

Eat Well Crawford County

Food Systems Assessment and Action Plan

December 2015

Written by New Venture Advisors

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Project Overview

New Venture Advisors, under the guidance of Eat Well Crawford County and with support from Kansas State University's Center for Engagement and Community Development, conducted a food systems assessment of Crawford County, Kansas. The goal of this study was to develop a prioritized action plan for Eat Well to focus the group's energy and efforts for the next several years. The recommended action plan emerged through the following research steps:

- Interviews with twelve stakeholders and food systems leaders across the county.
- Secondary research on the local landscape, including an assessment of demographics, agricultural production, demand and sales outlets, and health indicators in the county.
- FEAST event that brought together approximately 50 attendees, representing agriculture, hunger relief organizations, public education, healthcare, public agencies, grocery stores, distributors, restaurants and concerned citizens.
- Focused follow up data gathering and research of national examples, based on the prime strategies and priorities that emerged from the previously described research steps

These steps led to the development of **five recommended priorities**, driven by the concepts and issue areas that generated the most momentum and energy among stakeholders who were engaged throughout the research process. Secondary research, including data on production, demand and sales outlets, and intermediaries, was utilized to validate and shape these emerging priorities.

On October 12th, 2015, Eat Well Crawford County reviewed these five priorities and **selected two action steps for immediate focus** and two that will be supported by other stakeholders outside of Eat Well.

Action Step	Status
1. Worksite wellness programs and incentives	Immediate focus by Eat Well
2. Increasing agricultural production of consumable and healthy farm products	Immediate focus by Eat Well
3. Value chain facilitation, with the eventual goal of developing a Crawford County food hub	Supported outside of Eat Well
4. Establish processing entities	Supported outside of Eat Well
5. Build demand for local food through youth education efforts	Supported outside of Eat Well

Project Team

The core team responsible for executing the market assessment included Eat Well Crawford County and New Venture Advisors.

Eat Well Crawford County is a nonprofit working to improve Crawford County's food system; increase access to healthy, affordable food; and help make the healthy choice the easy choice for the people of Crawford County.

New Venture Advisors is a Chicago-based consulting firm with expertise in the assessment, design, launch and development of businesses in the local food and sustainable agriculture arena. Since 2009, New Venture Advisors has worked on more than 40 food hub ventures and food systems projects across North America.

CORE TEAM	TITLE AND ORGANIZATION	PROJECT ROLE
Martha Murphy	K-State Expanded Food and Nutrition Education Program Agent	Project Lead
Saloni Doshi	Engagement Manager, New Venture Advisors	Lead Researcher, Study Author
Kathy Nyquist	Principal, New Venture Advisors	Project Oversight

The following table outlines all Eat Well Crawford County team members, many of whom were engaged as interviewees, advisors and contributors throughout the study.

STAKEHOLDERS	TITLE AND ORGANIZATION	PROJECT ROLE
Janis Goedeke	Crawford County Health Department, Administrator	Commissioner Appointed Member
Kathy Flora	Farmer’s Market Vendor	Commissioner Appointed Member
Shelly Hipfl	Crawford County Health Department	Commissioner Appointed Member
Linda Timme	RD, Crawford County Health Department	Treasurer
Cherie Schenker	Schenker Family Farms	Member
Marcee Binder	Wesley House Executive Director: Food Pantry	Member
Debra Anthony	RN, Crawford County Health Department	Member
Rebecca Adamson	ARNP, Crawford County Health Department	Member
Susanna Thyer	RD, Pittsburg Community Schools	Member
Martha Murphy	Extension Agent, EFNEP	Member
Becky Gray	City of Pittsburg, Community Development	Member
Dick Horton	SEK Community Action Program	Member
Jeremy Johnson	Community Health Center of SEK	Chair
Jay Byers	City of Pittsburg, Assistant City Manager	Member

This document contains the following sections:

Section 1: Recommended Eat Well Action Plan

Section 2: Summary of Research

Appendices

- A. Detailed Secondary Research
- B. Interview Notes
- C. Full List of Strategy Ideas That Emerged
- D. FEAST Event Notes
- E. Works Cited

Recommended Action Plan

Summary

The following two priorities will be pursued in the short term by Eat Well Crawford County.

1. **Worksite wellness programs and incentives:** Eat Well Crawford County will apply for a \$40,000 implementation grant to position the group to work with major employers in the county on the research, identification and implementation of effective worksite programs that incentivize healthy food consumption. Specific strategies the group has already identified as high potential include:
 - Workplace CSAs for employees that are fully integrated into health and benefits packages, and paid for through a direct, pretax paycheck deduction.
 - Implementation of programs that subsidize healthy cafeteria foods so these items are cheaper than unhealthy options.
 - Organization of innovative farmers market programs, including points for farmers market visits and hosting markets on company premises.

There are many case studies nationwide for Eat Well to draw from. In particular, the following four examples or studies should be researched: ASAP (Appalachian Sustainable Agriculture Project) Connections study on workplace CSAs in 2013, Heal Cities Campaigns, Cleveland Clinic's local food and farmers market initiatives, and the Department of Labor's study on worksite wellness programs.

2. **Increasing agricultural production of consumable and healthy farm products:** Eat Well Crawford County recognizes the importance of increasing the volume of locally produced, healthy farm products in order to catalyze a robust local food system. A small portion of funding will be included in the \$40,000 implementation grant application described above, to be allocated to convening producers and other stakeholders with the goal of identifying strategies that will support the expansion of healthy food production in the county. Strategies brainstormed at the FEAST event that will be further considered at these convenings, include:
 - Establishing incubator farms to promote small scale farming of products for human consumption, and attract and train beginning farmers in the region.
 - Connecting new farmers with agricultural land in the area.
 - Supporting new and existing growers with season extension strategies, including greenhouse and hoop house development.

As Eat Well Crawford County organizes convenings of producers and other stakeholders to develop strategies that support the expansion of agricultural expansion, the group should research the following initiatives and resources nationwide: Tufts University's National Incubator Farm Training Initiative (NIFTI), Michigan's Hoop Houses for Health, Illinois' The Land Connection, and the NRCS High Tunnel Program.

The following two action items are of high priority for the county, but will not be pursued by Eat Well.

3. **Value chain facilitation, with the eventual goal of developing a Crawford County food hub:** Crawford County commissioners will explore the potential of hiring a staff person focused on county wide economic development, who may take on value chain facilitation as a component of his or her role. As part of value

chain facilitation, this staff person would build relationships with entities across the supply chain, identify matchmaking opportunities to help move local food between them, and run regular events and convenings of food systems stakeholders. Over time, this value chain facilitation work may lead to a food hub feasibility study, focused on assessing the optimal food hub model for the region, and setting production and demand volumes that would need to be hit before a food hub is developed.

4. **Establish processing entities:** Input from producers during the FEAST event suggest that Crawford County agriculture would benefit from a second state-inspected slaughter and processing facility in the county, and from the establishment of a commercial processing operation where farmers and entrepreneurs can produce value added and specialty products. Secondary research reinforced this recommendation, illustrating the very limited number of slaughter and processing facilities that can be easily accessed by Crawford County producers. While Eat Well Crawford County will not pursue this as a priority, Eat Well will support any other community efforts to establish a culinary incubator or shared-use kitchen. This may be explored by Fort Scott Community College's vocational center or by a local church.

Detailed Action Plan

1. Implement worksite wellness incentives

Innovative, consumer-facing incentives were identified, particularly through the FEAST event, as the most critical lever to increase demand for healthy food.

The main set of incentives would focus on worksite wellness. Employers are uniquely motivated to support efforts at improving the health of their employees. Health improvements will decrease the number of doctor and hospital visits among their employees, thereby decreasing insurance claims (leading to decreased premiums for the employer) and increasing productivity (as sick, absentee days are minimized). Some of the county's largest employers include Pittsburg State University, Pittsburg USD 250, Via Christi Hospital, Sugar Creek Packing Co, Walmart, Pitt Plastics, and Southeast Kansas Educational Services. Several FEAST attendees representing these organizations (as well as one who represented the City of Pittsburg) expressed active interest in pursuing strategies that will incentivize healthier habits among their employees.

Several ideas for worksite wellness programs that would improve healthy eating and strengthen the local food system emerged, including:

- Workplace CSAs for employees that are fully integrated into employee health and benefits packages, and paid for through a direct paycheck deduction. ASAP Connections did a study of workplace CSAs in 2013, and found several successful and varied models for further research, including: GE Analytical Instruments in Boulder, CO; HealthPartners in Bloomington, MN; Research Triangle Institute in Durham, NC; Highland General Hospital in Oakland, CA; and Colorado State University in Fort Collins, CO. Implementing these programs is complex, and requires specialized resources and ongoing support.
- Subsidizing healthy cafeteria foods so these items are cheaper than unhealthy options. This strategy is becoming more and more popular, particularly in cafeterias of self-insured companies and in institutions such as hospitals that have a specific focus on health. An important component of this strategy is to understand the role that foodservice management companies like Sodexo could and must play in execution.
- Innovative farmers market programs. This might include giving employees points when they purchase at farmers markets, and rewarding employees with physical and intangible benefits when they bank a certain number of points. Another trend in worksite wellness is to host a farmers market at a corporation, so

employees can shop during lunch or before they head home in the evening. An added value of this program for farmers is that the corporate cafeteria can then purchase any product that is not sold to employees. Cleveland Clinic implemented this innovative strategy seven years ago, and many institutions have since followed suit.

FEAST attendees agreed that worksite wellness strategies should extend to benefit employees' families, in order to have a tangible and positive impact on health and purchasing habits. Additionally, one representative of the City of Pittsburg emphasized the importance of employees leveraging their insurance companies. According to this representative, the City made the decision to drop Blue Cross Blue Shield as their insurance provider because the company was unwilling to provide employee claims data - critical information to help the City manage their worksite wellness program and their internal costs. They are now engaging other insurance providers who are able and willing to provide this information in aggregate to support their efforts.

Another set of incentives could focus on maximizing how successfully government subsidies encourage nutritious purchasing and eating habits. Several attendees emphasized their excitement about the WIC program (Special Supplemental Nutrition Program for Women, Infants, and Children) and how effectively the program encourages healthy eating habits among women and children. WIC has a highly restrictive authorized food list for which recipients can use their benefits. These food items, which include milk, fruits, vegetables, whole grain bread, eggs, peanut butter, etc, are ones that are deemed nutritious and wholesome for nursing mothers and young children.

SNAP (Supplemental Nutrition Assistance Program, previously known as Food Stamps), on the other hand, can be used to buy any food items that are to be consumed at home. This includes items typically considered "junk food." An excerpt from the Food and Nutrition Service website explains that:

Soft drinks, candy, cookies, snack crackers, bakery cakes, and ice cream are food items and are therefore eligible items. Since the current definition of food is a specific part of the Act, any change to this definition would require action by a member of Congress. Several times in the history of SNAP, Congress had considered placing limits on the types of food that could be purchased with program benefits. However, they concluded that designating foods as luxury or non-nutritious would be administratively costly and burdensome.

FEAST participants felt that SNAP should be more restrictive, focused on nutrient dense items only.

As a federal program, whose specific definitions are part of the Act, these changes would require an extensive, nationwide, resource-intensive effort. Within Crawford County, alternative approaches can be pursued, that focus less on restrictions and punitive measures, and more on rewarding healthy consumption with SNAP benefits. The Pittsburg Farmers Market is already offering double value benefits to SNAP recipients at the market. This type of benefit might be successfully extended to retailers, through grant funding that doubles the value of SNAP benefits when they are used on healthy, local products.

2. Increase production of consumable, healthy farm products

Crawford County land area is 377,446 acres and is home to 846 farms on 323,222 acres of farmland. This represents 86% of the county's land area. Yet production of consumable, healthy farm products in Crawford County is highly limited.

The following chart compares the market value of agricultural products sold in Crawford County and the surrounding counties in the Southeast region of Kansas in 2012.¹

County	Vegetables	Fruits & Nuts	Grains	Cattle/Calves	Dairy*	Poultry/Egg:	Total
Crawford	D	47	48,333	23,299	D	17	71,696
Cherokee	D	D	66,839	D	-	D	66,839
Bourbon	55	66	D	36,429	D	18	36,568
Neosho	221	D	39,447	24,849	970	45	65,532
Labette	52	353	48,381	69,055	1,705	24	119,570
Elk	-	-	5,177	34,683	322	4	40,186
Wilson	32	26	44,631	16,864	-	12	61,565
Montgomery	28	135	44,182	16,273	D	77	60,695
Southeast Region	388	627	296,990	221,452	2,997	197	522,651
Kansas	25,705	3,487	5,596,850	7,988,495	523,603	60,883	14,199,023

(D) Data undisclosed by USDA to protect individual farm operations (indicates that the number of farmers in category is low)

All numbers are in \$1,000s, data from 2012

The market value of agricultural products sold in Crawford County in 2012 was \$71,696,000. The vast majority of these products are nonconsumables and/or exported well beyond the county and state. Commodity crop sales represented \$48,333,000 (68% of total) and livestock sales were \$23,299,000 (32% of total). Livestock tends to be sold from the farm to feedlots in Western Kansas or out of state.

Fruits and vegetables represent **just .06%** of the county's total production. The Kansas Rural Center estimates that this would need to be increased by 500-600% in order to sufficiently meet the needs of local consumers.

These production trends led stakeholders to focus on the importance of increasing production of healthy farm products that can be readily consumed in the county. Key strategies would include:

- **Establishing incubator farms in the county to help promote produce farming, and attract and train beginning farmers to the region.** This strategy is supported by nationwide trends and best practice examples. New Entry, an initiative of Tufts University, works locally, regionally, and across the country to strengthen local food systems by supporting new farmers. The organization actively promotes incubator farms as an important tool to cultivate and attract beginning farmers, and has developed a National Incubator Farm Training Initiative (NIFTI), which provides comprehensive one-on-one consulting, educational resources, and professional development opportunities for dozens of organizations throughout North America.
- **Connecting new farmers with agricultural land in the area.** The majority of land in southeastern Kansas is already dedicated to farming; however, input from extension agents suggests that there may be opportunities for new farmers to lease unutilized (or underutilized) land from farmers to begin their operations. Diversified fruit and vegetable production requires relatively small acreage, and new farmers may be best served by launching their efforts on just 1-2 acres. Extension agents may be able to play a role identifying field crop producers with land that can be made available for lease. Additionally, farmland protection agencies and land trusts nationwide sometimes play a role in facilitating these types of connections.

¹ (USDA 2012)

- **Supporting new and existing growers with season extension strategies, including greenhouse and hoop house development.** This may require connecting these growers with technical assistance as well as financing support. USDA’s National Resources Conservation Services is an excellent resource. They have a Seasonal High Tunnel Initiative program that assists producers in extending the growing season using environmentally sustainable methods. There are many other innovative programs nationwide that promote season extension, some in ways that also strengthen food access and health equity. For example, Michigan’s Hoophouses for Health program is designed to increase access to Good Food for vulnerable families while at the same time expanding the Good Food infrastructure and season extension capacity of Michigan farmers. Farmers receive funding for season extension infrastructure, which they “pay back” by donating a portion of their product to vulnerable communities.

3. Value chain facilitation, with the eventual goal of developing a Crawford County food hub

Many stakeholders throughout the study highlighted the importance of establishing a Crawford County food hub. This food hub would address a number of challenges that are hindering local producers from selling to wholesale buyers, such as restaurants, institutions and grocery stores across the county. Buyers - such as Pittsburg USD 250, Martinous, Pittsburg Coop, and Ron’s – expressed a strong desire to source more local product. In fact, Martinous explained that this is a critical priority for the organization, largely because it cuts down on transportation, which represents the largest cost component of their business. All of these buyers have described some important barriers they face when attempting to source locally, such as difficulties securing the necessary volume of local product, the importance of local products meeting specific food safety and packing certifications, and requirements with respect to ordering and delivery. Pittsburg USD 250 explained that they have been able to source Kansas produced flour through their primary distributors, and that Marrone’s (their main produce supplier) has been able to bring them regional product (generally produced in neighboring states), but they have struggled to find produce or proteins grown in the county or even in the state of Kansas. This food hub would address these challenges by aggregating from growers in the county and from surrounding counties as needed, including producers in Missouri - such as the highly productive Amish farming communities. This food hub may also provide critical distribution and storage support, as well as technical assistance services to help Crawford County growers improve their wholesale readiness. A first start to developing a food hub is to pursue a food hub feasibility study that systematically assesses, quantifies and characterizes both production and demand, and helps the community determine the optimal operating model for a food hub and its financial viability.

Given that current production volume would not be high enough to warrant the development of a brick and mortar food hub, the recommendation was made that Crawford County pursue value chain facilitation efforts, to serve as a gateway to longer term food system and food hub development. A Value Chain Facilitator/Coordinator (VCF) can be an individual or organization that establishes strong food value chains in a region by developing the relationships among actors along a food supply chain. VCFs can “help match pent-up demand and supply by building capacity (such as market research or training)” or assist in building demand of local food through regional branding efforts or consumer education. Most often “VCFs work outside day-to-day business operations, a vantage point that offers a unique perspective on the optimal solutions in a regional market.”²

There are many roles for a VCF to play in regional food systems development. The core team recommends that a value chain facilitator in Crawford County focus primarily on serving as a matchmaker and relationship builder.

² (National Good Food Network 2015)

This facilitator would identify stakeholders across the food value chain, understand their needs with respect to local food procurement and sales, and make strategic connections between these stakeholders.

Examples of potential “matches” that the value chain facilitator might make include:

- Wesley House has expressed interest in securing additional fresh, locally grown produce. They prefer the product to be as fresh as possible (in contrast to the produce they often receive from the Food Bank and the local Walmart Supercenter); however, they have expressed openness to receiving seconds – or produce items that are fresh and food safe, but have blemishes that make them less likely to be sold to many buyers or consumers. At the same time, there are many stakeholders who expressed interest in giving youth opportunities to engage in farming and agriculture. A matchmaking opportunity may exist here, as nonprofits can organize gleaning efforts, utilizing youth volunteers. Gleaned produce would then be donated to Wesley House.
- After the FEAST event, there was some interest among Ron’s Supermarket in increasing its local sourcing and promotion efforts, beyond what they are able to purchase through Associated Grocer (from whom they purchase 70% of their goods). A value chain facilitator might connect procurement staff at Ron’s with local farmers and the farmers market manager, to help the store develop direct purchasing relationships with these local producers.

There are several organizations that identify themselves as VCFs, many of which have been instrumental in defining and establishing best practices around value chain facilitating. Two such examples include:

[Fair Food Philadelphia](#) is a non-profit based in Philadelphia, PA that is dedicated to bringing locally grown food to the marketplace and to promoting a humane, sustainable agriculture system for the Greater Philadelphia region. They often act as a matchmaker between food artisans and restaurants and regional producers and provide an assortment of programs and services that contribute to a strong and sustainable local food system.

[Appalachian Sustainable Agriculture Project](#) is an Asheville, NC based non-profit whose mission is to help local farms thrive, link farmers to markets and supporters, and to build healthy communities through connections to local food. The organization provides technical assistance and marketing support to producers and has spearheaded a local food campaign called Appalachian Grown.

The below reports and resources provide in depth information about value chain facilitation:

- [National Good Food Network’s “Talk is Cheap...and Efficient! Facilitating value chain development without costly new infrastructure”](#)
- [Food Value Chains: Creating Shared Value to Enhance Marketing Success](#)
- [Financing the Evolving Role of the Value Chain Coordinator: Guiding Questions, Participant Insights](#)
- [Value Chain Guidebook: A Process for Value Chain Development](#)

While this priority will not be actively pursued by Eat Well, the committee will encourage Crawford County commissioners to explore the possibility of hiring a staff person who will support county wide economic development, and whose role may include value chain facilitation as an important function.

4. Establish processing entities

Buyers and growers of all product types suggested that the region would benefit from processing capacity.

The majority of cattle producers in the region sell their animals to feedlots, often in Western Kansas. Some slaughter and process a small subset of their heads for home consumption or direct to consumer sales. However, the limited set of protein slaughter and processing facilities makes this difficult. Schroeder's, a state-inspected meat locker, is located in the county and serves a myriad of local protein producers. However, they are largely at capacity, particular during hunting season, the season during which protein producers have their highest demand for slaughter and processing facilities. Several farmers market vendors selling proteins bring their products to USDA inspected facilities in Missouri or other facilities fairly far from Crawford County.

Produce producers engaged in this study highlighted the fact that they often have excess product – some that remains in the field as well as at the close of the farmers market each Saturday. At the same time, schools highlighted the challenge they have sourcing locally when their purchasing months are in direct conflict with the growing season. If producers or buyers had an opportunity to process and preserve local produce, including farms' excess products, producers could improve their sales and profitability, and institutional buyers could have access to product throughout non-harvest months. However, there are no commercial kitchen facilities in the region to process produce. Douglas County and Saline County both have working processing kitchens; but these are two to four hours away from Crawford County producers.

The challenges led stakeholders to focus on the potential positive impact that processing facilities could have on the county's local food supply chain. Specifically, the following strategies may be valuable to pursue:

- Establishing a second state inspected slaughter and processing facility in the county, focused on serving local protein producers (versus hunters).
- Establishing a culinary incubator and/or shared-use kitchen in the county.
- Setting up commercial processing operations in the kitchens of schools and other institutions during their off months. Produce can be processed and preserved at these facilities, and used by schools in the district throughout the year. This strategy is emerging and expanding throughout North America. New London County Connecticut, through FRESH New London (a farm-to-school initiative), recently launched a similar effort in their district. The pilot has been successful and will be expanded in upcoming years.

While Eat Well Crawford County will not pursue this as a priority, the group will seek opportunities to support existing efforts to establish a culinary incubator or shared-use kitchen. This may be in consideration by Fort Scott Community College and/or by local churches and agencies.

Summary of Research Insights

This section outlines insights and trends that emerged from qualitative research throughout this study, including both interviews and discussions during the FEAST event. Detailed interview and event notes can be found in the appendix.

Stakeholders have different goals for Crawford County's food system and different definitions of local:

Throughout the study, interviewees ranged significantly in their roles and the specific issues they are committed to addressing. For example, Ann Elliot, Peggy Kramer and Martha Murphy serve low income community members in their roles, and witness firsthand the challenges these groups face in adopting healthy eating habits. On the other hand, Becky Gray and Jill Campbell are focused on strengthening a local food system in Crawford County and supporting the region's produce production. Finally, Jeremy Johnson and Jay Byers bring a stronger focus on economic development and regional self-sufficiency.

The myriad of goals identified by interviewees include:

- improving health and wellness among low income communities,
- addressing environmental sustainability, ensuring regional self-sufficiency with respect to the food supply,
- developing a food culture and local food system,
- and promoting economic development and job creation.

Across almost all of these potential goal areas, Crawford County has room for improvement. The county's median income is just 75% of the state's average, and county residents rank below state and national averages with respect to key health metrics (such as obesity, fruit and vegetable consumption rates, and diabetes rates). Finally, Crawford County mirrors Kansas in its agricultural landscape. The state exports over 90% of the products grown in Kansas to the nation and worldwide. Only 0.03% of Kansas farmland is used to produce vegetables, berries, fruits and nuts. A recent Kansas Rural Center report indicates that a mere 0.26% of Kansas's agricultural acres would need to be directed towards specialty produce in order to meet statewide demand for local fruit and vegetable consumption.³ This low percentage is still eight times the current fruit, vegetable and berry production in the state, suggesting that the state is not self-sufficient with respect to food.

While these goals are not necessarily in conflict, they each might motivate different investments in programs and enterprises. Clarifying and aligning on the primary objectives for this project is a critical step for the Project Team.

Additionally, how stakeholders defined "local" varied drastically. For some, the focus should be on Crawford County grown. For others, a focus on southeast Kansas is sufficient; while for others, the definition can expand to the entire state of Kansas or even neighboring states. Broader, more regional, definitions for local, that focus on securing "as local as possible" at any given time, are often more realistic for wholesale produce buyers who need large and consistent volumes of produce to meet their customers' needs.

Pittsburg and the rest of Crawford County: Crawford County economic and population trends appear more promising than surrounding counties; but a closer observation reveals that this is likely due to the City of Pittsburg and the presence of Pittsburg State University in the county. Pittsburg has over 20,000 residents. Frontenac and Girard, the county's next two biggest towns, have only 3,400 and 2,700 residents, respectively. The county's remaining seven towns each have less than 1,500 residents. Pittsburg and the university's presence are a tremendous asset. The university brings education and innovation, and a small student ethnic population that is unique to the region. The town's size and wealth helps to bring funding to local and healthy food initiatives. However, there may also be some tension between Pittsburg and other Crawford County towns, driven by the sense that Pittsburg is home to many of the amenities and resources that residents in other towns would like to see closer to them.

There is a strong foundation of institutions dedicated to improving Crawford County's health and wellness: These include the Wesley House, Via Christi, Girard Medical Center, The Family Resource Center, Crawford County Mental Health, K-State Extension, Greenbush and the United Way of Southeast Kansas. These organizations have implemented different strategies in support of community health and wellness, particularly among underserved populations. Programs have included: school gardens, bringing fresher and healthier food options into cafeterias, conducting health-related lunch and learns, and running cooking and nutrition education classes. Additionally, the Pittsburg Farmers Market, which has accepted SNAP for several years, received a grant

³ (Kansas Rural Center 2014)

to provide SNAP customers with double bucks (up to \$20 per week). This has led to a significant increase in SNAP payments at markets this past summer.

There appears to be informal and formal partnership development between many of these organizations; although there is much room for improvement in forging more strategic and formal alliances between complementary initiatives.

Unfortunately, some of these programs have since been discontinued due to lack of funding. Additionally, almost all interviewees suggested that even though they have tested some healthy food related programming, there is significant improvement and growth opportunity in this work. For example, Ann Elliott mentioned the desire to have her chefs attend fresh food production classes; however, these classes have often been canceled due to lack of interest. Marcee Binder described Wesley House's innovative efforts, but also highlighted the constraints they face in providing healthier food options (i.e. budget constraints force them to focus on hot dogs as a primary protein option, receiving old produce with limited shelf life remaining making their fruit and vegetable options less appealing, etc).

Production of local farm products, and capacity across the supply chain, is significantly limited: The production of local, healthy food is very limited in Crawford County, with fruit and vegetable production representing just 0.07% of agriculture in the region. The county's agricultural landscape is dominated by grains and cattle. Interviewees and FEAST event input suggested a number of obstacles hinder the expansion of specialty crop production. Josh Coltrain emphasized that available land is extremely limited – as viable land is typically owned by commodity crop farmers already (though some of this land may be available to lease). The region faces labor shortages, especially among seasonal workers. Finally, understanding among farmers of the value of specialty crops, versus commodity crops, is fairly limited. Most farmers, and K-State Extension agents, are far more familiar with the economics of commodity crops and are therefore often unwilling to consider diversification into fruit and vegetable production.

Additionally, small scale slaughter and processing facilities for meat, and processing facilities for produce are very limited in the region. Schroeder's is the only meat processing facility that exists in Crawford County, but this facility is at capacity during busy months. The closest viable commercial kitchen facilities are two or more hours away from Crawford County, though one may be developed in Crawford County in the future. These processing limitations make it even more difficult to encourage small scale production of fruits, vegetables and meat in the region.

Despite the limited production of local, consumable farm products, local and healthy food efforts are emerging. They face critical challenges, and are predominantly reaching wealthier community members:

Despite this limitation on fruit and vegetable production, local food related efforts appear to be emerging. At the wholesale level, Pittsburg USD 250, Ron's and Martinous all suggested that they are pursuing efforts to source local farm products. They all emphasized their strong commitment to local, but reiterated frustration over supply limitations of local products in the county and across the state. Pittsburg USD 250 explained that they are able to successfully source flour milled in Kansas. Martinous indicated that they are able to successfully source regionally (and prefer this because it results in lower transportation costs as compared to sourcing nationally or procuring imports), but have challenges sourcing produce from Kansas.

Becky Gray described a new culinary incubator being developed by Fort Scott Community College that would support local farmers and food entrepreneurs. Two interviewees – Martha Murphy and Becky Gray – described the groundswell of residential gardening efforts that are leading households to have a surplus in their output,

resulting in an informal trading economy between these gardeners. All interviewees mentioned that the Pittsburg Farmers Market is robust, drawing over 20 vendors (many from outside the county) and attracting a sizable crowd each Saturday. Bear Toes, a new specialty grocer, has opened in Pittsburg, and restaurants like Chatters are exploring local sourcing strategies. One CSA is in operation in the county (run by Darren Swartz) and a new CSA option (Bountiful Baskets) has opened a drop off location in Girard. By and large, these efforts are predominantly serving wealthier customers across the county.

Balancing the pricing thresholds of small scale producers with buyer restrictions: Discussion at the FEAST event emphasized the challenges of matching producer pricing needs with the county's efforts at making local food more broadly available and accessible. Beyond supply limitations, this issue of pricing appears to be the next most important constraint blocking efforts at making local food accessible to middle and lower income communities.

Throughout the interviews and the FEAST event, small to medium sized producers indicated their preference for direct-to-consumer channels, such as CSAs (heavily preferred by Schenker Family Farms) and farmers markets. These sales outlets put producers in front of the least price sensitive buyers and allow them to charge their preferred price.

Several FEAST event attendees suggested that unreasonable price expectations have been set in the market because imported produce utilizes such low cost labor. This struggle is faced by retailers and distributors, who are often unable to successfully sell higher priced, more sustainably or locally produced products. Institutions like Pittsburg USD 250 have to balance tight and complex budgets, and may not be appropriately managing their fiscal responsibilities and taxpayer commitments by overspending on food.

Additionally, many populations, such as the homeless, elderly and very low income, simply do not have any excess disposable income to spend more on healthier and local products.

Two notable examples of new initiatives to serve low income communities include (1) Pittsburg Farmers Market recent grant to accept SNAP double bucks matching at farmers markets for up to \$20 per customer, and (2) an emerging pay what you can / sliding scale diner to be launched in Pittsburg. Both of these efforts have strong momentum and are well positioned to address certain food and health related issues in the region. These are subsidized programs that enable the added price point of local to be absorbed by grants and not consumers or institutional buyers.

Education and incentives may be as, if not more, important than access when it comes to healthy food: The county has multiple grocery stores ranging from national chains and super centers (like Dillons / Kroger and Walmart) to smaller, independent entities and specialty (like Ron's and G&W Foods – independent, full service grocery stores and Bear Toes – a specialty store). Most customers are reasonably happy with the selection that these stores offer, and they are pleased with the increasing focus these venues seem to be placing on local. Most interviewees suggested that by and large, Crawford County residents living in or near Pittsburg have physical access to fairly healthy food options. However, moving further away from Pittsburg, many residents are in food desert locations, up to 20 miles away from the nearest grocery store.

Interviewees and FEAST event attendees heavily emphasized that education and incentives may be more important to focus on, at least early on, than expanding availability and affordability of healthy foods.

Education can be focused on shopping education (encouraging price comparison and private label brand selection), cooking education and demos, and broader nutrition education. Peggy Kramer suggested that

programs should focus on giving children, particularly very young toddlers, a chance to experience diverse and healthy options, and that these steps are critical to setting the stage for a lifetime of healthy eating.

Many of the interviewees expressed how impressed they are with the WIC program, and how well it educates mothers on prenatal and children's nutrition issues, and promotes healthy eating habits through its subsidization of wholesome food options only. Education efforts and incentives that build on WIC's success might have impact in the community.

Incentives may include subsidizations that make healthy food more affordable than unhealthy food in grocery stores, fast casual restaurants and cafeterias. They may be employer or school-driven, with strategies like giving students or employees points for healthy behaviors that can be "cashed in" for rewards.

Youth focused efforts can be particularly successful: FEAST attendees felt strongly that focusing on youth education was most critical, as these efforts would most successfully build demand for local and healthy products in the short and long-term.

Evidence from Pittsburg USD 250 suggests that youth-focused efforts can have a significant and lasting impact. The district recently began participating in federal Fresh Fruit and Vegetable Program, with students receiving one healthy fruit or vegetable snack each day. School administrators have found that students who have been exposed to healthy snacks early on have become more open to and curious about new fruits and vegetables. High school students who did not have the program in place when they were in elementary grades appear to be less open to these fruits and vegetables they are offered.

Efforts should recognize unique accessibility constraints of low income residents: While education and incentives can help consumers make more informed decisions on food choices, it is important to acknowledge the time and resource constraints that may prevent many households, and lower income households in particular, from cooking fresh meals for their families. Parents who work multiple jobs, have little to no kitchen equipment or supplies at home, and often struggle with language and numeric literacy challenges that make cooking extremely difficult, will often rely on prepared, ready to eat or ready to heat meals for their families. Therefore, new enterprises that aim to bring healthy, convenient and affordable options to the market will fill an important need.

Leveraging assets and existing institutions: Strategies should recognize and build on assets that already exist in the community.

Hospitals like Girard Medical Center and Via Christi can provide health classes and lunch and learns, as part of broader community outreach efforts. Schools like USD 250, as well as Family Resource Center and Greenbush should be recognized as key connections to students. Relevant efforts targeting students and youth should be executed in partnership with these institutions.

Several interviewees suggested that Walmart is stocking and marketing local, and that other grocery stores have begun these efforts as well. Grocery stores can play a powerful role in more proactively directing consumers to better-for-you products, and making these healthy options look as appealing as possible.

Gas stations, venues that some interviewees indicated were likely popular stops for meals like breakfast items, frozen pizzas or hot dogs, may be amenable to stocking healthier food options (although this strategy has not been broached with gas station owners yet).

Wesley House, a food bank and day shelter in Pittsburg, is open to exploring opportunities to more successfully serve the health and wellness needs of its clients.

Efforts should respect Crawford County's traditional agricultural landscape: Several interviewees, including Jeff Murphy and Josh Coltrain, represent traditional agriculture (i.e. large scale, monocrop production). These interviewees emphasized that this research effort must recognize that grains and cattle are the county's – and the entire state's – main form of production and a key driver of the municipal and state economy. Initiatives that solely focus on fruits and vegetables, and in particular that prioritize sustainability and organic, may frustrate traditional farmers and make them less likely to support these new efforts.

Josh Coltrain described Kansas's overall branding and marketing messages for its farmers, which emphasize the role the state plays in feeding the world's 9 billion, by serving as a bread basket to all. This agricultural legacy and the importance of this role nationwide cannot be ignored, even as important efforts are made to grow the local and healthy food system in the region.

Martha Murphy and Jeff Murphy both emphasized that they raise cattle, and the beef they produce for their own household and for others is far tastier than what is available at traditional retailers. This highlights the potential of improving availability of locally produced beef within Crawford County – as a strategy that celebrates the region's more traditional producers and builds increased, mainstream awareness of the value and benefits of local sourcing.

Summary of Entities Across the Food Value Chain

The following chart maps key players across the food supply chain who have emerged throughout this study. **This is not a comprehensive list of all food systems entities in or serving the county**, and instead, represents organizations that have been mentioned or that emerged periodically through secondary research.

It intends to provide an initial foundation for the existing assets, activities, gaps and opportunities that exist in Crawford County, to help Eat Well organize their list of potential partners and stakeholders.

Production and production support	Processing and Storage	Distributors	Institutions	Retail and Direct-To-Consumer	Nonprofits, agencies, education
<p><i>Small scale growers with local sales:</i></p> <ul style="list-style-type: none"> • Schenker Family Farms • Flora’s Produce • Hickory Creek Farms • Swartz’s Produce • Misty Morning Farms • Jill Campbell <p>• Amish communities in MO</p> <p><i>Groups supporting production</i></p> <ul style="list-style-type: none"> • 4H and Future Farmers of America • K-State Extension 	<ul style="list-style-type: none"> • Schroeder’s Custom Butchering & Processing • Erie Meat Locker • Fort Scott Community College • Your Commercial Kitchen (Springfield, MO) • Douglas County Fairgrounds Kitchen (Lawrence, KS) 	<ul style="list-style-type: none"> • Martinous • Marrones • Liberty Fruit Co. • Associated Grocer (national company, distributes into the county) • C&C Produce (regional distributor, delivers into the county) • Value Merchandisers (regional distributor, delivers into the county) 	<ul style="list-style-type: none"> • Pittsburg State University • Pittsburg USD 250 • Frontenac Public Schools • Girard Public Schools • Northeast Public Schools • Cherokee Public Schools • Via Christi Hospital • Girard Medical Center • Crawford County Mental Health • Southeast Kansas Educational Services Center • Southeast Kansas Special Education Center 	<ul style="list-style-type: none"> • Pittsburg Farmers Market • Girard Farmers Market • Swartz CSA • Bountiful Baskets CSA • Martinous’s Naked Fruit • Bear Toes • Pittsburg Food Cooperative • Ron’s • Dillons • Aldi • Walmart • G&W Foods 	<ul style="list-style-type: none"> • Wesley House • Department of Public Health • K State Extension - SNAPed • United Way of Southeast Kansas • Family Resource Center • Pay-what-you-can diner (name TBD)

Appendix A: Detailed Secondary Research

Located at the foothills of the Ozarks, Crawford County is approximately 590 square miles and consists of both the Osage Cuestas in the northwest (made up of rolling grasslands, limestone bluffs, and heavily timbered bottomland) and Cherokee Lowlands in the southeast (made up of thick brush, timber and rich coal resources). Crawford County is historically a coal mining region, with its now strip-mines having been reclaimed for native vegetation. The county is home to the Mined Land Wildlife area, 13,000 acres of rugged land, steep sided hills and dense vegetation, which provides hunting, hiking, camping, mushroom/berry picking, and fishing.⁴

Crawford County has a population of 39,290. Pittsburg is the largest city, accounting for approximately one half of the county’s residents with a population of 20,233. Six of the county’s ten cities have populations of less than 1,000.

*Crawford County population by city 2014*⁵

City	Population	City	Population
Arma	1,481	Hepler	132
Arcadia	310	McCune	405
Cherokee	714	Mulberry	520
Frontenac	3,437	Pittsburg	20,233
Girard	2,789	Walnut	220

⁴ (Visit Crawford County 2014-2015)

⁵ (Suburban Stats 2015)

Crawford County is part of the “Lower 8” counties in Southeast Kansas, and has the highest population of any other county in the region. The Lower 8 Public Health Region of Southeast Kansas was formed in 2002 to address bioterrorism, however, after several natural disasters occurred throughout the region, it was determined that the Lower 8 could broaden its scope. The Lower 8 consists of eight counties in Southeast Kansas including Cherokee, Crawford, Labette, Montgomery, Chautauqua, Elk, Neosho, and Wilson counties. The Lower 8 region is considered to be a rural area.

With the exception of Crawford County, all of the counties in the Lower 8 region decreased in population according to the 2010 Census data, with the exception of Crawford County, which saw a 2.9% increase in population.⁶ This may be driven by Pittsburg State University’s impact in Crawford County. The university draws a disproportionately large population of college-aged residents (20-24) and has therefore protected the city from the population decreases that are taking place in very rural settings.⁷

Crawford County accounts for 1% of the state’s population and 25% of the population of the Southeast Region.

*Crawford County and the Southeast Region 2014*⁸

County	Population
Bourbon County	14,772
Labette County	20,960
Neosho County	16,416
Crawford County	39,290
Wilson County	9,028
Elk County	2,694
Montgomery County	34,065
Cherokee County	20,787
Southeast Region	158,012
State of Kansas	2,904,021

Crawford County’s median household income was \$37,378 in 2013, compared with Kansas’ median household income of \$51,332 and the nationwide median household income of \$51,939.⁹ *The county has a high level of poverty, with 21% of its population living below the poverty line, compared to the state’s poverty level of 14% and the nationwide poverty level of 15%.*

The county is largely made up of healthcare and social assistance jobs (32% of jobs held), government roles (26%), manufacturing jobs (14%), retail (11%), and foodservice / tourism (11%).

Pittsburg State University is the largest employer in the county with 1,867 employees, followed by Crossland Construction and Pittsburg USD 250.¹⁰

⁶ (Crawford County Kansas 2014)
⁷ (Kansas US Census Records 2010)
⁸ (US Census 2014)
⁹ (US Census American FactFinder 2015)
¹⁰ (Pittsburg Area Chamber of Commerce 2015)

Employer ¹¹	Number of employees
Pittsburg State University	1,867
Crossland Construction	750
Pittsburg USD 250	684
Via Christi Hospital	677
Sugar Creek Packing Company	540
Walmart Super Center	380
Pitt Plastics	293
Millers Professional Imaging	287
SEK Regional Education Service Center at Greenbush	160

Pittsburg is also home to four industrial parks with over 40 manufacturing companies: Airport Industrial Park, Northeast Regional Industrial Park, Research and Development Park, and Southeast Industrial Park.

The three closest population centers near Crawford County include Joplin, MO (29 miles away and with a population of 51,316), Wichita, KS (157 miles away and with a population of 388,413), and Kansas City (123 miles away and with a population of 620,436 across both KS and MO).

Agricultural Landscape

Crawford County land area is 589.76 square miles or 377,446 acres and is home to 846 farms on 323,222 acres of farmland. This represents 86% of the county's land area. The average size of farms in Crawford County is 382 acres. There has been a 7% decrease in the number of farms since 2007, a trend likely driven by industry wide consolidation in commodity farms, as evidenced by the fact that in the same time period, the average farm size increased from 376 to 382 acres.

The market value of agricultural products sold in Crawford County in 2012 was \$71,696,000. Crop sales represented \$48,333,000 (68% of the total) and livestock sales were \$23,299,000 (32%). Fruits and vegetables represent just 0.07% of the total.¹²

The following chart compares the market value of agricultural products sold in Crawford County and the surrounding counties in the Southeast Region of Kansas in 2012.

County ¹³	Vegetables	Fruits & Nuts	Grains	Cattle/Calves	Dairy*	Poultry/Eggs	Total
Crawford	D	47	48,333	23,299	D	17	71,696
Cherokee	D	D	66,839	D	-	D	66,839
Bourbon	55	66	D	36,429	D	18	36,568
Neosho	221	D	39,447	24,849	970	45	65,532
Labette	52	353	48,381	69,055	1,705	24	119,570
Elk	-	-	5,177	34,683	322	4	40,186
Wilson	32	26	44,631	16,864	-	12	61,565

¹¹ (Pittsburg Area Chamber of Commerce 2015)

¹² (US Census of Agriculture 2012)

¹³ (USDA 2012)

Montgomery	28	135	44,182	16,273	D	77	60,695
Southeast Region	388	627	296,990	221,452	2,997	197	522,651
Kansas	25,705	3,487	5,596,850	7,988,495	523,603	60,883	14,199,023

(D) Data undisclosed by USDA to protect individual farm operations (indicates that the number of farmers in category is low).
All numbers are in \$1,000s, data from 2012.

Number of Farms¹⁴

County ¹⁵	Vegetables	Fruit	Grains	Cattle/Calves	Dairy*	Poultry/Eggs	Total Number of Farms
Crawford	1	4	217	375	4	6	846
Cherokee	2	10	239	291	-	7	729
Bourbon	6	5	102	434	1	4	903
Neosho	6	2	171	296	22	0	702
Labette	3	8	233	460	21	9	977
Elk	-	3	35	167	4	-	315
Wilson	4	-	137	145	-	4	423
Montgomery	2	11	140	519	5	15	1,012
Southeast Region	24	43	1,274	2,687	57	45	5,907
Kansas	232	265	23,272	15,991	398	385	61,773

These trends mirror the overall state’s agricultural landscape. 90 percent – or 82,277 square miles of Kansas’ land is dedicated to farming. In 2012, the state generated nearly \$18.5 billion in agricultural sales with crops totaling \$7 billion and livestock \$11.5 billion. According to the Kansas Department of Agriculture, Kansas produces nearly one-fifth of all wheat grown in the US. In 2012, only 441 farms in the entire state produced vegetables for sale, and only 489 still had land in orchards. Fruits, vegetables, and tree nuts represented just 0.15 percent of total statewide agricultural market value on 14,359 acres or 0.03 percent of Kansas farmland.

The 2012 study “A Kansas Food System Assessment” by Janke & Johnson suggested just 0.26 percent of Kansas’s agricultural acres would need to be directed towards specialty produce in order to meet Kansas consumers’ demand for fruit and vegetables. Although this would be a small percentage of the state’s overall agricultural production, it represents an increase of almost 900% in fruit and vegetable acreage across the state.

Transitioning more of the state’s acres to fruit and vegetable production may also increase net income for Kansas farmers. The average net income per crop per acre in the state for corn is \$137, soybeans is \$138, wheat is \$108 and vegetables is \$2,631.¹⁶

Export Trends

Kansas is an agricultural export state. In 2012, Kansas ranked 7th in agricultural **exports to North America** among 50 states, down from 6th in 2007 (Meter, 2014) with revenue from those exports totaling about \$4.9 billion (USDA-ERS, 2012) including processed foods at \$2.2 billion and agricultural products at \$2.0 billion.¹⁷

¹⁴ (USDA Ag Census 2012)

¹⁵ (US Census of Agriculture 2012)

¹⁶ (Kansas Rural Center 2014)

¹⁷ (International Trade Association 2014)

Nearly 97 percent of Kansas’s 2012 agricultural sales, almost all of which went out of state, were derived from grains, meat and animal products.¹⁸

Agriculture in Neighboring Regions

The Missouri counties that are closest to Crawford County, Kansas are Jasper County, Barton County and Vernon County and the closest large population center in Missouri is the city of Joplin. With a population of 51,316, Joplin, MO is located 29 miles away in southern Jasper County and northern Newton County.

Rich Hill, Missouri is a small town located in Jasper County approximately one hour northeast of Pittsburg. It is home to a community of Mennonite produce farmers, many of whom are part of Twin County Family Farms. Good Natured Family Farms, a long standing food hub in Kansas City, sources heavily from these farms, and sells these products to Ball Foods, Sysco and their CSA program.¹⁹

These Mennonite farmers have a highly efficient distribution model. Individual farmers are responsible for transporting their produce to their combined warehouse where it is washed and packaged under the GNFF brand using packaging and labeling materials.²⁰

Protein Slaughter and Processing

There are a number of meat and poultry slaughter facilities in Kansas, but most are outside of Crawford County and the Southeast region. The majority of those within Crawford County are pet food or bacon processors, developing and processing products under their own brand.

Processors/Slaughter ^{21 22}	Region	City	Services Provided	Food Safety Status
Alta Vista Locker	Kansas	Alta Vista	Meat and other slaughter	USDA
Anco Poultry Processing	Kansas	Garnett	Poultry slaughter	USDA
Banner Creek	Kansas	Holton	Meat, poultry slaughter	USDA approved Swine
Bauman’s Butcher Block / Stinson Processing	Kansas	Ottawa	Meat slaughter	USDA
Beck & Hill	Crawford County	Pittsburg	Processing meat, poultry	State inspected
Ben-Lee Processing	Kansas	Atwood	Meat, poultry, other slaughter	
Bern Meat Plant	Kansas	Bern	Meat, poultry, other slaughter	
Bichelmeyer Meats	Kansas	Kansas City	Meat slaughter	State inspected
Bob’s Locker Plant	Kansas	Washington	Slaughter, processing, meat	State inspected
Bowser Meat Processing	Kansas	Meriden	Slaughter, processing, meat	State inspected
Bronson Locker	Southeast Region	Bronson	Meat slaughter	
Burkhart Meats	Kansas	Kinsley	Slaughter, processing, meat, retail	State inspected
Butterball	MO	Carthage, MO	Meat, poultry, other slaughter	
Canton Lockers	Kansas	Canton	Slaughter, processing, meat	State inspected
Carr Creek	Kansas	Tipton	Processing meat	State inspected
Cargill Meat Solutions	Kansas	Dodge City	Meat slaughter	
Cedar Vale Locker	Kansas	Cedar Vale	Slaughter, processing, meat	State inspected
Chieftan Brand Meats / Kiowa Locker System	Kansas	Kiowa, KS	Meat, poultry, other slaughter	HACCP
Creekstone Farms Premium Beef	Kansas	Arkansas City	Processing meat	USDA

¹⁸ (Kansas Rural Center 2014)

¹⁹ (Williams 2012)

²⁰ (National Good Food Network 2008)

²¹ (Final Nail 2014)

²² (Kansas Department of Agriculture 2015)

Processors/Slaughterer ^{21 22}	Region	City	Services Provided	Food Safety Status
Daily Grind / Leonard Meat Co.	Kansas	Topeka	Processing, meat, poultry	State inspected
Dale's Supermarket	Kansas	Hillsboro	Processing meat	State inspected
Damn Good Jerky	Kansas	De Soto	Processing meat	State inspected
Diecks / Clay Center Locker	Kansas	Clay Center	Slaughter, processing, retail, meat	State inspected
Duncan Lockers & Slaughter Serv	Kansas	Lakin	Slaughter, processing, meat	State inspected
Ehresman Packing Co	Kansas	Garden City	Slaughter, processing, meat	State inspected
Elkhorn Valley Packing	Kansas	Wellington	Meat slaughter	USDA approved Cattle
Ellinwood Packing Plant	Kansas	Ellinwood	Slaughter, processing, meat	State inspected
Ellsworth Packing	Kansas	Ellsworth	Slaughter, processing, meat	State inspected
Erie Meat Locker	Kansas	Erie	Meat processing	
Farview Farms Meat Co	Kansas	Topeka	Meat slaughter	
First Choice Meats	Kansas	Herington	Slaughter, processing, meat	State inspected
Fitz Meats	Kansas	Oakley	Slaughter, processing, retail, meat	State inspected
Fort Hays State University Meats Laboratory	Kansas	Hays	Meat Processing	State inspected
Frankfort Meat Processors / Welch Bros Meat	Kansas	Frankfort	Slaughter, processing, meat	State inspected
Garden City Community College	Kansas	Garden City	Meat processing	State inspected
Glasco Locker Plant	Kansas	Glasco	Slaughter, processing, meat	State inspected
Golden City Meats	MO	Golden City, MO	Meat, poultry, other slaughter	
Grasshopper Packing Co	Crawford County	Pittsburg	Pet foods	
Grinnell Locker Plant	Kansas	Grinnell	Slaughter, processing, meat	State inspected
GTB Custom Meats	Kansas	Riley	Slaughter, processing, meat	State inspected
Heartland Choice Meats / Klema Quality Meats	Kansas	Beloit	Slaughter, processing, meat	State inspected
Heritage Meats	Kansas	Leoti	Slaughter, processing, meat	State inspected
Holton Meat Processing	Kansas	Holton	Slaughter, processing, meat	State inspected
Indian Hills Meat & Poultry	Kansas	Wichita	Processing meat, poultry	State inspected
J & W Poultry	Crawford County	Girard	Processing poultry	State inspected
Jackson Frozen Food Center	Kansas	Hutchinson	Meat processing	State inspected
Kansas State University	Kansas	Manhattan	Meat, poultry slaughter	violation
Kensington Lockers	Kansas	Kensington	Meat, poultry, other slaughter	
Kirby Meat Company	Kansas	Dodge City	Slaughter, processing, meat	State inspected
Krehbiels Specialty Meats	Kansas	McPherson	Meat, poultry, slaughter, processing	USDA
Mark's Meats	Kansas	Halstead	Slaughter, processing meat	State inspected
Mayfield Grocery & Locker	Kansas	Mayfield	Meat processing	State inspected
Mont Ida Meats	Kansas	Welda	Slaughter meat	State inspected
Moran Locker	Kansas	Moran	Slaughter processing meat	State inspected
National Beef Packing	Kansas	Dodge City	Meat slaughter processing	Certified
National Beef Packing	Kansas	Liberal	Meat slaughter processing	Certified
Olpe Locker	Kansas	Olpe	Slaughter, processing meat	State inspected
Oswego Locker	Southeast Region	Oswego	Slaughter processing retail meat	State inspected
Peabody Sausage House	Kansas	Peabody	Slaughter processing meat	State inspected
Percival Packing	Kansas	Scott City	Meat, poultry, other slaughter	
Phil's Farm /Joyce's Homestyle/Buhler Packing Co.	Kansas	Hutchinson	Processing meat poultry	State inspected
Rainbow Organic Farms	Lower 8	Uniontown	Meat, poultry slaughter	
Ron's Market	Kansas	Holcomb	Processing meat	State inspected
Santa Fe Trail Meats	Kansas	Overbrook	Slaughter processing meat	State inspected
Schroeder's Custom Butchering & Processing	Crawford County	Arma, KS	Slaughter, processing meat poultry	State inspected
Seneca Meat Market	Kansas	Seneca	Slaughter, processing meat	State inspected
Smithfield Farmland	MO	Milan, MO	Meat and other slaughter	
South Fork Meat Processing	Kansas	Ness City	Slaughter processing meat	State inspected
Steve's Meat Market	Kansas	De Soto		USDA
Stroot Locker Inc	Kansas	Goddard	Slaughter Processing meat	State inspected

Processors/Slaughterer ^{21 22}	Region	City	Services Provided	Food Safety Status
Stroot Locker Inc	Kansas	Mulvane	Slaughter processing meat	State inspected
Sugar Creek Packing	Crawford County	Frontenac	Sausages from purchased meat	
Swenson Meat Processing	Kansas	Concordia	Slaughter processing meat	State inspected
Swenson Meat Processing	Kansas	Salina	Processing meat	State inspected
Swiss-Burger Brand Meat Co	Kansas	Wichita	Processing meat	State inspected
T & W Meat Co	Kansas	Kingman	Meat and other slaughter	
T & W Meat Co	Kansas	Preston	Slaughter, processing meat	State inspected
Timber Creek Meats	Southeast Region	Parsons	Processing meat poultry	State inspected
Triple T's Foods HQ	Crawford County	Frontenac	Pet foods processing	
Triple T's Foods Warehouse	Crawford County	Pittsburg	Pet foods processing	
Tyson Fresh Meats	Kansas	Holcomb	Meat and other slaughter	
W Diamond M Meats	Kansas	Spring Hill	Meat slaughter	violation
Waggoner Ent / Yoder Meats	Kansas	Yoder	Slaughter, processing meat	State inspected
Walnut Valley Packing	Kansas	El Dorado	Meat processing, wholesale	USDA
Wang Jar Food Co	Kansas	Downs	Meat slaughter	violation
Woodson County Prime Meats	Kansas	Yates Center	Meat, poultry, other slaughter	USDA
Produce				
Bismarck Gardens	Kansas	Lawrence	Fruits and Vegetables	
Dole Fresh Fruit Co	Kansas	Lenexa	Produce processing	
Liberty Fruit Company	Kansas	Kansas City	Produce processing	
Louisburg Cider Mill	Kansas	Louisburg	Cider, etc - Wholesaler	
Nu Life Market / Sun Life	Kansas	Scott City	Flours and grain products	
Dairy²³				
Kansas State University Dairy Processing Plant	Kansas	Manhattan	Dairy processing	
T & R LeDue Milk Hauling	Kansas	Greenleaf	Dairy processing	
Jason Wiebe	Kansas	Durham	Dairy processing	
Emrich Family Creamery	Kansas	Wheaton	Dairy processing	
Mies Transfer Station	Kansas	Colwich	Dairy processing	
Newhouse Dairy	Kansas	Wellsville	Dairy processing	
Prairie Pride	Kansas	Rose Hill	Dairy processing	
Hilton House Foods	Kansas	Wichita	Dairy processing	
Niehues Transfer Station	Kansas	Sabetha	Dairy processing	
Kan Pak	Kansas	Arkansas City	Dairy processing	
Hiland	Kansas	Wichita	Dairy processing	
Bradford Cheese	Kansas	Eskridge	Dairy processing	
Cranston Dairy	Kansas	Baldwin City	Dairy processing	
Gorges Dairy	Kansas	Hillsboro	Dairy processing	
Jackson Ice Cream	Kansas	Hutchinson	Dairy processing	
IMAC	Kansas	Sabetha	Dairy processing	

Shared-use Kitchens and Commercial Kitchens

Commercial kitchen space for farmers and specialty products producers to create value added goods appears to be very limited within Crawford County. There is one commercial kitchen, although it is not currently available for rent. In the Southeast Region there are no certified kitchens available to rent, and within two hours of Crawford County, there are seven commercial kitchens available for rent.^{24 25}

Kitchens	Region	Address	City	Description	Distance from Pittsburg, KS
Your Commercial Kitchen	MO	3433 S Campbell Ave	Springfield, MO	1600 sq ft with a 6-burner gas range, two gas convection ovens, 20 qt mixer, 12" slicer, food	Approx 1½ hrs

²³ (KS Dept of Commerce Ag Marketing Division 2003)

²⁴ (Commercial Kitchen for Rent 2005-2015)

²⁵ (Culinary Incubator 2015)

Kitchens	Region	Address	City	Description	Distance from Pittsburg, KS
				processor, work tables, refrigeration, freezer, ice maker, 3-compartment sink, and lockable dry-storage lockers. Approved for food processing. Rates start at \$25 per hour; discounted for high-volume clients.	
Full Commercial Kitchen for Lease	MO	381 Guin Rd	Nixa, MO	Equipment includes full hood, grease traps, gas stove and ovens, grill, refrigeration, freezer, prep and dish areas, storage and more. 2,000/mo + utilities	Approx 1½ hrs
Commercial Kitchen Incubator at Douglas County Fairgrounds	Kansas	2110 Harper St., Bldg 21	Lawrence, KS	Electric Range with 6 burners and 24" griddle Electric Convection Oven, Electric Tilting Kettle, Electric Hot Food Serving Counter, Commercial Microwave Oven, Food Mixer, Refrigerator, Merchandiser Refrigerator, Freezer Prep Table, 3 Compartment Sink, Hand Sink, Dishwasher, Soiled Dishtable, 2 One-Compartment Sinks, 5 Stainless Steel Work Tables, Mobile Bun Pan Rack, Wire Storage Rack, Security Storage Unit (no long term storage units) \$25 per half day and \$50 for a full day	Approx 2 hrs
Ennovation Center	MO	201 N Forest Ave	Independence, MO	The kitchen features 6 kitchens including one gluten-free kitchen and 4 kitchen area work spaces; a shared kitchen area with griddle, grill, soup and tilt skillets, a smoker, commercial grade mixers, food processors, ranges, ovens, pots and pans, dry storage, coolers, freezer, a doc area for large deliveries, single room storage and a resource room where clients can meet potential vendors/buyers, print labels and conduct business.	Approx 2 hrs
Kansas State University Olathe	Kansas	22201 W Innovation Drive	Olathe, KS	Multiple kitchen spaces available; including a Theatre (Studio) Kitchen, Banquet Kitchens, and Competition Kitchen. Inquire for sq ft, rates and features.	Approx 2 hrs
The Fresh Catch	MO	700A E North Ave	Belton, MO	Mom and pop style fish and chicken restaurant with commercial fryers, 6 burner stove with lots of storage room.	Approx 2 hrs
Lulu's Bake Shoppe	OK	8162C S Lewis Ave	Tulsa, OK	Licensed, fully equipped 1400 sq. ft. kitchen for rent, refrigeration / dry goods storage.	Approx 2 hrs
Commercial Kitchen Rental	Kansas	702 Roseport Rd	Elwood, KS	A commercial kitchen certified by the state of Kansas with storage. Keith's BBQ	Approx 3 hrs
Glacial Hills Food Center	Kansas	1730 1 st Ave West	Horton, KS	Shared-use, incubator kitchen available to rent with a convection oven, industrial six-burner stove, three-vat sink, hand-wash sink, industrial dishwasher, specialty equipment such as a fermenting crock and a grain mill. Canning equipment is available including canners and two large pressure canners.	Approx 3 hrs
Spectrum Venue	Kansas	3920 W Douglas	Wichita, KS	Kitchen rental: cooking equipment, overhead stove stacks - needs other equipment, rent by the day, week or month 316-943-2100	Approx 3 hrs
The Wichita Chapel	Kansas	411 S Martinson	Wichita, KS	Commercial Kitchen for rent; Monthly, Weekly, daily, hourly. 5 bay pizza oven, additional 4 double convention ovens, 8 gas heating element commercial Hobart range top, 3	Approx 3 hrs

Kitchens	Region	Address	City	Description	Distance from Pittsburg, KS
				commercial sinks, Hobart commercial dish washer, additional 3 gas element range for express short order cooking, exhaust hood, XL center island, lots of cabinet space, additional storage	
Harper County Education Center HCEC	Kansas	128 E 9 th St	Harper, KS	Commercial incubator kitchen for rent: three-compartment sink, refrigerators, prep-sink and a hand wash-sink, walk-in cooler, gas range with oven, mixers and food processor, and stainless steel prep tables	Approx 3½ hrs
Kitchen 4 Hire	Kansas	336 S Santa Fe Ave	Salina, KS	An incubator environment within a fully licensed commercial kitchen available to rent by the hour	Approx 4 hrs
Hodgeman County Culinary Incubator	Kansas	203 N West St	Hanston, KS	Hodgeman County Culinary Incubator located inside the Elk Plaza Business Incubator. Large appliances include a commercial freezer & refrigerator, 2 residential stoves/ovens; 2 microwaves; 2 residential refrigerators; 2 sets of sinks; and lots and lots of counter space. Reasonable rates.	Approx 5 hrs

Demand Landscape

Consumers in Crawford County spent \$8.6 million on fruits and vegetables in 2014. The equivalent per person expenditure was \$218.79. In that same year, consumers in the county spent \$5.3 million on dairy, \$6.6 million on meat, \$2.3 million on poultry and eggs and \$8.6 million on grains.

If the demand for local food in Crawford County was on par with demand trends across the country, and if infrastructure existed in the county that enabled products grown locally to be consumed within the county, the region would have an unmet demand for local fruits and vegetables of \$7.6 million (in wholesale dollars, 2014). Crawford County consumers would also have an unmet demand for poultry and eggs of \$1.3 million. Given the county's relatively large production of grains, meat and dairy, there would be no unmet demand for local in these farm product categories.

The following tables summarize this data for Crawford County and all Southeast Region counties, and the subsequent tables provide additional detail.

County	Dairy	Meat	Poultry & Eggs	Fruit & Vegetables	Grains (Cereals and Bakery Products)
Crawford	0	0	1,281,347	7,590,979	0
Cherokee	0	0	702,627	4,162,515	0
Bourbon	0	0	487,643	2,888,906	0
Neosho	0	0	541,328	3,206,946	0
Labette	0	0	718,675	4,257,589	0
Montgomery	0	0	1,171,615	6,940,903	0
Elk	0	0	104,600	619,672	0

Wilson	0	0	320,398	1,898,107	0
Kansas	0	0	90,595,761	536,709,102	0

The following tables are derived from New Venture Advisors' Local Food MarketSizer™

<i>Crawford County</i>					
	Dairy	Meat	Poultry & Eggs	Fruit & Veggies	
Local Quotient*	239%	1,770%	43%	12%	
Local Food Demand	5,332,944	6,596,403	2,266,326	8,596,386	
Local Food Supply	12,750,520	116,739,888	984,980	1,005,407	
Unmet Demand for Local Food	0	0	1,281,347	7,590,979	
<i>in wholesale dollars</i>					

<i>Cherokee County</i>					
	Dairy	Meat	Poultry & Eggs	Fruit & Veggies	
Local Quotient*	239%	1,770%	43%	12%	
Local Food Demand	2,924,321	3,617,139	1,242,741	4,713,830	
Local Food Supply	6,991,750	64,014,339	540,114	551,315	
Unmet Demand for Local Food	0	0	702,627	4,162,515	

<i>Bourbon County</i>					
	Dairy	Meat	Poultry & Eggs	Fruit & Veggies	
Local Quotient*	239%	1,770%	43%	12%	
Local Food Demand	2,029,563	2,510,399	862,498	3,271,535	
Local Food Supply	4,852,477	44,427,806	374,855	382,629	
Unmet Demand for Local Food	0	0	487,643	2,888,906	

<i>Neosho County</i>					
	Dairy	Meat	Poultry & Eggs	Fruit & Veggies	
Local Quotient*	239%	1,770%	43%	12%	
Local Food Demand	2,252,999	2,786,769	957,451	3,631,699	
Local Food Supply	5,386,687	49,318,873	416,122	424,752	
Unmet Demand for Local Food	0	0	541,328	3,206,946	

<i>Elk County</i>					
	Dairy	Meat	Poultry & Eggs	Fruit & Veggies	
Local Quotient*	239%	1,770%	43%	12%	
Local Food Demand	435,342	538,482	185,006	701,746	
Local Food Supply	1,040,859	9,529,787	80,406	82,074	
Unmet Demand for Local Food	0	0	104,600	619,672	

<i>Montgomery County</i>				
	Dairy	Meat	Poultry & Eggs	Fruit & Veggies
Local Quotient*	239%	1,770%	43%	12%
Local Food Demand	4,876,241	6,031,500	2,072,243	7,860,209
Local Food Supply	11,658,591	106,742,518	900,628	919,306
Unmet Demand for Local Food	0	0	1,171,615	6,940,903

<i>Wilson County</i>				
	Dairy	Meat	Poultry & Eggs	Fruit & Veggies
Local Quotient*	239%	1,770%	43%	12%
Local Food Demand	1,333,490	1,649,415	566,690	2,149,506
Local Food Supply	3,188,238	29,190,538	246,292	251,400
Unmet Demand for Local Food	0	0	320,398	1,898,107

<i>Labette County</i>				
	Dairy	Meat	Poultry & Eggs	Fruit & Veggies
Local Quotient*	239%	1,770%	43%	12%
Local Food Demand	2,991,114	3,699,756	1,271,125	4,821,496
Local Food Supply	7,151,445	65,476,463	552,450	563,907
Unmet Demand for Local Food	0	0	718,675	4,257,589

<i>Kansas Statewide</i>				
	Dairy	Meat	Poultry & Eggs	Fruit & Veggies
Local Quotient*	239%	1,770%	43%	12%
Local Food Demand	377,058,032	466,389,027	160,237,305	607,794,941
Local Food Supply	901,506,884	8,253,923,455	69,641,544	71,085,839
Unmet Demand for Local Food	0	0	90,595,761	536,709,102

Local Quotient is the percentage of category food sales produced within the area. It is calculated at the state level and is overstated if production is shipped to other states. A result of greater than 100% indicates that local demand could be met entirely with local production if it were directed to these markets through a local food system.

It is important to note that many products grown in the county are unable to be consumed locally. While dairy, grains and meat are all grown in abundance in the southeast region of Kansas (resulting in a theoretical unmet demand of zero for these products), there is no processing, storage or distribution capacity to enable the sales of these products within the region. Instead, these products are exported to other parts of the state for processing and storage, and ultimately are consumed across the country and the world.

Additionally, consumers in Kansas, and Crawford County in particular, are likely to have a demand for local that is significantly lower than the national average. The Locavore index ranks Kansas 38th (out of 50) on their scale, based on the number of farmers markets, CSAs, food hubs and farm-to-school initiatives in place. In 2014, Kansas was estimated to have 97 farmers markets, 61 CSAs, 35% of institutions participating in farm to school programs, and two food hubs in operation.

These statewide trends are even more prominent in Crawford County. The county is home to just two farmers markets and two CSAs. Pittsburg has a thriving market, with approximately 20 vendors, that draws crowds from the university and town population. Outside of Crawford County, including cities in neighboring Missouri, there are several additional farmers markets; however, these do not tend to draw visitors from Crawford County.

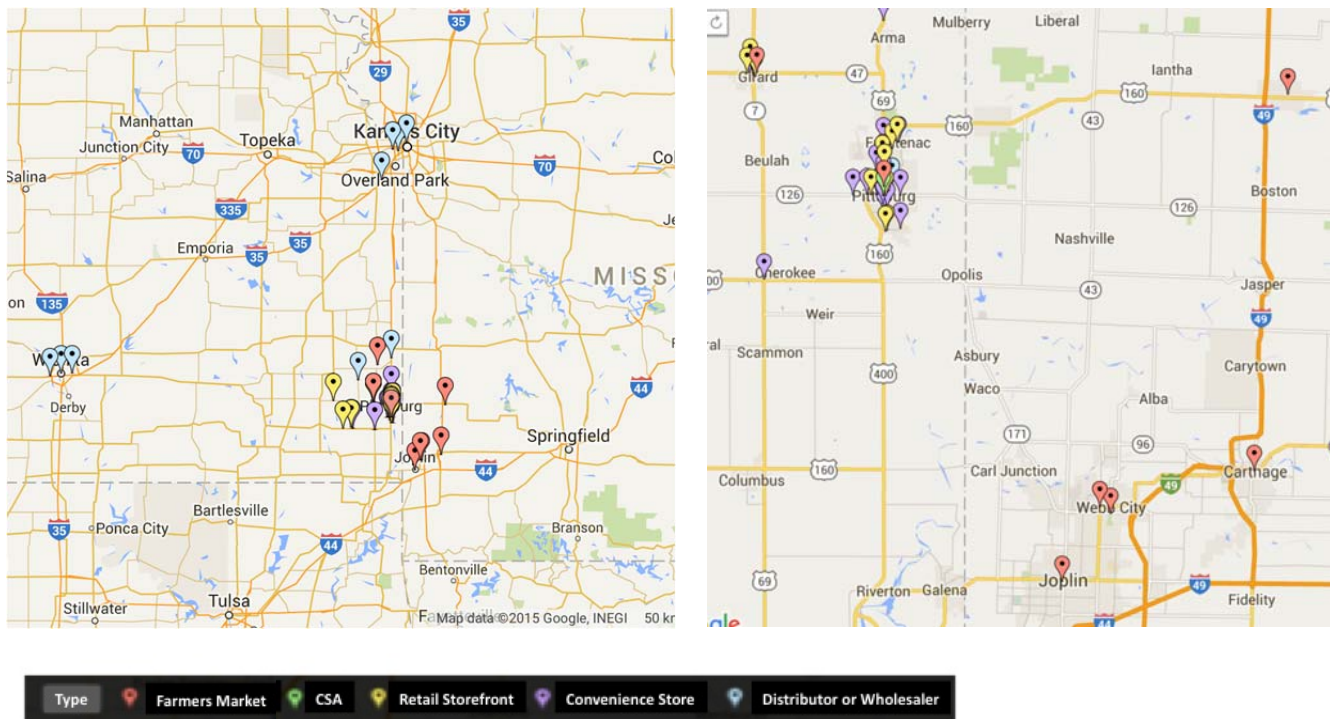
Outside of farmers markets, residents can purchase farm products from a variety of retail outlets, including three national grocery chains (Walmart, Dillons / Kroger and Aldi) and about four independent grocers in Crawford County. There are also approximately five specialty grocers or delis throughout the county. Outside of these traditional retailers, consumers in Crawford County often purchase staples at gas station stores.

The following chart includes a list of farmers markets, CSAs, retail food stores, distributors and wholesalers in Crawford County and the surrounding areas:

Farmers Markets	Region	Address	City	Farmers Market Hours
Pittsburg Area Farmers Market	Crawford County	119 E 11 th Street	Pittsburg	Wed 3:30 - 7, Sat 7:30 - 12 April - Nov all vendors within a 75 mile radius
Girard Area Farmers Market	Crawford County	300 E St John	Girard	Sat 7:30 - 12
Outside of Crawford County				
Webb City Farmers Market	MO	115 N Madison	Webb City, MO	Fri 11-2 Jan - April Nov - Dec
Webb City Farmers Market	MO	555 S Main St	Webb City, MO	Tues 11-2, Fri 11-2, Sat 9-12 May - Oct
Fort Scott Farmers Market	Southeast Region	592 160 th St	Fort Scott, KS	Tues 4-7, Sat 8-12 May - Oct
Parsons Farmers Market	Southeast Region	Labette Community College, 200 S 14 th St	Parsons, KS	
Joplin Farmers Market	MO	212 W 8 th Street	Joplin, MO	
Carthage Farmers Market	MO		Carthage, MO	
Tenth Street Community Farmers Market	MO	10 th & Poplar	Lamar, MO	
CSA	County	Address	City	Specialty
Naked Fruit Co	Crawford County	3510 N Lone Star Rd	Pittsburg	Fruit direct-to-consumer
Swartz's Produce	Crawford County	20510 Wallace Rd	Walnut	Locally grown produce, honey, CSA
Retail Storefronts	County	Address	City	Specialty
Aldi	Crawford County	2600 N Broadway St	Pittsburg	Global discount supermarket chain - offers Local
Bear Toes Healthy Living	Crawford County	814 W 4 th St	Pittsburg	Specializes in natural, local, organic
Circle's Pecans & Country Store	Crawford County	2499 US Hwy 400	McCune	Fresh produce, eggs, pecans, jams etc. farm and store
Dillon's	Crawford County	2600 N Broadway St	Pittsburg	Grocery supermarket chain division of Kroger
Fernandez Market	Crawford County	307 N Elm St	Pittsburg	Central American and Mexican specialties
General Nutrition Corp GNC	Crawford County	202 E Centennial Dr	Pittsburg	Health Food Store
G. W. Foods / G&W Family Super	Crawford County	501 W St John St	Girard	Grocery independent Their PrairieFresh Premium Pork brand uses local
Rhode's Grocery of Missouri Inc / Ron's Supermarket	Crawford County	310 E Centennial Dr	Pittsburg	Grocery
St Paul Supermarket	Neosho County	514 Washington	St. Paul	Grocery
Walmart Supercenter	Crawford County	3109 N Broadway	Pittsburg	Grocery
J&W Poultry	Crawford County	217 E Forest	Girard	Poultry
Beck & Hill Meat Market	Crawford County	303 N Broadway St	Pittsburg	Meat Market
Pallucca & Sons	Crawford County	207 E McKay	Frontenac	Italian style deli / catering
Pittsburg Food Cooperative	Crawford County	PO Box 717	Pittsburg	Health Food Store
Massa Meats	Crawford County	804 N Carbon St	Girard	Meat Markets / Freezer provisioners
Uncle B's Smoked Meats	Crawford County	702 4 th St	McCune	Meat Markets / Freezer provisioners
The Meat Shed	Crawford County	601 S Mt. Carmel Rd	Frontenac	Specialty Grocery Store / Meats
Convenience Stores				
Bo's 1 Stop	Crawford County	1116 W 4 th St	Pittsburg	Convenience Store Conoco
Casey's General Store	Crawford County	434 W 4 th	Pittsburg	Pizza
Doug's Convenient Stop	Crawford County	902 S Joplin	Pittsburg	Convenience Store
Gorilla Express	Crawford County	2401 S Rouse Ave	Pittsburg	Convenience Store
Kabredlo's Cenex	Crawford County	434 W 4 th St	Pittsburg	Convenience Store Cenex
Minimart	Crawford County	2304 W 4 th St	Pittsburg	Convenience Store
Mini Stop	Crawford County	100 W St John St	Girard	Convenience Store

Pete's of McCune	Crawford County	1100 W Hwy 400	McCune	Convenience store
Pete's	Crawford County	1307 S Broadway Ave	Pittsburg	Convenience Store
Pete's	Crawford County	4002 N Broadway Ave	Pittsburg	Convenience Store
Pete's	Crawford County	220 N Summit	Girard	Convenience Store
Pete's	Crawford County	1711 N Broadway St	Pittsburg	Convenience Store
Phillips 66	Crawford County	10867 NE Hwy 69	Pittsburg	Convenience store
R&Js Convenience Store	Crawford County	20 NW Hwy 400	Cherokee	Convenience store at Phillips 66
Raiders Express	Crawford County	325 E McKay St	Frontenac	Convenience store
Snak-Atak	Crawford County	1101 E 4 th St	Pittsburg	Convenience Store at Phillips 66
Kevin's Country Corner / Weeges One Stop	Crawford County	401 N 69 Hwy	Arma	Convenience Store
Bucks One Stop	Crawford County	307 W St John St	Girard	Convenience Store
Mighty Mart	Crawford County	5005 Parkview Dr	Frontenac	Convenience Store at Phillips 66
Distributors and Wholesalers²⁶	Region	Address	City	Specialty
Associated Wholesale Grocers/AWG	Kansas	5000 Kansas Ave	Kansas City	Retailer-owned cooperative
C&C Produce	Kansas/Missouri	1100 Atlantic St	North Kansas City, MO	Delivers to a 750 mile radius around Kansas City, MO
Liberty Fruit Co	Kansas	1247 Argentine Blvd	Kansas City	Wholesale produce distributor Mary's Pride Repack Division Carol's Cuts Processing Division
Marcus Food Co	Kansas	240 N Rock Rd, Ste 246	Wichita	Beef, Pork, Chicken, Turkey, seafood, frozen fruits & veg
Martinous Produce Co	Crawford County	3510 N Lone Star Rd	Pittsburg	Wholesale produce distributor to the Midwest
Marrone's	Crawford County	800 E 14 th St	Pittsburg	Foodservice Distributor
McCune Farmers Union Co-op	Crawford County	PO Box 58	McCune	Wholesale grain and field beans company
Rlada Trading Co	Kansas	6730 W Kellogg Dr, Ste 2	Wichita	
Sysco Food Services of KC	Kansas	1915 E Kansas City Rd	Olathe	Distributor
TKO Beef	Crawford County	924 N 80 th St	Hepler	A division of O'Brien Cattle Company, family-owned and operated cattle ranch USDA
Tom Lange Company	Kansas	800 E 1 st St N	Wichita	Fruits and Vegetables
Value Merchandisers	Kansas	4805 Campbell Dr	Fort Scott	Retailer-owned cooperative, subsidiary of AWG

The following are two figures that map the above markets, storefronts and distributors / wholesalers.



~~ (CAP IQ 2012)

Health Outcomes

Health trends in the state, region and county are on the decline. According to America’s Health Rankings, an annual report published by leading philanthropies and health groups, from 1991 to 2014 in state health Kansas fell from 8th to 27th in the country.

Crawford County ranked 92nd out of 101 counties (only 101 of the 105 counties were ranked) in Kansas in weighted scores for health behaviors, clinical care, social and economic factors, and the physical environment. Crawford County ranked 36% in adult obesity compared to 30% in the state. The food environment index for Crawford County was 6.1% as compared to 7.2% in the state. Johnson, Douglas and Nemaha were the best counties in the state.²⁷

*Crawford County and the Southeast region food environment 2015*²⁸

County	% Limited access to healthy foods	% Food Insecurity	Food Environment index	Health Ranking (out of 101 KS counties)
Bourbon County	8	13	7.1	83
Labette County	6	16	7.0	96
Neosho County	9	15	6.9	90
Crawford County	14	17	6.1	92
Cherokee County	7	15	7.2	97
Elk	50	14	2.9	94
Montgomery	9	13	7.5	99
Wilson	5	15	7.3	98
State of Kansas	8	15	7.2	-

The above table includes data from the County Health Rankings & Roadmaps website by the Robert Wood Johnson Foundation which displays Health Rankings data by state and county. Limited Access to Healthy Foods is the percentage of the population who are low income and do not live close to a grocery store. Living close to a grocery store is defined differently in rural and nonrural areas. In rural areas, it means living less than 10 miles from a grocery store; in nonrural areas, less than 1 mile. Food Insecurity is the percentage of the population who did not have access to a reliable source of food during the past year. The Food Environment Index ranges from 0 (worst) to 10 (best) and equally weights two indicators of the food environment: limited access to healthy foods and food insecurity. All counties in Kansas are ranked based on weighted scores for health behaviors, clinical care, social and economic factors, and the physical environment, ranging from 1 best to 101 worst (4 counties were not ranked due to missing data).

The following table illustrates the county and region’s current performance against key diet and health related indicators in comparison to the state and nation overall.

Indicator ²⁹	Crawford County	Lower 8	Kansas	National
Obese Adults	30%	32.4%	28.8%	31%
Diagnosed Diabetes	10.9% ³⁰	10.2%	8.5%	9.3%

²⁷ (County Health Rankings 2015)

²⁸ (County Health Rankings 2015)

²⁹ (CDC 2010)

³⁰ (Crawford County Kansas 2014)

% Eating 5+ Fruit/Veg Servings Per Day	N/A	15.6%	18.6%	26.3%
% of Households that are WIC Recipients	28.6%	30.2%	26.2%	32%
% of Households that are SNAP recipients (2013) ³¹	14%	N/A	36,523	20%
% of Households Low Income / Low Access (per USDA)	19.2%	N/A	13.7%	15.4% ³²

³¹ (GOVERNING 2013)

³² (US Census American FactFinder 2015)

Appendix B: Interview Notes

The following individuals were interviewed as part of this study.

Name	Organization	Category
Josh Coltrain	Extension Agent	Producer representative
Ann Elliott	The Family Resource Center	Consumer representative
Michael Ehling	Crawford County Mental Health	Consumer representative
Jeremy Johnson	CHCSEK; Pittsburg City Council	Community representative
Martha Murphy	K-State Extension	Community representative
Marcee Binder	Wesley House Food Pantry	Consumer representative
Jeff Murphy	County Commissioner & Farmer & PE	Community representative
Becky Gray	Pittsburg Community Development	Community representative
Peggy Kramer	RD, Girard Medical Center	Institutional representative
Marlene Willis	Greenbush	Institutional representative

Ann Elliot, Family Resource Center, Executive Director

FRC is the second largest childcare center in Kansas, serving 338 kids per day ranging from 0-5 in age and ages 5-12 in the summer. There are seven preschool classrooms during the year, and meals in 13 childcare rooms.

- Children are fed breakfast, lunch and snacks, through the CDCHP federal program. This limits menu options considerably, though the school has been trying to make strides in bringing freshly cooked food to students. Unfortunately, the CDCPH classes that staff can sign up for are getting canceled.
- 53% of students are on free and reduced rate lunch
- FRC food is procured through Via Christi (through the hospitals). Vegetables are frozen or canned (unable to do much in terms of fresh food). Meals are prepared in a full kitchen.
- Meals are included in the cost of tuition, and are paid for in part through state reimbursements.
- While there is flexibility with respect to sourcing, cooks are not currently trained in how to provide fresh food, and there aren't great suppliers available locally. Ideally, Marrone's would carry more local product.
- Barriers to healthy eating are numerous:
 - Processed food is easier to consume – drive thru, frozen pizza, etc
 - At school, we tend to do casseroles, which are better than many kids are eating at home, but still fairly heavily processed
 - Farmers markets are a challenge for low income community members, given the timing, the culture and the demand. Farmers markets accepting SNAP and WIC benefits, and having the double up option may be helpful a bit.
 - Fast food is too easy, and too inexpensive. Healthy products are expensive, go bad quickly, and are difficult to prepare.
- Enterprise ideas and initiatives to focus on
 - Focus on education. FRC's gardening grant from KDPHE seemed to be fairly successful in teaching kids about fresh food items they had never seen before. Extending education to parents as well would be very critical. Cooking classes, like what Martha does with our students in the summer are great.

- Don't believe there are enough producers in the area to warrant another farmers market; however, the Bountiful Baskets Cooperative may have merit. It is reasonable at \$15/box, and has been around for 1.5 months. Seems to be fairly popular as it always has a line.
- Continue grocery store's local sourcing efforts. Grocery stores seem to be carrying more local food items, including Walmart and Aldi.
- Provide shopping education, helping folks choose the right store and do price comparison shopping in the stores.
- Expand community gardens, like what they have (or used to have) at the church
- There are some important institutions in the area that should be leveraged: Wesley House, Via Christi, Community Health, USD 250, PSU
 - Wesley House - http://www.wesleyhouseumc.org/#!about_us/csgz
 - She has been teaching healthy cooking
 - They order from commodities
 - And then folks get a specific bag of stuff – they don't get to go in and “shop”
 - Hospital – Via Christi → they are always worried
 - Community Health – huge nonprofit; huge group
 - 3 founding partners – USD 250; university PSU; Via Christi hospital
 - Health and wellness committee – don't know when they meet. Used to sit on it.
- Community garden used to be at the church – still has a sign up but don't know if they are still in operation
- Improve and expand the reach of smaller stores, such as local small Hispanic stores, local butchers, etc. These are community assets that shouldn't be lost. Potentially think about bringing those healthy items into gas station convenience stores.
- Have a food fair, bringing people together and teaching healthy cooking classes, etc.

Becky Gray, Live Well Crawford County

- Director of housing and community development
- Sees firsthand how poor health is debilitating folks, making them physically incapable of many work opportunities. When people are dependent on cars, they limit what they can do for work. Seeing that migrant workers can pursue valuable opportunities when they are physically healthy (that Americans cannot).
- Everything in the county is fried and has gravy. This is a long standing heritage and changing it takes time. Now there is a natural grocer in town, reflecting some change in the food culture.
- Community Action Program, an approach utilizing less government, more activism. For example, we saw that the region had lots of land planted in monocrop production, and approached the county commissioners to adopt a food policy council, which over time morphed into Eat Well. Led many folks to consider zoning and planning regulation, ensuring that ag land stayed in ag, was focused on food, and did not become residential homes.
- A lot of community members / friends are farming small plots in their residential yards – this is becoming a groundswell. People have chickens, vegetables, goats, etc. Seems like a food hub of some sort could help these residential / hobby farmers connect with new sales outlets. Right now there is some informal trading economy work going on, but shifting to a more formal food hub would be desired. Individuals who would be interested in a food hub include:
 - Bear Toes (local natural grocery)
 - Local Baker who uses local foods

- Chatters (Ahmad Anyani)
- Supermercado Yoslyn (next to university, Mexican restaurant and grocer)
- The county directly to the west of Crawford has a large Amish / Mennonite population that could be engaged in any food hub work
- There are efforts to create a culinary school in partnership with USD 250 and Fort Scott Community College. This would focus on job training and careers in the culinary world – being a chef, being a waitress, etc.
- Farmers market costs \$25 to sell there. Reasonable price, but may seem steep to some. Food hub could at the beginning, just be a central entity that buys and picks up from residential “farms” and sells these items at the farmers markets.
- There seems to be a “divide” between people who have been in Crawford County many generations versus implants, or those who have left and come back.
- School and student population is an interesting asset. 7,500 students are more affluent and “sophisticated” than many residents, and 1,000 of these students are from foreign countries. This immigrant population is particularly interested in pursuing innovative things. Populations include Paraguay, China and Saudi Arabia.
- Downtown area of Pittsburg is promising, with an art walk, a bar scene downtown. The downtown area is fairly far from the university; currently there isn’t a lot of commercial activity right around the university.
- The city manager and assistant city manager are very focused on making a sustainable community, with “sustainable” as inclusive of energy, water production, food safety, etc. Their focus is largely on economic development opportunities.
- There is a great initiative here to start a pay as you go diner that would be doing 300 meals per week and feeding the hungry – individuals and families.

Jeff Murphy, County Commissioner, Farmer and Professional Engineer

- Currently working on a 2,000 acre farm, producing grains along with cow / calf operations
- Field crops and cow/calf operations are fairly typical in the area
- Produce growers are very limited; and those that exist are hobby farmers growing in residential areas or small plots, selling at the farmers markets
- Their farms’ proteins are being sold at livestock markets and Parsons (in the county west of us). Buyers there buy our calves, grass feed them and then raise them up to 500 lbs, before they go to a feedlot to get fed up to 12K pounds.
- Farming is a bit more challenging every year to make work, as the cost of land, water and equipment goes up. Equipment has probably doubled in pricing in the past 10-20 years. Land prices are going up, due in part because people are spending more on hunting land.
- At the same time, cattle and grain prices have gone up, but not as dramatically as the costs.
- Biggest challenge therefore is for new / beginning farmers. It takes so much capital to get a farm started, that it has to be a family business or you can’t get in.
- Produce growing seems unwise, since the growing season is too short.
- Consumers are buying food at the grocery stores; don’t feel like the farmers markets are a very big venue for this. Dillons in Pittsburg is ideal because you can also get gas. Walmart is a big one, and a huge draw for people. Girard has a G&W, which is more expensive.
- Not against local food; believe it is helpful and great, but we need to find a way for people to make it growing produce in this area.
- There is a big fast food presence, with Pittsburg as home to 20-30 restaurants, of which many are fried chicken establishments. Half of them are independent, and half are national chains.

- Gas stations seem to be a major breakfast spot for folks.
- Girard School District has a new dietician at the grade school at Girard who is doing a little bit more with diverse plate options, giving students more options for what they can select.
- Desired enterprises
 - Need a place that could process local meat. Just dropped off a heifer to a local butcher but they don't have certifications to resell. Could not sell our animal meat to others right now.
 - The county north of Crawford has a certified shop, need to learn more about this.
 - Schroeder's Butcher (Mark Schroeder) is worth looking into
 - Critical that initiatives are not just focused on organic; needs to be accessible and not too expensive, and should not undermine the work of farmers in the region.
 - Opportunity to identify synergies in the supply chain; for example, in Missouri, there is a county with a massive chicken farm producing way more manure than they need. Is there a two way distribution route between this farm and Crawford County?

Jeremy Johnson, Community Health Center of SE Kansas; Community Health Center of SEK; Pittsburg City Commissioner

- Community Health Center of SE Kansas is a local, federally qualified health clinic with 6 locations in Southeast Kansas, Pittsburg is the main / largest one. Work with patients on Medicaid and have mental illness diagnoses. Most of my focus is on connecting people with resources.
- Also on the board of Habitat for Humanities
- Also the city commissioner for the city of Pittsburg
- Eat Well started as a branch off of Live Well, which focuses mostly on the build environment. They do a big thing / triathlon for kids. Food will be analogous to that.
- This makeup of the group has shifted, attracting people who are interested in development and policy changes to improve healthy eating habits in the area.
- The goals within Eat Well continue to be murky, and thus far there hasn't been a tangible "thing" or goal to focus on. Depending on who you ask, there are different "camps"
 - Social justice and environmental concerns
 - Sustainability (environmental and regional self-sufficiency, not being reliant on state / feds to take care of things)
 - Economic development aspects
 - Public health side – for these folks, nutrition is the most important and health and wellness
- In considering the role of *local* food in this set of goals, it seems like local ties most into economic development. If you can create more local food produced and sell it locally/regionally – more of these dollars will remain in the county, tying to both economic development and self-sufficiency.
- What are the biggest challenges to a thriving food system in Crawford County?
 - Thriving food system in Crawford County is hindered by long standing institutions and a supply chain that is so deeply rooted and embedded in the culture.
 - Talking to distributors, vendors, grocery stores, etc, they have tons of reasons as to why they can't source from more sustainable, local entities, etc. Then you end up going to the farmers market – this is great, and it is the face of the local food movement.
 - Turnout for the Saturday market is very good, but it is still a very small subset of people in the county.
- Great institutions in the area include Wesley House and the clinic

- Wesley House
 - Health clinics are great resources
- What do people need – education! Being able to point people towards a class or an institution that would be able to do structured training and follow up. Right now, only Jeremy is educating his client base on diabetic education. So at this point, he is reacting to illnesses already in play, and he needs to get ahead of the curve, working on prevention.

Josh Coltrain, Extension Agent, Crop Production Agent (focus on field crops)

- Kansas Extension system is very unique as every county has an office; every county is locally funding (80% is locally funded)
- Our role in the region is as troubleshooters, trying to figure out what is wrong. They plan and hold informational meetings on a wide variety of topics, trying to get information out. Also use mass media / use weekly columns when it makes sense.
- The county does have a horticulture agent who covers everything from flowers, shrubs, gardens, household insects; but this production is very limited in the region.
- Ag in Crawford County is very standard – corn, double crop beans and wheat.
 - Recognize that there are not many truck farms left in the region (Josh grew up on a truck farm)
 - Josh’s father teaches at a community college in SW Kansas and is on a crusade to improve local food production in the area
 - Believes local food in Crawford County is doable; but very difficult in terms of getting producers to transition into such a high risk crop set.
 - There was previously a greenhouse fruit/veg producer in the county, but they did not make it past their first year.
- Challenge shifting from commodities to specialty crop – commodities is very light on labor intensity. Fruit/veg farming is endless work.
- One thing that is positive for the local food movement is that a lot of our fields are small in this area. Producers have little, small fields – this could be made into specialty crop production. However, in Kansas – every acre that can be farmed is either farmed or pasture. There is not a lot of idle ground around, and there might be an opportunity for a central entity to help sell these small parcels of land.
- Producers need some support in pricing and working with their buyers. Recently attended the SARE conference and learned about large scale crop producers that formed their own coop for marketing their own wheat. As a group, the coop became price makers. Something like this might have lots of merits for commodity crop and fruit/veg producers.
- Crawford County is unique. It’s mostly small towns, but Pittsburg is clearly the biggest town. Its presence makes the county feel less rural. So important to recognize this dichotomy in developing any strategies.
- Crawford County borders OK. Different agricultural cultures between the states, but potential to transcend the two and sell to other states as appropriate.
- Internal message is that Kansas is focused on “feeding the 9 billion” world population. However; this does not seem to resonate with the general public or farmers.
 - Research by KS Extension suggested that farmers and consumers could get more excited about a slogan that emphasizes the idea that our county or region is feeding ourselves.

Marlene Willis, Southeast Kansas ESA

- District has 120 schools; Marlene is particularly focused on IEP eligible kids

- Additionally, she is a second term school board member in Pittsburg.
- Pittsburg and Crawford County area have lots of poverty, demonstrating difficulty in terms of access to food, not just because of economic conditions, but also because of physical limitations of getting local foods.
- Historically, there has been a bus service, but this went away with the economic recession
- Additionally, education is a huge challenge. When previously worked at the hospital, used to run a health fair and executed a Sesame Street Eats program, and recognized how challenging it is to educate better eating habits.
 - Impacting the youngest children first seems best, as if a child's palate is exposed to healthy foods at a young age, they are more likely to make good choices later in life.
 - Bringing families in with any educational efforts for kids is critical
- Susanna Thyer (Pittsburg USD 250) has looked into school based gardens, healthy breakfast options, eating education in the classrooms, etc. She is a huge asset for the community.
- Hospital used to run smoking cessation, BMI education, etc workshops and lunch and learns.
- Local sourcing efforts are minimal, but may have a chance to grow. CSA is provided through Darren Swartz. There is a vibrant farmers market in Pittsburg. Other towns have small ones that are failing or virtually nonexistent now.
- There are plenty of people who know that if kids aren't eating well, they aren't doing well in school. Need to emphasize all of these different angles, to get people engaged through whatever "trigger" works for them.
- Wish is for a broad based coalition of folks who come to the table and make things happen; like the "active transportation" initiative that was successfully executed. If people can be better connected through research and formal interactions, and information sharing, the county will be better off. Would be spearheaded by Live Well / Eat Well Crawford County, the Health Department and potentially PSU. Other great agencies include the United Way (great funding agency) that might have healthy products on their radar.

Martha Murphy, K-State Univesity Extension

- Role of extension agent that conducts nutrition education classes for low income audiences in three counties in SE Kansas.
- Programming is generally done by paraprofessionals (nutrition assistants) that are indigenous to those communities. These are paid staff members of K-State University. These roles are advertised through papers and through referrals from agency partners. Former clients often make the best nutrition assistants.
- Activities include: home visits, working 1-1 with participants, going into schools and doing nutrition education in the classroom, cooking classes for youth and adults (set up at a church or at a food pantry like Wesley), recruiting people to attend these. Have a couple of staff in counties that work in community health clinics who are working with prenatal clients who are on public health benefits.
- An important component of SNAPed is to ensure folks who qualify for SNAP know how to apply and leverage the benefits.
- WIC does a pretty great job promoting nutritional eating, though their biggest issue is with breastfeeding, where they encourage breastfeeding but also reimburse clients for formula, encouraging less breastfeeding.
- Making SNAP recipients healthier is a complex issue.
 - SNAP double bucks (up to \$20) at the farmers market seems to have helped considerably. As of June, SNAP payments were higher than last year's entire SNAP revenue.
 - Would like to see SNAP limitations being placed on what products can be purchased (i.e. Dorito's, potato chips, etc).
 - Incentivizing people to come to class. Best turnout was with a \$100 utilities voucher if people made every class in a series.

- Prenatal nutrition
- Ideas to pursue for Crawford County
 - Connecting producers to local consumers (through schools, restaurants, etc) through a food hub of some sort.
 - Believes that local is important because it tastes better and therefore, people will eat more fruits and vegetables. Additionally, there are tremendous economic benefits with respect to local.
 - Important to think about meats (though the focus is trying to get more people to consumer fruits and vegetables) Local meat tastes excellent and can draw people into local foods more broadly.
 - Backyard gardens are showing an increase, how can these be leveraged?
 - Climate controlled agriculture may become important. Greenhouse business around here did flower production / ornamentals but they didn't make it.
 - Also interested in an incubator kitchen that will help farmers and entrepreneurs (salsas, bbq sauces, etc) and create a food culture of some sort in the area.

Michael Ehling, Crawford County Mental Health

- Director of Children Services at Crawford County Mental health. Case mgmt. work, working with heavily disturbed children
- Healthy homes initiatives spearheaded by Michael that has seen a lot of success in Missouri. Conduct home visits, have multiple touch points with folks and recognize that language should be clear and straightforward.
- 80% of his clientele is on SNAP. Desire is that SNAP would be limited to healthy items / staples, and that going through educational classes on nutrition and purchasing would be required.
- Obesity and poor eating habits run rampant in his client base. There is a fairly deep seeded culture of poverty that is a major contributor to poor eating habits.
- School is a major contributor of calories for children and their lunches have to be overhauled (made more like school lunches in own childhood).
- Have a therapeutic preschool at the mental health center, serving 25-30 kids. The cook we have was trained as a chef in Toronto and he brings in more sophisticated tastes rather than processed food. Once a semester, have parents come in to learn about health and talk about food, and they are very receptive.
- Walmart and Aldi's are the main places where people buy food.

Peggy Kramer, RD, Girard Medical Center

- Consulting dietician for Girard Medical Center, working with Assisted Living Facilities across the county
- Work closely with the Southeast Kansas Area on Aging / Meals on Wheels
- In this area, there is a crossover of issues:
 - Finances are a huge problem for the elderly.
 - There is some subsidized housing across the board and many elderly stay there.
 - Getting the elderly their meals, especially in rural populations. Some meals on wheels have gone to frozen meals; have had to ensure they have refrigerators and microwaves.
 - In general, Kansas needs to spend more on feeding the elderly.
- Hospital used to have a program called Dynamite for 3rd and 4th graders, where they took heights and weights and BMI's, and taught them about nutrition and health. The Dynamite program grant funding was pulled away. Need to start folks young on the nutrition side as early as possible.

- Culture here around food is difficult – number one veg is potatoes, and it is generally fried. Main proteins are beef, chicken and pork. There is no fish.
- Supportive of Michelle Obama’s school lunch program and love the idea of school gardens.
- Wesley House is phenomenal. Several restaurants, grocery stores, etc donate to Wesley.
- Walmart does a good job telling community members where food comes from, and seems to stock local food.
- Would like to see McDonalds and similar places have more healthy options. Fast food is the norm – Hardy’s, McDonald’s, Casey’s, dollar pizza / pop, take out, etc – and we need to figure out how to get healthier versions of this out there. People need heat and serve.
- There are unique barriers in rural populations. Rural communities have lost connection to veg farming and cooking. Needs to be addressed through education.
- There is a fairly high Mexican population in town, and they have different cultures and tastes that need to be addressed.
- Need to provide shopping education to folks, teaching them how to make their dollar go farther, i.e. a head of lettuce is much cheaper than bagged, washed lettuce. Helping people understand that they should consider the Great Value / private label brand.
- Minimum wage in Kansas is way too low
- WIC program has proven time and again that it is a huge and positive investment. Would want SNAP to look more like WIC.

Marcee Binder, Wesley House

- Started in 1982 as an outreach mission for the Methodist Church
- Served 17,000 meals in 2014
- People come to the food pantry once every 30 days, receive groceries for those 30 days including fruits, veggies, bread, etc. This is done through Feeding America, sponsored by Walmart (and products are received directly from Walmart). Families get one bag of products per family member.
 - Note that we are getting a neighborhood Walmart in Pittsburg which will expand our donation options
- Started offering day sheltering this month (in 540 sq ft space), and provide homeless prevention protection, rapid rehousing and day sheltering now. Main focus is on supporting the homeless population.
- Have a community dinner on Thursdays, feeding 50-80 people every Thursday
- Partnerships are huge to Wesley House’s success
 - Catholic Charities provides emergency rental and utilities assistance; educational classes for budgeting
 - Crawford County Health Department offers becoming a mom classes.
 - KState Extension classes – cooking classes,
 - Crawford County Mental Health – PATH program, that deals with homeless populations
- Funding
 - Food funding comes from United Way, participation with the Kansas Food Bank (buy \$10 of food for every \$1 we raise), and two main food drives. Also get local donations, such as canned veggies and top grade A beef from Downstream Casino. Dillons occasionally donates milk, bread and baked goods for us. Hometown IGA donates bread also. All shelf stable food comes from canned food drives or Kansas Food Bank.
 - Homeless services are paid for by emergency solutions grant.

- Other overhead is paid for by the Great Plains Annual Conference and the United Methodist Church
- Do not do anything with gleanings, though we sometimes get veggies from people's veggie gardens
- Right now, think the biggest opportunity for growth is in providing people with healthier options and more education. Our goal for bringing K State extension on board was to help people with the preparation of food. That program is slowly growing.
 - When we are in control of cooking, always try to offer a fruit option.
 - From what I've seen with the individuals we serve here, vegetables are just not a priority.
 - Part of this is because we are not getting great veggies / fruits. What we receive is close to the end of their good shelf life, and don't look that appetizing.
- If had unlimited resources
 - Would like to see higher quality of meat. Currently hot dogs are the main source of protein because it is cheap.
 - Expand day sheltering into night sheltering as well
 - Mobilization where we can send people out to find homeless folks – so we can meet them where they are, instead of expecting them to come to us
 - Would like to see a diaper depot in this area

Appendix C: Full List of Ideas Generated Throughout Study

- Ensure that **Eat Well** is effectively serving as a coalition and learning group for food systems leaders, food business operators and policy makers across the county, and is enabling stakeholders to be informed about initiatives that are underway and opportunities for collaboration and partnership.
- Establish a regional **food hub** that better connects local consumers with local food and brings local food into wholesale markets such as grocery stores. The exact vision for this food hub is not yet developed, and the business model could evolve through a subsequent round of research and analysis. Initial input suggests that a food hub may have two components – one that is connecting residential gardeners with each other and households interested in accessing their output (for free or through trading), and one that is connecting established agricultural producers in and around Crawford County with wholesale buyers.
- Developing a **nonprofit** (potentially similar to “Re: Vision International” in Denver), which trains low income community members to (1) support their neighbors in starting vegetable gardens and (2) become nutritional and culinary ambassadors in their community. The model would borrow from K-State Extension’s approach of selecting nutrition assistants and training these assistants to run SNAP education efforts in their community.
- Regularly hosting a **food and health fair**, with local restaurants featured alongside farmers and local companies interested in showcasing their products and services. This could also include cooking and nutritional classes, and promotions on how and where to buy local and healthy products. These can be organized by hospitals, schools, or nonprofit agencies and sponsored by foundations or corporations across the state.
- Recognizing that **gas stations** are a reasonably popular destination for breakfast in particular, work with gas station owners to bring in to-go breakfast options that are healthier than what they are currently offering.
- Recognizing that Hispanic communities often more actively seek out fresh produce than non-immigrant households, work with **Hispanic grocers** to improve and expand options with respect to fresh produce (potentially in collaboration with a new food hub in the region).
- Expand and increase promotion of the **master gardener** program that serves both low and higher income residents, encouraging them to start or expand their backyard gardens, generating products for their own households and for the community. This can be done in partnership with K-State Extension.
- Establish a certified **meat slaughter** and / or processing facility within Crawford County to make it easier for county residents to access locally produced beef.
- Support a **culinary incubator** that may be developed in the county, ensuring it is designed to bring more entrepreneurs and food innovation to the region and support their success. A culinary incubator will help catalyze food innovation, and even if entrepreneurs are not all focused on healthy products (salsas, jams and barbeque sauces may be part of the product set), a growing focus on food product development may help spur a broader healthier food culture.
- Bring new, **beginning produce farmers** through training and incentive programs. Initial input suggests that while there is not a large volume of unutilized cropland, Josh Coltrain did indicate that some field crop producers may be interesting in leasing out small parcels of their land to produce growers.
- Encourage and support **season extension** strategies, to make produce production more financially viable for farmers, and increase seasonal availability of local produce to wholesale and institutional buyers.

- Fund and support school and hospital-based nutrition and **healthy eating initiatives**. Specific strategies include cooking and nutrition classes, shopping education classes that promote comparison shopping and the purchase of less expensive and equally healthy products, hospital lunch and learns, community gardens, and taste testing opportunities that expose kids and adults to unique and healthy flavors, etc.
- Set up a regularly scheduled healthy food preparation **course for chefs** in institutional food service settings.
- Recognizing the tremendous impact that WIC appears to be having on families and young children, **evolve the SNAP program** in ways that more closely resemble WIC. For example, incentivize recipients to use SNAP dollars only on select healthy products. While this would be difficult to institute as a policy and restriction for SNAP recipients, the purchasing behavior can be encouraged by expanding the double bucks program that is currently at farmers markets to also apply to healthy products at grocery stores.
- Explore strategies to make the **Pittsburg Farmers Market** (as well as Girards and Franklins Farmers Markets) more appealing and accessible to low income communities, such as arranging communal transportation, organizing farmers market trips with a cooking and food expert, and extending the hours to enable residents who live farther away to attend.
- Work with **traditional grocers** Aldi, Walmart, Dillons, G&W Foods and Ron's to provide shopping and nutrition education classes at their stores.
- Establish an enterprise that makes healthy, **prepared meals** available to low income communities at a reasonable cost. Explore the possibility of enabling SNAP recipients to use their benefits on these meals, ideally allowing the double bucks program to apply. This has been successful in other states for meals that frozen, and intended to be heated and consumed at home.
- Support and eventually expand the pay-what-you-can **diner initiative** that is already in motion in Pittsburg. Restaurants like these have had great success across the country in serving low income consumers and the homeless (although very few are able to generate profit).
- Explore opportunities to establish **gleaning organizations** in and around Crawford County that bring volunteers to farms to harvest seconds, and donate these seconds to institutions like the Wesley House.

Appendix D: FEAST Event Notes

- Vonnie Corsini: Pittsburg Food Cooperative
 - Small group of families started this in 1981 because at the time there were no options available to purchase whole foods in the town
 - They buy in bulk, and then members break the food down and bring it home
 - Over the years, they have been able to invest in coolers and storage, sharing with a local storage company
 - Sees that grocery stores are becoming more and more relevant for natural foods, but thinks the coop is still relevant – they get harder to find things (organic nuts, environmentally friendly plastic wrap, etc) and people appreciate buying in bulk (less expensive, more environmentally friendly).
- Drew / Ron's
 - They use one main supplier – Associated Grocers (70%)
 - 30% of products come directly from vendors (i.e. Frito-Lay). Rarely do we get perishables outside of AG.
 - Specialty is the fastest growing segment in the store
 - Note that they don't seem to have their own requirements of growers, but they rely on AG (GAP certification, \$2m in liability insurance, traceability, farm audit for quality)
- Kirby / Commodity Grower
 - Corn goes to Springdale, AK (chicken feed)
 - Soybean goes to MO to become soybean oil
 - Alfalfa goes to local farmers as feed
 - Cattle goes to feedlots in Western KS
 - Used to have own restaurant where meat from farm was sold; but it was not successful. There are so many cuts of meat from one cow – but everyone just wanted burgers.
- Susanna Thyer, Pittsburg USD250
 - Oversees school foodservice
 - 6 schools total
 - Competitive bidding to select food service vendor
 - Uses Marrone's. Marrone's does indicate if they have KS grown product.
 - Uses a lot of KS produced flour; but do not do KS grown fruits/veg – because can't find the volume of product needed
 - Do have a limited school based gardening in effect; sending kids home with pots of crops
 - Participate in the fresh fruit/veg program (USDA) so kids get one fruit or vegetable every day as a snack

- Has noted that kids who “grew up” on fresh fruit/veg program are more likely to be open to trying new foods than those who didn’t (i.e. high schoolers)
- Jill Campbell / Pittsburg Farmers Market vendor / board chair
 - 21 vendors total
 - Give priority to fresh product vendors, then to value added, then to crafts
 - Has to be within 75 miles of Pittsburg (i.e. can be from MO)
 - Vendor has to grow / produce what they sell at market
 - Season is from Easter to Halloween (give or take)
 - Would like to have more product to extend season
 - Lots of growers seem to have excess product after market ends (sometimes consumers go directly to farms to get product but not often)
 - Have a facility that can be rented
- Matt McDonald – Martinous
 - 100+ years in business
 - Supply grocery stores, chains, etc
 - Supply largely fresh produce; try as hard as possible to “source locally” because transportation is our biggest cost
 - Often buy from Amish communities
 - Can buy from Rich Hill for 3 months of the year
 - Naked Fruit Company – direct to consumer delivery business; started several years ago; has been a failure though it is still in business
- Marcee, Wesley House (See Marcee’s interview notes above)

Panel Q&A

- Difficult for all to find organic produce (whether it’s local or not). Would like more organic.
- Drew noted that organic is very challenging because of a shorter shelf life
- Interesting discussion was had about whether or not the issue is the expectation that food must be cheap
 - This is a big issue because it impacts migrant workers – and how much they get paid AND reinforces the fact that we shouldn’t be paying people for their hard work on the farm (i.e. rewards mechanized production)
- Martinous feels like if they are sourcing from “reputable” vendors – i.e. Dole, Fresh Express, etc – then they know that the practices across the supply chain are good (this seems dubious!)
- Jill often has to defend pricing at the farmers market versus Walmart to her customers
- USD250 – allows to choose any vendor as long as there is written documentation; however have to be responsible stewards of tax dollars

- Big open question about the definition of local
- Big open question about the liability issues – especially with the food pantry
- Lots of discussion about education and the importance of education in spurring demand
- Portion sizes are critical as well – in school setting, restaurants, home, etc
- Open question about the barriers to value added produce
- Waste
 - PSU seems to have a preconsumer waste program / recycling program – interesting to learn more and see how it might fit in
 - Post-consumer waste is a huge driver of cost; how do we get customers to understand this (again through education)
- Focusing on children seems to resonate with the group
- During last Saturday of every month, Farmers Market has “sampler Sat” and hands out recipe cards; recognizing importance of education

First breakout group

- Schenker Family Farms
 - Gathered that they are a big farm, and a multifarm CSA with only corporate customers
 - Just received the VAPG for a food hub feasibility study
- KDPHE
- Themes that came out (across everyone’s groups)
 - Growing production
 - Education producers about why it makes sense (i.e. specialty crop; local sales)
 - Providing growers with access to funding
 - Technical assistance to growers
 - Infrastructure building for growers (i.e. greenhouses, food hubs, etc)
 - Bringing new farmers into the community, providing them with land
 - Growing demand across supply chain
 - End consumers
 - Education / education / education – could not have been emphasized more
 - Incentives (EBT/WIC, worksite wellness, double bucks, etc)
 - Youth and “underdeveloped minds”
 - Youth and seniors together (gardens that they all work on)
 - Wealthy vs poor (i.e. subsidized customers)
 - Changing culture of health / food (i.e. adopting the slow food movement)
 - Explaining the true cost of food and health
 - Making food more affordable and accessible
 - Appliances are limited
 - Wholesale buyers
 - Commercial kitchen / processing / slaughter facilities (i.e. need for intermediaries across the supply chain to support this work)

- Labor concerns and shortages – not enough people out there who can do the hard work of growing
- Connecting stakeholders across the food supply chain

Strategies that emerged

- Model and incubator farm / mentor farmers
 - Encouraging entrepreneurship in local food
- Beginning farmer (attracting, retaining, securing land, etc)
- Tax sale properties – look into these as potential sites for incubator farms and food hubs
- Leverage 4H/FFA programs (these are becoming limited in KS, though thriving in MO)
- Engage Greenbush – they are great at getting funding
- Food hub (where would it be located, who would it serve)
- Slaughter / processing facility (need to talk to Schroeder’s). This is the biggest issue in poultry it seems.
 - Schroeder’s and Erie Locker
- Consider focusing on expansion of more “fun” crops
 - Wineries (Ketoy)
 - Apple orchard
 - Grapes
- Supporting expansion of season extension by providing farmers with technical assistance and access to funding
- Focus on youth as the primary driver of changing food culture (i.e. ignore baby boomers)
 - Invest more heavily in school based strategies (fruits/veg for snacks, community gardens, culinary arts programs, etc – these things are happening and can be expanded on)
 - Millennials – social media, etc (leverage the university? This wasn’t stated but could be interesting to pursue)
 - Need to determine what kind of restaurants can appeal to these groups (two – Philipe and Scratch – a food truck – were started and failed)
 - Reverse mentoring (i.e. children training their parents)
- Extend farmers market; making it more regular
- Find solutions to labor challenges (WOOF? Internship programs? Migrant worker programs?)
- Connect players across the food supply chain so they are not operating as much in isolation (this idea was Becky’s group but was fairly vague)
- Small scale grain mill to encourage heritage grains → sell to local brew/distillery market
- Working with hospitals → community outreach (required by ACA), in hospital meals (Via Christi is run by Ascension, which has its own in-house foodservice manager - Touchpoint)
- Affordability and convenience – ultimately, we need to meet people where they are. Education can only go so far. Need to recognize that the true cost of food is also in the time it takes to peel/cube butternut squash. How can we make things more convenient while also being affordable.
- Worksite wellness
 - Points for shopping at farmers markets
 - Having a CSA (direct deduction)
 - Making healthy food in cafeterias the cheapest option (direct subsidization)
 - Vouchers to make healthy food choices
 - Food stamp doubling of value when receipts show that the food purchased was healthy
 - Include families in these plans – that part is important

- Leverage insurance companies. City of Pittsburg dropped blue cross blue shield because they wouldn't provide claims data that would help the city decrease their costs.
- Vision – flip this sentiment that Crawford county is at the bottom of the pile; become an inspiration – a “story” for the masses

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