"Local" as a Resiliency Strategy

Wallowa County Food Hub Feasibility Study



December 2017 Kristy Athens



"Local" as a Resiliency Strategy

Author & Design

Kristy Athens, MS Food Systems & Society
Outreach Specialist, Northeast Oregon Economic Development District (NEOEDD)
For more information about this report, contact NEOEDD at 541-426-3598 or www.neoedd.org

December 2017

On the Cover: Greenhouse in Wallowa. Credit: Lauren Johnson

Table of Contents

Acknowledgements	2
Executive Summary	3
Introduction	4
Brief History of Agriculture in the United States	4
Reason and Methodology for Food Hub Feasibility Study in Wallowa County	5
Wallowa County Food Systems Profile	7
Economy	7
Food Security	7
Current Options	9
Food Hubs as Component of Community Self-reliance and Resiliency	11
Surveys: Producers and Wholesale Purchasers	13
Producers	13
Wholesale Purchasers	15
Recommendations	19
Aggregation and Order Fulfillment	19
Building and Facilities	20
Value-Added Products and Branding	22
Economic Impact	24
Farmer/Farm Worker Job Creation	25
Encouraging New Farmers	25
Food Hub Employee Creation	26
Further Study and Funding	27
Appendices	
A: Survey questions	30
B: References and Resources	31

Acknowledgements

Much of the demographic and economic profile information is cited by its original sources and was gleaned from NEOEDD's Comprehensive Economic Development 2017 Update (which the author updated) and from two locally produced community food assessments (CFAs). Joshua Russell completed an initial CFA in 2011, and Lauren Johnson completed an update in 2015. Both authors were RARE Americorps members who worked in the NEOEDD office.

Thanks to Sara Miller for her support on this project, as well as many members of the Oregon Community Food Systems Network, particularly Katrina Van Dis of the Central Oregon Intergovernmental Council. The COIC's "Central Oregon Food Hub Feasibility Study" and "Economic Impact of Local Food Producers in Central Oregon" were instrumental in this work. The feasibility study helped me articulate my survey questions and consider the format of this report. The economic impact report provided a model that informed my recommendations. Please see Appendix B for a list of other reports and webinars that provided guidance and valuable information.

This report was funded with a generous grant from Meyer Memorial Trust. Many thanks to Wallowa County's producers and wholesale purchasers who provided data and anecdotes for this study.

Executive Summary

Rural communities across the United States are searching for ways to improve their economic activity and their "resiliency," a term that has come to the fore in economic development circles to mean a community's ability to withstand major disruptions in national/global systems, such as food and fuel supply, due to a natural-world or political disturbance. Many communities are focused on the food system as a major weak point in the whole resiliency picture, and are exploring ways to improve and strengthen local food systems. Meyer Memorial Trust supported Northeast Oregon Economic Development District's request for funding to look at the possible role of a wholesale food hub to increase Wallowa County's resiliency.

A 2017 USDA study (SR77 vol 4) finds food hubs to have survived the 2008 Recession, noting "food hubs may be more resistant to shockwaves produced by unfavorable economic conditions." The National Sustainable Agriculture Coalition, a Washington, D.C.-based USDA policy advocate, sees the role of the food hub as re-defining distribution models in a way that supports local economies: "Mid-tier value chains assist farmers and ranchers who are too large or remote to substantially engage in marketing directly to consumers but too small to profitably engage in high volume, low margin raw commodity production. They are designed to capitalize on the increasing demand for high quality products from family farms adhering to strong environmental and social values."

Research methodology included literature review, interview and two surveys—one for producers and one for wholesale purchasers including retail groceries, the hospital, and manufacturers who use food ingredients. There were 36 total respondents, including most of the prominent small growers in the county.

General findings from the surveys and interview indicate that there is interest in a food hub, but current local production rates might not provide sufficient quantity to justify one. There is also a gap between those farmers who have extensive experience (including being part of a multi-generational farm or ranch family), and those who are just beginning.

Recommendations include increasing and diversifying local production, especially produce and heritage grains, and launching the food hub in a series of stages, so it can grow without becoming overextended and jeopardizing the project. At least at first, it seems logical for an existing organization to launch the hub as one of its programs, which would simplify its operational needs and protect its assets during the fledgling years.

All alternative food initiatives, nationally and internationally, are fledgling and moving forward against tremendous odds and global corporate power. This food hub study is no exception. Information-sharing, in the form of reports, webinars, conferences and other means, is a major contributor to the exploration of alternative food systems, of which a food hub is one element. The author hopes that this report will help inform decision-makers in Wallowa County about the potential for increased resiliency in its food system as well as the potential to feed more locals and support more local farm- and food-based entrepreneurs.

Introduction

Brief History of Agriculture in the United States

Agriculture in "developed" countries such as the United States has experienced more than a century of mechanization; "modernization" in the forms of increased storage and processing technologies, and increased use of chemical pesticides and genetic modification of seed stock; and commodification of the food system. The resulting increased yields have succeeded in driving down the cost of food in a general sense but have "externalities" such as theft of land from Native Americans, ecological damage, depletion of soil, exploitation of labor, erosion of farming communities, and limitation or abandonment of traditional smallholder farming and indigenous gathering methods. Modern agriculture and food processing have also created a range of sub-quality foods that are highly processed and loaded with added sugar, salt, unhealthy fats, and chemical flavorings, and which have limited nutritional value. As opposed to "real food"—that which is fresh, nutritionally dense, and/or minimally processed—this commodity-grade food, as well as sugary drinks such as soda and juice, have become staples of the U.S. diet.

Another liability of commodity-based agriculture is a lack of variety of fresh and handcrafted food. The Wallowa Valley, for example, fed the Native Americans who lived here for tens of thousands of years. After white settlers displaced them, the valley hosted numerous dairies, grain mills, and farms. In 1940, Wallowa County had 989 registered farms, of which 60 percent (N=596) were smaller than 500 acres. By 2012, the number of farms dropped to 522, and the *average* size is 867 acres.

Farms by Size (Acres)	In Wallowa County	In Oregon
1 to 9	70	9,119
10 to 49	123	12,663
50 to 179	111	6,932
180 to 499	75	2,978
500 to 999	54	1,389
1,000 or more	89	2,358
Total	522	35,439

Wallowa County's dairies and mills are gone. Most of the grain from the 33,000 acres of wheat and barley that is grown here is shipped to Asia.

In the early 2000s, in the United States generally and Wallowa County specifically, people began to seek to reverse the momentum that is famously characterized in the USDA's 20th-century advice to farmers: "Get big or get out." Industrial agriculture proved profitable in the short term but is <u>now understood</u> to have so many "externalities" (damage to environment, indigenous peoples, etc.) that it no longer considered "sustainable," that is, viable for the long term. Farmers' markets, agriculture subscriptions (called Community Supported Agriculture [CSAs]), Farm to School, roadside farm stands, and community gardens began to pop up as an attempt to re-connect the people who grow food with the people who eat it. In addition, food grown organically (with no or limited use of pesticides, and using only natural fertilizers such as manure and compost) has grown in sufficient popularity to move the products out of the "hippie" cooperatives of the 1970s and into successful "natural foods" chains such as Whole Foods, and even sections in giant retail stores like Walmart.

While small farm endeavors such as these have continued to grow over the past two decades, their overall impact on U.S. agriculture remains minimal. Only about <u>0.8 percent</u> of all U.S. cropland and <u>0.5 percent</u> of all U.S. pasture was certified organic

in 2011. In 2016, \$1.65 billion of organic produce was <u>imported to the United States</u>, mainly from Mexico, Turkey, and the Global South (for U.S. customers, mainly Central and South America and Southeast Asia). Many food-systems organizations have identified "ag in the middle," currently defined as farms that gross \$250,000 to \$500,000 per year, as the next great hurdle in the reclamation of sustainable agriculture.

Ranching has seen similar change. A small number of livestock producers raise animals for sale in "branded beef" programs that serve niche markets, such as Country Natural Beef. A few small ranch owners also sell cattle directly to their customers, taking advantage of custom-exempt slaughter or transporting live animals to a USDA-certified slaughterhouse, but the majority of cattle are sold to commodity markets and end up in Midwestern feedlots. At one time in Wallowa County history, sheep were more populous than cattle, but currently compose <u>approximately 3 percent</u> of the <u>number of cattle</u> in the county (N=1,200 and 35,500). (Note: The most recent number for sheep is from 2013; the most recent for cattle is 2017.)

In order to reestablish "ag in the middle," in the 2000s producers and nonprofit organizations began to explore ways of aggregating product in order to attract wholesale purchasers. One of the strategies is to create an entity called a "food hub." This can be a virtual or physical location. Virtual food hubs provide a match-making service for producers and consumers of food. They sometimes serve wholesale purchasers only, and sometimes include retail customers. Physical food hubs can provide a number of services, including washing and cold storage of produce.

Food hubs re-engineer the food "value chain"—the route food takes on its way to the consumer's plate—with a goal of keeping more power and profits for the producers rather than for multinational food conglomerates. A 2017 USDA study (SR77 v.4) estimates that "there are approximately 360 active food hubs in the United States, three-quarters of which were established during the past decade."

Reason and Methodology for Food Hub Feasibility Study in Wallowa County

As noted in the following economic profile, Wallowa County has similar struggles as any rural, ag-based county. But the additional factor of its geographic isolation makes a strong case for enhanced efforts toward community resiliency, which can be defined as self-sufficiency and ability to withstand large-scale disruptions such as catastrophic wildfire, Cascadia Subduction earthquake, etc. For this reason, NEOEDD chose to explore the possibility of a food hub in the county. This began as an economic development inquiry and, over the course of data collection, it became evident that it is also a community-development inquiry.

Questions were:

- How is food currently procured in the county?
- How many producers in the county sell their food locally?
- How many of them would sell more if they could, and what are the barriers to doing so?
- How many wholesale purchasers buy local food?
- How many of them would buy more if they could, and what are the barriers to doing so?

These questions formed the basis of two surveys that were distributed to Producers and Wholesale Purchasers. Farmers and ranchers are generally reluctant to disclose their private businesses' income. The USDA implements a "D" in their reports to indicate "Withheld to avoid disclosing data for individual farms." This D is often used in rural areas with low population, because it would be easy for other local residents to figure out which numbers in the Ag Census report belong to whom. This makes U.S. agriculture research challenging.

In keeping with this, a few producers refused to complete the NEOEDD food hub survey because it asked for financial information. Therefore, the recommendations in this report are based on incomplete information but are influenced by personal testimonials collected by the author in confidential conversations.

To determine the viability of a Wallowa County food hub, a literature review of existing studies was performed, webinars were attended, regional data was gathered, surveys of growers and purchasers were conducted, and follow-up phone calls were

made. The author participated in a three-day tour of wholesale food hubs in November 2016 via the Oregon Community Food Systems Network. Economic scenarios were explored based on this information. The food hub "industry" is nascent and iterative—people across the United States are exploring food hubs in a variety of forms as a means of re-localizing the food system (part of the study of "alternative food institutions"). Throughout the process of researching this topic, new studies were being published and new webinars offered. They continue to be.

Wallowa County Food Systems Profile

Economy

The history, topography, and other elements of Wallowa County are well documented in <u>NEOEDD's 2012 and 2015 Community</u> Food Assessments. Rural Oregon lags behind urban/metro Oregon in both wages and availability of jobs. While rural Oregon

(all counties except those of the Willamette Valley, Deschutes County, and Jackson and Josephine counties in southern Oregon) makes up 17 percent of the state's population, it only offers 13 percent of the state's jobs. The region known as "Northeast Oregon," which includes Wallowa county, still struggles to recover from the significant effects of the Great Recession that began in 2008. In 2016, the annual average unemployment rate in Wallowa County was 6.7 percent, compared with Oregon's rate of 4.9 percent and the United States' of 4.5 percent.

It is important to remember that unemployment rates do not include people who have given up looking for a job, nor do they differentiate between those employed full- or part-time, nor whether their employer offered a benefits package upon hiring.



2015 figures, compared with 2014. https://datausa.io/profile/geo/wallowa-county-or/

The region's agriculture sector continues to be strong. Sales of both crops and animal products increased in all counties from 2011 to 2012. Wallowa County experienced a <u>7-percent increase</u> in gross farm and ranch product sales from 2011 to 2012. The 2012 Census of Agriculture lists Wallowa County's total value of agricultural crops sold as \$46.6 million. <u>Top sales by commodity</u> group are from cattle/calves, hay crops, and grains/oilseeds/bean/peas.

Note: Oregon State University's Oregon Agricultural Information Network uses USDA Census of Agriculture data, which is collected every five years; the most recent data available is from 2012. There was a new survey distributed in 2017, but the results of this aren't expected to be released until February 2019.

Geographical remoteness may result in a lagging economy, which may result in poverty. Outside of agriculture, tourism is a major industry—but provides mainly seasonal, low wages stemming from service-sector jobs associated with the "leisure and hospitality" (tourism) industry. The average wage per job in Wallowa County in 2016 was \$33,700, and Oregon \$49,452. There is little manufacturing—which generally yields permanent, higher-paying jobs with benefits—based in the county due to added transportation costs. The slow economy results in poverty for many residents. In 2014, 16.7 percent of county residents were reported to live below the federal poverty standard, and 15.7 percent to experience food insecurity. Subsequently, residents' buying power for food (and everything else) is compromised.

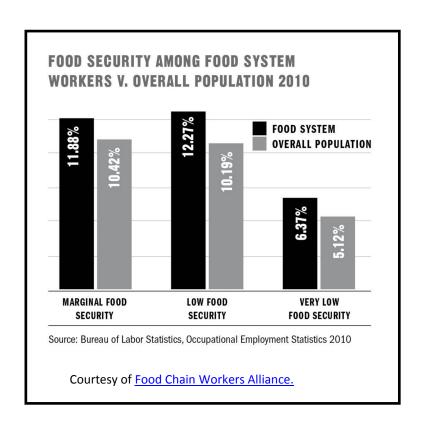
Food Security

Food hubs are lauded for achieving social-capital goals as well as economic goals. The 2016 <u>U.S. Census American Community Survey</u> estimates the county's population at 6,946, a slight decrease from 2010. The county comprises 3,082 households, with an average of 2.18 persons per household, and a median household income of \$40,581. Approximately 10 percent of Wallowa County households utilize <u>SNAP</u> each month, which is valued at \$994,440 annually (N=311).

In 2012, RARE Americorps member Joshua Russell conducted a survey of local consumers via <u>a public survey</u>. When asked whether participants felt that food is accessible in the county (any food, not just locally produced), only 83.3 percent answered "yes." No one in Wallowa County is technically in a food desert, which the USDA gives a very specific definition; however some residents live in remote canyons that can become inaccessible during the winter.

Economy and "food insecurity" (otherwise known as "hunger") are closely linked. Phillip Kennedy-Wong of the Oregon Food Bank notes that "Oregon's economy improved over the past few years, but personal income growth is not keeping up with the cost of living and thus has not translated into greater food security. The number of Oregonians relying on food assistance remain at recession-levels. The Oregon Hunger Response Fund is a critical state program, which influences Oregon's network of 20 regional food banks' ability to distribute food cost-effectively."

Despite the strength of agriculture as an industry in the county, hunger can also affect farmers and farmworkers. In 2012, 64 percent of farms reported sales of less than \$10,000, and another 18 percent reported sales of up to \$49,999. More than half of farmers earn off-farm income, both for the financial support and for benefits such as health insurance. Farmworker income is not tracked consistently for a number of reasons, but there is some quantitative data (see below) and ample qualitative data indicating farmworkers cannot afford to buy the food they pick or process.



Current Options

Wallowa County's approximately 7,000 residents have limited choices when it comes to purchasing food locally:

Wallowa County Food Retailers

Location	Store Name	Store Con- tact	Description/ Notes	Retail Area	Local Food Policy	Main Suppliers
Wallowa	Food City	Ena May Dempsey, manager	Privately owned grocery	3,200 sf	None. "We're not allowed to sell produce if it's not [USDA] inspected."	URM Stores Inc. (Spokane); proprietary snack and soda vendors
Wallowa	Lower Valley Farmers' Market	Debborah Reth, manager and building owner	Cooperative; open limited hours	462 sf	Most produce, eggs and processed foods grown in Wallowa County. Approximately 15% (seasonally) comes from Hermiston, Walla Walla, or Baker County	Local/regional growers
Lostine	M Crow Mercantile	Jane Harschman, manager	Convenience/ specialty store; sells hardware and gift items in addition to food	3,200 sf	"As much as possible": produce, eggs, jam, mustard, sourdough starter, garlic powder, meat, baked goods. "I consider [Hill Meat Co.] from Pendleton local." Of M Crow's food products, approx. 25% comes from local sources. Produce, eggs, and milk are seasonal	URM; United Natural Foods, Inc. (UNFI, Ridgefield, Wash.)
Enterprise	Safeway	Steve Hunter, manager	Corporate grocery; has pharmacy and bakery and deli (unattended); sells household and seasonal items, cosmetics, etc.	24,000 sf	"Local" defined as coming from Washington, Oregon or Idaho	Vertically integrated corporate supplier; proprietary snack and soda vendors
Enterprise	Dollar Stretcher	Mike Goss, owner	Privately owned grocery; has deli with processed foods	10,000 sf	Inmaha tomatoes, corn. Local bison and beef. "But I can't buy everybody's everything."	URM; Costco (Clarkston, Wash.); proprietary snack and soda vendors
Enterprise	Ruby Peak	Leslie Lamb, owner	Privately owned natural foods grocery; sells nutritional supplements; offers soup, sandwiches and smoothies during the lunch hour	1,950 sf	15-20% local growers (food items, not other merchandise), particularly in summer. Produce plus local beef, goat and chicken. Ensures vendors use organic methods before buying from them	UNFI; Spokane Produce
Joseph	Mt. Joseph Family Foods	Marco Rennie, manager	Privately owned grocery; smokes meats and cheeses; deli with processed foods	5,500 sf	"Try to buy as much as possible." Local produce includes tomatoes, potatoes, apples from Imnaha, Baker City	Super Valu (Portland); proprietary snack and soda vendors

Other than Safeway, these are all independently owned stores. In addition to these retailers, it is not unusual for consumers to travel to La Grande to visit large stores like Bi-Mart and Grocery Outlet; to Lewiston, Idaho, to visit Costco; to Walla Walla, Washington, to visit Andy's Market (specializing in vegan and bulk items); or even to Portland to visit Trader Joe's or one of the many "ethnic" or organic food stores. Even some wholesale purchasers shop this way. People order food to be delivered from Azure Standard, a value-added producer and distributor based in Dufur, Oregon, and from online retailers including Amazon and specialty food vendors such as Blue Apron.

Direct-sale, seasonal sources of produce include the Wallowa County Farmers' Market (WCFM), a produce booth run by someone who drives to Enterprise from Hermiston on Tuesdays, Liza Jane's Farm Stand on Hwy. 82 and other roadside stands; and occasional other street-corner vendors. Food items are occasionally posted on Facebook pages such as "Wallowa County Classifieds" or "Wallowa County Produce Stand." In 2017, the WCFM implemented a Community Co-op Booth, which hosted produce from local gardeners who may not have had enough product for an entire booth, further increasing the amount of locally grown food available to Wallowa County residents. There is also gleaning between neighbors and from fruit trees, and wildcrafting of morel mushrooms and huckleberries.

Sources of animal protein include "custom exempt" beef, goat, or lamb (ordering a live animal slaughtered via Dale's Mobile Slaughtering [based in La Grande] and processed at Wallowa Valley Meats [Wallowa] or Stafford's Custom Meat [Elgin], or trucked out of the county for slaughter and processing). Hawkins Sisters Ranch acquired an Oregon State exemption in 2016, allowing them to slaughter, process and sell, by the cut, up to 20,000 fowl (chickens, turkeys, and ducks) without USDA inspection. Many Wallowa County residents also hunt and fish recreationally.

Food Hub as Component of Community Self-reliance and Resiliency

Resiliency is defined as the ability to "bounce back" from a trauma or disruption, and is also associated with "self-sufficiency" or "self-reliance." As is true for most places in the United States, self-sufficiency in Wallowa County is a major facet of the regional persona, but in actuality most products are brought in from elsewhere. Ironically, most of the food that is grown in the county is exported to international markets, while most of the food consumed is imported from other areas in the United States and from the Global South. This makes remote areas like Wallowa County especially vulnerable to disruption of existing supply lines.

There are only three roads in and out of Wallowa County: Hwy. 82 leads approximately 75 miles to La Grande and Interstate 84; Hwy. 3 leads north to Lewiston, Idaho; Oregon Route 39 winds through the Wallowa Mountains and ends near Halfway, Ore., which is in turn 54 miles from Baker City (also on Interstate 84). The "39 Road" is completely impassable from October to June (or later); the highways are often temporarily closed in the winter due to snowfall and ice. Considering these distances in miles is misleading, as all are winding roads that weave through canyons and mountains, often with significant elevation loss and/or gain. For example, the road to Lewiston is 93 miles but takes two hours in good conditions.

There are two public airports that are limited to use by small aircraft and lack control towers (Enterprise Municipal Airport and Joseph State Airport), a U.S. Forest Service airport in the Wallowa-Whitman National Forest, and seven private landing strips.

The expected 9.0 Cascade Subduction Zone mega-earthquake in western Oregon/Washington is projected to result in a failed electrical grid, broken supply lines of food and other goods, including gasoline, to inland destinations including Eastern Oregon. This disruption could last for months or longer. Supplies can come to Wallowa County from inland, but this will require extra transportation and will be seasonally challenged.

These threats to Wallowa County's resiliency make a strong case for an improved local food system. While it's unlikely the county could be completely self-reliant in total isolation, any improvement will strengthen the local economy, increase the amount of fresh and nutritious local produce and meat, and, hopefully, increase the number of local producers.

Community food system development can improve resiliency in a number of ways. Purchasing food from local growers can help plug the leak of money spent on non-local food purchases. It was estimated in 2011 that if residents of Wallowa County increased local food purchasing to 15 percent, \$1.6M dollars could be generated for the local economy annually.

There are other benefits as well. With locally distributed and consumed food, food safety concerns are more easily traceable. The direct connection with customers can build trust and social capital. Small-scale farms often produce a variety of crops, contributing to biodiversity which helps support the long-term sustainability of ecosystems by building resiliency and reducing susceptibility to disease or natural disasters. The freshness of local foods can provide greater nutritional benefits that can contribute to the health and productivity of the populace.

As is the case across the United States, the largest growth in agriculture is with industrial-scale farms. The <u>USDA ERS reports</u> that in Wallowa County between 2002 and 2012, by far the greatest growth was in farms grossing more than \$500,000 per year, with 82-percent growth. The smallest category of farms, less than \$9,000 annually, fell by 7 percent. There was 11-percent growth in farms grossing \$10,000-\$49,000, and slight growth in farms grossing \$50,000-\$499,000.

In spite of this, farmers' and ranchers' direct sales to the public are strong in Wallowa County. A 2012 <u>Community Food</u>
<u>Systems Assessment</u> reported that per capita sales were \$35.92, compared with \$11.37 in Oregon generally. There was a 179.2-percent increase in direct sales, per capita, in Wallowa County from 2002 to 2012, when county farms reported total

direct sales of \$252,000. The industry appears to still be recovering from the 2008 recession—2007 sales were \$313,000 in Wallowa County and \$56.4M in Oregon (\$43.90 per capita in Wallowa County).

Agriculture Sales Comparisons in Wallowa County

2007	2012	% Change from 2002 to 2012	% Change from 2007 to 2012
\$313,000	\$252,000	179	81
Per capita: \$43.90	Per capita: \$35.92		

Source: 2014 Wallowa County Community Food Systems Assessment

While value-added products can create a great deal more income than unprocessed produce, very few farms take advantage of this opportunity—just 8.8 percent of farms in Wallowa County (9.3 percent in Oregon). "Adding value" entails changing a raw product in some way, including processing such as making jam or salsa, cooking into a soup or other food item, culturing as with cheese, baking, drying, or smoking. The 2014 report "Building Resiliency: The Case for Community Food Systems" lists value multipliers between 1.5 and 1.95, depending on the product.

Wallowa County has seen growth in the number of farms that are raising "specialty crops" (fruits, vegetables, tree nuts, dried fruits, horticulture, and nursery crops); however the numbers are small. In 2012 there were 18 farms that reported selling any amount of fruit, berries, and/or tree nuts; 67 farms with poultry and/eggs; and 12 farms growing vegetables, melons, and/or potatoes. There may be overlap between farms within these categories; many farms that grow specialty crops are diversified.

The role of a food hub in a resilient local food system has been studied in earnest for about 15 years. The Wallace Center's National Good Food Network is the nexus for studies, strategies, and other examinations of food hubs. Organizations across the country have been exploring various options, both for-profit and non-profit, co-operative and corporate. Some food hubs simply aggregate and store; some market the produce under a brand; some act as a pass-through. Some are under the wing of a larger organization, and some *are* the organization. Some have economic development as a mission, and some equity in food access.

A 2017 USDA study (SR77 vol 4) finds most food hubs to have survived the 2008 Recession, noting "food hubs may be more resistant to shockwaves produced by unfavorable economic conditions." The National Sustainable Agriculture Coalition, a Washington, D.C.-based USDA policy advocate, sees the role of the food hub as re-defining distribution models in a way that supports local economies: "Mid-tier value chains assist farmers and ranchers who are too large or remote to substantially engage in marketing directly to consumers but too small to profitably engage in high volume, low margin raw commodity production. They are designed to capitalize on the increasing demand for high quality products from family farms adhering to strong environmental and social values."

Surveys: Producers & Wholesale Purchasers

Input from local producers and wholesale purchasers was mainly acquired via online surveys, which gave people an opportunity to share information when it was convenient, as project timing led data collection to occur during the busy summer season. There were also some follow-up calls, and information given to the author verbally. This being a small county, there were times when the author was pulled aside at public events, at the store, etc. by people who wanted to share ideas about the study.

The author distributed two surveys via Survey Monkey—one for producers and one for wholesale purchasers including retail groceries, the hospital, and manufacturers who use food ingredients. There were 36 total respondents, though not every one answered every question. The survey questions are listed in Appendix A.

Producers

Most prominent small growers in the county participated in the survey. Commodity-level producers (wheat, hay, cattle) were not engaged for this research since both the scale of their operations and the export destinations for their products are

inappropriate for this study and unlikely to change. There is a potential for future collaboration with commodity-level producers to re-direct a portion of their crops to local markets and/or to lease/donate small parcels of land (20 or fewer acres) to beginning or small farmers who are seeking land for specialty crops—this will be explored further in the Recommendations section.

Twenty-nine percent of the producers who participated in this survey (N=14) have been farming less than five years, and 36 percent have been farming or ranching more than 31 years. Like the "Ag in the Middle" that refers to production/income, there is also a gap between those farmers who have extensive experience (including being part of a multigenerational farm or ranch family), and those who are just beginning. As there is no official licensing or other requirement to begin farming, there is no way to gauge the skill or knowledge level of new farmers. None of the ranchers surveyed are new to the profession (the newest has been ranching 15 years), which seems indicative of the larger food system—novices are more comfortable being responsible for plants than they are for animals, and the capital investment is smaller.

Thirty-six percent of the producers who participated in this survey are utilizing less than five acres of land; 21 percent utilize 21 to 50 acres; 29 percent utilize more than 500 acres in ranching (only one of the farmers in this study farms more than 100 acres, and that is for grains that are distilled).

Q2 For how many years have you been a farmer/rancher?

Answered: 16 Skipped: 1

Less than 5 years

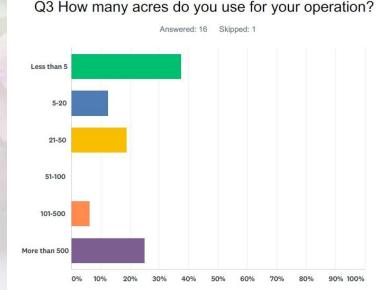
5-10 years

21-30 years

41 or more years

30%

40%



One rancher also sells eggs and honey. Some of the farmers grow pigs, chickens (broilers and layers), and goats (for meat and milk).

Only one farmer sells more than \$100,000 per year, which is because s/he sells to restaurants in a metropolitan area. This farmer has the best income-to-acre ratio, with \$2,000 to \$4,762 per acre (the range correlates with the selected survey response).

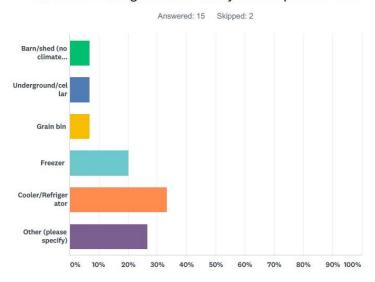
The majority of sales (67 percent) is direct-to-consumer, including the ranchers who utilize the exemption from USDA meat inspections. Forty-seven percent of these producers also indicated they sell to wholesale customers, and/or some combination of the two (survey participants were allowed to select more than one choice, and also write in answers). The majority also have

sold to an institution, such as a restaurant or a grocery store. One grower has donated food to a local school and hospital (as well as the food pantry), but not held a wholesale account with those institutions.

The most common storage facilities are cold and frozen storage (53 percent). Twenty percent of respondents do not process their crop; 40 percent said they wash, chop and/or bag produce and then freeze it. Some is pickled or otherwise preserved, or prepared and served (for example, one producer also runs a catering business). Meat is cut and wrapped, and usually frozen, by a processor.

Thirty-eight percent of respondents (N=5) are happy with their existing facilities; 23 percent (N=3) are not. Comments included needing more cooler and freezer space, and

Q8 What storage facilities do you use prior to sale?



seasonal processing bottlenecks for meat processing. The barley grower mentioned needing more grain augers.

The question of what price producers would be willing to pay for additional facilities wasn't well answered, and responses varied widely. Some respondents indicated in the comments section that they simply didn't know what to pay for such services. Prices suggested for cooler space ranged from \$2 per square foot per month to \$20-\$30. Aggregation and wholesale pricing was consistent, with 10 cents per \$1 of sales. Processing (washing, cutting, and/or packaging, per pound) ranged from 10 to 50 cents. Rental of commercial kitchen had one response: \$18-\$25 per hour. Distribution (per cubic foot, per mile within Wallowa County) had two responses: "\$10-\$20" and "Unknown." One respondent wrote, "If overall combined costs exceed 20% I will choose other markets." Other entries in the Comments section:

- "Hard to say on any of these without closer analysis, but willing to pay for services."
- "I may be interested in providing some of those services (cold storage at chicken facility, kitchen at homeland)" (This refers to Hawkins Sisters Ranch, an Oregon-inspected poultry and rabbit facility, and the Homeland Project's Tamkaliks site in Wallowa.)
- "I occasionally have customers who say they wish they could rent a [private meat] locker, but this is rare."
- "If the hub could help sell meat to wholesalers, I would be very interested."

Producers were asked when they would use a food hub, and for what. The results were fairly evenly balanced between fresh and processed food. Fresh produce, unsurprisingly, had its greatest need from July through October, particularly in September. The need for food hub services by meat producers peaks in the fall months, when most slaughtering occurs, but the need for storage continues year-round. Estimated meat-storage needs exceeded 400 pounds per producer every month; produce was more reserved at up to 200 pounds per month.

Wholesale Purchasers

This survey had 19 respondents and reached at least one representative of 11 separate wholesale purchasers of food:

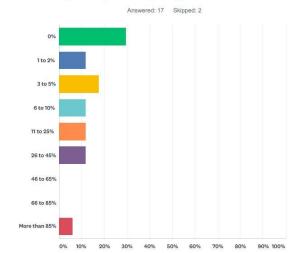
- Restaurants (4)
- Grocery stores (3)
- B&B (2)
- Hospital (1)
- Hotel (1)
- Caterer (1)
- Maker of food item (1)
- Maker of non-food item (1)
- Coffee shop (1)
- Assisted-living community (1)

Representatives of Wallowa County schools were not reached due to the survey's timing (summer vacation and then the busy beginning of school year). It is known that the Joseph Charter School has had a farm-to-school program in the past and receives food donated by The Magic Garden (TMG), a local effort headed by the Joseph Methodist Church. TMG also preserves food in a commercial kitchen at the church that is then offered to the public in exchange for donations at the Wallowa County Farmers' Market and other venues. The manager of TMG participated in the producer survey.

One-third of respondents purchase food products from a non-Wallowa County source. One buys more than 85 percent of their inventory from Wallowa County. Sources include:

- Food Services of America (weighted average 3.67)
- Sysco (w.a. 3.0)
- Local grocery stores (which, as noted above, in turn get their food from out of the county) (w.a. 2.9)
- Azure Standard (w.a. 2.86)
- "I grow my own" (w.a. 2.6)
- Wallowa County producers (directly) (w.a. 1.78)
- Costco (w.a. 1.43)
- Non-Wallowa County producer (directly) (w.a. 1.33)
- McDonald Wholesale Co. (w.a. 1.0)
- Local foragers (w.a. 1.0)
- Grocery Outlet (w.a. 1.0)
- Cash & Carry (w.a. 1.0)

Q6 Of your average monthly food/ingredients budget (referenced in Question 3), what percentage is grown in Wallowa County?



Not all respondents' answers added up to 100 percent. The greatest weighted average was "Other," but the survey did not provide an opportunity to list other sources. The strength of the "I grow my own" category is somewhat surprising, and probably skewed by what is assumed to be Lower Valley Farmers Market, which claimed 70 percent.

It's important to remember that percentages here belie amounts of food. Nearly 60 percent (N=10) of respondents have a wholesale purchasing budget of \$5,000 or less per month (N=10). Three respondents each noted \$5,001 to \$10,000 and \$10,001 to \$25,000 per month. Only one respondent indicated a budget of more than \$75,000 per month (a grocery store). Nearly 30 percent of respondents have no food whatsoever that comes from Wallowa County; the rest have 45 percent or less, with the exception of one answer of "more than 85 percent."

In keeping with budget numbers, 53 percent reported average monthly gross sales, for products containing a food ingredient, of \$5,000 or less. A couple of respondents selected each intermediate category, with three selecting \$25,001 to \$50,000, and then one (same grocery store) indicated sales of more than \$75,000 per month.

Fourteen buyers ranked their purchases considering the following attributes

- Quality (weighted average 5.79)
- Price (w.a. 4.79)
- Organic (w.a. 4.5)
- Origin (w.a. 4.29)
- The individual's or company's reputation (w.a. 3.21)
- Processing such as being cut into pieces (w.a. 3.08)
- One invoice rather than many (w.a. 2.92)

"Organic" as an attribute came in higher than the author expected, since so little organic food is offered in the county. The low ranking of the single invoice as a consideration is also surprising, as dealing with a bunch of small invoices is a common complaint throughout the alternative food system, and one of the respondents discussed this issue with the author verbally. That "Price" scored high is not surprising, as it is the main obstacle facing mainstream acceptance of organic food. If more mainstream purchasers (Safeway and a number of conventional restaurants) had participated in the survey, the author assumes that "Price" would have been the first priority.

"Local" is currently an important buzzword in the food world. The word was defined by respondents to mean anything from only food produced in Wallowa County, to "produced within 100 miles," to the entire Pacific Northwest. Purchasers were asked about their policy to carry local food, and whether they feel their customers value local food offerings. Most (62 percent) do not have an official policy regarding purchasing "local;" two have an official policy supporting local purchases and three "don't have an official policy and sourcing WC-grown food is not a priority." The hospital noted that, "As a health care institution, we must follow state and federal regulations in regards to meat, eggs, poultry, pork and dairy for example. Must be USDA inspected when we buy local beef."

In spite of all this, 85 percent felt that their customers value "local," and 15 percent were indifferent—no one indicated that their customers don't value it at all. One retailer noted that consumers' desire to buy local is limited in some cases by their economic situation. A B&B wrote that eating locally grown food is part of the expected experience of their guests.

Q9 How do you define "local" in regard to sourcing food or food ingredients?

Answered: 14 Skipped: 5

#	RESPONSES	DATE
1	Wallowa County, Oregon or Washington. Depends on the product and requirements for freshness. If I can find it closer to home, I try.	8/24/2017 8:49 AM
2	Wallowa COunty sourced	8/10/2017 2:18 PM
3	City, County, State. I source the organic dried fruits & hazelnuts in Oregon.	8/4/2017 2:12 PM
4	Within the state	8/2/2017 9:50 PM
5	Locally grown	8/1/2017 12:21 AM
6	Local to me comes from products produced in Oregon, Washington and Idaho as well as from within the county.	7/27/2017 11:22 AM
7	Wallowa County grown or processed.	7/25/2017 5:36 PM
8	Regional (i.e., as far away as Prosser, WA or Portland, OR) although we prefer to purchase within the county when we can.	7/6/2017 10:06 AM
9	Pacific Northwest	7/5/2017 10:03 PM
10	Dollar Stretcher	7/5/2017 12:44 PM
11	Wallowa County, then Oregon then pacific NW, then US	6/20/2017 2:38 PM
12	Produced within 100 miles.	6/13/2017 5:22 PM
13	Wallowa & Union County	6/13/2017 4:54 PM
14	Mainly Wallowa Co if it's grown here, maybe extending to NE OR if it's not grown here but it is in a neighboring community	6/5/2017 9:35 AM

The main barrier (N=9) to buying local was availability, meaning amount of product available at one time—a store needing 100 pounds of something with one delivery, rather than 10 pounds delivered 10 times over the course of two weeks. Seasonality was the next most popular, and then cost and "regulatory issues" each had three. "Delivery issues" came next. Consistency, quality, and "hassle of dealing with individual producers" each had one vote. Two people selected "none."

Asked how wholesale purchasers would prefer to source their Wallowa County-grown products if they were to acquire them, most popular (64 percent) is straight from the grower. Nearly as popular (57 percent) was sourcing from a Wallowa County-based food hub aggregator or from a virtual (online) food hub. Thirty-five percent would still use Wallowa County grocery stores (which could suggest that there is a misconception of how many local products local stores offer). "Grow it myself" was popular with 29 percent of respondents. Least popular were the farmers' market and commercial distributors. There was an option to select "Other" and write something in, and no one did. This was a multiple-choice question; percentages do not total 100.

These answers demonstrate a desire for locally grown food, and for a local distributor. Even if the food hub limited purchasers' ability to work directly with growers, it appears that purchasers still want the product and would use the food hub as a source for connecting with participating farmers and ranchers.

The need for a number of value-added services were queried. Most popular (57 percent) was having product delivered. Next was receiving produce washed, chopped and/or bagged. Packaging was generally considered important, whether it was produce, grain, or meat. Processing was less important, and one respondent requested no services at all. The hospital representative noted, "Due to the large volume of food we serve and inability to maintain staffing levels, we rely on food that is more processed as far as lettuce that is already cut, baby snack carrots, and pre-washed and sorted herbs." Another respondent would like more USDA-inspected meat (her facility is unable to purchase custom-exempt meat).

Many respondents were interested in either forward-contracting (agreeing to purchase specific quantities of crops at the beginning of the planting season), or at least giving a farmer or rancher input about their needs without signing a contract. Only 21 percent (N=3) said they would not forward-contract at all. Slightly more respondents indicated that Grade A/1 products were not necessary (as opposed to imperfect produce and unusual cuts of meat); one even noted in the comments that they would like both.

If local products are used, they are advertised. The most popular method (86 percent) is/would be printed material (menu, flyer, sticker) and the second most popular (79 percent) is verbally. A B&B noted, "We promote via our website content that we serve local food when we can and always mention [it] at breakfast." ("Website" as an answer was inadvertently left out of this survey question.)

Respondents were asked if they would need the services of a food hub themselves. The data that was collected shows an overwhelming desire for access to a commercial kitchen, which is puzzling because that is the only resource listed in the survey that is actually available in the county. Also puzzling is that "Distribution" was the fourth-most popular choice, considering that having product delivered was the number-one value-added service requested in a previous question. Freezer and cooler space were also popular.

What to pay for these services was a bit harder for respondents to answer. Twelve of 19 respondents skipped the question altogether; more than one noted here or elsewhere that they weren't sure how to respond. The answers that were given noted a rate of \$10 per square foot for storage in either a cooler or a freezer, and \$10 per hour to use a commercial kitchen. Public meat lockers for rent were not considered a priority. Delivery was valued at \$10 per destination.

In addition to survey responses, grocery store contacts also offered anecdotal information when they were contacted for information about their square footage and local-food purchasing policies. Mike Goss, owner of the Dollar Stretcher in Enterprise, said that he goes out of his way to support local producers, but that there are limits:

One of the problems you'll find is value. I can get tomatoes from—well, I don't know where they're coming from, Mexico maybe—from my regular distributors and pay 75 cents a pound. When I'm buying from my two Imnaha growers I'm paying double that. In order for it to work, it has to be a stand-out product. That's the challenge. Nobody has a problem paying more for tomatoes, or corn. But if it's not stand-out it can't compete with commercially grown food. Something like 6 Ranch beef is much higher than the stuff I buy from my regular suppliers. But there's more nutritional qualities that make people want it. People are willing to pay \$6 a pound for it or Stangels' buffalo, but I can get \$4 a pound for my regular hamburger from URM or Costco. [Buying from local producers] is good but it needs to be profitable for me. I'm [sympathetic], but I can't do it as a charity.

Marco Rennie, manager of Mt. Joseph Family Foods in Joseph, also sells local produce in-season and additionally sells house-smoked cheese and meat. "The smoker works various ways," he says. "We get the cheese from our primary wholesaler. We get some meat some locally, some from our wholesaler. Up until June [2017] we butchered wild game and cattle, but we had to stop because we're lacking skilled labor to do the butchering. We will start it up again if we can hire someone with the skills."

Leslie Lamb, who owns Ruby Peak in Enterprise, works with a number of small-scale local vendors but also noted that a food hub would need to provide equal or better service than regional distributor UNFI, which "delivers stuff for \$35 a week and brings it into the store for me" (Ruby Peak has no loading or staging area). The local vendors bring their products directly to the store as well.

Recommendations

Existing food hub literature reveals a number of things—mainly, that the success of the food hub model is not guaranteed. A 2017 USDA study of failed food hubs (SR77 vol 4) found that "based on national data on food hubs, statistical analysis on active and inactive food hubs reveals that such variables as legal status, business model, location, hub competition, and consumer demand do not indicate consistent factors as to why some food hubs fail while others succeed." At the same time, the study also found the aggregate survival rate of food hubs since 2005 to be approximately 88 percent, "well over the survival rate for all types of new businesses."

Part of the problem may be the notion of equating "economically viable" with "successful." Instilling social values into our capitalist economic system generally requires a sacrifice of profit, unless consumers can be convinced to care about the intangible benefits of supporting the model. An example of relative success would be the "price premiums" generally accepted with purchasers of organic food, in large part due to the marketing efforts of the USDA National Organic Program, numerous national and regional nonprofit organizations, third-party certifiers such as Oregon Tilth, and national lobby groups such as the Organic Trade Association and American Grassfed Association. Still, organic sales remains a small fraction of all food sales in the United States, at approximately 5 percent.

Additionally, shirking the economies of scale from which Big Ag profits also poses a challenge to food hubs. In other words: Going small is more expensive. This is the reason many food hubs organize as nonprofits: to raise charitable funds to subsidize operations. But doing so brings its own set of issues, including the need to assemble a board of directors and implement charitable/educational programming. This model makes more sense for food hubs that have a distinct social justice mission.

The author doubts that a food hub could singlehandedly revive the Ag in the Middle segment in Wallowa County. However, with a few "anchor purchasers" that regularly purchase large quantities, the food hub could bolster the incomes of the smallest segment, so that annually its farmers are grossing closer to the \$25,000 end of the data point than to the \$1,000 end, and encourage more small operations to break ground. Important questions for a potential food hub are:

- What business model should be used (LLC, nonprofit, B Corp, cooperative)?
- Should the hub act as a pass-through, or take possession of the product?
- Will the hub collect exclusively Wallowa County produce and meat, or bring in product from elsewhere?
- Will the hub provide distribution, collaborate with existing delivery companies, or require on-site pick-up?
- How large should the facility be?
- Where should it be?
- Should the building be purchased or leased?
- What equipment is needed, and how would it be acquired?

These questions are considered below, not in sequential order.

Aggregation and Order Fulfillment

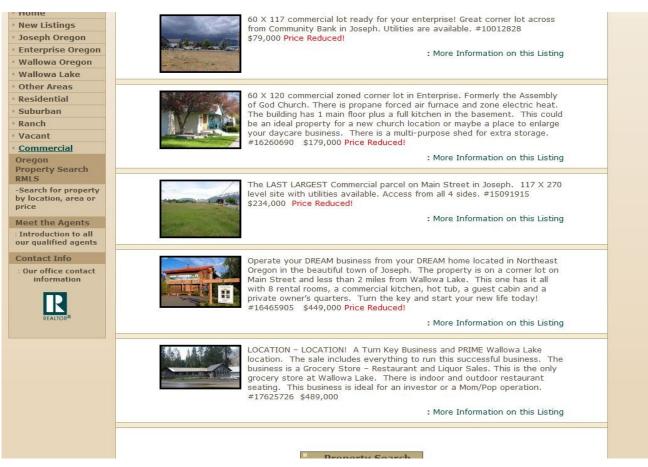
There are a number of types of food hubs that are physical places, and there are also online services, from national databases like Ecotrust's <u>FoodHub</u> and <u>Farmigo</u>, to regional hubs like North Country Food Hub in Boone, North Carolina, or the <u>Kenai</u> <u>Peninsula & Anchorage Food Hub</u>. Many online hubs also sell retail, directly to consumers.

The commitment to occupy a building is a serious one. An alternative could be to work with <u>Food4All</u>, a Bend, Oregon-based technology platform that allows small food producers to sell both online and in person, while giving purchasers a directory of producers in their area. Food4All as a platform is still fairly new, so this recommendation is somewhat tentative. The advantage is that, unlike many online hub options, Food4All provides invoicing services and point-of-sale technology (useful to producers that also have a CSA, sell at a farmers' market, etc.). Growers in Baker County are using it and working to hone the delivery side to range from Baker to Umatilla counties.

A major challenge for Wallowa County is its distance from a metropolitan area. Most successful hubs are within 100 miles of a large city; La Grande (population 13,000) is 75 miles away; Boise (populations 223,000) is 150 miles; Walla Walla (population 32,000) is 85 miles, and Portland (population 640,000) is 325 miles. At least one Wallowa County farmer is known to drive to Portland on a regular basis, and a number of meat producers have buyers in Portland as well.

Building and Facilities

Offering an online sales service would not help producers who need more physical storage space. There are generally few commercial properties for sale at any given time, and purchasing a building would be difficult to leverage for a start-up food hub. What seems more feasible, especially at the beginning, would be to take advantage of one or more existing facilities.



Totality of Wallowa County commercial properties offered in August 2017 by one broker

One reason is to keep overhead lower by renting/leasing existing structures instead of purchasing one large enough to grow into. Another is to increase the project's acceptance by avoiding the perception of preferential treatment of one area over another. There has traditionally been a schism between "upper valley" (living in or near Joseph or Enterprise) and "lower valley" (living in or near Lostine or Wallowa) residents, based on socioeconomic and other factors. There are even two different

farmers' markets; one in Joseph and one in Wallowa. Working with locations throughout the valley could help to bring the entire county's farmers, ranchers, and food systems supporters together behind this project. A van or other vehicle might be necessary to act as a conduit between locations, but this is still a lesser investment than a building. Existing possible facilities (which would need to be contacted for negotiation):

- Lower Valley Farmers' Market (Telephone Building), in Wallowa
- Hawkins Sisters Ranch, in Wallowa
- Homeland Project/Tamkaliks, in Wallowa
- Community Connection, in Wallowa (food pantry is located here)
- (Former) Lostine Tavern, in Lostine
- South Fork Grange, in Lostine
- Old hospital building (Wallowa Resources), in Enterprise
- Community Connection, in Enterprise (food pantry is located here)
- Cloverleaf Hall, in Enterprise
- Christian Church, in Enterprise
- The Place (Methodist Church), in Joseph
- Liberty Grange, in Joseph
- Hurricane Creek Grange, in Joseph
- Community Center, in Joseph
- Methodist Camp, south of Joseph

In addition, a number of restaurants lease out commercial kitchen space, and occasionally storage space, on a case-by-case basis. Other churches may also have space available to their members. Imnaha producers could be based in Joseph and Troy/Flora producers in Wallowa.

What might work would be to hire someone to (among other duties) broker and schedule smaller spaces across the county, while working toward a larger, centrally located facility that could be grown into. Creating a cooperative would be the most administration-intensive option to achieve this. Something less formal, such as a shared cloud-based spreadsheet, could also suffice depending on how many producers were involved.

The size of the leased spaces within the building could vary. Ecotrust opened two buildings in 2015 in Portland called <u>The Reddon Salmon Street</u>, which leases 20,000 square feet of storage space in ambient temperature, cooler, and freezer storage bays. 2017 monthly rates for these spaces are:

- \$45 per pallet for dry-racking (ambient temperature)
- \$60 per pallet for pallet storage in cooler or freezer
- \$30 per shelf for walk-in accessible cooler or freezer (also \$100 per rack, \$200 per half-bay, \$400 per full bay)

Pallet storage at The Redd accommodates up to 2,000 pounds. As Wallowa County producers indicated more conservative needs, noting up to 400 pounds of meat per month and 200 pounds of produce, the food hub's lease units could be much smaller. A Wallowa County Food Hub might start with as little as 500 square feet, if there is no processing of food and only storage.

The freezer space is anticipated to be in demand year-round, due to the number of meat-growers who are interested in a hub's services. The limitations of Wallowa County's growing season, even with season-extenders, could result in cooler storage being more seasonal. However, storage crops like root crops and possibly apples could be stored year-round (separately).

Equipment needed would depend on the chosen buildings' existing offerings, and could include a forklift for moving pallets, the pallets themselves, shelving, stainless steel tables, produce washing stations, bins. If the food hub aggregates and packages food, packaging, labeling equipment, scales and other equipment, access to clean water and drainage, and a larger facility would be needed. Administration tasks would require a computer, back-up storage, internet access, desk and chair, a telephone, and office supplies.

Value-Added Products and Branding

"Value-added" refers to the act of changing produce or meat from its original form. This could be as simple as washing and cutting carrots into small pieces, or as elaborate as canning salsa with many ingredients. The most popular service noted by

producers in the survey was cooler/freezer storage, followed by cutting/packaging. A couple of purchasers (particularly the hospital) noted that their produce *must* be purchased cut, while most wholesale purchasers were interested in "quality" and other factors over processing. Other than meat processing, which must be performed by a USDA- or state-inspected processor, people can turn their produce and grains into a number of food items, including bread, jam, salsa, and non-food items like soap. There appears to be enough access to commercial-grade kitchens to accommodate increased processing of food ingredients, were they to become available.



Wallowa County product logo, not currently in wide use

There is a groundswell of interest in agricultural regions across the United States in branding the region itself. In December 2017, the Oregon Dept. of Agriculture launched a survey exploring the notion of creating an "Oregon Brand." There have been past efforts to create a Wallowa County brand that could be used to market a variety of locally made products. Those efforts have faltered due to lack of interest and infrastructure/funding, but may have just been ahead of their time. As noted above, a B&B owner who participated in the survey wrote that eating locally grown food is part of the expected experience of their guests, and a Joseph-based river guide company also uses "local food" as a selling point. Lodging businesses, restaurants, tour groups and other businesses that cater to the tourist trade should be taking advantage of this trend and providing as much locally grown food they can access. There are also a number of local residents who value "local," for a variety of reasons: Local pride, perception of greater nutrition, desire to support local producers among others.

Possible existing companies:

- Stein Distillery
- Sally B. Farms (goatmilk soap)
- 6 Ranch (beef and honey)
- Marr Flat Beef
- Prairie Creek Farms (root crops)
- Backyard Gardens (produce and ready-to-eat salads)
- Carman Ranch
- McClaren Ranch
- Nancy Knoble (meat goats)
 (Continued)

- Hawkins Sisters Ranch (poultry and rabbits)
- Bee Crow Bee (body care products)
- Wild Carrot (body care products)
- Bear Creek Farms
- Ralph Anderson and other Lower Valley Farmers Market producers
- Magic Garden (pickled produce and sauces)
- Sugar Time Bakery
- Terminal Gravity (brewery)
- Amaranta Farm (garlic)
- Randy's BBQ Sauce

Possible potential companies (known of/underway):

- Beer factory
- Mushroom farm
- Kombucha production
- Hemp products
- Aged meats production (i.e. prosciutto)
- Fresh sausage production
- Hot sauce bottler
- Quinoa grower
- Bread bakery (general)
- Sourdough bread (Wallowa County is home to a legendary sourdough starter)
- Apples and other tree fruits

Other products (not known to be under development)

- Cow dairy (milk, cheese, etc.)
- Goat dairy for food products (not soap)
- Tamales
- Fermented vegetables
- Soups (frozen)
- Flour (milled)

Additionally, there are dozens of independent farmers of laying hens throughout the county, who hand-sell their eggs directly to local customers; these could be gathered into a food hub and then sold under a "Wallowa County" brand.

Tillamook Coast, a tourism organization for Tillamook County, published in Nov. 2017 on YouTube a video called "Coast to Table Artisan Producers" touting the area's specialty food items. Wallowa County could do the same. Producers could handle their

own e-commerce, or the food hub could purchase a truck that delivered all Wallowa County products to specialty groceries and restaurants in La Grande, Baker City and Boise (heading east), or La Grande, Pendleton, and Portland or Walla Walla (heading west).

At an Oregon Food Bank-funded FEAST event that was hosted by NEOEDD in March 2017, a local farmer and a local rancher discussed a value added-partnership of using the farmer's potatoes and carrots, and the rancher's beef, and processing and packaging a "Wallowa County"-branded beef stew. Local cooking expert, food systems writer, and author of *Pure Beef*, Lynne Curry, is another potential co-conspirator.

This type of collaboration could lead to increased demand for local ingredients as well as increased income for local farmers. Again, the capital needed to build a processing plant could be prohibitive. If it could be done on a smaller scale at first, or with a product like a "meal kit" (made popular by companies like Blue Apron and Hello Fresh), momentum could be built for a dedicated facility.

While fresh vegetables are the poster child of the healthy food movement, this county most readily grows grain and animals. In the early twentieth century, there were eight grist/flour mills in Wallowa County. One hundred years later, heritage grain operations are cropping up across United States. Vertically integrated grain operations are operating in Baker County (Gold Rush Malt) and in Wallowa County (Stein Distillery) to make alcoholic beverages. Carman Ranch, known for its successful marketing in Portland of grass-fed beef, heritage pork and other animal products, announced in November 2017 that it is providing grain to a new boutique distillery in Portland, Freeland Spirits. Grains could be sold at the farmers market or via CSAs, as is done by Community Foodworks in the D.C. area. Small grain operations, or a small amount of grain from large operations, could support local bakeries. An example of this is the Red Fox Bakery in McMinnville, Oregon, and the Tuality Great Grains Project in Forest Grove, Oregon. The Bread Lab in Washington State and Greenmarket's Regional Grains Project (New York) are resources for further consideration of this idea.

Economic Impact

An economic impact study conducted by the Central Oregon Intergovernmental Council (COIC), the High Desert Food & Farm Association, and OSU Extension that was released in November 2017 shares numbers about employment that are useful for this study. Central Oregon has important differences with Wallowa County, mainly that Bend is now considered an urban area, but also many similarities, including climate and predominant agriculture industries being cow/calf pairs and forage crops. The Central Oregon food hub is being proposed as a to-be-determined corporate structure that will purchase and re-sell farm products, rather than act as a pass-through.

Two focus areas of the COIC study are congruent with this study, which are to increase local production (particularly of produce) and to launch a food hub to distribute this bounty locally. Their study has one major difference, which is that COIC et al. also looked at the scenario of shifting produce purchases directly to farmers from grocery stores. In Wallowa County, grocery stores are a vital lifeline for county residents—providing household goods, childcare products, and other necessities besides food—and so the goal of the Wallowa County food hub would be to replace imported produce with local produce as wholesale sales, not divert retail sales away from local stores.

COIC et al. listed local-economy percentages that should also be appropriate for Wallowa County. They report:

Unlike imported foods, which retain \$0.28 for every dollar spent, 97 percent of sales by local producers stayed in the local economy. This means that the money spent by producers on their supplies, such as seeds and gas, created an additional 11 jobs and \$1.1 million in additional sales throughout the region's economy.

If the numbers for Wallowa County are consistent with these, approximately every \$100,000 in redirected sales may create one job in the community. Because outside money is generally hard to come by in remote Wallowa County, recirculating existing capital is crucial.

In keeping with this idea, hundreds more people are eligible for SNAP (food stamps) than take advantage of this program. An effort to increase SNAP usage would bring more funds into local revenue streams; if those funds are spent on locally produced food, those are "new" dollars being introduced into the local economy.

Farmer/Farm Worker Job Creation

As is true across the United States regarding organic produce, in Wallowa County there is more demand for locally grown food than there is supply, and the supply chain is extremely fragile. An example: In early 2017, the owners of Warnock Farms announced their retirement from the Wallowa County Farmers' Market. This left Backyard Gardens as the only fresh produce vendor of approximately 12 vendor stalls (BG was soon joined by Alder Slope Nursery, and the market board installed a Community Co-op Booth to give non-professional growers a place to sell). For weeks, customers came to the market asking about the Warnocks.

While all agriculture creates jobs, specialty crops create more. It takes few people to grow a field of wheat—the farmer and possibly a helper or two on planting day; the farmer to spray pesticides if necessary; two people to move water lines once or twice a day from approximately mid-May to mid-August; and the farmer and one or two helpers on harvest day. Weeding is

generally unnecessary midseason, as the field was sprayed before the crop went in and then the crop is planted closely to not allow weeds to infiltrate. The expense is in very large machines such as combines and sprayers.

By contrast, specialty crops require smaller machines but much more physical labor. Some crops, like carrots, can be mechanically planted and harvested. Others, like broccoli, strawberries or lettuce, must be hand-planted, handweeded, and hand-harvested. Fruit trees require hand-labor to harvest the fruit, especially for crops that do not ripen at once. COIC et al. characterize the difference as 26 jobs created in specialty crops for every \$1 million in sales, versus 12 jobs created in commodity production.



Harvesting broccoli, image courtesy of Food Matters

Nationally speaking, farm workers are victims of a host of indignities ranging from low pay, wage theft, lack of access to health care, threats of deportation, and sexual harassment and assault. These conditions, in addition to the hard physical labor that farm work requires, does not inspire the unemployed to seek out this work. Subsequently, there is a <u>national labor crisis</u>, exacerbated by deportations of the undocumented, disenfranchised immigrants who lack the ability to work in other jobs. Farmers have been forced to leave crops in the field to rot because they lack workers to pick them.

It would be difficult for local farmers to dodge this issue—if they offer low wages they might be unable to find people willing to do the work, and if they offer higher wages they have to reflect that cost in the price of their food, which could put off some potential purchasers. This issue is not unique to Wallowa County, but part of the global food system.

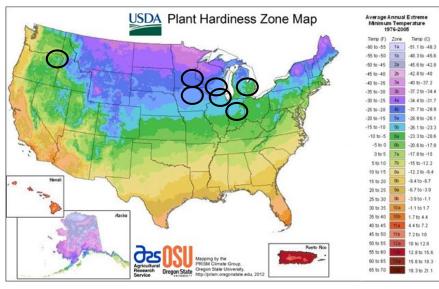
Encouraging New Farmers

The USDA Agricultural Marketing Service released a tool kit in 2016 ("The Economics of Local Food Systems: A Toolkit to Guide Community Discussions, Assessments, and Choices") that includes a study that was done to see how many acres of production would be needed to "satisfy local demand for fruits and vegetables" within a six-state region in the Midwest. The authors estimated that 195,669 acres would be necessary for 35.6M people. Another study noted in the toolkit studied Kane County, Illinois, population 445,328 and called for 2,157 acres of fruit and vegetable production. This averages, between the two studies, 0.00515 acres per person, or 224 square feet. Wallowa County's 2015 U.S. Census population is 6,856; using the average number of acres per person provided in these studies as a guide, Wallowa County would need just 35 acres to satisfy its residents' produce needs.

All of the areas involved in these studies are geographically comparable with Wallowa County, with many of them in colder "hardiness zones" (see Page 26). These studies reinforce the idea that specialty crops *could* be generated within the county for

county consumption, if some land were converted from production agriculture or pasture. Vegetable crops that grow most easily in Wallowa County are root crops, such as potatoes, beets and carrots. Warmth-loving crops like cucumbers and tomatoes grow better in the Alder Slope area west of Enterprise and the lower-elevation areas of Imnaha and Troy. Hardy fruit trees like apples grow here, but finicky ones like peaches don't do as well. The climate is much too cold for citrus fruits, avocado trees, etc.

A further challenge is the general popularity of offseason produce, such as asparagus and grapes which are imported from Mexico and South America, and of produce that never grows in Wallowa County, such as avocados, bananas, and mangoes.



Wallowa County and the areas in "The Economics of Local Food Systems" are circled

Land is expensive in Wallowa County, and its Exclusive Farm Use zoning prohibits the subdivision of small parcels. While this does serve to preserve farmland, it also creates a barrier to entry for young and/or new farmers. One way to get around this would be to purchase, either outright or via conservation easement, a large parcel of land and break it into smaller, leased plots. This is known as an "incubator farm" and could help new farmers build a reputation and learn the climate and soil types available in Wallowa County. A 100-acre parcel could be divided into ten five-acre plots and five 10-acre plots; with farmers sharing equipment and knowledge, and possibly farm labor. The East Multnomah Soil and Water Conservation District runs a popular incubator farm on 60 acres near Gresham, Oregon. Ecotrust launched its first cohort of an Ag-in-the-Middle business accelerator in Winter 2018.

An even more ambitious project would be to create a "demonstration farm," which combines incubator plots with any number of other projects, such as a greenhouse, apiary, solar panels, or rotational pastures, and welcomes the public. Washington State University Extension runs <u>such a farm</u> on 79 acres outside of Vancouver, Washington.

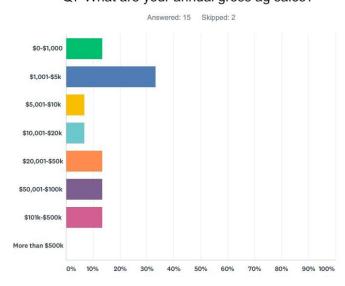
Food Hub Employee Job Creation

There are a number of factors affecting how many jobs might be created by a food hub:

- Its corporate structure
- · Whether it occupies one or more buildings
- Whether it takes possession of the product or simply aggregates
- · Whether it provides any type of delivery service

The COIC study estimates that "by establishing a food hub and purchasing a minimum of \$610,000 of local food products, nine new jobs, \$329,000 in wages and \$642,000 sales would occur in the overall economy." Using this feasibility study's survey results as a basis, the annual gross agriculture sales of survey participants could total more than a million dollars (at the highest range that one could select. However, in 2012 there were total direct sales in Wallowa County reported to the USDA of just \$252,000. Therefore, Central Oregon's goal

Q7 What are your annual gross ag sales?



of purchasing \$610,000 of local food products is likely out of reach. This seems reasonable considering Central Oregon is a more populous and wealthy region.

Reducing the figures proportionally (\$252,000 is 39 percent of \$642,000), approximately 1.5 FTE jobs could be created with \$101,667 of local food products, which seems more realistic, especially considering the reported incomes of survey participants for this report (taking the median of each response category for the question of gross annual sales, and adjusting the highest category down to \$100,000, results in \$448,500).

Further Study and Funding

Further Study

A 2017 USDA study listed the following as actions taken by successful food hubs:

- 1. Create a business plan
- 2. Secure a strong financial foundation
- 3. Start with expert staff
- 4. Focus on your strengths and find partners for the rest
- 5. Know your customers and markets
- 6. Understand the food production process

Number Four seems especially important in a county like Wallowa, which thrives because of community partnerships. Likely community partners include Wallowa Resources and Wallowa Land Trust. If the hub is a cooperative, the producers and possibly also the wholesale purchasers could become members.

A closer look at start-up costs is necessary, requiring further study of potential existing facilities and infrastructure. As noted in Building and Facilities, there are a number of options for a beginning effort that would not take up too much space. As the food hub operation grows, it could relocate as needed, or operate in multiple locations. Because commercial properties are limited in the county, prices per square foot is difficult to chart in a meaningful way. Also, there is a county culture of donating time, materials, and talents for worthy projects, so it is possible that a space might be available as a donation or with limited costs, at least at first.

The entity or individuals who take up the charge to launch a food hub will need to incorporate this information in a business plan. The other major decision to make will be the corporate status of the hub. A cooperative might make sense considering the collaborative nature of the county. However, it would only be successful if:

- 1. The hub had two or three champions that would dedicate their time to ensure success.
- 2. The hub had sufficient members to draw from (more than the 36 producers and wholesale purchasers who took the surveys for this report).

Probably both.

Making the hub a <u>Benefit Corporation</u> (B Corp) would write social capital into its bottom line (B Corps promote profit, planet, and people). A nonprofit organization would have access to more grant opportunities, while a B Corp or an LLC would have more flexibility in management.

At least at first, it seems logical for an existing organization to launch the hub as one of its programs, which would simplify its operational needs and secure its assets during the fledgling years. Possible host organizations are Wallowa Resources, NEOEDD, and the two farmers' markets groups (although Wallowa County Farmers' Market would need to reorganize, as it is a [c][6] organization). If the hub were located in Enterprise, Greater Enterprise Main Streets Group (GEMS) might be a choice. Another option would be for a "fraternal organization," such as the Elks or IOOF, to sponsor the hub.

There is no need for the people of Wallowa County to work in a vacuum—numerous resources exist, both in Oregon and nationally. Oregon resources include members of the Oregon Community Food Systems Network, particularly on the Wholesale committee, and the Oregon State University Small Farms program (many overlapping members with OCFSN). National resources include the USDA; university programs such as Michigan State's or the University of Vermont, which offers a food hub management certificate program; and organizations such as the National Sustainable Agriculture Coalition and Common Market. And, of course, the Wallace Center's Food Hub Collaboration.

Funding

Creating added demand for local food will require advertising and educational efforts. Several USDA grant programs that could be helpful for a potential food hub are:

- <u>Value-Added Producer Grant</u> could benefit a project such as the beef stew factory above for certain expenses.
- Local Food Promotion Program supports efforts to develop, improve, or expand local/regional markets. This grant program was used in Wallowa County to secure greenhouses for a local operation in the mid-2000s. In 2017 Community Foodworks, a Washington, D.C.-based nonprofit, was awarded a \$496,000 LFPP grant to implement a "pop-up food hub," a local food-distribution model that creates new and diversified income streams for farmers through a combination of direct-to-consumer, subscription, and wholesale food sales at farmers markets.
- If the food hub project were led by a "public body" or "community-based" nonprofit, it is possible
 that a portion of the funding could be provided via the USDA <u>Community Facilities Direct Loan &</u>
 Grant Program.
- New farmers could be encouraged with the USDA <u>EZ Guarantee Loan program</u>, and other USDA loan programs.
 - Possible partners for recruiting beginning farmers are Rogue Farm Corps and Friends of Family Farmers, Oregon-based small ag supporters, as well as the <u>National Young Farmers Coalition</u>.
- The <u>Beginning Farmers and Rancher Development Program</u> offers education, extension, outreach, and technical assistance initiatives via the <u>National Institute of Food and Agriculture</u> (NIFA), which has dozens of other programs as well.
- Rural Energy for America (REAP) <u>Grants for Renewables and Energy Efficiency</u> are available to for-profit entities (businesses and producers) for energy efficiency installations, including cold storage upgrades.
- The <u>Environmental Quality Incentives Program</u> supports conversation improvements and activities (including hoop houses), particularly with its <u>Conservation Innovation Grants</u>.

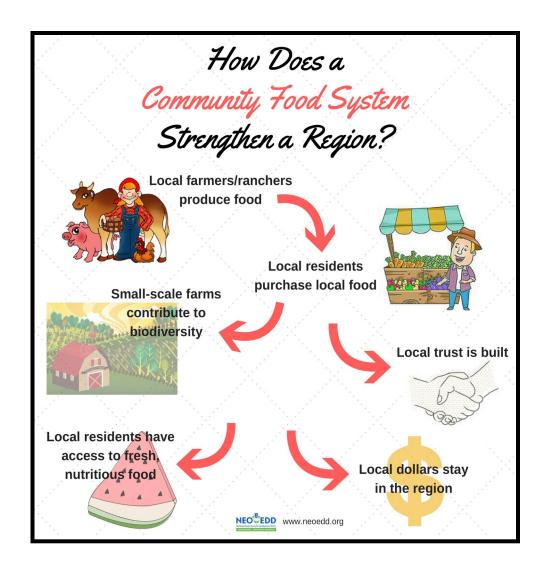
<u>Western SARE grants</u> may be available for beginning farmer/ranchers and for "professional + producer" to conduct on-site experiments that can improve their operations and the environment and can be shared with other producers. Other nonprofits and programs supporting beginning farmers are starting to appear as well, such as Rogue Farm Corps.

Business Oregon offers a <u>Rural Opportunity Initiative</u> grant program. The grants require three organizations to work in tandem, which would create an opportunity for collaboration.

There is a nascent fund that could be tapped once it has reached giving capacity—the Wallowa County Fund of the Oregon Community Foundation. Its stated granting priorities include "developing a vibrant economy with family-wage jobs," "maintaining a rural lifestyle and opportunities," and "sustainably using natural resources." There are also individuals in the community, who value good food and also community investments who, could be tapped for support.

The Oregon Community Foundation also funds a number of organizations in Northeast Oregon via its <u>Community Grant Program</u>. Other major funders in Oregon include The Ford Family Foundation, Meyer Memorial Trust, and The Wildhorse Foundation.

Modeling after COIC and HDFFA's process, a useful next step might be to create a steering committee consisting of agricultural agency representatives; producers; food business owners; distribution representatives; economic development and government representatives; grocers; institutions; and local residents with high, moderate, and low food security. Members of the ad hoc Wallowa County Community Food Systems Council and of Slow Food Wallowas should definitely be tapped. This group could conduct an economic impact study and a business plan, possibly in conjunction with Mallory Rahe of Oregon State University Extension Service, referencing the COIC's Central Oregon Food Hub materials and the "Economic Impact of Local Food Producers" study, and using the USDA's Economic Impact of Food Systems Toolkit.



Appendix A: Survey Questions

Questionnaire for Producers

- Where do you own a farming/ranching business?
- For how many years have you been a farmer/rancher?
- How many acres do you use for your operation?
- Please indicate what percentage of your total ag income each crop represents:
- How/to whom do you currently sell your product?
- Have you ever sold food to a local institution, such as a restaurant, school, or hospital?
- What are your annual gross ag[riculture] sales?
- What storage facilities do you use prior to sale?
- Do you process your crop (creating value-added products)? Check all that apply:
- Do you use a licensed commercial kitchen to process your crop?
- Are you satisfied with your existing facilities?
- What would you pay for the services a food hub could provide?
- When would you utilize the food hub, and with what type of products and how much of them?
- What other kinds of technical assistance/services would be helpful?
- Anything we missed? Additional comments are welcome!
- Could NEOEDD staff contact you for follow-up?

Questionnaire for Wholesale Purchasers

- Where do you own/operate a business or institution?
- What type of wholesaler are you?
- How do you source ingredients?
- What is your business's average monthly food/ingredients purchasing budget?
- What is your average monthly gross sales for food or products that include a food ingredient?
- Of your average monthly food/ingredients budget (referenced in Question 3), what percentage is grown in Wallowa County?
- Please rank considerations for your ingredient purchases:
- What is your current company policy regarding sourcing Wallowa County-grown food?
- How do you define "local" in regard to sourcing food or food ingredients?
- Do you feel the majority of your customers value "local" products?
- What barriers do you perceive to buying more WC-grown food/ingredients?
- If you were to use more WC-grown food/ingredients, how would you prefer to acquire them?
- Do you need U.S. Grade No. 1/A products?
- What value-added services would you want in order to use more local food/ingredients?
- Would you work with a producer at the beginning of the season to forward-contract?
- How do/would you promote your use of WC-grown ingredients?
- If you could use food hub services for your own business, what would you pay for these services?
- What other kinds of technical assistance/services would be helpful?
- Anything we missed? Additional comments are welcome!

Appendix B: References and Resources

The following resources were instrumental in this report, whether or not they were directly referenced in the text:

- Agricultural Utilization Research Institute et al. "Central Minnesota Food Hub Feasibility Study," 2012
- Congressman Earl Blumenauer. "Growing Opportunities: Reforming the Farm Bill for Every American," 2017
- Matthew Buck. "Building Resilience: The Case for Community Food Systems," 2014
- Central Oregon Intergovernmental Council. "Central Oregon Food Hub," 2017
- COIC. "Meat CSA Feasibility Study," 2011
- Cornell University. "Economic Impacts of Food Hubs," 2014
- Ecotrust. "The Impact of Seven Cents," no date
- Federal Reserve Bank of St. Louis. "Harvesting Opportunity: The Power of Regional Food System Investments to Transform Communities" (report), 2017
- GrowNYC. "GrowNYC's Healthy Exchange Project 2015" (webinar), 2017
- Illinois Dept. of Commerce and Economic Opportunity. "Building Successful Food Hubs: A Business Planning Guide for Aggregating and Processing Local Food in Illinois," 2012
- Locus Developers. "Funding for Projects that Don't Pencil Out" (webinar), 2017
- Michigan State University. Tools for Assessing Economic Impact" (webinar), 2017
- National Center for Frontier Communities. "The Feasibility of a Regional Food Hub for Southwest New Mexico," 2015
- National Co+op Grocers. "Financing Food Co-ops to Advance Regional Food Systems" (webinar), 2017
- Northeast Oregon Economic Development. "Community Food Assessment: Wallowa County," 2012
- NEOEDD. "Wallowa County Bounty: 2015 Addendum to Wallowa County's Community Food Assessment"
- Oregon Food Bank. "Community Organizing" (webinar), 2017.
- Oregon State University Extension Service et al. "Economic Impact of Local Food Producers in Central Oregon," 2017
- Social Sciences and Humanities Research Council of Canada. "Food Counts: A Pan-Canadian Sustainable Food Systems Report Card," 2017
- Sustainable Agriculture Education Association. "Assessing Small Farm Viability and Net Farm Income" (webinar), 2017
- USDA AMS. "The Economics of Local Food Systems: A Toolkit to Guide Community Discussions, Assessments, and Choices," 2016
- USDA. "Census of Agriculture: Wallowa County," 2012
- USDA Rural Development. "Running a Food Hub: Lessons Learned from the Field" (Vol. 1), 2015
- USDA Rural Development. "Running a Food Hub: A Business Operations Guide" (Vol. 2), 2015
- USDA Rural Development. "Running a Food Hub: Assessing Financial Viability" (Vol. 3), 2016
- USDA Rural Development. "Running a Food Hub: Learning from Food Hub Closures" (Vol. 4), 2017
- USDA Rural Development. "Why Food Hubs Fail" (webinar), 2016
- University of Buffalo. "Growing Local: A Community Guide for Agriculture and Food Systems," 2017
- University of Wisconsin Extension Service. "Before You Leap: Food Hub" (webinar), 2016
- Wallace Center. "Counting Values: Food Hub Financial Benchmarking Study," 2014
- Wallace Center. "Findings of the 2015 National Food Hub Survey," 2016
- Wallowa County Food Systems Council. "2015 Strategic Plan"
- Worksource Oregon. 2017 Oregon Wage Information for Northeast Oregon

