



Frederick County Office of Agriculture Strategic Plan

*A Plan for Building an Economy
around the Agricultural Entrepreneur*

March 2025

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Executive Summary

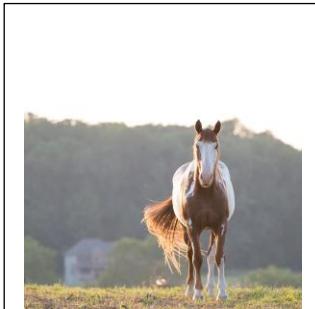
The Frederick County Agricultural Strategic Plan is designed to address the evolving challenges and opportunities within the county's agricultural sector, focusing on enhancing its economic vitality, sustainability, and integration into the broader community. The plan recognizes agriculture's significant role in the county's economy, particularly in light of shifts towards technology-based industries and the decreasing integration of local agriculture into the overall economy. The strategic plan outlines the need for directed efforts to close supply chain gaps and foster collaboration among various agricultural segments, emphasizing a more resilient and interconnected agricultural economy.



The strategic plan is built on an in-depth analysis of current economic trends, farm transitions, labor issues, and key agricultural sectors within the county. It highlights the increasing importance of smaller, diversified farms and the growing significance of value-added agriculture, which now positions Frederick County as a leader in Maryland for value-added sales. The county's agricultural landscape is characterized by a mix of strengths and weaknesses, with strong entrepreneurial activity, political support, and land preservation efforts being notable strengths. However, challenges such as regulatory complexity, workforce availability, and the need for better industry collaboration and understanding remain.

To address these challenges, the plan recommends a series of strategic actions, including developing a more modern definition of agriculture, creating a regional value-added processing facility, and enhancing land preservation programs to better support diverse and small-scale operations. The plan also emphasizes the need for ongoing community education and engagement to foster a deeper understanding of agriculture's economic and cultural significance in Frederick County.

In conclusion, the strategic plan provides a roadmap for ensuring the long-term success and sustainability of Frederick County's agricultural sector. By leveraging the county's existing strengths and addressing its challenges through targeted actions, the plan aims to position Frederick County as a model of agricultural innovation and resilience, ensuring that agriculture continues to be a cornerstone of the county's economy and cultural heritage.





Section 1: Introduction



Section 1: Introduction

Purpose

As a part of its work to build a stronger and more vibrant economy, Frederick County Division of Economic Opportunity has focused a portion of its economic development efforts on rebuilding the strength and economic vitality of agriculture, food, and beverage industries and their attendant supply chains. Frederick County believes these industries underpin its rural economy and are best suited to leverage its natural and human resources. Thus, the county created a stand-alone Office of Agriculture to support agriculture more concretely. Its mission is to “preserve [the county’s] farming heritage, assist farmers in their endeavors, and promote a thriving agricultural sector.”

Despite being a significant, but declining land use, local agriculture and farmer-based organizations (FBOs) are becoming less integrated into the economy. As the economy shifts to technology-based businesses, the food supply chain is weakening, and the community is losing the benefits associated with the high level of integration that boosted both employment and output multipliers to among the highest in the state. The proposed Office of Agriculture Strategic Plan will lay out the best opportunities to improve this condition, moving local agriculture and related businesses toward a healthier future.

Solutions to systems failures start with discovering supply chain gaps worthy of development. This plan is structured to overcome these gaps within specific supply chain clusters. It begins with a thorough understanding of where we are today, how we got here, and where we want to go as a community. Only then can we begin to make headway.

Methodology

ACDS used a time-proven iterative process to conduct this strategic assessment. The process included the following steps:

1. Development of an agricultural economic data analysis using secondary data sources.
2. On-the-ground analysis of local industry and community conditions using primary research techniques such as personal interviews and focus groups. For this project, over 100 interviews were conducted with agribusiness owners, community leaders, and other stakeholders.
3. Refined analysis of critical local issues utilizing subject area experts and targeted secondary data resources.

The outcome of this analysis was an in-depth understanding of both industry needs and community considerations. With this level of detailed analysis, the ACDS project team is able to create structural and programmatic responses to industry needs that fit within a community context—the essence of economic development.



Section 2: Economic Trends



Section 2: Economic Trends

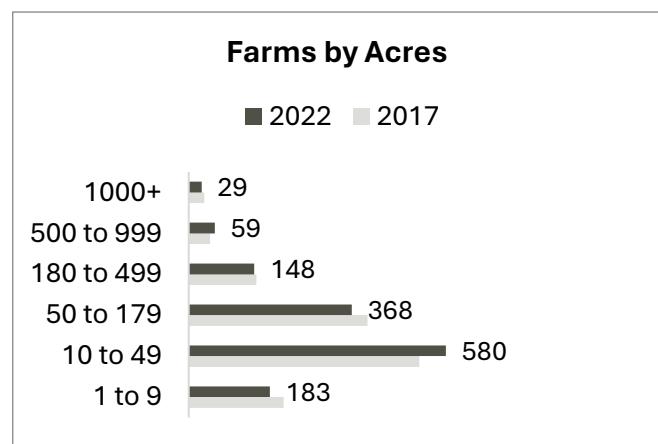
Introduction

Frederick County agriculture is at a transition point. Larger fruit and dairy operations and their associated local food manufacturing companies have mostly closed. When they were dominant, innovation was driven at the commercial level through collaboration between producers and processors. As farm sizes decrease and production diversifies into other sectors, innovation is coming from on-farm value-added makers, food entrepreneurs, and other makers who are very close and responsive to consumers. Since the economic drivers are becoming more atomized, the county will need to make directed efforts to ensure collaboration among the various value-chain segments. The following section discusses the changes occurring in the county's agriculture industry.

Farm Trends

Farming and agriculture are a significant part of Frederick County's landscape and economy. The total number of acres farmed has increased slightly since 2012, and 45 percent (188,832 acres) of the county is farmland. Most of these acres (74 percent) are used for growing crops. The county's population is increasing, putting pressure on farmland acres, so the county has taken a lead in farmland preservation. This effort is conducted to ensure farm businesses' ongoing viability and protection. With support from programs like the Maryland Agricultural Land Preservation Foundation, Rural Legacy Program, Conservation Reserve Enhancement Program, and Installment Purchase Program, Frederick County has preserved more than 70,000 acres.

Farm size has been stable since 2017. However, a continued decline in the median acres of a farm suggests a shift to small holdings. There was a four percent increase in farms with fewer than 50 acres and a five percent decrease in farms between 50 and 999 acres between 2017 and 2022.



Source: USDA NASS, Census of Agriculture, 2022

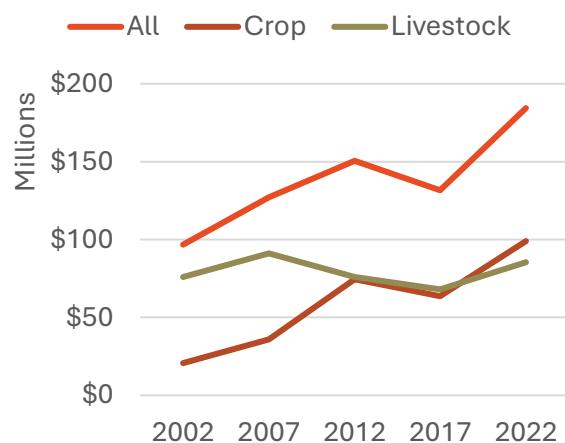
Agriculture sales are a vital component of the local economy. The market value of products sold from county farms in 2022 was \$184,393,000, an increase of 40 percent from 2017. The economic impact of this level of farm production created an additional \$55.1 million in output and \$32 million in upstream value-added activity. Generally, the value is split pretty evenly between crops and livestock, though the number of beef and dairy farms has decreased 27 percent and 40 percent, respectively. While there are relatively few poultry and swine farms in the county, the number of farms and greenhouse, nursery, and floriculture production has increased significantly (see Appendix A). Additional details regarding key sectors can be found below.

Farm Transition and Farm Labor

To critically assess the future of agriculture in a county, it is vital to understand the demographics of ownership and the farm labor pool. Frederick County has an advantage over many areas of the country because it is seeing strong growth in the number of farmers. Farmers under the age of 25 have increased by 47 percent, and those aged 35-44 have gone up by 30 percent. However, it is also important to note that there is an increase in owners aged 55-64 up to the 65-74 bracket; another 24 percent have moved up into the older than 75 group.

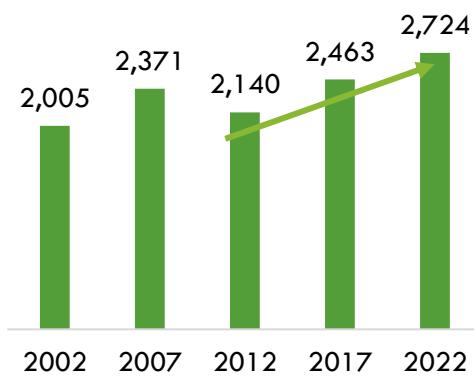
Understanding the future of the labor pool and the costs thereof is also essential for future planning.

Market Value of Agricultural Sales

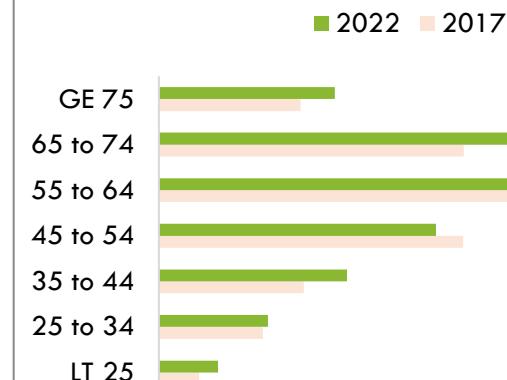


Source: USDA NASS, Census of Agriculture, 2022

No. of Farmers in Frederick Co.



Farmers by Age Group in Frederick Co.



Source: USDA NASS, Census of Agriculture, 2022

The increasing labor and living costs will be difficult to keep up with if farms cannot improve profitability. There has been a nine percent increase in labor expenses, though this is a slightly lower share of total farm expenses than before. Farms paid \$21,307,000 in farm labor compensation in 2022. Migrant labor will continue to be a key resource. Currently, county agricultural operations employ 1,341, and of those, 108 are migrants, an increase of 46 percent since 2017.

Key Agricultural Sectors

The county's key agricultural sectors have shifted over the years. In the past, dairy and fruit production were the most economically productive sectors. The industry has since become more diverse with increased crop, horticulture, produce, poultry, and swine production.

Grain, soybeans, and other crop production are the most valuable commodities in terms of sales value. In 2022, crop sales equaled \$71 million. Some crop sales, like corn silage, have decreased with the shrinking cow numbers in dairy operations.

Dairy lost its top spot in sales value but still increased 15 percent from 2017 to \$51.8 million. The number of farms has declined, but herd size has grown as has production efficiency. The increase in sales has come despite a decrease in cow numbers.

The inventory of cattle and calves for beef has decreased by 7 percent since 2017. However, inflation and other market forces increased 12 percent to \$16.5 million in the same time frame.

Poultry and egg sales were \$11.8 million in 2022, a 275 percent increase from 2017. The number of broilers has increased by 216 percent.

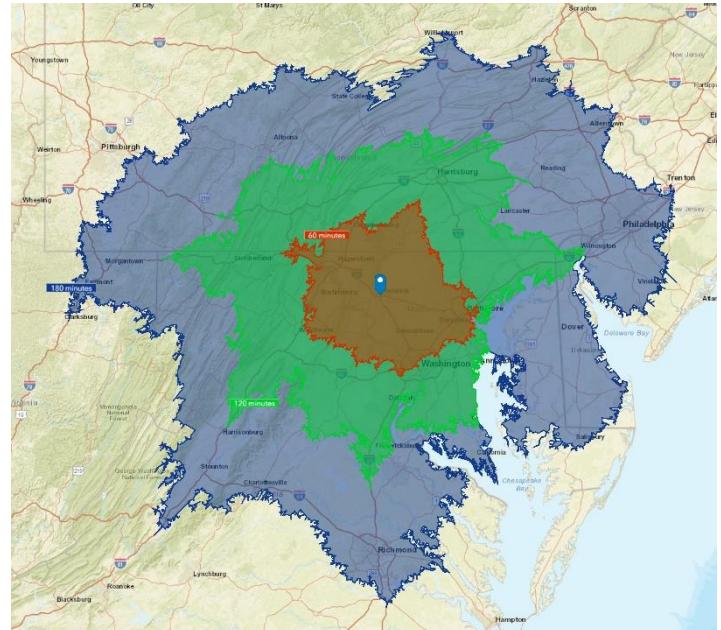
Fruits and vegetables grown outdoors are also growing in importance in the local ag economy, with \$6.2 million in sales. Orchard acreage has increased by 36 percent, and vegetable production has increased by two percent. The top crops in each sector by acreage are pumpkins and grapes. Frederick County ranks number one in Maryland for grape acreage.

County hog operations are mostly small-scale. In 2022, there were five times more hog operations with 25-49 head than in 2017. However, sales value increased only 15.9 percent to \$1.5 million. Declining meat prices will lower revenue, but feed prices are also decreasing. The smaller operations tend toward more heritage breeds that can command a higher price point.

Horticulture and indoor production are a combination of greenhouse fruits and vegetables, floriculture, and bulb and rhizome production. While still small in sales, this sector has increased by more than 75 percent. For example, greenhouse-grown tomato sales have increased from \$209,622 in 2017 to \$432,533 in 2022. Greenhouse production is crucial for farms to extend their growing season and market products year-round.

While not a typical production sector, agritourism is a vital link between farms and their customers and an additional revenue source that supplements conventional production income. Frederick County has a natural advantage because of its proximity to Washington, DC, Baltimore, Philadelphia, and Pittsburgh. Approximately 23.4 million people live within a three-hour drive, providing a large pool of potential visitors. Operations have been increasingly leveraging this opportunity, with a 19 percent increase in the number of farms participating.

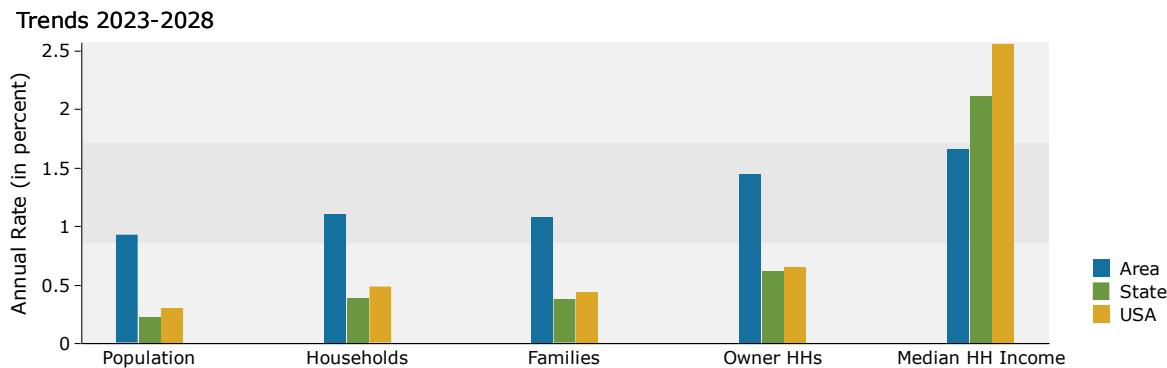
Another way farms can diversify is by adding value to the products they already grow. This is another way to extend selling seasons and marketing products during off-seasons when prices might be higher. The number of farms adding value to their products increased 28.6 percent between 2017 and 2022. Frederick County ranks first in Maryland for value-added sales at \$13.6 million. As this sector grows, farms with successful products may begin to buy from other local producers who may not have the wherewithal to add value on their own farms.



Drive Time from Frederick (Source: Esri Business Analyst, 2024)

Demographic Factors

Frederick County's changing demographic landscape is going to drive future growth and marketing efforts. Besides the increasing population, the types of residents are changing, which heavily impacts farmers and the types of products they might need to grow in the future.



Projected Increase Comparison (Source: Esri Business Analyst, 2024)

Food Purchasing and Consumption Trends

The growing population is also increasingly wealthy. The 104,311 households have considerable disposable income, \$6,702 more than the rest of the State of Maryland. This wealth contributes to changing psychographic characteristics. In the past, local consumers may have purchased locally grown products to support their neighbors. Now, they are more likely to do so out of concern for the environment. The distinction is subtle but should inform how farmers market their products.

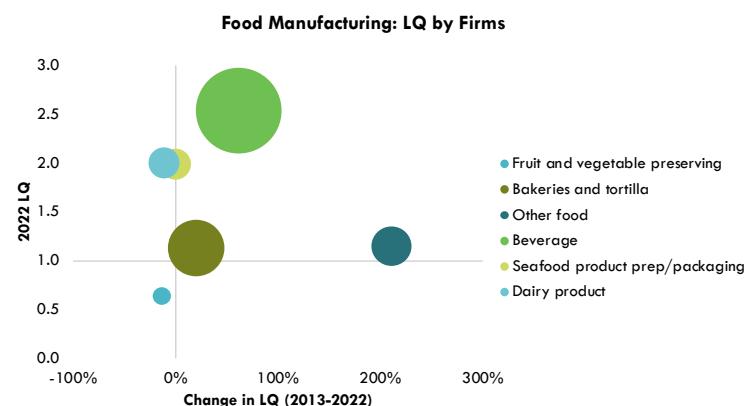
Additionally, the county is increasingly diverse, with a diversity index of 59.6. The index shows the likelihood that two persons, chosen at random from the same area, belong to different races or ethnic groups. The index ranges from 0 (no diversity) to 100 (complete diversity). Understanding the components of this diversity might enable farmers to grow ethnic products that are unavailable elsewhere for local consumers.

Industry Cluster Analysis

The industry cluster analysis examines the strength of the food and beverage manufacturing sectors as a driver of demand for agricultural products.

The analysis uses Location Quotients and Shift-Share Analysis to examine specialization in the local economy based on firm numbers and employment compared to the rest of the nation.

Location Quotients (LQs) demonstrate that the manufacturing



Source: Bureau of Labor Statistics, Quarterly Census of Employment and Wages, March 2024

sectors most highly correlated to Frederick County's past agricultural production strengths, dairy and fruits, are in decline. Emerging growth sectors, however, are rising in importance, including baking and beverage manufacturing.

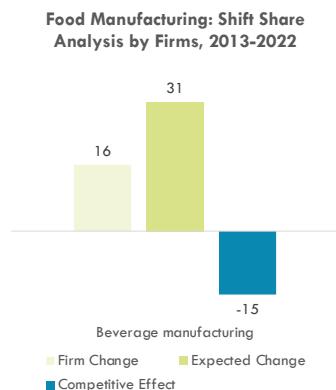
This shift is important to understand as the former sectors of fruit and vegetable manufacturing and dairy were highly correlated to farming and had a direct and immediate influence on the health of these sectors.

The industry's success was challenged as these sectors failed to remain connected to area farms. Looking at the emerging sectors, we note that these sectors are not as closely aligned with local production agriculture but instead have stronger

relationships with large national supply chains.

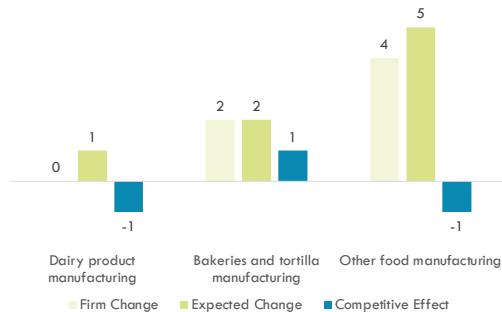
Therefore, finding a means to integrate the emerging manufacturing sectors with agriculture can be meaningful.

Looking specifically within the region using Shift-Share Analysis, we see that food manufacturing specialization has not significantly changed firm numbers. Still, there has been a significant change in the share of the economy attributed to the beverage industry, making it a strong target for growth and competitive advantage, particularly in small-scale businesses.



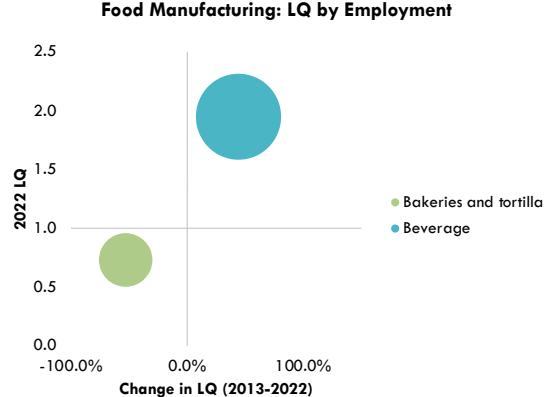
Source: BLS, QCEW, March 2024

Food Manufacturing: Shift Share Analysis by Firms, 2013-2022



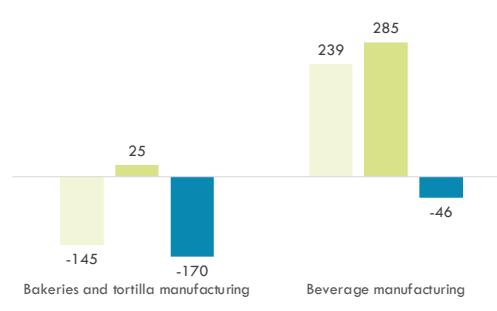
Source: BLS, QCEW, March 2024

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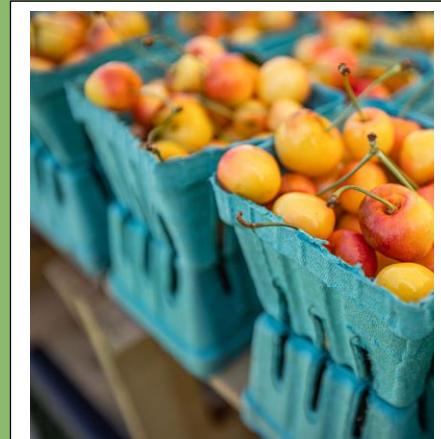
Source: BLS, QCEW, March 2024

Food Manufacturing: Shift Share Analysis by Employment, 2013-2022



Source: BLS, QCEW, March 2024

Section 3: Competitive Assessment



Section 3: Competitive Assessment

Introduction

The competitive assessment briefly describes key conditions/elements affecting the ultimate success of the agricultural industry in the region. These conditions are then assessed as strengths, weaknesses, or mixed factors in terms of their current and potential contribution to the economic health of the industry as follows:

- Strengths are those factors that contribute to the growth and stability of the agricultural economy, as measured by profit-making opportunities at the farm level and public benefits such as tax base enhancement, job creation, and quality of life improvement at the community level.
- Mixed results are those factors that significantly offset positive and negative qualities or may be indeterminate in their potential impact due to their current transitional nature.
- Weaknesses are those factors that present challenges to the development of the agricultural industry or act as impediments to expanding the public benefits of agriculture.

Following is a list of these findings:

Strengths

1. Agriculture, food, and beverage entrepreneurs
2. Market conditions
3. Political Support
4. New and beginning farmers
5. Communities of support
6. Investments in value-added
7. Agricultural land preservation
8. Operational diversity

Mixed

1. Concept of agriculture
2. Definition of agriculture
3. Knowledge transfer
4. Collaborative development
5. Agricultural finance
6. Regional agricultural resources

7. Regional development patterns
8. Dual Use Opportunity

Weakness

1. Regulatory structure
2. Age of asset owners
3. Industry structure
4. Community understanding of agriculture
5. Workforce skills
6. Workforce availability
7. Cost of doing business
8. Support resources

These conditions represent a snapshot of findings uncovered through one-on-one interviews, focus groups, and economic and marketing data. Markets and economies are dynamic, so specific conditions may change.



Strengths

Entrepreneurship

What is it?

Entrepreneurs are the risk-takers who build enterprises around market opportunities and innovations. They refresh industries and add to output and tax base. Entrepreneurial innovation is the source of new ideas for (and improvements to) products, services, and processes.

Why is it important?

Farming in a market changing as rapidly as Frederick County requires the agility and creativity of entrepreneurs for long-term success. It will take the active engagement of entrepreneurs to monetize opportunities such as high market segmentation while overcoming shortcomings like low workforce skills and availability.

Local Considerations

Frederick County has historically been a place of significant agricultural ingenuity. For this to continue, the regulatory environment must allow entrepreneurs to innovate and be agile, encourage them to identify markets, and build new products or processes. Integration and cooperation are necessary to build industry relations and discourage industry disintegration.

If further consideration is made for building a regional value-added processing center within the county, entrepreneurs will be vital for this endeavor. Frederick County can help support this notion from an infrastructure perspective, but the local thought leaders will bring such a facility to fruition.

Summary

Building skills and improving collaboration among independent risk-takers is essential for agriculture's long-term success in Frederick County. A change in the regulatory environment may be necessary for current residents to make significant investments in innovation or new market development or to attract these thought leaders to the county. Agricultural operations will require a level of flexibility that allows for new ways of doing business without significant restrictions or obstacles.

In addition, entrepreneurs are less likely to invest in an uncertain climate. Therefore, Frederick County must demonstrate in the next iteration of the Livable Frederick Master Plan a clear understanding of both the economic contribution of the industry (direct contribution) and as a catalyst and industry driver (indirect contribution). Policies must

allow working lands to work, not only represent a pastoral notion of a sense of place or a rural land use placeholder.

Market Demand Conditions

What is it?

Demand is an essential element of effective markets. Demand serves to motivate consumer households to spend their income on the products created by the farmers, makers, and food and beverage processors in the marketplace.

Why is it important?

Farmers make business decisions based on income needs that cover costs and minimize risks. There are many choices in addressing how farmers approach these markets, not the least of which is the decision to sell into large commodity markets with known characteristics or to sell into less known but potentially more lucrative local markets.



Local Considerations

Selling into local markets requires confidence in market information and clearly defined strategies for accessing such markets. The challenge in areas with such enormous market demand as the Baltimore and Washington markets is determining how best to access and fill dependable niche opportunities that meet the customers' demand profile, lifestyle, existing relationships, and shopping habits.

Summary

There are many opportunities for market development based on unique target populations from within a short driving distance. Data supplied and analyzed by the county and educational institutions may help local producers determine new markets and marketing strategies.

The creation of new markets poises the industry for continued growth and demonstrates that the food and beverage sectors develop and change along with consumer preferences. In addition, producers who sell directly to consumers can adjust prices as changes in the supply chain occur.

Political Support

What is it?

Political activity and policymaking have a substantial effect on local economies. Political leaders set policies that impact land use, human health, environmental conservation, and trade, to name a few. Political support means the policymakers will take the time to understand the issues while working with sector participants to develop appropriate solutions.

Why is it important?

Because agriculture is such a complex industry, it is affected by a wide range of policies promulgated at the federal, state, and local levels. For this study, the most important political considerations are state and local and come in the form of financial assistance, land use control, food safety, environmental regulation, conservation, infrastructure investment, education, tax policy, and many more.

Local Considerations

Frederick County must execute a comprehensive policy development approach that considers a diverse, modern agricultural industry, understanding it as an economic driver in addition to its place-making and natural resource values. Maintaining political support will likely take an active public relations and outreach strategy as the county becomes more focused on the ever-growing needs of a larger and more affluent base of residents. These efforts can build on the solid but informal relationships between the Frederick Farm Bureau and local elected officials.

Summary

The creation of the county's new Office of Agriculture demonstrates its ongoing commitment to supporting the agricultural industry. Subject matter expertise from the

Office of Agriculture can help inform elected officials about what and how existing and proposed policies impact working land and the industry's economic contribution.



New and Beginning Farmers

What is it?

New and beginning farmers are those with less than ten years of experience. They are not to be confused with young farmers under 35 years of age. New and beginning farmers are sometimes

people who get into agriculture after having other careers.

Why is it important?

Continuity in agricultural production is dependent on the constant renewal of farmers and not just on the availability of land. New farmers replace aging operators and are often the source of risk-taking and innovation. Second-career new and beginning farmers tend to have more capital or access to lending opportunities.

Local Considerations

Frederick County should be a place where new and beginning farmers can thrive. However, the cost of land and access to finance is a significant barrier to entry. Because the average age of new farmers in the region is close to 50, it will be important to focus on developing a pipeline of new producers by working on youth engagement and relevant skill development and providing an environment that encourages second-career operations. Ensuring financing and entrepreneurial skills development for younger farmers will be critical as these are the resources that older, new farmers possess.

Summary

New and beginning farmers are necessary for the agricultural industry to continue in Frederick County. Whether young entrants starting their first job or second-career entrepreneurs, resources and assistance are essential for success.

Community Support of Agriculture

What is it?

Communities support agriculture through various means, including purchasing farm products, supporting a farm-friendly culture, adapting infrastructure, and creating a supportive policy infrastructure.

Why is it important?

Unlike most industries, agriculture generally exists alongside residential areas, which can put it in conflict with its nonindustrial neighbors. The reasons are myriad, including the dust, noise, long working hours, and odors associated with agriculture and the slower traffic conditions created by moving large equipment on the roads. In return, however, farms



create more resilient food systems, contribute positively to the tax base, and are often associated with a higher quality of life.

Local Considerations

Local support and agricultural education for current and new residents will be key for continued community understanding of the industry and a requirement for new residents to have pride in the cultural and economic significance of the industry. More practically, having a supportive community will help create the types of policy and infrastructure funding that will improve neighbor relations, alleviate traffic issues with slow traffic, decrease right-to-farm conflicts, make a more resilient local food system, and generally improve the understanding of agriculture.

Summary

Consumer education will be vital to the long-term success of Frederick County's agricultural industry. Many residents do not understand how a normal agricultural business operates. Therefore, partnering with entities committed to agricultural education, such as the Great Frederick Fair, will be key.

Investment in Value-Added Agriculture



What is it?

Value-added agriculture is a means for farmers or related makers to change the form and function of agricultural products to make them more valuable to the end consumer. This essential function in the food supply chain often requires significant capital investment and risk to get started.

Why is it important?

Accessing the market demand discussed previously requires that the consumer's needs for food and beverage products be met with precision. A good example is dairy, where the consumer has specific demands for many types of products, such as yogurt and cheese, but not the raw milk that is those products' precursor. Furthermore, demand for dairy

products changes throughout the year, with both product volume and product type changing dramatically. As a result, farmers must heavily invest in value-added processes to ensure that the customer has access to the products they want at the time, price, and quality standard they expect.

It is often the case that farmers directly invest in value-added activities as a result of having close and trusted relationships with consumers. In other words, farmers have the confidence to invest in changes to their operations based on their understanding of the demand and their strong relationship with it. Value-added products help diversify operations and can create employment opportunities that can help bring in the next generation and successful farm transitions.

Local Considerations

The State of Maryland's Department of Agriculture has been increasing its support for value-added agriculture. Frederick County has also been looking at ways to encourage more value-added production. While there can be tension between traditional commodity growers and those involved in value-added, there is a place for all types of operations within the county.

The local value-added processors in both the beverage and food sectors could benefit from a value-added processing facility that accommodates the region. Having a local facility would increase efficiency for producers who are already processing and offer those doing product development a place for trial and error. Such a facility could be the difference between success, efficiency, and operational failure.

Summary

The state of Maryland is focusing on the value-added contribution to the agricultural economy and, at least in part, modernizing the working definition of agriculture. Frederick County should assess what it can do to benefit from the state's initiatives and leverage what it can.

Agricultural Land Preservation

What is it?

Efficient agriculture cannot endure without a base of highly productive soils, so protecting those facing development pressure is vital to the ongoing strength of the industry. Outside of land



use controls, agricultural land preservation is the primary method for protecting large and contiguous blocks of agriculture using tools such as purchase of development rights, environmental easements, and lease of development rights.

Why is it important?

Agricultural land preservation protects critical agricultural assets from conversion to other uses such as residential development, commercial centers, and industrial uses. These policy responses are based on the concept that there is a bundle of property rights that can be separated from the land and that the public benefits for doing so include the following:

1. Safeguarding food supply.
2. Creating a foundation for local food systems.
3. Protecting environmental areas and habitats.
4. Reducing the costs of development.
5. Ensuring a healthy supply chain.
6. Preserving cultural heritage assets.
7. Protecting the foundation of the county and regional economy.

Local Considerations

Maryland was one of the first states in the nation to embrace farmland preservation. Since 1980, the county has preserved over 23,422.7 acres, or 21 percent of prime farmland, with over 77,419 acres of farmland preserved out of the 160,000-acre target. As residential development pressure continues in Frederick, it will be important for the county to provide recreation and trail open space amenities. However, the funding for these public assets must be assessed regularly so as not to override the importance of farmland preservation. In addition, the programmatic requirements of agricultural land preservation may need to be revised to allow for increased focus on the preservation of productive soils for crops other than corn and soybeans, smaller acreage, and potentially noncontiguous parcels. Given the rising importance of industry sectors that require soils that are not defined as Prime or Productive by corn productivity, it will be important to find a way to incorporate these operations into the farmland protection program.

Reassessing agricultural land preservation criteria may be part of a larger paradigm shift and understanding of the needs of modern agriculture. This would encompass an increase in the Priority Preservation Area of 96,208 to more closely align with the county's preservation goal of 160,000 acres as well as an extension of the program to serve important and growing sectors like viticulture and value-added agriculture. Increasing this target would require a new approach to considering what constitutes a farm beyond Prime and Productive soils.

Summary

The county needs to continue its support and funding of farmland preservation. In fact, consideration should be given to identifying additional funding sources to raise the county's preservation target. In addition, Frederick County may be able to advocate for changes to the program to incorporate new and more modern activities that occur on smaller lots.

Operational Diversity

What is it?

Operational diversity is the presence of a wide range of agri-businesses servicing myriad markets across a broad range of industry sectors. This contrasts with an agribusiness economy dominated by one or two sectors, as exemplified by the Eastern Shore poultry industry.



Why is it important?

Operational diversity is a key feature in a transitioning agricultural economy with several benefits. First, it provides entrepreneurs with a test ground for new industrial development at the business level. Second, it provides a measure of risk management at both the business and economy levels. Third, it rewrites the industrial psychology of declining industries by creating new, creative thought patterns, thereby reducing group think. Finally, it helps expose or mitigate bias, which can be found in market development and legal and regulatory environments.

Local Considerations

As the agricultural industry in the county transitioned out of dairy, it has become diverse in a variety of ways, including but not limited to types of businesses, scale, scope, distribution, and sales methods. Another change from sector dominance is a reduction in the weight of advocacy or the ability to influence policy at the state or federal level. In addition, because one or two industries no longer dominate the industry in Frederick, it has become more dependent on entrepreneurs and individual producers.

Going forward, the county will need to talk with many more individual producers to do ongoing assessments of industry needs. This will be essential for developing relevant entrepreneurial programming as well as creating a shared entrepreneurial culture.

Entrepreneurial culture describes the atmosphere and set of values within a company or organization that encourages innovation, risk-taking, and proactiveness. It's about fostering an environment where individuals are empowered to generate new ideas, experiment, and contribute to the growth of the industry through personal and business accomplishments.



The project team encountered resistance to entrepreneurial culture at this last point as there were clear negative attitudes toward successful entrepreneurs.

Summary

The diversity in Frederick's agricultural industry should be supported and encouraged through business planning and resource development. When considering existing or updating policy, getting input from the various sector stakeholders will be important.

Mixed

Concept of Agriculture as Industry

What is it?

Agriculture is an industrial activity that encapsulates a wide range of value chain activities. It includes but is not limited to plant production, animal production, support industries, supplying industries, processing businesses, distribution systems, and research and development activities. Generally speaking, production agriculture is the economic driver of these activities.

Why is it important?

Agriculture is a core economic driver due to its significance as a contributor to the county's job growth, sales, and wealth creation that ranges well beyond base agricultural production.



Understanding this notion is critical to future growth because agriculture is expected to provide 60 percent of the inputs required for the emerging [bioeconomy](#). However, agriculture is currently poorly understood and defined within policy systems, so it is important to state that agriculture is not a watershed, culture, or even a holding pattern for development.

Local Considerations

Frederick County has hard-working entrepreneurs operating a variety of businesses that create jobs and add economic value to the local economy. However, the hard truth is that they survive because they are incredibly good at what they do and that they are successful in spite of, not because of, many local policies and attitudes. Agriculture as an industry is different than other sectors, but it also requires thoughtful policy support that embraces the industry that grows our food, fuel, and fiber.

Frederick, like many suburbanizing areas, has a growing population that is removed from agricultural production. Many are unfamiliar with what it looks, smells, and sounds like, even though every person relies on it for survival. Elected officials and policy makers must ask for assistance from the Office of Agriculture to gain access to a world that is foreign and perhaps uncomfortable, to meet local producers, tour their operations and begin gaining a sense of how the industry really works, why it is essential and what can be done to ensure it thrives.

Summary

There is a lot of work to be done to help decision-makers better understand the agricultural industry. They must begin seeing it as the economic driver that it is, rather than a piece of the county's history, a relic, or a place-making land use that is pretty to look at. County officials, board members, and department heads, such as Workforce Services and Planning and Permitting, should tour several agricultural operations and talk with the producers to better understand how the industry works.

Definition of Agriculture

What is it?

The historical definition of agriculture is a land-based concept that links economic output to the production of crops and livestock to produce food, fiber, and other products/byproducts. As modern agriculture has developed since the Second World War, the definition changed to incorporate the notion of agriculture as a set of evolving biological and ecological processes that rely on technology, science, innovation, and value-added services to produce a range of useful products in both urban and rural environments.

Why is it important?

Defining agriculture properly within a modern context is essential to creating effective policy that supports continued growth and economic development. Communities that do

not make an effort to adapt to emerging trends in agriculture can inadvertently push the best enterprises in the sector out of the area, resulting in rapid declines in industry opportunities and destabilizing the profession.



Local Considerations

Frederick County needs to review, assess, and modernize its definition of agriculture across

departments to better capture what agriculture is and how it operates in local, national, and global markets. For instance, a change to farm size (currently defined as 25-acre minimum) will demonstrate a much more accurate understanding that many operations are successful on less than 25 acres, that what some people consider niche businesses (vegetable or flower production) are on a per acre basis as economically competitive, if not more so, than traditional agriculture (corn and soy crops).

Changing the definition will be a lengthy process, but it is necessary to support future policymaking. The Office of Agriculture, along with county support, will need to make a plan to address this issue and others. Other county departments will need to agree and accept the input from the subject matter experts. In addition, the counties Division of Planning and Permitting should consider performance standards instead of land use determinations to allow for and incorporate more flexibility and acknowledge what the industry needs to operate successfully.

Summary

A lot of coordinated effort will be required to ensure that a modern, more reflective definition of agriculture is used county-wide. This should coincide with the internal county education discussed above.

Knowledge Transfer

What is it?

Knowledge transfer is a combined set of social and business processes for sharing information, skills, expertise, and ideas between individuals, businesses, communities, and other organizations. Knowledge transfer is often formally organized within structured economic systems through extension services, training programs, coaching, mentorship, apprenticeships, documentation, and peer-based networking.

Why is it important?



Industries such as agriculture are characterized by complex business and science relationships that require experience and formal training for business success. Where networks are strong, and system continuity is in place, maintaining experience-based knowledge transfer is relatively straightforward and often structured, leading to improved business success. As industries decline or change, the above knowledge transfer systems fall apart, leading to a loss of institutional learning. As a result, profitability declines, and business failures rise.

Local Considerations

The county needs to create a policy and regulatory environment that enables knowledge transfer to the next generation. It should ensure diverse and flexible multigenerational businesses that can financially support more than one generation so that ownership is more fluid. In other words, it should encourage participation by the next generation before the current generation is ready to retire. In addition, the county will want to create training and resources to assist with non-family transfers.

Summary

Production agriculture is a hands-on learning profession. While skills training and agriculture education curriculum and degrees are essential, every operation works differently (even within the same sector), and the only way to have uninterrupted knowledge transfer is for information to flow freely and effortlessly. The county can create programs to assist in peer-to-peer networking and training.

Industry Collaboration

What is it?

Industry collaboration indicates a level of cooperation between businesses and industry organizations within and across industry sectors. Collaboration can happen in many ways, from supporting public education to building common marketing strategies and advocating for specific policy outcomes.

Why is it important?

Collaboration in industries under stress or with limited resources offers an efficient means to address shared challenges. These challenges may include understanding changing consumer behaviors, implementing technology, or seeking regulatory relief. Collaboration can also efficiently promote market access through new product development, sharing production assets, or developing common logistics and cross-marketing platforms. At the workforce level, collaboration can lead to the creation of tailored workforce development strategies or specific training curricula. It can also support the development and adoption of innovation to solve intractable problems, such as the capital replacement of labor or the creation of data management systems to improve work efficiency. Finally, it has proven to be an effective way for companies to reduce costs through cost-sharing or collaborative price negotiation.

Local Considerations

The Office of Agriculture already partners with many community stakeholders. The county should continue to do so and look for ways to build additional connections and help facilitate networking among other organizations.

One project that has been mentioned previously in this plan is the value-added processing facility. This kind of facility, with county support, could provide producers with opportunities to collaborate and innovate.

Summary

Business collaboration is crucial to a vibrant agricultural economy, particularly with the increasing diversity and automation of operations that comprise most of Frederick



County's industry sectors. The Office of Agriculture is in a great position to help facilitate additional networking and collaboration initiatives.

Agricultural Finance

What is it?

Agricultural finance includes the provision of both debt and equity financing for operations in the agricultural value chain. Financing activities include both operating and capital finance. Generally, these products include loans (private and government), grants



(government), investment (private equity), insurance, subsidies, and support payments.

Why is it important?

Farmers and agribusinesses in the value chain require capital to run and, more importantly, to adapt to market changes. Since Dodd-Frank, it has become harder for farmers, particularly small farmers, to access financing outside of a narrow band of programs dominated by government agencies. Among the challenges

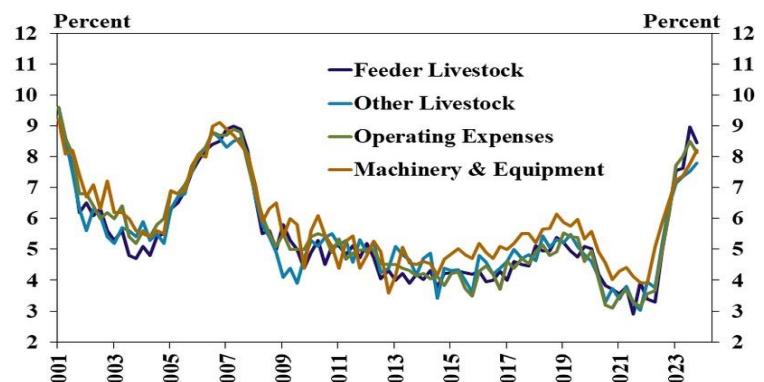
created are stricter cashflow coverage and collateral coverage ratios that further pressure young and beginning farmers and suppress innovation. Without properly functioning financial systems in agriculture, supporting the ongoing changes in the agricultural economy will be difficult.

Local Considerations

Rapidly rising land costs and a large number of young or beginning farmers combined with generally low profitability at the farm level make for difficult agricultural finance conditions. Regional bankers point to the tightening credit standards referenced above as a primary limiter to servicing young and beginning farmers and certain sectors.

The market is still unfavorable for those farms and agribusinesses for whom

Chart 3: Average Effective Interest Rate by Loan Type



Sources: Survey of Terms of Lending to Farmers and Federal Reserve Bank of Kansas City

credit is available. The costs of credit are becoming prohibitive, reducing the amount of lending overall in the industry.

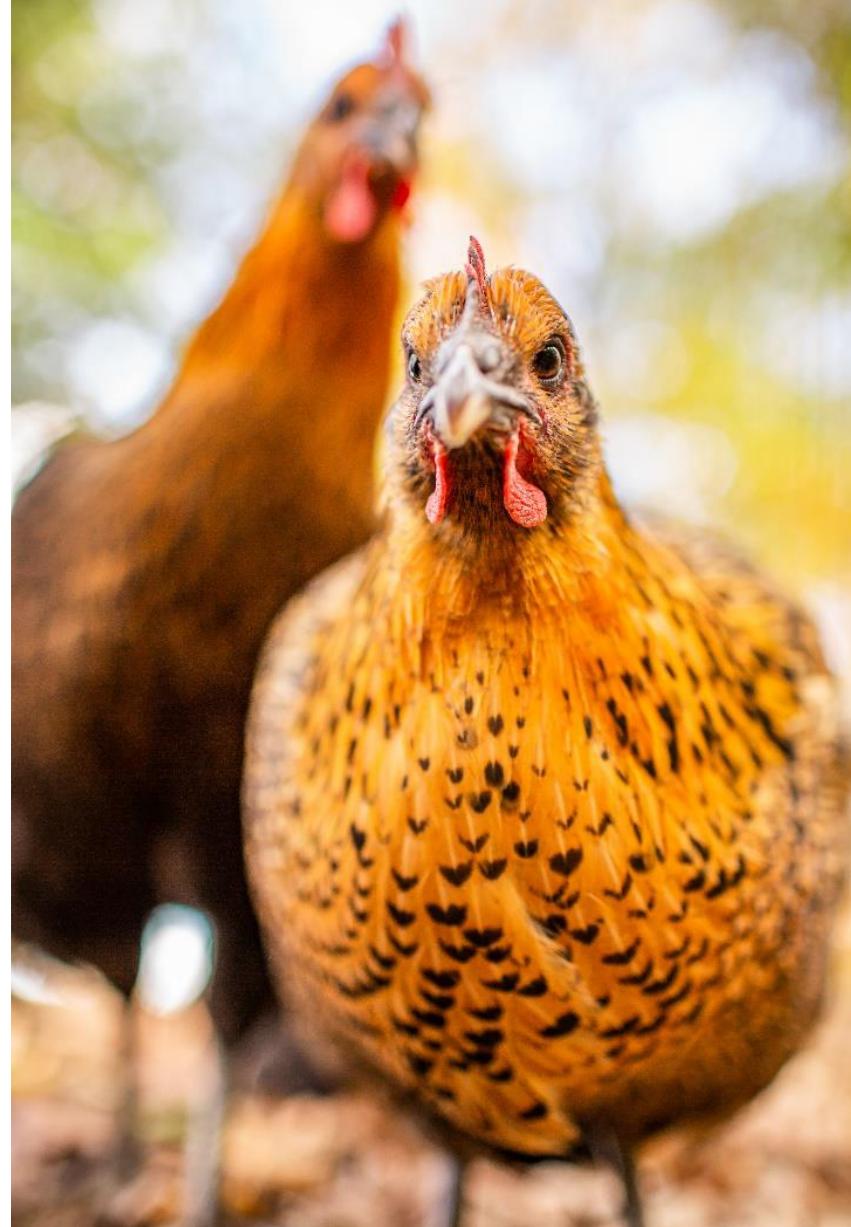
Summary

If a new generation of farmers and agribusinesses is to arise in the county, issues related to finance must be addressed with alacrity. This may mean looking for alternatives to traditional debt, which has become fashionable in other areas of the US, including Real Estate Investment Trusts and private equity.

Regional Agricultural Supply Chain

What is it?

Agriculture relies on a large and effective network of service and supply companies to maintain competitiveness. Increased specialization in most farm sectors is making immediate access to such networks a critical success factor, allowing farmers to concentrate on their core competencies.



Why is it important?

Each agriculture sector requires immediate or proximate access to a set of services and supply businesses that, if unavailable, can force businesses to close or relocate. Small local service and supply businesses were commonplace in the past, but they have been declining for several decades across most sectors. As a result, farmers have come to rely on regional resources and online services to fill the gap. If these regional and local services fail in any given sector, it could cause a negative tipping point across many sectors.

Local Considerations

Frederick County maintains a viable value chain with sufficient agricultural service and supply companies, including crop and production support, large animal veterinarians, harvesting services, postharvest conditioning, equipment service, environmental consulting, forestry management, marketing services, breeding, apiary, and many others.

These services, however, are shrinking, and there is a concern among farmers that the loss of one or more suppliers of any single service could be a tipping point for survival.

These services have already migrated out of the county for some industries like fruit growing and beef. Farmers now rely on value chain activities that predominately operate in other parts of Maryland, Pennsylvania, and Virginia, with some farmers going even farther for service. While it is good that these services exist, the distances add to the risks and costs of doing business. Several young farmers indicated this potential service shortage was causing them to consider relocation.

Summary

The transition away from a dairy and fruit-based agricultural economy locally and regionally has forced a shift in the agricultural services sector. While there is a general fear that the transition will force farms to close, this does not seem to be an immediate threat.

Regional Development Patterns

What is it?

Both farm operations and policymaking activities are influenced by local and regional



development patterns, particularly given the strong influence of nearby urban areas. Increasingly, growth in the region significantly contributes to the low-density development that spreads across the landscape as both major and minor subdivisions. Agriculture and residential developments often conflict as their uses are incompatible in many ways.

Why is it important?

For farmers, the double-edged sword of regional growth is that it often expands market opportunities but increases restrictions as former farmlands become Washington, DC, bedroom community. The development patterns are the amount and location of residential, industrial, energy, and commercial developments encroaching on agricultural production areas. Growth no longer concentrates in or near towns and villages.

Local Considerations

The county must continue to make careful land use planning decisions, considering and balancing the long-term economic viability of its productive agricultural land against residential housing units. Some of those decisions will come into play with the potential

reduction in acreage per a potential new farm definition discussed above, which may allow for agricultural activity in more suburbanized areas. In addition, as farms incorporate accessory uses like agritainment or agritourism events to assist with profitability, there may be more impact, such as additional traffic, when these events occur.

Summary

It will be important for the county to continue balancing development pressure and preserving agricultural land and the agricultural industry. However, doing so requires the county to understand better what modern agriculture needs to be successful and for producers to remain viable.

Dual Use Opportunity

What is it?

Dual-use designations involve co-locating agricultural and non-agricultural business uses on a single piece of property. An example of this is a use plan that allows uses such as agrivoltaics, forestry or mineral extraction, and agricultural land access in a way that enables both to thrive.

Why is it important?

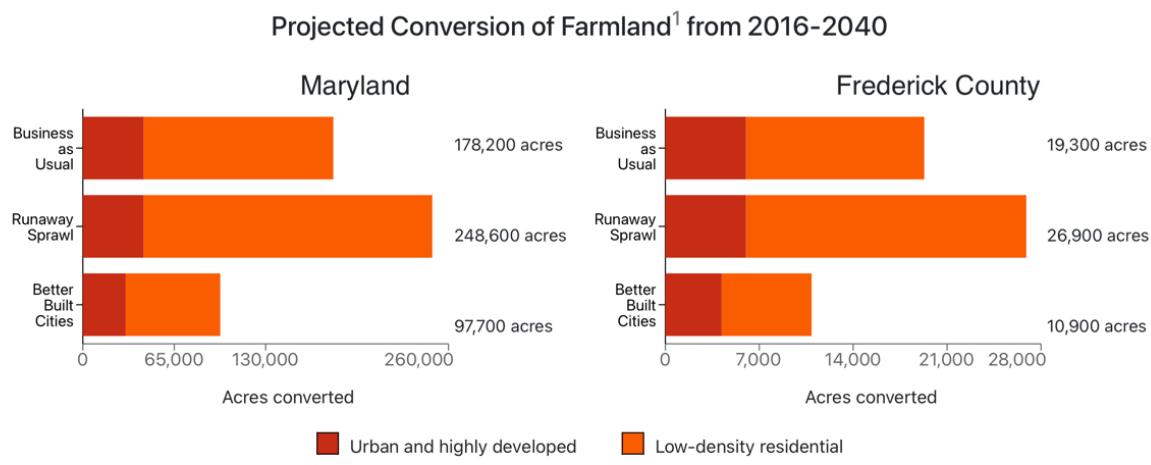
Monetary returns for alternative land uses such as alternative energy often offer higher present value returns per acre to farmers, forcing what is often a final decision on land use. This is particularly important for those two-thirds of farms operating at a loss when they are forced to choose between economic opportunities. This choice does not have to be binary. With proper planning and support, many farms can support thriving dual-purpose operations.

In many cases, the alternatives, such as solar and mineral extraction, are presented as a binary choice where the only viable approach is sacrificing agricultural production. This means installing infrastructure on the most productive lands without regard for secondary impacts, which may have even more far-reaching consequences, including higher-than-expected life-cycle costs, lower surface water quality due to runoff, low well pressures, increased turbidity, e-coli and salmonella in ground water, and difficult site recovery due to soil contamination. Instead, planning could include the dual-use activity in a manner that leaves the necessary agricultural infrastructure and most productive soils for the agricultural operations as intact as possible, with the alternative use remaining viable.

Local Considerations

Land transition and land costs are major concerns for young and beginning farmers, and rising competition from non-agricultural economic activities is forcing farmers with low income or poor access to equity to sign high-value conversion contracts. Much of the

conversion pressure is currently notional. However, the [American Farmland Trust projects](#) that Frederick County will transition upwards of 14,000 acres of Prime and Productive agricultural land between now and 2040 for the development of housing and energy projects. Thus, the issue cannot be overlooked.



Urban and highly developed (UHD) land use includes commercial, industrial, and moderate-to-high density residential areas.

Low-density residential (LDR) land use includes scattered subdivisions and large-lot housing, which fragment the agricultural land base and limit production.

¹Farmland includes cropland, pasture and woodland associated with farms.

Source: American Farmland Trust, Farms Under Threat 2040

If much of this transition is driven by energy requirements, agricultural sustainability will depend on the development of a dual-use framework based on the best available GIS data as well as the farm's operational and asset-based considerations. Put differently, helping to facilitate site-specific management decisions and better agricultural outcomes that protect a farmer's profitability, the underlying soils, water quality, and community energy needs will be essential.

Numerous organizations, such as the National Renewable Energy Laboratory in Colorado and the College of Agriculture at the University of Massachusetts, have conducted significant research into the various dual-use capabilities of varied energy, crop, horticultural, and livestock operations to provide farmers with a framework for evaluating opportunities that include energy-centric, agricultural centric, and integrated opportunities. Forestry and mineral extraction operations organizations such as the Maryland Forests Association and the Maryland Aggregates Association can also offer support.

Summary

Farmers and communities need better tools to assist with planning for dual-use outcomes as well as a better understanding of the policy and legal ramifications of certain decision-making processes. These tools must consist of site-based tools, full life cycle cost

analysis, and management decision-making tools. They should not only assist local and business-level planning but also form the basis for an online tool that supports a steady revenue stream for the Office of Agriculture.

Weaknesses

Regulatory Framework and Enforcement Actions

What is it?

The regulatory framework is a system of laws, regulations, and guidelines established by governments and industry associations to govern outcomes in certain activities.

Why is it important?

Farmers and agribusinesses live in a multifaceted regulatory environment that sits at the intersection of federal, state, and local laws as well as additional compliance requirements of industry standards. This complex web of regulatory structures and enforcement actions can confuse the operator and the enforcement agencies. The situation is particularly tricky regarding health, safety, workforce, and land use codes, where agriculture often exists as a special case or exception to the rules and regulations. It is nowhere more complex than in land use regulations. As a result of the complexity, regulatory enforcement can be costly, time-consuming, and uncertain. Additionally, regulations relating to agriculture often have difficulty keeping up with the pace of change or technology advancement, creating unintentional competitive disadvantages.

Local Considerations

Regulatory issues were the number one complaint listed by farmers, agribusinesses, food processors, and beverage makers. While the issues were different depending on the businesses interviewed, there were striking similarities in the effects:

- **Compliance costs:** Navigating complex regulations and complying with reporting requirements are a significant burden for small companies with limited resources.
- **Stifling innovation:** Restrictive regulations stifle innovation by making it difficult and expensive for companies to experiment with new ideas and business models.
- **Market entry barriers:** Complex and poorly understood regulations make it harder for companies to compete with established players with the resources to navigate the regulatory landscape.
- **Uncertainty and delays:** The constantly evolving nature of regulations can create uncertainty for businesses, hindering long-term planning and potentially delaying product launches.

- **Limited agility:** Regulations can make it difficult for companies to adapt quickly to changing market conditions, disadvantaging startups that need to be flexible and responsive.

Summary

Policymakers can create an environment encouraging entrepreneurship while protecting consumers and the economy's overall health.

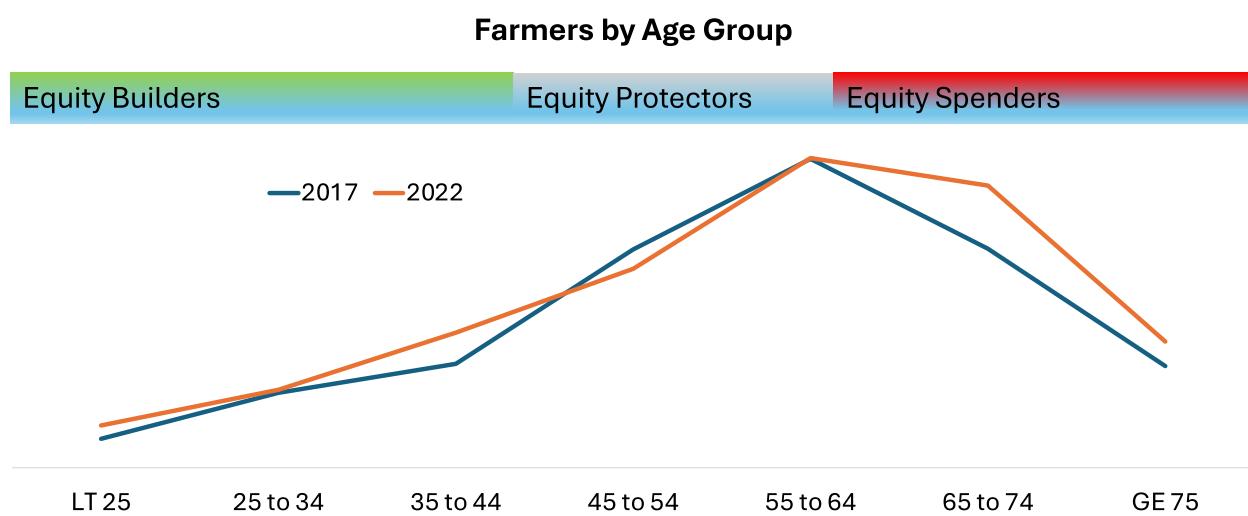
Asset Concentration

What is it?

Farm ownership is driven by access to certain capital assets such as land and buildings. These assets are increasingly concentrated in older operators' hands, creating risk.

Why is it important?

The orderly transfer of assets such as land, buildings, and equipment is necessary for young and beginning operators to begin the process of investing and building value. If owners of critical agricultural assets are holding them too long or divesting the assets in an unorderly way, it could prevent new and beginning farmers from efficiently operating the business. The graphic below highlights the changing relationship between the treatment of investment assets and life stage.



Source: USDA NASS, *Census of Agriculture, 2022*

From 2017 to 2022, a growing number of farmers reached the age when they spend the assets accumulated as they enter retirement. Perhaps more concerning is the large number of farmers protecting assets and not necessarily looking to take risks on long-term growth. Decisions made to protect assets can make it difficult for younger family members

to persuade their older partners to take on risky projects that could enable them to build equity. As a general rule, the equity protectors and spenders control most of the agricultural assets, which starkly contrasts with other industries, like food service, where people in the equity builder and equity protector categories control most assets.

Local Considerations

As a new generation of agricultural entrepreneurs replaces older farmers, there is a need to see land and other assets become productive assets under their management. Additionally, the loss of industry structure, which is discussed in a following section, creates a condition whereby many younger farmers lack a connection to those who own and are looking to monetize the transfer of their assets.

Without a clear pathway linking the owners of assets in the “Equity Spender” category to those new and emerging operators in the “Equity Builder” category, the equity spenders are as likely to transition land and assets in Frederick County to other uses. Interviewees suggested a number of tools, from Purchase at Ag Value provisions in easements to mentor-protégé programs, to assist in dealing with this issue.

Summary

This complex issue will require complex solutions, beginning with thinking about supporting farmers transitioning into retirement and assisting new farmers with well-planned business strategies and financing for entry into the industry.

Industry Structure



What is it?

Industry structure refers to the characteristics of a particular economic sector's businesses, markets, and other competitive dynamics. Typical factors of analysis are the number and size of firms in the sector, barriers to entry, scope of regulation, threats to growth, bargaining power of buying and supplying industries, threat of substitution, and degree of rivalry. *NOTE: Industry structure is not a measure of entrepreneurship but business and market conditions within a consolidated sector.*

Why is it important?

Agricultural industries and those in related supply chains exist within highly concentrated and controlled sectors in which a few economic actors have undue control over the outcomes. In livestock, dairy, and poultry industries, high concentration levels contribute to high barriers to entry and exit and give farmers little control over management decisions and economic outcomes. The situation becomes more complicated when government programs overlay concentrated industries.

As a result of the above, competitive conditions can change rapidly, as seen with the shift of dairy production from the Northeastern US to the Southwestern US. Conditions can cause assets and investments to be abandoned and drain a local economy of particular workforce and entrepreneurial skills. Shifts can also cause strategic partners to abandon an area, complicating other industry functions, such as pricing, marketing, distribution, manufacturing, and product development.

Local Considerations

The loss of market representation was a concern across nearly every production sector in agriculture as well as across farms by size class. The most commonly cited issues related to a reduction in support industries are the loss of purchasing power, disruption to workforce availability, loss of business owner replacements, and a change in institutional capacity.

As a result of this “deindustrialization” of agriculture, there has been declining investment in traditional sectors and an increase in “Impermanence Syndrome,” or the fear that the industry is irretrievably lost. Despite this fear, many entrepreneurs are working to build a new industrial base.

Summary

Policymakers and businesses can take steps to mitigate the negative impacts of the loss of industry structure, such as recruiting and training new workers, investing in infrastructure that attracts new industries, and supporting entrepreneurship and innovation.

Community Understanding of Agriculture

What is it?

Community understanding of agriculture is a measure of how well those outside of agriculture understand its functions, needs, requirements, and contributions. The levels of understanding run from high (generally a rural community) to moderate (communities in transition from agriculture with older populations) to low (urban areas and communities removed from production agriculture).

Why is it important?

Having a well-informed understanding of agriculture across a community is essential, especially in an urbanizing/suburbanizing environment. First and foremost, this is a political issue whereby the issues relating to agriculture logically but possibly determinately take a backseat to more urban needs. Second, a better understanding of agriculture can foster a more thoughtful appreciation for food and the environment. Third, understanding agriculture can help to make a better-informed consumer, which may lead to a more robust local food economy. Finally, an appreciation for agriculture as an industry opens up the prospect for new workforce and entrepreneur development.



Local Considerations

For many, the concern about the relationship and understanding of agriculture starts in the primary and secondary education systems, where many students get their first exposure to agriculture in its many dimensions. For many farmers, the loss of agricultural programs that taught agriculture as the “original” STEM program contributed to the notion that farmers are “unsophisticated” or “not business people.” Some of these notions are carried over into policy documents where agriculture is reduced to a landscape feature rather than a multifaceted business activity that requires knowledge in science, technology, marketing, management, and operations.



Interviewees made it clear that bridging this gap through more formal programming is important. This would include more formal policymaker tours and permanent programming directed at children and adults that connects them to agriculture through food and beverage.

Summary

Maintaining a closer relationship between the general public and agriculture requires leadership and devotion to long-term goals that show how agriculture is integrated into all aspects of life. Leadership that represents all industries will be essential.

Workforce Skills

What is it?

Workforce skills are defined as the abilities, knowledge, and capabilities required to succeed in a job classification or industry. Skills are defined as hard skills, including the objectively measurable skills required for a job, and life skills, which are the abilities related to success, such as communicating or participating in teamwork.

Why is it important?

Like most industries across the United States, agriculture has a severe labor shortage complicated by a skills shortage. This skills shortage affects workforce efficiency, impacting investment and growth decisions at the business level. At the employee level, low-skill achievement affects career advancement and wages. Collectively, these conditions can have a significantly negative impact on overall industry competitiveness.

Local Considerations

Even at the entry-level, the agricultural labor force must develop and maintain a set of technical skills to be effective in the job. These include hard skills such as animal husbandry skills and life skills such as the ability to work as a team.

During interviews and listening sessions, many farmers indicated that while hard skills are



in very short supply, the lack of soft skills is currently the most challenging issue. Many indicated that despite being able to hire consistently, retaining employees long enough to begin on-the-job training has become difficult. Farmers indicate that most new employees do not stay on for longer than one to two days.

This situation would indicate that internship programs that develop soft and hard skills before a worker begins employment would be helpful for both employer and employee. This will allow a lower-stress environment for

on-the-job training and enable the intern to experience a wider range of farm labor categories to make a better-informed job search decision.

Higher-level skills are also in demand, including management-level employees and employees with STEM and digital literacy skills. According to farmers, the later is particularly important in many emerging agricultural fields where farmers are facing increasing data loads without the capability to do the data engineering and programming required to benefit from the data on hand.



Summary

Upskilling and reskilling in the agricultural workforce are essential to industry success. The responses, however, are not one-size-fits-all and will require both individualized responses and trial-and-error approaches to larger workforce development initiatives.

Workforce Availability

What is it?

Workforce availability refers to a measure of the pool of available workers. It is not a simple numerical calculation of supply but a more nuanced view of participation rates, cultural norms, transportation availability, and economic conditions.

Why is it important?

Access to a qualified workforce is essential to industry growth and, perhaps more importantly, industry stability. Additionally, when the labor

force is tight, wage inflation often follows, which can jeopardize industries such as agriculture that already operate on thin margins.

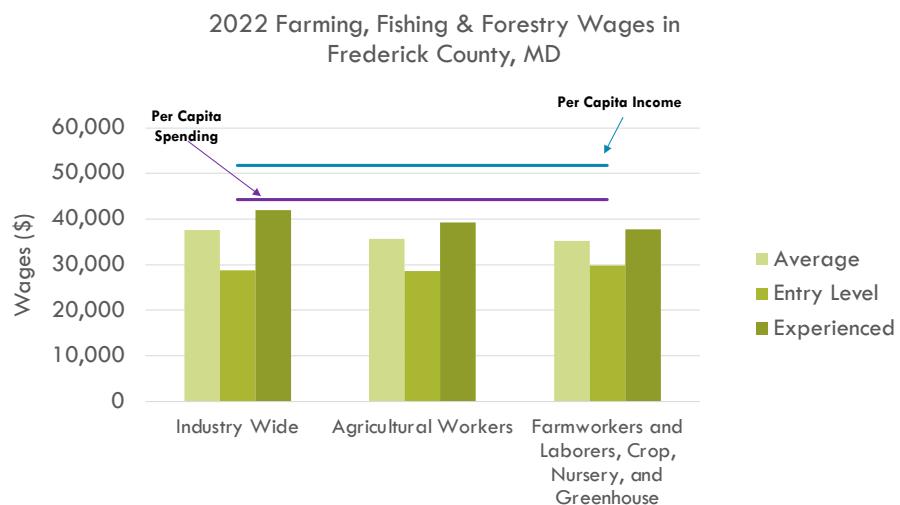
Wage inflation and wage competition generally create movement in the industry, which can influence the rate of hard- and soft-skill development because the employees move too

much to acquire necessary abilities. This can exacerbate skills gaps, particularly in industries that cannot afford to keep up with prevailing wage inflation.

There are also social and demographic conditions that influence labor force participation. These include language and cultural boundaries as well as workforce aging. Localized factors can also influence workforce participation, including lack of sufficient public transportation or parent services such as day/night care for children and other dependents.

Local Considerations

Farmers and other businesses in the value chain struggle to find a sufficient number of workers to fill available jobs. This limits the ability and desire to expand operations until they can either develop technology to replace labor or improve operating revenue sufficient to increase wages.



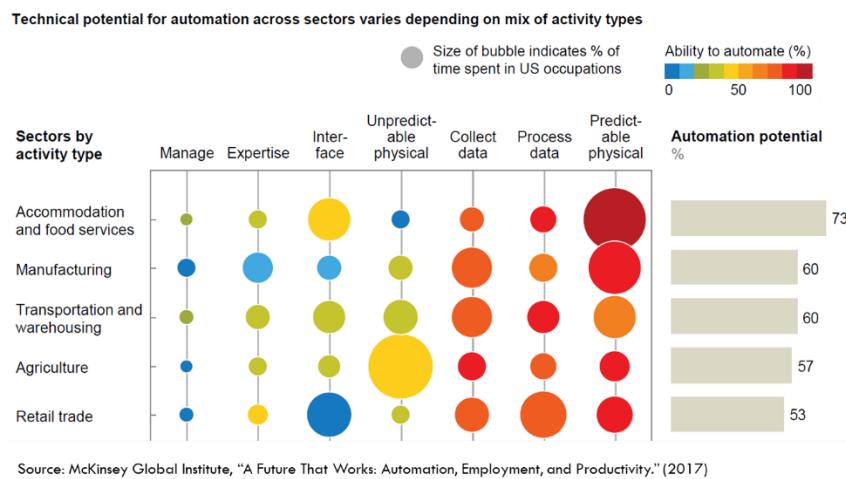
Source: USDA NASS, Census of Agriculture, 2022

Attracting a non-traditional workforce has been suggested as a means to fill the workforce void. These new workforce markets include migrants, immigrants, urban workers, and workers in recovery. These workforce elements may require special training, recruitment, transportation, and language skills.

Interestingly, farm labor makes a very high contribution to the labor force from an indirect and induced standpoint, where it is responsible for creating nearly 300 jobs with an average salary of just over \$57,000.

Summary

Workforce conditions are an absolute growth limiter in agriculture. Until such a time as automation and technology can replace farm labor, it will be difficult to overcome this challenge. As the chart from McKinsey and Company indicates, it will be some time before this type of automation is broadly available due to the unpredictable nature of agricultural work.



Cost of Doing Business

What is it?

The term “costs of doing business” encapsulates all expenses incurred in running a business, including capital and operating expenses. In managerial accounting, the approach would catalog these expenses as fixed and variable costs, which helps owners and operators understand issues such as break-even, profitability, pricing, cost management, and financial forecasting.

Why is it important?

Agriculture generally relies on a low cost-basis to be competitive. Labor force, equipment, energy, input, service, and land-related costs are among the most important factors for farmers to control. In areas where these costs get out of balance, a shift is forced in the types of agriculture operations because of the impact on margin, increased debt burden, and influence on management decision-making. If business costs become too high, owners decrease investment in their businesses and, ultimately, farms close.

Local Considerations

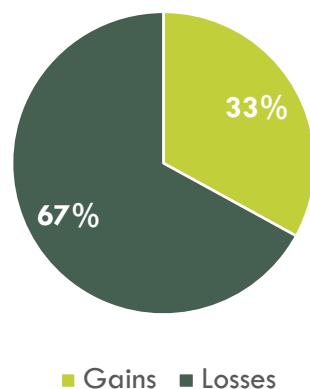
According to the Tax Foundation, Maryland has the fifth highest business tax rate in the United States, and according to the Economic Policy Institute, the state has the seventh highest cost of living. The average 2-person household in Frederick County faces a monthly household budget of \$9,318.

The high costs make it difficult for a majority of farms to cover operating expenses. Over the last five years, labor alone has increased 39 percent, leaving farmers without sufficient funds to invest in the farm. This level of performance cannot be sustained over an extended period, indicating that further transition is eminent.

Summary

A wide range of operational and structural changes must occur in order for farmers to maintain operations in a high-cost environment. At the farm level, it includes efficiency improvements, operational diversification, increased marketing efficiency, and better collaboration. At the policy level, it includes improved fiscal policy and more streamlined regulations.

Farms with Gains/Losses



Source: USDA NASS, Census of Agriculture, 2022

Local Agri-business Support Resources

What is it?

Public sector resources allocated to support agribusinesses and farmers nationwide cover a wide range of services, including financial planning, management consulting, tax management, regulatory support, infrastructure development, and planning. Successful resource deployment matches the resource to the need.

Why is it important?

Agriculture has unique needs that differ from other types of industries. This means that farmers are often using systems that are custom-designed for them, but these offices are typically underfunded and unable to support the top requested services:

1. Support with planning, zoning, and permitting
2. Assistance with agriculture by right issues
3. Managing complex tax situations
4. Creating food safety plans
5. Managing environmental reporting requirements
6. Expanding markets
7. Accessing financing

8. Educating the general public
9. Promoting agriculture and local foods
10. Supporting farmer-farmer learning

Local Considerations

With the agriculture sector transitioning to an entrepreneur-led development model, the structure of support programs must change to secure resilience. County and private industry must provide the resources in terms of qualified program staffing and sufficient program funds to navigate the process of streamlining regulations, creating an entrepreneurial culture, investing in shared infrastructure, accessing capital, supporting new workforce skills, and promoting innovation.

Summary

Transitioning from a cluster-based agricultural economic development strategy to an entrepreneurship-based one requires a new approach and sufficient resources to influence economy-wide outcomes. The expected outcomes will be measured in risk mitigation, innovation, job growth, and wealth creation.



Section 4: Moving Toward the Future

Section 4: Moving Toward the Future

Frederick County, Maryland, boasts a rich agricultural heritage that has been a cornerstone of the community for generations. Today, our agricultural industry continues to play a vital role, contributing significantly to the county's economic well-being, environmental health, and unique cultural identity.

This plan outlines a comprehensive strategy to ensure Frederick County agriculture's continued success and sustainability as we look towards the future. By fostering innovation, strengthening infrastructure, and promoting local food systems, we can empower our farmers and ranchers to thrive in a competitive marketplace while preserving the rural landscape and ensuring a secure and sustainable food supply for generations to come.

Those things that will lead us to the future include:

1. Agriculture is an economic driver
2. Strong entrepreneurial spirit throughout the supply chain
3. Positive market conditions
4. Supportive political establishment
5. Critical assets are protected

Those issues that challenge the future include:

1. Regulatory conditions challenge industry growth and stability
2. Agricultural workforce is declining in skills and availability
3. Collaborative solutions are needed to integrate disparate sectors
4. Coordination of the value chain will be required to improve market penetration

The strategies and actions to support a smooth transition follow in the Recommendation Support Matrix.

Recommendations

Following is a summary of recommendations and possible actions to improve farms' economic performance in Frederick County. These brief descriptions introduce the recommendations and list possible support agencies and program partners, in addition to related activities, priority ranking, and budget and funding information.

FOCUS AREA 1: REGULATION

The agricultural industry faces a complicated regulatory environment at all levels of industry activity. In many cases, this regulatory environment is particular to agriculture, as is the case with labor law, but in other instances, the regulations are often complicated and sometimes conflict based on the broad nature of the regulations. Such cases would include zoning, where agricultural and residential land use controls are often mixed and contradictory, or health and transportation, where regulations in nearby states can affect the competitiveness of local farm operations.

RECOMMENDATION 1

Develop an agricultural “playbook” which includes the rules and regulations that affect agriculture, including:

- ✓ Planning, Zoning, Permitting information and estimated timeframes.
- ✓ Tax assessment determinations of commercial versus agricultural use.
- ✓ Conservation requirements (e.g., nutrient management plan).
- ✓ Licenses needed to sell at a farmers’ market.

ACTIONS:

- Create a searchable online system to help farmers, food processors, beverage makers, and similar companies navigate the regulatory landscape.

PRIMARY IMPLEMENTATION RESPONSIBILITY:

- Frederick County Office of Agriculture

SECONDARY IMPLEMENTATION RESPONSIBILITY:

- Frederick County Division of Planning and Permitting
- Frederick County Dept. of Health
- Maryland Dept. of Agriculture
- Maryland Dept. of Environment
- Maryland Dept. of Health and Mental Hygiene
- Frederick County Interagency Information Technology (IIT)

BUDGET CONSIDERATIONS: Staff commitment of 200-250 hours. Website programming should be budgeted at \$12,500.

ISSUE PRIORITY: The study team feels that this is a top priority issue that should be implemented in fiscal year 2026.

FUNDING RESOURCES: There is interest among numerous jurisdictions in tackling this issue, which may result in a cooperative agreement amongst counties supported by state

agencies such as the Department of Commerce, MARBIDCO, Rural Maryland Council, and the Maryland Department of Planning.

RECOMMENDATION 2

Revise the agricultural use definition that better reflects modern agriculture, such as:

- ✓ Agriculture (e.g. farm stand, processing) and non-agriculture (e.g., tasting room) accessory uses.
- ✓ Cultural tourism, agritainment and agritourism.
- ✓ Value-added products.
- ✓ Cooperative retailing.

ACTIONS:

- Update and harmonize the definition of agriculture with performance standards that recognize it as a set of economic activities supporting innovation and value chain needs agnostic of size, marketing strategy, management systems, etc.

PRIMARY IMPLEMENTATION RESPONSIBILITY:

- Frederick County Office of Agriculture

SECONDARY IMPLEMENTATION RESPONSIBILITY:

- Frederick County Farm Bureau
- Horizon Farm Credit
- Frederick County Division of Planning and Permitting
- Frederick County Dept. of Health
- Maryland Dept. of Agriculture
- Maryland Dept. of Environment
- Maryland Dept. of Health and Mental Hygiene

BUDGET CONSIDERATIONS: Staff commitment of 100 hours.

ISSUE PRIORITY: The study team feels that this is a top-priority issue that should be implemented in fiscal year 2026.

FUNDING RESOURCES: This element of the plan requires little outside funding support through agency discretionary funds at the Maryland Department of Agriculture, the Maryland Department of Commerce, and the Maryland Department of Planning.



RECOMMENDATION 3

Develop the policy and strategy for the agricultural industry for Frederick County as part of the “evergreen” Livable Frederick Master Plan.

- ✓ Prepare the definition of agriculture in time for the 7/25 interim report.
- ✓ Create an internal process that creates a planning document to inform the next full comprehensive plan update.

ACTIONS:

- Work within the Ag Office and with other County agencies to determine policy and strategy.
- Determine if County policies conflict regarding agriculture and work with County executives and elected offices to resolve inconsistencies.

PRIMARY IMPLEMENTATION RESPONSIBILITY:

- Frederick County Office of Agriculture
- Frederick County Farm Bureau

SECONDARY IMPLEMENTATION RESPONSIBILITY:

- Frederick County Division of Planning and Permitting
- Maryland Dept. of Agriculture
- Maryland Dept. of Planning

BUDGET CONSIDERATIONS: Staff commitment of 120 hours annually. \$50,000 every five years for a plan update.

ISSUE PRIORITY: The study team feels that this is a top-priority issue that should be implemented beginning in fiscal year 2026, but the effort will need to be ongoing.

FUNDING RESOURCES: Internal staffing required to complete this action with data analytics supported by county funding allocation.

RECOMMENDATION 4

Update farmland protection programming.

- ✓ Update and modernize the definition of agriculture.
- ✓ Advocate with regional partners for changes to state programming.

ACTIONS:

- Audit existing program performance and enhance tools to build greater utility into a highly successful program.
- Work with the State of Maryland in a leadership role to explore and develop new farmland protection tools.

PRIMARY IMPLEMENTATION RESPONSIBILITY:

- Frederick County Office of Agriculture

SECONDARY IMPLEMENTATION RESPONSIBILITY:

- Maryland Agricultural Land Preservation Foundation
- Frederick County Division of Planning and Permitting
- American Farmland Trust

BUDGET CONSIDERATIONS: Modest changes in staff allocations for advocacy and administrative tasks.

ISSUE PRIORITY: The study team feels this is a top-priority issue that should be implemented beginning in fiscal year 2027.

FUNDING RESOURCES: Numerous grant programs are available to leverage this proposed action to include USDA funding through Rural Development or Natural Resource Conservation Service as well as state agency discretionary funds at the Maryland Department of Agriculture, Maryland Department of Commerce, and the Maryland Department of Planning, Maryland Department of Natural Resources, and the Rural Maryland Council.

RECOMMENDATION 5

Increase the Frederick County Agricultural Land Preservation Programs acreage target.

- ✓ Explore alternative funding strategies such as green bonds, general obligation bonds, and Payments for Ecological Services (PES) contracts.
- ✓ Develop public-private partnerships to incentivize businesses to invest in preservation, offering tax credits or branding opportunities in exchange for funding support.
- ✓ Seek improvements to the Agricultural Rights Transfer Option (ARTO) program to streamline its use and encourage greater program liquidity.
- ✓ Leverage innovative financing models such as revolving loan funds or lease of development rights programs to bank land while permanent protection funding is developed.

ACTIONS:

- Expand eligibility criteria to include lands with high ecological value, such as those supporting pollinator habitats, wetlands, or forested areas.
- Expand eligibility criteria to include farms where value-added activities, agritourism, hospitality, controlled atmosphere production assets, and other modern agricultural account for a significant portion of the farm's land use.
- Offer bonus incentives for landowners engaged in intergenerational transfers or incorporate dual-use or value-added practices.
- Collaborate with universities, business support organizations, lenders, and conservation organizations to provide technical assistance for farmers on enrolled lands.

PRIMARY IMPLEMENTATION RESPONSIBILITY:

- Frederick County Office of Agriculture

SECONDARY IMPLEMENTATION RESPONSIBILITY:

- Maryland Agricultural Land Preservation Foundation
- Frederick County Division of Planning and Permitting
- American Farmland Trust

BUDGET CONSIDERATIONS: Assuming an average easement value of approximately \$7,500 per acre and a program overhead of an additional 12%, the cost of expanding the easement target is estimated at \$689 million in 2024 dollars.

ISSUE PRIORITY: The study team feels this is a top-priority issue that should be implemented beginning in fiscal year 2027.

FUNDING RESOURCES: This element of the plan requires County funding with support from agency discretionary funds at the Maryland Department of Agriculture, the Maryland Department of Commerce, and the Maryland Department of Planning.

RECOMMENDATION 6

Increase understanding of agriculture and application of conservation tools:

- ✓ Farm growth
- ✓ Farm transition
- ✓ Noncontiguous parcel acquisition
- ✓ Overlaying easements and conservation activities

ACTIONS:

- Provide materials or programs that will enable farmers to better understand the impact of existing programming in financial planning.
- Conduct educational and networking events for service professionals, as well as one-on-one outreach and training.

PRIMARY IMPLEMENTATION RESPONSIBILITY:

- Frederick County Office of Agriculture

SECONDARY IMPLEMENTATION RESPONSIBILITY:

- Maryland Agricultural Land Preservation Foundation
- American Farmland Trust
- Private attorney

BUDGET CONSIDERATIONS: Holding webinars and outreach events should have an annual allocation of \$5,000. One-on-one counseling should be assessed at approximately \$400 per session.

ISSUE PRIORITY: The study team feels that this is a top-priority issue that should be implemented beginning in fiscal year 2026.

FUNDING RESOURCES: Internal staffing required to complete this action with support available from numerous grant programs such as USDA funding through Rural Development or Natural Resource Conservation Service as well as state agency discretionary funds at the Maryland Department of Agriculture, Maryland Department of Commerce, and the Maryland Department of Planning, Maryland Department of Natural Resources, and the Rural Maryland Council.



RECOMMENDATION 7

Create model legal documents that may enable landowners to realize additional financial benefits by monetizing various land use elements of the farm:

- ✓ Purchase agreement
- ✓ Long-term livestock and crop lease
- ✓ Alternative energy and communications structures
- ✓ On-farm marketing and processing

ACTIONS:

- Develop, with the help of partners, model legal documents or guidance documents on a variety of topics to help producers save money on legal fees and assist attorneys with the nuance of agriculture for additional farm revenue.

PRIMARY IMPLEMENTATION RESPONSIBILITY:

- Frederick County Office of Agriculture
- University of Maryland Agriculture Law Education Initiative

SECONDARY IMPLEMENTATION RESPONSIBILITY:

- Private attorney
- Frederick County Attorney's Office

BUDGET CONSIDERATIONS: \$8,000 to conduct PALS course at UMD.

ISSUE PRIORITY: The study team feels that this, while important, is a second-tier priority issue and suggest begin implementing in fiscal year 2027.

FUNDING RESOURCES: Support through private land conservation programs, USDA-Rural Development, the University of Maryland Ag Law initiative, and the National Center for Smart Growth may provide funding support.

RECOMMENDATION 8

Create model ordinances and policy support documentation that provide farmers/landowners and municipalities more “bright lines” regarding agricultural activities, accounting for changes in agricultural practices, technologies, and economic diversification.

ACTIONS:

- Modernize the definition of agriculture across platforms and agencies.
- Review agricultural legislation at the state level.
- Create an ag use determination process modeled on New York State 25-AA process to assist with the determination of regulatory application.

PRIMARY IMPLEMENTATION RESPONSIBILITY:

- Frederick County Office of Agriculture
- Frederick County Division of Planning and Permitting

SECONDARY IMPLEMENTATION RESPONSIBILITY:

- University of Maryland Agriculture Law Education Initiative
- Maryland Department of Agriculture
- Frederick County Treasurer

BUDGET CONSIDERATIONS: Staff time from several agencies.

ISSUE PRIORITY: The study team feels that this is a top priority and will begin implementing it in the fiscal year 2025. These efforts will be ongoing.

FUNDING RESOURCES: Support through private land conservation programs, USDA-Rural Development, University of Maryland Ag Law initiative, and the National Center for Smart Growth may provide funding support.

RECOMMENDATION 9

Advocate for agricultural exemptions to stormwater management and additional permitting processes for plumbing, electrical, and similar to level the competitive playing field by reducing the regulatory burden and costs for farmers.

ACTIONS:

- Seek regulatory relief from burdensome regulations.
- Conduct best practice research regarding the treatment of these issues in competitive markets.
- Develop alternative approaches to current regulations based on the above research.

PRIMARY IMPLEMENTATION RESPONSIBILITY:

- Frederick County Office of Agriculture
- Frederick County Division of Planning and Permitting

SECONDARY IMPLEMENTATION RESPONSIBILITY:

- University of Maryland Agriculture Law Education Initiative
- Frederick County Division of Energy and Environment
- Maryland Department of Agriculture
- Frederick County Soil Conservation
- Maryland Department of Environment
- Maryland Forests Association
- Maryland Forest Service

BUDGET CONSIDERATIONS: Staff time from several agencies and a \$30,000 consulting budget for best practice research.

ISSUE PRIORITY: The study team feels that this is a top priority and will begin implementing beginning in fiscal year 2027.

FUNDING RESOURCES: Limited funds required beyond staff support.

FOCUS AREA 2: WORKFORCE AND HUMAN CAPITAL

The agricultural workforce is a critical component of economic development, particularly in regions where agriculture plays a significant role in the local economy. In this report, we present targeted recommendations to strengthen the agricultural workforce to meet current and future demands. These recommendations focus on enhancing workforce skills, attracting and retaining talent, and fostering innovation in agricultural practices. By addressing the unique challenges the agricultural sector faces—such as aging workers, evolving technology, and fluctuating market demands—these strategies aim to ensure a sustainable, resilient, and competitive agricultural industry that can drive economic growth and stability in Frederick County.

RECOMMENDATION 1

Develop a land-based new and beginner farmer mentor protégé program to motivate internal transfer of knowledge and assets.

ACTIONS:

- Screen and link mentors and protégés.
- Train and financially support mentors.
- Support learning and development needs.
- Support transition finance.

PRIMARY IMPLEMENTATION RESPONSIBILITY:

- Frederick County Office of Agriculture
- Frederick County Parks and Recreation

SECONDARY IMPLEMENTATION

RESPONSIBILITY:

- Frederick County Farm Bureau
- University of Maryland Extension



BUDGET CONSIDERATIONS: Pilot project with four mentor protégé teams will require approximately \$32,000.

ISSUE PRIORITY: The study team feels that this is a top-priority issue that should be implemented in fiscal year 2027.

FUNDING RESOURCES: Funding to support this program will likely come from local philanthropies, with additional support available from the Governor's Workforce Development Board, the Economic Development Administration, and USDA – Rural Development.

RECOMMENDATION 2

Support the development of a regional information exchange program to initiate a broad exchange of regional information and ideas related to major policy, infrastructure, sustainability, and climate change decisions using moderated topics in an online setting with at least the following elements:

- ✓ Agribusiness development needs
- ✓ Community and peer-based lending
- ✓ Transportation planning
- ✓ Sustainability monetization strategies

ACTIONS:

- Recruit people to participate in the program.
- Grow the group as necessary with additional regional and subject matter expertise.

PRIMARY IMPLEMENTATION RESPONSIBILITY:

- Frederick County Office of Agriculture

SECONDARY IMPLEMENTATION RESPONSIBILITY:

- Maryland Dept. of Agriculture
- MARBIDCO
- Western Maryland RC&D
- Southern Maryland Agricultural Development Commission

BUDGET CONSIDERATIONS: Approximately \$15,000 for website update and group moderation.

ISSUE PRIORITY: The study team feels that this is a top-priority issue that should be implemented in fiscal year 2027.

FUNDING RESOURCES: Funding to support this program will likely come from local Rural Maryland Council, with additional support available from the Maryland Department of Agriculture, the Economic Development Administration, and USDA – Rural Development.

RECOMMENDATION 3

Conduct an annual workforce needs and readiness survey in agribusiness, the results of which should be used by a broad range of organizations to improve workforce conditions.

ACTIONS:

- Work with Frederick County Works and private employers to develop an online survey (mail to plain community).
- Publish Frederick County and partner websites.
- Distribute findings to workforce development partners and educational institutions.

PRIMARY IMPLEMENTATION RESPONSIBILITY:

- Frederick County Office of Agriculture

SECONDARY IMPLEMENTATION RESPONSIBILITY:

- Frederick County Workforce Services
- Frederick County Public School System

BUDGET CONSIDERATIONS: Survey development and distribution require limited staff resources and can be published at a low cost or free online.

ISSUE PRIORITY: The study team feels this is a top-priority issue that should be implemented in fiscal year 2026.



FUNDING RESOURCES: Funding to support this program will likely come from Office of Agriculture staff with additional funding support from the Chamber of Commerce, Farm Bureau, the Economic Development Administration, and USDA – Rural Development.

RECOMMENDATION 4

Organize a structured internship program with direction from an agribusiness education subcommittee based on The Greater Cumberland Committee Education Subcommittee structure. The program should encourage secondary and higher education students to explore career and entrepreneurship opportunities in agriculture.

ACTIONS:

- Work with farmers to create the guiding principles for an internship program.
- Create learning objectives.
- Develop a structured evaluation process.
- Offer diversity in opportunities and mobility.
- Recruit farms and interns.

PRIMARY IMPLEMENTATION RESPONSIBILITY:

- Frederick County Office of Agriculture

SECONDARY IMPLEMENTATION RESPONSIBILITY:

- Frederick County Workforce Services
- Frederick County Farm Bureau

BUDGET CONSIDERATIONS: Effective intern program management will require a half-time FTE.

ISSUE PRIORITY: The study team feels this is a second-tier priority that should be implemented in fiscal year 2027.

FUNDING RESOURCES: Funding to support this program will likely come from Office of Agriculture staff, with additional funding and support from Frederick County Public Schools, Hood College, Rural Maryland Council, MD Department of Commerce, Economic Development Administration, and USDA – Rural Development.



RECOMMENDATION 5

Create an HR Help Desk and Resource Center that reduces hiring risk for farmers and includes assisting farmers with the adoption of H2A labor force.

ACTIONS

- Develop agricultural workforce issues-based tear sheets.
- Conduct quarterly topical webinars.
- Staff a call-in HR help desk.
- Collaborate with an online helpdesk using a service such as Rippling or BambooHR.

PRIMARY IMPLEMENTATION RESPONSIBILITY:

- Frederick County Office of Agriculture
- Frederick County Chamber of Commerce

SECONDARY IMPLEMENTATION RESPONSIBILITY:

- University of Maryland Agriculture Law Initiative

BUDGET CONSIDERATIONS: Work with UMD College of Agriculture and Natural Resources to create a PALS course to develop tear sheets and webinars based on critical HR needs. Identify help desk partners and prepare an RFP for services.

ISSUE PRIORITY: The study team feels this is a second-tier priority issue that should be implemented in fiscal year 2026 as time permits regarding the top priorities identified in this plan.

FUNDING RESOURCES: Funding to support this program will require new county funding allocation and should be reviewed relative to service offerings of the Frederick County Workforce Services office.

FOCUS AREA 3: INFRASTRUCTURE DEVELOPMENT

In Frederick County, the development of robust rural infrastructure is essential for fostering economic growth, enhancing quality of life, and ensuring the long-term sustainability of our rural communities. This report outlines a series of strategic recommendations aimed at improving critical infrastructure, including transportation networks, broadband access, utilities, and public services. By addressing these foundational needs, we can better support agricultural businesses, attract new investment, and enhance connectivity for residents and enterprises alike. These recommendations are designed to strengthen the economic resilience of Frederick County's rural areas, positioning them for continued growth and prosperity in an increasingly competitive and connected world.

RECOMMENDATION 1

Coordinate a multijurisdictional review of road design standards with a focus on:

- ✓ Road width
- ✓ Shoulder stability
- ✓ Speed
- ✓ Clearance
- ✓ Water management

ACTIONS:

- Improve local and state planning and design initiatives to fully incorporate the interests and needs of agriculture, particularly within areas that require the movement of large tillage equipment and slow-moving traffic.
- Improve input from farming and agribusiness entities as part of a continuous improvement program.

PRIMARY IMPLEMENTATION RESPONSIBILITY:

- Frederick County Office of Agriculture
- Frederick County Department of Public Works

SECONDARY IMPLEMENTATION RESPONSIBILITY:

- Maryland Department of Transportation
- Frederick County Farm Bureau

BUDGET CONSIDERATIONS: Approximately \$20,000 to conduct a design charrette with local, regional and national participation.

ISSUE PRIORITY: The study team feels this is a second-tier priority that should begin being implemented in fiscal year 2028.

FUNDING RESOURCES: Office of Agriculture staffing required to initiate this recommendation.



RECOMMENDATION 2

Re-engage at a regional level in planning for a Value-Added Food Processing Center, which can open processing, aggregation, distribution, marketing, and education opportunities for food, fiber, and beverage industries.

ACTIONS:

- Collaborate with regional partners to develop project scope for agriculture, food, and beverage center.
- Develop grant application for planning and design project.
- Conduct learning tour of opportunities in other states (NC & NY).

PRIMARY IMPLEMENTATION RESPONSIBILITY:

- Frederick County Office of Agriculture

SECONDARY IMPLEMENTATION RESPONSIBILITY:

- Maryland Department of Agriculture
- MARBIDCO
- Western MD RC&D
- Southern Maryland Agricultural Development Commission
- Maryland Food Center
- Montgomery County Office of Agriculture
- Brewers Association

BUDGET CONSIDERATIONS: Planning and design contracting support is estimated at \$175,000, which can be funded by several USDA grant funds.

ISSUE PRIORITY: The study team feels this is a top priority to be implemented in fiscal year 2026.

FUNDING RESOURCES: Numerous jurisdictions are interested in tackling this issue, which may result in a cooperative agreement amongst counties supported by the state. USDA LAMP funds would provide the planning and development backing necessary to move the project forward.

RECOMMENDATION 3

Protect critical agricultural transportation corridors to ensure safe movement of agricultural goods and add safety for both farmers and commuters.

ACTIONS:

- Define and map critical agricultural transport corridors.
- Assess road conditions and traffic loads along Ag corridors.
- Determine if appropriate shoulder widths are in place for moving large equipment about safely.
- Train local law enforcement on agricultural and forestry-specific transportation rules.
- Work with MDDOT for potential road signage improvements.

PRIMARY IMPLEMENTATION RESPONSIBILITY:

- Frederick County Office of Agriculture
- Frederick County Department of Public Works

SECONDARY IMPLEMENTATION RESPONSIBILITY:

- Maryland Department of Transportation
- Frederick County Farm Bureau
- Maryland State Police
- Local law enforcement

BUDGET CONSIDERATIONS: Should require in-house resources and partner agency support with a periodic budget for traffic analysis at \$4,000 per intersection.

ISSUE PRIORITY: The study team feels that this is a top priority that should be implemented in fiscal year 2026.

FUNDING RESOURCES: Office of Agriculture staffing required to initiate this recommendation.

FOCUS AREA 4: VALUE CHAIN SUPPORT

The food, fiber, and beverage industries are vital components of Frederick County's economy, with a rich heritage and significant potential for growth. This report presents strategic recommendations to strengthen and expand the value chains associated with these sectors, from production to processing, distribution, and marketing. By enhancing collaboration across the supply chain, investing in innovation, and supporting local producers and processors, we aim to boost the competitiveness and sustainability of these industries. These recommendations are designed to capitalize on Frederick County's agricultural strengths, promote value-added products, and create new opportunities for economic development, ultimately driving growth and prosperity for the entire region.

RECOMMENDATION 1

Create a transition support team designed to rapidly react to intergenerational or new ownership farm transition needs that may cause farms to be lost to agriculture.

ACTIONS:

- Coordinate existing business support systems across multiple agencies.
- Include specialized teams with outside consulting support.
- Train attorneys, accountants, and financial professionals.

PRIMARY IMPLEMENTATION RESPONSIBILITY:

- Frederick County Office of Agriculture

SECONDARY IMPLEMENTATION RESPONSIBILITY:

- Small Business Development Center (SBDC)
- Service Corp of Retired Executives (SCORE)
- University of Maryland Extension
- Horizon Farm Credit
- Hood College
- Farm Services Agency (FSA)
- Maryland Dept. of Agriculture
- MARBIDCO
- Bar Association

BUDGET CONSIDERATIONS: Staff time and modest initial planning investment of \$5,000 to \$10,000. Users should pay for service and fully cover costs after pilot period.

ISSUE PRIORITY: The study team feels that this is a top priority that should be implemented in fiscal year 2026.

FUNDING RESOURCES: Funding from various resources may be necessary to create this program successfully. Planning funds from Rural Maryland Council or Rural Development may be necessary to initiate the program. Long-term funding from corporate and philanthropic sources may be necessary to maintain operations in the long term.



RECOMMENDATION 2

Manage networked peer learning and masterminding sessions that work specifically with high-performance farms and agribusinesses to improve business outcomes.

ACTIONS:

- Create a consultant-moderated peer learning environment.
- Develop unique peer group and individual agribusiness goals.
- Incorporate individual consulting with team-building activities.
- Monitor goal achievement during participation.

PRIMARY IMPLEMENTATION RESPONSIBILITY:

- Frederick County Office of Agriculture

SECONDARY IMPLEMENTATION RESPONSIBILITY:

- SBDDC
- SCORE
- University of Maryland Extension
- Horizon Farm Credit
- Hood College
- FSA
- Frederick County Community Foundation
- MARBIDCO

BUDGET CONSIDERATIONS: Staff time and modest initial planning investment of \$3,000 to \$7,000. Users should pay for service and fully cover costs after pilot period.

ISSUE PRIORITY: The study team feels that this is a top priority that should be implemented in fiscal year 2026.

FUNDING RESOURCES: Funding from various resources may be necessary to create this program successfully. Planning funds from Rural Maryland Council or USDA – LAMP may be necessary to initiate the program. Long-term funding will come from user fees.

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RECOMMENDATION 3

Support adoption of GIS-based assessment tool to enable better land use decisions with GIS-based data access and to help with:

- ✓ Site selection for farming operations.
- ✓ Location analysis for retail and manufacturing.
- ✓ Alternative land use decision making.
- ✓ Monetization of non-agricultural opportunities
- ✓ Sustainability monetization strategies.

ACTIONS:

- Clarify the goals or outcomes that the process or project aims to achieve.
- Document these objectives and share them with the ag industry alignment.
- Work with industry to identify GIS features necessary to achieve goals.
- Design UI/UX
- Build technology response

PRIMARY IMPLEMENTATION RESPONSIBILITY:

- Frederick County Office of Agriculture

SECONDARY IMPLEMENTATION RESPONSIBILITY:

- Frederick County Division of Planning and Permitting
- University of Maryland Extension
- University of Maryland National Center for Smart Growth
- Frederick County IIT

BUDGET CONSIDERATIONS: Contracting support is estimated at \$75,000. An alternative approach would be to make this a PALS Course, which would require up to \$32,000, depending on the number of courses.

ISSUE PRIORITY: The study team feels that this is a top priority that should be implemented in fiscal year 2027.

FUNDING RESOURCES: Given the statewide application of such a program, funding from state and federal resources should be used, with possible grant funding coming from the Maryland Department of Planning, Maryland Department of Agriculture, Maryland DNR, National Smart Growth Center, NGA, and USDA-Rural Development.

RECOMMENDATION 4

Collaborate with agricultural support entities to create short courses on data management and data engineering because the adoption of technology and innovation at small enterprises will lag unless owner-operator skills development becomes a priority.

ACTIONS:

- Create and conduct a technical needs survey of farms and agribusiness.
- Support or co-develop short courses to meet the need identified above.

PRIMARY IMPLEMENTATION RESPONSIBILITY:

- University of Maryland Extension
- Frederick County Office of Agriculture

SECONDARY IMPLEMENTATION RESPONSIBILITY:

- Natural Resources Conservation Service (NRCS)
- Frederick County Farm Bureau
- Farm service providers
- Equipment manufacturers
- Technical schools
- Universities
- Ag associations

BUDGET CONSIDERATIONS: Augmenting existing farm management training with specific topical content and specialized speakers will require approximately 12-15 hours of staff time per session.

ISSUE PRIORITY: The study team feels that this is a top priority that should be implemented in fiscal year 2027.

FUNDING RESOURCES: Federal funding from the Agriculture and Food Research Initiative, USDA – Rural Development, USDA – Farm Service Agency, and the USDA – Risk Management Agency. State funding partnerships with MARBIDCO and RMC may be possible.

RECOMMENDATION 5

Convene value chain masterminding groups to focus on leveraging the market and product innovation of best-in-class business leaders into a peer learning environment.

ACTIONS:

- Engage a qualified consultant through an RFP process to run the masterminding groups.
- Develop benchmark targets with consultant.
- Create an outreach program in collaboration with the consultant.
- Recruit initial participants.
- Evaluate first- and second-year results from initial masterminding groups.
- Expand program.

PRIMARY IMPLEMENTATION RESPONSIBILITY:

- Frederick County Office of Agriculture

SECONDARY IMPLEMENTATION RESPONSIBILITY:

- SBDC
- SCORE
- University of Maryland Extension
- Horizon Farm Credit
- Hood College
- FSA
- Frederick County Community Foundation
- MARBIDCO

BUDGET CONSIDERATIONS: Staff time and modest initial planning investment of \$5,000 to \$10,000. Users should pay for service and fully cover costs after pilot period.

ISSUE PRIORITY: The study team feels that this is a top priority that should be implemented in fiscal year 2026.

FUNDING RESOURCES: Funding from various resources may be necessary to create this program successfully. Planning funds from Rural Maryland Council or USDA – LAMP may be necessary to initiate the program. Long-term funding will come from user fees.

RECOMMENDATION 6

Create a farm finance learning program that can develop a higher level of financial literacy and will increase critical goals such as capital efficiency and better asset transition.

ACTIONS:

- Adopt financial literacy training programs in collaboration with Farm Credit's beginning farmer program.
- Work with the school system to build a youth financial learning course based on agriculture.
- Explore creation of a local financial literacy program with a reach beyond debt.
- If electing to move forward, build the program around eight topics: Earning, Spending, Saving, Risk Management, Investing, Borrowing, Protecting, and Transferring.

PRIMARY IMPLEMENTATION RESPONSIBILITY:

- Frederick County Office of Agriculture

SECONDARY IMPLEMENTATION RESPONSIBILITY:

- SBDC
- SCORE
- University of Maryland Extension
- Horizon Farm Credit
- FSA
- Frederick County Community Foundation
- MARBIDCO

BUDGET CONSIDERATIONS: Testing of the literacy program should be conducted using an existing program, such as those provided by Farm Credit, with support from SBDC and SCORE. Expansion into new programming will require significant additional resources.

ISSUE PRIORITY: The study team feels that this is a top priority that should be implemented in fiscal year 2026.

FUNDING RESOURCES: Funding from local philanthropies, chambers of commerce, banks, Farm Credit, USDA – Farm Service Agency, USDA – Risk Management Agency, MARBIDCO, and similar organizations are likely to fund activities related to this recommendation.

RECOMMENDATION 7

Collaborate on the development of agribusiness credit enhancement programs, which will enable agriculture to finance growth, particularly for farmers with limited assets or low experience rates, otherwise, it is growth limiting and forms a bias toward certain types of agriculture.

ACTIONS:

- Explore feasibility of establishing a regional farm finance consulting service modeled after Wisconsin Farm Business Initiative.
- Develop a credit risk webinar to teach farmers and agribusinesses how to lower their risk profile.
- Work with local banks to facilitate debt workouts.
- Explore structured programs in collaboration with regional partners to support collateral valuations, interest rate buy-downs, guarantees, and syndication.

PRIMARY IMPLEMENTATION RESPONSIBILITY:

- Frederick County Office of Agriculture

SECONDARY IMPLEMENTATION RESPONSIBILITY:

- Horizon Farm Credit
- MARBIDCO
- University of Maryland Extension
- FSA
- Maryland Forests Association
- Dirt Capital
- Local banks

BUDGET CONSIDERATIONS: Feasibility study will require approximately \$75,000. Programming for webinar will require modest staff commitment. Structured programs will require substantial investment to be effective and may need to be augmented by external agencies such as MARBIDCO.

ISSUE PRIORITY: The study team feels that this is a top priority that should be implemented in fiscal year 2027.

FUNDING RESOURCES: Collaboration with state agencies such as the Department of Commerce and MARBIDCO is the most likely pathway to funding the above activities. Additional funding support may come from chambers of commerce, banks, Farm Credit, USDA – Farm Service Agency, USDA – Risk Management Agency, Rural Maryland Council, and similar organizations.

RECOMMENDATION 8

Create a regional retail and on-farm value-added innovation center to research, test, evaluate, and support enhanced on-farm profitability by bringing producers and consumers together in a closer relationship. A farm retail innovation center would include:

- ✓ Best practice retail layouts
- ✓ New product development
- ✓ Technology innovation
- ✓ A key role in improving the cultural fit between urban and rural populations

ACTIONS:

- Apply for funding to develop a business plan for a public-private partnership that advances on-farm retail success
- Apply for funding to develop a three-year pilot program
- Build a resource network to develop best practice documentation for on-farm and direct-to-consumer marketing
- Create a consulting network to assist in start-up, floor plan design, product development, redesign, and technology use

PRIMARY IMPLEMENTATION RESPONSIBILITY:

- Frederick County Office of Agriculture

SECONDARY IMPLEMENTATION RESPONSIBILITY:

- Frederick County Farm Bureau
- Rural Maryland Council
- Industry Associations
- University of Maryland Extension
- MidAtlantic Direct Marketing Conference
- Hood College
- Maryland Dept. of Agriculture
- MARBIDCO
- The Greater Cumberland Committee
- Wayne County Agriculture Innovation Center
- Private sector

BUDGET CONSIDERATIONS: Feasibility study will require approximately \$150,000 of which 50% would be required match through staff resources and private contributions.

ISSUE PRIORITY: The study team feels that this is a top priority that should be implemented in fiscal year 2026.

FUNDING RESOURCES: This recommendation is intended to have the support of industry associations and research organizations across the Mid-Atlantic and as such should include cooperative funding agreements with organizations with shared mission. Federal support for planning and execution is expected through USDA – LAMP USDA UAIP, RMC, and Regional Food Business Centers.



FOCUS AREA 5: OUTREACH AND MARKETING

Effective outreach and marketing are essential for the continued growth and success of Frederick County's agricultural industry. This report outlines targeted recommendations to enhance the visibility and competitiveness of our agricultural sector, both locally and beyond. By strengthening communication channels, promoting the county's diverse agricultural offerings, and building stronger connections between producers, consumers, and markets, these strategies aim to elevate the profile of Frederick County's agricultural industry. These efforts will support local farmers and producers and attract new business opportunities and investment, ensuring that agriculture remains a vital and thriving component of the county's economic landscape.

RECOMMENDATION 1

Create a dedicated agricultural marketing position with internal and external marketing functions to streamline and improve marketing programs and support better marketing outcomes at the farm level by creating first-of-its-kind program offerings. Use data to inform marketing and outreach decisions where applicable.

ACTIONS:

- Create Brand Management Strategy (Internal)
- Develop Style Guide with photo library (Internal)
- Create social media strategy (Internal)
- Conduct farmer marketing training (External)
- Assist farmers with social media analytics (External)
- Develop A/B and smoke test protocols. (External)
- Track internet keywords used to describe experiences with Frederick County agriculture (External)
- Conduct marketing events
- Develop the Frederick Food and Farm Challenge event modeled after Makers Ultimate Challenge.

PRIMARY IMPLEMENTATION RESPONSIBILITY:

- Frederick County Office of Agriculture

SECONDARY IMPLEMENTATION RESPONSIBILITY:

- University of Maryland Extension
- Maryland Department of Agriculture
- Frederick County Chamber of Commerce
- Frederick County Farm Bureau
- Maryland Forests Association

BUDGET CONSIDERATIONS: New staff position at \$75,000 FTE and approximately \$25,000 annual budget for programming and events.

ISSUE PRIORITY: The study team feels that this is a top priority that should be implemented in fiscal year 2026.

FUNDING RESOURCES: Funding for an internal position that can be augmented by USDA – LAMP funds is expected.



RECOMMENDATION 2

Develop an annual agriculture and forestry land-use training program, offering continuing education accredited training to expand understanding and employment of best practice planning using smart growth principles for elected and agency officials to improve integration of:

- ✓ Agriculture.
- ✓ Value-add opportunities on farm
- ✓ Alternative energy installations
- ✓ Forestry
- ✓ Tourism

ACTIONS:

- Identify and understand relevant issues
- Collaborate with legal and regulatory experts
- Assess training needs and objectives
- Develop hands-on learning materials
- Establish continuous learning and support framework

PRIMARY IMPLEMENTATION RESPONSIBILITY:

- Frederick County Office of Agriculture

SECONDARY IMPLEMENTATION RESPONSIBILITY:

- Frederick County Division of Planning and Permitting
- Maryland Department of Agriculture
- Maryland Department of Planning
- Tourism Council of Frederick County
- Municipal League
- Frederick County Chamber of Commerce
- Frederick County Farm Bureau
- Maryland Forests Association

BUDGET CONSIDERATIONS: Approximately \$2,500 annually to fund speakers and meeting location.

ISSUE PRIORITY: The study team feels that this is a top priority that should be implemented in fiscal year 2026.

FUNDING RESOURCES: Office of Agriculture staffing required to initiate this recommendation with specific training support coming from state agencies, universities, colleges, and industry associations.

RECOMMENDATION 3

Develop a “Good Neighbor” marketing program (e.g., Welcome Wagon) that promotes a safer environment for farmers to operate, encourages fewer complaints to local municipalities, and helps residents better understand what, when, and why agricultural activities occur, including:

- ✓ Moving farm equipment on roadways.
- ✓ Manure application (odorous occurrences).
- ✓ Value-add activities (e.g., pick-your-own)
- ✓ Hours of operation (not 9-to-5).
- ✓ Benefits of local production.

ACTIONS:

- Establish a Good Neighbor Committee:
- Identify Common Issues
- Create a Code of Conduct
- Identify Best Practices for Farmers
- Identify Best Practices for Nonfarm Neighbors
- Host Workshops and Community Meetings
- Develop Educational Materials
- Organize Community Events

PRIMARY IMPLEMENTATION RESPONSIBILITY:

- Frederick County Office of Agriculture

SECONDARY IMPLEMENTATION RESPONSIBILITY:

- Frederick County Farm Bureau
- Frederick County Chamber of Commerce
- Maryland Department of Agriculture

BUDGET CONSIDERATIONS: Collaborative staffing by partner agencies.

ISSUE PRIORITY: The study team feels that this is a second-tier priority that should be implemented in fiscal year 2026.

FUNDING RESOURCES: Office of Agriculture staffing required to initiate this recommendation with support from the Farm Bureau, Cooperative Extension, industry associations, realtors, and Chamber of Commerce.

