS	Baltimore Co.	Maryland	% of MD Total	County Ranking
Total Number of Farms, 2012 <sup>n</sup>	640	12,256	5.22%	6
Acres of Land in Farms, 2012 <sup>n</sup>	70,419	2,030,745	3.47%	13
% of Land in Farms, 2012 <sup>n</sup>	16.20%	32.50%		19
Average Farm Size (Acres), 2012 <sup>n</sup>	110	166		20
Acres of Cropland Harvested, 2012 <sup>n</sup>	42,451	1,280,965	3.31%	12

AGRICULTURE - ECONOMICS	Baltimore Co.	Maryland	% of MD Total	County Ranking
Number of Small Farms (Market Value <\$50,000), 2012 <sup>n</sup>	537	9,190	5.84%	5
Number of Mid-Sized Farms (\$50,000 - \$499,999), 2012 <sup>n,10</sup>	73	1,851	3.94%	11
Number of Large Farms (\$500,000 or more), 2012 <sup>n</sup>	30	1,215	2.47%	13
Total Market Value of Agricultural Products Sold, 2012 <sup>n</sup>	\$76,306,000	\$2,271,397,000	3.36%	13
■ Average Per Farm	\$119,229	\$185,329		11
Net Cash Farm Income of Operations, 2012 <sup>n</sup>	\$17,265,000	\$477,002,000		12
■ Average Per Farm	\$26,977	\$38,920		10

AGRICULTURE - GENERAL CHARACTERISTICS	Carroll	Maryland	% of MD Total	County Ranking
Total Number of Farms, 2012 <sup>n</sup>	1092	12,256	8.91%	2
Acres of Land in Farms, 2012 <sup>n</sup>	132,630	2,030,745	6.53%	5
% of Land in Farms, 2012 <sup>n</sup>	46.30%	32.50%		5
Average Farm Size (Acres), 2012 <sup>n</sup>	121	166		17
Acres of Cropland Harvested, 2012 <sup>n</sup>	86,756	1,280,965	6.77%	6

AGRICULTURE - ECONOMICS	Carroll	Maryland	% of MD Total	County Ranking
Number of Small Farms (Market Value <\$50,000), 2012 <sup>n</sup>	895	9,190	9.74%	2
Number of Mid-Sized Farms (\$50,000 - \$499,999), 2012 <sup>n,10</sup>	151	1,851	8.16%	4
Number of Large Farms (\$500,000 or more), 2012 <sup>n</sup>	46	1,215	3.79%	11
Total Market Value of Agricultural Products Sold, 2012 <sup>n</sup>	\$111,637,000	\$2,271,397,000	4.91%	10
■ Average Per Farm	\$102,232	\$185,329		14
Net Cash Farm Income of Operations, 2012 <sup>n</sup>	\$23,881,000	\$477,002,000		11
■ Average Per Farm	\$21,869	\$38,920		12

AGRICULTURE - GENERAL CHARACTERISTICS	Harford	Maryland	% of MD Total	County Ranking
Total Number of Farms, 2012 <sup>n</sup>	582	12,256	4.75%	8
Acres of Land in Farms, 2012 <sup>n</sup>	65,472	2,030,745	3.22%	15
% of Land in Farms, 2012 <sup>n</sup>	23.40%	32.50%		15
Average Farm Size (Acres), 2012 <sup>n</sup>	112	166		19
Acres of Cropland Harvested, 2012 <sup>n</sup>	36,818	1,280,965	2.87%	14

AGRICULTURE - ECONOMICS	Harford	Maryland	% of MD Total	County Ranking
Number of Small Farms (Market Value <\$50,000), 2012 <sup>n</sup>	473	9,190	5.15%	7
Number of Mid-Sized Farms (\$50,000 - \$499,999), 2012 <sup>n,10</sup>	82	1,851	4.43%	9
Number of Large Farms (\$500,000 or more), 2012 <sup>n</sup>	27	1,215	2.22%	14
Total Market Value of Agricultural Products Sold, 2012 <sup>n</sup>	\$46,002,000	\$2,271,397,000	2.03%	15
■ Average Per Farm	\$79,042	\$185,329		16
Net Cash Farm Income of Operations, 2012 <sup>n</sup>	\$3,108,000	\$477,002,000		18
■ Average Per Farm	\$5,340	\$38,920		18

AGRICULTURE - GENERAL CHARACTERISTICS	Howard	Maryland	% of MD Total	County Ranking
Total Number of Farms, 2012 <sup>n</sup>	293	12,256	2.39%	20
Acres of Land in Farms, 2012 <sup>n</sup>	37,475	2,030,745	1.85%	19
% of Land in Farms, 2012 <sup>n</sup>	23.40%	32.50%		15
Average Farm Size (Acres), 2012 <sup>n</sup>	128	166		13
Acres of Cropland Harvested, 2012 <sup>n</sup>	19,372	1,280,965	1.51%	20

AGRICULTURE - ECONOMICS	Howard	Maryland	% of MD Total	County Ranking
Number of Small Farms (Market Value <\$50,000), 2012 <sup>n</sup>	251	9,190	2.73%	17
Number of Mid-Sized Farms (\$50,000 - \$499,999), 2012 <sup>n,10</sup>	25	1,851	1.35%	21
Number of Large Farms (\$500,000 or more), 2012 <sup>n</sup>	17	1,215	1.40%	16
Total Market Value of Agricultural Products Sold, 2012 <sup>n</sup>	\$31,883,000	\$2,271,397,000	1.40%	16
■ Average Per Farm	\$108,817	\$185,329		13
Net Cash Farm Income of Operations, 2012 <sup>n</sup>	\$4,023,000	\$477,002,000		16
■ Average Per Farm	\$13,732	\$38,920		14

## Urban Agriculture

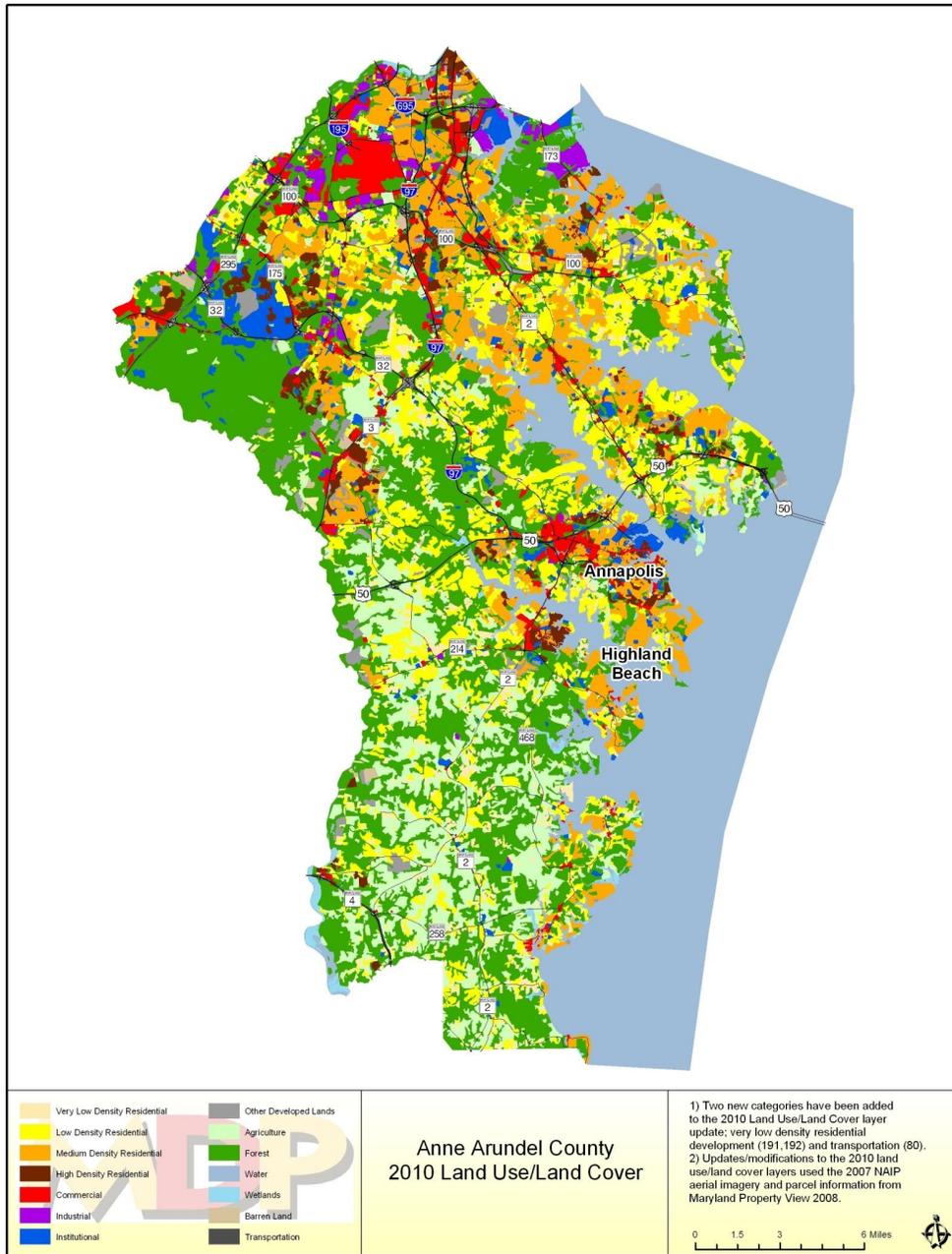
URBAN AGRICULTURE <sup>1</sup> - GENERAL CHARACTERISTICS	Baltimore City	Maryland	% of MD Total	County Ranking
Total Number of Urban Farms <sup>14,7</sup>	15	15		
• Number of Baltimore Farm Alliance Members <sup>15</sup>	11	11		
• Number of Farms with Laying Hens	3	3		
• Number of Farms with Honey Bees	7	7		
• Number of Farms Raising Fish	1	1		
• Number of Farms Growing Fruit	7	7		
• Number of Farms Growing Vegetables	9	9		

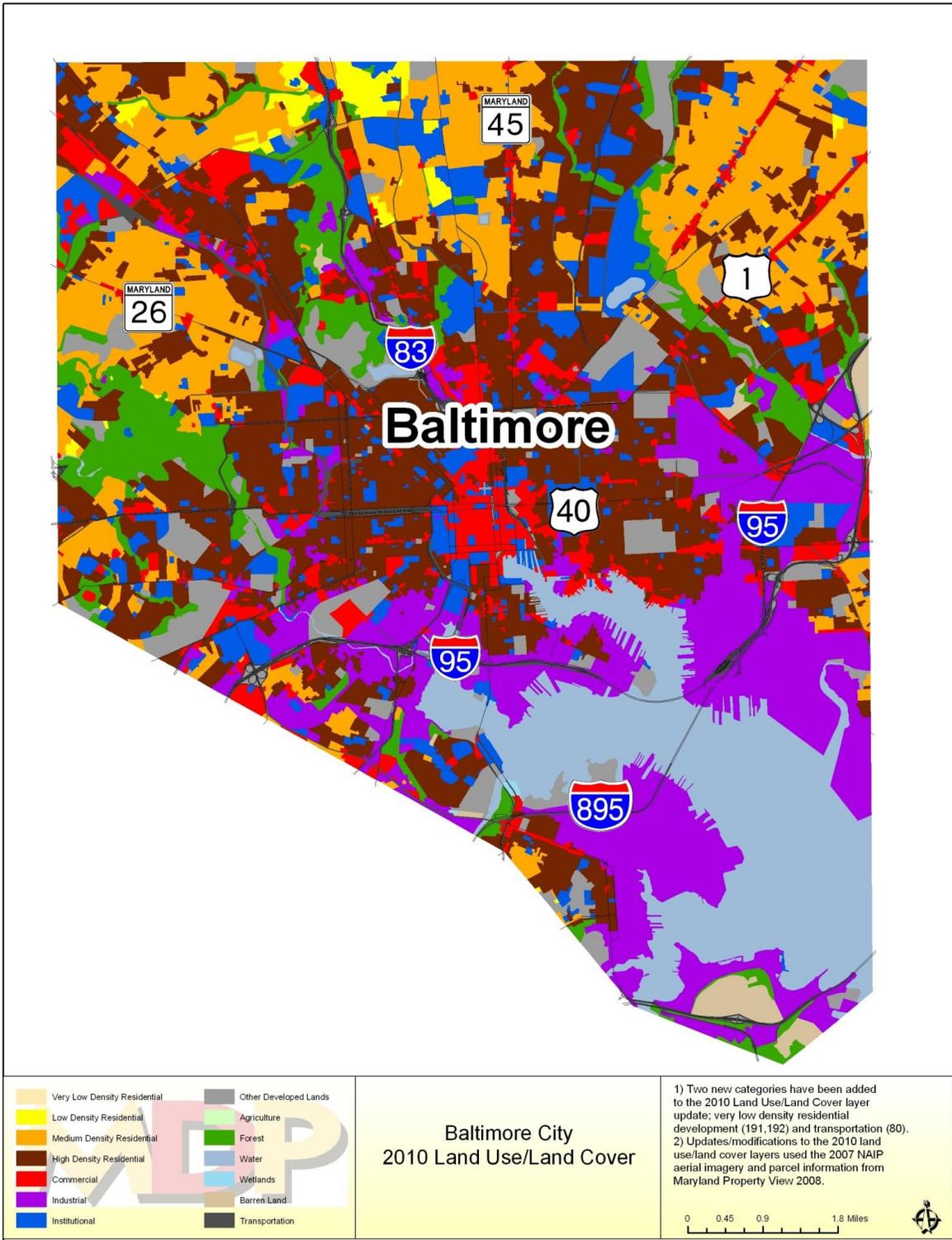
URBAN AGRICULTURE - LOCAL FOOD	Baltimore City	Maryland	% of MD Total	County Ranking
Number of Farmers Markets, 2013 <sup>6</sup>	19	163	11.66%	2
Total Number of Urban Farms Selling Locally, 2012 <sup>1,16</sup>	15	15		
• Urban Farms that are Certified Organic	0	0		
• Urban Farms that sell at farmers markets	11	11		
• Urban Farms that Sell at Farm Stands <sup>17</sup>	8	8		
• Urban Farms that Sell Through Wholesale <sup>18</sup>	9	9		

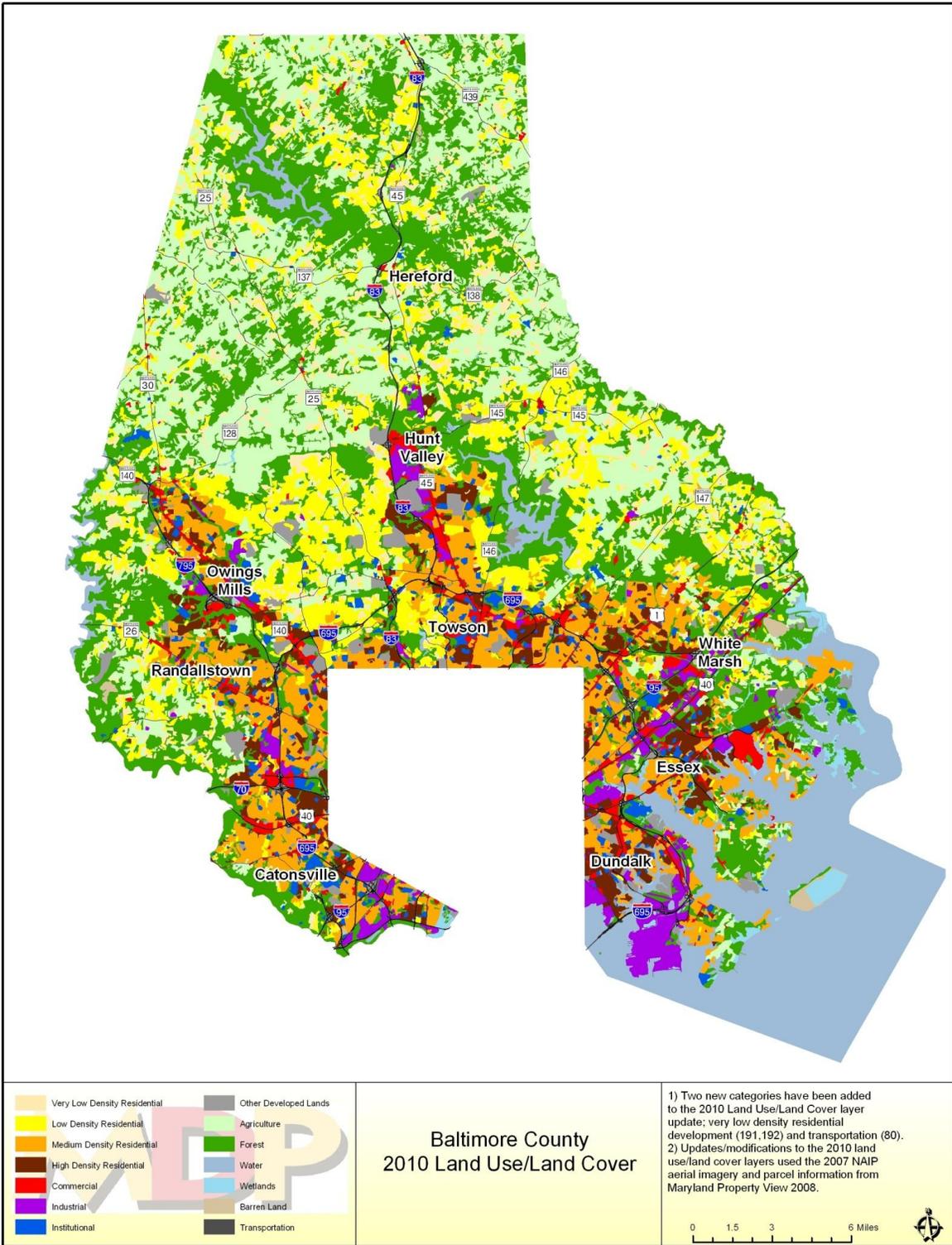
## Processing and Distribution

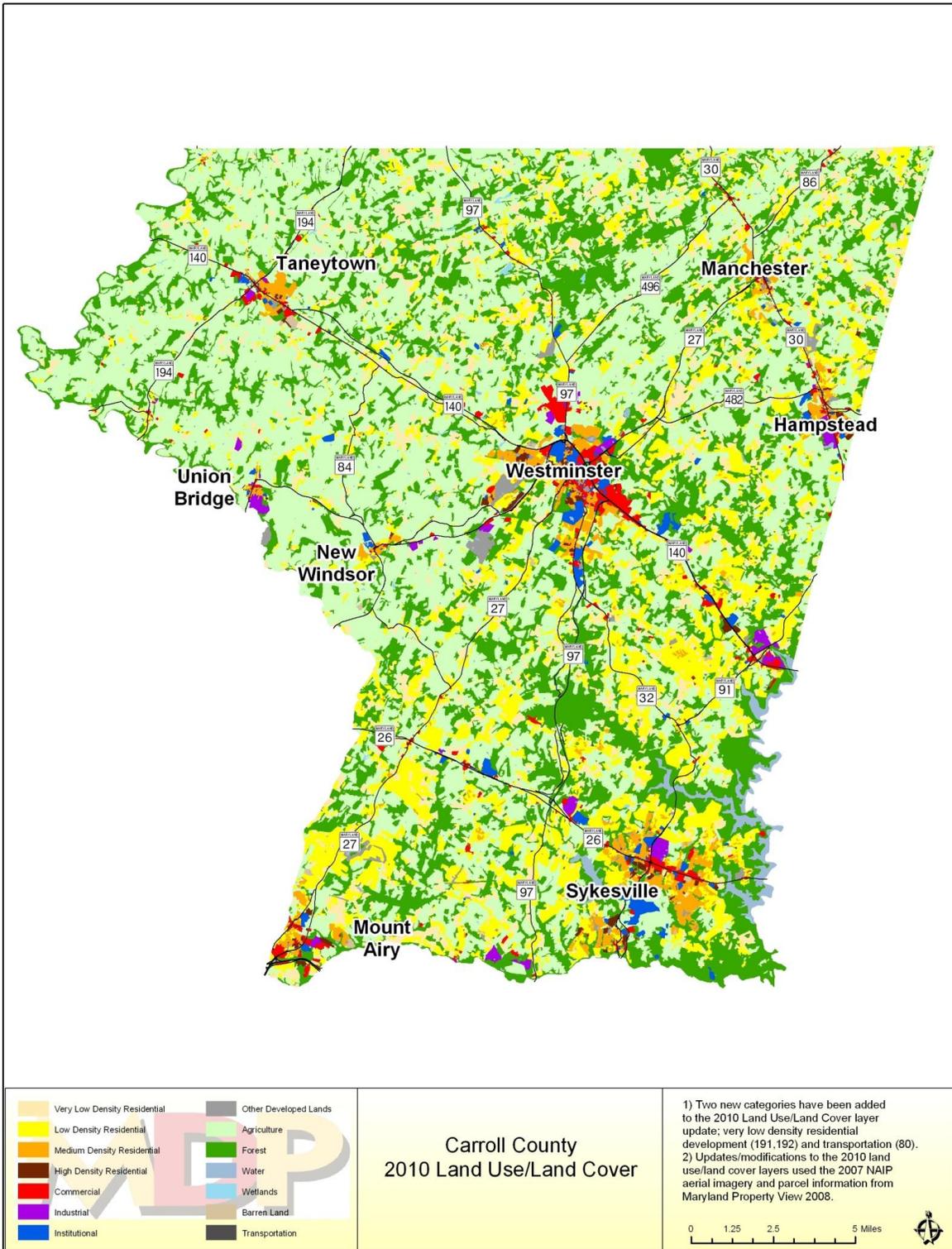
PROCESSING AND DISTRIBUTION <sup>1,19</sup>	Baltimore City	Maryland	% of MD Total	County Ranking
Total Number of Food Processing Facilities*	76	1111	6.84%	4
• Number of Canneries	0	12	0.00%	10
• Number of Facilities that Process Dairy	14	130	10.77%	3
• Number of Facilities that Process Eggs	0	358	0.00%	24
• Number of Facilities that Process Seafood	6	196	3.06%	11
• Number of Facilities that Process Meat	26	199	13.07%	1
Animal Slaughter Facilities*	0	51	0.00%	19
• Number of Facilities that Slaughter Hogs	0	12	0.00%	8
• Number of Facilities that Slaughter Cattle	0	17	0.00%	9
• Number of Facilities that Slaughter Poultry	0	34	0.00%	16
Distribution and Storage Facilities*	59	727	8.12%	4
• Number of Distributors that Source Locally	0	65	0.00%	19

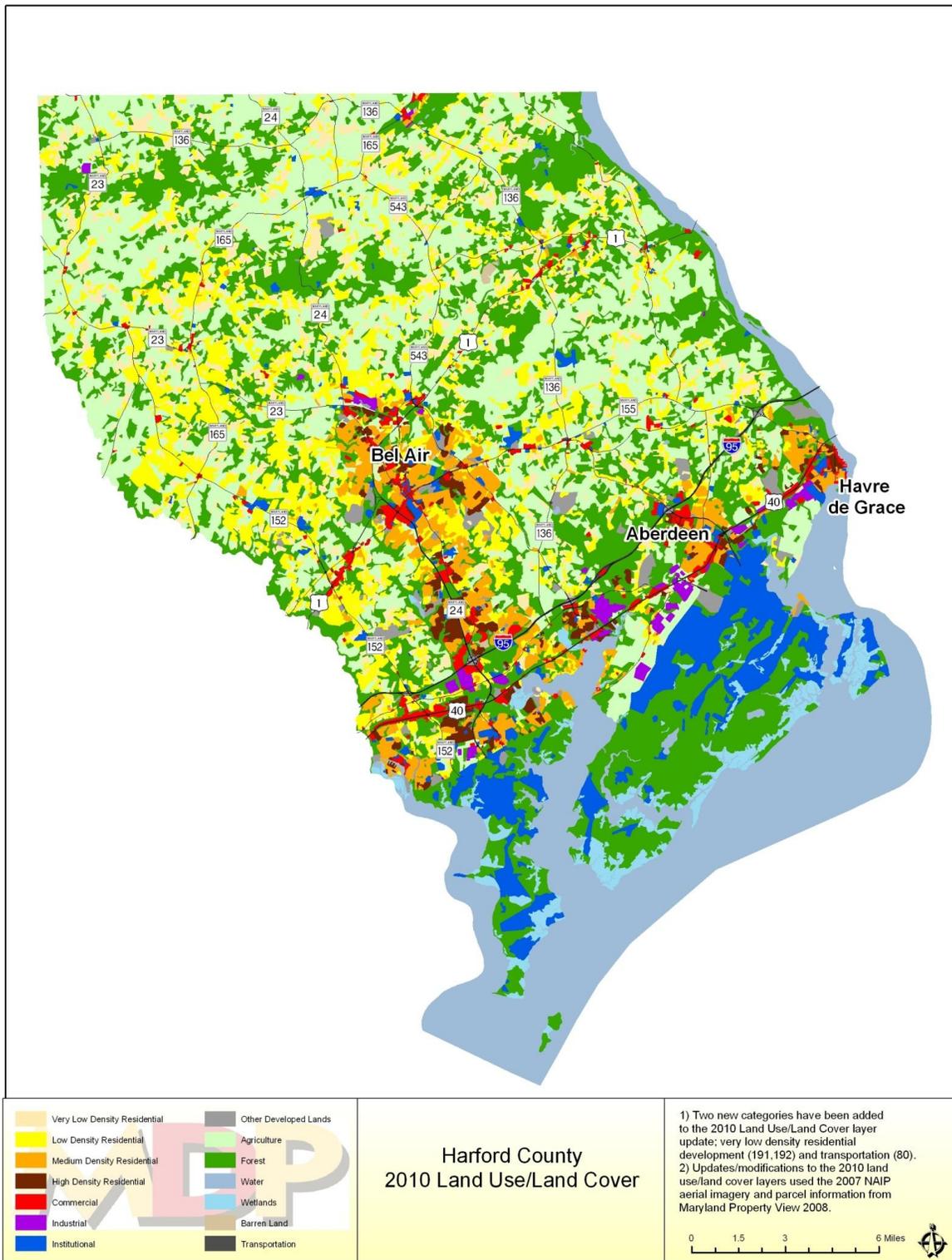
## Appendix 2: Land Use Maps

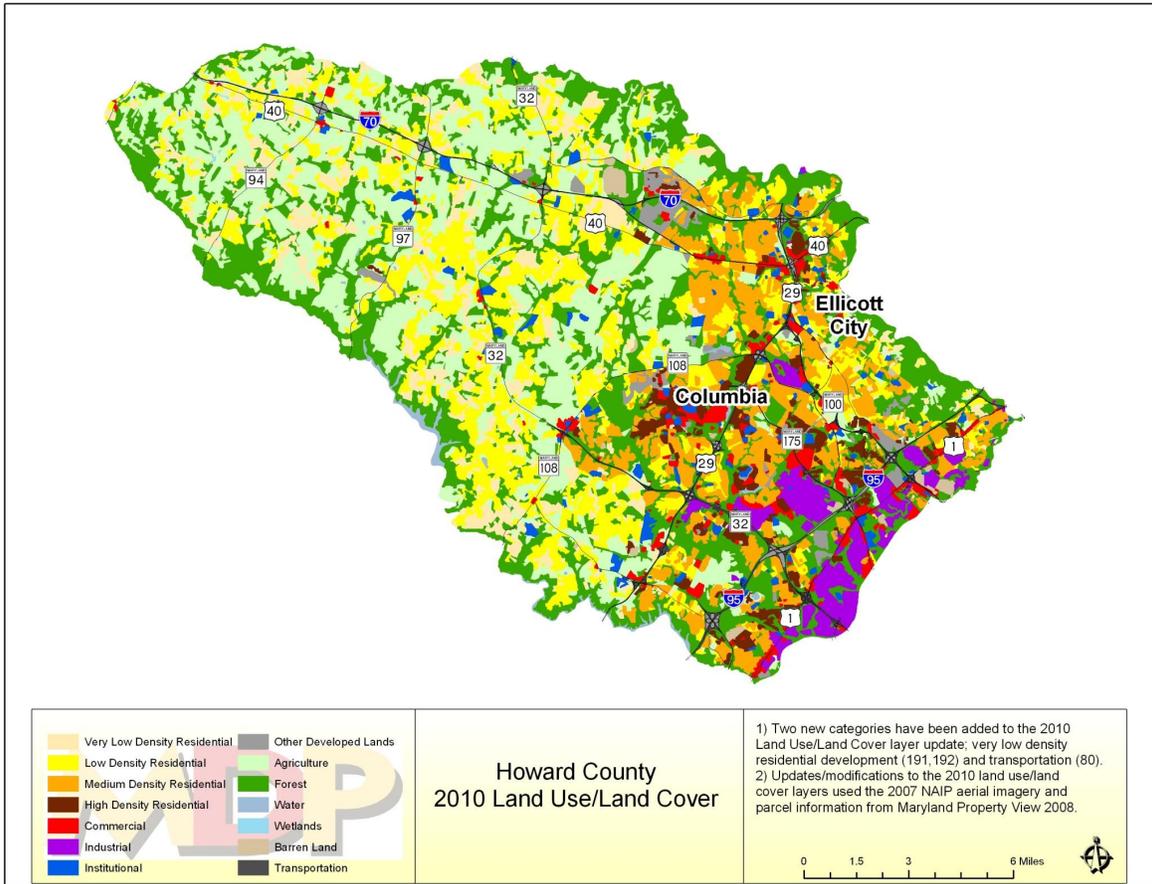












## Appendix 3: Federal, State and County Grant & Loan Programs

Level	Organization	Program
Federal	USDA (Various Departments) <a href="http://www.usda.gov">www.usda.gov</a>	<ul style="list-style-type: none"> <li>• Agricultural Conservation Easement Program</li> <li>• Conservation Reserve Program</li> <li>• Conservation Stewardship Program</li> <li>• Environmental Quality Incentives Program</li> <li>• Microloans</li> <li>• Farm Storage Facility Loans</li> <li>• Noninsured Crop Disaster Assistance Program</li> <li>• Rural Energy for America Program</li> <li>• Whole-Farm Revenue Protection Program</li> <li>• Organic Cost Share Programs</li> <li>• Biomass Research and Development Initiative</li> </ul>
	USDA Farm Service Agency <a href="http://www.fsa.usda.gov">www.fsa.usda.gov</a>	<ul style="list-style-type: none"> <li>• Farm Operating Loans</li> <li>• Microloan Programs</li> <li>• Farm Ownership Loans</li> <li>• Guaranteed Farm Loans</li> <li>• Minority and Women Farmers and Ranchers</li> <li>• Beginning Farmer and Ranchers Loans</li> <li>• Emergency Farm Loans</li> </ul>
	USDA Rural Development <a href="http://www.rd.usda.gov">www.rd.usda.gov</a>	<ul style="list-style-type: none"> <li>• Agricultural Conservation Easement Program</li> <li>• Conservation Reserve Program</li> <li>• Conservation Stewardship Program</li> <li>• Environmental Quality Incentives Program</li> <li>• Microloans</li> <li>• Farm Storage Facility Loans</li> <li>• Noninsured Crop Disaster Assistance Program</li> <li>• Rural Energy for America Program</li> <li>• Whole-Farm Revenue Protection Program</li> <li>• Organic Cost Share Programs</li> </ul>
	Northeast Sustainable Agriculture Research & Education <a href="http://www.nesare.org">www.nesare.org</a>	<ul style="list-style-type: none"> <li>• Farmer Grant</li> <li>• Partnership Grant</li> </ul>
State	MARBIDCO <a href="http://www.marbidco.org">www.marbidco.org</a>	<ul style="list-style-type: none"> <li>• Resource-Based Industry Financing Fund Loan</li> <li>• Rural Business Equipment and Working Capital Fund Loan</li> <li>• Forestry Equipment and Working Capital Loan</li> <li>• Rural Business Energy Efficiency Improvement Loan Fund</li> <li>• Urban Agriculture Commercial Lending Incentive Grant</li> <li>• Local Government Ag/RBI Project Cost Share Program</li> <li>• Value Added Producer Grant (Capital Assets Option)</li> <li>• Vineyard, Hop Yard &amp; Orchard Planting Loan Fund</li> </ul>

	Mid-Atlantic Farm Credit <a href="http://www.mafc.com">www.mafc.com</a>	<ul style="list-style-type: none"> <li>• Farm Loans: Poultry, Dairy, Nursery, Equine Financing</li> <li>• Agribusiness</li> <li>• Farm Equipment Loans</li> <li>• Special Loan Programs: StartRight Financing, AgBiz Masters, Farm Fresh Financing</li> <li>• Home Loans: Lots, Home Construction, Part-Time Farm/Residential</li> </ul>
	Rural Maryland Council <a href="http://www.rural.maryland.gov">www.rural.maryland.gov</a>	<ul style="list-style-type: none"> <li>• Rural Maryland Prosperity Investment Fund</li> <li>• Maryland Agricultural Education Rural Development Assistance Fund</li> </ul>
	Maryland Department of Agriculture <a href="http://www.mda.maryland.gov">www.mda.maryland.gov</a>	<ul style="list-style-type: none"> <li>• Specialty Crop Block Grant</li> <li>• Conservation Grants</li> <li>• Animal Waste Technology Fund</li> <li>• Maryland Agricultural Water Quality Cost-Share Program</li> <li>• Cover Crop Programs</li> <li>• Conservation Reserve Enhancement Program</li> <li>• Manure Transport Program</li> <li>• Maryland Wine and Grape Promotion Fund</li> </ul>
	Maryland Department of Commerce <a href="http://www.commerce.maryland.gov">www.commerce.maryland.gov</a>	<ul style="list-style-type: none"> <li>• Job Creation Tax Credit</li> <li>• Enterprise Zone Tax Credits</li> <li>• One Maryland Tax Credit</li> <li>• Research and Development Tax Credit</li> <li>• Regional Institution Strategic Enterprise Zone Program</li> <li>• Brownfields Tax Incentive</li> <li>• Cellulosic Ethanol Technology R&amp;D Tax Credit</li> <li>• Maryland Wineries and Vineyards Tax Credit</li> <li>• Military Personnel and Veteran-Owned Small Business Loan Program</li> <li>• Small, Minority and Women-Owned Business Account Video Lottery Terminal Fund</li> <li>• Maryland Small Business Development Fund Authority</li> <li>• ADVANCE Maryland</li> </ul>
<b>Local</b>	All County Economic Development Offices	<ul style="list-style-type: none"> <li>• Small Business Development Centers</li> <li>• Enterprise Zones &amp; Tax Credits</li> <li>• Workforce Development</li> </ul>
	Baltimore City Office of Economic Development <a href="http://www.baltimoredevelopment.com">www.baltimoredevelopment.com</a>	<ul style="list-style-type: none"> <li>• Baltimore Microloan Fund</li> <li>• Revolving Loan Funds</li> <li>• City General Obligation Bonds</li> <li>• Small Business Resource Center</li> </ul>
	Baltimore County <a href="http://www.baltimorecountymd.gov/Agencies/economicdev/baltimorecountybusiness/">www.baltimorecountymd.gov/Agencies/economicdev/baltimorecountybusiness/</a>	<ul style="list-style-type: none"> <li>• Boost Loan Fund Program</li> <li>• Advanced Technology Loan Fund</li> <li>• Small Business Loan Fund</li> <li>• Business Growth Loans</li> </ul>

	Baltimore County (continued)	<ul style="list-style-type: none"> <li>• Building Improvement Loan Program</li> <li>• Tax-Exempt Bond</li> </ul>
	Harford County <a href="http://www.harfordcountymd.gov/718/Economic-Development">www.harfordcountymd.gov/718/Economic-Development</a> <a href="http://www.harfordcountymd.gov/1655/Agriculture">http://www.harfordcountymd.gov/1655/Agriculture</a>	<ul style="list-style-type: none"> <li>• Harford County Agricultural Grant</li> <li>• Harford County Agricultural Marketing Cooperative Emerging Technology Grant</li> </ul>
	Howard County <a href="http://www.hceda.org/farms-agriculture.aspx">www.hceda.org/farms-agriculture.aspx</a>	<ul style="list-style-type: none"> <li>• Howard County Agricultural Innovation Grant</li> </ul>

## Appendix 4: Survey Questions

1. Business/Farm Name

2. Contact Name

3. Address

4. Town/City

5. May we contact you by phone or email if we have additional clarifying questions?

- Yes
- No

6. If yes, please provide a phone number or email address.

7. For Farmers: How many total acres do you own or operate?

8. What components of the value-added agricultural industry do you undertake on your farm, or in your business? (Select all that apply)

- **Farms/Agricultural Producers that Sell Products Segregated by Identity and/or Production Characteristics:** Local; Regional; Direct Sales through Farm Stand or Farm Store; Sales through Farmers Markets; Community Supported Agriculture (CSA); Third-Party Certifications (ie. USDA Certified Organic, Animal Welfare Approved, Non-GMO Verified, Demeter, Certified Naturally Grown, etc.); Grass-fed (third-party certified or labeling claim)
- **Processors/ Small Food Businesses: Meat, Fruit and Vegetables:** Poultry (chickens, turkeys, quail, etc.); Livestock (beef, hogs, sheep, goats, rabbits); Butchers/Livestock Processors; Kosher; Halal; Fruit Processors (jams/jellies, pickled/fermented canned/jarred, dried/frozen, etc.); Vegetable processors (canned/jarred, pickled/fermented, dried/frozen, etc.); Honey; Baked Goods.
- **Processors/ Small Food Businesses: Repackaging:** Cleaning; Packaging; Drying; Malting; Milling; Pelletizing
- **Processors/ Small Food Businesses: Dairy.** Cheese; Ice Cream; Butter; Yogurt; Milk (fluid on-farm processed, flavored, etc.)
- **Processors/ Small Food Businesses: Beverages. Beer; Wine; Distilled spirits; Ciders; Meads;** Non-alcoholic beverages (sodas, kombuchas, etc.)
- **Other.** Agritourism; Energy; Forestry

9. Please list types of products sold:

10. Where do you sell your products? (Select all that apply)

- At my farm
- Maryland farmers market(s)
- Out of state farmers market(s)

- Maryland wholesaler / grocery store(s)
- Out of state wholesaler / grocery store(s)
- Online sales

11. Please tell us approximately what percentage of your total sales comes from each of the sales outlets selected above.

12. What are your long-term goals for your business? (Select all that apply)

- Financial stability and profitability
- Pass on the business to the next generation of family members
- Preserve our farmland
- Continue diversifying the business operation
- Other (please specify)

13. How did your value-added enterprise start? How did you determine what products you wanted to develop?

14. For farmers: Do you send any of your raw agricultural products outside of Maryland for processing?

- Yes
- No

15. If yes, to what state(s) do you send your raw agricultural products for processing? (Select all that apply)

- DE
- PA
- VA
- WV
- Other (please specify)

16. If you process products outside the state, please let us know what prevents you from processing your agricultural products in the state of Maryland. (Select all the apply)

- That type of processor does not exist in the state
- Too expensive
- County or state regulations are too restrictive
- The out of the state processor is closer to me than another in the state
- N/A
- Other (please specify)

17. Is sourcing raw agricultural products produced in Maryland important to your business?

- No
- Yes
- If yes, why?

18. Where are the majority of your raw agricultural products sourced from?

- Maryland farms
- Outside Maryland
- If outside the state, please list the other states

19. What agricultural products do you source from Maryland?

- None
- List products:

20. What factors would lead you to purchase more Maryland products for your food business?

(Select all that apply)

- Ease of sourcing them
- Ease of getting them delivered
- More economical
- Product quality

21. How many employees does your business have (including yourself)?

- 1-4
- 5-9
- 10-14
- 15-19
- 20-24
- 25 or more

22. If your farm or food business has employees (including yourself), what is their employment status? (Select all that apply):

- Full time
- Part time
- Seasonal

23. How many total full time, part time, and seasonal employees do you have?

24. What is the range of your revenue from operations?

- Under \$10,000
- \$10,000 to \$24,999
- \$25,000 to \$49,999
- \$50,000 to \$74,999
- \$75,000 to \$99,999
- \$100,000 to \$149,999
- \$150,000 to \$199,999
- \$200,000 to \$499,999
- \$500,000 to \$1 million
- More than \$1 million

25. Approximately what percentage of your total business revenue is derived from the sale of value-added products and activities?

26. Does the majority (more than 50%) of your annual income come from producing a value-added agricultural or food product?

- Yes
- No

27. If no, please select all additional sources of income:

- Non-agricultural related income
- Growing raw agricultural products on the farm
- Other (please specify)

28. Do you take advantage of any county or state level economic development support programs?

- Yes
- No

29. If yes, please list which ones.

30. If no, are you aware that county and state economic development support programs exist?

- Yes
- No

31. What sources have you used to gain access to capital for your business? (Select all that apply)

- Banks
- Farm Credit
- Maryland Agriculture & Resource Based Industry Development Corporation (MARBIDCO)
- Credit cards
- Crowdsourcing
- Friends & Family
- Investors
- Other (please specify)

32. What is the biggest challenge to your business and growth?

33. What do you see as your best opportunities?

34. What do you think the state of Maryland, or its counties, can do to support value-added agriculture and your business?

## Appendix 5: Additional Case Studies

Many hours were spent interviewing local businesses for the case studies included in this report; the time businesses dedicated to the phone calls or visits are incredibly appreciated. Additionally, the candid conversations provided a wealth of information on the current state of VAA. Included in this appendix are case studies that were conducted, but not able to be highlighted in the body of the report.

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## Friends and Farms: Howard County

Processor/Small Food Business: Repackaging



**Owners:** Philip Gottwals

**Founded:** 2012

**Closed:** 2016

**Employees:** 25+ (FT & PT)

**Skills Needed:** Organizational, logistical.

**Location/Zone:** Annapolis Junction/Commercial

**Sales:** 100% Online

**Source local:** Yes (poultry, eggs, vegetables); however, the majority of products were sourced outside the state.

**Produce local:** No

**Uniquity:** Worked with more than 100 producers and processors of regional foods.

The idea for Friends & Farms was developed in coordination with a group of farmers who wanted to see a shorter supply chain with a more direct feedback loop to consumers. Focus groups convened to further flesh out the idea revealed that local consumers were frustrated by their food options. As a result, the concept was to offer simple products, delivering consistent quality, at a value demanded in the marketplace.

The businesses aggregated and repackaged products from more than 100 producers and processors of regional foods. Their supplier network consisted of approximately 20-25 key suppliers with whom they engaged in seasonal planning efforts to ensure product delivery at the standards and terms required to be profitable. Products included meat, poultry, seafood, fluid dairy, ice cream, cheese, eggs, grains, legumes, vegetables, fruits, mushrooms, baked good, granola, coffee, tea, and hot and cold pack items.

Gottwals found that the current labor market was supportive of growth in their sector. They did not employ seasonal employees; instead they developed their second and third shifts to be functional second job opportunities for part-time workers. Job sites dedicated to the food industry produced few good candidates, whereas they found that broader job boards produced better results.

In 2016 Friends and Farms closed its doors. Said Gottwals, "This is a very competitive, low margin business. If you can't be competitive in all aspects of the business, it is hard to survive. Competition from county organizations - the Roving Radish - using taxpayer financing that directly competed with private companies made survival difficult." In Gottwals' opinion, the county's Roving Radish program, which offered Howard County residents meal kits comprised of locally and regionally grown foods, became a direct competitor to Friends & Farms in 2014. This, coupled with low margins, led to their decision to close.

## Old Westminster Winery: Carroll County

Processor/Small Food Business: Beverages



**Owner:** Jay & Virginia Baker, Lisa Hinton, Andrew Baker, Ashli Johnson

**Employees:** 6 FT/20 PT and seasonal

**Skills Needed:** Agricultural labor, winemaking, sales, hospitality.

**Location/Zone:** Carroll County/Agricultural

**Sales:** On-site, wine club, at local festivals, wholesale

**Source local:** Grapes, from home vineyard and other local growers

**Produce local:** Yes

**Uniquity:** Diversified business into custom-processing for other wineries.

**In 2009, when the Baker family was researching what to do with their 18 acres in Carroll County, the concept of a vineyard and winery rose to the top of the list. Now, just a few years into the business, one small winery on a rural road employs 26, boasts an 800-member wine club and recently won the Comptroller's Cup Competition with its Malbec.**

Jay and Ginger Baker have managed to keep all of their kids on the farm, a feat envied by farmers throughout the region. All it took was finding a diverse business enterprise that could incorporate their skills of business management, marketing and chemistry.

The Bakers produce all-Maryland wines, with 40% of their grapes grown at the farm, and the balance sourced from vineyards around the Maryland. Finding additional land suitable for growing more of their own grapes is their current challenge.

Other challenges noted include burdensome requirements from health and environment agencies regarding their septic, kitchen and tasting room—even when science and common sense disagreed.

Understanding the challenges startup wineries face - sometimes needing to decide whether to focus on the vineyard *or* the winemaking - the Bakers diversified their operations to create Maryland Wine Cellars (MWC), a custom-winemaking service. Vineyards seeking entry into the winemaking business can contract with MWC to produce their wine—from grapes to bottle—and receive a top-quality product with their first vintage under their own label. This service has helped the overall industry progress at a faster rate.

## Union Craft Brewing: Baltimore City

Processor/Small Food Business: Beverages



**Owners:** Adam Benesch, Kevin Blodger, John Zerivitz

**Employees:** 16 FT/5 PT

**Skills Needed:** Brewing, chemistry, plumbing, electrical, sales, hospitality

**Location/Zone:** Baltimore City/manufacturing

**Sales:** On-site, wholesale, events.

**Source local:** Hops

**Produce local:** Yes

**Uniquity:** Minority-owned

**Manufacturing never tasted so good. With the launch of Duckpin Pale Ale in 2012, Baltimore’s Union Craft Brewing became a major player the local brewing scene. Founders Benesch, Blodger and Zerivitz set out to produce a top-quality product to be sold primarily via wholesale, and in their tap house. Just four years later, Union is expanding.**

Union’s cans and kegs can be found throughout Maryland northern Virginia, Washington, DC and Washington State, grossing over \$1 million annually. The brewery sources some local hops, though it requires much more than Maryland growers are able to supply. They cite a lack of locally-available malt and other ingredients, forcing Union to source out of state.

Their biggest challenge relates to the state’s beer distribution rules - “franchise law” - which are unfavorable to small breweries. When a brewery signs a deal with a distributor, the brewery cannot break the agreement, even in cases of utter non-performance by their distributor. It is only when the distributor agrees to break the deal that the brewery may buy its own beer back at a multiplier cost.

The brewery is investigating sites throughout the region—both in and outside of Maryland—to expand by 2018. Other states overtly offer tax incentives and deals to attract large breweries, but Union’s owners hope to continue their success in Baltimore.

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