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## Northern Neck Economic Development Plan: Improving Connectivity within the Food Industry

Annie Weidhaas

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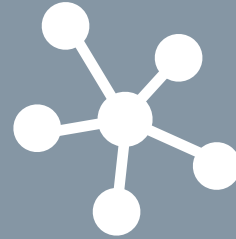
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# Northern Neck Economic Development Plan: *Improving Connectivity within the Food Industry*



Annie Weidhaas  
May 2022

Master of Urban and Regional Planning Program  
Virginia Commonwealth University



**VCU**

L. Douglas Wilder School of  
Government and Public Affairs







## **Northern Neck Economic Development Plan: Improving Connectivity within the Food Industry**

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## *Acknowledgments*

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**The Northern Neck region seeks a better understanding of its food industry and how the industry contributes to economic growth and development. This plan examines the food industry in the Northern Neck to identify existing assets and missing linkages that can improve regional economic development.**

### Background & Context

The Northern Neck Planning District Commission (NNPDC) is the client for this plan. NNPDC represents the four counties that make up the Northern Neck: Lancaster, Northumberland, Richmond, and Westmoreland. This plan and its recommendations support NNPDC's purpose "to plan for the orderly and efficient physical, social, and economic development" of the region.

The region's history and context explain the focus on the food industry. The region is defined by water: it borders the Potomac River to the north, the Rappahannock River to the south, and the Chesapeake Bay to the east, and its connection to water and land defines its economy. Prior to European occupation, rivers provided food and acted as boundaries between Native American tribes. Agriculture and aquaculture (including vineyards, corn, wheat, barley, soybeans, oyster harvesting, and menhaden fishing) are leading economic industries.

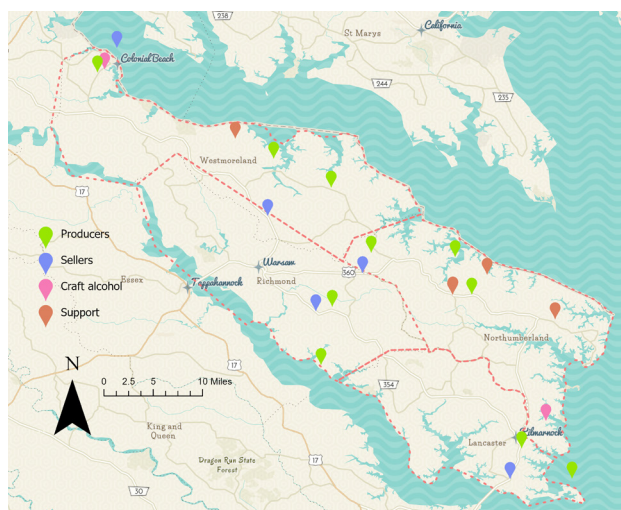
This plan is rooted in the following ideas that emerge from current research and literature on rural planning and economic development: 1) Rural areas deserve rural-specific solutions. For too long, planners have overlooked the value of rural areas to regional economies and applied urban policies to rural areas. Rural regions face unique contexts and challenges, and solutions must acknowledge this. 2) Regional connectivity is an important tool for local economic development and supporting a regional food cluster in the Northern Neck can strengthen existing business and help grow new business. 3) Asset-based community development, which identifies assets that already exist within a community to organize and capitalize on them, is the most sustainable way to plan for effective economic development.

### Research Methods & Findings

Today, the Northern Neck faces challenges to its regional economic growth and development. Demographic indicators show declining population in some counties, and overall lower annual wages and higher poverty rates in the region compared to the state. These demographics, however, do not paint a full picture of the region. This plan uses interviews with local food-related businesses and stakeholders to understand what is going on in the food industry. The following research questions needed to be answered: 1) What is currently happening within the region's food industry? 2) Can connectivity within the region's food industry improve? And 3) What can we add or change to support the food



Figure A: Local produce at Old Farm Truck Market in White Stone (Credit: Annie Weidhaas)



Map A: Location of interviews (Credit: Annie Weidhaas, VGIN, ESRI, SafeGraph, FAO, METI/NASA, USGS, EPA, NPS)



## Executive Summary

industry? Overall, 22 interviews with producers, sellers, and support groups were conducted (see Map A). Eight major findings emerged. They are explained in detail, and categorized in the following manner, which ties the findings directly to the original research questions: what is present, what can we do to connect businesses, and what can be added?

<b>PRESENT</b>	<b>GAPS TO FILL</b>	<b>HOW TO DO IT?</b>
1) Power and strength of business community	3) Right-fit businesses focused on food	6) Concrete examples and evidence
2) Distinct population and labor challenges	4) Physical gaps 4) Knowledge gaps	7) Balance of collaboration and competition 8) Shared resources

The research findings are translated into the following recommendations and objectives. The recommendations largely focus on industry organization, knowledge, and communication as economic development tools. The value of communication and connectivity within a regional economic ecosystem cannot be overstated: current research supports the idea that strong linkages between local and regional firms and industries often indicate strong economic markers. Taken as a whole, this set of recommendations is critical for the Northern Neck's food industry to grow to its full potential and provide the most benefit to the economy.

### **RECOMMENDATION 1 - SUPPORT & ORGANIZE EXISTING ASSETS**

*Recommendation 1 deals with both supporting identified assets in the region and organizing them for the benefit of future intervention. These objectives deal with surveying businesses for additional information and sharing information on local businesses to encourage collaboration.*

**Objective 1.1: Support the work already being done by businesses and workers in the region.**  
**Objective 1.2: Organize existing knowledge to the benefit of future interventions.**

### **RECOMMENDATION 2 - WORK TO FILL GAPS IN INDUSTRY**

*Recommendation 2 deals with addressing both physical and knowledge gaps that would help the food industry and regional economic development. These recommendations deal extensively with potential research undertakings that would support increased knowledge and awareness of how agriculture and food contribute to the local economy.*

**Objective 2.1: Address physical gaps that exist within regional economy**  
**Objective 2.2: Address knowledge gaps that exist within regional economy.**

### **RECOMMENDATION 3 - CONNECT INDUSTRY AT THE REGIONAL LEVEL**

*Recommendation 3 focuses on both small and large-scale interventions to get businesses talking and working together. It also deals with potential shared marketing initiatives.*

**Objective 3.1: Encourage small-scale interactions between businesses.**  
**Objective 3.2: Encourage shared initiatives between businesses.**  
**Objective 3.3: Support large-scale efforts to improve regional connectivity.**

***This plan outlines a clear path from research questions, to findings, to recommendations. These recommendations are based on what business owners in the Northern Neck want and need to thrive. Their implementation is critical for the success of the food industry.***

# 1 - Introduction

The Northern Neck region seeks a better understanding of its food industry and how the industry contributes to economic growth and development. This plan examines the food industry in the Northern Neck to identify existing assets and missing linkages that can improve regional economic development. The research findings inform the final set of recommendations to cohesively understand the region's food industry and how it can contribute to regional economic development. Planning deals with economic growth and development because improving economic indicators can improve the standard of living and quality of life of residents of a community (Nahavandi 2013). This plan aims to serve the people of the Northern Neck.

## Outline

The plan is organized in the following manner: Background is presented on the need for rural-specific planning and economic development. The context section presents an overview of the region's demographics and economic indicators. The methodology section explains the process of conducting stakeholder interviews and lists interviewees. The research findings section summarizes the eight major takeaways from interviews. The plan concludes with three overall recommendations and their accompanying objectives and action items, all summarized in implementation tables.

## Client



NNPDC is one of 21 planning district commissions in the state of Virginia

NNPDC represents the four counties that make up the Northern Neck: Lancaster, Northumberland, Richmond, and Westmoreland

NNPDC was established to plan for the orderly and efficient physical, social, and economic development of the Northern Neck Region

The Northern Neck Planning District Commission (NNPDC) is the client for this plan. NNPDC is one of 21 planning district commissions in the state of Virginia, formed in 1969 after the Regional Cooperation Act was adopted by the Virginia General Assembly. NNPDC represents the four counties that make up the Northern Neck: Lancaster, Northumberland, Richmond, and Westmoreland. In these counties are the following towns: Colonial Beach, Irvington, Kilmarnock, Montross, Warsaw, and White Stone. NNPDC was established “to plan for the orderly and efficient physical, social, and economic development of the Northern Neck Region” using comprehensive planning, technical assistance, grant seeking, and regional coordination activities (Northern Neck Planning District Commission).

NNPDC was designated as an Economic Development District by the U.S. Department of Commerce Economic Development Administration (EDA) in 1999. This enables NNPDC to develop and lead regional priorities for economic projects and investments. NNPDC regularly updates the region's Comprehensive Economic Development Strategy (CEDS) document, a requirement to apply for assistance from the Economic Development Administration's public works and economic adjustment programs. This is significant for the continued work and justification of this plan proposal because while the CEDS outlines the region's economic goals and key economic indicators with quantitative analysis, this plan supplements the CEDS with further qualitative research on economic conditions to provide recommendations and best practices.

## 2 - Background: valuing rural economies

As a rural region, the Northern Neck would benefit from economic development and planning specifically tailored to its rural nature. Unfortunately, the planning field often overlooks the role of rural areas in regional economies, with negative consequences for local economic development. The contributions of rural economies and communities to a regional economy are often undervalued and non-monetized (Dabson 2019). To plan for economic development in the Northern Neck, it is necessary to understand how the value of rural economies can be re-imagined and centered. This plan argues this can be achieved with a thorough understanding of three topics: rural-specific planning; regional connectivity and the food system; and asset based development.

1) *Focus on rural specific planning*

2) *Regional connectivity & the food industry*

3) *Asset-based development*

### 1) The need for rural-specific solutions

Planners in recent years are starting to recognize the marginalization of rural planning and the need for specific rural planning solutions, not just urban policies applied to rural areas (Frank and Reiss 2014, Edwards and Haines 2007). It wasn't until the 1960s that the planning industry began to view small towns and rural communities as objects worthy of their own study, beyond just parts of regions or urban outskirts. In the United States, regional planning often serves as a proxy for rural planning, but they are not the same: there is a difference between integrated, community-based rural planning and the top-down planning in rural areas to which regional planning typically refers (Frank and Reiss 2014). Raising awareness of rural planning may address the historic sidelining of the field (Frank and Reiss 2014, 388).

The "Smart Growth" concept in the planning field is gaining traction; it provides a newer perspective on the interaction between rural and urban spaces. Smart Growth typically calls for denser infill development in urban areas to protect agricultural and natural resource use of rural land, directly connecting land uses across different spaces. Despite this systemic perspective, the application of Smart Growth principles may still fall along the false urban-rural dichotomy. Evidence suggests that cities are more likely to use smart growth principles when compared to towns or rural governments and "for small communities and especially for rural communities, a different set of policy options are necessary" (Edwards and Haines 2007, 61). The 2010 report "Putting Smart Growth to Work in Rural Communities" offers an example of successful rural-specific solutions and application of planning by adapting smart growth approaches within a rural context (Mishkovskoy et al. 2010).

New research is starting to acknowledge the need for rural-specific planning. To address the issue of combining urban growth with the need for land for food production, a case study of Stockholm, Sweden argues for incorporating an ecosystem service perspective into urban planning (Gren and Andersson 2018). The study argues that it is critical to overcome the "unconstructive" urban-rural divide by acknowledging the relationship between rural and urban areas. For example, "urban" land-use types like urban green areas simultaneously can support "rural" ecosystem services like pollination and food production.

There is opportunity to understand urban and rural areas as connected as opposed to disparate, but the "unconstructive" rural-urban divide persists today. An example of this is renewable energy, as localities across Virginia are currently approached for large-scale solar energy installations and are not always supportive of proposals, citing concerns about who benefits and bears the cost of solar installations (Jojack 2021). Illuminating the shared connections between urban and rural areas is necessary for a systemic perspective.



Figure 1: Solar farm in Louisa County (Photo credit: Dominion Energy)

## 2) Rural economic development: regional connectivity + the food industry

The connection between urban and rural areas is relevant to current economic systems. As cities continue to grow, so do urban agglomeration economies: the economies created when firms and individuals locate near one another to reap the benefits that come with proximity and location (Glaeser 2010). This growth and centrality of cities can leave the economic growth and development of rural areas behind, which has led to a larger interest in how to improve economic outcomes in rural areas. Regional connectivity and food systems are appropriate tools for a rural-specific economic development strategy.

### *What is regional connectivity?*

Connectivity within an economy refers to strong linkages between local and regional firms and industries (McFarland 2019). Research supports the idea that good connectivity across a region improves local economic development, as it indicates the presence of “mechanisms of agglomeration such as skilled labor, sophisticated and demanding local customers, niche markets, suppliers, and related industries are at work regionally” (McFarland 2019, 260). One approach to rural economic development policy is to focus on improving the connections between local firms and regional systems. Regional collaboration is a good approach to improve “social and economic opportunity and health for all people and places across the rural–urban continuum” (Dabson 2019) and extending regional perspectives into economic development strategy can improve both local and regional economic outcomes (McFarland 2019). An economic development strategy focused on connectivity and intra-regional linkages will improve local outcomes.

### *The food system + food industry clusters*

The oversight of rural planning has implications for how planners interact and engage with the food system. The food system refers to the activities related to food production, processing, distribution, and consumption. A survey of planning agencies in 2000 revealed many planners did not believe the food system dealt directly with the built environment and that the food system is a rural issue, not an urban one (Pothukuchi and Kaufman 2000, 116). This has shifted in recent years, and the food system is increasingly seen as a site of planning and economic development. Interest in regionalized food systems is growing in light of environmental and equity concerns (Donald et al. 2010), and localizing food systems is viewed as a way to achieve economic development and revitalization (Feenstra 1997). Other studies focus on food as an instrument to boost rural tourism (Dougherty et al. 2013, Renko et al. 2010).

To understand how the food industry in the Northern Neck could impact economic



*Cluster theory is relevant to the Northern Neck and its food industry because it argues that regional institutions can play a role in enabling and supporting clusters within a region, thus impacting economic development.*

development, it helps to understand economic clusters and cluster theory. A cluster is a group of inter-related industries that drive wealth creation in a region, primarily through exports. To identify if a

food industry cluster is present in a region like the Northern Neck, quantitative and qualitative methods can be used to identify whether the food industry is exporting goods and services, whether the industry is bringing wealth back into the region, and the linkages between different firms in the region (San Diego Association of Governments). Cluster theory is relevant to the Northern Neck and its food industry because it argues that regional institutions can play a role in enabling and supporting clusters within a region, thus impacting economic development. Regional interventions like promoting access to finance or supportive policies can create an enabling environment for cluster development (Maxwell Stamp PLC). There is evidence that the food industries within the Northern Neck are specialized and economically significant enough to be considered for cluster development strategy: a 2009 Harvard project identified fishing and fishing products as the top cluster by employment in both Northumberland and Westmoreland counties (Harvard Cluster Mapping Project).

Within regional economic development, developing and supporting industry clusters is often a key goal as clusters “have been shown to strengthen competitiveness by increasing productivity, stimulating innovative new partnerships, even among competitors, and presenting opportunities for entrepreneurial activity” (Slaper and Ortuzar 2015). Developing clusters can occur at a regional level, and can be applied not just to technology business in urban areas, but to rural agricultural clusters as well. The Sacramento Area Council of Governments (SACOG) Rural-Urban Connection Strategy program is an example of how industry clusters can be developed at a regional level, and used to strengthen agricultural and rural assets. Through case studies, toolkits, and mapping, farmers and growers are able to plan for the future and enhance their competitive edge, further strengthening the agricultural advantage of the region.

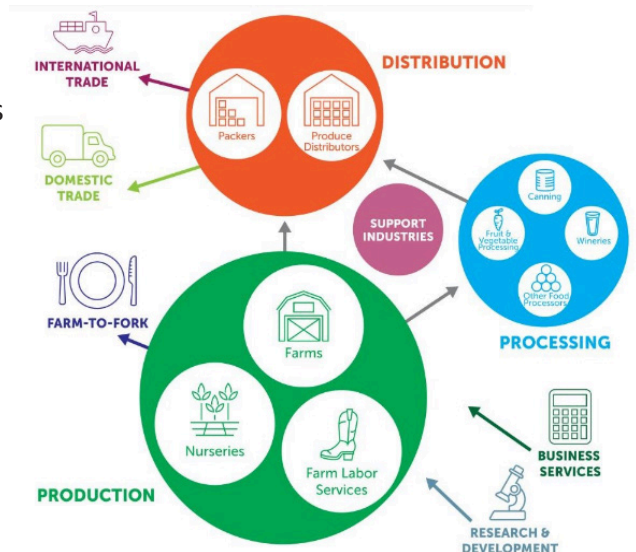


Figure 2: Map of food and agricultural industrial cluster (Source: SACOG RUCS)

### 3) Asset-based Community Development (ABCD)

When seeking solutions to problems within communities, planners can either focus on the needs, deficiencies, and problems of a community, or focus on a community’s assets and capacities. Focusing on problems and needs creates deficiency-oriented policies, which create a host of issues for residents of a community by ignoring or removing the agency, wisdom, creativity, and capabilities of residents. Focusing on assets within a community, on the other hand, allows for local community members to become more invested in the development (Kretzmann and Mcknight 1993). ABCD is an important tool for organization: by identifying assets, a community can then organize them and see what gaps, needs, or opportunities exist for outside intervention or help (on the terms of the community). This plan uses ABCD framework to identify the Northern Neck's assets to center residents and provide them with agency, as well as begin to identify gaps and offer realistic and appropriate recommendations.

### 3 - Context

This section provides information on the history and economy of the region to give an understanding of how the region operates and begin to understand its assets and challenges.

#### Study Area

The Northern Neck refers to the four counties and six towns on the uppermost eastern peninsula of Virginia. The four counties within the region are Lancaster, Northumberland, Richmond, and Westmoreland. The six towns are Colonial Beach, Irvington, Kilmarnock, Montross, Warsaw, and White Stone. The Northern Neck can be characterized as primarily rural, although it is located near the urban area and accompanying sprawl of Washington D.C., and historic agricultural and water-based industries continue to play an important role in the region's economy. The region is now a popular vacation and retirement destination due to its natural resources and proximity to metropolitan areas (2022 Northern Neck CEDS).



Map 1: The Northern Neck Region (Map Courtesy of NNPDC)

#### History: Water, Food, Agriculture, and the Economy

The Northern Neck is defined by water: it is bordered by the Potomac River to the north, the Rappahannock River to the south, and the Chesapeake Bay to the east. The region's connection to water and land defines its economy, from its history to the present day. Prior to European occupation, rivers provided food and acted as boundaries between Native American tribes. Agriculture and aquaculture (including vineyards, row crops including corn, wheat, barley, and soybeans, oyster harvesting, and menhaden fishing) are leading economic industries. Water has shaped the character of the region, as it served as a source of food and economic resources, transportation networks, and eventually as the reason for the Northern Neck's distinct character: as transportation became land-based, the region became more isolated and preserved its landscapes and traditions.

Tobacco was the primary economic driver of the region in colonial times, where enslaved people and indentured servants were exploited to profit from the labor-intensive crop. Wheat eventually replaced tobacco as the region's staple crop, and tomatoes became the primary cash crop by the 1920s. Fishing



Figure 3: Northern Neck Black watermen oystering in the Rappahannock River off the shore of Sharps in Richmond County, Virginia (year unknown). Photo from the Jamie Smith Collection, Northern Neck of Virginia Historical Society.

and the harvesting of shellfish have been present in the region since the 17th century and became large economic drivers after the Civil War, as marine resources proved to be more accessible and dependable than crops. The processing and catching of menhaden (a small fish processed into fish oil and fish meal) is a primary industry of the region (Northern Neck National Heritage Area Feasibility Study, Department of the Interior 2020). This summary of traditional economic drivers of the Northern Neck's economy justifies further research to understand and elevate the region's unique connection to food.

### *Revitalization, Precedent Plans, & Recent Attention*

Extensive research and effort has gone into revitalizing the Northern Neck in recent years. NNPDC assisted the Village of Callao, and the Towns of Montross, Colonial Beach, Warsaw, and White Stone with revitalization grants and planning documents. The 2022 Northern Neck Comprehensive Economic Development Strategy (CEDS) is referenced heavily throughout this section, as it is a key precedent document that sets up the future research proposed by this plan. NNPDC was designated as an Economic Development District by the EDA in 1999; this enables NNPDC to develop and lead regional priorities for economic projects and investments. NNPDC regularly updates the region's CEDS document, a requirement to apply for assistance from the EDA's public works and economic adjustment programs.

Exciting steps towards bringing national attention and necessary federal funding to the region occurred in 2021. In June 2021, federal legislation was introduced to designate the region as a National Heritage Area. The June 2020 National Heritage Area Feasibility Study found that the region meets all ten evaluation criteria, making it eligible for designation as a national heritage area. The designation will make the region eligible for federal money and funding (Alston 2021). In addition to this designation, the first phase of a fiber-optic broadband access project began in July 2021 that will deliver broadband access to approximately 7,200 households (NNPDC).

## **Regional Economic Goals and Objectives**

The 2022 CEDS document outlines the region's economic goals, many of which deal with supporting the needs of existing businesses. This plan aligns with these goals by identifying assets in the food industry and understanding what would help existing businesses.

*Table 1: Economic goals of the Northern Neck region*

<b>Theme</b>	<b>Goals</b>	<b>Relevant Objectives to Plan</b>
<b>Fishing, farming, agriculture</b>	Encourage entrepreneurship, service existing food companies and producers, provide local services to food producers, make it easier for working watermen	Identify or create a commercial kitchen, open new opportunities for food producers and increase sales, upgrade working waterfront facilities
<b>Workforce development</b>	Expand the workforce, help meet employer needs	Conduct marketing, develop incentives to attract new workers, assist with work readiness
<b>Business attraction, retention/ expansion/new startups</b>	Expand on tourism activities, build capacity of small businesses to handle operations, expand local business community through enhanced marketing, help grow more businesses	Develop products and raise outreach/ marketing, enhance viability of small local businesses, build tax base, create business incubator or mentoring program
<b>Tourism</b>	Increase tourist visits, attract more tourists	Market to attract tourists, make it easier for tourists to find destinations, reach new markets, develop themed driving tourism, spend money for niche marketing

*Source: 2022 Northern Neck CEDS*

## Demographics and the Economy

Economic development is important because the economy impacts the health and quality of life of people within a community (Nahavandi 2013). This plan focuses on economic development to benefit people. The following section paints a picture of who these people are and challenges they face. It also begins the process of identifying assets within the region. The 2022 Comprehensive Economic Development Strategy (CEDS) summarizes important takeaways on the region’s context. There are notably large disparities between different counties. For example, Westmoreland County is the only county to experience population growth since 2010 (all others saw population decline). There is a significant senior population: seniors make up 29.5% of the total population in the region. Compared to federal and state average annual wages, average annual wages are lower across in all four counties, and the poverty rate is higher in all counties compared to the state and federal levels. Signs of economic opportunity exist as educational attainment levels are improving across the region. These themes, and additional themes and evidence, are outlined in Table 2.

Table 2: Demographic and economic trends in the Northern Neck region

Theme	Evidence
<b>Small population decline, different in each county</b>	The population of the region in 2018 was 50,429. 2020 census data indicates a total population of 50,158 (a decline of 271). Westmoreland County is the only county to experience population growth since 2010: its growth almost completely offsets the decline in population of Richmond, Lancaster, and Northumberland.
<b>Largely White and Black residents</b>	Whites are the largest racial/ethnic group in the Northern Neck region, representing 68% of the population. Black/African American residents make up 27.8% of the region’s population. The Hispanic/Latino population is estimated to be around 4.8%.
<b>Significant senior population</b>	Lancaster County has 36.7% and Northumberland County has 37.5% senior population, compared to 15.9% in Virginia. Richmond County has 21.1% and Westmoreland County 26.5%. Across the region, seniors make up 29.5% of the total population.
<b>“No middle class”</b>	This statement was repeated throughout 2018 CEDS interviews. Per capita income in Lancaster County is \$48,301, and in Richmond County is \$26,941.
<b>High unemployment rate (but skewed by specific factors)</b>	Across the region, less than 50% of the population is employed. This is below state (64%) and national (63%) rates, but it is important to note that this can be attributed to the high population of seniors in Lancaster and Northumberland counties, and the incarcerated population in Richmond County at the Haynesville Correction Facility (where 1,141 people are incarcerated).
<b>Educational attainment levels improving</b>	The 2018 CEDS showed that 20% of the region’s population was without a high school diploma, however, this has decreased to 12% in the 2022 CEDS update. In the U.S., 10% of the population does not have a high school diploma.
<b>Median household income lower across the region</b>	Median household income is behind the state level in all four counties (it is highest in Northumberland at \$62,632 and lowest in Richmond at \$49,517). The state median income level is \$74,222 and in the U.S. is \$62,843.
<b>Low annual wages</b>	The state average annual wage is \$64,607 and the nation is \$64,141. Average annual wages in the region are significantly lower in every county. It is highest in Northumberland County at \$47,170 and lowest at \$35,776 in Westmoreland County.
<b>High poverty rates across all counties</b>	The poverty rate is higher in all counties of the Northern Neck when compared to the state rate (9.9%) and the U.S. rate (11.4%). The poverty rate is 17.8% in Richmond County and 15.9% in Westmoreland County. This reflects the split found in wages and income between the counties: the rates are lower in Lancaster county (12.7%) and Northumberland County (13.3%).

Source: 2022 and 2018 Northern Neck CEDS



## 4 - Methodology

Interviews were conducted with participants within the food industry in the region. Findings from interviews were directly analyzed to develop recommendations about what specific interventions within the supply chain can improve connectivity and economic outcomes for businesses and the entire region, primarily using existing assets. This section explains research questions and details the stakeholder outreach and analytical methods.

### Research Questions

Table 3 outlines the primary research questions. These follow the ABCD and regional connectivity approaches outlined in the Background section: first, identify assets, then identify gaps, then use those to identify potential connections and improvements. See Appendix (Page 29 for more detailed explanation on developing the research questions.

Table 3: Research questions

Research Question	Sub-questions
<b>What is currently happening within the region's food industry?</b>	What firms / businesses are present? Who are the firms interacting with? Who do they buy from? Who do they sell to? What are challenges they face connecting to other businesses? What are challenges to growth they face? What challenges to innovation do they face? Are there rules and regulations that help or hurt their business distribution? What demand is out there? What demand would help suppliers explore new networks?
<b>Can connectivity within the region's food industry improve?</b>	How is connectivity improved between businesses? Are firms communicating? What are barriers to growth and communication? What pieces of the supply chain are missing? What interventions can be made (physical, spatial, educational) to improve communication and interaction between businesses? What are successful interventions from other regions that address relevant problems?
<b>What can we add or change to support the food industry?</b>	What interventions can be made (physical, spatial, educational) to improve communication and interaction between businesses? What are successful interventions from other regions that address relevant problems?

### Interview Protocol

Research questions were translated into the following questions asked with each interview:

- 1) *How would you describe your business?*
- 2) *Who do you buy from? (Distributors, farms, etc.)*
- 3) *Who are your customers? Who do you sell to?*
- 4) *What is the current state of your employment structure/labor force? Are you having issues with staffing, employment?*
- 5) *Are there any businesses you have close relationships with? Where are they located?*
- 6) *Is there any business you would like to do more business with?*
- 7) *What are the obstacles you face to growing your business?*
- 8) *Who do you see as your competitors? Do you think there is room for more competition?*
- 9) *Is there anywhere you would like to sell your products but can't?*
- 10) *Are there any businesses you would like to start? What is preventing you from starting them?*
- 11) *Do you plan to grow your business or are you happy with your operations and size now?*
- 12) *What can be added to help you? What is missing?*

## Stakeholder Outreach Methodology

The client provided an initial list of contacts who work within different parts of the food industry: producers, distributors, and purchasers. Interviews were conducted between November 2021 and February 2022. A snowball sampling technique was used, where participants in the interviews were encouraged to help identify additional research participants. This led to the following list of interviews (see Table 4). The list represents a snapshot of the regional food industry and was finalized through an iterative process with the client and interviewees.

Table 4: Interview list

	Industry	Company / Group	Name
1	Alcohol - cidery	Ditchley CiderWorks	Cathy Calhoun
2	Alcohol - winery	Monroe Bay Vineyards	Kiki Apple
3	County economic development	Northumberland County	Jim Blue
4	Farm - Amish	Anonymous surveys (mail-in)	Anonymous
5	Farm - Direct to consumer	Dug In Farms	Carolyn Quinn
5	Farm - Direct to consumer	Monrovia Farm	Cathy Powell Cavender
6	Farm - direct to consumer, meat	Village Farms	Haydon Garland
7	Farm - Hispanic	Flores Farms	Omar Flores
8	Farm - Hydroponic	Sion House Farm	Justin McKenney
9	Farm - Mennonite	Mennonite farmer	Lamar Martin
10	Farm stand	Old Farm Truck Market	Jean Price
11	Farm stand	County Line Market	Jamie McKenney
12	Farm stand	Garner's Produce	Dana Boyle
13	Grain	Bay's Best Feed	Mason Brent
14	Grain	Grapewood Farms in Montross	Cathy and Fred Sachs
15	Hospitality / catering	Ma Margaret's BnB	Alva Jackson
16	Tourism / historic site	Rice's Hotel / Hughlett's Tavern	Corinne Anthony Becker
17	Restaurant - Farm to table	Denson's	Blaire Denson
18	Seafood Supplier/Oyster	Cowart Seafood / Bevan's Oyster Co.	AJ Erskine
19	Seafood Supplier/Oyster	White Stone Oyster Company	Tom Perry
20	Store - Convenience	Thomas Store	Richard Thomas
21	University-hosted assistance	Virginia Cooperative Extension	Stephanie Romelczyk
22	University-hosted assistance	Virginia Cooperative Extension	Trent Jones

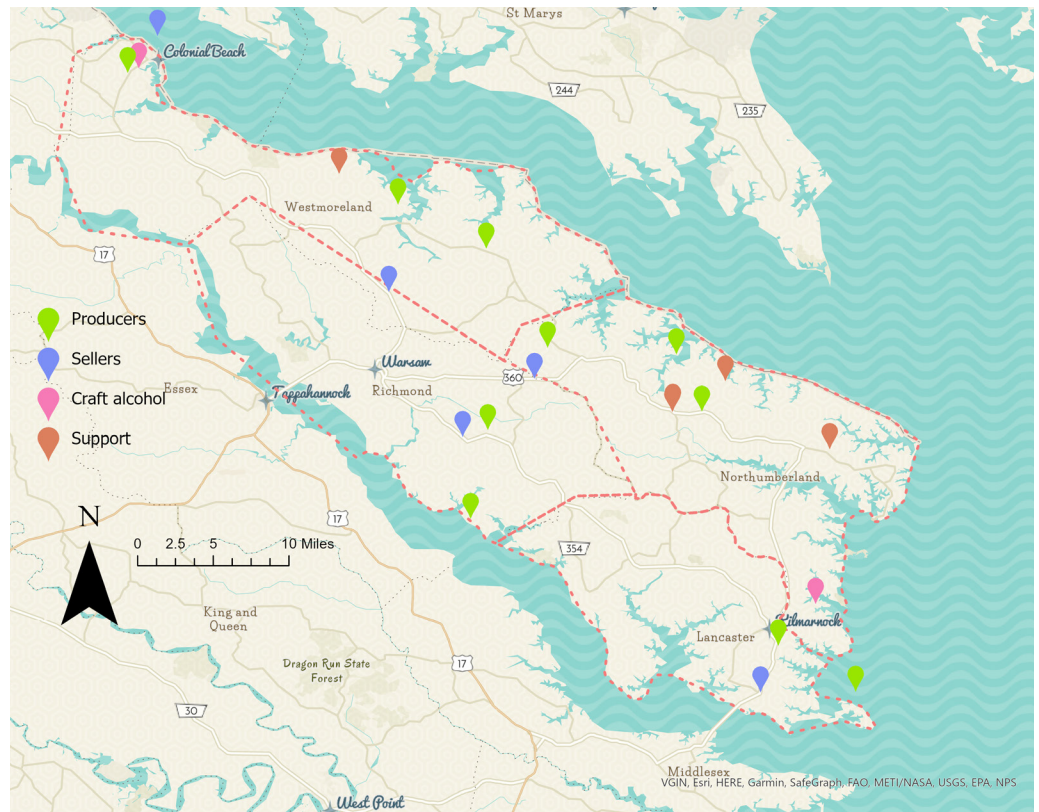
Interviews were used to contextualize data and gain in-depth understanding of the food industry. When scheduling interviews, the offer was first made to meet in person, before offering to talk over the phone if an in-person meeting did not work. For Amish and Mennonite farmer interviews, a community member who had established relationships with these farmers assisted with introductions and passing out paper copies (and stamped envelopes) of the

survey questions. It was emphasized to the farmers that they did not have to answer all of the questions. This is one example of how relationship building was emphasized throughout the process. The interview protocol was used as a general structure, but if interviews went in one specific direction, that was leaned into and emphasized.

## Analytical Methods

Notes were taken during each interview and then organized. Important takeaways were highlighted within the document. When five interviews had been completed, themes were noted that were

appearing in multiple interviews. As interviews progressed, if an interviewee that made a statement that supported (or contradicted) a theme, it was noted in the master theme document. The appendix contains a list of businesses and individuals that were not interviewed and could be contacted for further research. The themes were then categorized by the original research



Map 2: Location of interviews (Credit: Annie Weidhaas, VGIN, ESRI, SafeGraph, FAO, METI/NASA, USGS, EPA, NPS)

questions: which of the three questions (*What is currently happening? Can connectivity be improved? What can we add or change?*). Figure 4 on Page 13 visually demonstrates how the findings answer the original research questions.

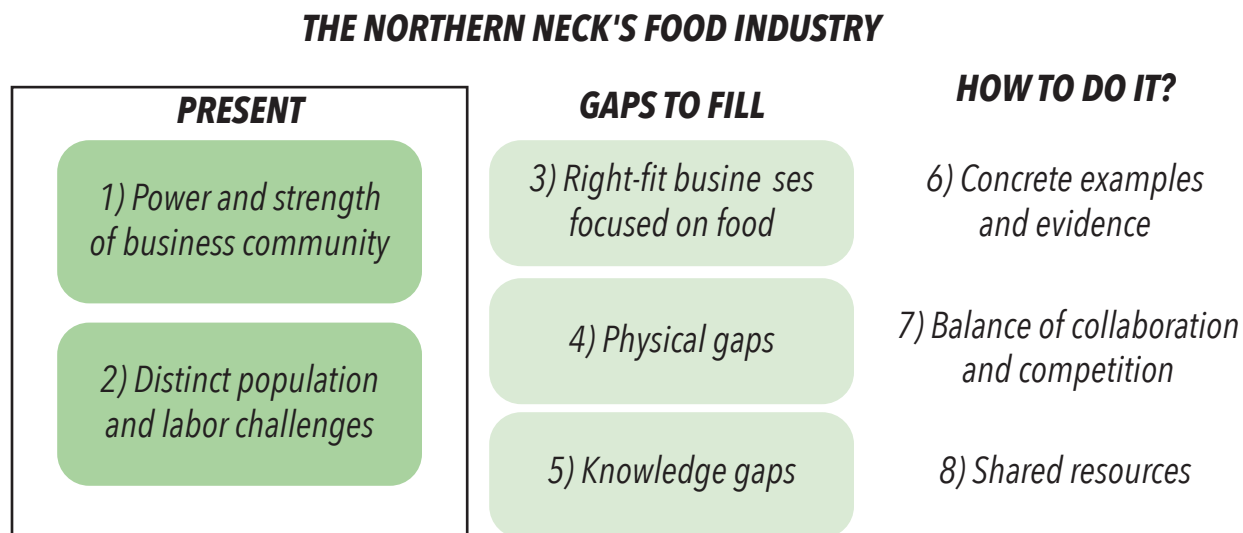
Map 2 indicates the location of interviews represented by different categories: producers, sellers, craft alcohol, and support. Mapping the locations of each interview provides a sense of the regional nature of interactions between businesses, as well as the scale of the region. For example, the drive from Kilmarnock in southeastern Lancaster County is over an hour from Colonial Beach in the northwest of the region.

Producers include farms, grain producers, and seafood suppliers. Sellers include farm stands, stores, and restaurants. Cidery and wineries are represented by craft alcohol, and the support category references multiple groups and businesses that deal with economic development, tourism, and assistance (like the Extension offices). Not every interview is mapped (for example, anonymous interviews are not included on the map) and not every location is precise, but the map offers a first step of visualizing the food industry and connections between businesses at a regional scale.

## 5 - Findings

Eight themes emerged after conducting stakeholder interviews. The themes are outlined below as research findings. These findings can be viewed through the Asset Based Community Development (ABCD) model explained in the *Background* section. The findings are outlined by existing assets and gaps and how to fill them (see Figure 4).

Figure 4: Outline of research finding



### 1 – Power and Strength of Business Community

The interviews reveal a picture of a strong and resourceful network of business owners that are making the food industry work for them and their customers. Many business owners reported a strong belief that their customers are loyal and their personal relationships with their customers are important. They emphasized that they were comfortable knowing their customers were pleased with the products and services they offered, and they were not concerned about competitors taking their customers.

Many business owners have ideas for new businesses they would either like to pursue themselves or would like to see others pursue in the region. The spirit of entrepreneurship was present throughout interviews, however, the necessary tools to start businesses were not always present. This does not stop individuals from pursuing both creative and necessary tasks to support the food industry and their businesses: many individuals are doing unpaid labor to market and support the food industry across the region (for example, hosting community events, creating shared marketing and informational materials on local produce, creating educational materials for how to meet governmental regulations).

Another piece of this theme is the understanding that working within food, agriculture, or aquaculture is not an easy task, but one that business owners choose to pursue because they are passionate about it. There are substantial challenges, best reflected in the phrase “if it was easy everyone would be doing it.” Not all business owners are working within the food industry for the money, but instead are passionate about the meaning and roots of their business. This reflects a deep-seated power and strength that the community can build on.



## 2 – Distinct population and labor challenges

The Northern Neck is a unique region and looking at standard demographics is not enough to understand what is happening within its regional economy. Across the board, businesses and interviewees cited labor as a challenge to their businesses. Attracting labor and having younger people stay in the region came up time and time again in interviews. Although there is a large senior population in the region, many business owners interviewed are “retired” from a career but still work in their food/agriculture/aquaculture related business. This is a potential asset that can be leveraged. Many “retired” individuals are involved in new businesses or businesses they consider their passion projects. This population of older individuals passionate about food and water access and farming is a potential population of entrepreneurs or part-time labor.

Another opportunity is the fact that the Northern Neck is a destination for vacationers and retirees. Many businesses in the food industry benefit from the people that travel to the Northern Neck. Multiple business owners believed they had an uptick in sales due to more people either vacationing or spending full time working remotely in the region, compared to before the pandemic.

This leads to the tension between the perceived “come-here” and “been-here” population. Come-here’s are typically the perceived people who move to the Northern Neck to retire or vacation and been-here’s are the “local” residents that have been in the area for a long time, some for generations. This plan doesn’t comment on the accuracy of this notion but does offer the perceived tension as a significant finding. Some interviewees noted that “come-heres” who retire in the area often do not support agriculture or agricultural-related businesses, potentially due to a lack of understanding or awareness of the history of the region. This is a gap or need for the region: better education and understanding of the value of the region’s agricultural resources. Other interviewees noted that the “come-here” population has been integral for achieving improvements or growth in some areas, and some interviewees noted they are completely dependent on out-of-town visitors to sustain their sales. This is a major identified asset that can be leveraged to support a potential food industry cluster.

A final noteworthy population trend is the growth of Amish and Mennonite communities in the region. As both the Amish and Mennonite communities focus on agriculture and prepared foods, their presence is noted and welcomed by interviewees involved in agriculture and food.



*Rice's Hotel / Hughlett's Tavern is a popular gathering place for community members in Northumberland County. Visitors can eat at the cafe, shop local handmade products, or become a part of multiple craft guilds with studio space in the building.*

Figure 5: Rice's Hotel / Hughlett's Tavern (Credit: Annie Weidhaas)

### **3 – Need for “right fit” businesses focused on food**

Multiple interviewees reflected on the idea that it would be challenging for the region to get a large company or business to locate to the region and impact the economy, but it is feasible to focus on supporting businesses that are the “right fit” for the region. Interviews revealed that the types of businesses that would be appropriate for the scale, assets, and resources already available within the region are those related to food. This is supported by the demographic and historic analysis in the *Context* section: The Northern Neck has a long history of benefiting from its geographic location to produce food. Agriculture and aquaculture have provided for the regional economy for centuries. The region’s unique location surrounded by water and its increased attention as a site of broadband expansion and as a National Heritage Area, as well as its improving markers in some demographic areas since the previous CEDS update, marks the region as an area that deserves both care and attention when evaluating the contribution of rural economies and the opportunity for economic development through the food system. The idea of encouraging growers to produce and sell on smaller scale farms ranging from 2-5 acres or focusing on specialty crops instead of following the traditional path of growing corn or grain, came up.

This relates directly to education and awareness around agriculture and support of agricultural businesses. Some producers that were interviewed have shifted into growing different specialty crops, with significant economic gain. Some were able to achieve this through experimentation, but others had the support of foundations or completed research to make the decision to shift crops. This begs the question of how to help producers figure out what is agriculturally viable for them but also identify what the most economically beneficial crop or product to pursue might be. Education was also cited as a potential tool to support agriculture and food businesses: whether for children learning about the importance of food systems or for those moving to the area who may not know the history and importance of agriculture to the region. Interviewees reflected the desire to support businesses that capitalize on land and water.

### **4 – Missed Opportunities and Gaps: Physical**

Missed opportunities and gaps were identified throughout all interviews. They are broken down into two categories: physical and knowledge based. The physical gaps and opportunities are tangible needs of businesses owners and those working within the food industry. Multiple businesses that sell local produce cannot source enough produce locally to sustain their demand. Some source produce from outside the region. This is also the case with value-added products (like coffee, pasta, chips, etc.). Many businesses would prefer to sell local products, but to meet the demand of their customers have to bring in value-added products and produce grown and produced from outside the Northern Neck. Farmers must source farm supplies from outside of the region. For restaurants and those preparing food, it is hard to source produce or meat locally at a price that is feasible for the business. There is no local USDA processing facility that business owners use – many travel outside of the region to process their meat. Another gap related to value-added products is that individuals would like to sell the products they make, but they cannot unless they are prepared in a certified kitchen. This limits the ability of individuals to make money, and for local businesses to sell local products.

## 5 – Missed Opportunities and Gaps: Knowledge

Missed opportunities and gaps were identified throughout all interviews. Knowledge gaps and opportunities are extrapolated from the needs of business owners and those working within the food industry to identify what types of projects would help garner awareness and support for the work being done in the industry.

One substantial gap is connectivity between businesses. Although many interviewees cited working together, other expressed interest in more collaboration or opportunities to work together. Some interviewees suggested they would love to work with more local businesses (particularly when it came to selling more local products) but faced challenges either knowing about the businesses or accessing them for deliveries or orders. This is a major opportunity for intervention and support for connectivity across the region. Another gap is the lack of education and understanding about agriculture and its importance to the region (mentioned previously in Findings 2 and 3), as well as the value of buying local. Some interviewees suggested that if local buyers knew the benefits (increased quality products, for example) they may be more inclined to buy locally. Another substantial gap is labor. Research on how to attract and retain labor could be relevant to this gap.



*This building located off of Route 3 near Farnham is currently being converted into a produce auction that will be operated by a group of Mennonite farmers from the community. Similar to the auction in Loveville, Maryland, a produce auction allows buyers to buy large quantities of produce and helps farmers aggregate their products and spend less time searching for customers*

*Figure 6: Location of future produce auction (Credit: Annie Weidhaas)*

## 6 – Need for concrete examples and evidence

The final three findings touch on how existing assets and connectivity can be improved and how exactly to address the gaps and needs. This first of these themes is the need for concrete examples and evidence. Multiple interviewees cited the idea that those involved in agriculture and aquaculture are traditionalists, can be resistant to change, and need to see that an idea or model has been successful first before they buy into the idea. Other interviewees saw a similar pattern across the community: that people needed to see an event or plan before putting in time and resources to support it. This reflects a need to show that the market is there for any new idea: you can't just propose an intervention and assume it will be accepted or successful.



## 7 – Balance of collaboration and competition

Another important finding to keep in mind when addressing interventions is the need for a balance between collaboration and competition. Most interviewees agreed that a balance is present: although they are happy to help competitors in times of need, they aren't necessarily collaborating. This is a healthy indicator of economic success: a certain level of competition breeds innovation, creativity, and growth, and multiple interviewees stated that increased competition has encouraged them to adjust or streamline their business model to greater success.

In terms of increasing food related businesses, multiple interviewees stated there is a market for certain products that is not being met currently, or there is room for even more businesses related to agriculture, food production, and food sales in the region. Interviewees also shared various examples of how they work together on projects like ordering supplies or moving products. These examples demonstrate the intertwined network of interactions between food-related businesses in the region.

## 8 – Shared resources

The final finding was that there is an opportunity for shared resources, particularly a shared marketing initiative. Some challenges that business owners cited were challenges that could be addressed in a manner that would benefit other businesses: opportunities for shared resources and supplies exist. Many businesses do not have the time or bandwidth to do any sort of marketing of their business. Some interviewees expressed interest in a shared marketing campaign across the region.



Figure 7: Buy Fresh Buy Local flyer (C edit: PECVA.org)

Above, Figure 7: The non-profit Piedmont Environmental Council operates at a regional scale across nine counties in Virginia. The organization publishes "Buy Fresh Buy Local" food guides and marketing materials to help consumers find local products and create a network of producers, business owners, and community organizations.

Right, Figure 8: The Virginia Department of Agricultural and Consumer Services (VDACS) operates the Virginia's Finest Trademark program to help Virginia processors and producers differentiate their products. The trademark can be found on meats, cheeses, seafood, peanuts, sauces, and more.

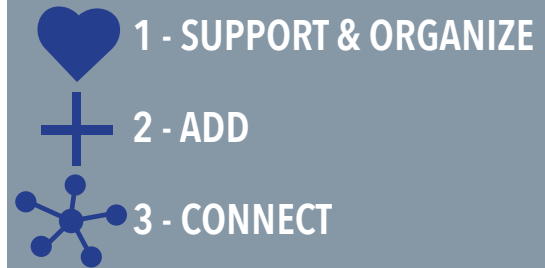


Figure 8: Virginia's Finest brand (Credit: VDACS.Virginia.Gov)



## 6 - Recommendations

The following three recommendations derive directly from interview findings. Each recommendation is broken down into objectives and accompanying action items. Recommendations are summarized in implementation tables beginning on page 23.



### **RECOMMENDATION 1 - SUPPORT & ORGANIZE EXISTING ASSETS**

*The Northern Neck region possesses a variety of assets within its food industry, but they aren't fully recognized or organized in a way that will allow them to grow and thrive. The following objectives and actions will both support the continued existence of assets and work to organize assets in a way that allows for further recommendations to be implemented successfully.*

#### **Objective 1.1: Support the work already being done by businesses and workers in the region.**

##### **Action 1.1.1: Identify unpaid and unrecognized work that is being done by community members**

Many business owners are already working, unpaid, to organize and connect businesses. Some compile lists of locally available products for restaurants, or research laws on how to sell food products and share with farmers. Partnering with community members who have established patterns/networks may ease startup time and cost. This is based on direct research findings that community members are doing this work and have networks in place.

##### **Action 1.1.2: Host business appreciation events**

Letting local farmers, watermen, and business owners know that their business is important to the region and valued as an asset to the community is essential. This would also help to get everyone in the same room, and hopefully foster communication and information sharing.

##### **Action 1.1.3: Support Virginia Cooperative Extension**

VCE is an important asset to the region and has an impressive network of farmers and producers they work with on a regular basis. Their work in relationship-building should be supported.

##### **Action 1.1.4: Partner with VCE to support and monitor growth of produce auction**

The new produce auction is an opportunity to both support local farmers and agricultural businesses, while monitoring how a shift in distribution and aggregation in the region opens up new markets. The produce auction in Loveville, Maryland is the best example for reference and study.

#### **Objective 1.2: Organize existing knowledge to the benefit of future interventions.**

##### **Action 1.2.1: Partner with county leadership to create a comprehensive list of businesses and update it annually**

There is not a comprehensive list of food related businesses that is updated on a regular basis with contact information and products offered. Creating a list of businesses and their contact information would enable local businesses to know when they can consider sourcing locally and hopefully source more local products.

##### **Action 1.2.2: Develop and support labor force through training and education**

Finding workers was a challenge cited by many interviewees. Partnerships with community colleges and VCE will help educate and train potential workers. NNPDC can serve as a communication facilitator between businesses and partners (like Rappahannock Community College) to help identify what types of skills employees need to have or what type of training could be offered. This labor force support could benefit both younger people in the region, or retirees entering the food industry.

### **Action 1.2.3: Consider marketing the region as a place where you can come to open your dream business or passion project**

Many "retired" individuals in the region are now operating a food-related business they are passionate about. This is an asset that should be capitalized on. The Northern Neck Tourism Commission operates an updated website with ideas for how to spend time in the area. On the "Moving to the Northern Neck?" page that lists ATM and Bank locations, there may be an opportunity to encourage people considering re-locating or spending part of their time in the region to open a business or work for an existing business.

### **Action 1.2.4: Complete geographic study / survey of how people travel in and where they stop in the region**

Many businesses depend on out-of-town visitors. Understanding movement patterns of visitors may point to geographic opportunities to access consumers. For example, if a majority of weekend travelers are stopping at a certain destination to buy groceries for the weekend, there may be an opportunity to target and access those consumers and encourage them to purchase local products instead. A comprehensive undertaking to understand travel and movement patterns throughout the region may also assist with understanding distribution challenges that businesses experience and the geographic constraints due to transportation infrastructure and design the region poses for businesses.

### **Action 1.2.5: Form a food and agriculture development working group / center**

Working groups are typically formed to research or study an issue and offer recommendations. One example is the Great Falls Food and Ag Development Center (FADC) dedicated to cultivating and enhancing economic activity rooted in agriculture and its related industries within North-Central Montana. The "2011 Virginia Farm to Table: Healthy Farms and Healthy Food for the A Strategic Plan for Strengthening Virginia's Food System and Economic Future" report calls for creating a regional working group to monitor the state's food system. Creating a specific group responsible for growing the food/agriculture industries would assist with short-term actions like 1.1.1, 1.1.2, 1.1.4, 1.2.1.

## **+ RECOMMENDATION 2 - WORK TO FILL GAPS IN INDUSTRY**

*Research findings identified both physical and knowledge gaps that exist when it comes to understanding and growing the food industry. The following objectives and actions support the addition of new resources, tools, and methods to further economic development in the region.*

### **Objective 2.1: Address physical gaps that exist within regional economy.**

#### **Action 2.1.1: Identify sites and attraction strategies for a USDA processing facility**

Findings indicated that many meat producers must travel long distances out of state to process their meat at a quality facility. Processing facilities are currently incredibly booked, with month-long wait times. A nearby facility would reduce travel times and stress on meat producers and may incentivize future businesses. There is a unique opportunity to partner with an organization for supply-chain related projects that require funding, as the USDA recently introduced the Build Back Better program to use American Rescue Plan Act funding for supply-chain interventions in light of Covid-19 pandemic supply chain disruptions.

#### **Action 2.1.2: Support efforts to achieve Longwood University Hull Springs Commercial Kitchen**

A recent feasibility study was completed (Longwood University Hull Springs Commercial Kitchen Study) to understand the potential opportunity a commercial kitchen would present at Longwood University's Hull Springs campus. This plan found similar findings: that there are existing kitchens in the region, but none present the opportunity to create value-added products, and there is a desire among business owners (and a potential opportunity for new businesses) if a commercial kitchen were developed.



#### **SHARED USE FOOD FACILITY:**

A FACILITY DEDICATED TO RENTING COMMERCIAL KITCHEN SPACE FOR SHARED USE TO A VARIETY OF FOOD ENTREPRENEURS, LOCAL BUSINESSES, AND CATERING SERVICES. WITHIN THIS UMBRELLA TERM ARE INCLUDED COMMISSARIES, COMMERCIAL KITCHENS, AND KITCHEN INCUBATORS, WHICH OFFER BUSINESS INCUBATOR SERVICES TO PROVIDE STARTUP FOOD BUSINESSES WITH PROFESSIONAL DEVELOPMENT AND TRAINING.

—The Food Corridor

Figure 9: Shared use food facility definition (Source: Longwood University Hull Springs Commercial Kitchen Study)

**Action 2.1.3: Survey existing businesses for basic supply needs and encourage partnerships between businesses to share supplies**

Some businesses cited challenges in stocking, maintaining, and machinery; for example, labels or printing. A survey of businesses could be completed to identify what types of supplies and equipment various businesses use, and then businesses could be connected that have an opportunity to share. If enough businesses need certain supplies, some sort of business support center with labels, printers, supplies, etc. could be created. This could also be applied to machinery - if businesses know other businesses that are using similar tools, they can contact other businesses for technical assistance before paying for outside assistance.

**Objective 2.2: Address knowledge gaps that exist within regional economy.**

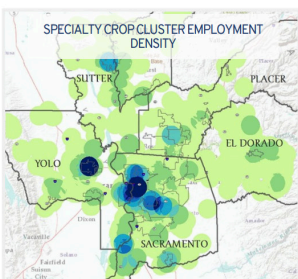
**Action 2.2.1: Create educational materials on the historic importance of land and water to the region's economy and family-owned nature of land and waterways**

Findings indicated a lack of understanding about the importance of land and water to the economy of the region. An opportunity exists to promote awareness and understanding across different age groups and populations about the history of waterways and agriculture to the economy, and address common misconceptions. An opportunity exists to document the work and history of minority farmers in the Northern Neck to bring awareness to the diversity of the Northern Neck and the historic marginalization of Black, Hispanic, and other minority populations. A program similar to the Virginia Century Farm program could be developed for waterways.

**Action 2.2.2: Commission report that studies the economic value of the region's rural lands and how they contribute to the local economy**

Increasing attention is being paid toward rural planning and rural-specific economic development policies. A comprehensive plan, study, or report that quantifies the economic value of the rural lands (both productive in agriculture or conserved and undeveloped) would provide justification for many of these actions. The Sacramento Area Council of Government's (SACOG) Rural Urban Connection Strategy (RUCS) program provides helpful examples of what a comprehensive study would look like. Figure 10 shows RUCS findings on the food and agriculture value to urban areas, as Figure 11 shows the findings of its evaluation of the agricultural industry.

**The food & ag. cluster creates industry jobs beyond the farm, with more jobs located in urban areas than in rural...**



While people often think of agriculture as a predominantly rural industry, SACOG found that most of the region's specialty crop jobs are actually located in urban areas. The cluster as a whole provides 32 thousand jobs and 6.8 billion dollars to the regional economy.

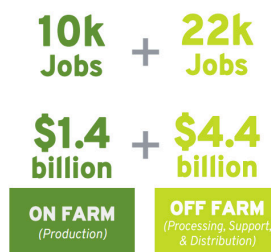


Figure 10: SACOG RUCS findings on urban rural economic connections (Source: SACOG)

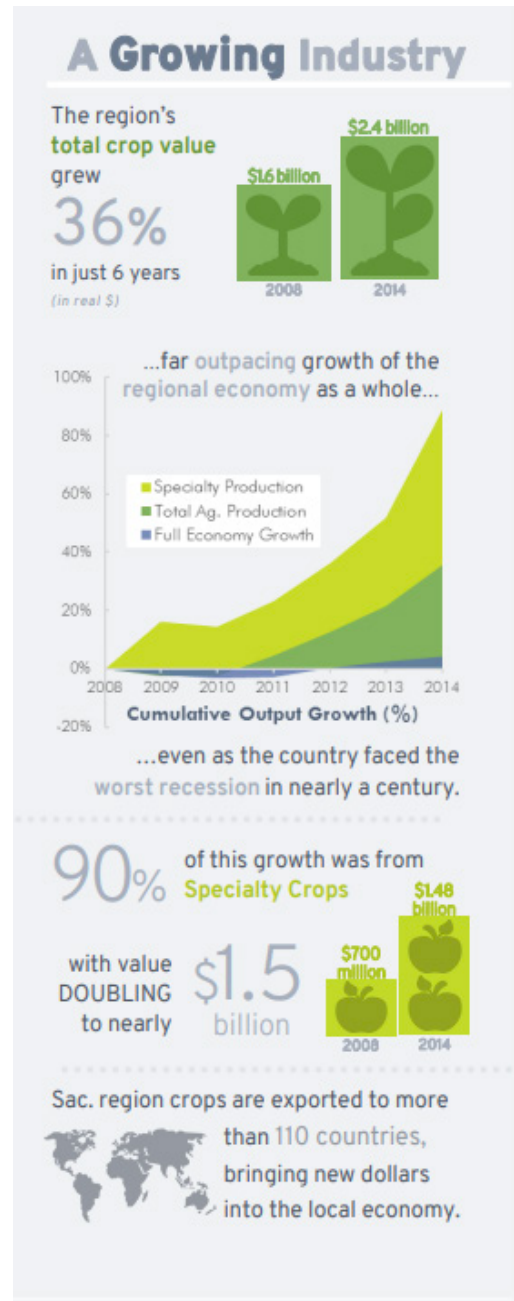


Figure 11: Sacramento agricultural industry snapshot (Source: SACOG)

### Action 2.2.3 Research potential to lean into large production area of agriculture and seafood

The Northern Neck is a large region with significant agricultural and waterfront access. Instead of focusing on agritourism and small farm growth, the region could consider a project with the perspective of transforming the region into a large scale producer and distributor, where enough is produced to warrant significant supply chain interventions where food and seafood can be distributed directly from the region (currently, cold-chain distribution is a challenge, with products transported across long patterns to reach the middle of the country).

### Action 2.2.4: Research economic impact of crops and the impact of different crop scenarios

Research is warranted on how certain crops contribute to the economy and if there is opportunity to shift to different scenarios to impact the profit of farmers. The SACOG RUCS program again provides a helpful example of what this project would look like and what types of results would be produced. Figure 12 provides an example of a projected crop scenario from alfalfa to walnuts and the resulting economic impacts. The Iowa State Extension hosts free webinars on risk management for specialty crop producers that are available online.

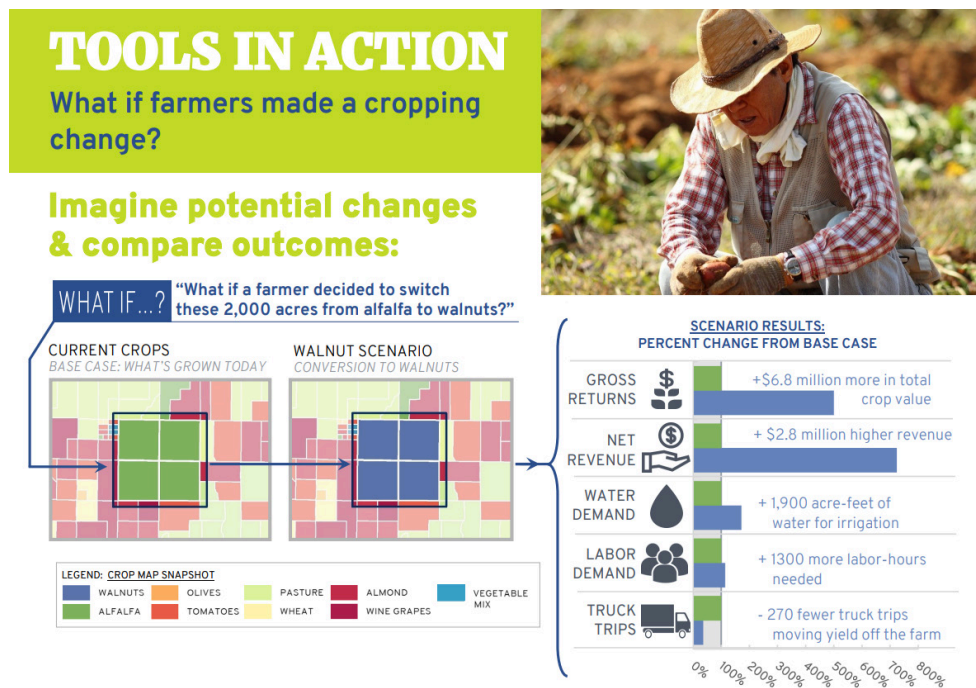


Figure 12: SACOG RUCS crop scenario project (Source: SACOG)



## RECOMMENDATION 3 - CONNECT INDUSTRY AT THE REGIONAL LEVEL

Improving regional interconnectivity is a way to improve local economic development outcomes. A creative network of businesses exists in the region that are already working together to some extent, but further assistance can be provided to improve and increase regional connectivity at a variety of scales.

### Objective 3.1: Encourage small-scale interactions between businesses.

#### Action 3.1.1: Partner with local leadership to create inventory and map of food related businesses and contact information with information on benefits of sourcing locally

Similar to Action 1.2.3, knowledge of local products will enable businesses to source locally when possible.

#### Action 3.1.2: Host food related business events or award ceremonies that showcase local products and get everyone in the same room

Hosting an event that lets businesses experience local products and celebrate local businesses would help businesses source locally, and help businesses form connections and network. Local chambers of commerce, like the Northern Virginia Chamber of Commerce, host annual award ceremonies recognizing businesses.



### Objective 3.2: Encourage shared initiatives between businesses.

#### Action 3.2.1: Develop a shared marketing initiative for businesses, potentially using existing tourism or 'Buy Fresh Buy Local' resources

Many businesses are doing little to no advertising or marketing. There is an opportunity to set up communication channels between groups and develop a regular social media posting schedule. There is also an opportunity to create a 'Buy Fresh Buy Local' chapter for the Northern Neck that publishes promotional information on local products.

#### Action 3.2.2: Research interest in potential cold-storage pickup site for local businesses (ex: existing fridge at a local church, store, organization used for local delivery)

Due to geographic constraints, it is hard for businesses to source locally. A shared, central location where local products can be dropped off and stored until a business owner can pick them up at a convenient time for them would make it easier and more feasible to source local products.

**FARMS**

**Celtic Iris Gardens and Nursery**  
1310 Lester Drive (Corner of Galloway)  
Charlottesville  
Nannette Morrison  
(434) 293-7547  
nannette1861@outlook.com  
celticirisdensandnursery.com  
Sells at onsite farmers market  
*Lavender, medicinal/culinary herbs, seeds, Lettuce varieties, Tomatoes, Baked goods, Flowers, Iris plants, tobacco and botanicals*

**ALBEMARLE/CHARLOTTESVILLE**

**Atelier Farm**  
3194 Preddy Creek Rd  
Charlottesville  
Austin Mandryk  
(434) 326-0902  
Austin@atelier.farm  
www.atelier.farm  
Small scale, Year-Round, Free-Choice  
CSA & Farm Stand (sign up online)  
*Vegetable, Fruit, Herb, and Flower*

**Copps Hill Farm**  
2205 James River Road  
Esmont  
Kate Crosby  
(434) 286-3106  
katecrosby@earthlink.net  
Sells on the farm by appointment,  
by email or phone.  
*Grass-fed beef by whole, half, and quarter cuts*

Figure 13: Snapshot of 2021 Buy Fresh Buy Local Charlottesville area flyer (Source: Piedmont Environmental Council)

### Objective 3.3: Support large-scale efforts to improve regional connectivity.

#### Action 3.3.1: Develop cluster strategy and create enabling policy for regional cluster development

Rural areas can use urban economic vitality to their advantage and strengthen urban-rural linkages. Research indicates that county clusters that are connected to regional clusters grow at a higher rate, and clusters that benefit the most from connectivity are traditionally rural-based ones like agriculture (McFarland 2019). Regional governance can have a role in enabling the food industry's cluster development. The first step (which this plan attempts to undertake) is to understand what is happening within the cluster. From there, plans and strategies focused on building connections can occur.

#### Action 3.3.2: Use differentiation and relationship-building to improve economic outcomes

To strengthen relationships between urban and rural areas and thus strengthen the food economic cluster in the Northern Neck, differentiation in products is a key way to increase the value of the product to the consumer (as profit depends on creating value above costs) (Martin 2011). This can be done through certification, where consumers are assured of quality of the product. The potential commercial kitchen site at Longwood's Hull Springs campus presents an opportunity to brand products that are prepared in the kitchen as directly from the region.



Figure 14: Wade's Mill grits with Virginia's Finest label providing product differentiation (Source: VAMade.com)

## 7 - Implementation

An implementation table is an important tool for summarizing recommendations and accompanying objectives and actions, and identifying specific budgetary concerns and funding options for ensuring the actions are achievable. The implementation table is broken down by each recommendation, and indicates the "scale" of the timeline: whether the action can be achieved in the short, mid, or long term, or if it is an ongoing action. The Northern Neck Planning District Commission is the implementing entity for these recommendations. The "Potential Partners" column indicates parties that NNPDC could consider partnering with to accomplish certain objectives and actions.

### RECOMMENDATION 1 - SUPPORT & ORGANIZE EXISTING ASSETS

*Recommendation 1 deals with both supporting identified assets in the region and organizing them for the benefit of future intervention. These objectives deal with surveying businesses for additional information and sharing information on local businesses to encourage collaboration.*

Action	Timeline	Potential Partners	Budget/Funding
<b>Objective 1.1: Support the work already being done by businesses and workers in the region.</b>			
<b>Action 1.1.1:</b> Identify unpaid and unrecognized work that is being done by community members	Short Term ●	Local economic development leadership (Board of Supervisors), business owners	<a href="#">USDA Local Food Promotion Program</a> - helps businesses that act as intermediaries between producers and consumers
<b>Action 1.1.2:</b> Develop and support labor force through training and education	Mid Term ● ●	Virginia Cooperative Extension, local businesses, Rappahannock Community College, Longwood University, Northern Neck Technical Center	
<b>Action 1.1.3:</b> Host business appreciation events	Short Term ●	Local government and economic development leadership (Board of Supervisors), local chambers	See Action 1.2.4 - could be part of food/ag work group responsibilities
<b>Action 1.1.4:</b> Support Virginia Cooperative Extension	Ongoing ██████		
<b>Action 1.1.5:</b> Partner with VCE to support and monitor growth of produce auction	Short Term Mid Term ● ● ●	Virginia Cooperative Extension, Sustainable Agriculture Research and Funding (SARE)	<a href="#">SARE Research Grants - due in November, maximum \$400,000, limit 3 years</a>
<b>Objective 1.2: Organize existing knowledge to the benefit of future interventions.</b>			
<b>Action 1.2.1:</b> Partner with county leadership to create a comprehensive list of businesses and update it annually	Short Term Mid Term ● ● ●	Local government and economic development leadership (Board of Supervisors), local chambers, USDA Agricultural Marketing Service	See Action 1.2.4 - could be part of food/ag work group responsibilities
<b>Action 1.2.2:</b> Consider marketing region as a place where you can come to open your dream business or passion project	Ongoing ██████	University of Mary Washington Small Business Development Center, Virginia Tourism Corporation	Marketing plan would be necessary - various VTC grants and funding sources are available

<b>Action 1.2.3:</b> Complete geographic study / survey of how people travel in and where they stop in the region	Long term ● ● ●	Local government leadership, local chambers, Longwood University	<a href="#">Rural Business Development Grants (USDA) - Enterprise Grant can be used for feasibility studies and rural transportation improvements</a>
<b>Action 1.2.4:</b> Form a food and agriculture development working group / center	Short term ●	Local government leadership, local chambers, Longwood University, VCE, business owners	<a href="#">Governor's Agriculture and Forestry Industries Development Fund (AFID) Planning Grant program</a> can be used to invest in local ag. development boards

## RECOMMENDATION 2 - WORK TO FILL GAPS IN INDUSTRY

*Recommendation 2 deals with addressing both physical and knowledge gaps that would help the food industry and regional economic development. These recommendations deal extensively with potential research undertakings that would support increased knowledge and awareness of how agriculture and food contribute to the local economy.*

Action	Timeline	Potential Partners	Budget/Funding
<b>Objective 2.1: Address physical gaps that exist within regional economy.</b>			
<b>Action 2.1.1:</b> Identify sites and attraction strategies for a USDA processing facility	Mid Term ● ●	U.S. Department of Agriculture, local CDFIs (like Capital Impact Partners in Arlington or NCRC in D.C) that have ability to act as lender for Guarranteed Loan program  VDACS	USDA Build Back Better - Food Supply Chain Guaranteed Loan Program - goal to strengthen supply chains, guarantees loans up to \$40 million for qualified lenders to finance food systems projects for start-up or expansion of mid-supply chain activities  <a href="#">Virginia AFID Fund</a>
<b>Action 2.1.2:</b> Support efforts to achieve Longwood University Hull Springs Commercial Kitchen	Long Term ● ● ●	Longwood University, VDACS	
<b>Action 2.1.3:</b> Survey existing businesses for basic supply needs and encourage partnerships between businesses to share supplies	Short Term ●		Rural Business Development Grants (USDA) - Entepre Grant can be used for rural business incubators
<b>Objective 2.2: Address knowledge gaps that exist within regional economy.</b>			
<b>Action 2.2.1:</b> Create educational materials on the importance of land and water to the region's economy, minority farmers, and family-owned nature of land and waterways	Long Term ● ● ●	Virginia Department of Agriculture and Consumer Services, Sustainable Agriculture Research and Funding (SARE)	<a href="#">SARE Education Grants - due in November, maximum \$50,000, limit 2 years</a>
<b>Action 2.2.2:</b> Commission report that studies the economic value of the region's rural lands and how they contribute to the local economy	Long Term ● ● ●	Sustainable Agriculture Research and Funding (SARE)	<a href="#">SARE Research Grants - due in November, maximum \$400,000, limit 3 years</a>

<b>Action 2.2.3</b> Research potential to lean into large production area of agriculture and seafood	Long Term ● ● ●	GO Virginia Regional Council	Feasibility study through GO Virginia grant program
<b>Action 2.2.4:</b> Research economic impact of crops and what impact of different crop scenarios	Long Term ● ● ●	Sustainable Agriculture Research and Funding, VCE	<a href="#">SARE Research Grants - due in November, maximum \$400,000, limit 3 years</a>

### RECOMMENDATION 3 - CONNECT INDUSTRY AT THE REGIONAL LEVEL

*Recommendation 3 focuses on both small and large-scale interventions to get businesses talking and working together. It also deals with potential shared marketing initiatives.*

Action	Timeline	Potential Partners	Budget/Funding
<b>Objective 3.1: Encourage small-scale interactions between businesses.</b>			
<b>Action 3.1.1:</b> Partner with local leadership to create map and inventory of food related businesses	Short Term ●	See Action 1.2.4 - could be part of food/ag work group responsibilities	See Action 1.2.4 - could be part of food/ag work group responsibilities
<b>Action 3.1.2:</b> Host food related business events that showcase local products and get everyone in the same room	Mid Term ● ●	Virginia Tech, Longwood University (Cooperative Development Grant only eligible to non-profits and institutions of higher learning)	<a href="#">USDA Rural Cooperative Development Grant program improves the economic condition of rural areas by helping individuals and businesses start, expand or improve rural cooperatives and other mutually-owned businesses through Cooperative Development Centers</a>
<b>Objective 3.2: Encourage shared initiatives between businesses.</b>			
<b>Action 3.2.1:</b> Develop a shared marketing initiative for businesses, potentially using existing tourism or 'Buy Fresh Buy Local' resources	Long Term ● ● ●	Virginia Cooperative Extension, Piedmont Environmental Council	<a href="#">Governor's Agriculture and Forestry Industries Development Fund (AFID) Planning Grant program</a> can be used to develop websites to connect consumers to producers
<b>Action 3.2.2:</b> Research interest and sites for potential cold-storage pickup site for local businesses (ex: existing fridge at a local church, store, or community organization used for local delivery)	Mid Term ● ●		<a href="#">USDA Local Food Promotion Program</a> - can be used for feasibility studies or market research  <a href="#">Governor's Agriculture and Forestry Industries Development Fund (AFID) Planning Grant program</a> can be used to fund cold storage facilities
<b>Objective 3.3: Support large-scale efforts to improve regional connectivity.</b>			
<b>Action 3.3.1:</b> Develop cluster strategy and create enabling policy for regional cluster development	Long Term ● ● ●	GO Virginia Regional Council	
<b>Action 3.3.2:</b> Use differentiation and relationship-building to improve economic outcomes	Long Term ● ● ●	VDACS, University of Mary Washington Small Business Development Center	<a href="#">Governor's Agriculture and Forestry Industries Development Fund (AFID) Planning Grant program</a> can be used to fund initiatives that support agriculture



## 8 - Conclusion

The Northern Neck is a region with many assets, and its food industry is primed for growth and success. There are extensive agriculture and aquaculture resources – it is surrounded by water and is home to significant agricultural lands and farms of varying sizes and scales. Demographic opportunities are present: educational attainment is increasing, and it is increasingly the site of retirees and travelers eager for a break from urban life, especially in light of the Covid-19 pandemic. Many retirees and “come-heres” to the region continue to work in some capacity, supporting the work of “been-heres” and longstanding producers and businesses that contributed to the local food system and regional economy for generations. The region possesses a strong business community that cares deeply about both sustainable and local food systems and creative development of the food industry.

**This plan illuminates that in some ways, the Northern Neck’s traditionally perceived challenges are actually its strengths in leveraging its food industry for economic development.**

Traditional economic and demographic analysis shows a region that is geographically spread out – this, however, is why the region is primed to take advantage of its reputation as an agriculture and aquaculture producer. Simply citing the population of retirees as not contributing to the labor market is incorrect – many “retired” people are pursuing businesses in food. The region may not attract a large company to promote economic development due to its population trends and market analysis, but this primes the food industry as the prime industry for investment and growth – “right-fit” businesses focused on food will thrive in the region.

The recommendations in this plan focus on economic development tools that are not necessarily tangible. They focus on industry organization, knowledge, and communication. The value of communication and connectivity within a regional economic ecosystem cannot be overstated: current research supports the idea that strong linkages between local and regional firms and industries often indicate strong economic markers. **Taken as a whole, this set of recommendations is critical for the Northern Neck’s food industry to grow to its full potential and improve the region’s economy.**



*For additional background research on rural connectivity, please see below:*

**Best practices: regional connectivity + food system**

Two “best practice” examples are outlined in this section to illustrate how regional connectivity and food system interventions can be used as economic development tools. The Rural-Urban Connections Strategy (RUCS) program by the Sacramento Area Council of Governments (SACOG) and the rural-urban partner project work by Minnesota Rural Partners (MRP) are two examples that address the false dichotomy of rural and urban areas and provide a helpful framework for rural economic development.

In 2007 SACOG launched the RUCS program to deliberately shift from a traditional planning paradigm. The project looks at regional growth and sustainability from a rural perspective, based on the value and importance of rural lands to the region. The project acknowledges that the traditional planning process creates a detailed picture of urban areas but oversimplifies “the value of rural landscapes and the unique complexities of life in rural communities.” The project develops and applies analytical tools to create an economic and environmental sustainability strategy for rural areas, which are recognized as important parts of a region’s economy, health, quality of life, and future (Rural-Urban Connection Strategy, SACOG 2007). Table 7 breaks down projects and findings that RUCS has accomplished, all of which provide a framework to rethink traditional urban-centric planning and address regional and local economic outcomes.

MRP worked on the “Pilot Study: Estimating Rural and Urban Minnesota’s Interdependencies” from 2009 to 2011. The report is an analysis of rural-urban interdependencies and provides quantitative evidence to show how rural Minnesota holds great economic importance to all of Minnesota’s economic health, and particularly the correlation between urban and rural prosperity and benefits. The report demonstrates that rural-urban linkages in the state of Minnesota drive wealth and innovation throughout the entire state’s economy (Searls, 2011). A summary of MRP’s work is found in Table 7.

These examples demonstrate that rural-specific planning and economic development is possible and succeeds when it focuses on regional connectivity and the value of rural areas to regional economies. This background section offers a basis for creating a framework of appropriate rural-specific economic development strategies.

*Table 7: Best practice summary of rural valuation strategies*

	RUCS	Minnesota Rural Urban Linkage Analysis
Goals	Advance development of rural agricultural infrastructure and establish region's rural economic sustainable strategy	Determine and estimate the economic value of rural areas in Minnesota
Products/ Deliverables	Analytical tools to estimate effects of land use and crop choice, Case studies - YOLO Case Study, Food and Agriculture Cluster Assessment	Interactive map of existing rural-urban connections, Framework of partnerships to share resources between areas
Outcomes / Findings	Value of expanding agricultural infrastructure and value of combining habitat protection and farmland, Economic implications of changing crops, How to engage with local stakeholders to identify gaps in the regional food system, Understand the economic impacts of rural and agricultural land on a larger region	Input-output analysis of manufacturing cluster estimates linkages between rural and urban, Rural job presence
Funding / Support	California Department of Food and Agriculture (CDFA) Specialty Crop Block Grant	United States Department of Agriculture Rural Development

*For additional economic information on industry clusters, see below:*

### **Industries**

Quantitative data that characterizes the Northern Neck region and its industries is readily available and does not need to be replicated for the purpose of this plan. This section summarizes quantitative data from the Harvard Cluster Mapping Project and the Northern Neck 2018 Comprehensive Economic Development Strategy (CEDs) to give an overview of prominent industries in the region.

Location quotient analysis is a tool used to indicate the concentration of sectors within a region relative to the United States. An LQ higher than 1 indicates that there is a larger concentration of employment in that sector, compared to the U.S. LQ estimates in the 2018 CEDs provide evidence that certain industries are concentrated within Northern Neck counties, but it should be noted that the takeaways are limited as the data compares counties side by side, instead of as an entire connected region. Regardless, LQ data shows that the concentration of employment in the *agriculture, forestry, fishing, and hunting sector* in the region is significantly higher than in the United States and that some counties exhibit slightly higher concentrations in accommodation and food services.

*Table 8: Location quotients by county (Source: 2018 CEDs)*

NAICS Code	Description	Lancaster	Northumberland	Richmond	Westmoreland
11	Agriculture, Forestry, Fishing and Hunting	Not disclosed	Not disclosed	3.97	9.4
72	Accommodation and Food Services	1.08	.76	.54	1.18

Analysis of industry clusters is another way to provide evidence for prominent industries in a region. A cluster is a group of inter-related industries that drive wealth creation in a region, primarily through exports. There are a variety of methods to measure clusters. The Harvard Cluster Analysis project uses an algorithm based on 2009 industry census data to map different clusters across the United States. The interactive platform identifies the top clusters by employment for the four counties within the Northern Neck region (Harvard Cluster Analysis Project). Table 5 outlines top clusters for each county, demonstrating the value of fishing and fishing products to the region’s economy:

*Table 9: Top clusters by employment (Source: Harvard Cluster Mapping Project)*

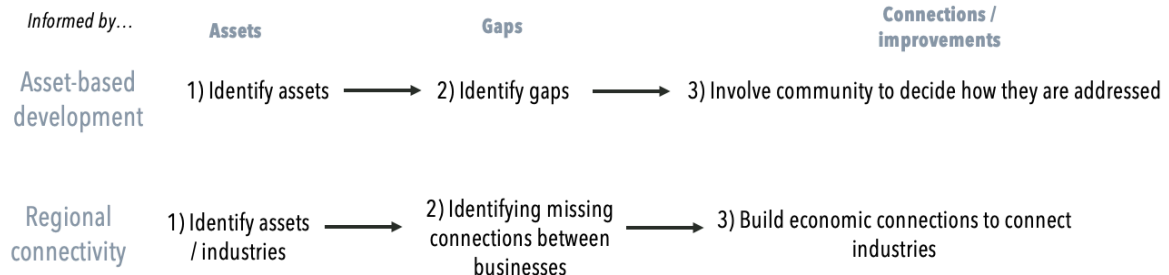
County	Top cluster by employment
Lancaster	Hospitality and tourism
Northumberland	Fishing and fishing products
Richmond	Wood products
Westmoreland	Fishing and fishing products

Within regional economic development, developing and supporting industry clusters is often a key goal as clusters “have been shown to strengthen competitiveness by increasing productivity, stimulating innovative new partnerships... and presenting opportunities for entrepreneurial activity” (Slaper and Ortuzar 2015). This industry information provides evidence to look more closely at the food and agriculture systems from which the region has historically benefited.

For additional methodology information, see below:

The following diagram was developed for a presentation on the plan, to demonstrate how the research questions were developed based on asset-based community development and regional connectivity frameworks.

**Successful, sustainable economic development:**



**Research questions follow this process....**



The following is a list of contact persons who were not interviewed, but could be interviewed for additional information, or should be considered if pursuing visualizations or cluster projects related to the food industry in the region.

INDUSTRY	BUSINESS / GROUP	POINT OF CONTACT
Farmer - chickens	Sylvanaqua Farms	Chris
Oyster	Miss Mary's Seafood	Lisa Carol Rose
Market	Town of Warsaw Farmers Market	Missy Coates
Restaurant - Farm to table	Adrift	
Seafood Supplier/Oyster and Farm (farm stand)	Kellums Seafood	Lynn Kellum
Farms - Direct to consumer	Blenheim Organic Gardens	Becky Latane
Seafood Supplier/Oyster	Rogue Oysters	Taryn Brice-Rowland
Restaurant - Farm to table	Relish	Carol Mead Smith
Food Bank	Healthy Harvest Food Bank	Cindy Balderson
Grower - sheep	Maple Lawn Farms	Brian & Ginny Barnes
Farm	Large scale vegetable farmer	Parker Farms
Alcohol - vineyard	Triple V Vineyard	Marti Moyer - Craig Allshouse
Farm	Hispanic farmer	Christina Medin
Farm stand	Lois' Produce	



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