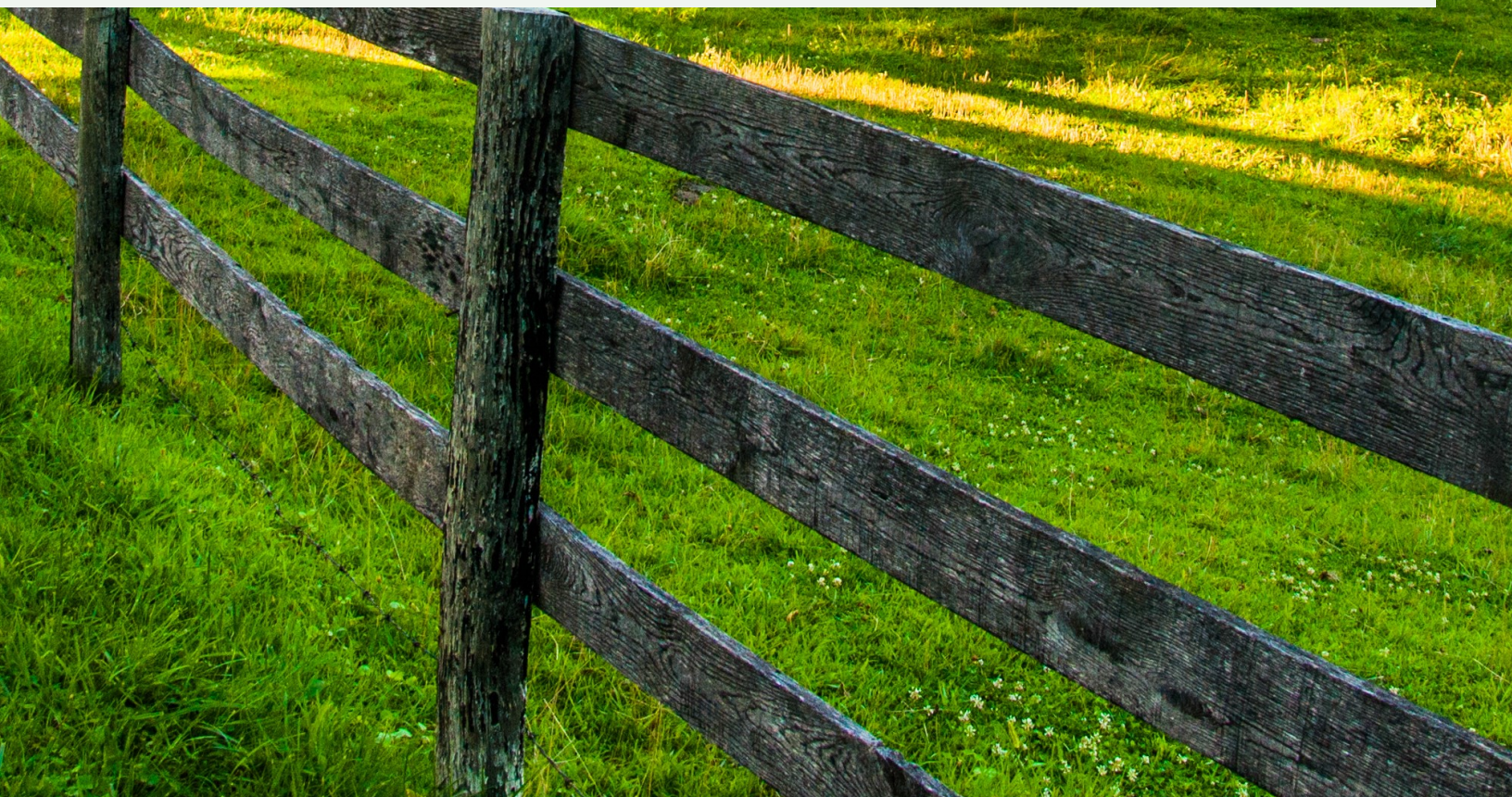
West Virginia Food Hub Feasibility Assessment



West Virginia Food Hub Feasibility Assessment

November 30, 2014

Prepared by:

Annie Stroud

Fritz Boettner

Ben Gilmer

Meghan Betcher

Downstream Strategies, LLC
295 High Street, Suite 3
Morgantown, WV 26505
304.292.2450

Prepared for:

The New Appalachian Farm and Research Center

PO Box 43
Rock Cave, WV 23233
304.472.1757

Letter from the New Appalachian Farm & Research Center

The main purpose of the New Appalachian Farm and Research Center's study was to identify the information needed to ascertain the feasibility of creating a statewide local Food Hub system in West Virginia. We have found in other research that market and consumer demand has been heavily discussed and identified in West Virginia. Therefore we feel that any feasibility study moving forward must rely on local supplier identification and interest level, developing a metric baseline of production volumes, and identifying types of agricultural products currently being produced. In order to establish a measurement of future growth potential, research must identify a refined quantitative measurement of West Virginia farms' potential production capacity.

We believe this project has the potential to be a catalyst for continued growth and development of small farms and agribusinesses throughout West Virginia. NAFRC feels very strongly that local agriculture will be a major economic driver in this state, with the real potential to create thousands of jobs within locally owned farms and agri-businesses.

Our vision for the purpose of the information derived from our surveys is that it will assist stakeholders, funders and organizations – in and outside of West Virginia – in deciding where to focus resources to best affect change in the WV local food economy. This study provides the critical information used to determine the types of resources needed and regions that can benefit most from added investment.

An up-to-date, locally relevant database of producers who are interested in increasing their markets and/or production volume was a very helpful output of this project. The list of producers will be used as a great starting point and as a tremendous asset for resource providers who need to make farm businesses aware of new technical assistance programs or funding opportunities. We hope that these resources will accelerate the timeline of the delivery of resources to those that can benefit most.

Improving Farm Businesses is Economic Development. Improving the quality of life of individuals' within a geographical area by making available additional resources that were once not available is the fundamental basis of economic development. Through the use of information provided by this study, additional resources that were once not available or readily known, will now be accessible. Delivering existing resources along with the creation of new resources will continue to improve the business environment for agri-businesses around the state.

We hope that you find this information insightful and that this study brings tremendous value to the next steps for building a successful and sustainable West Virginia local food system.

In good food,

Robert Hinton
Special Projects

New Appalachian
Farm & Research Center

Acknowledgements

This report was made possible by funding from the Claude Worthington Benedum Foundation. The development of this project was largely influenced by the need to identify a statewide baseline of producers that could contribute supply for the development of local food hubs in West Virginia.

Robert Hinton, Special Projects for New Appalachian Farm and Research Center, provided guidance, vision, and support throughout the life of this project. We would like to thank Mary Oldham, Regional Coordinator of The Value Chain Cluster Initiative for providing insight and sharing her findings with us. Alan Arnold of the Collaborative for 21st Century Appalachia, WVU Small Farm Center, West Virginia Department of Agriculture, WVU Extension Service, and the West Virginia Food and Farm Coalition were also invaluable to this project and the authors are grateful for their participation.

The authors would also like to express great appreciation to everyone who contributed to this report by providing information, offering insights, and verifying facts. In alphabetical order, thanks to: Bob Corey (CEO, Corey Brothers, Inc.), Buddy Davidson (WVDA), Rick Edwards (Director of Produce Procurement, Kroger), Chad Fuller (Owner, Fuller Tomato), Stacy Garrett (Member, Board of Directors, The Wild Ramp), Teresa Halloran (Marketing Specialist-Foods, WVDA), Dale Hawkins (Owner, Fish Hawk Acres), Jennifer Jones (Owner, Swift Level Farms), Ashley Keane (Manager, Mountain People's Cooperative), Derek Kilmer (Owner, Kilmer's Farm Market), Jim LeFew (Owner, JL Foods), Bekki Leigh (Coordinator of Fresh Fruit and Vegetable Program, WVDE Office of Child Nutrition), Cindy Martel (Marketing Specialist, Marketing and Development, WVDA), Tom McConnell (WVU Small Farm Center), Paul Mock (Owner, Mock's Greenhouse and Farm), Gail Patton (Executive Director, Unlimited Future, Inc.), Jean Smith (Director of Marketing and Development, WVDA), Elizabeth Spellman (West Virginia Food and Farm Coalition) Reg Trefethen (Heart and Hand), Jennifer Williams (WVU Ag Extension) and Jill Young (Coordinator, VC2 Value Chain Cluster Initiative).

Finally thanks go to all of the organizations that were instrumental in disseminating the survey and thanks to all producers who participated in the production survey.

Table of Contents

Executive Summary

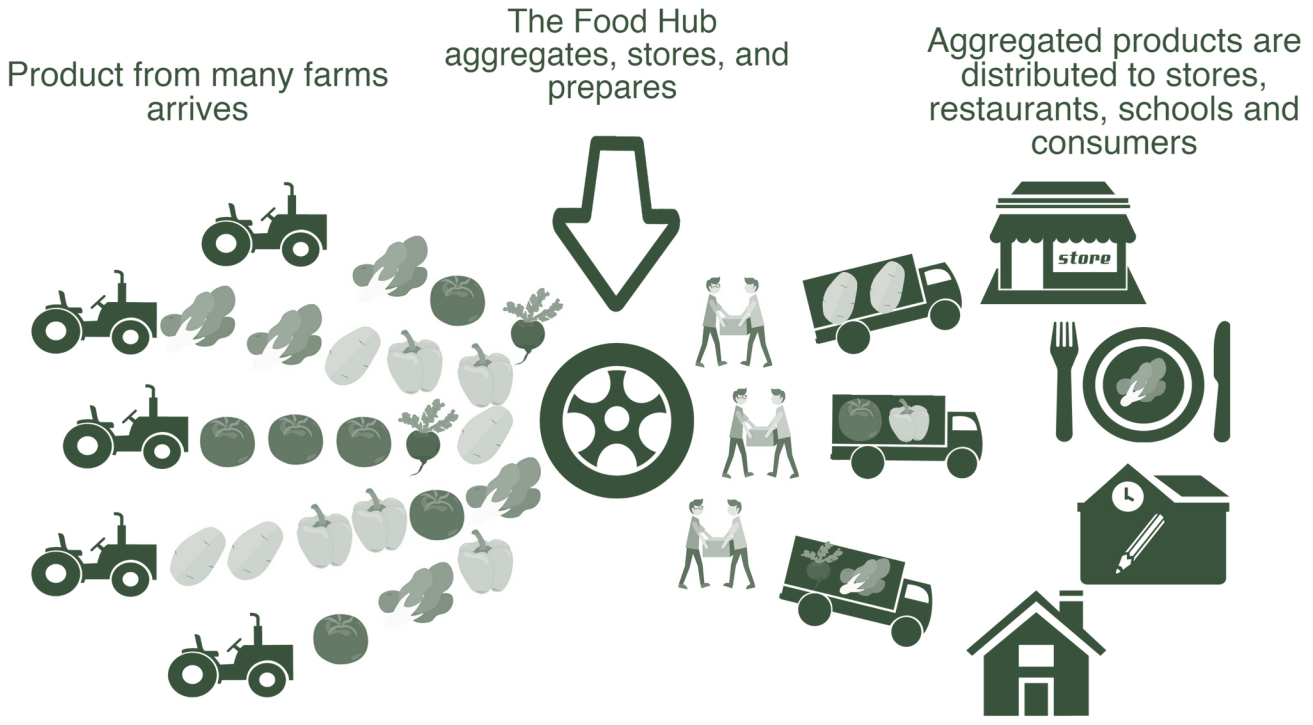
The New Appalachian Farm and Research Center conducted this study to assess the feasibility of siting a local food hub in the state of West Virginia. The assessment leveraged existing studies and data, implemented a producer survey, and performed an analysis to understand the enabling factors and barriers to developing a food hub in West Virginia. Information characterizing production potential and food hub feasibility has been one of the major barriers limiting growth of local and regional aggregation initiatives in the state of West Virginia. To adequately secure funding and create a functional food hub, individuals and organizations need to better understand current production in the state, and the role and feasibility of food hubs in helping local producers meet market demand.

This study provides a snapshot of the state's current and potential local fruit and vegetable production, gives an in-depth look at the top three regions in the state based on survey data for fruit and vegetable production, and provides a food hub feasibility analysis based on the findings.

This report is intended to assist stakeholders, funders, businesses, policy makers, and other organizations in and outside of West Virginia in deciding where to focus resources to strengthen the West Virginia local food economy.

A Food Hub—according to the USDA— is "a centrally located facility with a business management structure facilitating the aggregation, storage, processing, distribution, and/or marketing of locally/regionally produced food products." A Food Hub can have many different structures and helps provide local producers with access to new markets, services, and increase access to healthy food for consumers within their regions.

What is a Food Hub?



The next step for the West Virginia food system is to identify ways to scale-up production to meet demands of consumers and institutional buyers in a way that keeps the value and wealth with West Virginia's farmers.

Currently, it is challenging for farms to meet wholesale demand from customers. Quantity and packing requirements for larger buyers are often beyond the capacity of one or two farms, but can be met by aggregating product from many farms through food hubs.

The local food system in West Virginia is rapidly growing. However, there are still many areas where demand is mostly wholesale and individual farms have difficulty meeting that demand. There are many factors that create barriers for meeting that demand, including distance to the nearest markets, seasonality, packaging, and production coordination.

The major barrier is aggregation between producers and larger buyers. This gap is recognized by organizations all over the state, and the West Virginia Food and Farm Coalition has developed a working group focused on aggregation and distribution. The information provided in this study can be used in coordination with other research and implementation efforts to aid in the development of aggregation projects in West Virginia.

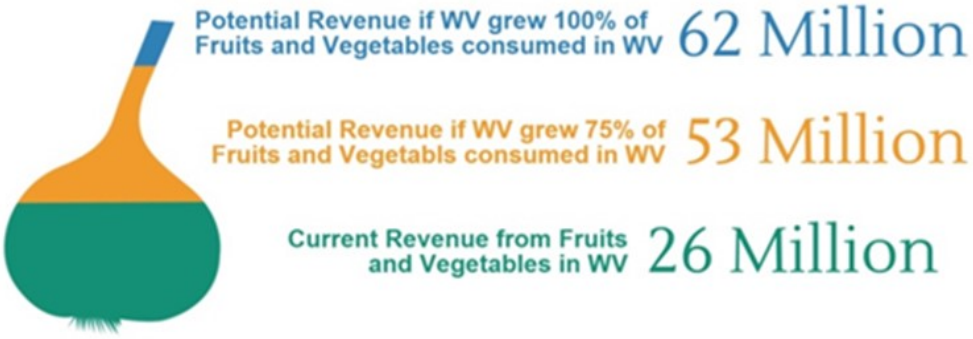
This project utilized existing survey data and also conducted a statewide survey of producers to gather information. Generally, most regions of the state contain producers wanting to expand and sell to food hubs. There are several key regions that stand out as areas ready to scale-up production and that are geographically suited to serve farms and consumers. This report includes statewide data and three regional sections that highlight the responses from the project's 2014 producer survey.

Why Food Hubs in WV?

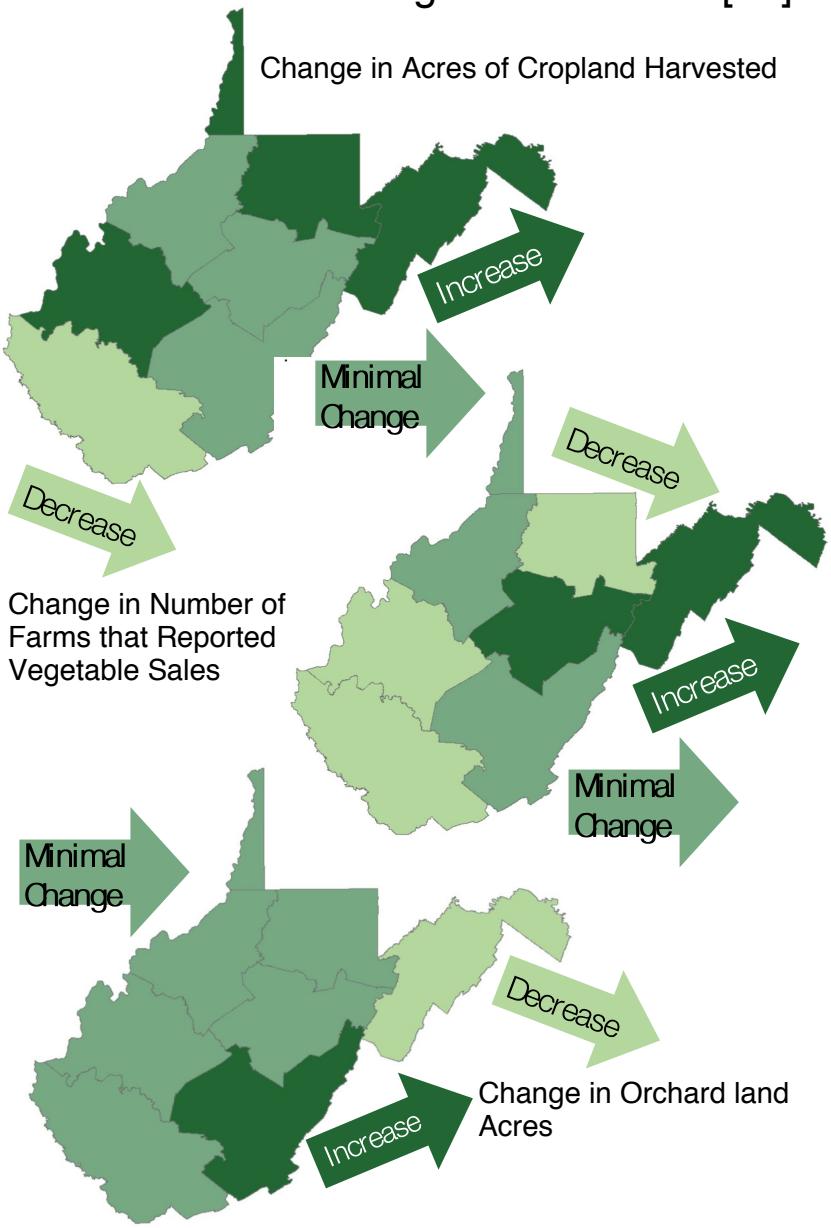
The market for Local Food in WV is: **6 Billion Dollars**

Key Facts and Trends

West Virginia has a population of 1.84 million. This population consumes $421 million worth of fruits and vegetables every year. Currently, WV farms are only producing $26 million worth of fruits and vegetables [1].



Trends In WV Agriculture by Region 2007-2012 [16]



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USDA Food HUBS

West Virginia only has two USDA-defined food hubs, Fish Hawk Acres and Monroe Farm Market. Surrounding states—Ohio, Virginia, and Pennsylvania—contain between 11-19 food hubs each [15].

While there are only two registered food hubs, WV has at least 21 businesses and organizations working on aggregation at various levels throughout the state. Aggregation and distribution are recognized challenges and new and existing initiatives are working to address those issues.

About this Study

For the purpose of this study it was necessary to divide the state up into the following regions in order to accurately display and analyze the survey data.

- **Central:** Braxton, Lewis, Upshur, Randolph, and Webster.
- **Eastern Panhandle:** Berkley, Grant, Hampshire, Hardy, Jefferson., Mineral, Morgan, and Pendleton.
- **Kanawha:** Cabell, Clay, Jackson, Kanawha, Putnam, Mason and Roane.
- **North-central:** Barbour, Harrison, Marion, Monongalia, Preston, Taylor, and Tucker.
- **Northern Panhandle:** Brooke, Hancock, Marshall, and Ohio.
- **Southeast:** Greenbrier, Fayette, Monroe, Pocahontas, Raleigh, and Summers.
- **Southwest:** Boone, Lincoln, Logan, McDowell, Mercer, Mingo, Raleigh, Wayne, and Wyoming.
- **Upper Ohio Valley:** Calhoun, Doddridge, Gilmer, Pleasants, Ritchie, Tyler, Wetzel, Wirt, and Wood.

6%

Vegetable and Fruit producers

West Virginia has a strong agricultural tradition. While most farms produce livestock or feed products, 6% of WV farms produced vegetable or fruit products in 2012 [16].

$421 million

spent on fruits and vegetables each year

The number of farmers markets has doubled in the past decade and over 80% of farms in the state are small operations grossing less than $10,000 per year.

West Virginia farms grow 1.2 acres of vegetables per thousand people, which is comparatively lower than neighboring states [1].

Food Hub 101

What does a food hub need to be successful?

Food hub models vary dramatically based on the regional differences each hub faces. With that in mind, a few common factors that food hubs need to succeed are described below[18].

⇒ Diversity and Consistent Supply

Diversity in food hub offerings provides stability for projects. Food hubs require constant supply of product in order to keep the system working. If a food hub has infrastructure to maintain (coolers, trucks, etc.) this is even more important.

⇒ Buyers

Food hubs require access to markets. Rural hubs can work but greater effort needs to be placed on developing potential purchasers. Most food hubs rely on and become profitable by marketing to urban areas.

⇒ Transportation

Adequate transportation for product from the producers to the hub is important to maintain quality. Additionally, quality distribution from the hub to buyers is equally important.

⇒ Potential Production

Some food hubs continually work with the same producers, but it is necessary to keep developing new producers and suppliers throughout the process. It is important to plan for developing potential production.

⇒ Finance

Food hubs and aggregation projects can use a variety of means to fund their projects. Many rely on outside grant funding, but there are innovative models to implement that encourage community investment.

⇒ Leadership structure

For a food hub to be successful it needs to have a good management and staffing plan. Successful hubs require dedicated employees, and the return is worth the cost.

Quick facts about West Virginia's listed food hubs.

Fish Hawk Acres
Upshur County, WV

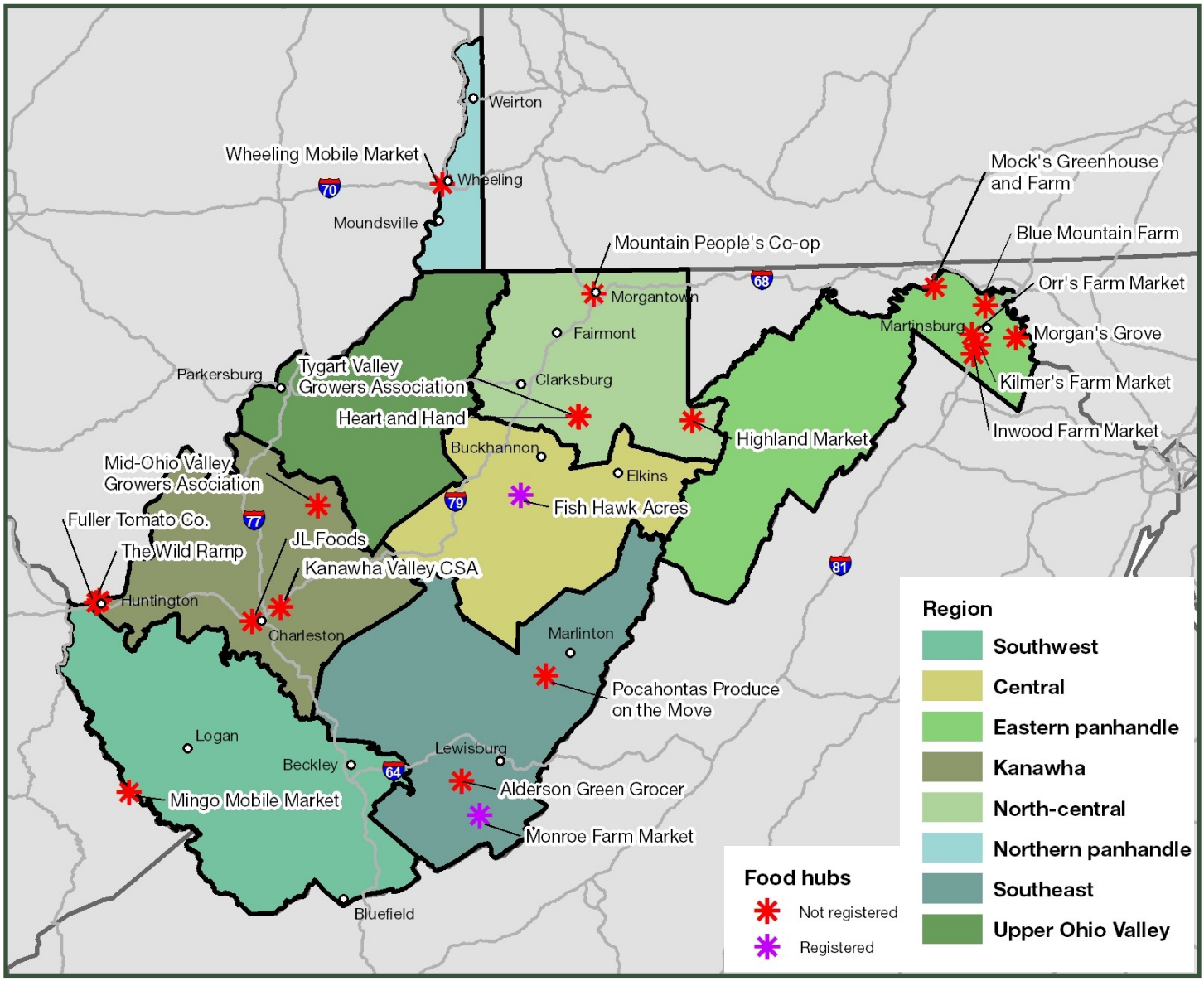
Fish Hawk Acres opened in 2005. It is an aggregator that sells food at farmers markets and to restaurants throughout the state. It is a privately owned business [19].

Monroe Farm Market
Monroe County, WV

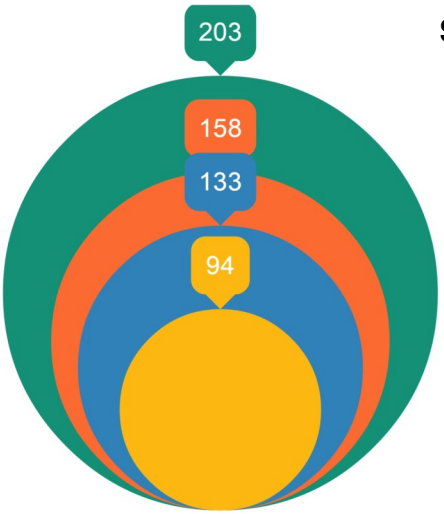
Monroe Farm Market started around 2007. They use an online ordering system to aggregate product to sell to the nearest urban center, Charleston, WV. Currently it is a cooperative representing 25 small farms in the area [10].

Existing Efforts

While there are only two registered hubs, aggregation efforts exist throughout the state. See the map below for existing efforts.



Talking to West Virginia Farmers



Survey Respondents

Total respondents

Respondents that are WV farmers

WV farms that produce or are interested in producing fruits and vegetables

WV farms that sell vegetable and/or fruit products

National agricultural statistics and surveys are often too coarse to capture details about small producers, such as those supplying local food to markets in West Virginia. To better understand existing and potential production in the state, the project team leveraged existing research and data collection already completed by our partners across the state, in addition to implementing a producer survey. This information helped characterize current production data as well as indicators for potential production in the future. The project producer survey was conducted from July 14 to August 24, 2014 with a survey outreach period from February 2014 to July 2014. The survey questions and analysis of results were informed by previous research, such as a graduate thesis by Ruth M. Oldham that explored factors influencing producer decisions [4], as well as input from project partners. It is important to note that the survey results are an approximation of production and not an absolute inventory.

Acres

A basic indicator of fruit and vegetable production is the amount of acres in production. Respondents were asked to indicate how many acres of fruit and vegetables they farm. Acre figures are estimated, but give a sense of the differing capacities between the regions. The Upper Ohio Valley (2,009 ac.) and Southeastern (1,720 ac.) regions had the highest estimated acreages.

Acres in Fruit and Vegetable Production per-Region

Region	Acres
Central	364
Eastern panhandle	557
Kanawha	1,404
North-central	768
Northern panhandle	150
Southeast	1,720
Southwest	415
Upper Ohio Valley	2,009
Total reported acreage	7,389

Sales

Respondents were asked to select their gross sales ranges and if farming was their primary income.

$917,265 Combined approximate gross sales of survey respondents who indicated they sold vegetables in 2013 (74 total).

$12,395 Average gross sales per respondent who indicated they sold vegetables in 2013 (74 total).

26% of respondents say that farming is their primary source of income (out of 128 responses).

Farm Types

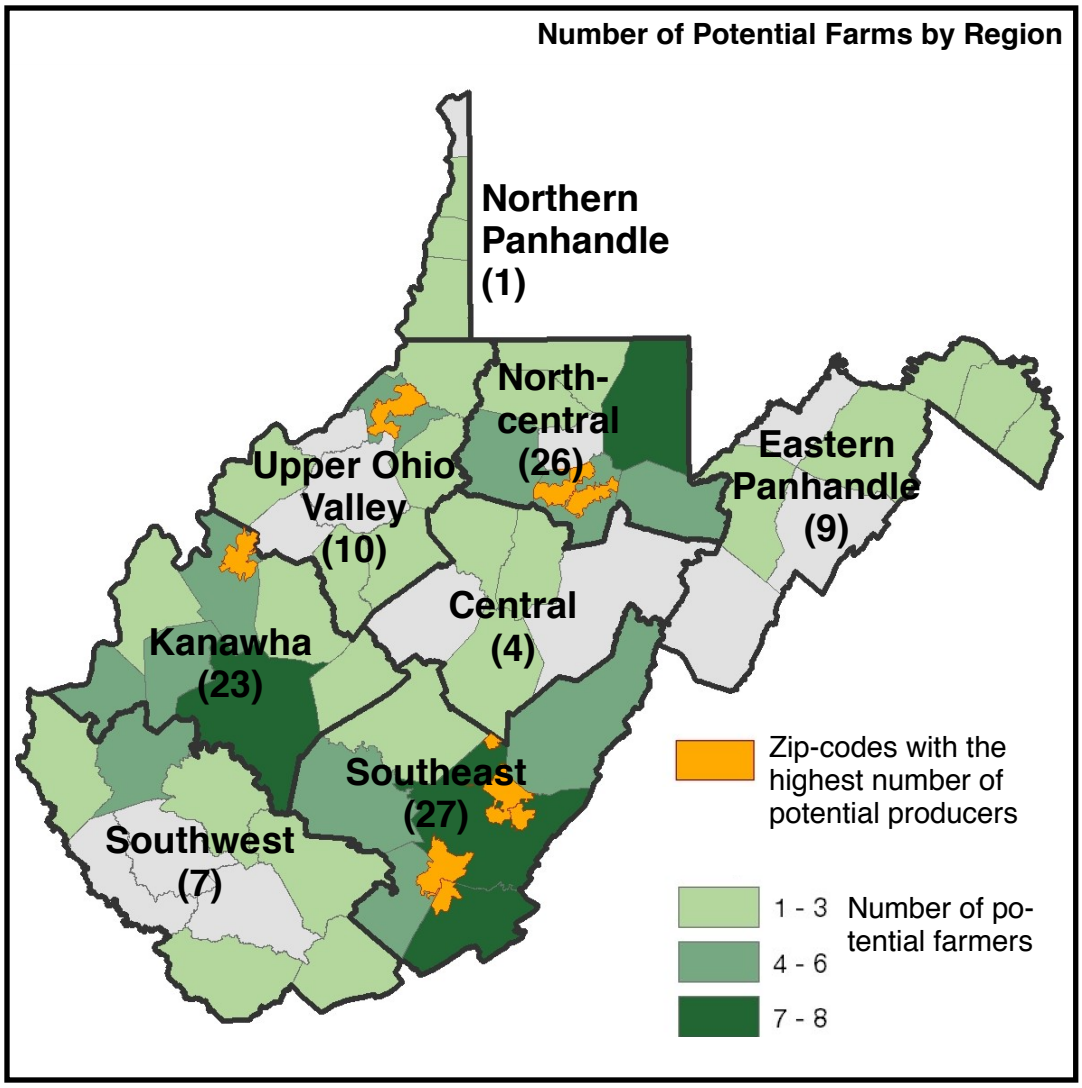
Respondents chose from seven options for farm type. The farm types are based on number of crops rather than actual size of the farm. The top farm types across the state were small farms with a few crops (51), followed by mid-sized farms with a moderate variety of crops (34), and gardens for personal/family use (34).

The challenge for small farms is how to reach larger markets when each farm produces small amounts of each product. Food hubs meet that challenge by allowing small farms to aggregate to meet demand.

Winter Production

Season extension techniques can increase production in the fall and winter seasons. Season extension includes a number of production practices, such as utilizing hoophouses, low tunnels, row covers, or greenhouses. These practices allow farmers to grow product during bumper seasons, such as late fall and early spring, by protecting the crops from weather events. In some cases producers are able to harvest year-round with good management practices.

In West Virginia, 70 respondents indicated that they used season extension methods. Season extension is an important factor for food hubs and aggregation efforts to ensure consistent supply and longer harvest seasons.



Number of Survey Respondents Using Season Extension

Region	Number of Producers
Central	0
Eastern panhandle	4
Kanawha	12
North-central	15
Northern panhandle	1
Southeast	20
Southwest	6
Upper Ohio Valley	10
Total Respondents Using Season Extension	70

Adding Value

Of the 133 respondents that indicated they were WV fruit and vegetable farmers, 55 respondents indicated that they produce value- added products. Value-added products can be any product that is transformed (e.g., canned, frozen, processed) to be sold again.

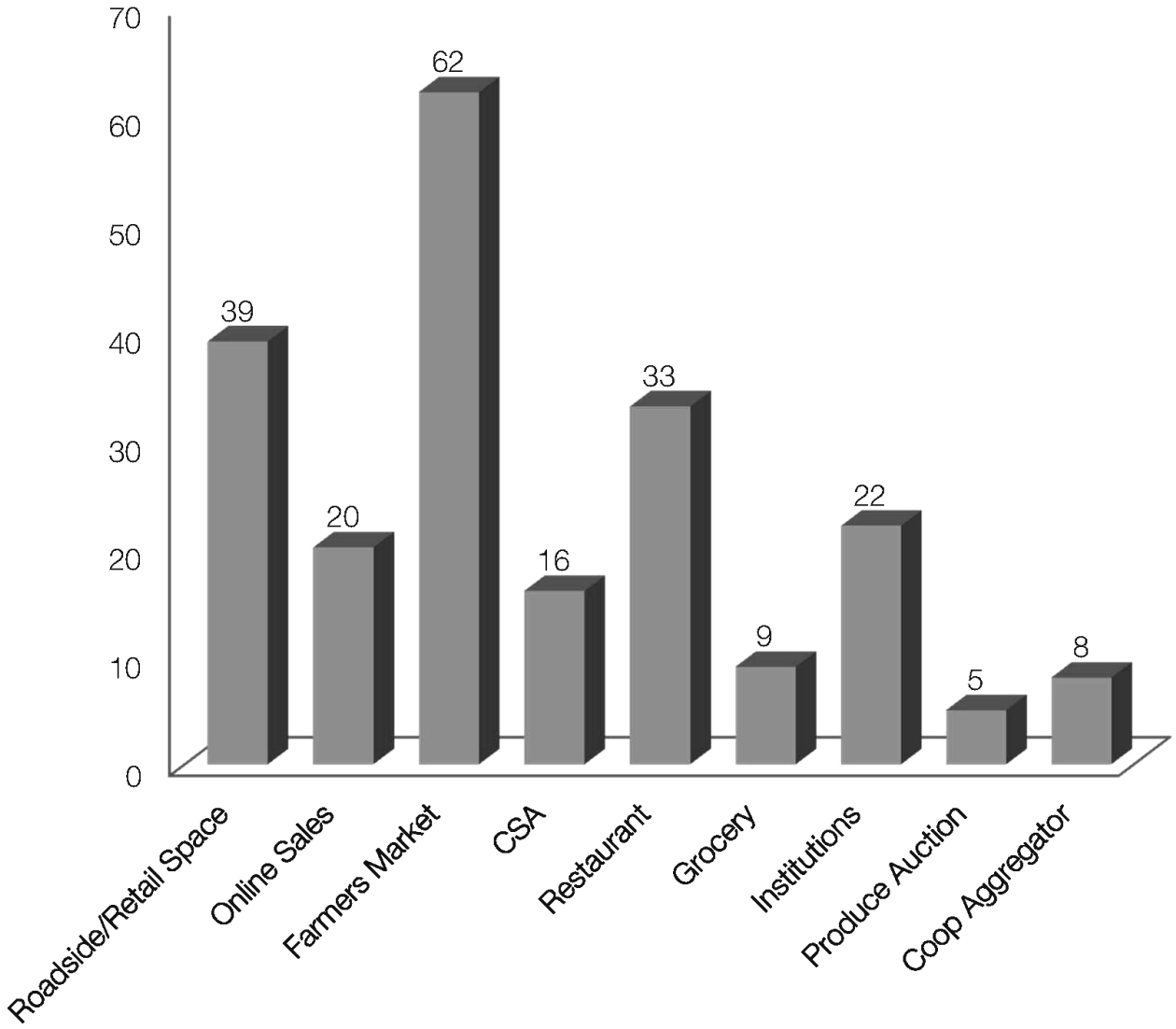
Value added products can offer an income stream for producers and food hubs by preserving product to be sold at a later date.

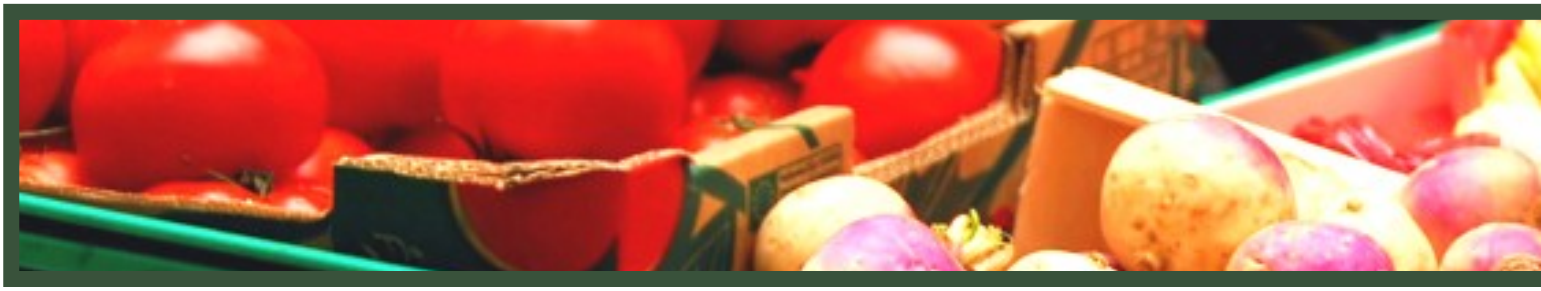
Where are farmers selling now?

Farmers markets are the top current sales outlets for fruit and vegetable producers statewide, followed by on-farm/retail sales and restaurant sales.

To get an idea of how far producers were driving to reach their preferred sales outlets, producers were asked about driving distance. The survey garnered 88 responses who drove a range of 0-500 miles with an average of 35.8 miles for one-way travel.

Number of producer respondents that sell at the listed sales outlets.



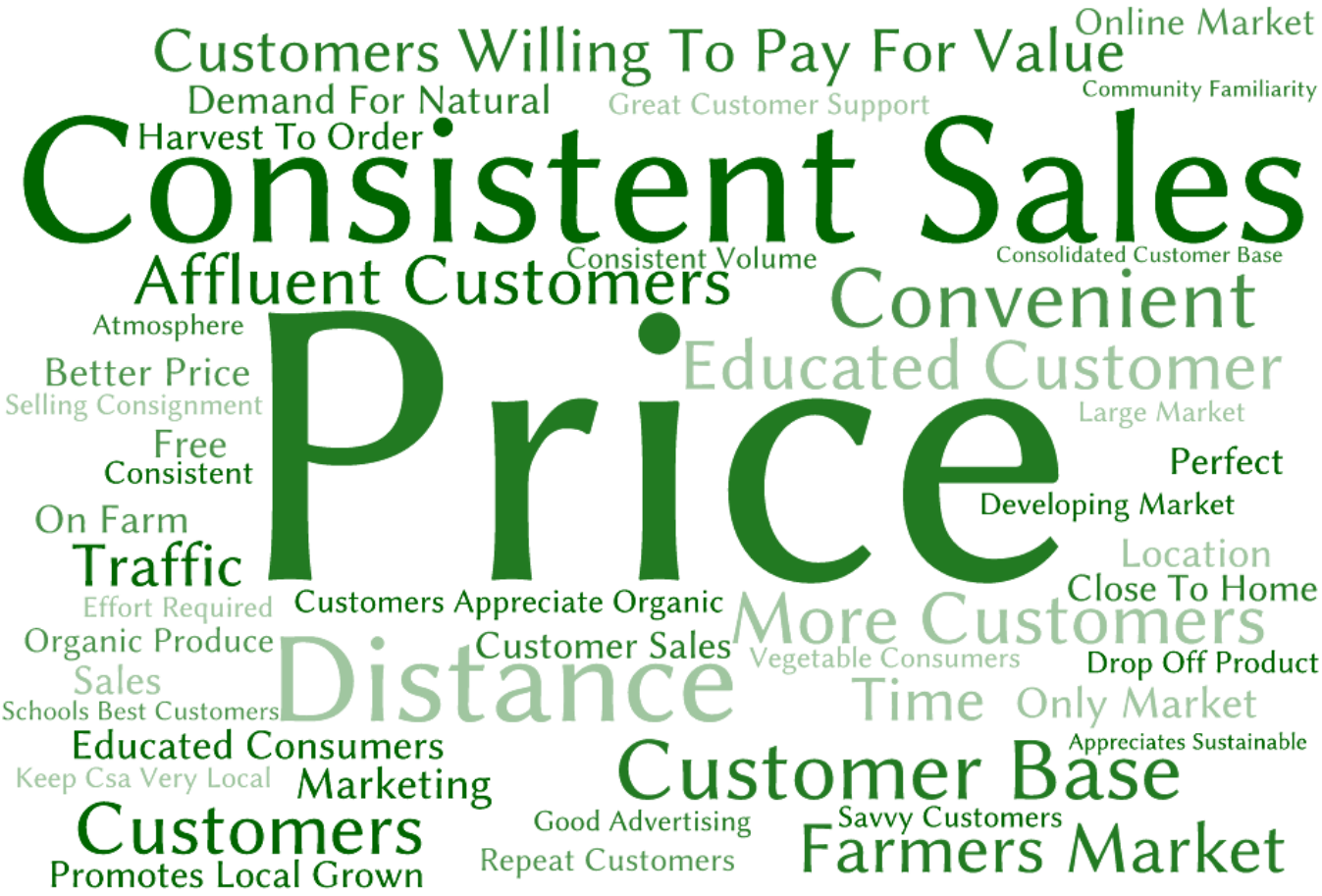


What makes your outlet the best?

Producers were also asked what they liked about their market, giving insight into what makes a good market for producers. The box below illustrates the responses, with the larger words being the most frequently cited in producers' answers.

Consistent sales and prices had the highest response rate. Food hubs play a critical role in promoting consistent sales and pricing.

Qualities that survey respondents used to define their best market

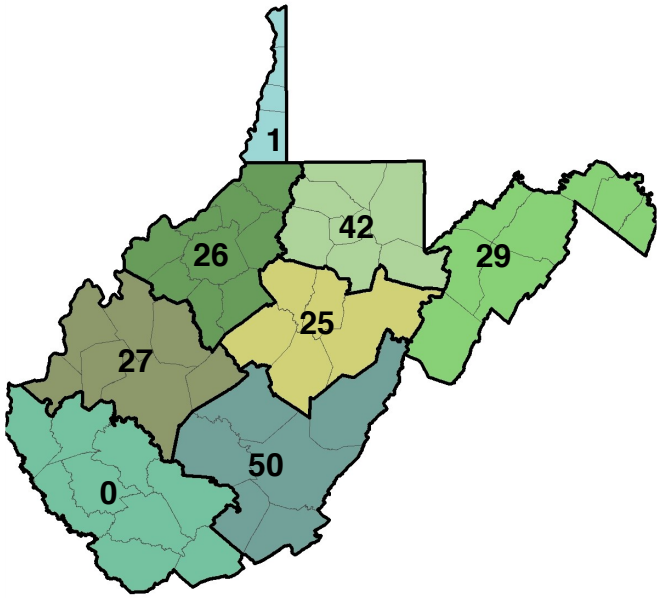


Key questions this report answers

Is farming growing in West Virginia?

Yes, producer feedback and other data indicate that small farms are growing and additional farms are interested in expansion.

Previous studies found that 48% of producer respondents indicated that they are planning to expand production [4] and the 2012 US Agricultural Census data indicated that the acres of cropland in the state are either expanding or have remained the same [16].



Number of farms that want to expand by region [4]

Where is it growing?

Given the critical role of production potential in developing a food hub, an index of production potential was created based on current and planned production across the state. The project team used previous study data [4] and responses from the 2014 producer survey to rate the regions.

The production potential index identifies where fruit and vegetable production could be maximized, based on regions that had high numbers of existing producers, high numbers of those that wish to expand, high numbers of those who do not currently produce but would like to start, and those that plan to produce more. The top regions identified are the Southeast, Kanawha, and North-central.

Is there enough produce and vegetable production to supply a food hub?

Yes, survey respondents maintain a total of 7,389 acres of farmland on which fruits and vegetables are produced in WV. If all of these acres produced an average of 16,000 pounds of vegetables a year (average mixed vegetable yield), this would account for **59,112 tons** of vegetables produced a year. Given that survey respondents represent a small subset of actual producers, the true production potential is likely substantially higher.

Which regions have enabling conditions for food hub development?

Production potential is not the only key to food hub success. To understand how these enabling conditions vary across the state, the project team examined 18 factors for each region to determine which regions had the highest number of positive factors for food hub development. As indicated by the map to the right, the top regions are the Southeast, North-central, and Kanawha region.

Top Regions

Southeast | Kanawha | North-central

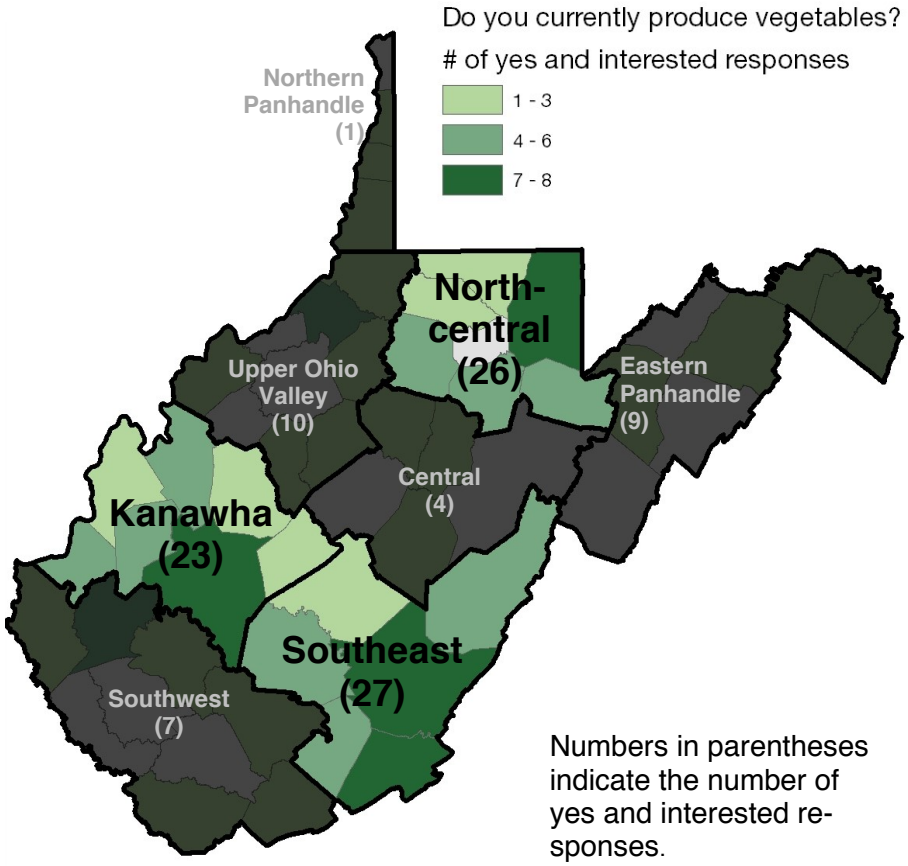
Key Index Factors

Existing fruit and vegetable production indicates that there is an existing supply of fruits and vegetables that could serve as a base for a food hub.

Interest in selling wholesale or to a food hub indicates that producers in the region are already looking for another outlet for their product and are interested and willing to scale up to meet a larger demand.

Potential year-round product supply is determined by examining product availability, existence of value-added products and use of season extension techniques. High use of season extension means that producers in that area are more able to produce through the bumper seasons and sometimes throughout the winter.

Local resources exist throughout the state. Many regions have existing producer groups or initiatives in place to support the increase of food production. These indicate existing momentum for food hub projects.



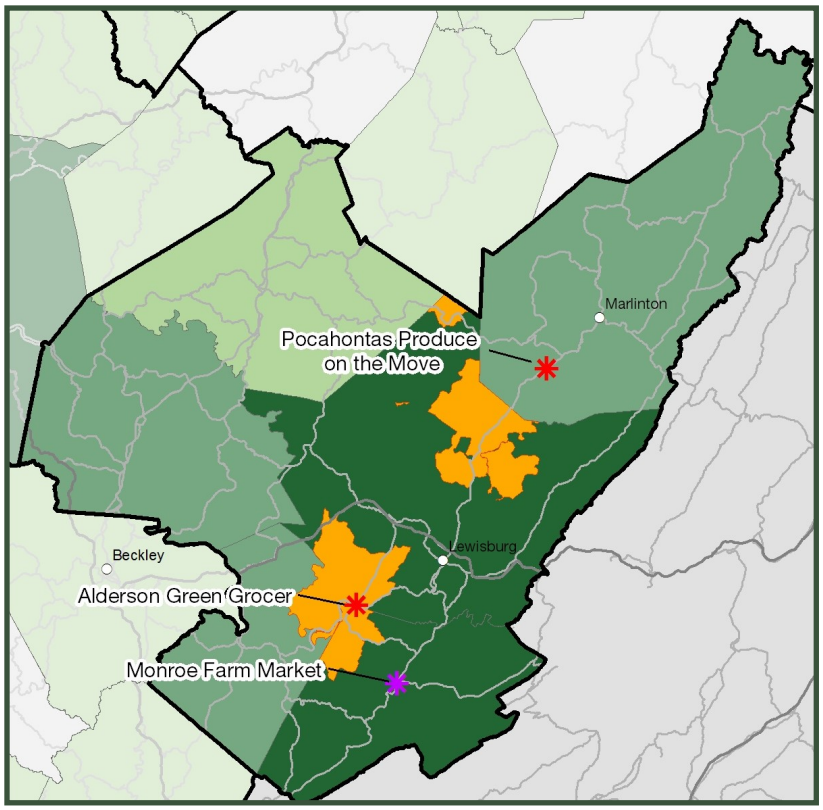
Numbers in parentheses indicate the number of yes and interested responses.

Prime farmland is an indicator of where there is good quality farmland within the state. The regions with significant amounts of prime farmland are more able to support expanded production.

Complete list of factors used in index:

Positive: Number of producers extremely and very interested in expanding, Number of producers interested in beginning to produce fruits/vegetables in the future, Number of producers who currently produce fruits and vegetables, Number of producers who produce value-added products, Number of producers who produce value-added products that they sell, Acres in fruits and vegetables, Number of producers that use season extension, Number of producers that have a fruit or vegetable produce available in the winter, Number of producers who sell vegetables[4], Number of producers interested in selling wholesale[4], Percent of respondents interested in selling wholesale [4], Sum of producers interested in expansion who also produce vegetables [4], Number of producers who sold wholesale in 2012 and produce vegetables [4], Number of producers that plan to produce more [4], percent of respondents that plan to produce more[4], Number of prime farmland acres

Negative: Number of producers that do not produce fruits and vegetables, Producers that do not use season extension



Number of potential producers and existing aggregation efforts

Southeast Region

Greenbrier, Fayette, Monroe, Pocahontas, Raleigh, and Summers Counties
Data from 2014 producer survey.

The Southeast region had 33 total respondents. The area highlighted orange depicts the zip-codes that had at least 5 farms producing vegetables currently or interested in future vegetable production.

Products

Producers in the Southeast region produced 31 distinct products. The top five products mentioned were tomatoes, green beans, greens, lettuce, and potatoes.

Jobs

18 farms have employees—other than primary operator— with a total of seven paid employees and 30 unpaid.

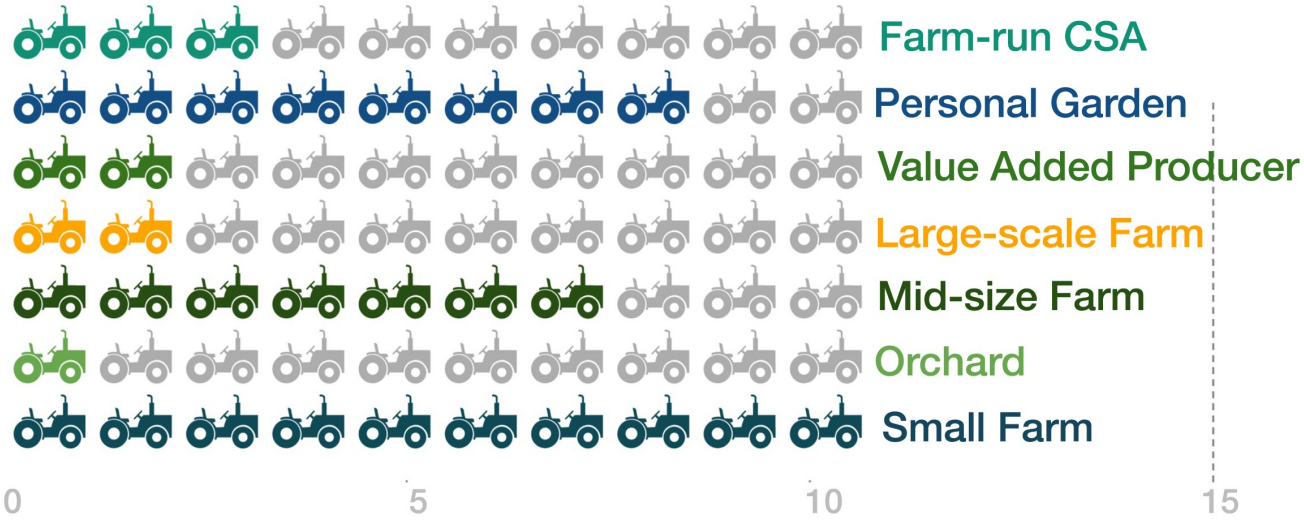
Diversified Farms

Producers in the region are fairly diversified with 32% producing livestock or poultry, 14% producing value-added products, and 22% producing products not for human consumption such as animal feed products, wood, compost, and more.

Farm Size

In the Southeast region the highest self-reported farm types were small or mid-size farms with a total of 17 responses. Eight (8) respondents identified their farms as personal gardens. These producers could be future hub suppliers.

Farm Types in the Southeast Region. Each tractor represents one farm respondent



Yield

Producers were asked to indicate their yields for each product. While the responses for these questions were low, we were able to estimate the total poundage for the top five products by converting respondents' yields into pounds. These numbers indicate production for four to six producers that responded.

Estimated yields for top 5 products

Willingness to Travel

Producers indicated that they would travel up to 100 miles one-way to reach their best market, with an average of 23 miles. Consistent sales, price, and distance were the most common reasons producers chose to sell at their self-identified best markets.

Season Extension

20 producers in the region use season extension technologies.

The most popular season extension method is high tunnels, with eleven producers utilizing the method. An additional five indicated that they use a greenhouse. The high use of season extension contributed to the relatively high availability of vegetables at typically low production times. The region has high winter production compared to other regions and high spring production which can be an indicator of effective season extension.

Vegetable season availability

Season	Number of producers with product available
Fall	22
Winter	6
Spring	20
Summer	21

22%

of farms surveyed listed farming as the primary source of income.

33%

of farmers surveyed have a business plan, production plan, and electronic accounting system.

100

Maximum miles famers are willing to drive their produce to an aggregator, average is 34 miles.

1,720

Acres in production in the Southeast Region.

6 producers have vegetable products available in the winter

15 producers sold wholesale in 2012

22 producers would like to expand

5 producers have a food safety plan

Southeast Region Food Hub Potential

Regional Opportunities

High production, season extension, high interest in selling to a food hub, and high current and potential production

Key food hub attributes and services by producer importance

Lack of buyers, transportation, lack of funding, and lack of producers

Regional Challenges

Info from 2014 survey data

Resources

72% of respondents have reliable internet

15% have a food safety plan

45% have a delivery vehicle

21% have produce coolers

Potential Partners

- Greenbrier Valley Local Foods Initiative
- New River Gorge Regional Development Authority
- Greenbrier Valley Economic Development Corporation
- West Virginia Food and Farm Coalition
- The City of Beckley

Existing Aggregation Efforts

- Alderson Community Food Hub
- Farm to Table Market at Greenbrier Nurseries, Beckley
- Monroe Farm Market
- Pocahontas County Produce on the Move
- Farmers Markets in Lewisburg, Fayetteville, Alderson, Marlinton, and Union.

Food Hub Case Study: Eastern Carolina Organics, North Carolina—Distribution based [9]

Eastern Carolina Organics (ECO) started in 2004 as a project of the Carolina Farm Stewardship Association to support customers that wanted to buy larger volumes and more consistent supplies of organic product grown by local growers. It is now a private grower/manager owned LLC. They market and distribute wholesale produce to retailers, restaurants, and buying clubs.

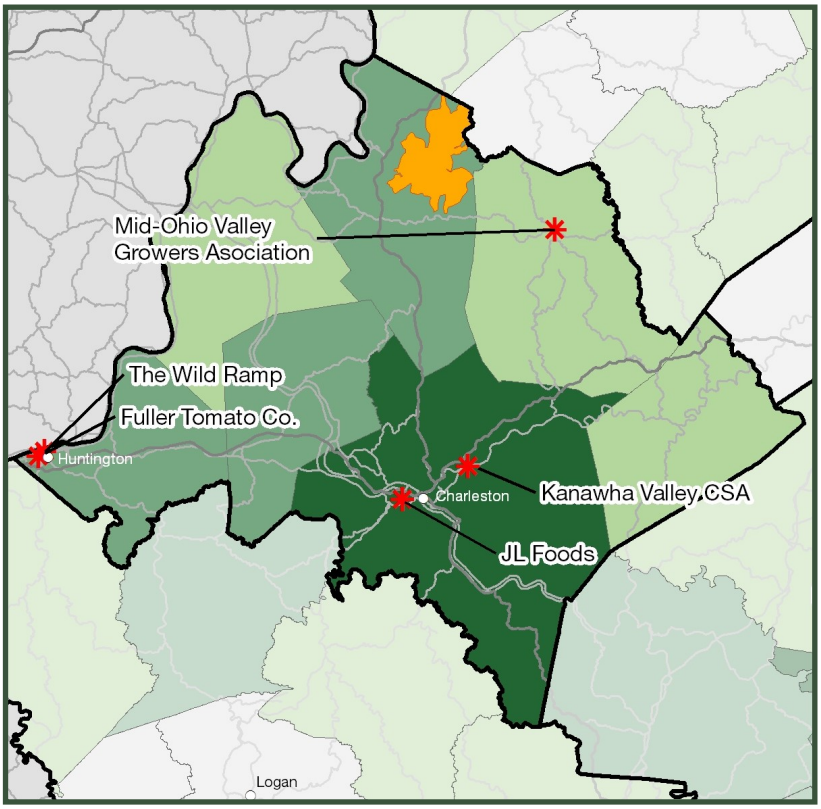
ECO is an example of a group that not only markets and handles pricing and selling for producers, but also provides services for transitioning farmers to organics. ECO conducts demand research over winter with customers about potential quantities and product types desired. ECO then works with their farmers to plan production across their farms.

ECO has 2 delivery trucks, a warehouse with loading dock, and 10 staff members. Producers bring their products to a central warehouse where it is aggregated for buyers. Producers usually pick to order, and thus provide fresh food with a 1-2 day turnaround from field to customer.

ECO works over a large geographic area which allows them a larger range of season and product availability. Some producers have grown from under 5 acres to over 200 acres as a result of access to a new market, good prices, and assistance with organic certification.

Facts:

- Started as a project of a farm-focused non-profit
- Start up grant funds were $48,000
- Transferred to private grower/manager owned LLC in 2005
- 2014 has 10 staff members, works with over 60 growers and 100 buyers
- Producers get 80% of sales
- Sales 2004: $240,000
- Sales 2013: Over $3 million



Number of potential producers and existing aggregation efforts

Kanawha Region

Cabell, Clay, Kanawha, Jackson, Mason, Putnam, and Roane Counties
Data from 2014 producer survey.

The Kanawha region had 33 total respondents. The area highlighted orange depicts the zip-codes that had at least 5 farms producing vegetables currently or interested in future vegetable production.

Products

Producers in the Kanawha region grew 43 distinct products. The top five products grown were tomatoes, lettuce, green beans, cucumbers, and garlic.

Diversified Farms

Producers in the region are fairly diversified. 27% report producing something other than our survey options (including salt, eggs, honey, fruit trees, farm crafts, flowers, greenhouse products), 27% producing livestock or poultry, and 12% producing value-added products.

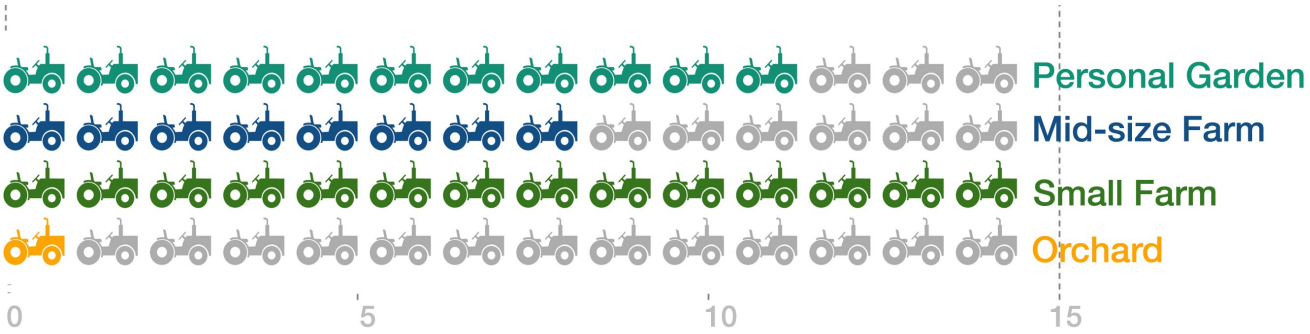
Jobs

13 farms have employees other than primary operator, totaling 34 employees. Of the 34, two are paid employees.

Farm Size

In the Kanawha region the highest self-reported farm types were small farms with a total of 14 responses. 11 indicated that they were personal gardens, while 8 identified themselves as mid-sized farms.

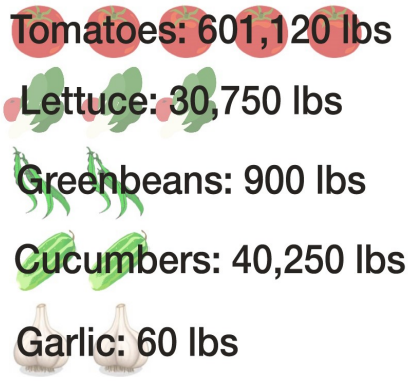
Farm Types in the Kanawha Region. Each tractor represents one farm respondent



Yield

We asked producers to indicate their yields for each product. While the response rates were low, we were able to estimate the total poundage for the top five products by converting respondents yields into pounds. These numbers indicate production for 2-5 producers that responded to the question.

Estimated yields for top 5 products



Willingness to Travel

Producers indicated that they would travel up to 200 miles to reach their best market, with an average of 49 miles. In the Kanawha region, access to customers, consistent sales, and price were the most common reasons producers chose to sell at their self-identified best markets.

Season Extension

14 producers in the Kanawha region use season extension technologies.

The most popular season extension method is high tunnels, with five producers indicating that they use them. Additionally three producers utilize greenhouses, furthering the ability to produce in the winter seasons and possibly accounting for the non-food crops mentioned under diversified farms.

Vegetable season availability

Season	Number of producers with product available
Fall	15
Winter	6
Spring	11
Summer	16

14%

of farms producing fruit/vegetables said that farming is their primary income.

33%

of farmers have a business plan and electronic accounting system. Only 18% have a production plan.

200

Maximum miles famers are willing to drive their produce to an aggregator, average is 49 miles.

1,404

Acres in production in the Kanawha region.

3 producers have vegetable products available in the winter

11 producers sold wholesale in 2012

22 producers would like to expand

7 producers have food safety plans in place

Kanawha Region Food Hub Potential

Regional Opportunities

High production, season extension, high interest in selling to a food hub, high current and potential production.

Key food hub attributes and services by producer importance

Lack of funding, regulation, lack of buyers, and transportation

Regional Challenges

Info from 2014 survey data

Resources

48% of this region's respondents have reliable internet

21% have a food safety plan

21% have delivery vehicle

15% have produce coolers

Potential Partners

- WV Farmers Market Association
- The Scratch Project
- City of Huntington Department of Development and Planning
- Unlimited Future
- SARE

Existing Aggregation Efforts

- The Wild Ramp
- KISRA
- J & L Foods
- Kanawha Valley CSA
- Mid-Ohio Valley Edibles

Food Hub Case Study: Local Food Hub, Charlottesville, VA—Non-profit [17]

Local Food Hub in Charlottesville, VA is a non-profit food hub that was founded in 2009. Founders realized that small and mid-sized producers were struggling to market their products. They collected information about how much local buyers would purchase locally if certain requirements were met (easy ordering, refrigerated delivery, liability insurance). Kate Collier and her founding business partner Marisa Vrooman conducted fundraising and received support from foundations and the Local Food Hub opened in July of 2009. Local Food Hub has since added an educational farm component to their operation as well.

Local Food Hub operates a warehouse outside of Charlottesville that purchases products from local producers and then sells them wholesale to buyers and distributors. They do extensive production planning, coordination, and product demand projections to assist their producers with scaling up. This helps ensure that prices are not inadvertently reduced by excess supply. Local Food Hub also donates 5% of their purchased food to local food banks. They have seven full-time and one part time paid staff, many volunteers, and 65 "partner/producers."

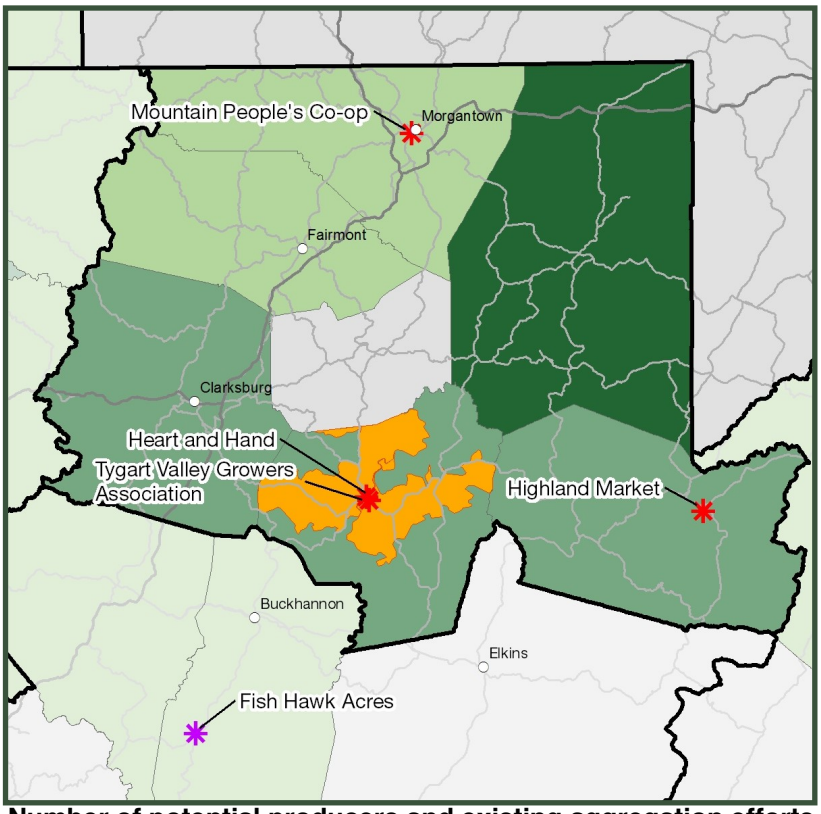
Start up costs

- Estimated Need of $300,000
- Obtained $10,000 from the Nelson County Economic Development Board for the business plan, $150,000 from a foundation, and $50,000 from community donations
- Received use of renovated warehouse as in-kind donation
- Received use of working farm as in-kind donation

Finances (as of April 2011)

- Annual budget is about $650,000
- $150,000 comes from its projects, the remaining $500,000 is supplemented by fundraising
- Projected warehouse self-sufficiency by 2015
- Breakeven point is $1.2 million in produce moving through the warehouse

A key aspect to note from this example is the time spent up front to create a viable plan and then time spent to reach out to their buyers. There are several cities in WV with a similar population size (Charleston, Huntington, Morgantown) and these population centers may be able to support a purely wholesale model like this one.



Number of potential producers and existing aggregation efforts.

North-central Region

Barbour, Harrison, Monongalia, Marion, Preston, Taylor, and Tucker Counties
Data from 2014 producer survey.

The North-central region had 27 total respondents. The area highlighted orange depicts the zip-codes that had at least 5 farms producing vegetables currently or interested in future vegetable production.

Products

Producers in the north-central region grew 41 distinct products and indicated the variety of products sold. The top five products mentioned were tomatoes, peppers, herbs, green beans, and raspberries.

Jobs

14 farms have employees other than primary operator, with a total of 2.5 paid employees and 11 unpaid.

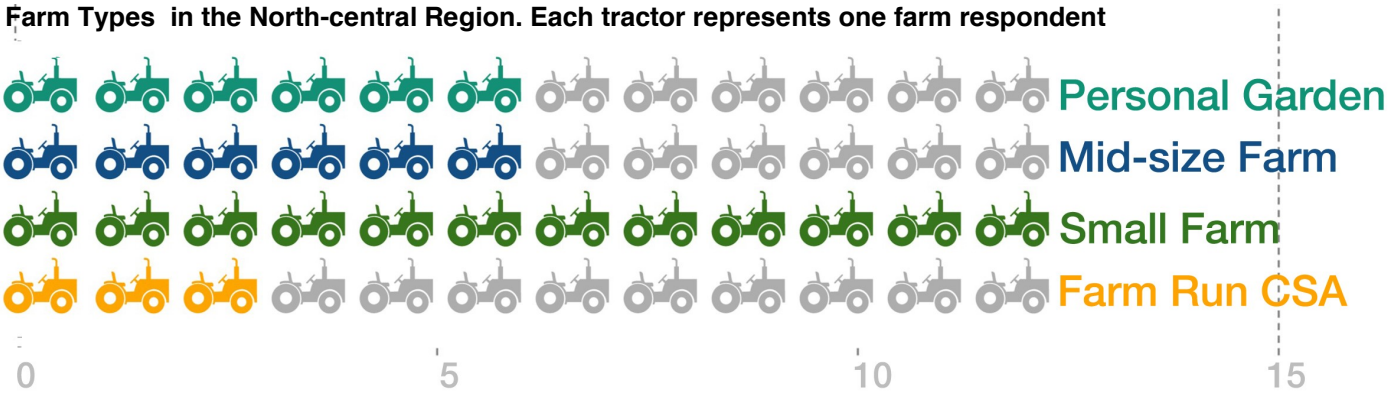
Diversified Farms

Producers in the region are fairly diversified with 37% producing livestock or poultry, 20% producing value-added products, 18% producing other products (bees, honey, eggs), 18% producing products not for human consumption, such as animal feed products, wood, compost, and more.

Farm Size

In the North-Central region, the highest self-reported farm types were small or mid-size farms (total of 18 responses). There were 6 producers that identified their farms as personal gardens. These producers may not be selling currently but could be future hub sellers. Three producers also identified themselves as farm-run CSAs.

Farm Types in the North-central Region. Each tractor represents one farm respondent



Yield

We asked producers to indicate their yields for each product, while the responses for yield were low we were able to estimate the total poundage for the top five products by converting respondents yields into pounds. These numbers indicate production for 3-8 producers that responded to the question.

Willingness to Travel

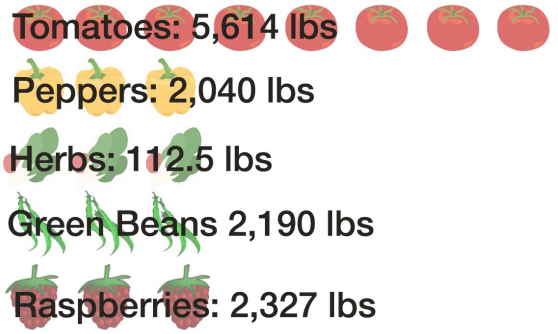
Producers indicated that they would travel up to 150 miles to reach their best market, with an average maximum distance of 44 miles. In the North-Central region, good prices, consistent sales, and access to customers were the most common reasons producers chose to sell at their self-identified best markets.

Season Extension

15 producers in the North-Central region use season extension technologies.

The most popular season extension methods are high and low tunnels, with 7 producers indicating high tunnel use and 5 indicating low tunnel use. Four producers indicated that they utilized greenhouses. Two producers indicated high tunnel growing feet, totaling 3,660 square feet of growing space.

Estimated yields for top 5 products



Vegetable season availability

Season	Number of Producers with Product Available
Fall	14
Winter	3
Spring	8
Summer	18

32%

of farms producing fruit/ vegetables said farming is their primary income.

28%

of farmers have a business plan and electronic accounting system. 22% have a production plan.

150

Maximum miles famers are willing to drive their produce to an aggregator, average is 44.

768

Acres in production in the North-central Region.

6 producers have vegetable products available in the winter

14 producers sold wholesale in 2012

16 producers would like to expand

6 producers have a food safety plan

North-central Region Food Hub Potential

Regional Opportunities

High production, season extension, high interest in selling to a food hub, and high current and potential production

Key food hub attributes and services by producer importance

Lack of funding, transportation, regulation, lack of central location, and interpersonal challenges

Regional Challenges

Info from 2014 survey data

Resources

70% of this regions respondents have reliable internet

22% have a food safety plan

37% have delivery vehicle

14% have produce coolers

Potential Partners

- Tygart Valley Growers Association
- Mountaineer Country Farmers Market
- Arthurdale Coop Store

Existing Aggregation Efforts

- Heart and Hand House Garden Market
- Highland Market
- Mountain People's Co-op

Case Study: New River Organic Growers Cooperative, West Jefferson, NC—Producer organization [14]

New River Organic Growers was founded in 2000. They opened a distribution center (2,000 sq. ft.) in 2013 that started as two garage doors with a cooler. They started out only selling to restaurants; they now sell to buyers clubs, retailers, and distributors as "New River Organic Growers."

The organization used to pick up from farmers at 3 different delivery locations. This process was very time consuming and disorganized. Their facility now provides a central receiving location, better product organization, freezer/ refrigerator storage for meats and cheeses, and allows for a winter market.

New River Growers Cooperative takes 20% from sales and farms receive 80 cents of each dollar.

Initially, they only worked with certified organic/transitioning farmers. New River Organic Growers changed its bylaws to make it easier for conventional farms to become involved and is now marketed as New River Growers. Conventional producers cannot use GMO products. For now they are managing conventional farms case-by-case and encourage low-spray.

New River Growers has been able to improve the success of their farms through pooling of resources for marketing and transport. Bulk purchasing of farming supplies, sharing and coordination of information, and general marketing of local food to the public through education.

Their system is a good model for replication in rural areas. The group started small, just selling to restaurants, and picked up 3 locations. They have now grown enough to maintain a small distribution site in a central area.

Facts:

- Offer deliveries in regional area
- Work with 80+ buyers
- Pooled purchasing
- Delivery truck
- Sales of $240,000 in 2012
- Sales of $450,000 in 2013

Key Findings

Existing wholesale sales

In all regions, farmers markets were the highest sales outlets mentioned; however, in two regions (Southeast and North-central) restaurants were 2nd and 3rd respectively, with retail space and institutions mentioned.

Potential

There is high production potential, but many producers face challenges reaching markets including distance, lack of storage infrastructure, and trouble accessing new markets.

Producer motivations

Consistent sales, price, and access to customers were the most important motivators for producers in reaching their best outlet. Any project seeking to increase production and provide a market outlet needs to understand and incorporate producer motivations to keep their business.

Distribution routes

There may be established distribution routes between locations, with existing projects and commercial distributors that could be explored. Backhaul partnerships with existing distributors could present a lower cost transportation option.

Season extension is a growing opportunity

There are high numbers of producers in the study regions that report using season extension or indicate planning to in the future. This presents a great opportunity for year-round sales.

Market demand

There is high regional and in-state demand for local foods. There is a $36 million gap between current production and fruit and vegetable demand in West Virginia.

Leveraging resources for impact

There are many existing initiatives to assist small and growing farms in the state of West Virginia. Any food aggregation project needs to partner with these organizations to maximize the investment in the state.

Many solutions may be successful

Due to the unique character of each region within the state (geographically, climactic, type of producer, interpersonal climate) there are many different approaches to aggregation that could be successful. A “Food Hub” project needs to be aware that the traditional model may not be the best fit.

Barriers

⇒ **Low food safety reporting**. There were low numbers of producers reporting established food safety plans in all regions across the state.

⇒ **Geography**. Transportation to potential sites remains difficult, even when sites are located in central areas. Farms are spread out and aggregating products can be a significant time and fuel -intensive investment.

⇒ **Funding** for infrastructure projects could be a barrier, and creative financing solutions may be necessary.

Opportunity

⇒ **Existing efforts** exist in each region. These efforts could provide valuable partnerships from general information sharing to partnerships on projects.

⇒ **Support from partners** including service providers, organizations, and technical experts.

⇒ **Awareness** of the growing importance of locally produced food has created momentum behind these efforts.

Potential Food Hub Organizational Structures

Producers were asked to indicate which potential food hub organizational structures would be most successful in their respective regions. Options included producer cooperative, multi-stakeholder cooperative, privately run business, government run facility, non-profit run, and "it doesn't matter to me."

Southeast: 40% said structure did not matter, 24% said producer cooperative

Kanawha: 24% said structure did not matter, 24% said producer cooperative

North-Central: 38% said it did not matter, 33% said producer cooperative

*All three regions had respondents explicitly comment that **government-run** hub structure was not a preferable option.*

Equipment:

Producers in study regions indicated that the most important equipment for them would be **access to cold storage** (27), **large batch canning equipment**(24), **warehouse space** (22), and **flash freezing** (20).

- 30 producers indicated that cold storage would be a very important attribute for a hub.
- 21 indicated that dry storage would be very important.
- 29 indicated processing would be very important.

Key Factors from Survey

Opportunities

- High production potential
- Significant use of season extension technologies
- Expressed interested in expansion
- Good land and water resources
- Existing efforts including supportive economic development, producer organizations, and support partners

Challenges

- Lack of transportation to aggregation points or potential buyers
- Lack of buyers
- Low demand for products in respondents immediate areas
- Lack of funding for infrastructure and projects

Recommendations

We recommend targeted project development to continue the development of food hubs in West Virginia. A project in any one of the identified regions could be successful based on this study. Project development is extremely reliant on the existing efforts in the area and any project planning should include collaboration with local and state partners, while recognizing that the solution for each region may be different.

Less is more.

⇒ Start small and only invest in infrastructure that is a necessity. Do not over-commit the project to costly investments [7].

A food hub has to be run like a business.

⇒ Even if it is run by a non-profit or has an educational orientation, the quality control, services provided, and customer support need to be well managed [3].

Planning, relationships and communication are key.

⇒ For any food hub, aggregation, or distribution project, it is very important that the project team outlines the specific issues at hand and then develops a project plan, and business plan, based on the best way to address it.

⇒ Relationships with producers, partners, and potential buyers are very important. Find the anchor farms and anchor buyers that believe in the mission and are willing to work with the project [13].

⇒ Communication. Ensure that there is clear marketing about what the project is, ensure all potential partners know about it, and listen to their feedback.

Choose a structure based on need

⇒ The structure of a food hub relies very strongly on the most pressing needs and the goals and scale of the project team. It is very important for organizations to have a clear mission and clear goals before determining the way the group will address the issue of aggregation and distribution through the creation of a formal organization/operation.

⇒ Organizational structures can change. Many hubs start as one structure and transfer or merge into a new one based on goals and members.

Find appropriate buyers for project

⇒ Make sure the initial buyer/partners are appropriate to project scale (see box below for buyer types).

High value-based buyers

May provide higher prices for product quality:

- Restaurants
- Health food groups,
- Business CSAs,
- Wellness programs,
- Retail markets

Value-based buyers

May provide lower prices but offer regular quantities:

- Restaurants
- Retail markets
- Private medical and assisted care facilities
- Hotels/event centers
- Specialty distributors

Quantity-based buyers

Traditional wholesale buyers. May require wholesale prices but offer high quantities:

- Public Schools
- Institutions (hospital, colleges, prison)
- Distributors/ processors
- Restaurants
- Retail grocery

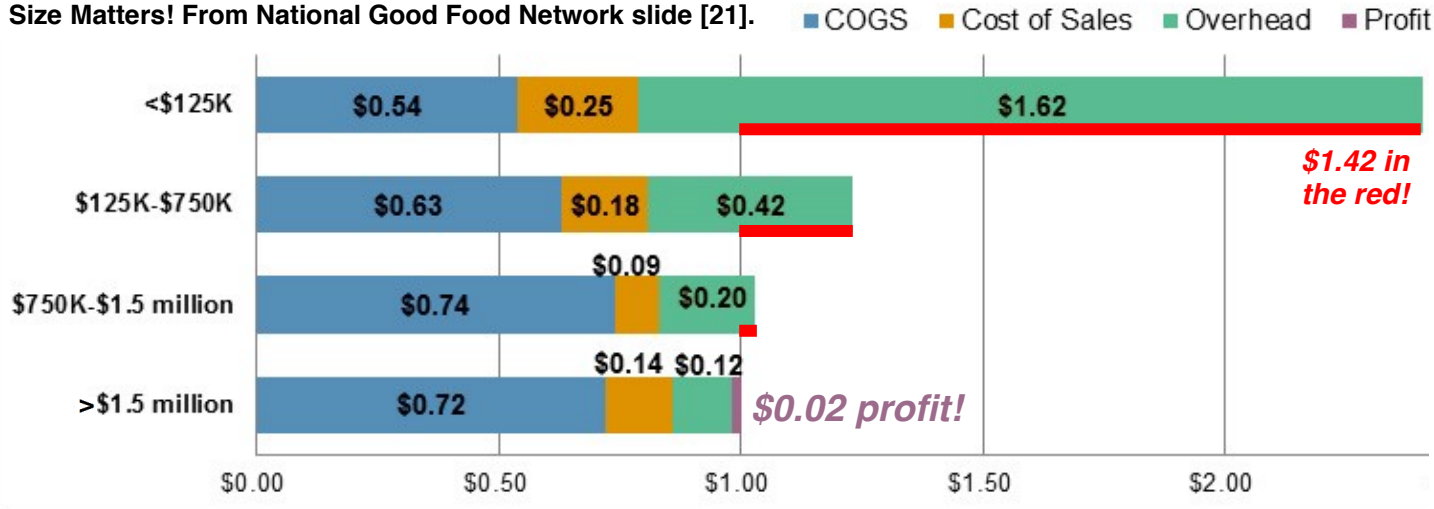
Food Hub Financials and Benchmarks

Food hubs are not a traditional industry sector and do not operate on the same level as a traditional business. The purpose of local food hubs is to bring local food to consumers. Because of the higher production costs and inherent inefficiencies in working with multiple producers, food hubs can rarely meet the profit margins of industrial food production and distribution businesses. Many food hubs have to diversify and rely on outside funding to maintain the facility and keep the value of the product intact. Food hubs can, in effect, serve to subsidize smaller producers with value-driven products.

Size Matters!

The size of any business, but particularly food hubs makes a large difference in the profitability. Start-up and smaller hubs are much more reliant on grant funding. Additionally, while not getting close to the conventional industry size, economies of scale still make a large difference in food hub profitability. Note, creating an economy of scale means that as the volume of business increases the cost per unit also decreases[20]. The chart below gives an overview of the profitability by size for the 48 food hubs included in the 2013 Food Hub Benchmarking Study. The economy of scale effects can be seen in this figure, where the largest food hubs have the lowest overhead percentage, and where the smallest have the highest overhead percentages. Maintaining a low overhead and reasonable Cost of Goods Sold (COGS) is very important.

Size Matters! From National Good Food Network slide [21].



Benchmarking

Benchmarking is the practice of looking at similar businesses or industries and comparing their costs, numbers and financials with yours to see how your business is functioning, and to see where it can potentially be improved upon. Traditionally, industry numbers are available for most business, however, food hubs are not a traditional industry sector and so Farm Credit Council, Farm Credit East, Morse Marketing Connections and the Wallace Center at Winrock International developed a food hub benchmarking program . Their studies examined financial data from 18 food hubs in 2012 and 48 food hubs n 2013 [21].

Average Scope of Operations 2013 [21].

Benchmark Scope of Operations for Food Hubs 2013 [21]	
Average Age of Study Hubs	**7** years
Average Revenue	**$ 2.83** million
Annual Operations	**276** days
Facilities—Square Footage	**6,936** sq. ft.
Facilities—Number of Loading Docks	**2** docks
Facilities—Delivery Fleet	**40,315** annual miles driven

This data can provide a valuable indicator of the range of performance between models within the food hub sector. It helps provide a comparison to peer group for similar food hub businesses, and provides a means to identify trends in the industry [21]. New and existing hubs can utilize this data to help them prepare and determine goals, and craft a reference for what their food hub businesses could look like.

We suggest all food hubs use benchmarking as a reference while developing their projects.

USA Food Hub Facts. From 2013 National Food Hub Survey[2].

Next Steps for Food Hub Development

For interested project partners:

Need for effective management appeared to be at the root of food hub challenges.

Any project planning should include potential partners and existing efforts outlined in the region, along with continued research to find additional partners as producers, buyers, and other partners change every year.

1. Develop project planning team

The most encountered barrier for food hubs was accessing capital.

Entities and organizations looking to develop a food hub in one of the identified regions should make sure to follow the following steps.

1) Reach out to identified partner organizations to determine local organizational interest.
2) Identify and contact interested key stakeholders and farmers (e.g., farmers that are willing to work towards production expansion).
3) Develop a project planning team that includes regional partners and stakeholders to outline goals, mission, and a development plan. It is important that this planning group is representative of the region and includes farmers and other stakeholders[13].

Hubs located in proximity to highly populated areas had lower reliance on grant funding.

4) Identify the organization or business that will carry out the project implementation. This could be an existing organization or a new one.

2. Create development plan

General findings indicated that the most financially successful hubs were for-profit and cooperative models.

5) Research and outreach - Does existing distribution infrastructure exist? What partners are already looking at this? Is anyone actively distributing? Are distributors running trucks through my area? Do backhaul opportunities exist?
6) Look at the number of farms in the project area. Find your anchor farms, find out who wants to expand and who will commit to project. A food hub needs a core group of anchor farms[13].

84% of food hubs offered distribution services and 82% offered aggregation services

7) Identify and characterize the market. A food hub will be most successful if it identifies core buyers willing to grow with the food hub.

8) Determine what services a hub needs to focus on distribution and marketing. Technical assistance? Marketing?

9) Start small. If one project is successful, additional services can be added later and improved based on lessons from existing efforts.

10) Explore and research potential sites to locate a food hub.

11) Choose a business model that best fits the interested stakeholders (e.g., coop, non-profit, private, etc.).

12) Explore financial models and funding options that fit the chosen business model.

13) Develop a timeline to help inform project milestones, key decisions, and other operations.

14) **Develop a strong business plan.** Every food hub operation will need a business plan.

The highest percentage (around 40% each) of food hub start up funds came from the start up organizations own capital, donations, in-kind support, and foundations.

81% offered marketing services for producers and actively helped producers find new markets.

3. Begin hub activities

15) Begin outreach to additional farmers (or farmer organizations, if available) to broaden potential supply.

16) Begin outreach and data collection from potential buyers. These can be institutional, summer camps, restaurants, or can be creative direct-to-consumer models such as larger CSAs (hospitals/ workplaces), or through other retail models (local food section in a store).

17) Find funding to get project started. Methods available will depend on the organizational structure of the project. Financing can be achieved through traditional financing or through other options including: “slow money”, community investment, grant funding, foundation funding.

37% reported that most or all of the producers had extended their growing seasons since working with the food hub and 31% had extended their product offerings.

Managing growth and balancing supply were the highest rated challenges facing food hubs in the US.

4. Re-evaluate/ check

18) Maintain demand (buyer) focus throughout, if the hub products are not meeting the buyers need then changes need to be made.

19) Re-evaluate services for efficacy and inefficiencies.

20) Look at other services that may be needed (e.g., further processing, frozen services, new products)

21) **Do not be afraid of change** but keep an eye on project goals.

Consultants, university partners, and other small business resources should be identified as potential partners for food hubs seeking to grow.

USA Food Hub Facts. From 2013 National Food Hub Survey[2].

Resources

Existing food hubs, economic development groups, service providers, non-profits, markets

Southeast:

- Greenbrier Valley Local Foods Initiative:
  108 Industrial Park Rd., Maxwelton, WV. 304-497-4300. www.greenbriervalley.org
- Monroe Farm Market
  www.monroefarmmarket.com, contact@monroefarmmarket.com
- Alderson Community Food Hub
  Alderson, WV, www.aldersonfoodhub.org, aldersonmarket@gmail.com
- New River Gorge Regional Development Authority
  116 N. Herber St. Beckley WV. 304-254-8115. www.nrgrda.org, info@nrgrda.org
- West Virginia Food and Farm Coalition
  411 Main St. Suite 215, Mount Hope, WV. 304-877-7920. www.wvhub.org/foodandfarmcoalition, foodandfarm@wvhub.org
- The City of Beckley Community Development
  Beckley WV. 304-256-1772 , www.beckley.org
- Farm to Table Market at Greenbrier Nurseries
  222 Pinewood Drive, Beckley WV. 304-256-5775, http://greenbriernurseries.com/
- Pocahontas County Produce on the Move
  Pocahontas County WV. http://www.brightsideacres.com/Pocahontas_County_Produce_on_the_Move/

Kanawha:

- The Scratch Project http://www.scratchproject.org/
- City of Huntington Dept. of Development and Planning
  Huntington WV, www.cityofhuntington.com
- Unlimited Future
  1650 8th Ave, Huntington, WV 304-697-3007 www.unlimitedfuture.org
- The Wild Ramp
  555 14th St W. Huntington WV. 304-523-7267 www.wildramp.org, info@wildramp.com
- Kanawha Institute for Social Research & Action (KISRA)
  131 Perkins Avenue, Dunbar, WV 304-768-8924 www.kisra.org
- J & L Foods
  2119 Stratford Road, Charleston WV
- Kanawha Valley CSA. Charleston, WV. https://sites.google.com/site/kanawhavalleycsa/home
- Mid-Ohio Valley Edibles. Spencer, WV www.movedibles.com

North-central:

- Tygart Valley Growers Association
  Regional. 304-457-1420, TVGA2013@gmail.com
- Mountaineer Country Farmers Market
  26 Gladesville Road, Morgantown, WV 304-291-8014 www.mountaineercountryfarmersmarket.com
- Heart and Hand House Garden Market
  106 South Main Street, Phillipi, WV, 304-457-5774, www.heartandhandhouse.org
- Highland Market
  737 William Ave, Suite 3, Davis WV. 304-259-5388, www.phffi.org
- Mountain People's Co-op
  1400 University Ave, Morgantown, WV. 304-291-6131, www.mountainpeoplescoop.com
- Arthurdale Coop Store
  ESSO Station, WV 92 Arthurdale, WV. 304-685-6226, www.arthurdaleheritage.org

General Resources

- WV Farmers Market Association www.wvfarmers.org
- SARE www.nesare.org/State-Programs/West-Virginia
- The Value Chain Cluster Initiative www.vc2.org
- The Small Business Development Center www.sbdcwv.org
- Report: Improving Systems of Distribution and Logistics for Regional Food Hubs, 2014 : http://www.cannetwork.org/documents/MIT_CAN_Food_Hub_ReportNovember2014_000.pdf

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Honey Glen

Michael Staddon
1911 Buffalo Calf Rd
Salem, West Virginia 26426
3047829610
www.honeyglen.com
michael@honeyglen.com

Products offered:

Raw honey, beeswax, bee pollen, propolis

Baggett Farm

Amy Baggett
101 GREENFIELD LANE
DANESE, West Virginia 25831
3046633713

amsummers@liberty.edu

Products offered:

pears, apples, watermelon, cantaloupe, beans, radishes, potatoes, sweet potatoes, pumpkins, squash

Sickler Farm

Lisa Sickler
1739 Chestnut Ridge Road
Moatsville, West Virginia 26405
304-457-6615
www.sicklerfarm.com
lisa@sicklerfarm.com

Products offered:

tomatoes, peppers, lettuce, squash, onions, garlic, strawberries, asparagus

Tyler Creek Farm

Aimee Figgatt
237 Figgatt Ln
Cross Lanes, West Virginia 25313
304.541.1649
Facebook/tylercreekfarms
aimeefiggatt@gmail.com

Products offered:

Carrots, pork, lettuce, cherry tomatoes

Jerill Vance Wood-

Jerill Vance
2874 Middle Rd
Culloden, West Virginia 25510
(304)690-0430

Products offered:

Heirloom quality furniture - customer designed and built with native hardwoods

D&E Orchards & Gar-

David Simpson
1086 Sugarlands School Road
Hambleton, West Virginia 26269
3044781043
Facebook
sdave4000@yahoo.com

Products offered:

FRUITS: Apples, Apricots, Cherries, Peaches and Pears. VEGETABLES: Beets, Broccoli, Red & White Cabbage, Carrots, Cauliflower, Celery, Eggplant, Sweet Corn, Cucumbers, Green Beans, Kohlrabi, Lettuce, Onions, Peppers, Red & White Potatoes, Sweet Potatoes, Pumpkins, Ramps,

Four Kids Farm

Jeff Gilbert
rr 1 box 99
Red House, West Virginia 25168
3045412622

wvgrapes@msn.com

Products offered:

I can grow what the market demands for the area, I have the land just not huge equipment or the help needed. I would list specialty produce, ethnic produce

Jennings Brae Bank

John Jennings and Mollie Toppe
5554 Mountaineer Highway
New Martinsville, West Virginia 26155
3044551314

Products offered:

Seasonal vegetables, grass-fed beef, pastured pork

New City Farms

Marti Neustadt
7830 Appalachian Hwy
Davis, West Virginia 26260
3048663361

marti.neustadt@gmail.com

Products offered:

Non GMO fed pork, chicken, eggs Tomatoes, cabbage, peppers, eggplant Herbs such as cilantro, dill, basil

Mountain Grown

Victor Skaggs
307 McKinney St.
Fairmont, West Virginia 26554
7608821504

victorskaggs@gmail.com

Products offered:

olives; apple, pear, plum, prickly pear purées; dried herbs

Possum Tail Farm

Jennifer Kahly
1771 Oak Grove
Terra Alta, West Virginia 26764
304-789-5556
www.facebook.com/PossumTailFarm
possumtailfarm@gmail.com

Products offered:

We raise Certified Naturally Grown grass finished beef, grass finished goat, pasture raised turkey, pasture raised chicken and pasture raised eggs. Our farm is free of GMO's, pesticides, herbicides, fungicides, hormones and antibiotics.

Davis Ridge Farm

Brandon Harden
PO BOX 222
Nettie, West Virginia 26681

Products offered:

Pork, Poultry, Lamb, Goat, produce starting 2015, tomatoes, peppers, lettuce, strawberries

L & M Farms

Marilyn Blake
1806 Buffalo Creek Rd.
Lost Creek, WV 26385
3047453237
https://www.facebook.com/pages/L-M-Farms/168574719871551?ref=hl
mrfrank654@frontier.com

Products offered:

Seasonal vegetables and fruits Poison Ivy Spray Fresh & dried herbs & herbal products/teas Brown eggs

Rising Moon Farm

Alfred Tuttle
3420 Little Sancho Creek Rd
Middlebourne, wv 26149
304-758-2745

aetuttle@hughes.net

Products offered:

Cut Flowers - but need transportation/ distributon assistance if more than 30 miles away

Sycamore Creek Farm

Julia Bolin
31 Bearsville Road
Middlebourne, WV 26149
304.758.2744
https://www.facebook.com/wvlocalfood
wvlocalfood@hotmail.com

Products offered:

Asparagus; shiitake mushrooms; eggs; salad greens; eggplant; peppers; tomatoes; squash

mt hollow farm

David ahrend
62 edgewood drive
Philippi, WV 26416
304-288-0777
mthollow farm @ facebook
mthollowfarm@gmail.com

Products offered:

tomatoes, kale, lettuce, peppers, beans, peas, squash, strawberries, raspberries, blue berries, garlic, onions, and other vegetables.

Manna Meal, Inc.

Jean Simpson
1105 Quarrier St.
Charleston, WV 25301
304-345-7121
www.mannameal.com
jsmannameal@wirefire.com

Products offered:

Can take anything producers are willing to give (can give tax receipts) and possibly we could purchase.

The Greenville Garden

Pamela Dalton
Route 1 Bo 94
Union, WV 24983
304-832-642
www.greenvillegarden.com
contact@greenvillegarden.com

Products offered:

Organically grown vegetables, fruit and free range eggs in Monroe County WV near town of Greenville.

Products offered:

Steven Roche
PO Box 3004
Beckley, WV 25801
304-921-0850

Garden Vegetables organically grown but not certified

christian farms

al darman
po box 297
spencer, wv 25276
304-927-3748
christianfarms.us
pd2526eh@bellsouth.net

Products offered:

horses goat meat vegatbles

parsons family farm &

mike parsons
326 drift run road
sandyville, wv 25275
304-761-4276

parsonsfamilyfarmgreenhouse@yahoo.com

Products offered:

greenhouse transplants

Simply Hickory Syrup

Ruby Griffith
PO Box 902
Milton, WV 25541
304-360-0132
www.simplyhickory.com
simplyhickory@yahoo.com

Products offered:

Shagbark Hickory Syrup

Whole Life Farm

Mary Beth Lind
390 Norris Ridge Rd.
Philippi, WV 26416
304-457-1420

lmlind13@frontier.com

Products offered:

Red raspberries

Family Roots Farm

Britney Hervey Farris
245 Hervey Lane
Wellsburg, WV 26070
304-266-0402
www.facebook.com/familyrootsfarm
familyrootsfarm@outlook.com

Products offered:

Sweet Corn, Potatoes, Green Beans, Tomatoes, Cabbage & Maple Syrup Small amounts of other seasonal produce also available.

Dogwood Hill Natural

Anne Brown
HC 73, Box 37
Alderson, WV 24910
304-445-7068

Sogwoodhillgardens@gmail.com

Products offered:

Certified Pork, Seasonal fruits and vegetables, Beeswax candles, Honey inSeason.

Gardner Farms

Larry Gardner
340 Gardner Ridge
Waverly, WV 26184
304-679-3769

larrygardner@wildblue.net

Products offered:

Tomatoes, (Blueberry, Blackberry, Raspberries projected for 2015)

Dunn's Produce, LLC

Kandy Dunn
502 Dunns Drive
Cameron, WV 26033
304-686-2344

madunn@frontiernet.net

Products offered:

tomatoes, cucumbers, (we can add additional products if there is a market.)

Wild Roots Produce

Rosalie Santerre
41 Freedom Lane
Sugar Grove, WV 26807

rosey.santerre@gmail.com

Products offered:

Wind Dance Farm

Leslie Devine-Milbourne
649 Virginia Line Rd
Berkeley Springs, WV 25411
304 258 4672
winddancefarm.org
wind.dance@frontier.com

Products offered:

We have a CSA with a 15 week delivery period, with an option to purchase 10-15 weeks of food.

Feagans' Mill at Wheat-

Daniel Lutz
28 Feagans' Mill Lane
Charles Town, WV 25415
304 725 0966

p.lutz007@gmail.com

Products offered:

Can't offer the products because of county regulations

LeJa Produce

Gene Bennett
359 Teays Lane
Hurricane, WV 25526
304-561-5713

lejaproduce@gmail.com

Products offered:

Lettuce, collards, kale, apple butter, apple jelly, apple pear jelly, pear jelly

Pars farm

Bahram Roshanaei
2084 Centenary Road
Bruceton Mills, WV 26525
304-581-4808

Products offered:

Eggs, hay, seasonal fish

Wild Berry Ranch

Victoria Schweizer
637 shaffer St
Terra Alta, WV 26764
304-288-3470
www.wildberrryranch.com
Victo-
ria@WildBerryRanch.com

Products offered:

Beef, Berry and Bee products (body care)

Madison Avenue Gar-

c/o Japheth Stump - Owner
529 6th Avenue
Huntington, WV 25701
3047101143

madisonavenuegarden-
ers@gmail.com

Products offered:

Vegetables and herbs, locally grown in Cabell County, without pesticides.

Mt. View orchard and

Rebecca and Michael feller

Levels, Wv 25431
3048130929

Mrmfeller@yahoo.com

Products offered:

We grow a multitude of fresh fruits and vegetables right on our farm in WV.

Church View Farm

Steven Martin
619 Peach Tree Farms Lane
Romney, WV 26757
304-822-3878
www.churchviewfarmwv.com
churchview-
farmwv@gmail.com

Products offered:

honey, eggs, chicken, lamb, seasonal produce

Products offered:

Angelica Bennett
117 E Anderson Street
Lewisburg, WV 24901
(304) 647-5682

angelicabennet-
ty@yahoo.com

H&W FARMS

BRANDON WARD
5029 THOMAS RIDGE ROAD

LEON, WV 25123
304-444-0387

Products offered:

BULK SWEET CORN, TOMATOS, SQUASH

Hanna Farm

Woody Hanna
HC 68 Box65
Renick, wv 24966
304-645-5469

mwhanna@access.k12.wv.us

Products offered:

Purebred Angus cattle
Sweet Corn

Products offered:

Rodney M. Wallbrown
381 Staffhouse Rd.
Pt. Pleasant, WV 25550
304-675-5886

RMWallbrown@mail.wvu.edu

Products offered:

sweet sorghum molasses, pumpkins of all sizes, watermelons and potatoes

ShadyOaksFarm

Leslie Burdette
Rt.1 Box 209
Poca, WV 25159
304-586-2681
Facebook
Shadyoaksfarm@aol.com

Products offered:

Same as listed

Mountain Top Mead-

John Robinson
95 Lighthouse Dr
Sod, WV 25564

johnrobinson@ucwv.edu

Products offered:

Vegetables, Cattle, Pigs, Eggs, Apples, Blackberries

T L Fruits and Vegeta-

Tommye Lou Rafes
221 Montview Road
Caldwell, Wv 24925
304-645-4044
Monroefarmmarket.com
Tommyerafes@ AOL.com

Products offered:

A variety of fruits and vegetables

Santa Croce Farm

David Lester
P.O. Box 216 US Route 19, Behind Post Office
Enterprise, WV 26568
304-592-2693
www.santacrocefarm.com
davidplester@aol.com

Products offered:

Variety of Vegetables, berries and fruits. Vermicompost-Organic Plant Food

JahUniversal

Mason McMonegal
28 Kingwood street
Morgantown, Wv 26505

Products offered:

Garlic, peppers, wild crafted herbs,

CCHS Greenhouse

Robert Morris
Hayleydale Farms 1 Panther Drive
Clay, WV 25043
304-587-4743

agmorris14@yahoo.com

Products offered:

Fall beans, lettuce, cabbage, kale, broccoli, etc.

Beeappy Farm

Larry & Jane Caswell
1918 Brush Run Road
Gay, WV 25244
3043722280

larry@beeappy.com

Products offered:

Small hatchery for turkeys, chickens and Cornish from day old to slaughter, bee keeping equipment and honey processing.

Fane Irvine, sr.
4922 brush country road
marlinton, wv 24954
304-799-4849

sandrairvine53@gmail.com

Products offered:

fresh vegetables in season

little valley farm

cathy napier
6 atha road
west hamlin, wv 25571
3046547265

cathynapier@aol.com

Products offered:

potatoes, corn, beans, cuk's, squash, spinach tomatoes, peppers, greens.

Mountain Diamond

Barbara Miller
98 Atlantic Rd
Tunnelton, WV 26444
304/568-2322

mountaindiamondlong-horns2004@msn.com

Products offered:

Halves or quarters of Texas longhorn beef , individual cuts of frozen Texas longhorn beef, produce in season, Texas longhorn snack sticks, jerky and summer sausage

Byrnside branch farm

Dirk McCormick
Hc 76 box 3a
Union, Wv 24983
304 667 3699

Cornmaze@westvirginia.com

Products offered:

Vegetables pumpkins

J and K Farm

John Brenemen
posted box 122
scarbro, wv 25917
3048946064

mejohnnyb@msn.com

Products offered:

Beans, tomatoes, potato

Berea Gardens

Bob Gregory
97 Milo Rd
Orma, WV 25268
304-655-7389
bereagardens.org
bgregory@bereagardens.org

Products offered:

lettuce, broccoli, cauliflower, greens, seasonal vegetables

Beaver Farms

Steve Beaver
845 Smith Ridge Road
Sistersville, Wv 26175
3047713956

sbeaver845@frontier.com

Products offered:

Fruits and veggies

Sunset Berry Farm &

Kent Gilkerson
Rt 1 Box 336A
Alderson, WV 24910
304-646-3784

sunsetberry-farm@hotmail.com

Products offered:

Strawberries, Sweet Corn, Green Beans, Green Tomatoes, Red Tomatoes, Cucumbers

JP Family Farm

Peggy Burgess
554 Joy Cabin Run Road
West Union, WV 26456
304-873-2056

pdburgess@msn.com

Products offered:

tomatoes, peppers, potatoes, winter greens, strawberries, various other vegetables all grown without pesticides and no GMOs

Deer Hollow Farm

Wayne Brown
3354 WILLIAMSBURG RD
WILLIAMSBURG, WV 24991
3046451339

wayne1317@gmail.com

Products offered:

Tomatoes, peppers, lettuce, kale, spinach, sweet potatoes, and strawberries.

T&T Organics, LLC

Jason Tartt
37 Valerie Street
Vallscreek, WV 24815
304-875-4763

jaytartt@gmail.com

Products offered:

Vegetables

Nutty Knoll Farm

Willow Kelly
PO Box 64
Lewisburg, Wv 24901
304-667-4548

Nuttyknollfarm@hotmail.com

Products offered:

Fruit

Standard Agriculture

Don Smith II
202 2nd Ave
Tornado, WV 25202
(304) 541-3339

thegvg@gmail.com

Products offered:

Industrial Agricultural Hemp and Commercial Timber Grade Bamboo

Perennial Favorites,

Donna Rumbaugh
2202 Madison Avenue
Huntington, WV 25704
304-633-3680

plantnerds@gmail.com

Products offered:

Micro greens, other greens, herbs.

Gritt's Midway Green-

Penny Goff
14844 Charleston Road
Red House, WV 25168
304-586-2449
grittsgreenhouse.com
goffpl@comcast.net

Products offered:

Hydroponic Tomatoes, lettuce, cucumbers and herbs

Liberty Hill Farm

David S Ferrell
3146 Waiteville Road
Waiteville, WV 24984
304772-3524

david.s.ferrell@gmail.com

Products offered:

STARTING FArmerTBD

Covenant Community

Mike O'Connell
136 Center Ave
Wheeling, WV 26003
304-231-7960
www.facebook.com/C3CommunityGarden
green-housegrower69@gmail.com

Products offered:

Round Right Farm

Sunshine Vortigern
145 Dream Field Ln
Terra Alta, WV - West Virginia 26764
3047895887
www.roundrightfarm.com
roundrightfarm@gmail.com

Products offered:

Vegetables!