



Northeast Indiana Local Food Network

**Phase 1 Report
toward a strategic plan**

**For the
Northeast Indiana Regional Partnership**

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For Manheim Solutions, Inc.
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Executive Summary

Northeast Indiana, part of the tenth largest farm state in the U.S., produces \$1.4 billion of farm products each year, which are typically exported to other states or countries at wholesale prices. Meanwhile, the region imports about \$1.9 billion of food (at retail prices) that is sourced outside.

In an effort to bring some of these dollars back to work at home, The Northeast Indiana Regional Partnership has chosen to increase local food trade within the region. To do so, it selected Manheim Solutions, Inc. to explore the feasibility of building The Northeast Indiana Local Food Network. The team was commissioned to write a strategic plan that would strengthen local food networks in the region.

Local food networks have been patiently crafted within the region for decades. These collaborations create the conditions that will promote more efficient, more profitable, and more inclusive local food trade within the region.

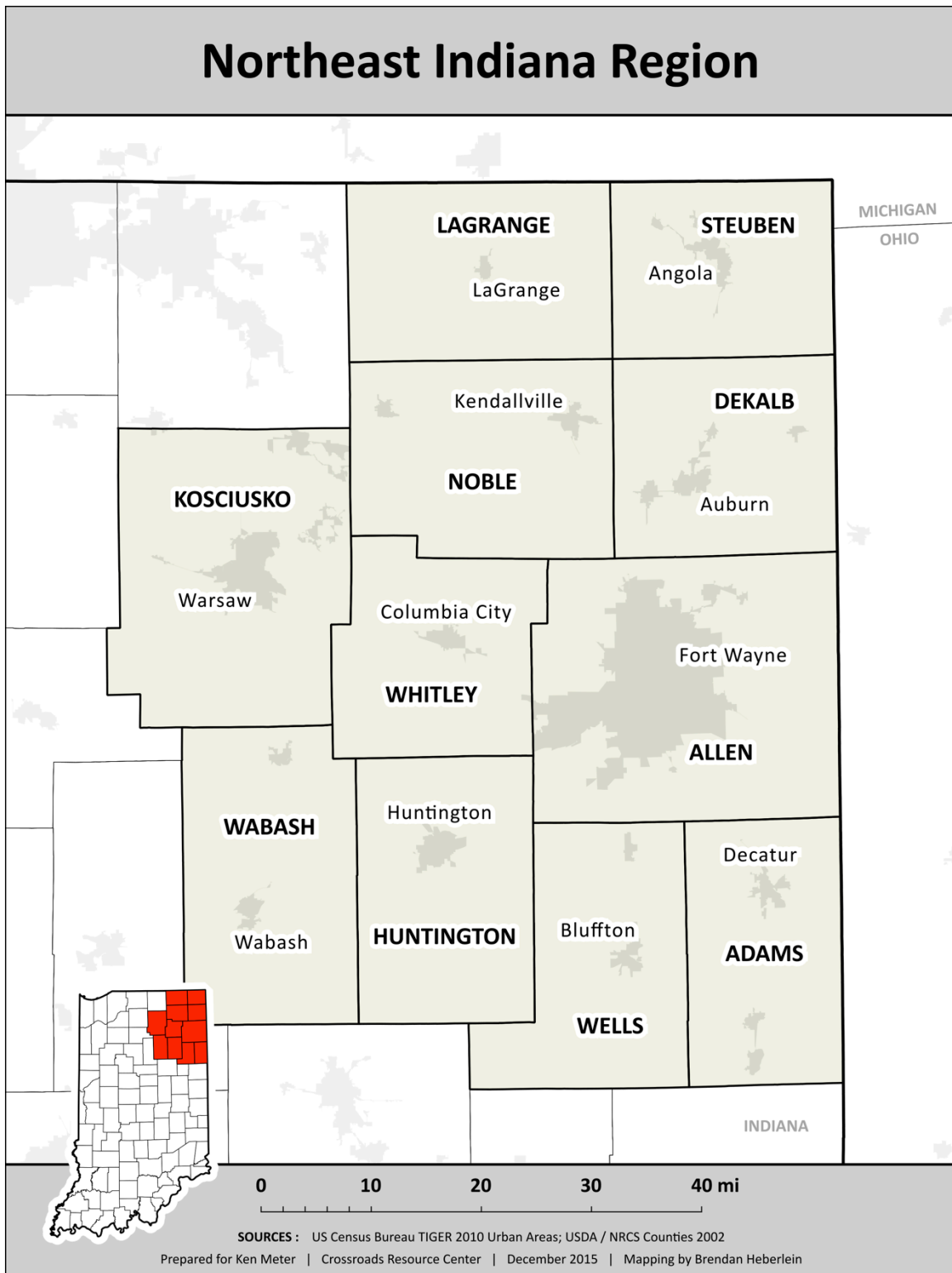
Our team interviewed in depth several local food networks. Each was identified by our local partners as food business clusters worthy of attention. Each has been launched by farmers who realize that to create more stability for agriculture and local food systems, new forms of farming and marketing must be created, with supportive infrastructure. These pioneering farms produce higher value food items, differentiated from the conventional marketplace. To create sustainable businesses, each builds new social capital that engages farmers, businesspeople, and consumers in a common purpose.

These new collaboratives are not simply clusters of food businesses; they are proactive efforts to build new economic connections based on social and commercial networks. These initiatives have not always been noticed by previous economic development studies in the region.

In this Phase I report, we offer our findings. We offer an overview of how these emergent local food networks are forming, showing both their strengths and limitations with respect to the region's vision. Then we will offer an overview of economic conditions in the farm and food economy of Northeast Indiana, and conclude with an overview of the competitive strengths and weaknesses of food business clusters in the region.

Finally, as the region heads into Phase II of this project, we list the key themes that have emerged from our research, and some of the strategic opportunities our sources have put forward. In the next phases, priorities among these (or newly created) strategies should be established, and pragmatic business plans written for priority projects. Hopefully, this report will serve as a reference in Phase II.

Map 1: Northeast Indiana



What is a Food Business Cluster?

As the Manheim team interviewed key stakeholders in the Northeast Indiana region, it became apparent that there are many diverse definitions of “food business cluster” being used by leaders in the region. Accordingly, we offer some definitions.

As it happens, Fort Wayne is located close to one of the key theorists who works with business clusters, the University of Toledo’s Neil Reid. Reid and his associates provide a very concise definition: “An industrial cluster comprises a geographic concentration of firms within a particular industry.”¹

Reid was quick to point out that such a cluster “Extends beyond core firms, however, and includes any other actor or agency in the region who can contribute to the industry’s competitive success.” This means, he added, “A cluster, therefore, should include supplier firms, university researchers, economic development practitioners, consultants, and any other individual or entity from the industry, academia, or the regional community who has skills, expertise, or resources that are of value to the industry.”

Reid also cited Michael Porter from the Harvard Business School to add that physical proximity is not enough. “The mere co-location of companies, suppliers, and institutions creates the potential for economic value; it does not necessarily ensure its realization.”² Reid concluded, “The key to a successful cluster is collaboration among the members of the cluster.” This is especially true given the likelihood of major changes in production or factor markets — resilience requires joint action by members of the cluster. In many cases, Reid added, “individual firms are incapable of addressing or solving [issues and challenges] by themselves.”

How Does the Region Define “Local Food”?

The Manheim team also learned that different stakeholders in the region hold different definitions of the term “local food.” We encountered each of the following definitions in our research:

“Local food is whatever local farms produce.” To some stakeholders in the region, local food is any food that is produced on a farm in the region, or perhaps even in Indiana. It is local by virtue of being produced here. Under this definition, any food item raised on a farm in, say, LaGrange County is local food even if it were sold to a broker who shipped it to New York City.

“Local food is food raised on exemplary farms in our region.” Many people we spoke with identified local food businesses as those who had become the most successful in selling

¹ Reid, Neil; Carroll, Michael C.; & Smith, Bruce W. (2007). “Critical Steps in the Cluster Building Process.” International Economic Development Council (IEDC) *Economic Development Journal*, Fall, 45.

² Porter, Michael (1998). “Clusters and the New Economics of Competition.” *Harvard Business Review*, Nov.-Dec., 88.

food to national markets: Thus, Whiteshire Hamroc, which sells pigs internationally as well as domestically, was considered a prime example of a local food firm to some.

“Local food is food grown or processed in the state.” This definition devotes greater attention to the strength Northeast Indiana has as a food-processing region. Thus, cheese produced at Swissland Dairy in Berne would very properly count as local food. Yet if the milk that was used to create this cheese came from a farm just across the Ohio border, the regional economic benefit from that cheese sale would be somewhat less than if Swissland had made cheese from the milk of its own cows. Moreover, the economic benefit would be even larger if the milk were produced in Northeast Indiana, and the cheese were sold to consumers in the region. This leads us to a more restrictive definition:

“Local food is food that was raised on a Northeast Indiana farm and eaten by consumers in Northeast Indiana.” This definition reflects a very clear aspiration for the future. For example, if a Thai restaurant in Fort Wayne serves duck raised on a farm in Kosciusko County and processed and marketed through Maple Leaf Farms, this could certainly be considered a “local” food transaction. Producing ducks for export benefits the region financially, since both the farmers, processors, and marketers earn their livelihoods through such sales. Eating Northeast Indiana duck in a Fort Wayne restaurant certainly helps offset the losses the region experiences from eating food sourced elsewhere. Yet other stakeholders brought up additional concerns, as shown below.

“Local food is when people have an opportunity to know where their food came from, and it is presented thoughtfully in a relational marketing way.” This definition was put forward by a farmer who sells commodities but also devotes professional time as an economic developer to building new, relational forms of marketing food. Under this definition, even the food sold from the family’s farm would not be considered “local” since it is sold through relatively standardized market channels to Eastern buyers.

Crossroads Resource Center’s own work on defining “local food” is informed by a study we performed in collaboration with the Pennsylvania Association for Sustainable Agriculture in 2014.³ Our research into the published literature on this theme showed that **what most characterizes local food trade is that it is carried out through community-based market channels (local food networks). It must also build the local economy in ways that bring broad benefit.** Local food trade thus creates stronger social capital as it builds local commerce. Thus, when Seven Sons Farms ships beef it has raised on its own farm in Huntington County to a Michigan slaughter plant (and back) and then to a customer in Chicago, it is “local” in some sense even though it does not end up in a Northeast Indiana household. The food is “local” to the extent that the commercial connections conveying this food from Roanoke to Chicago help build a sense of social and commercial belonging, and a mutual sense of trust and respect. The fact that Seven Sons farm also collaborates with Gunthorp Farm and Joseph Decuis Farm & Restaurant also means it is more likely to remain rooted in community commerce. Such commerce builds local food networks.

³ Crossroads Resource Center, The Farmers Market Coalition, FoodRoutes Network, & the Pennsylvania Association for Sustainable Agriculture (2014). “The Real Deal: How Do We Define ‘Local’ in a Meaningful and Measurable Way?” Available at <http://1local.org/resources/>

This strategy of building farm-to-farm connections was highlighted by Pete Eshelman of Joseph Decuis Farm & Restaurant. As he related in the study *Hoosier Farmer?* (p. 111), there is regular coordination among Gunthorp Farm, Hawkins Family Farm, and Seven Sons Farm. “We all need each other,” Eshelman said. “The next step is, how do we all work together as a niche industry?”

This definition of “local” also takes into consideration the fact that a locally grown commodity product (such as Maple Leaf Duck) is grown at considerable scale. Once such undifferentiated products are loaded into a semi truck for hauling, they can be shipped anywhere in the U.S. In fact, it may be more economic to ship these commodities long distances, once production is scaled up to a certain level. Those farms that have built more localized trade in the region ship in smaller loads, selling more directly to final consumers. The loyalty the farmers gain by being more connecting socially to consumers is a large part of their differentiation, and is the only protection they have against impersonal and fickle global markets. Participating in local food collaborations also serves as a differentiation point for these community-minded producers.

The Northeast Indiana Regional Partnership, in collaboration with the LEDOs who guide this project, have defined “local” food under definition four, for the purpose of this initiative: **“Local food is food that was raised on a Northeast Indiana farm and eaten by consumers in Northeast Indiana.”** This suggests that the purpose of the current project is to ensure that as much food as possible is produced in Northeast Indiana and sold to consumers who live in the region. This definition encompasses the concept that surplus food may well be exported outside of Northeast Indiana, once local needs are met.

For this initiative, we define “local food networks” to be the commercial, social, and cultural connections that sustain food trade within Northeast Indiana. As mentioned above, these supportive networks are precisely what allow local food business clusters to be cohesive and resilient. Such networks operate through the totality of physical, intellectual, cultural, and other forms of infrastructure. When successful, they foster efficient food production, processing, warehousing, distribution, and recycling of organic materials within the region. They also play strong roles in developing a strong sense of quality of place.

With these definitions in mind, we continue by reviewing prior studies of food business clusters in Northeast Indiana. For several farms and food business clusters, we have mapped trade networks that have been built as each firm cultivated loyal local consumers. These maps of course do not show all commercial connections that have been formed by each firm or business cluster; but they show connections that each firm valued and was willing to make public for mapping. These maps are very useful in visualizing how networks are structured, but do not show the strength of connections made, nor do they show the influence each cluster has in the region. Such influence is intangible. The number of lines emanating from a given firm is a strong indicator of the connections they have built, but does not automatically mean a firm has greater influence.

Previous Analyses of the Northeast Indiana Regional Farm & Food Economy

NE Indiana Regional Partnership CEO John Sampson pointed out that much has been achieved over the past decade in forming a more coherent regional approach to industry. He added, “In 2006, things were totally dysfunctional. We tried to get people working together.” That resulted in the Vision 2020 initiative. “We set a few priorities and tried to work in a way that mattered.”

From this visioning process, a wealth of information has been compiled about the region’s economic development potential, its infrastructure, competitive standing, and specific industries. Cluster analyses have been performed covering the following industries: insurance, logistics and distribution, advanced manufacturing, medical devices, aerospace, food processing,

The Vision 2020 reports are available at
<http://www.neindiana.com/vision/resources/regional-reports>

However, Sampson lamented that so far, “We have not had a real success when it comes to food.”

Following are some of the key studies that have been published in the region over the past few years concerning the possibility of forming a food business cluster.

Building a Food Cluster: Asset Mapping

The Community Research Institute (2009). “Building a Food Cluster: Asset Mapping.” Produced for the Northeast Indiana Fund, October.

While noting that “The Food Processing Cluster in NEI primarily consists of value-added processors and associated support services,” the report also noted that the list of food firms provided by its consultant did not provide consistent criteria for what should be included on the list. For example, some farms that processed their raw products were included, but most farms were not included.

The report does contain a detailed list of food firms showing sales and employment. All told, these firms made up 9% of all sales for manufacturing firms in the region, and sold more than \$1.8 billion of products. The report added that several important food sectors were not included in this total due to the limits of the sample provided.

CRI developed a list of local food firms that “Identifies 97 companies in the 11-county NEI area.” They added that “This represents over 12,000 employees in food manufacturing, beverage manufacturing, specialized warehouse and transportation, and specialized manufacturing, as well as some agriculture.” The study concluded that this represented a little over four percent of the private employment in the region. It continued, “Fifty-one of these companies are considered primary producers or processors. The remaining

46 are distributors and support businesses, such as equipment manufacturers.” Data was drawn from Dun and Bradstreet data sets, and covered the period 2002-2009.

Largest employers noted in the report were often in the Food Warehousing and Distribution business: Peyton's Northern warehouse in Wells County, hiring 1,185; WalMart Distribution Centers in Grant and DeKalb Counties, with 905 and 450 employees respectively; and a Supervalu regional distributor in Fort Wayne, hiring 400.

Allen County also is home of two food packaging firms that were listed as major employers: C&M Fine Pack, Inc. (hiring 428) and Mullinix Packages, Inc. (hiring 360). In Noble County, Silgan Plastics Corp. made thermoform plastic packaging and hired 380.

The report also listed key manufacturers, including Edy's Ice Cream (486 employees) Kraft's snack food factory (451) and the Red Gold tomato canning facility in Geneva (362).

Results from a survey of food firm managers are also shown. Though a small sample, this survey suggested that the two most favored strategies for enhancing competitive standing are to form strategic partnerships, and to expand branding campaigns to targeted groups. Northeast Indiana customers were rated as the most important regional asset by those firms surveyed.

Also included was an analysis of the geographic concentration of food manufacturing for each county in the 11-county region. This shows strong concentrations in Adams, Wells, and Steuben Counties. Yet the report cautions that these calculations may be artificially high when calculated county by county, because population is relatively low in each one.

The report also plots out the location quotient (employment concentration for a regional industry relative to national counts), 2009 employment, and an analysis of regional changes in economic conditions for key manufacturing industries. Note that for this report we provide similar analyses for the region as a whole using 2013 data [See Appendix B, p. 95].

Building a Food Cluster: A Plan for Northeast Indiana

OnCallPSN (2009). “Building A Food Cluster.” Prepared for the Northeast Indiana Foundation, Draft report, December 14 version [*Note this may not be the final version*].

This report by OnCallPSN relied heavily on data published in the above report by Community Research Institute. This draft strategic plan proposed a vision for Northeast Indiana: “To become nationally recognized as a major food processing cluster.” After identifying the region as a place that holds an “ongoing demand and economy based on food production,” the report cautioned, “A consensus conclusion is that a functioning food cluster does not exist today.”

Researchers concluded that the primary interest in advancing toward building a regional food cluster came from the education, government, and economic development sectors. The authors added, “Industry support was evident, but minimized by time constraints for participation.”

On page 26 of the report, the team’s Strengths, Weaknesses, Opportunities, and Threats (SWOT) analysis for a Northeast Indiana Food Cluster was summarized:

Strengths:

Business Infrastructure

- Labor availability and training
- Water availability and price
- Energy cost
- Distribution facilities and transportation
- Raw material availability
- Regulatory environment

Opportunities:

Development of Food Network

- Growth of Specialty Foods
- Growth of Service Sector
- Leverage Existing Business
- Focus on Education
- Identify Food Resources
- Leverage Pro Business Position
- Leverage Location & Distribution

Weaknesses:

Lack of Regional/Local Food Network

- Food Incubator
- Local Food Network

Access to Venture Capital & Finance Workforce

- Labor – Localized Entitlement Mentality
- Attracting Professionals – Diversity and Sophistication Lacking

Threats:

Macro Economics

- Global Competition
- Government Trade Barriers
- Plant Closures & Consolidation
- Slowing Midwest Population Growth
- Government Regulations

The Strategies proposed included:

1. Develop a lead partner organization to support Northeast Indiana food businesses.
2. Develop and promote educational and outreach programs to provide training to the food industry workforce and management.
3. Determine the best resources to develop a Center for Specialty Foods.
4. Encourage and assist local food production, marketing, and agritourism.
5. Provide assistance in understanding and initiating cooperative entities to interested food businesses.
6. Provide ongoing linkage to local and regional economic development resources to encourage new business development and support existing business.
7. Develop necessary marketing product programs, including an evaluation of regional branding, to encourage new business development and support existing business.

Detailed action steps were outlined that included quarterly due dates for each.

The draft report concluded that “There is a compelling case for a food processing cluster for NEI that needs to be shared. The initial planning and analytical stages are complete. Many of the key ingredients for a successful cluster exist today. A commitment to support the cluster initiative is needed now to realize its economic benefits.”

Yet significantly the draft added, “The organization to start-up the Food Processing Cluster is uncertain.”

Northeast Indiana Food Industry Council study

OnCallPSN (2011). “Food Industry Cluster Implementation Report.” Prepared for the Northeast Indiana Fund, January.

This report called for the region to develop an organization that would support the creation of a Northeast Indiana food cluster. This support organization would be called the Northeast Indiana Food Industry Council. Further, the report called on the region to launch education and outreach programs that would help build both workforce and management skills. The report also recommended that the region develop a framework for a Specialty Foods Center, to be located in LaGrange County. Promotion of local foods and regional branding were suggested. Beginning on page 30, the report included a list of the major food businesses operating in Northeast Indiana at the time (note, however, that Kosciusko County was not included in the region for this study).

John Sampson recalled that when this report was taken to key business leaders in the region, it became clear that they believed they could pursue their business goals without greater regional coordination. “We were unsuccessful in getting processors to work together. Each of them thinks they have some information they need to protect to keep their competitive edge, even if they produce the same thing as someone a mile down the road.”

Fort Wayne Public Market Feasibility Study

Market Ventures (2011). “Fort Wayne Public Market Feasibility Study.” Prepared for City of Fort Wayne, July 8. Technical Memo #1: Project Scale and Merchandising. Technical Memo #2: Preferred Site Options.

After performing an analysis of market conditions, and interviewing 40 key informants in Fort Wayne, this report concluded that there was “general enthusiasm” for creating a public market in Fort Wayne. Yet is also noted that Fort Wayne consumers tend to favor low-priced food options, which limits the possibilities for new food ventures. Further, the report noted that farmers’ markets are “popping up throughout the region” but that restaurateurs still found it hard to access local foods. The study also mentioned the arrival of home delivery options such as Green B.E.A.N. in the Fort Wayne market. Tourism would account for only about 5% of the potential demand for a Public Market, so the market would have to cater to local residents to be successful, the report concluded.

Based upon a market area that covered ten of the 11 counties covered in this report (once again, Kosciusko County was not included) as well as Defiance, Paulding and Van Wert Counties in Ohio, the study concluded that “There does not appear to be ‘fertile ground’ for finding qualified and interested vendors for a year-round public market.” This was true for two reasons: “Northeast Indiana has a large number of farms but there is relatively little fruit

and vegetable production.” Moreover, the study noted, “The area has a limited number of independent restaurants, food producers, and specialty food retailers.”

Northeast Indiana Food Industry Cluster Strategic Initiatives

OnCallPSN (2012). “Northeast Indiana Food Industry Cluster Strategic Initiatives.” Prepared for the Northeast Indiana Fund, January.

Toward the goal of Northeast Indiana becoming a nationally recognized food cluster, OnCallPSN recommended a four-part strategy including a Specialty Foods Fair, Site Certification for Food Processors, compilation of Strategic Business Partner Profiles for the national firms that operate in the region, and expanded Food Industry Degree Programs in both sustainable agriculture and culinology® (the blending of the culinary arts, food science, and food technology).

This report noted that the food system is changing rapidly: “The changes in our food system that are now emerging will favor diversification in a wider variety of non-commodity products, decentralization in the production and distribution of food, disaggregation of ownership to smaller and more nimble enterprises, and the localization of the production and consumption of food.”

Food Processing Fact Sheet

Northeast Indiana Regional Partnership — Available at <http://www.neindiana.com/vision/resources/regional-reports>

In May, 2012, the Northeast Indiana Regional Partnership published a “Food Processing Fact Sheet” that lists the top 15 food businesses in the region by number employed. Noting the region’s strengths in corn, wheat, soybeans, and milk production, its favorable business atmosphere and excellent workforce, the wealth of technical advisory groups and access to markets in both the U.S. and Canada, the fact sheet stated that the region had several “shovel-ready” industrial sites.

Hoosier Farmer? Emergent Food Systems in Indiana

Meter, Ken (2012). *Hoosier Farmer? Emergent Food Systems in Indiana*. Produced by Crossroads Resource Center for the Indiana State Department of Health. Available at <http://www.crcworks.org/infood.pdf>

In 2011, Ken Meter of the Crossroads Resource Center (CRC) was commissioned by the Indiana State Health Department to compile an overview of the Indiana food system. The purpose of this study was to help the health department better understand the connections between food and health, by gaining deeper knowledge of how food is produced in the state.

The resulting report, *Hoosier Farmer? Emergent Food Systems in Indiana*, found that the state’s commodity system was not as strong financially as many assumed. Although Indiana was the

10th largest farm state in the U.S., 90% of the food Indiana residents eat was sourced outside of the state. As a result, Indiana households spent \$14.5 billion per year buying food sourced outside of the state (that figure has now increased to \$16 billion). The state's farmers combined only produced \$10 billion of products, primarily raw materials requiring further processing, and typically for markets outside of the state. In particular, 98% of the fruits and vegetables Hoosiers eat were imported into Indiana. However, Hoosiers expressed a strong desire to eat locally, and farmers expressed a strong desire to diversify their farm operations.

Overall the study noted that in the absence of public investment in local foods, Hoosiers were patiently building regional foods initiatives aimed at restoring social, cultural, and financial connections among farmers and consumers. It recommended the construction of supportive infrastructure that would create new efficiencies in local food trade. The current initiative to build a Northeast Indiana Local Food Network appears to be wholly consistent with this recommendation.

Central Indiana Food Hub Study

Aubrey, Sarah (2012). "Indiana Farms, Indiana Foods, Indiana Success: Central Indiana Food Hub Feasibility Study." Prepared for Purdue Extension, Hancock County, by Prosperity Ag and Energy Resources.

This feasibility analysis concluded there was sufficient feasibility to form a food hub in central Indiana providing the initiative took relatively small steps and worked with a fairly simple model of aggregating "known product to existing channels that are actively seeking" local foods. The report recommended that the initiative begin with a simple aggregation facility, hire a project coordinator, and explore setting up (or modifying an existing) internet order platform so that consumers could place orders online for delivery by the hub.

Drawing upon this study, Hoosier Harvest Market (HHM) was opened at the Purdue Extension office in Hancock County. A proprietary internet ordering software platform constructed by Local Food Marketplace was modified for local use. The Market delivers food orders to several locations around the county, including the Purdue Extension office itself, where customers pick up the foods they have ordered on a specific day.

Note: Indiana State Department of Health commissioned a study of farm-to-school opportunities for Hoosier Harvest Market, which is still forthcoming. This report was also written by Ken Meter of Crossroads Resource Center. During this research, it was learned that as of March, 2015, HHM had settled down to a core of 20 regular farmers. These farmers offer their products for sale to some 300 customers (not all regular customers) through the HHM internet platform. Yet each farmer retains the right to also sell independently, often through a CSA or at a local farmers market, where they can often get higher prices than through the Market. "We struggle to find farmers who can sell us produce," hub organizer and Prude Extension agent Roy Ballard laments. "A lot of what they have offered us is excess produce."

Although Hoosier Harvest Market was set up with the hope of providing aggregated product to wholesale markets, this goal has proven elusive. One board member (a farmer) cautioned

that adding a middleman to wholesale transactions makes little financial sense. Those farmers who produce at scale large enough to attract wholesale interest are often better off selling directly to a wholesaler. Even farmers who have scaled up often are themselves positioning for greater retail sales since these command higher prices. Currently the Hoosier Harvest Market board has set a priority of selling more produce items through home delivery to the eastern suburbs of Indianapolis, where there is considerable spending power and a more densely settled population than in Hancock County.

Another model of a food hub has been formed around a farm in Colfax, Indiana: This Old Farm, which has built its own cluster of activity. See www.thisoldfarminc.com/

Food Hubs Feasibility Study

Miller, Thomas P. (2015). Food Hubs Feasibility Study. Indiana State Department of Agriculture.
Available at: <http://www.in.gov/isda/3109.htm>

The study was conducted on behalf of the Indiana Department of Agriculture by Indianapolis-based consulting firm Thomas P. Miller and Associates in collaboration with Monrovia-based Prosperity Consulting. The project was funded by a U.S. Department of Agriculture (USDA) Specialty Crop Block Grant and administered by ISDA. It recommended that Indiana set up new food hubs in each region of the state, and offered overviews of several food hubs currently under development.

2015 Producer Survey

Heartland Communities, Inc. — “Plowshares Project” [not formally published]

The Plowshares Project surveyed 11 farms in the Fort Wayne region. A formal summary of this data does not appear to have been produced at this point, but results from this survey were shared with the Manheim team. This survey appears to have been designed to consider opportunities for creating frozen fruit and vegetable products through the Community Harvest Food Bank’s Produce Processing Center. Respondents indicated that they were either growing, or interested in growing, 41 different vegetables. Each of the 11 farms indicated they would grow more produce if market demand allowed. The largest barrier to growth cited by these growers was a lack of awareness of local food on the part of local consumers.

Northeast Indiana Local Food Network

By late 2015, the region had been awarded a grant from USDA to produce a strategic plan for a Northeast Indiana Local Food Network — for which this Phase I report was written. As Sampson said in our December 8, 2015 interview, “This project is about getting locally produced food to local consumers. Right now, that happens at the farmers market, with small entrepreneurs. Our mission as a region is to build quality of place and support entrepreneurship, so this fits in under both counts.”

Lessons Learned from Previous Studies:

The Northeast Indiana Regional Partnership has successfully raised the visibility of efforts to build industry clusters in the region, but has experienced only limited success when it comes to food. It is clear that the region contains a vibrant cluster of food industries, and that many of these have national prominence. However, at this stage, food processing firms do not appear to believe they have much to gain from networking with other food firms in the region. Nor do these firms appear to be directing strong attention to the ways in which they might play a role in expanding local food trade.

Still, the region has compiled a wealth of data about the food industry in the region, and has also supported the creation of a strategic plan aimed at achieving greater coordination among food businesses in the region. Over time, the vision has morphed from its starting point, which was to position the region as a stronger player in national food markets, and perhaps attracting new food processors to join the existing cluster of food firms, to the idea of creating a Center for Specialty Foods, to the prospect of opening a Food Innovation Center, to the concept that what really will be important to creating an effective food business cluster is to increase coordination among local food firms, and to increase food trade from local producers to local consumers.

Responding to data provided in each of these studies, the region appears to have positioned itself well for far more effective work.

An Overview of the Region's Farm and Food Economy

For this strategic planning process, Crossroads Resource Center compiled a summary of the most recent public data sets available covering the Northeast Indiana region as a whole, as well as each of the 11 counties in the region. The full report is given as Appendix A of this document [page 65].

These data show that farming in the region has enjoyed several relatively prosperous years for three or four growing seasons. Yet the artificially high grain prices that fueled that boom have fallen away to more normal rates. USDA estimates show that the average Midwestern corn farmer may have lost \$90 per acre in 2015.

The region has one-fifth of the state's farmers. The 12,302 farmers in Northeast Indiana sell \$1.42 billion of food products per year (1989-2014 average), spending \$1.33 billion to raise them, for an average gain of \$88 million each year. This is an average net cash income of \$7,191 per farm per year.

Overall, the region's farmers earned a surplus of \$2.3 billion by selling crops and livestock over the years 1989 to 2014. Yet farm production costs exceeded cash receipts for 13 years of that 26-year period. Moreover, 45% of the region's farms reported net losses in 2012 (Ag Census), and net cash income of farming is about the same today as it was in 1969 — only \$61 million higher (in 2014 dollars).

Farmers earn almost as much from other sources as they do by farming, bringing in another \$67 million per year of farm-related income — primarily custom work, and rental income (26-year average for 1989-2014, adjusted for inflation). Federal farm support payments average \$75 million per year for the region for the same years.

On the consumer side, the region's residents spend \$2.1 billion buying food each year, including \$1.3 billion for home use. Most of this food is produced outside the region, so Northeast Indiana consumers spend about \$1.9 billion per year buying food sourced outside. Only \$3.8 million of food products (0.2% of farm cash receipts and 0.2% of the region's consumer market) are sold by farmers directly to consumers.

Our research also showed that increasing direct sales between the region's farmers and consumers could bring positive economic impacts. If each Northeast Indiana resident purchased \$5 of food each week directly from farmers in the region, this would generate \$198 million of new farm income in Northeast Indiana.

Manufacturing in the region is stronger than in most rural areas, and accounts for \$6.5 billion of the \$29 billion Northeast Indiana residents earn. Yet 28% of all personal income in the region is funneled through government jobs or public programs, marking a high degree of dependence on government.

Also troubling is the fact that 236,000 people, one of every three Northeast Indiana residents, earn less than a livable wage. This certainly serves as a strong impediment to efforts to build local food networks and food business clusters.

Manheim team also commissioned a separate review of the competitive position held by food businesses in Northeast Indiana; this was performed by Dr. Philip Watson of the University of Idaho. This study showed that the region is a relatively low-wage region. Livestock farming (representing primarily the chicken and duck farms of the northern section of the region) was more significant in Northeast Indiana than in most parts of the U.S., but crop farming did not show solid fundamentals. The food processing sector showed signs of strength, but not a strong advantage over other regions of the U.S. This study can be found as Appendix B, p. 95.

Therefore, Watson's review suggested that food business clusters may not have as strong a competitive position as other industry clusters — yet as we are about to see, vibrant local food business clusters have been forming all the same, as farmers with the means to do so vertically integrate, therefore gaining greater market power, and building more sustainable businesses.

Local Food Networks Emerge

What is most clear about the previous studies performed in the region is that they gave scant attention to the ability of the region to produce food for itself. The focus had been more on food processing than farming, and an assumption appears to have been made that farmers would willingly supply the processors with needed commodities once a broader vision was established.

However, this lack of attention to farmers has had an even more pernicious outcome: most of these studies have overlooked the fact that vibrant local food networks have been forming in the region, even as hopes for coordination of food processors stalled.

These emergent networks have been organized by several enterprising farm operations that were attempting to build greater market power and stronger incomes from farming than they could earn from commodity production. They sought out more lucrative markets in Chicago, Indianapolis, and Detroit, and set up direct marketing connections in order to earn higher prices for what they produce. By vertically integrating, by taking advantage of emerging technology, and by building direct and mutual bonds of loyalty with consumers, these farms have created a profound new set of possibilities for themselves. Thereby, they have permanently altered the landscape of farming in Northeast Indiana.

Each of these farms has taken the steps to coordinate its own network of activity. Yet importantly, there is no central coordinating body; each farm has built its own support network and each collaborated with the others, as shown in Map 2.

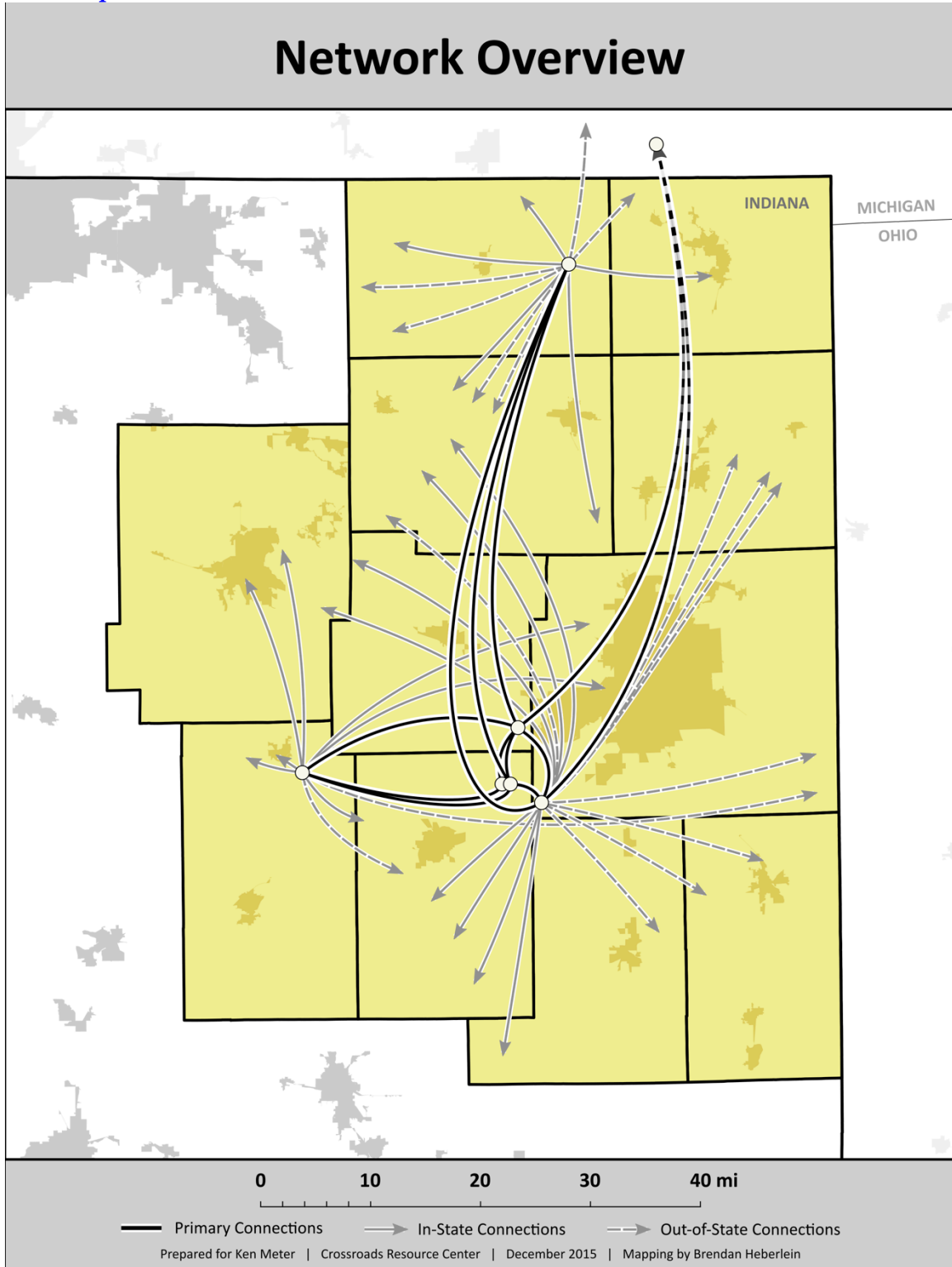
What each of these farmer-centered networks share in common is that each has focused on building social and commercial support for farm production that is geared to household consumers, but also available to wholesale accounts. Each has constructed innovative production systems that produce high-value, differentiated food products. Each has built up business by selling direct to households and restaurants, building added-value production, and seeing wholesaling as a longer-term strategy at best, and perhaps not even in their interest. Each has sought out customers who can afford higher-priced food.

Following are profiles of several emergent food business clusters. These are all examples of clusters that have not been content to simply exist in close proximity to each other; rather they have, in Michael Porter's word, begun to *realize* the potential of business clustering by coordinating with each other.

Time and resource constraints mean that not all emergent food networks can be identified and interviewed for this study; this report focuses on those exemplary networks that have captured the attention of the LEDOs in Northeast Indiana. While not an exhaustive sample, these interviews do convey some of the strengths, as well as potential weaknesses, of local food network building to date.

- Seven Sons Farm** (Huntington County)
- Hawkins Family Farm** (Wabash County)
- Gunthorp Farm** (LaGrange County)
- Joseph Decuis Farm and Restaurant** (Whitley & Huntington Counties)
- Trellis Growing Systems** (Fort Wayne)
- WOLF Cooperative** (Wolcottsville, LaGrange & Noble Counties)
- Whitley County Farmers' Market** (Columbia City, two locations)

Map 2: This map shows the reach of one local food network involving several farms: Joseph Decuis Farm (& Restaurant), Seven Sons Farm, Hawkins Family Farm, & Gunthorp Farm. See individual farms for more detail.



Other emergent clusters that were mentioned by our sources, but could not be interviewed in depth given the time available, include the following. See page 52.

- Clear Spring Produce Auction** (LaGrange County)
- Miller’s Poultry** (Orland, in Steuben County)
- Maple Leaf farms** (Kosciusko County)
- Strauss Veal Feeds** (Wabash County)
- Amish food businesses** in LaGrange and Elkhart Counties

Emergent Local Food Networks in Northeast Indiana

Seven Sons Farm (Huntington County)

<https://sevensons.net/>

- Formed cluster of farm businesses managed by seven brothers
- Vertically integrated beef, pork, and egg production & marketing
- Intensive nested livestock production returns \$4,300 per acre profits
- Sells direct to 5,200 customers in Fort Wayne, Chicago, Indianapolis, & Detroit
- Find it difficult to locate other producers wanting to pursue intensive practices
- Sees regional infrastructure opportunities in innovative livestock methods
- Partners with other farms in the region

The Hitzfield family has developed a vertically integrated farm operation that is actually several different businesses under one family umbrella. They raise grass-fed beef, pastured pork, and eggs, selling through an extensive network of buying clubs with 46 drop sites in Chicago, Detroit, and Indianapolis, and also sell \$250,000 of products from a self-serve farm stand. They also sell a limited amount to mid-sized grocery stores.

Each separate product is organized under its own business entity, both to reduce liability and for tax advantages. “We have nested and stacked enterprises,” Hitzfield said, with multiple people per enterprise. This allows each brother to take leadership in what he does best, and to operate with considerable latitude within that business, as long as his work fits the larger plan of the overall enterprise. The farm is essentially its own business cluster.

By nesting production (rotating different livestock through the same plots of land), the family says it has increased profits dramatically. The Hitzfields calculate that the farm earns a profit of \$400-\$500 per acre by direct-marketing beef. Chickens are pastured on the same land (typically after the cattle have grazed, in order to clean up insects that have settled on the manure, and also to clip the grass one more time). So the cost of producing the chickens can be justified both as a sanitation strategy and as a production strategy (the chickens’ main task is to lay eggs). The brothers estimate that grazing chickens adds value of about \$3,000 per acre above what is earned by raising beef – on the same land. The presence of the chickens also lowers veterinary costs for the cattle. Raising 200 hogs per year on the same land adds about \$800 profit per acre. This is enhanced by the fact that feed costs for these hogs (Duroc, Large Black, Hampshire) are reduced by 20% if the farm rotates these animals

through pasture, rather than feeding them grain continuously. All in all, the brothers claim profits of \$4,300 per acre of livestock. Total acreage of their farm (not all in pasture) is 550 acres.

The farm washes and packs 265 dozen eggs per day using a small washing device they purchased in Iowa. From their on-farm store, Seven Sons sells cheese from Sweet Meadow, A Hutterite cheesemaker in Indiana, from Organic Valley (based in Wisconsin), and several other producers. The farm also adds value even to spent laying hens. “We take our spent hens to Greg Gunthorp,” Hitzfield said. “He takes the bones out and can process from there to make bone broth and chicken broth.”

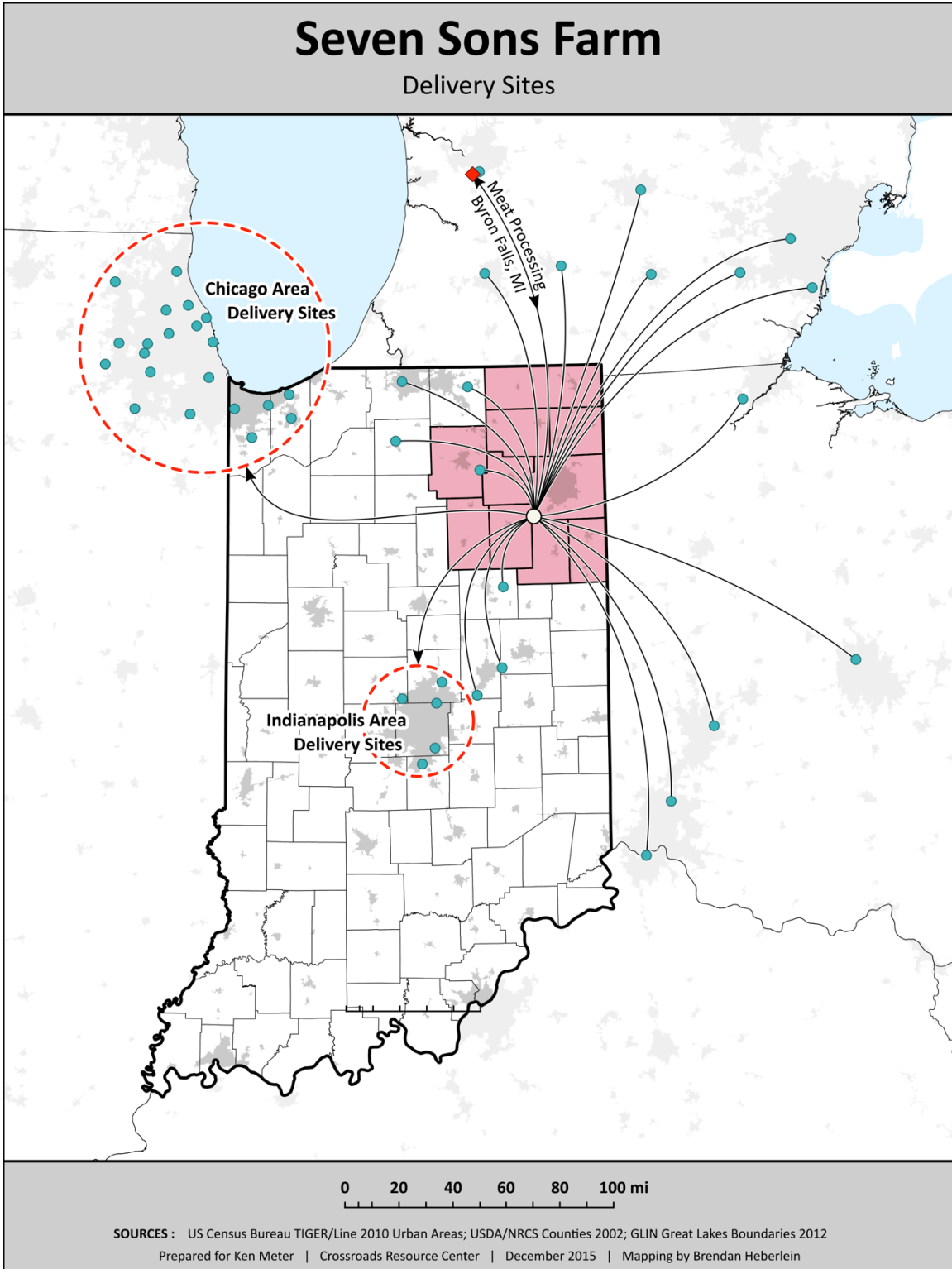
Blaine and other staff at the farm also earn money by selling internet services. They developed their own ordering platform that is unique in that it allows farmer to set prices that vary with the price of inputs and the weight of the animal. Essentially the customer goes on line and places an order at a provisional price. When the animal has been processed and actual prices are known, the customer is billed, understanding the price may vary slightly from what they were quoted, but the brothers guarantee it will not be a huge discrepancy.

Meat is sold through buying clubs, mostly in the Chicago area, where their meat is delivered to 46 drop sites currently (with another 175 people signed up on a waiting list to serve as drop sites). Their files show 5,200 total members, but not all of these are actively purchasing food from Seven Sons at any one time. There is no membership fee, but each purchaser pays a minimum \$5 delivery fee for each order. Each delivery route serves 3-5 locations where deliveries are made per day.

Legend for Network Maps

○ Network Node	◆ Input Supplier
● Farm	◆ Processor
● Farmers' Market	◆ Wholesaler
● Delivery Site	● Grocery / Retail
● Restaurant / Café	● Food Service
● Food Truck	● Delivery Service

Map 3: Delivery sites for Seven Sons direct sales (Fort Wayne customers can also come directly to farm store)



To reduce costs, the farm has purchased smaller vans that hold smaller quantities of food product and are cheaper to run. Each van averages 200 miles per day. Each drop site gets a delivery once every 5-6 weeks, which is sufficient for a frozen product that consumers can store at their household. Deliveries to Fort Wayne are offered more often, roughly every 1-2 weeks. And of course, Fort Wayne customers may also visit the farm and buy from the on-farm store. This is the main location where one can purchase canned pre-cooked pork and beef, or rendered fat, from Seven Sons animals.

The brothers are opening up delivery options in Fort Wayne through Tiny Footprint delivery, a sister company to Green B.E.A.N. delivery, which is based in Indianapolis. They also sell a limited amount to mid-sized grocery stores. While the farm has sold to restaurants, they have found this to be a mixed experience. “Restaurants have always flirted with us,” Hitzfield said. “They love having our name on their menus, but they are not always consistent in ordering.” The farm has set up a separate ordering channel on its web site, however, so restaurants can place orders easily. One new eating place in Fort Wayne, Trubble Brewing, was serving Seven Sons beef in December, 2015.

Hitzfield said that the farm was born out of a health crisis in the family. His father had bought 70 acres in the 1970s, and put up a standard confinement operation (for its time) to raise hogs farrow to finish. Yet his mother developed rheumatoid arthritis. During the difficult period of overcoming this disease, the family consulted with several experts who advised they should close the confinement operation because of its health repercussions for the mother. So the family began to explore open-air production, and refashioned their diet. Her disease did in fact dissipate.

As the farm transitioned, the brothers tried raising chickens inside the old hog barn, after giving the structure a rest and a thorough cleaning. “The confinement barn did not work well for the chickens,” Hitzfield recalled. Still desiring evening and winter shelter for their livestock, the family constructed hoopouses where the layers could live during cold weather, and separate hoopouses for young pigs.

Seven Sons send their cattle to Byron Center, Michigan, to be slaughtered and processed. A mid-sized family business, with 20-30 employees, Byron Center has won a great deal of respect from local farmers for the quality of their work and their flexibility in dealing with diverse grower needs. “Currently our business is doubling in size. That would not have been possible without Byron Center,” Hitzfield added. Once the processed meat returns to the farm, the brothers have invested heavily in freezer space, so that they always have reserve supplies on hand. This means they can promise that bulk meats will always be available when the consumer wants it — not determined solely by the animals’ life cycles on the farm. The brothers sell their beef in one-eighth fractions. “Any investment we’ve made in new freezers has paid for itself in a year,” Hitzfield said.



Seven Sons farm cans its own meats, sold exclusively from the farm store.

As the farm expands, there are always new challenges, but also a wealth of skills and perspectives to draw from to tackle complex issues. Hitzfield noted that, “We can keep scaling both our marketing and our distribution quite easily. It is much harder to scale up production.” They have scanned their neighborhood for more farmers, but Hitzfield added that it is difficult to locate new producers who are interested in learning the intensive techniques the brothers have developed through the years. “As we looked for new producers, we learned that those who were committed to raising only one species of animal did not fit. To work within our system, they need to develop a stacked model of their own that fits their farm and builds the soil on that property. It has to be a combination of a ruminant and poultry to get the maximum benefits to the land,” he cautioned.

Hitzfield said that it would be easy for the farm to scale up egg production on their own land simply by building new laying sheds and adding new washing equipment. But their growth in raising chickens for meat is limited by the region’s capacity to process chickens.

Hitzfield said that the farm does not engage in marketing campaigns, relying exclusively on its internet site, which gets 12,000 hits per month. He estimated that 80% of this attention comes from within the farm’s service area. “Consumers are turning to the internet,” he added. The brothers have also begun to explore home delivery in the Fort Wayne area.

Several years ago, the farm experimented by starting Neighborhood Egg Clubs in Fort Wayne, so people could grow their own eggs at home. “There were four clubs,” Hitzfield said, “And we had a surplus of eggs at a fairly competitive price.” But it was difficult to sustain the effort.

Hitzfield said he sees a profound possibility that Northeast Indiana could build a sustained effort to leverage on the stacked and nested farm enterprises the Hitzfields have developed. “I see an opportunity to create infrastructure in Fort Wayne that would make it easier to stack farm enterprises. Even if it started regionally, it would spread across the U.S.”

Hawkins Family Farm (Wabash County)

www.hawkinsfamilyfarm.com/

- Manages one of the more localized food trade networks in Northeast Indiana
- Offers CSA packages that include beef, pork, chicken, and vegetables
- Moving toward a “whole diet” CSA.
- Makes extensive use of community partnerships
- Hosts Pizza Night every Friday May-September
- Engages local clergy in supporting agriculture
- Partners with other farms in the region
- State regulatory procedures have posed an immense obstacle; seeks legislative relief

Hawkins Family Farm may have one of the most localized trade networks in the region, selling beef, pork, chickens, turkeys, and vegetables through several Community Supported Agriculture (CSA) packages, and to selected restaurants. By adding value on the farm, selling food to nearby neighbors, and working carefully through partnerships, the farm minimizes its distribution costs and creates cohesive community around itself.

The farm’s mission involves caring for the land, raising healthy food, and bringing people together, a legacy that grows out of the family’s heritage, and owner Jeff Hawkins’ previous career as a minister.

Jeff’s grandparents, John Leo and Velma Hawkins, purchased a 99-acre farm outside of North Manchester in 1957, after years of farming on leased land. In that era, one could earn a down payment to buy land by farming — something that is almost unheard of today. The family always prided itself on stewarding this land carefully.

Yet Jeff’s father developed asthma, and his doctor suggested he should leave the farm to alleviate the condition. The family eventually moved to Detroit, but continued to hold its farm values and even some of its practices. Jeff’s mother, for example, raised 700 rabbits for medical researchers, and Jeff learned how to tend livestock in the city. He went on to forge a career in the ministry.

Thirty years after the family had purchased the farm, Jeff was called to serve as a Lutheran

minister in the same North Manchester congregation where his family had worshipped. After a year in his new position, Jeff and his family moved to live on the farm which his dad now owned. Hawkins rented 13 acres of his family's land and began to raise cattle and chickens. He still earned his income as a minister, but being on the farm he began to read about more intensive and sustainable farming techniques, and he attended farmer conferences where he met some of the practitioners. He altered some of his farming practices as he cared for his small herd and flocks. He pondered his father's health issues, and his own as he struggled to stay healthy while serving in parish ministry. His priorities began to slowly shift.

With these new insights, his conversations with his production agriculture neighbors began to change, as well. "In a kind and gentle way, they were shaking their heads at the way I was farming, thinking I was following a fad. I guess, in my own way, I was shaking my head at the way they were farming, too. To think of farming only in terms of ways to produce more per acre, or ways to cut costs is too limiting."

Jeff added, "When you take a complex system like agriculture and boil it down to measuring success on a single dimension — production — the system gets distorted. I began to realize I had a different way of measuring success on my farm. I wanted to build health. I wanted to keep my animals healthy. Over time I realized that maximizing production took a toll on health, and maximizing health took a toll on production. You cannot maximize everything in the system. I could create an optimal balance between the two, but I could not maximize both at the same time."

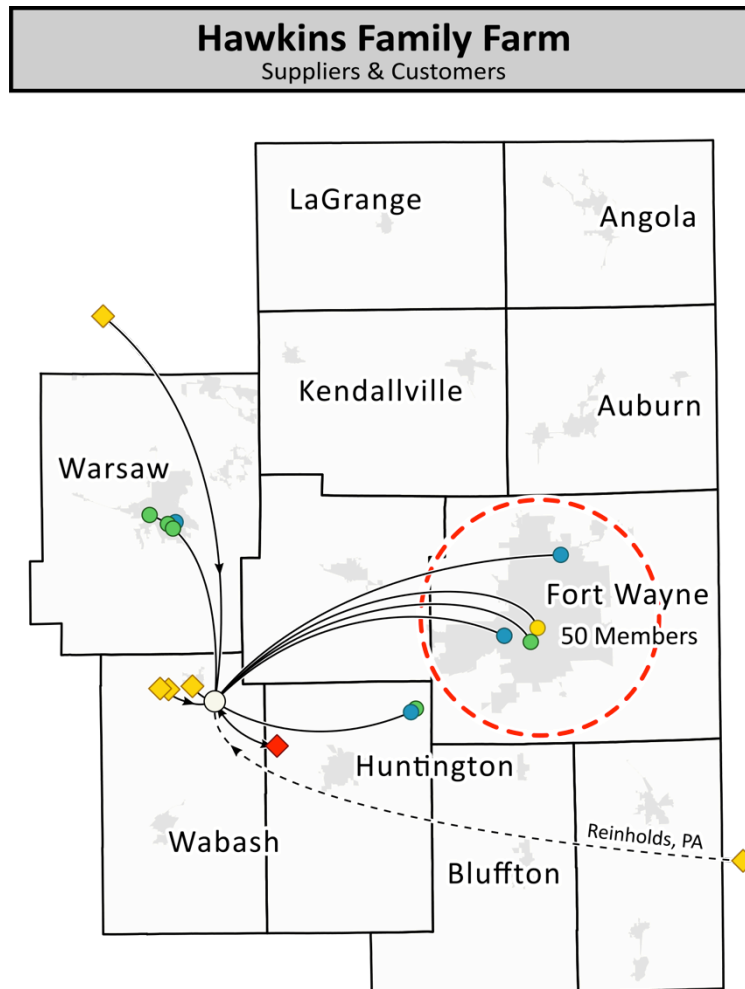
Yet as he strolled his fields, this inner dialogue brought him new insights into his ministry. "I've always seen ministry as tending a flock, much like farming. When I thought about the ministry as popularly practiced, however, I began to realize many were tempted to approach ministry in the same way my neighboring farmers were, as a matter of production. Church had become a matter of how many people do we get to join, how much money do we have to raise? I wondered if it was possible to have a healthy congregation if we selected for production, if we continued to act that way."

In 2003, he left his ministerial position, and moved from farming as a hobby to farming as an authentic setting for considering ministry based on the idea that tending a flock is tending a flock, whether animal or human. The goal was to use the farm as a way of introducing other ministers to ways to optimize health in their own congregations. Hawkins launched a nonprofit educational program called HOPE CSA. The acronym stands for, "Hands-on Pastoral Education using Clergy Sustaining Agriculture." He viewed his farm as the best context for this work: as an effective setting for educating clergy. The lessons one could learn on the farm could not be learned simply by staying in a church basement, he added.

The goal of the farm was to at least break even, with his paycheck coming from his role as Executive Director of the non-profit organization. Even though he thought of the continuing education ministry to clergy as an enterprise of the farm—vegetables, chickens, cattle, pigs, and clergy--over time the demands of the farm began to eclipse the demands of the ministry. "Farming claimed me more. Until 2013, there was no big leap, but a very gradual shift." He added more animals, and began to sell more meat to his neighbors.

Hawkins still farms the family’s original 99 acres, and added, “That is all I intend to farm.” The big shift happened in 2013 when his son Zach came home as usual for summer work on the farm and decided to remain as a farming partner rather than return to his graduate writing program in Iowa. “At that point, I realized I really had to aim to make a living off the farm like I had never done before.” The two worked together to significantly expand the farm’s output. They installed hoop houses to raise more vegetables and to more fully develop the farm’s CSA. Zach added social networking to the farm’s capacities. Jeff worked with the state Board of Animal Health to secure a USDA on-farm processing exemption, building a butchering facility in order to raise up to 20,000 chickens per year and sell them to restaurants and households after processing them on the farm. They hired a farmhand, two interns, and part-time workers.

Map 4: Local Food Network built by Hawkins Family Farm



Currently, Hawkins Family Farm sells pastured Jersey and Jersey-Holstein beef by the half and quarter; and pastured pork by the whole and half. Slaughtered and processed at a nearby

custom shop, the W&W Locker, the meat is sold direct to the farm's customers — who can order precisely the cuts of meat they prefer by calling the butcher. Hawkins Farm also has a small on-farm store that features cuts of pork and beef.

Processing chickens on the farm to save money and because he can be more watchful of health, the Hawkins offer a red bird designed for pasture for sale. Their chickens are served at Joseph Decuis Restaurant in Roanoke, Trubble Brewing in Fort Wayne, One Ten Craft Meatery in Warsaw, and Cerulean Restaurant in Winona Lake. He also sells to Affiné Food Truck, and is lined up to sell to several new restaurants slated to open in Fort Wayne.

The Hawkins currently sell about 4,000 chickens each year. Hawkins said, “We raised Cornish Cross for a while (this is the typical variety bred grow the most meat in the shortest time), but we decided we did not want them. Because they have been selected for quick growth, they are not particularly healthy.”

So the Hawkins tried other breeds, settling on the Freedom Ranger, one variety of a French red chicken, that take 2-3 weeks longer to grow than the Cornish Cross birds. We purchase the chicks from a hatchery in Reinholds, Pennsylvania, between Reading and Harrisburg. We sell the mature birds for \$3.99 a pound. “We have also tried Dixie Rainbow, but they took even longer to mature by 3-4 weeks. This threw off our rotation (of moving the chicks through various feeding spaces). In the fall, we sell both Broad-breasted white and heritage turkeys, fresh for Thanksgiving, and a few frozen birds. We smoked 22 for the winter holidays, but have not had great luck in getting these sold.”

The Hawkins also raise “every vegetable from arugula to zucchini” and market these through their CSA program to about 50 shareholders. The farm offers both summer and winter shares; one program each season contains only vegetables, while the other four combine vegetables, meat, bread, and eggs. The CSA sales themselves are formed around partnerships: one key drop-off site is the Joseph Decuis Emporium in Roanoke, while others are delivered in partnership with Cerulean Restaurant/Light Rail Café and Roasters in Winona Lake, the Manchester University College of Pharmacy, and Lutheran Hospital of Indiana in Fort Wayne.

Hawkins has also leveraged his ministerial networks. HOPE CSA collaborated with the Samaritan Counseling Center in South Bend to offer Clergy Care and Challenge support groups, congregational consultation, and coaching for clergy who wish to offer their ministry in innovative ways. HOPE CSA is also the principal beneficiary of Friday night Pizza Night at the Hawkins farm, where fresh pizzas covered with farm-raised vegetables and cooked on the farm's brick oven are sold to anyone who comes.

Drawing extensively on networks, Hawkins said, he does not have to sell the concept of his farm. “We have no marketing budget,” he said, other than the very important privilege of having our name on the menus of great restaurants. All of the CSA packages are currently sold out, until the farm can boost production over time. “We aim to get to 200 shares, and hope to move to a whole-diet CSA share,” Hawkins added. The farm also has an on-store farm, open six days a week. Along with the farm's own meats, and eggs, the store stocks raw-milk grass-fed Jersey milk cheeses from Sunny Meadow Farm in Argos, and maple syrup from nearby Winger's Sugar Bush.

The core of the farm's customers, he added, live in Winona Lake/Warsaw. "Due to the biomedical industry there, many have come from larger cities where they have been used to the availability good food such as ours. Our neighbors who live in the country often balk at the higher prices for food that we must charge, though this is changing somewhat. Some who do want better food tend to raise it for themselves." Yet Hawkins Family Farm is considered some one economic developer to be the "most local" farm in the region.

When asked about where he sources grain for his chickens and pigs, Hawkins said he raises some of his own corn but mostly purchases corn from a neighbor five miles away. He procures organic supplements from a firm in Nappanee, and fish meal from a feed store in North Manchester. Hawkins says that they are actively moving toward raising more of their own grain for feed. He already owns a grinder so he can mill the grain into feed.

Hawkins said that staying small can be effective. "As a group, many small farms are just as powerful as one large business," he said, "And when people buy from us, the money stays right here." When Huntington College opened its agricultural institute, he added, one of their first field visits was to Hawkins Family Farm.

The Hawkins had an immense obstacle thrown in his path by Indiana health authorities, who attempted to prohibit him from selling his chickens to restaurants unless the birds were USDA or state inspected. Joseph Decuis Restaurant was also challenged, since they were purchasing Hawkins' chickens and offering them on their dinner menu. Although the state Board of Animal Health had granted the exemption so that Hawkins could process up to 20,000 chickens per year on their own farm in accord with USDA regulations, and sell them direct to restaurants as well as household consumers, officials of the Indiana State Department of Health intervened, wrongly making use of a law that pertains to producer/processors who raise and slaughter 1,000 birds per year that must be sold directly to household consumers. After considerable lobbying, the Indiana Attorney General gave an opinion that the law was mistakenly applied and that Hawkins Farm was legally selling its farm-processed birds to restaurants under the USDA exemption. The issue is not dead yet; one legislator has introduced a bill, SB71, that would prohibit sales of farm-slaughtered poultry to restaurants or institutional buyers. Hawkins is now working with Pete Eshelman and several legislators to defeat the proposed legislation in order to uphold the right of farms to sell up to 20,000 birds per year direct from their farm to any restaurant or institutional customer in the state. Proponents view this as an essential step in writing new food safety laws that are appropriate to the scale at which farmers produce. Different rules are required, they noted, for larger operations where 200,000 birds might be processed in a day.

Gunthorp Farm (LaGrange County)

<http://www.gunthorpfarms.com/>

- Fourth-generation farmer returns to older methods to gain profitability
- Direct markets to households, butchers, and restaurants in Fort Wayne, Chicago, Indianapolis, & Detroit

- Built on-farm slaughter and meat processing plant certified by USDA
- Partners with other farms in the region
- Vertically integrated food business cluster
- Seeks to grow more of his own feed

Greg Gunthorp raises pastured pork the way his family has done for four generations on their land in Lagrange, in the northeastern corner of the state. “We always sold them [our hogs] as commodities, but as commodities we got the low end of the market,” he said. When prices fell to intolerable lows in the 1998, Gunthorp recalled, farmgate prices for pigs fell to “lower than during the Great Depression. I told myself I would not be the last Gunthorp to farm.” He searched through farm magazines to see what other producers were doing to recover. Many were going back to simpler ways of raising pigs — “the same techniques my family had been using all along.” Gunthorp decided that since he already produced the quality consumers were seeking, he would market his pigs directly.

“No longer would I grow a shipment of pigs only to find out what price buyers would give me at the end of the process,” he recalled. “I spoke directly to consumers to find out what they wanted, and what they would pay.” One reliable outlet was the Green City market in Chicago, more than a two-hour drive from his farm, but located in a prosperous section of the city, where he could find customers willing to pay a higher price. He watched what his neighbors at the farmers’ market did to adapt. “I saw the vegetable guys, how they kept growing, evolving, based on what they learned their customers want.” He adapted this flexible strategy to his pork operation.

Among the customers who came to Green City market were chefs of white tablecloth restaurants. They were looking for higher quality meats than the commodity system offered, and they could pay premium prices. Gunthorp was able to build up his business, eventually expanding to the point where he could process his own animals on the farm, keeping even more of the value of the hogs for himself.

Gunthorp’s specialty hogs, largely of the Duroc breed, but including some Berkshire genetics, offered the taste qualities the chefs were seeking. Gunthorp said they are “very uniform in the cooler,” which chefs also like because it means each plate they serve has a similar appearance. Yet these specialty hogs also cost a bit more to produce because they require more care during maternity.

After years of building the business, Gunthorp is currently selling 40 duroc pigs per week, and will be up to 70 before long. He also raises a few Mangalitza pigs for special customers. After much hesitation, he finally signed up with Neiman Ranch – before this it was his policy not to sell to anyone without running through his own processing plant, but in this deal he will sell live animals and avoid processing duties. His pigs are raised entirely at the farm.

He farms 250 acres now, having just opened up a new piece of wooded land (77 acres) he recently purchased. “Over the long term, I would like to have even more acres so I can raise my own feed,” he said. Scattered around Gunthorp’s farm are small plastic shelters; these offer the pigs a covering when they choose to head indoors, but also leave them free to sprawl out on the earth as they wish. The pigs roam the pasture as they like.

On another corner of the property, separated by a small woods, chickens and turkeys stroll near separate wood-and-metal shelters. Gunthorp sells 100,000 broiler chickens per year. He purchases day-old Cornish Cross chicks from Miller's Poultry in Orland. He also sells 6,000 turkeys that are packaged in parts; another 4,000 that are sold whole for Thanksgiving; and 2,000 that are sold fresh. Young turkeys come from Tom Otto, a supplier in Michigan. They arrive at about 8 pounds. Some of these are sourced in Canada.

His largest chicken customer is Frontera Grill in Chicago. Frontera Chef Rick Bayless also opened up a new restaurant, Tortas Frontera, at O'Hare airport; Greg sells them a smoked chipotle-lime loin as well as bacon. He sells to Lula Café in Chicago and the restaurants in the Cunningham Group, and more. His farm will make 30-35 delivery stops each week in Chicago each Thursday. From there, his meat is delivered to 60-70 different places to about 150 customers. This appears to be a combination of buying clubs or CSA drop sites, restaurants owned by well known chefs, and a few other buyers. He delivers to other restaurants, Mesh in Louisville and Indianapolis (delivered through Piazza Produce in Indianapolis), and several in Detroit.

Gunthorp also delivers through Green B.E.A.N. delivery both in Fort Wayne and in Indianapolis, and also sells through Door-to-Door, an organic food delivery service in Chicago with branches in Michigan and other states.

He smokes his own meats at the farm, but also sells raw meats to Smoking Goose and Goose the Market in Indy, who process their own charcuterie.

In Northeast Indiana, he sells to Trine University, which hires Bon Appetit as its food service; Cerulean restaurant (Winona Lake and Indianapolis), 800 Degree Pizza in Fort Wayne (and their "Three Fires" brand as well). "I also do a little retail for fun," he added. This appears to be primarily selling through Ted's Market north of Fort Wayne, and Three Rivers Co-op in Fort Wayne.

While Gunthorp explored the possibility of selling wholesale at large scale, he ultimately decided he had more power if he worked through his own networks where he could set prices for himself. He checked into selling to WalMart and learned it would cost him \$10,000-\$12,000 to certify for such sales, and he felt it was not worth it. Marsh's, he added, would be happy to buy his meat, but he has not explored the idea.

Building a customer base of direct sales has "just been about building relationships," Gunthorp adds. "It has to be a sustainable relationship. That is what has been wrong with our food supply in the past. The food trade has all been at the expense of farmers, of rural communities, and of eaters. We are out to develop an entire food system that is sustainable for all of us."

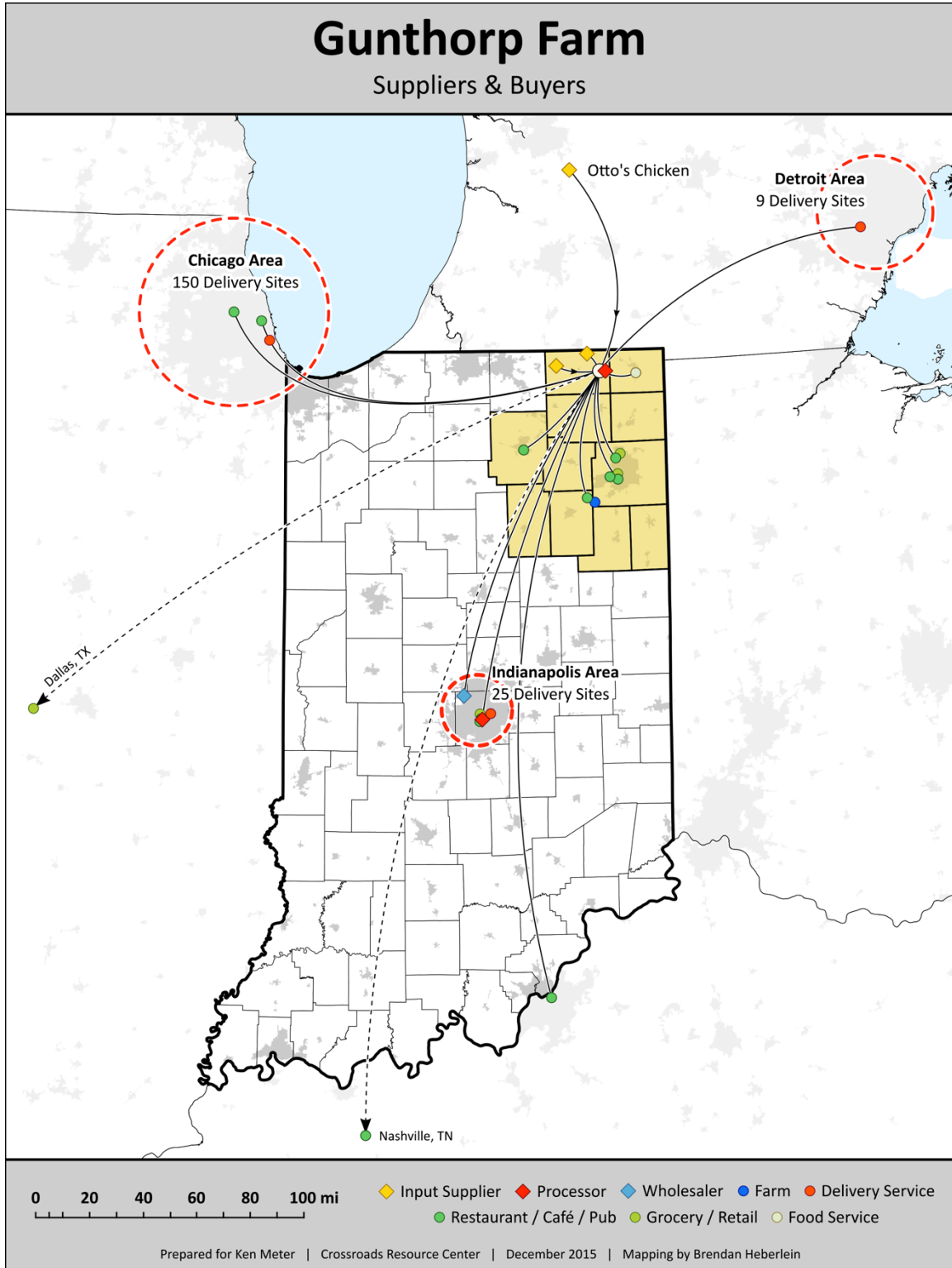
In addition to these retail clients, Gunthorp supplies about 80 customers who regularly buy half a hog direct from the farm's processing plant. "We can sell our animals for something like two to three times the commodity price," he says.

Building the place to process his own meats, even at a small scale, has proven daunting, he adds. “It’s often a black hole, but today I am just now thinking it is not simply a necessary evil, it is important to our vision.” Nor has the path been straightforward. At first, the Gunthorps invested in a processing plant in Union City, Michigan. “It was the only plant that did what we wanted,” he adds. “It didn’t work out, but we learned a lot.”

This experience persuaded him that he had to process for himself to get the quality and schedule he needs. Gunthorp has built a small operation, but it is enough to carry the volume he handles.

Gunthorp’s on-farm slaughter and processing facility has been USDA approved, so USDA inspectors are present whenever he is processing. The facility has also been certified for organic processing, which means they have installed the proper procedures, but his meat is not certified organic because he cannot yet control all of his feed supply. He buys most of

Map 5: Farm suppliers and delivery sites for Gunthorp Farm



his feed from Hubbard Feeds in Shipshewana. This firm also sells him organic pesticides when needed. He purchases grain from a farmer in Howe. Gunthorp just installed a 2,000 bushel storage hopper that will allow him to grind and store more of his own grain. He purchases soybeans from Lord's Seed in Howe.



Greg Gunthorp installed this USDA certified meat processing facility on his farm.

With his combination of farm, processing plant, value-added products, and direct marketing, Gunthorp Farm is also its own vertically integrated business cluster. It is a local food network the farm built because of the dilemmas that large-scale exports through a commodity economy brought him.

As a society, “We have to value food more,” Gunthorp concluded, “to cover the costs of processing and distribution.”

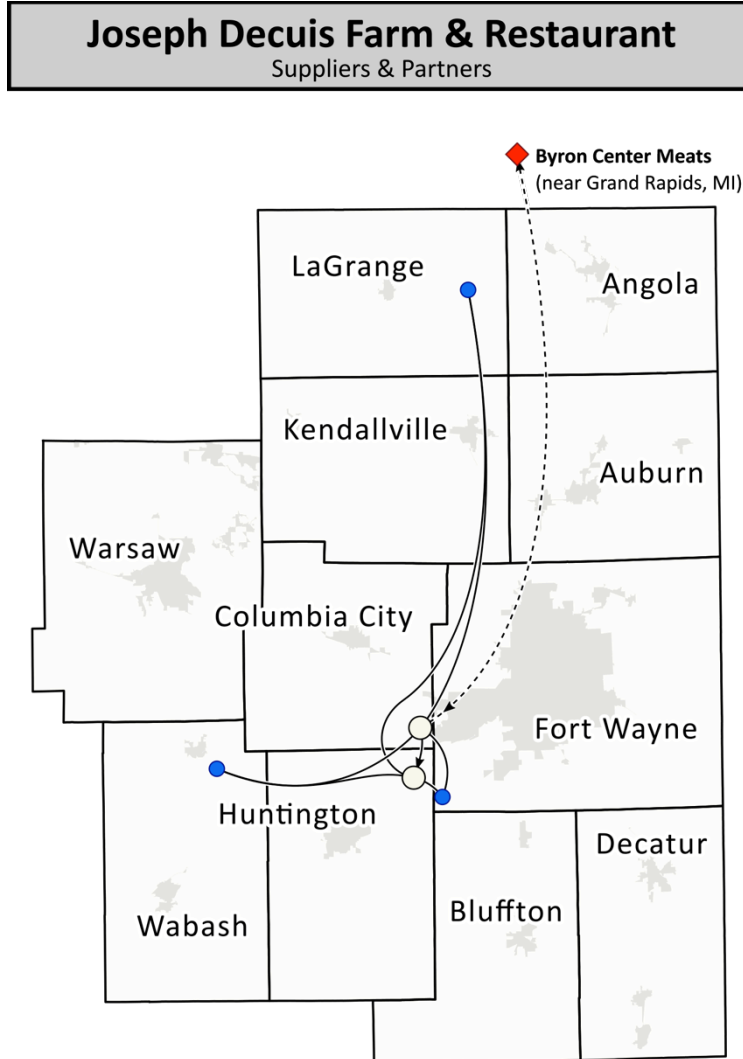
Joseph Decuis Farm and Restaurant (Whitley & Huntington Counties)

- Joseph Decuis Farm raises Wagyu cattle, heritage pork and chickens, turkeys, eggs, goats, sheep, hops, herbs, and vegetables
- Joseph Decuis Restaurant offers world-class dining
- The Inn at Joseph Decuis provides overnight accommodations
- Joseph Decuis Emporium sells fine foods from a Roanoke storefront
- Joseph Decuis Farmstead Inn provides a farm bed & breakfast experience
- The restaurant sources Decuis' own Wagyu beef, heritage pork and duck from Greg Gunthorp in Lagrange, beef from Seven Sons Farm near Roanoke, heritage poultry from Jeff Hawkins farm near Roanoke, herbs and organic produce from Decuis farm, and many other sources.
- Vertically integrated food business cluster all under ownership by one family
- Partners with other farmers
- Maintains broad vision for Main Street and rural development
- Main hope is greater coordination of local food activities

The Joseph Decuis food business cluster is itself several distinct firms, owned by the same family, that coordinate efforts seamlessly. Although launched by Pete and Alice Eshelman, who earned considerable wealth in previous careers, the cluster has also pursued a broader vision of community economic development for the Northeast Indiana region. Toward this end, Eshelman serves on the Indiana Grown Commission sponsored by ISDA.

Pete Eshelman built his wealth in the sports insurance industry, after playing baseball for a New York Yankees farm team and then working in the Yankees front office. When he retired from these commitments, the Eshelmans settled into Alice's home region of Northeast Indiana. They purchased land and fashioned a farm from the ground up, naming it after one of Alice's ancestors. They built new fences with redwood posts, solid outbuildings for the animals, a three-story home, a new pond, and a long wooden horse barn. Pete traveled to Japan to study with a master cattle farmer, to learn how to raise gourmet Wagyu beef, renowned for its flavor, at a level that has been recognized as equal to that of Japanese masters. He brought heritage Mangalitzta hogs onto the land, and eventually added Dixie Rainbow and Naked Neck chickens, heritage breeds whose meats hold better flavor.

Map 6: Joseph Decuis Restaurant serves as the center of a vibrant network



When Eshelman arrived in the Roanoke area, he viewed the town as a place holding great potential, despite several empty store fronts, because it offered a destination not far from Fort Wayne. He imagined he could attract tourists to the town if he created the right mix of amenities. The flagship business he opened for this purpose was the Joseph Decuis Restaurant, intended from its inception to be a world-class dining experience, featuring eggs, meats, herbs, and produce from Eshelman’s own farm, but also raising the visibility of several local farms that had been raising food for local markets for years. At first, Pete said, “We sought to either source the food locally or to raise it ourselves. We struggled to find out what was available locally.”

A long block away from the restaurant, the Eshelmans renovated an old salt-box home into an bed and breakfast with four bedrooms. Down the street, he opened up a retail store — The Joseph Decuis Emporium — that features more informal dining options (once again

featuring their own meats) as well as gourmet products. This activity was enough to attract other investors to open a wine shop and a cultural center. Later the Eshelmans turned an old farmhouse into a six-bedroom bed and breakfast.

Yet Pete’s vision was broader than these two businesses. As he put it, “The restaurant was the calling card for more general rural revival.” He invested in Main Street Roanoke, helping the place develop into an attractive destination. This he said, has “sparked the opening of other shops in Roanoke.”



Joseph Decuis Emporium is a place to buy lunch, gourmet food items — or pick up your CSA share from Hawkins Family Farm.

“Our vision is to make this an epicurean village. We hope to bring in a creamery that will make cheese and sell milk, invite a micro-brewery, a distillery, artists, and other firms that source from Indiana and nearby states. An artisan baker just bought a building here. We are also opening a culinary theatre, with education programs and demonstrations by universities and culinary schools, geared for kids as well as adults.”

Spinning off from this one farm are several other related food businesses. Eshelman continued, “We’re also forming cottage industries, and co-packers. We make 25 different products using Wagyu beef. We take the bones and make broth. The fat is rendered into cooking oil. We make signature condiments, and other products.”

Eshelman’s vision is centered upon food that is locally produced, healthy, and authentic. “These fresh foods speak for how they were raised, and where they were raised. Here we have a special environment – free range, no drugs, stress free, with great forage. This makes Indiana distinctive. We have lush pastures, rainfall, and grain. Hoosiers are direct, hospitable, personable, friendly, and not pretentious. We’re friends and neighbors and we talk to teach other.” These qualities are all part of creating Roanoke, and the entire region, as a destination.

Yet high quality is also a key to success. “Great food requires great ingredients. There is the trinity of protein (beef, pork, chickens), and we have to have absolute control of the whole process.”

He is quick to recognize that many of the farms he trades with have been in operation longer than he has. “Some of the farms we buy from were here before. For example, Greg Gunthorp was not that well known at the time, but now he is,” Eshelman pointed out. Seven Sons had been practicing intensive farming for many years, and Jeff Hawkins had been raising chickens in only a limited way.

Out of this cluster of activity, Eshelman added, may emerge the need for an aggregation center. “We’re considering the best location for a food hub. Producers need a place to sell their product, and they need traffic. The key is to create a marketplace.”

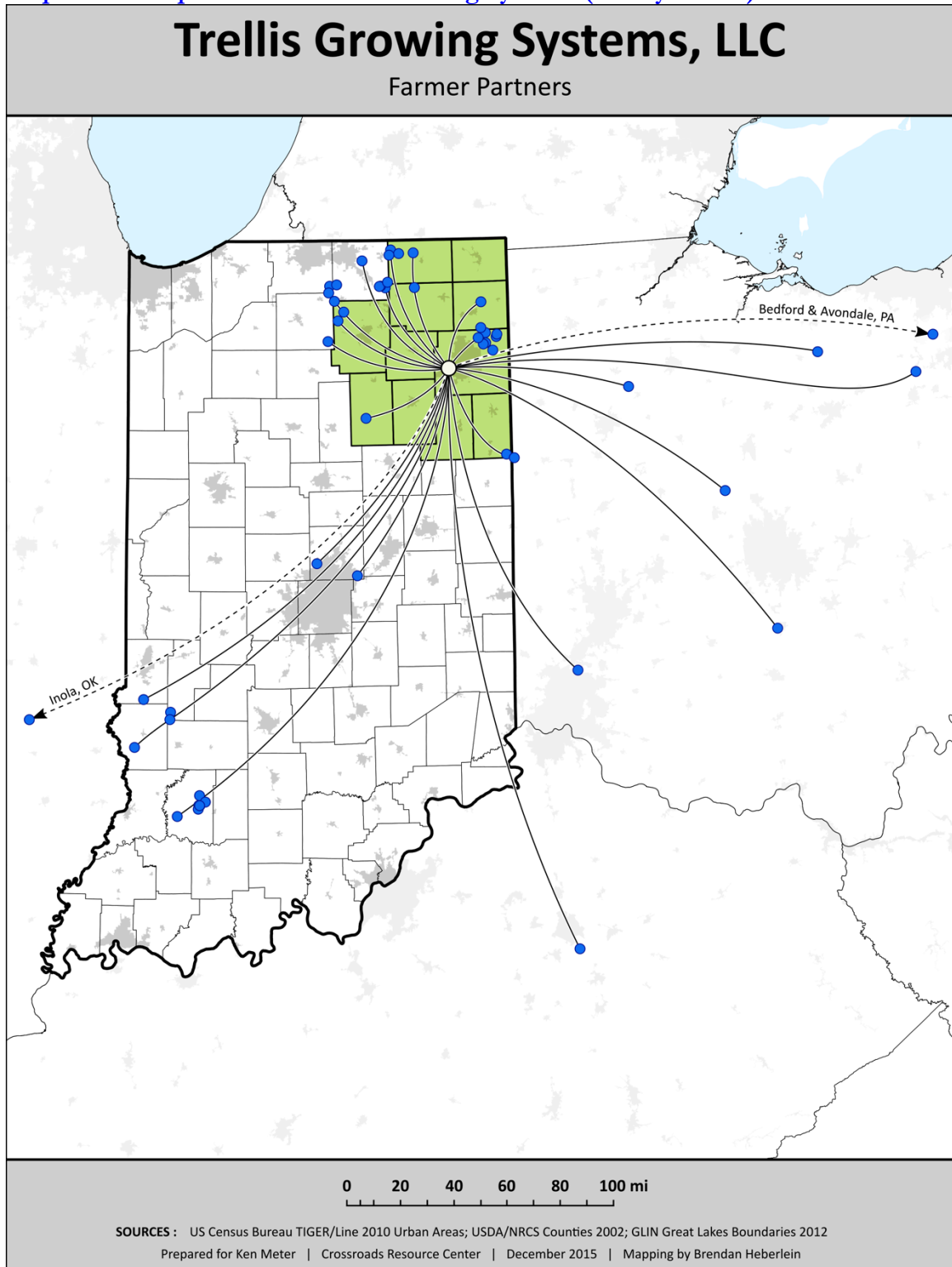
This, he continued, will require better coordination than the region has known so far. “The local foods movement is fragmented and needs to be regionally organized. We need a cooperative effort. We have to have regulations, but regulations appropriate to our scale. We have to be growing local food economics.”

Trellis Growing Systems (Fort Wayne)
trellisgrowingsystems.com/

- Innovative technology yields larger berry harvests
- Vertical integration of farming, technical assistance, marketing
- National marketing organization means broad distribution
- Aims to cover all of Indiana in 2016
- Goal is to produce 1 million pounds of berries in 2016
- Looking for place to freeze second-quality berries into value-added product

Richard Barnes, a manufacturing engineer, began to farm in 2000 with a small, 9,000-row-ft. operation in Wells County, Indiana, growing seven varieties of raspberries and blackberries. As markets expanded, and with the help of several research grants, he was able in 2007 to design and build a modular system for growing berries on trellises that significantly increases the yield by forcing production to one side of the plant. This, in turn, reduces labor costs.

Map 7: Farmer partners of Trellis Growing Systems (mostly Amish)



He moved the operation from this rural site to a demonstration farm that now covers about 40 acres inside the city of Fort Wayne. Now Barnes partners with more than 50 growers farming some 300 acres in Indiana, Ohio, and Pennsylvania (many of them Amish), projecting a 2016 harvest of 1,000,000 pounds.

“Our focus this year in to expand our cooperative to cover all of Indiana,” Barnes said. We plan to add approximately 60-70 acres each year for the next few years.” He would like to add a value-added product from both seconds and possibly grade A berries, perhaps frozen berries chilled in a flash freezer or an Individually Quick Frozen (IQF) unit. Toward that end, he has met with an Indiana firm that has vacant freezer space, and made contact with the Community Harvest Food Bank after it was suggested during this interview. Barnes has also explored bringing his growing technology to inner-city farms in Fort Wayne.

Having designed this technology, Barnes moved on to fashioning a production system that could reward growers at a higher level than conventional channels. Trellis Growing Systems (TGS) owns the technology, and has created modular production designs so that individual growers can select a size appropriate to their needs. He has developed business plans adaptable to each site, that spell out the investment required and potential returns. TGS assists in adapting the technology to each parcel of land, and installs the trellises.

Trellis Growing Systems then acts as a marketing agent, representing each of these growers and selling through a national produce distributor, Giumarra, based in California, under the label of Nature’s Partner.

Working with David King, the statewide coordinator of Indiana Grown and others to begin marketing fresh berries directly to the large retailers as soon as the summer of 2016. He is also meeting with other large national distributors, and says he has found strong interest.

As Map 7 shows, one of the strengths of this collaboration is the large network it has created to support both the production and marketing of fresh berries.



The trellis growing system makes it possible to produce more fruit per acre.

WOLF Cooperative (Wolcottville, LaGrange & Noble Counties)
www.wolfco-op.com/

- 80 Amish farmers form cooperative to reduce grain milling costs and gain more control over production and marketing
- Private mill owner sells his business interest to co-op and manages the firm
- Supplies grain for organic dairy farmers and poultry farmers
- Supplies small growers in Chicago and Detroit as well
- Business has grown 10-fold in three years
- Collaborative network brings resiliency
- Seeks new technology to expand even more



WOLF Co-op's organic feed mill in Wolcottville.

WOLF Cooperative is tackling one of the most difficult issues to penetrate in the region's farm economy: Northeast Indiana farmers spend an estimated \$900 million each year purchasing essential farm inputs from sources outside the region. WOLF is a collaboration that allows some 150 farmers in Northeast Indiana to grow more of their own feed grains and have them freshly milled for their animals. This brings tremendous new value to the regional economy.

WOLF (Wolcottville Organic Livestock Feed) Co-op is also a remarkable story about farmers making immense changes to form close collaboration. CEO Lamar Bontrager said he grew up on an organic dairy farm, and became devoted to organics. As his career advanced, “I purchased the Honeyville Mill in Topeka, Indiana, in 2000. While I was there I was approached by farmers who wanted me to add agricultural fertilizers. I added them in 2001.”

Four years later, he added, “Three or four organic farmers started to sell organic milk to Organic Valley (the Wisconsin-based co-op). The question was, where would they buy the feed? So, I bought a tractor and a grinder, rented a facility in Millersburg, and began to grind organic feed.”

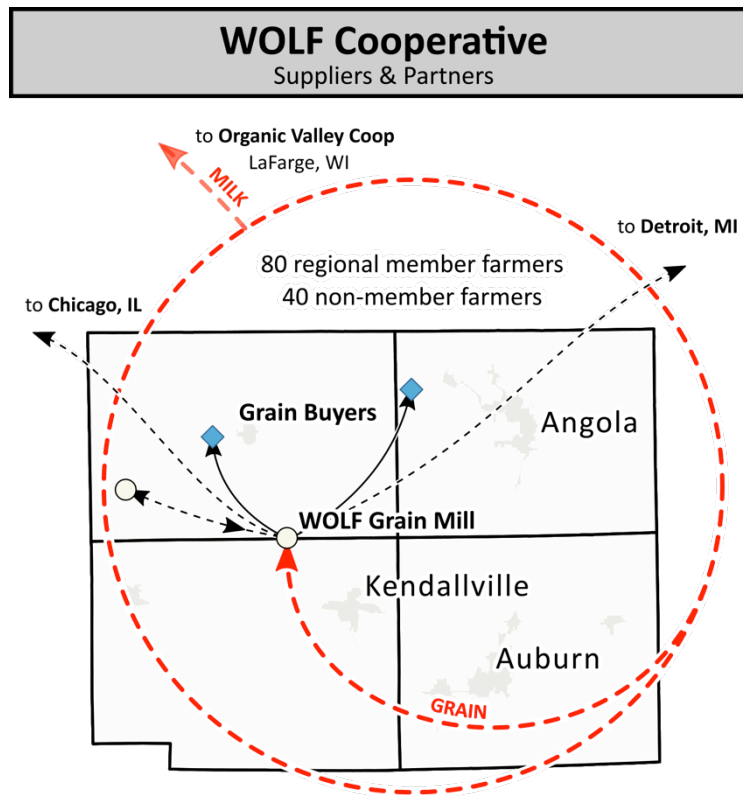
As this business grew, Bontrager purchased the mill in Wolcottville. Sourcing organic grain was still difficult, since only a few of his neighbors grew organically. “At first I bought a lot of grain from Western states – Idaho, Iowa, and South Dakota,” Bontrager said. Yet he also looked ahead and saw potentially large growth in the organic industry. “I sensed there was about to be a great deal of need for organic grain. I thought I could not keep up with it by myself.” It would mean more investment and longer working days than he could contemplate on his own. So Bontrager spoke to the farmers who he served. “I broached the idea of forming a co-op with my neighbors. I took the idea to Organic Valley. There are about 100-120 farmers who sell to Organic Valley in this area. Most of them are Amish, but not all.

At the initial farmers meeting on March 11, 2013, 50 farmers attended. Pursuing conversations with other neighbors, he added, the group realized it needed considerable assistance to learn how to form a co-op. They turned to Bob White, local foods coordinator at the Indiana Farm Bureau, who helped them answer their questions and contact other experts. “Eventually we built up to 80 farmer shareholders,” Bontrager added. Each chipped in some capital. “The farmers bought the business from me, and I agreed to run the company for the next 10 years.” This injection of expertise and capital poised the grain mill for incredibly rapid growth.

The added network of support created by the co-op also helped the business survive an early calamity. Only two months after the initial meeting, a fire broke out that burned down the mill head. The firm filled orders the next day. “We survived the fire. One neighbor came in with his milling equipment and we kept filling orders just as we had been. Later we rebuilt to a larger capacity.”

Over time, the co-op attracted business from nearby grain producers who wanted grain milled, even though they were not selling milk to Organic Valley. “Now we purchase from 40-50 farmers who are not members of the co-op, but who have product to sell, mostly to poultry farmers. All told, about 900 acres of land supply this mill now.” Even then, he added, “There were times I had to buy from Canada to keep up with demand.”

Map 8: WOLF Co-op grinds organic grain for (mostly Amish) dairy farms and poultry producers — and for urban chicken producers in Chicago and Detroit.



In just a short time, he added, business has boomed well beyond what he had imagined. “It is a different scene now. More people are coming to our door – we don’t have to look for business any more. We’ve grown tenfold since I sold my interest in the company – from \$1.6 million in sales to \$15 million, in less than three years. We handle 100,000 – 200,000 bushels of custom grain per year, mostly from Illinois, Michigan, and Ohio. Organic Valley sells milk to Meijers, and WalMart. Stonyfield is also in those stores, and in Kroger.”

Bontrager thinks this explosion of sales reflects the perspectives of new farmers, who are more interested in establishing an independent foothold. “The younger generation is driving this thing. People see the consequences of taking on debt, and they want to add more of the value for themselves.”

The board has also been a source of business acumen. Bontrager said he feels far more relaxed at the end of his work day with such solid people behind him, and the ability to hire more help. “We have a five-man board,” he added. “All are Amish except one. The co-op is very good so far. We have annual meetings with our shareholders, and they have been very supportive. I am happier, too. There is more to life than working oneself to death.”

Expansion has shifted the direction of the business dramatically. Although at first the board was reluctant to move beyond grinding grain for dairy farmers, they did venture into the grain milling market. Now grinding corn for poultry feed is their largest source of income. “We haul 3 semi-loads a day to Miller’s Poultry. We supply one layer company, one Illinois company, and one poultry firm.” But the co-op also opens its doors to smaller operations: “We sell to backyard chicken producers in Chicago and Detroit. We sell calf feed. We supply two Amish brothers who run Country View Calves. We sell to mega dairies. It is going gangbusters. The challenge is to keep our quality high. We have the right sources for grain, but we have some difficulty with beans that we import.”

As Bontrager reflected on the past few years, he said, “I really like the co-op situation. This is working together as a community. The more you can keep each function in the community, it is incredible what that does for the community. We have to get that mentality out to others who do not have the experience.”

Yet he is clear that “We don’t really supply local food markets. That thought has come up. There are some farmers who have 10 acres of land, and they could set it aside for something else. I think we will see more of that. There is a tire store next to the office, and I have been thinking of turning it into a retail store where we could sell locally produced foods. This location, though, is a little bit out of the area for that. Still, people are starting to get the idea of eating better. More and more Amish are doing it. Shipshewana has more organic produce farms.”

Bontrager does, however, have a robust list of future directions he would like the co-op to take. “In five years I would like to have a pelleting facility up and running. This is something that is not readily available in the organic world.” Further, he “Would like us to launch a retail store selling more than feed and related equipment like we do now. I would also like to expand into Western Ohio. This might require us to add a second shift. The hog side of our business just started up, and beef could be a big thing eventually. We already do goat feed but are not yet supplying sheep. Also, we could begin to sell pet food.”

Whitley County Farmers’ Market (Columbia City, two locations)

<https://www.facebook.com/Whitley-County-Farmers-Market-543878292318928/>

- Farmers’ Market serves as connection point for growers to collaborate more effectively
- Whitley County LEDO plays a proactive role in local food system work

When we interviewed Kelley Sheiss, agribusiness coordinator for the Whitley County Economic Development office in Columbia City, to learn more about food business clusters in her region, she pointed out that the two farmers’ markets in Columbia City (one near the courthouse square and another at Parkview Whitley Hospital) serve a great role in fostering a sense of collaboration among the 12 growers who sell food there. “We have one of the strongest farmers markets in the region,” she said. The growers meet each other at the market, and help shape market policies, which creates a forum for a broader community

discussion about what types of production might be needed, how more consumers might be attracted, and how vendors might coordinate efforts. The region also supports two large CSA farms. Sheiss also suggested that launching a co-op grocery might fuel interest in local foods, at least in a small way.

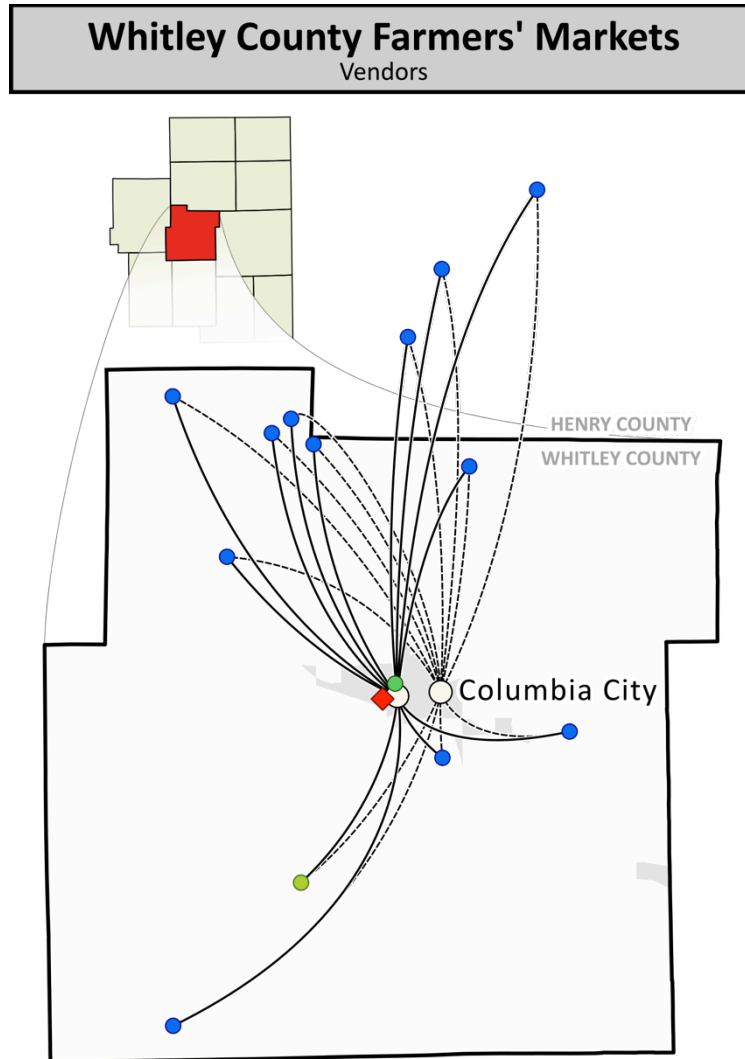
Since Sheiss was willing to share the addresses of the farms and food vendors that sell at the Columbia City markets, we were able to map their locations to give a sense of the scope of this network (see Map 9, next page). Certainly this serves as an example of the networks other farmers' markets can help create.

Yet Sheiss sees a strong need to expand local production. "One entrepreneur toyed with the idea of launching year-round food production here using hydroponics. He moved to Ohio, so someone else is planting in his greenhouse." She does not see the spark for this coming from inside the community. "We need to consider year-round production, but we will need to attract it from outside."

New processing opportunities also are on her mind. "We have a strong need for a co-packer for low-acid foods — dessert sauces, barbecue sauce, etc. We identified 20 foods that have potential for co-packing." She looks to Flavorcraft, a German firm in Louisville as a model, and perhaps a firm that could be attracted to locate in the region. "Our critical needs for this are investment capital, a good facility, and proper machinery. I look at the food bank space in Fort Wayne and think, why couldn't this be a co-packing facility?"

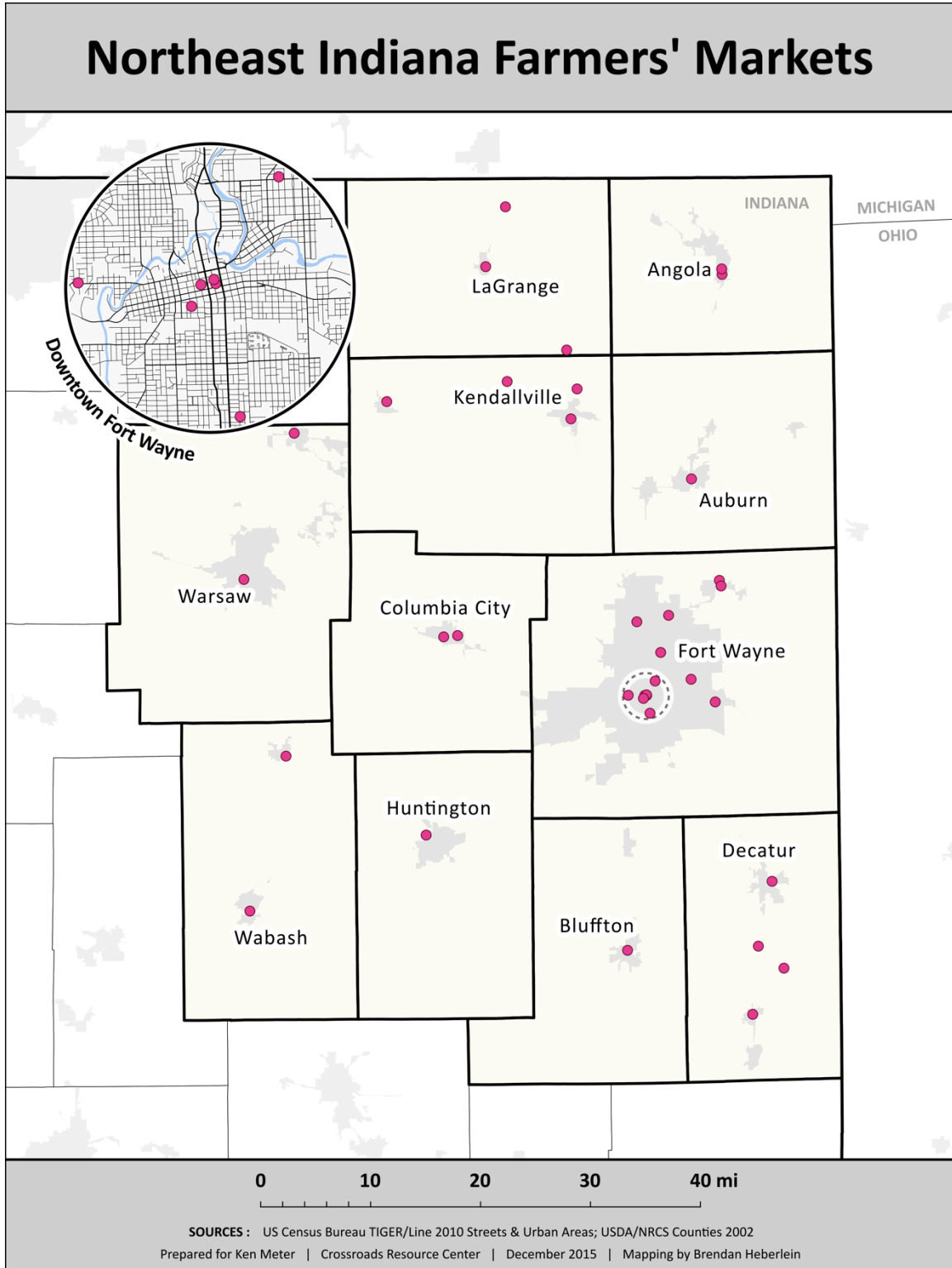
"Whitley County is dedicated to agribusiness," Sheiss affirmed. "We have one building we built on spec ready right now. We have three industrial parks. We see a huge increase in local growers coming, led by existing farmers who wish to diversify. One young lady wants to develop a mobile poultry processing business. Strauss Veal contracts with farms in the area. Neininger Dairy is nearby."

Map 9: Whitley County Farmers' Market operates at two locations, and helps bring local farmers into a common network



On the next page is Map 10, showing all the farmers' markets listed by USDA and/or Purdue Extension for the entire region.

Map 10: Northeast Indiana has 36 farmers' market locations



Other food business clusters

Other emergent clusters that were mentioned by our sources, but could not be interviewed in depth given the time available, include:

Clear Spring Produce Auction (LaGrange County)

<https://www.facebook.com/pages/Clear-Spring-Produce-Auction/152411348133571>

Clear Spring Auction was launched 15 years ago after Amish community elders realized the small Amish farms of the area needed an outlet for selling their produce. A small group of 12-15 local investors each put up \$5,000 toward the construction, and also helped construct the building. The auction itself is run by a nonprofit corporation that rents use of the space from this investors group.

The main clientele for the produce auction are buyers from independent grocery stores in Indiana and nearby states, from Battle Creek, Michigan, to Gary, Indiana. Sales through the market total about \$1 million per year of bedding plants and flowers as well as produce. The market is open to anyone who wants to sell. Some 30-40 growers sell there now.

The Amish community in an around LaGrange County maintains 150 churches, forming the second-largest Amish community in the U.S. after central Pennsylvania. It is also unique in its integration into the industrial economy. After the recreational vehicle industry slumped during the 2008 financial crisis, many Amish who had held factory jobs were left out of work. They turned to raising produce. Many fathers also took this step because they preferred returning to the land, and having more time with their children.⁴

Miller's Poultry (Orland, in Steuben County)

<http://millerpoultry.com>

The Miller family has run this business since 1942, starting with the purchase of Pine Manor Farms, which at the time had been an advanced dairy farm. Five years later, the family had started hatching, raising, and processing turkeys. By 1974, the family was also raising broiler chickens, eventually hatching their own chicks as well. Eleven years after that, the family began raising ducks for Culver Duck Farms in Middlebury. The farm expanded in 1992 by taking over a nearby firm, Booth Poultry, and Martin's Feed Mill in New Paris, Indiana.

All chicks are incubated and hatched at the firm's own hatchery in Goshen, Indiana. Now the firm said it holds the capacity to process 35,000 chickens per day, using modern automated equipment. The firm sells both organic and naturally grown chickens that are antibiotic and hormone free.

The firm contracts with individual growers to raise the birds, preferring farms with at least 20 acres of land within 50 miles of the processing plant in Orland. The firm offers education and training programs, turnkey housing programs, and mentoring. Financial figures posted

⁴ Mertens, Richard (2009). "Indiana's Amish, laid off from RV factories, return to their plows." *The Christian Science Monitor*, May 26.

on the firm's web site show that growers have been able to net \$35,000 from \$230,000 in sales per year, after making an initial \$1.3 million investment in a three-barn production complex. The firm provides heat for each barn, and said that growers may make additional money by selling the manure from their operations. Miller's is actively looking for new growers.

Chickens are primarily sold through Michiana, Illinois, and Ohio distributors to grocery stores in the Midwest, inside a geography roughly bordered by Minneapolis, Omaha, Houston, Louisville, Pittsburgh, and Sault Ste. Marie.

Maple Leaf Farms (Kosciusko County)

<http://www.mapleleaffarms.com>

Many Hoosiers point to Maple Leaf Farms as a sterling example of a successful local food firm. This family-owned company is in its fourth generation. Like other clusters mentioned above, this firm is an aggregation of different firms under one umbrella. Unlike those listed above, it sells duck meat in Asia.

Maple Leaf was one of the earliest operations in the region to parcel out production to a wide variety of neighboring farms, determining the production protocols, and then serving as a slaughtering, processing, and marketing firm once the birds reached maturity. This approach to vertical integration is reflected in the business planning of each of the clusters listed above, though each has also adapted this framework to suit a different product or business goal.

Founded by Donald Wentzel in 1958, Maple Leaf Farms began its life as a small duck operation dedicated to producing products with "quality you can count on." In its first year, the company website states, the company produced just 280,000 ducks. Six years later, it was selling more than one million. Now it has expanded to international markets.

Maple Leaf Farms contracts with nearby farmers who raise the birds; Maple Leaf processes the ducks and markets the product. Maple Leaf also defines the specific protocols under which the birds are raised, which specify that ducks shall eat an all-natural diet of corn, wheat, and soybeans purchased from local farmers, with no added antibiotics or hormones.

The parent firm has spawned several related companies in its cluster. The Maple Leaf Farms, Inc. — International Division has developed a duck production system that it claims "optimizes the genetic potential of ducks under the safest and most natural conditions possible." This is being implemented in other nations, including China.

MLF Biotech, Inc. offers testing protocols for natural health products and food and ingredients, including a screening program that tests for the overall toxicity of ingredients, feed, and finished food products with a single test.

Down Inc. and its sister firm, the Eurasia Feather Company, manufactures down and feather bedding products for the residential, design and hospitality trade. The division also sells

down bedding products direct to consumers through its downdirect.net website.

Milford Valley produces a line of chicken entrees and chicken products, including natural chicken products marketed under the brand name Sandra's.

The Maple Leaf Farms' retail store, Duck, Down & Above, is located in Leesburg, Indiana. The store stocks duck and chicken products, down and feather bedding items, gourmet sauces, spices, and cooking gear as well as specialty items and gifts made by local artisans.

Strauss Veal Feeds (Wabash County)
straussfeeds.com/

Although the corporation now has its home base in Wisconsin, Strauss Veal Feeds was born in North Manchester. CEO David Grant said, "We are probably the largest producer of veal in the U.S." The firm manufactures milk replacers, as well as special electrolytes, microbials, colostrum supplements, fortifiers, and medications for those raising young cattle for meat. "We market and distribute our products throughout the U.S. in areas with high concentrations of dairy cows."

The firm also coordinates the production and sale of some 78,000 veal cattle that are produced by nearly 100 independent farmers who raise animals under contract with Strauss. Each farm invests in the equipment required to raise the animals. Strauss retains ownership of the young cattle, and provides their special feed. When the animals reach maturity, at about 600 pounds, Strauss sells them to one of six specialized processors from Milwaukee east. Grant says his firm accounts for about 30% of the U.S. veal production.

While grain is a key ingredient in their recipe, the firm relies more heavily upon whey, which is purchased from cheese manufacturers. Grant lamented, "This region once had five major cheese plants. Now there is only one left in the state of Indiana. We have to go to Ohio, Michigan, and Wisconsin to source our whey."

The firm follows strict European protocols for its feeding regimen. "The biggest producers are the Dutch," Brandt added. Moreover, "the largest consumer market is in major metro areas, primarily on the Eastern seaboard. Veal is especially popular among Italian, Jewish, Kosher communities. Not much is consumed in this area."

He added that the cattlemen have to go long distances to process their meats, as well — to Milwaukee, central Ohio, New Jersey, and New York. "It requires a special facility and a sales network to process veal. Beatrice Foods used to have a plant in South Bend, and still has one in Mentone. Detroit once had Detroit Lamb and Veal. This became Wolverine, located right downtown, but is also closed. Processing veal is difficult. It requires large infrastructure, and requires an end user. Our farmers supply high-end grocers, hotels, and restaurants. FDA scrutiny has gotten so intense, they are breathing down your neck constantly. You have to have the most modern equipment."

Brandt added that the veal industry is a small and close-knit one. “There has been talk about forming a Veal Council. The budget required would be about \$400,000. We met in Fort Wayne at the Casa Restaurant. We form a close alliance with buyers.” This makes it a very unique food business cluster in the region.

Amish food businesses in LaGrange and Elkhart Counties

Steve Engleking, Purdue Extension agent for LaGrange County, offered a list of some of the main Amish food firms in the northern part of the region. Time has not allowed us to learn whether this is merely a business cluster, or more of an active network of producers.

- Yoder’s Meat and Cheese (Shipshewana; also assorted canned foods)
- Sunshine Acres (Middlebury; vegetables and poultry)
- Miller’s Poultry (Orland; poultry)
- Rise’n Roll Bakery (Nappanee and Fort Wayne; was sold to investors)
- Culver Duck (Middlebury; ducks raised on Amish farms)
- Clear Spring Auction (LaGrange; see above)

This is not intended to be an exhaustive list.



Cerulean Restaurant in Winona Lake at holiday time

Other Notable Farm & Food Enterprises in the Region:

When asked to name especially interesting local food enterprises in Northeast Indiana, our respondents mentioned a wide variety of business. These are listed below. While not all of these could be contacted in this first phase, each has done something to attract special interest from the region's economic developers, farmers, and food handlers.

Note: This is not intended to be an exhaustive list. Farms & businesses that have been featured elsewhere are not generally listed here:

Dairy Farms:

- Brand Dairy Farm (Waterloo)
- Dozens of dairy farms (Shipshewana)
- Metzger Dairy (Kimmell) — dairy; milking equipment
- Neininger Dairy

Meat Farms:

- Whiteshire Hamroc (Albion) — training Chinese farmers; selling feeder pigs to Asia

Poultry Farms:

- Culver Duck (Middlebury)

Egg Farms & Processors:

- Creighton Brothers (Warsaw) — eggs
- Egg Innovations (Warsaw) — larger pasture and free-range egg operation
- Herbrucks Poultry Ranch (Saranac, Michigan) — larger egg operation
- Hy-Line (Warren) — eggs, baby chicks

Grain Farm & Broker:

- Zolman Farms (Warsaw) — grain buyer and warehousing

Produce Farms:

- Amish Aquaponics (New Haven)
- B&B Organics (Mishawaka 46544) — wholesale produce, buying clubs, direct sales
- Blueberry Acres (Laotto)
- Get Fresh Farms (Fort Wayne) — aquaponics; hydroponics
- Greenthumb Organics (Avilla)

Seed Farms:

- Lord's Seeds (Howe)

Farm Inputs:

- Helena Chemical (Huntington & Liberty Center) — produces fertilizer

Meat Processing:

- Mishler's (Shipshewana) — meat slaughter plant; original pork burger product; sells to grocery chains

Cheese:

- Guggisberg Deutsch Käse Haus (Middlebury) — award winning Colby Cheese
- Swissland Cheese (Berne)

Produce Auctions:

- Adams County Flower & Produce Auction (Monroe)
- Clear Springs Produce Auction (LaGrange)

Wholesalers/Brokers:

- Green B.E.A.N. Delivery (Indianapolis)
- Tiny Footprint (Indianapolis & Fort Wayne) — Logistics for local processed foods
- Lennard AG (Howe, Indiana & Samaria, Michigan) — Contract potato, corn, tomato buyer with warehousing space; sells to processors.
- Stanz (South Bend) — broadline distributor; delivers to Joseph Decuis

Specialty items:

- Wick's Pies (Winchester)
- DeBrand Chocolatier (Fort Wayne)

Other food Manufacturers & Processors:

- Ben's Pretzels (Shipshewana)
- Bunge North America (Decatur) — largest soybean processing operation in U.S.
- Dean Foods (Rochester) — ice cream
- Echo Lake Foods (Huntington) — frozen breakfast items, eggs
- Edy's (Fort Wayne) — ice cream
- Kraft (Kendallville) — snack foods
- Red Gold Tomatoes (Elwood)
- Rickle's Pickles (Fremont)
- Seckler's Pickles (St. Joseph) — locally owned

Distribution:

- Prime Transport (Elkhart)

Retail stores:

- All Things Food Coop (Auburn, Indiana & Bryan, Ohio)
- Amish Healthy Foods (Chicago) — retail store; sources from Shipshewana area
- Three Rivers Natural Food Co-op and Deli (Fort Wayne)

Restaurants that Purchase food from local farms:

- Affiné food truck (Fort Wayne)

- Cerulean Restaurant (Winona Lake)
- CS3: Calhoun Street Soups, Salads, Sports (Fort Wayne)
- Dash-in (Fort Wayne)
- J.K. O'Donnell's (Fort Wayne)
- Joseph Decuis Emporium (Roanoke)
- Joseph Decuis Restaurant (Roanoke)
- 800 Degrees Pizza (Fort Wayne)
- Light Rail Café (Winona Lake)
- One Ten Meatery (Warsaw)
- Three Fires Pizza (Fort Wayne)
- Three Rivers Natural Food Co-op and Deli (Fort Wayne)
- Trubble Brewing (Fort Wayne)
- Junk Ditch Brewing (Fort Wayne) — opening soon
- The Golden (Fort Wayne) — opening soon
- Tolon (Fort Wayne) — opening soon

Breweries:

- Chapman's Brewery (Angola)
- Mad Anthony's Brewpub (Fort Wayne & Warsaw)
- Summit City Brewwerks (Fort Wayne)
- Trubble Brewing (Fort Wayne)

Vineyards:

- 2 E's (Roanoke)
- Country Heritage Winery and Vineyard (Laotto)
- Grimaldi Winery (Angola)
- Satek Winery (Angola)

Lodging:

- Joseph Decuis Inn (Roanoke & Whitley County)
- Potawatomi Inn & Conference Center (Angola)

Hospitals supporting local food trade:

- Lutheran Hospital
- Parkview Hospital

Commercial Kitchens:

- Community Harvest Food Bank
- The Summit / Cookspring (Fort Wayne)

Community Harvest Food Bank

Several of our informants noted that the Community Harvest Food Bank was an important resource to the local foods network discussion, since they have solid experience in handling food safely, and also have close connections with low-income residents of Fort Wayne.

Indeed, the food bank gives food assistance to 90,000 (unduplicated) people each year, distributing these food items through a network of over 400 member organizations in nine counties (the food bank does not serve Kosciusko or Wabash Counties). These agencies include food pantries, soup kitchens, homeless shelters, rehabilitation centers, and youth and senior citizen programs.

Founded in 1983, Community Harvest now ships million pounds of food each year. It carries these food items directly to 52 locations with its fleet of nine trucks. One of the ways the food bank differentiates itself from others is that all of its drivers are food-safe certified to ensure proper handling.

Among the programs the food bank runs are Farm Wagon, a mobile market with fresh produce, and Community Cupboard, which is basically a grocery store for low-income



Community Harvest Food Bank's Produce Processing Center features state-of-the-art ovens

constituents. They offer backpacks filled with food for students to take home, and run senior nutrition programs.

Community Harvest works with several area farmers who “plant-a-row” for the hungry, which the food bank will collect. Yet they have discovered that this model is somewhat limiting because they are never sure in advance what will be arriving. Now they are moving toward a model where the production and deliveries are scheduled in advance.

The food bank also partnered with WalMart, one of their biggest food donors, to attract 600,000 pounds of food donations on a fall Saturday from local farms. WalMart donated the use of clean dumpsters, and each farmer that filled a dumpster became eligible for a tax break. All told the food bank counts 12 farms as regular donors.

The previous director of the food bank, Jane Avery, placed a high priority on opening a food processing facility as part of the food bank. When Azar’s Restaurant Commissary abandoned its processing center on Coliseum Drive and donated the building to Community Harvest, her staff raised \$5.5 million dollars to renovate the building and install state-of-the-art processing equipment. Unfortunately, Avery passed away last year, and management of the Produce Processing Center has been put somewhat on hold until a new executive director is hired.

The technical centerpiece of the processing center is sophisticated ovens that were in part purchased and in part donated by a local manufacturer. They would allow precise temperature settings and considerable automation of the cooking process. The center also has cold rooms for receiving and preparation, a walk-in freezer, three coolers, and several loading docks.

Health inspectors have approved the food bank to perform limited processing of fresh produce for local farms, which they are freezing to give away in the off season. Palettes of frozen corn and potatoes are stacked in the freezer and ready to go. Yet the food bank is currently limited to simple processing steps because the work is performed by volunteers.

Recently, the food bank added a board member who works for a transportation firm that handles logistics for food banks across Indiana, hoping this will help make their distribution routes more efficient.

With these facilities in place, Community Harvest has begun to make contact with several community partners to explore an expanded role which is yet to be defined. Parkview Hospital has expressed interest in sourcing more food from local farms through the food bank, and the Plowshares Initiative is suggesting the building serve as a food hub. Others, as noted above, consider this a good place for a co-packing facility.

The food bank has also spoken with The Summit’s Cookspring Kitchen, which is also developing a business plan to coordinate activities with the food bank.

Already the building is being used by community groups. Purdue Extension offers food-safe cooking classes for low-income clients, featuring foods that have recently been part of the donation stream. Ivy Tech offers classes in its culinary program there.

The next executive director will be addressing several challenges: Will Community Harvest adopt a mission of playing a strong role in forming local food networks? What will be the best use of the Produce Processing Center, and how will the operation sustain itself? What new community partnerships will be required?

Successes & Limitations

Key elements of success for emerging food networks

- Begin by commanding an important source of farm production.
- Produce at higher value than prevailing commodity farming.
- Offer a differentiated product with higher quality and desired attributes.
- Integrate vertically with command of a significant market share, at least in the region.
- Create community-based market channels.
- Connect directly with household customers who have disposable income, and chefs at more upscale restaurants.
- Contribute to the region building a stronger sense of place through local food options.
- Participate in regional networks.
- Support related entrepreneurial activity in the region.
- Networks show their efficacy when larger firms help smaller firms build greater presence.

Key limitations of emerging food networks

- Many leaders say greater coordination among food firms, business clusters, and local food networks is essential.
- Communities with a heritage of farm production, and infrastructure suited to farming food for local markets, tend to make the most progress.
- Many farmers have relied upon access to wealth earned in earlier days of farming, or in nonfarm industries, from community investors, or inherited wealth, to launch a new operation.
- Often these consumers are easier to locate in metro areas where income is higher.
- Lower-income residents of Northeast Indiana are not always included.
- Penetration into Fort Wayne markets is somewhat limited.
- Trading through local foods networks seems more suited to early adaptors and innovators and may not appeal to farmers who seek to farm within more predictable markets.
- The large scale of the prevailing food industry creates significant barriers to entry.
- Prevailing business infrastructure does not always favor local food trade; new efficiencies in local trade must be created.
- Regulation that is not scale appropriate, or that is intrusive, has posed an immense obstacle to many growers.

Some Tests for Gauging the “Locality” of Food

The list below is a preliminary list of potential measures for gauging the “locality” of food produced within the Northeast Indiana Local Food Network. As we saw above, even defining “local food” is a daunting task. All of the networks described in this report have created some local benefit, and many have been forced to look outside of the region for suppliers or customers given the limited nature of interest in local foods in the region. The cultural inclination to seek inexpensive dining options, rather than seeking the most nutritionally dense food available, also has limited local food networks.

Does the local food network in question:

1. Produce food in Northeast Indiana?
 - What is the value of the food products that were grown on farms in the network?
 - What is the value of the food products that were processed within the network?
2. Foster local consumption of that food?
 - How much locally grown and processed food did the network sell to Northeast Indiana households?
 - How much locally grown and processed food did the network sell to restaurants in the region?
 - How much locally grown and processed food did the network sell to institutional or corporate food services in the region?
 - How much of this food was handled by wholesalers or distributors inside the region?
 - How much of this food was shipped outside the region?
 - To what extent have local food markets expanded over time?
 - In what ways was regional food differentiated from commodity food products?
 - Do farmers alter what they produce based on what consumers request?
 - Were low-income residents able to access affordable local foods of high quality?
3. Build stronger community connections?
 - Does the food network help build a sense of quality of place?
 - Do farms in the network offer memberships or sell shares?
 - Do the farms or food businesses host community gatherings that bring residents together to learn more about food, farming, and eating?
 - How does the network help farmers and consumers meet each other?
 - Were living wage jobs available for workers at all stages of the food system?
4. Create tangible economic development returns for the region?
 - Did the network build market power for farmers?
 - Was production vertically integrated under the command of farmers?
 - Did farm families, farmworkers, and laborers build wealth over time?
 - What was the return on investment?
 - Did the Northeast Indiana region as a whole prosper from the actions of this local food network?

Diverse Visions are Held by Northeast Indiana leaders:

Here are the broader visions our respondents held:

Local Economy

“This project is about getting locally produced food to local consumers.”

“Our regional focus has been how to parlay our region’s expertise in process, manufacturing, & logistics into agriculture, especially in Steuben and Noble Counties.”

“Because of the large Amish population, entrepreneurship is actually very much alive and well in LaGrange County.”

“I would like to see the study unleash the entrepreneurial spirit in northeast Indiana through food.”

Revitalize downtown Fort Wayne.

“Forty percent of the workforce is automotive in nature. This is dangerous, to be so dependent on one industry. I’d like to see the skills that go with the automotive industry be utilized in the food industry.”

“Workforce development is key — we have a shortage of skilled workers – jobs are begging for people to fill them.”

“We should build wealth by building upon what is already in the region.”

“This project is (1) about importing wealth from outside the region; and (2) retaining wealth through the local marketplace.”

“What the Study means to me is: (1) connecting existing assets that are currently silos; (2) filling gaps in the network with different kinds of connectors including brick and mortar facilities; and (3) expanding market reach within the region and eventually outside of the region.

Quality of Place

“Now the workforce is shrinking and our focal point is to improve the quality of place. We need to attract millennials, who enjoy eating healthy, high quality food, and have money to spend.”

Downtown Development for Fort Wayne: our sources saw Des Moines, Grand Rapids, Denver, and Omaha as examples of what could be done to use food as a revitalization strategy and tourist draw.

“In Steuben County, the population swells from 35,000 to 100,000 in the summer months due to the lakes; these present a ready market for local farms.”

Advance the Agricultural Industry

“We should turn from corn and soybeans to human consumables.”

“We should develop Pharmaceuticals.”

Specific Opportunities Suggested by our Respondents:

The feasibility of any of these strategies could be assessed in Phase II depending on the priorities and interests determined by the Northeast Indiana Regional Partnership.

Connecting Local Food Networks

“We have a lot of individual efforts, but there hasn’t been a lot of connectivity. It is not intentional. No one has time to call each other. We really need someone locally who can introduce the concept to people and connect the players.”

“We also need (1) a catalog of local producers and then (2) to disseminate this information.”

“Key issues are: (1) scalability by small producers; and (2) resources that give producers a reasonable return.”

“About three of the restaurants in Fort Wayne source locally; they don’t communicate with each other.”

Food Processing

The Community Harvest Food Bank has made a \$5.5 million investment in opening and operating a produce processing center; there are several parties interested in running a community kitchen space. These discussions should be integrated into a single process, and the feasibility of opening a commercial kitchen for community use should be explored.

The Community Harvest Food Bank has also been mentioned as a potential site for a co-packer for local food processing; the financial feasibility of this could be explored — at this site or another.

Community Harvest Food Bank is exploring the financial feasibility of installing a IQF freezing unit at their processing center, or elsewhere.

Trellis Growing Systems has held initial conversations with Community Harvest regarding flash freezing or IQF processing of berry seconds.

Jodi Ellet of Purdue is doing a study of the uses and demands for a community kitchen across several Midwestern states.

Infrastructure investments

Seven Sons farm suggests that infrastructure could be developed for farmers in the region who are interested in learning how to create nested livestock production suitable for their individual farms; the brothers suggest this might become a regional specialization that would help to brand Northeast Indiana.

Indiana is working on intermodal transport – possibly in Fort Wayne – to be an alternative route to Chicago. It would run along State Road 6 from Ohio to South Bend. It would be integrated with airports and waterways.

New agribusiness opportunities

WOLF seeks to build a pelleting facility for organic feed grains.

DeKalb County is exploring new initiatives that would combine the region’s industrial expertise with its agricultural base. This might include a “breaker” firm that would raise & process eggs, and would suggest boosting local grain production to feed the laying hens. Cattle and pork initiatives have also been considered. All are in early stages of discussion.

The Eastern third of DeKalb County is the least developed part of the county. We have 6 electricity providers. They have put forward the notion of a “certified agricultural park.” This might be located in Butler. The idea would be all new buildings, all FDA approved from the start, so that each firm could produce with great safety. It would be a cluster of firms.

Expanding Food Production in inner-city Fort Wayne

Trellis Growing Systems has also expressed interest in working with inner-city neighborhoods in Fort Wayne to produce berries using its trellis technology.

There are a slew of empty buildings on the east side of town, on Highway 930, former big box stores and strip malls. These are potential places for growing food. One of the grocery chains might be willing to finance.

Parkview Hospital has land in Southeast Fort Wayne, a low-income area, where they have invited Burmese [possibly Karen?] residents to garden. They have built, or are exploring building a greenhouse in the area. There is also an Extension initiative to promote community gardening.

Farmland is available inside Fort Wayne, and is zoned for agriculture, but often if a development presents itself the zoning is simply changed. There has not yet been any conversation about protecting open land for agriculture, or setting different priorities for use of larger tracts. Moreover, many of the open sites are former factories, where the soil is not conducive to raising food.

The City is beginning to hold a preference for farming on vacant tracts of land in residential areas – if a developer wants it but there is someone who wants to grow food, there is supposed to be a preference for food production.

The City just got one farm started, at the site of an old Firehouse #9 in Southeast Fort Wayne. The Firehouse itself may be converted into a restaurant. There is a commercial kitchen there that Growing Minds may use for processing.

Develop agricultural training programs

Huntington University's new Hauptert Institute for Agriculture will be offering agriculture degrees.

Ivy Tech is expanding its agriculture offerings.

Extension is starting to work with beginning farmers and new farmers. They are assisting them to go from gardening to commercial scale. The key obstacle is access to land. Next to that would be the knowledge of how to farm, especially food safety.

Regional Branding

Branding for the region that would be “tenacious, resilient and tested.”

Farm-to-cafeteria

Manchester School (a public school) buys locally when possible.

“We should find a couple of farmers who have specific items they could sell at wholesale quantities to restaurants and to Parkview Regional food distribution.”

“We can also envision having a statewide food ordering system based on the same software that Hoosier Harvest Market is using.”

Legislation

If local food networks are to flourish, new legislation may be required to ensure farmer's rights to sell directly to consumers, to invest in infrastructure that supports local food networks, and to ensure scale-appropriate food safety regulation.

Food policy council

Vickie Hadley of Purdue Extension is coordinating an effort that has launched a food policy council for Fort Wayne and the surrounding counties.

Recommendations for Phase II

The greatest need identified to date by our informants is the need to ensure better coordination of local food networks. As noted above, several of our respondents noted that there is a wealth of food activity, and several food processing clusters, but little collaboration among the firms.

The Northeast Indiana region has been well studied in recent years. Further data compilation will do little by itself to advance the work of strengthening local food networks, although updating data sets and tracking changing conditions will be important as plans are implemented.

Further analysis of emergent local foods networks and analysis of key characteristics that promote local food trade in the region could be useful. What we know so far is that the foundation for the successful local food networks outlined in this report was their ability to command high quality food production and to market it on their own terms, usually directly to both household and commercial consumers. Often a technological advantage or special production process helped to create solid differentiation for their products. Farmers integrated vertically to reduce costs and gain more command over the value network. Their ability to market their products on their own terms helped ensure them build market power, and helped build loyalty among consumers. The amount of commitment the region's consumers have to purchasing from the region's producers is the limiting factor for intra-regional food trade.

As the region engages low-income residents of Fort Wayne in local food networks, it will be important to keep in mind that food production for dedicated consumers stands at the core of local food networks. Planning for a food hub in Fort Wayne should also refer to the experience gained by Hoosier Harvest Market: food hub planning may be premature unless (a) significant food production is launched in and near the city's urban neighborhoods, with sales sufficient to cover the costs of running an aggregation service; or (b) some funder is identified that is willing to underwrite 10-20 years of aggregation activity until sufficient food is produced in and near the city to cover operating costs. HHM itself is moving toward a direct delivery model rather than an institutional aggregation model.

Main Tasks for Phase II:

1. Bring Northeast Indiana food stakeholders together in three groups: (1) farmers; (2) food buyers; and (3) related stakeholders. Outline the key findings of this study and invite each group to vote on their favorite implementation suggestions; develop a short list of priority projects.
2. The Northeast Indiana Regional Partnership will consider these recommendations and then select a short list of strategic action steps.
3. The Manheim Solutions team will collaborate with the Partnership to determine the economic feasibility of selected priority strategies, and write a business plan for implementing the most favored strategy or strategies.



Joseph Decuis Restaurant in Roanoke

People Interviewed for this Phase I Report

By Ken Meter, Sylvia Lovely, or Chris Manheim

Richard	Barnes	Trellis Growing Systems
Pete	Eshelman	Joseph Decuis Farm & Restaurant
Scott	Glaze	Get Fresh Farms
Greg	Gunthorp	Gunthorp Farms
Jeff	Hawkins	Hawkins Family Farm
Blaine	Hitzfield	Seven Sons Farm
David	Grant	Strauss Veal Feed
Stephanie	Seyring	Stanz Food Service
Todd	Stearns	Stanz Food Service
Matt	Steinau	Gordon Food Services Store
Spencer	Mize	The Summit Fort Wayne
Dan	Mosgaller	Organic Valley
Bryan	Wood	Organic Valley
Carmen	Griffith	Community Harvest Food Bank
Mary	Carpenter	Community Harvest Food Bank
Bill	Hoover	Community Harvest Food Bank
Lamar	Bontrager	Wolcottville Organic Livestock Food Co-op
Jain	Young	Plowshares Local Food System Project
Steve	Engleking	Purdue Extension LaGrange County
Vickie	Hadley	Purdue Extension Allen County
James	Wolff	Purdue Extension Allen County
Bob	White	Indiana Farm Bureau
Deb	Trocha	Indiana Cooperative Development Center
Vince	Buchanan	Regional Chamber of Northeast Indiana
Ellen	Cutter	IPFW Community Research Institute
Tim	Ehlerding	Wells County Economic Development
Ted	Ellis	Mayor of Bluffton
Keith	Gillenwater	Economic Development Group of Wabash County
Jaclyn	Goldsborough	Northeast Indiana Regional Partnership
David	Koenig	Steuben County Economic Development Corp.
Ryne	Krock	LaGrange County Economic Development Corp.
Ken	McCrary	DeKalb County Economic Development Partnership
Larry	Macklin	Adams County Economic Development Corp.
Kirk	Moriarty	Greater Fort Wayne Inc.
Jon	Myers	Whitley County Economic Development Corp.
Terry	Rayle	DeKalb Chamber Partnership
George	Robertson	Kosciusko Economic Development Corp.
John	Sampson	Northeast Indiana Regional Partnership
Kelley	Sheiss	Whitley County Economic Development Corp.
Rick	Sherck	Noble County Economic Development Corp.
John	Urbahns	Greater Fort Wayne Inc.
Mark	Wickersham	Huntington County Economic Development

Appendix A: Farm & Food Economy Data

Northeast Indiana Farm & Food Economy

by Ken Meter, Crossroads Resource Center (Minneapolis)⁵
for
**Northeast Indiana Regional Partnership
and Manheim Associates**
December 20, 2015

*Covers Adams, Allen, DeKalb, Huntington, Kosciusko, LaGrange,
Noble, Steuben, Wabash, Wells, & Whitley Counties in Indiana*

Northeast Indiana (Bureau of Economic Analysis, 2014)

772,241 Northeast Indiana residents receive \$29 billion of income annually. Personal income increased 114% from 1969 to 2014, after dollars were adjusted for inflation. The largest source of personal income is manufacturing jobs with \$6.5 billion. Transfer payments (from government programs such as pensions) rank second, at \$5.7 billion. Ranking third was capital income (from interest, rent or dividends), with \$4.6 billion. Health care workers earn \$2.5 billion, and government workers earn \$1.9 billion. Finance and insurance workers earn \$991 million. Note that income from public sources (transfer payments and government jobs) makes up 28% of personal income.

Income earned from transfer payments includes \$2.3 billion of retirement and disability insurance benefits; \$2.3 billion of medical benefits; \$538 million of income maintenance benefits; \$46 million of unemployment insurance; and \$142 million of veterans' benefits.

Government income includes \$242 million of income earned by federal workers, \$230 million earned by state employees, and \$1.4 billion earned by local government workers. Military personnel earn \$76 million of personal income.

Although population has increased more than 36% since 1969, there has been only limited public planning to assure a secure and stable food supply.

Issues affecting low-income residents of Northeast Indiana:

More than 236,000 residents (32%) earn less than 185% of federal poverty guidelines. At this level of income, children qualify for free or reduced-price lunch at school. These lower-income residents spend an estimated \$500 million each year buying food, including \$56 million (26-year average, 1989-2014) of SNAP benefits (formerly known as food stamps) and additional WIC coupons. Half of the region's farmers (6,010 of 12,302) receive an annual combined total of \$75 million in subsidies (26-year average, 1989-2014), mostly to raise crops such as corn or soybeans that are sold as commodities, not to feed local residents. *Data from Federal Census of 2009-2013, Bureau of Labor Statistics, & Bureau of Economic Analysis.*

⁵ Considerable research assistance provided by Josh Miner in compiling public data sets.

6% percent of the region's households (nearly 47,000 residents) earn less than \$10,000 per year. *Source: Federal Census of 2009-2013.*

21% of all adults aged 18-64 in Indiana carried no health care coverage in 2013. *Source: Centers for Disease Control.*

Food-related health conditions:

44% of the state's residents reported in 2013 that they eat less than one serving of fruit per day. 27% eat less than one serving of vegetables. This is a key indicator of health, since proper fruit and vegetable consumption has been connected to better health outcomes. Many experts recommend consumption of at least five servings of fruit and vegetables each day, while others make even higher recommendations. *Source: Centers for Disease Control.*

16% of Indiana adults report they get sufficient exercise each week to meet recommended guidelines. *Source: Centers for Disease Control.*

11% of Indiana residents have been diagnosed with diabetes as of 2013. *Source: Centers for Disease Control.* Medical costs for treating diabetes and related conditions in the state are estimated at \$5 billion. *Source: American Diabetes Association.*

65% of Indiana residents were overweight (34%) or obese (31%) in 2013. *Source: Centers for Disease Control.*

The region's farms (Census of Agriculture, 2012)

Census of Agriculture data for 2012 were released May 2, 2014

The Census of Agriculture defines a "farm" as "an operation that produces, or would normally produce and sell, \$1,000 or more of agricultural products per year."

Land:

- 12,302 farms (a 4% increase over 2007).
- Northeast Indiana had 21% of the state's farms (2012).
- 503 (4%) of these were 1,000 acres or more.
- 6,586 (54%) farms were less than 50 acres.
- The most prevalent farm size was 10-49 acres, with a total of 5,028 farms (41% of farms).
- Average farm size was 172 acres, 32% lower than Indiana's average of 251 acres
- Northeast Indiana had 2,113,798 acres of land in farms (14% of the State's farmland), an increase of 5.3% since 2007. This increase in farmland may be correlated with expanded efforts to count small farms and farms owned by minorities.
- 86% of farmland was cropland (94% of which was harvested).
- 10,242 farms harvested 1,820,855 acres of cropland.
- 495 (4%) farms had a total of 65,699 acres (3%) of irrigated land.

- Average value of land and buildings per farm was \$976,000 (27% below the State average of \$1.3 million).

Sales:

With the exception of foods sold directly to consumers (see below), farmers typically sell commodities to wholesalers, brokers or manufacturers that require further processing or handling to become consumer items. The word “commodities” is used in this report to mean the crops and livestock sold by farmers through these wholesale channels. The term “products” encompasses commodity sales, direct sales, and any other sales.

- Farmers sold \$2.0 billion of crops and livestock in 2012. This was 18% of Indiana’s agricultural sales.
- This was a 55% increase in sales over the 2007 level of \$1.3 billion. This rise was primarily due to temporarily high prices for corn and soybeans. These high rates have since subsided to normal levels.
- \$1.1 billion of crops were sold in 2012 (55% of sales) by 7,132 farms, \$446 million (67%) more in sales than five years earlier.
- \$895 million of livestock and products were sold (45% of total sales) by 5,072 farms. This was \$264 million (42%) more in sales than in 2007.
- In 2012, 6,222 (51%) of Northeast Indiana’s farms sold less than \$10,000 of products. Their aggregate sales of \$12 million amounted to 0.6% of the region’s farm product sales.
- In 2012, 2,814 farms (23%) sold more than \$100,000 of products, an aggregate total of \$1.9 billion, 93% of the region’s farm product sales.
- 6,010 farms (49%) in Northeast Indiana received \$42 million of federal subsidies in 2012. This was 16% of the payments received in Indiana.
- 45% (5,557) of Northeast Indiana’s farms reported net losses in 2012 even after subsidies are taken into account, about the same as the state average.

Top farm products of the Northeast Indiana Region (2012)

*Note: * denotes sales data has been suppressed for certain counties so totals are incomplete*

Product	\$ millions
Corn	555
Soybeans	487
Poultry & eggs	*278
Hogs & pigs	*220
Cattle & calves	*194
Milk from cows	*146
Wheat	28
Other crops & hay	*13

Production Expenses

- Total farm production expenses were \$1.5 billion in 2012, an increase of \$490 million (47%) over 2007.
- The largest farm production expenses were:
 1. Feed costs (\$377 million; 25% of the region's total);
 2. Fertilizers, lime, and soil conditioners (\$187 million; 12%);
 3. Cash rent for land, buildings, and grazing fees (\$141 million; 9%);
 4. Depreciation (\$139 million; 9%);
 5. Seeds, plants, vines, & trees purchased (\$133 million; 9%);
 6. Livestock and poultry purchased or leased (\$123 million; 8.%)

Grains, Dry Edible Beans, Oil Crops, and others:

- 5,979 farms sold \$1.1 billion of grains, oil crops and edible beans, \$493 million (84%) more than the \$585 million sold in 2007. *Note that aggregate sales figures for Whitley County in 2007 were withheld by USDA in an effort to protect confidentiality, so the increase in sales was not as large as recorded.*
- In 2012, 4,803 farms sold \$556 million (81 million bushels) of corn raised on 751,210 acres; this was an average price of \$6.88 per bushel.
- In 2007, 4,442 Northeast Indiana farms sold \$347 million (107 million bushels) of corn raised on 742,940 acres; this was an average sale price of \$3.24 per bushel. *Note that aggregate sales figures for Whitley County in 2007 were withheld by USDA in an effort to protect confidentiality.*
- In 2012, 4,147 farms sold \$487 million (37 million bushels) of soybeans raised on 762,171 acres; this was an average sale price of \$13.31 per bushel.
- In 2007, 4,045 farms sold \$259 million worth of soybeans. This was a small increase in the number of farmers raising soybeans (2.5%), and a much larger increase of 88% in total crop value from 2007 to 2012.
- In 2012, 1,159 of the region's farmers sold 4.1 million bushels of winter wheat raised on 60,079 acres. This crop had a total value of \$28 million.

Cattle & Dairy:

- In 2012, 3,668 farms held an inventory of 219,789 cattle and calves.
- Cattle and calves worth \$194 million were sold from 2,955 farms in 2012. This was a 17% increase in the number of farms, and a 58% increase in sales, over 2007 levels.
- 813 farms reported selling a total of \$146 million in milk or dairy products (2007 figures were not available for comparison).
- 4,592 farms produced 258,492 dry tons of forage crops (hay, etc.) on 96,055 acres of cropland. Of these, 1,712 farms sold \$13 million of forage.
- In addition, 971 farms produced 469,150 tons of corn silage on 37,171 acres.

Other livestock & animal products:

- In 2012, 693 Northwest Indiana farms held an inventory of 675,687 hogs and pigs.
- 680 farms sold 1,735,542 hogs and pigs for a total of \$220 million. This was a 24% decrease in the number of farms selling, and a 30% increase in the value of hog and pig sales, from 2007 levels.
- In 2012, 1,246 farms (20% more than in 2007) sold a total of at least \$278 million (58% increase over 2007 sales) in poultry and eggs. *Note that sales totals for Steuben County [2012] and Whitley County [2007] were withheld by USDA in an effort to protect confidentiality.*
- 1,589 farms raised an inventory of at least 1.9 million laying hens in 2012. *Note that sales totals for Kosciusko, Noble, Wabash, and Whitley Counties were withheld by USDA in an effort to protect confidentiality.*
- Northwest Indiana has 264 broiler chicken producers, who together sold at least 12 million birds. *Note that sales data for Allen, Kosciusko, and Steuben Counties were withheld by USDA in an effort to protect confidentiality.*
- 566 farms sold \$2 million worth of sheep, goat, wool, mohair, and milk products in 2012.

Nursery, Landscape and Ornamental Crops:

- 181 farms sold least \$7.4 million of ornamental and nursery crops in 2012. *Note that sales data for DeKalb, Huntington, Noble, and Whitley Counties were withheld by USDA in an effort to protect confidentiality.* This was a 22% increase in the number of farmers, but a 22% decrease in the value sold from 2007 levels. *Note that sales data for Whitley County were withheld by USDA in an effort to protect confidentiality.*

Vegetables & Melons (some farmers state that Ag Census data do not fully measure vegetable production):

- In 2012, vegetable and potato sales figures for Northwest Indiana were \$6.3 million (238 farms working at least 2,087 acres). *Note that vegetable acreage for farms in Kosciusko and Steuben Counties were withheld by USDA in an effort to protect confidentiality.*
- This was an increase in sales of almost 9% over 2007 levels, with roughly the same number of growers (234).

Fruits (some farmers state that Ag Census data do not fully measure fruit production):

- The region had 127 farms with 426 acres in orchards (fruits, tree nuts & berries) in 2012, with \$834,000 in sales. *Note that sales figures for Adams, Allen, DeKalb, Huntington, and Whitley Counties were withheld by USDA in an effort to protect confidentiality.*

Direct & organic sales:

- 741 Northwest Indiana farms sold \$3.8 million of food directly to consumers in 2012. This was a 13% increase in sales, and a 5.6% increase in the number of farms selling direct over 2007 levels.

- Direct sales accounted for 0.2% of the region’s total farm product sales, the same as the State’s percentage (0.2%), and below the national average of 0.3%.
- 20% of the State’s farms selling directly to consumers are located in Northwest Indiana counties; they accounted for roughly 15% of the State’s value of direct sales in both 2007 and 2012.
- 51 Northwest Indiana farms reported marketing their products through Community Supported Agriculture (CSA) programs in 2012. This was 22% of the State’s total. 17 of these farms were located in LaGrange County.
- In 2012, Northwest Indiana had 172 farms that were USDA National Organic Program (NOP) certified organic. This was 52% of Indiana’s NOP certified organic farms. 142 of these certified farms were located in LaGrange County. Another nine farms in the Region were considered exempt from NOP certification.
- Sales of organic products in the region totaled at least \$11 million, but this total is incomplete because *data for Adams, Kosciusko, Wabash & Wells Counties were suppressed by USDA in an effort to protect confidentiality.*
- Outside of LaGrange County, a modest number of Allen and Noble County farmers participate in the USDA NOP. See County Highlights below for further detail

Conservation practices:

- In 2012, 1,344 Northwest Indiana farms used rotational management or intensive grazing (23% of the State total). 701 of these farms were located in LaGrange County.
- 64 farms (26% of the State total) harvested biomass for use in renewable energy. 14, 12, and 13 of these farms were located in Adams, Allen, and LaGrange Counties, respectively.

Operation and operator characteristics:

**Signifies that data were withheld to protect confidentiality.*

	farms	acres
Family or individual	10,694	1,381,167
Partnership	697	295,234
Family-held corporation	620	375,797
Other corporation	41	*4,728
Other - cooperative, estate or trust, institutional, etc.	250	*16,680

County Highlights

Adams County highlights (Census of Agriculture, 2012):

- Adams County had 1,476 farms with 210,227 acres of land. This is 12% more farms, and 15% more land, than in 2007).
- County farmers sold \$250 million of products in 2012.
- \$120 million (48%) of these sales were crops.
- \$130 million (52%) of these sales were livestock.
- The most prevalent farm size was 10 to 49 acres, with 661 farms (45% of the total); the next most prevalent was 50 to 179 acres (336 farms; 23% of the total).
- 914 farms (62%) were less than 50 acres.
- 42 farms (2.8%) were 1,000 acres or more.
- 652 farms (44%) sold less than \$10,000 in farm products.
- 371 farms (25%) sold more than \$100,000 in farm products.
- 70 farms sold \$281,000 of products directly to household consumers. This was a 3% decrease in the number of farms and a 3% decline in sales since 2007.
- Direct sales were 0.1% of farm product sales, half the Indiana rate of 0.2%.
- Adams County rankings among Indiana counties in 2012:
 - 2nd in Indiana (and 3rd in the U.S.) for inventory of ducks;
 - 5th for value of sales of cattle and calves;
 - 5th for value of sales of milk from cows;
 - 5th for total acres of wheat;
 - 7th for value of sales of livestock, poultry, and their products;
 - 7th for value of sales of horses, ponies, mules, burros, and donkeys;
 - 8th for total value of agricultural products sold;
 - 9th for value of sales of poultry and eggs;
 - 9th for value of sales of hogs and pigs;
 - 9th for inventory of layers;
 - 9th for inventory of pullets for laying flock replacement.

Allen County highlights (Census of Agriculture, 2012):

- Allen County had 1,725 farms with 270,808 acres. This is 5% more farms, and 7% more land, than in 2007).
- Farmers sold \$188 million of products in 2012.
- \$149 million (79%) of these sales were crops.
- \$38 million (21%) of these sales were livestock.
- The most prevalent farm size was 10 to 49 acres, with 778 farms (45% of the total); the next most prevalent was 50 to 179 acres (427 farms; 25% of the total).

- 995 farms (58%) were less than 50 acres.
- 62 farms (4%) were 1,000 acres or more.
- 883 farms (51%) sold less than \$10,000 in farm products.
- 356 farms (21%) sold more than \$100,000 in farm products.
- 100 farms sold \$632,000 of products directly to household consumers. This was a 15% increase in the number of farms, and a 22% increase in sales, since 2007.
- Direct sales were 0.3% of farm product sales, more than the Indiana rate of 0.2%.
- 7 Allen County farms were certified organic.
- Allen County rankings among Indiana counties in 2012:
 - 2nd in Indiana for value of sales of horses;
 - 3rd for acres of soybeans;
 - 4th for value of sales of cut Christmas trees and short-rotation woody crops;
 - 4th for total acres of wheat for grain (all);
 - 4th for total acres of winter wheat for grain;
 - 4th for inventory of horses and ponies;
 - 7th for total value of cattle and calves sold;
 - 8th for total value of crops (including nursery and greenhouse);
 - 8th for value of grains, oilseeds, dry beans, and dry peas;
 - 8th for value of other crops and hay;
 - 9th for value of sales of nursery, greenhouse, floriculture, and sod;
 - 9th for value of sales of other animals and other animal products;
 - 10th for acres of forage-land used for hay and haylage, grass silage, and greenchop;
 - 10th for inventory of broiler chickens.

DeKalb County highlights (Census of Agriculture, 2012):

- DeKalb County had 924 farms with 160,894 acres. This 19% fewer farms, and essentially the same acreage as in 2007).
- Farmers sold \$107 million of products in 2012
- \$70 million (65%) of these sales were crops.
- \$37 million (35%) of these sales were livestock.
- The most prevalent farm size was 10 to 49 acres, with 375 farms (41% of the total); the next most prevalent was 50 to 179 acres (291 farms; 32% of the total).
- 461 farms (50%) were less than 50 acres.
- 43 farms (5%) were 1,000 acres or more.
- 593 farms (64%) sold less than \$10,000 in farm products.
- 153 farms (17%) sold more than \$100,000 in farm products.

- 46 farms sold \$122,000 of products directly to household consumers. This was a 2% decrease in the number of farms, and an 80% decrease in sales since 2007.
- Direct sales were 0.1% of farm product sales, half the Indiana rate of 0.2%.
- DeKalb County rankings among Indiana counties in 2012:
 - 3rd in Indiana for value of sales of cattle and calves;
 - 6th for total acres of wheat for grain.

Huntington County highlights (Census of Agriculture, 2012):

- Huntington County had 695 farms with 188,848 acres. This was 9% fewer farms and 5% fewer acres than in 2007).
- Farmers sold \$175 million of products in 2012
- \$115 million (64%) of these sales were crops.
- \$60 million (34%) of these sales were livestock.
- The most prevalent farm size was 10 to 49 acres, with 241 farms (35% of the total); the next most prevalent was 50 to 179 acres (174 farms; 25% of the total).
- 330 farms (48%) were less than 50 acres
- 59 farms (8%) were 1,000 acres or more.
- 344 farms (50%) sold less than \$10,000 in farm products.
- 196 farms (28%) sold more than \$100,000 in farm products.
- 34 farms sold \$117,000 of products directly to household consumers. This was a 3% decrease in the number of farms selling direct, and a 43% decrease in sales from 2007 levels.
- Direct sales were 0.07% of farm product sales, less than half of the Indiana rate of 0.2%.
- Huntington County rankings among Indiana counties in 2012:
 - 1st in Indiana in 2012 for inventory of roosters;
 - 1st for colonies of bees;
 - 3rd for value of sales of other animals and other animal products.

Kosciusko County highlights (Census of Agriculture, 2012):

- Kosciusko County had 1,247 farms with 254,847 acres, This was 1% more farms and 1% more acres than in 2007).
- Farmers sold \$282 million of products in 2012
- \$132 million (47%) of these sales were crops
- \$150 million (53%) of these sales were livestock.
- The most prevalent farm size was 10 to 49 acres, with 477 farms (38% of the total); the next most prevalent was 50 to 179 acres (325 farms; 26% of the total).

- 676 farms (54%) were less than 50 acres.
- 55 farms (4%) were 1,000 acres or more.
- 718 farms (58%) sold less than \$10,000 in farm products.
- 259 farms (20%) sold more than \$100,000 in farm products.
- 80 farms sold \$384,000 of products directly to household consumers, This was an 18% decrease in the number of farms selling direct, and a 7% increase in sales, over 2007 levels.
- Direct sales were 0.1% of farm product sales, half of the Indiana rate of 0.2%.
- Kosciusko County rankings among Indiana counties in 2012:
 - 2nd in Indiana for value of sales of other crops and hay;
 - 2nd for inventory of pullets for laying flock replacement (13th in U.S.);
 - 3rd for value of sales of poultry and eggs;
 - 4th for total value of agricultural products sold;
 - 4th for inventory of ducks (8th in U.S.)
 - 4th for value of sales of other animals and other animal products;
 - 5th for value of livestock, poultry, and their products sold;
 - 5th for inventory of layers (*U.S. ranking withheld to protect confidentiality*);
 - 6th for acres of corn for silage;
 - 8th for value of sales of cattle and calves;
 - 9th for value of sales of horses, ponies, mules, burros, and donkeys;
 - 9th for inventory of broilers and other meat-type chickens (*U.S. ranking withheld to protect confidentiality*);
 - 10th for value of sales of milk from cows.

LaGrange County highlights (Census of Agriculture, 2012):

- LaGrange County has 2,419 farms with 204,092 acres. This is 60% more farms, and 26% more acres, than in 2007).
- Farmers sold \$263 million of products sold in 2012.
- \$68 million (25%) of these sales were crops.
- \$194 million (74%) of these sales were livestock.
- The most prevalent farm size was 10 to 49 acres, with 1,071 farms (44% of the total); the next most prevalent was 50 to 179 acres (887 farms; 37% of the total).
- 1,421 farms (59%) were less than 50 acres.
- 29 farms (1%) were 1,000 acres or more.
- 1,084 farms (45%) sold less than \$10,000 in farm products.
- 558 farms (23.%) sold more than \$100,000 in farm products.

- 191 farms sold \$1.1 million of products directly to household consumers. This was a 47% increase in the number of farms, and a 172% increase in sales over 2007 levels. Direct sales were 0.4% of farm product sales, twice the Indiana rate of 0.2%.
- 17 LaGrange County farms reported marketing products through CSA programs in 2012. This was 7% of the State total as shown by the Census of Agriculture.
- LaGrange County listed 142 farms participating in the USDA NOP. This was 83% of the organic farms in the region, and 52% of the organic farms in the State.
- 64 more farms were listed as transitioning into the USDA NOP.
- 123 of the LaGrange County NOP farms sold \$10 million in organic products. This was as much as 91% of the Region's organic sales (*although sales data for Adams, Kosciusko, Wabash, & Wells Counties were suppressed by USDA to protect confidentiality, so this reported percentage could be artificially high*). It also amounted to 28% of the State's organic sales.
- 701 LaGrange County farms used rotational management or intensive grazing (12% of the State total).
- LaGrange County rankings among Indiana counties in 2012:
 - 1st in Indiana for number of farms;
 - 1st for value of sales of cattle and calves;
 - 1st for value of sales of horses, ponies, mules, burros, and donkeys;
 - 1st for acres of forage-land used for hay and haylage, grass silage, and greenchop;
 - 1st for inventory of cattle and calves;
 - 2nd for value of sales of livestock, poultry, and their products;
 - 2nd for value of sales of other animals and other animal products (*U.S. ranking withheld to protect confidentiality*);
 - 2nd for acres of corn for silage;
 - 2nd for inventory of broilers and other meat-type chickens;
 - 3rd for inventory of ducks (4th in the U.S.);
 - 4th for value of sales of milk from cows;
 - 4th for value of sales of sheep, goats, wool, mohair, and milk;
 - 5th for value of sales of vegetables, melons, potatoes, and sweet potatoes;
 - 6th for total value of agricultural products sold;
 - 7th for value of sales of poultry and eggs;
 - 8th for value of sales of aquaculture (*U.S. ranking withheld to protect confidentiality*);

Noble County highlights (Census of Agriculture, 2012):

- Noble County had 1,163 farms with 181,491 acres. This was 3% fewer farms, and 14% more acres, than in 2007).
- Farmers sold \$144 million of products in 2012.
- \$82.5 million (57%) of these sales were crops.
- \$61 million (43%) of these sales were livestock.
- The most prevalent farm size was 10 to 49 acres, with 509 farms (44% of the total); the next most prevalent was 50 to 179 acres (343 farms; 30% of the total).
- 614 farms (53%) were less than 50 acres.
- 38 farms (3%) were 1,000 acres or more.
- 648 farms (56%) sold less than \$10,000 in farm products.
- 214 farms (18%) sold more than \$100,000 in farm products.
- 71 farms sold \$414,000 of products directly to household consumers. This was a 22% increase in the number of farms and an 85% increase in sales over 2007 levels. Direct sales were 0.3% of farm product sales, more than the Indiana rate of 0.2%.
- Noble County rankings among Indiana counties in 2012:
 - 4th in Indiana for inventory of broilers and other meat-type chickens;
 - 5th for value of sales of cut Christmas trees and short-rotation woody crops;
 - 5th for inventory of ducks (12th in U.S.);
 - 7th for value of sales of other animals and other animal products;
 - 7th for acres of corn for silage;
 - 8th for value of sales of fruits, tree nuts, and berries;
 - 8th for acres of forage-land used for hay and haylage, grass silage, and greenchop;
 - 10th for value of sales of sheep, goats, wool, mohair, and milk;

Steuben County highlights (Census of Agriculture, 2012):

- Steuben County had 562 farms with 104,572 acres. This was 22% fewer farms, and 2% fewer acres, than in 2007.
- Farmers sold \$62 million of products in 2012.
- \$41 million (66%) of these sales were crops.
- \$21 million (34%) of these sales were livestock.
- The most prevalent farm size was 50 to 179 acres, with 238 farms (42% of the total); the next most prevalent was 10 to 49 acres (183 farms; 33% of the total).
- 219 farms (39%) were less than 50 acres.
- 21 farms (4%) were 1,000 acres or more.
- 356 farms (63%) sold less than \$10,000 in farm products.
- 82 farms (15%) sold more than \$100,000 in farm products.

- 22 farms sold \$170,000 of products directly to household consumers. This was a 42% decrease in the number of farms, and a 57% *increase* in sales, over 2007 levels
- Direct sales were 0.3% of farm product sales, more than the Indiana rate of 0.2%.
- Steuben County rankings among Indiana counties in 2012:
 - 7th in Indiana for value of sales from aquaculture;
 - 9th for value of sales from cut Christmas trees and short-rotation woody crops.

Wabash County highlights (Census of Agriculture, 2012):

- Wabash County had 745 farms with 197,588 acres. This was 12% fewer farms and 2% fewer acres than in 2007.
- Farmers sold \$227 million of products in 2012.
- \$117 million (51%) of these sales were crops, and \$111 million (49%) of these sales were livestock.
- The most prevalent farm size was 10 to 49 acres, with 264 farms (35% of the total); the next most prevalent was 50 to 179 acres (197 farms; 26% of the total).
- 334 farms (45%) were less than 50 acres.
- 57 farms (8%) were 1,000 acres or more.
- 354 farms (48%) sold less than \$10,000 in farm products.
- 223 farms (30%) sold more than \$100,000 in farm products.
- 46 farms sold \$314,000 of products directly to household consumers. This is a 31% decrease in the number of farms, and a 32% decrease in sales from 2007 levels.
- Direct sales were 0.1% of farm product sales, half of the Indiana rate of 0.2%.
- Wabash County rankings among Indiana counties in 2012:
 - 1st in Indiana for inventory of layers (*U.S. ranking withheld to protect confidentiality*);
 - 2nd for colonies of bees (*U.S. ranking withheld to protect confidentiality*);
 - 3rd for value of sales of sheep, goats, wool, mohair, and milk;
 - 4th for inventory of pullets for laying flock replacement;
 - 6th for value of sales of cattle and calves;
 - 6th for value of sales of hogs and pigs;
 - 8th for inventory of hogs and pigs;
 - 10th for value of sales of livestock, poultry, and their products;
 - 11th for total value of agricultural products sold.

Wells County highlights (Census of Agriculture, 2012):

- Wells County had 636 farms with 200,334 acres. This is 9% fewer farms and 3% more acres than in 2007.
- Farmers sold \$210 million of products in 2012.

- \$141 million (67%) of these sales were crops.
- \$69.2 million (33%) of these sales were livestock.
- The most prevalent farm size was 10 to 49 acres, with 178 farms (28% of the total); the next most prevalent was 50 to 179 acres (157 farms; 25% of the total).
- 255 farms (40%) were less than 50 acres.
- 57 farms (9%) were 1,000 acres or more.
- 225 farms (35%) sold less than \$10,000 in farm products.
- 251 farms (39%) sold more than \$100,000 in farm products.
- 30 farms sold \$80,000 of products directly to household consumers. This was the same number of farms, but a 32% *decrease* in sales from 2007 levels.
- Direct sales were 0.04% of farm product sales, well below the Indiana rate of 0.2%.
- Wells County rankings among Indiana counties in 2012:
 - 7th in Indiana for inventory of ducks (22nd in US);
 - 9th for acres of soybeans;
 - 10th for value of sales of crops including nursery and greenhouse;
 - 10th for value of sales of grains, oilseeds, dry beans, and dry peas.

Whitley County highlights (Census of Agriculture, 2012):

- Whitley County had 710 farms with 140,099 acres. This was 12% fewer farms and 2% more acres than in 2007).
- Farmers sold \$100 million of products in 2012.
- \$76 million (76%) of these sales were crops.
- \$24 million (24%) of these sales were livestock.
- The most prevalent farm size was 10 to 49 acres, with 291 farms (41% of the total); the next most prevalent was 50 to 179 acres (184 farms; 26% of the total).
- 367 farms (52%) were less than 50 acres
- 40 farms (6%) were 1,000 acres or more.
- 365 farms (51%) sold less than \$10,000 in farm products.
- 151 farms (21%) sold more than \$100,000 in farm products.
- 51 farms sold \$219,000 of products directly to household consumers. This was a 28% increase in the number of farms, and a 130% increase in sales, over 2007 levels.
- Direct sales were 0.2% of farm product sales, the same as the Indiana rate of 0.2%.
- Whitley County rankings among Indiana counties in 2012:
 - 2nd in Indiana for inventory of live rabbits;
 - 10th for inventory of ducks;
 - 11th for acres of wheat.

State of Indiana highlights (Census of Agriculture, 2012):

- 58,695 farms, 4% less than in 2007.
- Indiana has 15 million acres of land in farms.
- Farmers sold \$11.2 billion of products in 2012.
- \$7.5 billion (67%) of these sales were crops, fueled by unusually high corn and soybean prices that have since declined.
- \$3.7 billion (33%) of these sales was livestock.
- The most prevalent farm size is 10 to 49 acres, with 20,770 farms (35%) in this category.
- The next most prevalent is 50 to 179 acres, with 16,396 (28%) farms.
- 3,940 farms (7%) are 1,000 acres or more.
- 27,377 farms (47%) are less than 50 acres.
- 30,346 farms (52%) sold less than \$10,000 in farm products.
- 14,313 farms (24%) sold more than \$100,000 in farm products.
- Indiana ranks 3rd in the United States for inventory of laying hens, with 26 million.
- The state ranks fourth in the country for inventory of pullets for laying flock replacement, with 7.6 million.
- Indiana ranks fifth in the country for inventory of hogs and pigs, with 3.7 million.
- The state ranks fifth in the country for acreage of soybeans, with 5.1 million.
- Indiana ranks fifth in the United States for acreage of corn, with 6 million.
- The state ranks 5th in the country for sales of hogs and pigs, with \$1.3 billion.
- Indiana ranks sixth in the country for sales of grains, oilseeds, dry beans, and dry peas, with \$7.2 billion.
- The state ranks 7th in the country for crop sales, with \$7.5 billion.
- Indiana ranks seventh in the country for inventory of turkeys, with 5.1 million.
- The state ranks ninth in the United States for sales of tobacco, with \$7.7 million.
- Indiana ranks 10th in the country for sales of agricultural products, with \$11 billion.
- Statewide vegetable sales totaled \$104 million.
- 3,673 farms sold \$27 million of food directly to consumers. This is a 3% increase in the number of farms selling direct (3,576 in 2007), and a 21% increase in direct sales over 2007 sales of \$22 million.
- Direct sales from farmers to household consumers amounted to 0.2% of farm product sales, less than the national average of 0.3%.
- If direct food sales made up a single commodity, the value of these sales would outrank the state's 11th-ranked product, fruits and nuts.
- 283 farms farm organically, with total sales of \$36 million.
- 230 farms market through community supported agriculture (CSA).

- 1,791 farms produce and sell value-added products.
- 991 farms marketed products directly to retail outlets.
- 549 farms had on-farm packing facilities.
- 5,811 farms practice rotational or management intensive grazing.
- 36 farms practiced alley cropping or silvopasture.
- 246 farms harvested biomass for use in renewable energy.

Indiana’s top farm products in 2014 (Economic Research Service)

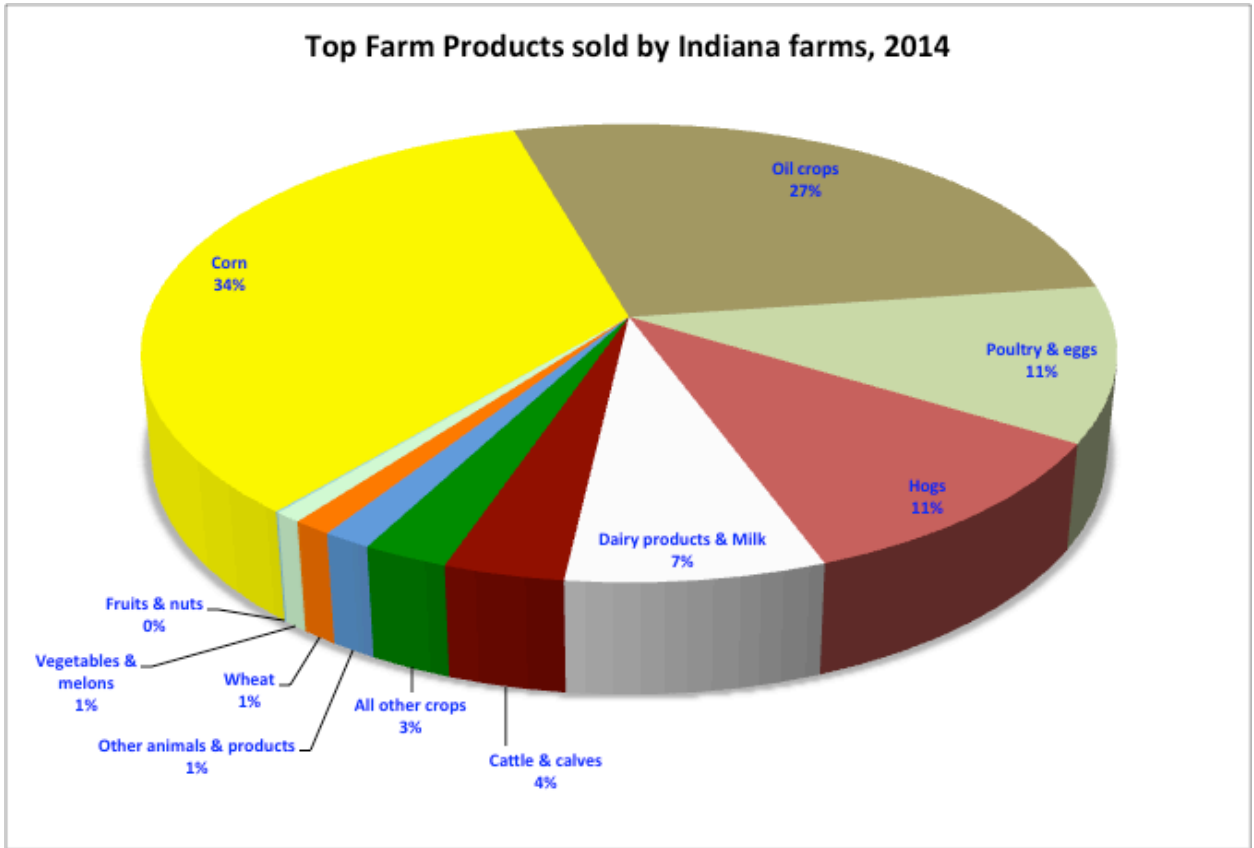
The data in the table and pie chart on next page are for the state of Indiana as a whole.

	\$ millions
Corn	4,358
Oil crops	3,442
Poultry & eggs	1,386
Hogs	1,347
Dairy products & milk	939
Cattle & calves	438
All other crops	312
Other animals & products	177
Wheat	141
Vegetables & melons	99
Fruits & nuts	10

Note also that at \$27 million, direct sales from farmers to consumers far exceed the 11th-ranking product, fruits and nuts.

Chart 1: Indiana’s top farm products in 2014 (Economic Research Service)

See table on previous page.

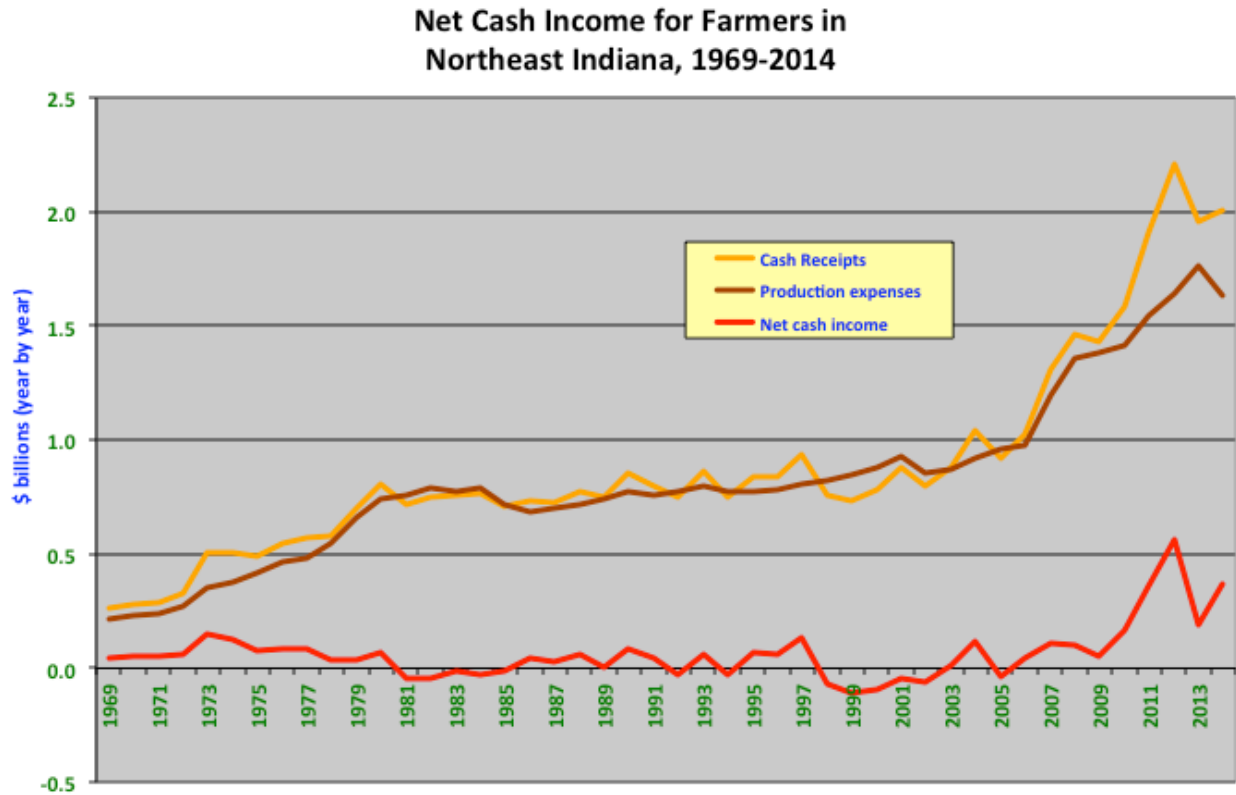


Source: USDA Economic Research Service

Farm Economy Indicators — Northeast Indiana

Chart 2 shows that cash receipts rose for Northeast Indiana farmers from 2010 to 2013, fueled by higher corn and bean prices, but net returns were limited because production expenses also rose significantly. The region’s farmers earned a net cash income of \$567 million in 2012, the highest recorded in recent memory, yet net income fell to \$197 million the next year, rebounding slightly in 2014 despite far lower corn prices.

Chart 2: Net cash income for Northeast Indiana farmers, 1969 - 2014

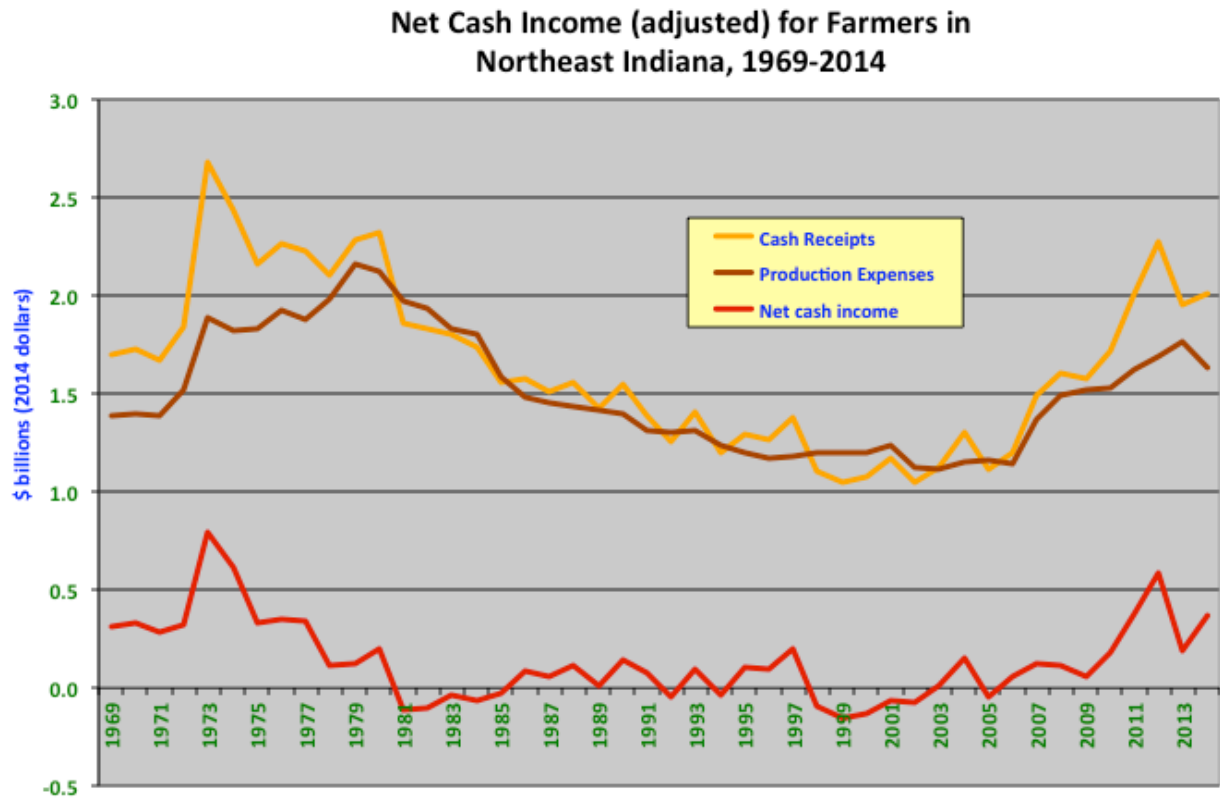


Source: Bureau of Economic Analysis. Data in dollars current for each year listed.

Net cash income is likely to fall substantially in 2015. The USDA currently estimates that Midwestern corn farmers will lose an average of \$93 per acre producing corn in 2015, if all costs of farming are accounted for. See “Corn production costs and returns per planted acre, excluding Government payments, 2013-2014.” Data is compiled by USDA ERS using Agricultural Resource Management Survey data and other sources. Available at <http://www.ers.usda.gov/data-products/commodity-costs-and-returns.aspx>

Once data in Chart 2 are adjusted for inflation, very different patterns appear, as Chart 3 shows. While net cash income for Northeast Indiana farmers was still robust at \$370 million in 2012, this was less than the net cash income farmers earned in 1974, when farmers exported large quantities of corn and wheat to the Soviet Union following the OPEC energy crisis.

Chart 3: Net cash income for Northeast Indiana farmers (adjusted to 2014 dollars), 1969 - 2014

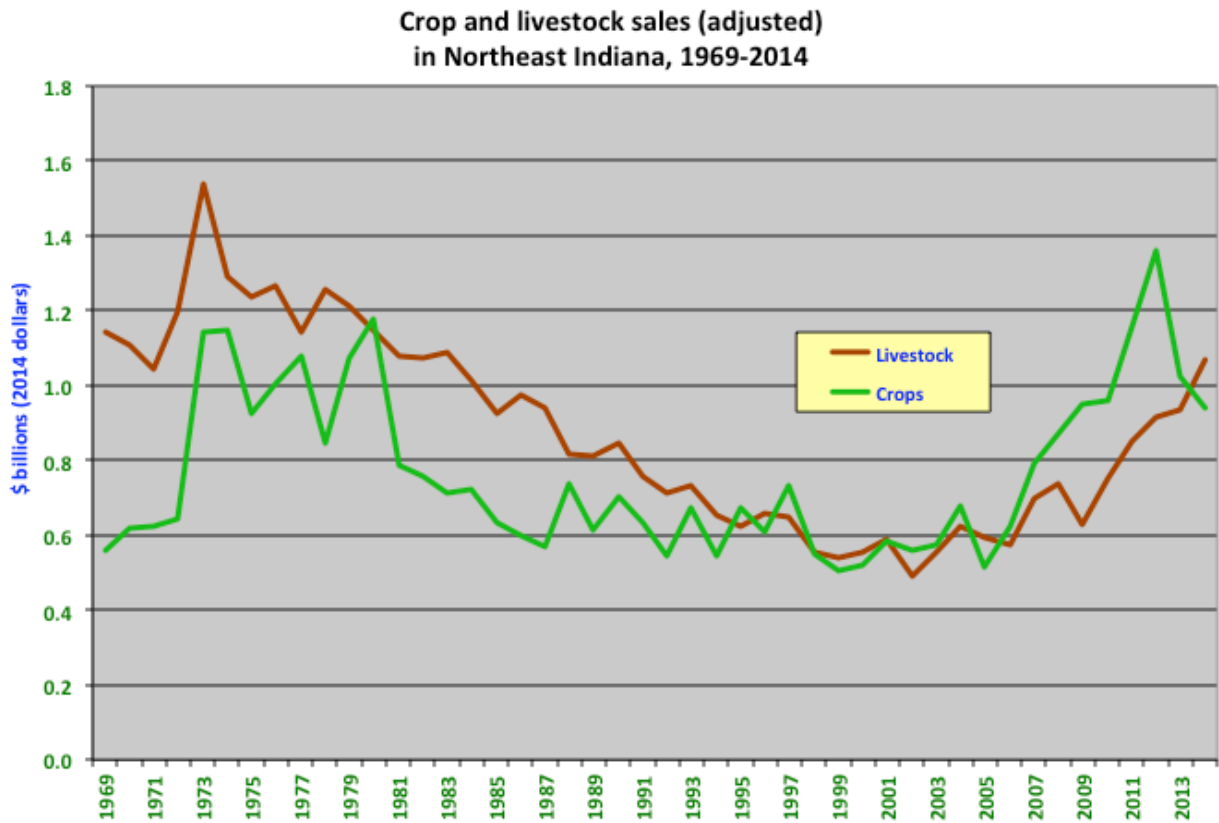


Source: Bureau of Economic Analysis. Data in 2014 dollars.

Note that net cash income for the region’s farmers is now roughly at 1969 levels.

As Chart 4 shows, the recent increase in sales by Northwest Indiana farmers was led by large increases in crop (corn and soybeans) sales, as prices rose to unusually high levels. These rising prices, however, also had the result of increasing costs for livestock producers who fed corn or beans to their animals. Many of these costs were passed along to consumers. Through a combination of new production and higher prices per animal, overall livestock sales rose. While crop sales surpassed 1974 levels, livestock income was well below 1974 levels.

Chart 4: Sales of crops and livestock by Northwest Indiana farmers (adjusted), 1969 - 2014

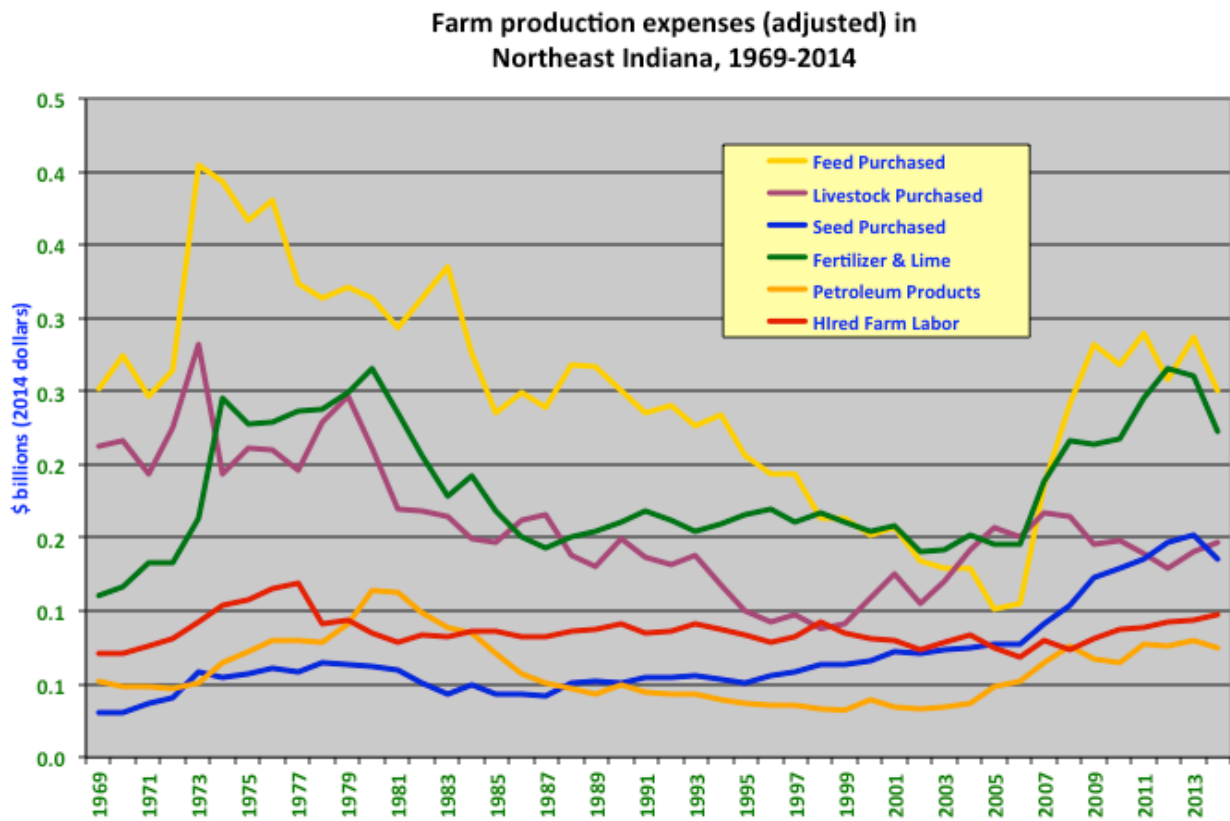


Source: Bureau of Economic Analysis. Data in 2014 dollars.

Net cash income for the region’s farmers was limited by the fact that production expenses increased when farmers had more money to spend. The top four expense items tracked by Chart 5 below are feed costs (\$251 million in 2014), fertilizers and chemicals (Northeast Indiana farmers purchased \$222 million), livestock purchases (\$146 million), and seed costs (\$136 million). Machinery purchase and rental is not shown on this chart, however. While labor costs held steady, energy costs also rose, given higher oil prices and greater reliance upon large-scale equipment.

Rising feed costs reflect both high grain prices and increased livestock production. Rising chemical costs reflect greater focus on producing as much grain as possible while unusually high prices lasted. Note also that seed costs have risen steadily since 1995.

Chart 5: Selected production expenses for Northeast Indiana farmers (adjusted), 1969 - 2014



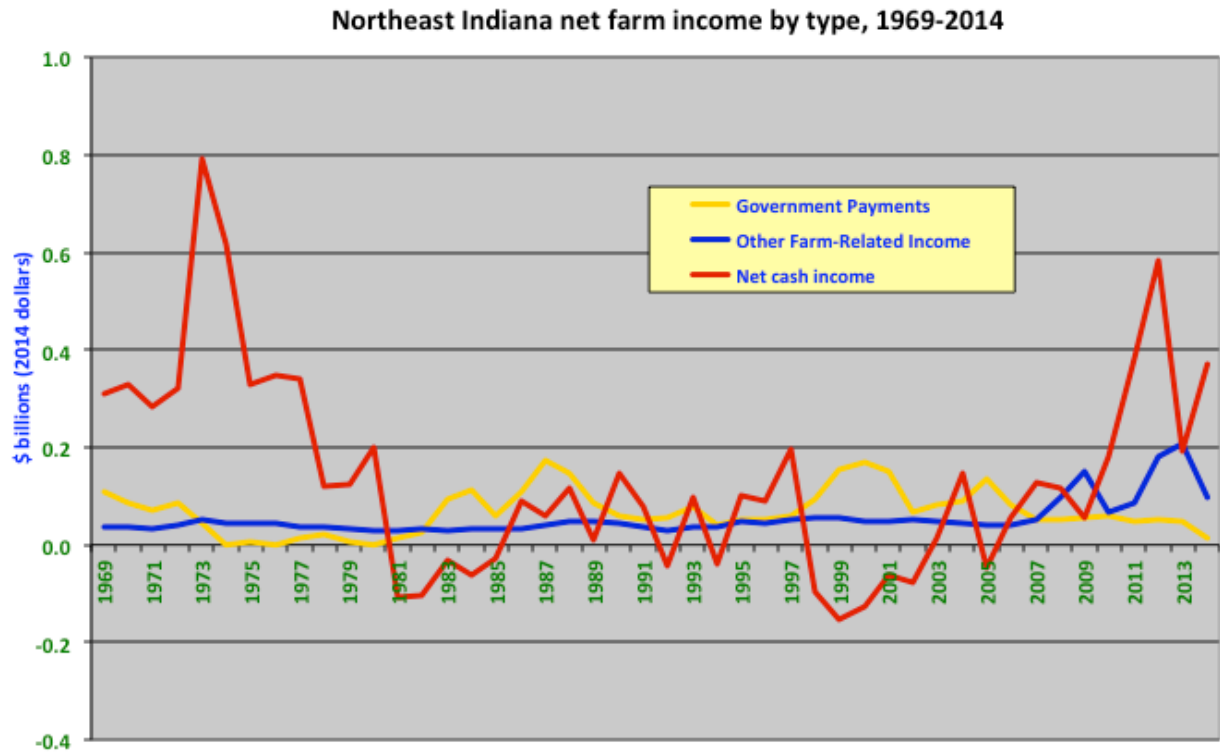
Source: Bureau of Economic Analysis. Data in 2014 dollars.

Most farm chemicals, machinery, and fuel purchased by farmers are sourced outside the region, while considerable labor costs and land rentals are retained in the region. As seed costs rose, farmers have increasingly purchased these inputs from external sources.

As Chart 6 shows, 2010 was the first year since 1980 in which net income earned by farming surpassed by a large margin federal payments, or income earned from renting out land. Indeed, for most of the years 1981 to 2006, the main source of net income for farmers was federal payments, and these only accrued to about half of the region's farmers — those who raise corn or soybeans.

Higher grain prices also fueled a sharp increase in land rental income for those farmers who own farmland. In 2009 and 2103, this farm-related income was the single most significant source of net cash income for farmers.

Chart 6: Sources of net cash income for Northeast Indiana farmers (adjusted), 1969 - 2014



Source: Bureau of Economic Analysis. Data in 2014 dollars.

Northeast Indiana: Balance of Cash Receipts and Production Costs (BEA):

12,302 Northeast Indiana farmers sell \$1.42 billion of food products per year (1989-2014 average), spending \$1.33 billion to raise them, for an average gain of \$88 million each year. This is an average net cash income of \$7,191 per farm. Cash receipts for 2010 – 2013 were buoyed by artificially high corn prices that have now declined to normal levels. *Note that these sales figures compiled by the BEA may differ from cash receipts recorded by the USDA Census of Agriculture (above).*

Overall, farm producers earned a surplus of \$2.3 billion by selling crops and livestock over the years 1989 to 2014. Yet farm production costs exceeded cash receipts for 13 years of that 25-year period. Moreover, 45% of the region's farms reported net losses in 2012 (Ag Census).

Northeast Indiana farmers earned \$61 million more by selling commodities in 2014 than they earned in 1969 (in 2014 dollars).

Farmers earn another \$67 million per year of farm-related income — primarily custom work, and rental income (26-year average for 1989-2014). Federal farm support payments nearly as important a source of net income as commodity production, averaging \$75 million per year for the region for the same years.

The region's consumers:

See also information covering low-income food consumption and food-related health conditions, page 1-2 above.

Northeast Indiana consumers spend \$2.1 billion buying food each year, including \$1.3 billion for home use. Most of this food is produced outside the region, so Northeast Indiana consumers spend about \$1.9 billion per year buying food sourced outside. Only \$3.8 million of food products (0.2% of farm cash receipts and 0.2% of the region's consumer market) are sold by farmers directly to consumers.

Farm and food economy summary:

Farmers earn \$88 million each year producing food commodities, and half of the region's farmers receive \$75 million of farm subsidies each year, for a combined net income of \$163 million.

Each year, farmers spend an estimated \$900 million buying inputs sourced outside of the region.

Meanwhile, consumers spend \$1.9 billion buying food from outside. Thus, total loss to the region is \$2.6 billion of potential wealth *each year*. This loss amounts to nearly double the value of all food commodities raised in the region.

Northeast Indiana: markets for food eaten at home (2013):

Northeast Indiana residents purchase \$2.1 billion of food each year, including \$1.3 billion to eat at home. Home purchases break down in the following way:

	<i>millions</i>
Meats, poultry, fish, and eggs	\$ 279
Fruits & vegetables	248
Cereals and bakery products	182
Dairy products	144
“Other,” incl. sweets, fats, & oils	472

If each Northeast Indiana resident purchased \$5 of food each week directly from farmers in the region, this would generate \$198 million of new farm income for the region.

Adams County: markets for food eaten at home (2013):

Adams County residents purchase \$96 million of food each year, including \$60 million to eat at home. Home purchases break down in the following way:

	<i>millions</i>
Meats, poultry, fish, and eggs	\$ 13
Fruits & vegetables	11
Cereals and bakery products	8
Dairy products	6
“Other,” incl. sweets, fats, & oils	21

Allen County: markets for food eaten at home (2013):

Allen County residents purchase \$1 billion of food each year, including \$623 million to eat at home. Home purchases break down in the following way:

	<i>millions</i>
Meats, poultry, fish, and eggs	\$ 131
Fruits & vegetables	117
Cereals and bakery products	85
Dairy products	68
“Other,” incl. sweets, fats, & oils	222

DeKalb County: markets for food eaten at home (2013):

DeKalb County residents purchase \$119 million of food each year, including \$74 million to eat at home. Home purchases break down in the following way:

	<i>millions</i>
Meats, poultry, fish, and eggs	\$ 15
Fruits & vegetables	14
Cereals and bakery products	10
Dairy products	8
“Other,” incl. sweets, fats, & oils	26

Huntington County: markets for food eaten at home (2013):

Huntington County residents purchase \$104 million of food each year, including \$65 million to eat at home. Home purchases break down in the following way:

	<i>millions</i>
Meats, poultry, fish, and eggs	\$ 14
Fruits & vegetables	12
Cereals and bakery products	9
Dairy products	7
“Other,” incl. sweets, fats, & oils	23

Kosciusko County: markets for food eaten at home (2013):

Kosciusko County residents purchase \$216 million of food each year, including \$134 million to eat at home. Home purchases break down in the following way:

	<i>millions</i>
Meats, poultry, fish, and eggs	\$ 28
Fruits & vegetables	25
Cereals and bakery products	18
Dairy products	15
“Other,” incl. sweets, fats, & oils	48

LaGrange County: markets for food eaten at home (2013):

LaGrange County residents purchase \$105 million of food each year, including \$65 million to eat at home. Home purchases break down in the following way:

	<i>millions</i>
Meats, poultry, fish, and eggs	\$ 14
Fruits & vegetables	12
Cereals and bakery products	9
Dairy products	7
“Other,” incl. sweets, fats, & oils	23

Noble County: markets for food eaten at home (2013):

Noble County residents purchase \$133 million of food each year, including \$82 million to eat at home. Home purchases break down in the following way:

	<i>millions</i>
Meats, poultry, fish, and eggs	\$ 17
Fruits & vegetables	15
Cereals and bakery products	11
Dairy products	9
“Other,” incl. sweets, fats, & oils	29

Steuben County: markets for food eaten at home (2013):

Steuben County residents purchase \$95 million of food each year, including \$59 million to eat at home. Home purchases break down in the following way:

	<i>millions</i>
Meats, poultry, fish, and eggs	\$ 12
Fruits & vegetables	11
Cereals and bakery products	8
Dairy products	6
“Other,” incl. sweets, fats, & oils	21

Wabash County: markets for food eaten at home (2013):

Wabash County residents purchase \$91 million of food each year, including \$57 million to eat at home. Home purchases break down in the following way:

	<i>millions</i>
Meats, poultry, fish, and eggs	\$ 12
Fruits & vegetables	11
Cereals and bakery products	8
Dairy products	6
“Other,” incl. sweets, fats, & oils	20

Wells County: markets for food eaten at home (2013):

Wells County residents purchase \$78 million of food each year, including \$48 million to eat at home. Home purchases break down in the following way:

	<i>millions</i>
Meats, poultry, fish, and eggs	\$ 10
Fruits & vegetables	9
Cereals and bakery products	7
Dairy products	5
“Other,” incl. sweets, fats, & oils	17

Whitley County: markets for food eaten at home (2013):

Whitley County residents purchase \$93 million of food each year, including \$58 million to eat at home. Home purchases break down in the following way:

	<i>millions</i>
Meats, poultry, fish, and eggs	\$ 12
Fruits & vegetables	11
Cereals and bakery products	8
Dairy products	6
“Other,” incl. sweets, fats, & oils	21

Indianapolis Metro area: markets for food eaten at home (2013):

Indianapolis Metro area residents purchase \$5.5 billion of food each year, including \$3.4 billion to eat at home. Home purchases break down in the following way:

	<i>millions</i>
Meats, poultry, fish, and eggs	\$ 714
Fruits & vegetables	636
Cereals and bakery products	465
Dairy products	368
“Other,” incl. sweets, fats, & oils	1,210

Indiana: markets for food eaten at home (2013):

Indiana residents purchase \$18 billion of food each year, including \$11 billion to eat at home. Home purchases break down in the following way:

	<i>millions</i>
Meats, poultry, fish, and eggs	\$ 2,401
Fruits & vegetables	2,138
Cereals and bakery products	1,566
Dairy products	1,238
“Other,” incl. sweets, fats, & oils	4,071

Key data sources:

Bureau of Economic Analysis data on farm production balance

<http://www.bea.doc.gov/bea/regional/reis/>

Food consumption estimates from Bureau of Labor Statistics Consumer Expenditure Survey

<http://www.bls.gov/cex/home.htm>

U.S. Census of Agriculture

<http://www.nass.usda.gov/census/>

USDA/Economic Research Service food consumption data:

<http://www.ers.usda.gov/data/foodconsumption/>

USDA/ Economic Research Service farm income data:

<http://ers.usda.gov/Data/FarmIncome/finfidmu.htm>

For more information:

To see results from *Finding Food in Farm Country* studies in other regions of the U.S.:

<http://www.crcworks.org/?submit=fffc>

To read the original *Finding Food in Farm Country* study from Southeast Minnesota (written for the Experiment in Rural Cooperation): <http://www.crcworks.org/ff.pdf>

For further information: <http://www.crcworks.org/>

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Appendix B: Economic Base & Competitive Advantage Analysis

NE Indiana Economic Base and Competitive Advantage Analysis

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12/15/2015

Note: data used in this competitive advantage report are from 2013, and may vary from Bureau of Economic Analysis data for 2014 used elsewhere in this report. Moreover, categories are more refined in this analysis, so cannot always be compared with categories used earlier.

Introduction

The economy of Northeast Indiana has remained remarkably steady over the past 15 years at just over 450,000 jobs. The manufacturing sector, however experienced a marked drop in employment in the years following the Great Recession. While manufacturing employment has not returned to its high of 105,000 jobs seen in 2002, they have increased to over 92,000 jobs in 2014 from their recession low of 76,000 jobs in 2009.

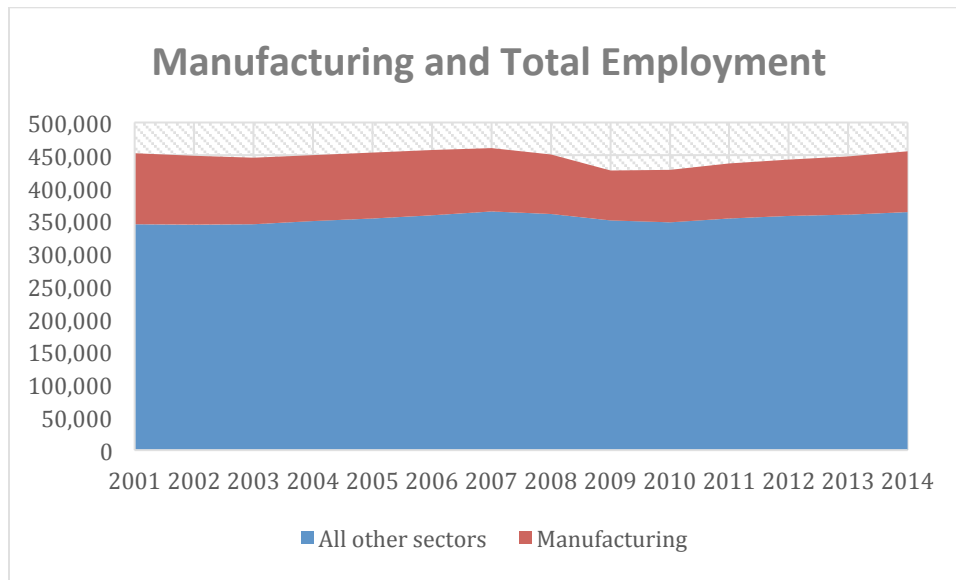


Figure 1 - Employment Trends in Northeast Indiana

Jobs in Northeast Indiana are spread over a diverse set of sectors including services, (government, food services, administrative support services, professional services, healthcare, and social services), manufacturing (transportation equipment, fabricated metal, and miscellaneous manufacturing) and construction (Table 1). While the government sector represents the single largest employer, at 8% of total employment government is a smaller share of employment than in the nation as a whole (government accounts for 13% of total U.S. employment). Conversely, the manufacturing sectors represent a larger share of employment in

Northeast Indiana than they do in the nation as a whole. The full list of employment by sector along with the associated NAICS sector is presented in the appendix Table A1.

Table 1 – Top sectors by total gross employment in Northeast Indiana in 2013

Rank	Sector	2013 Gross Employment	Percent of Total Employment
1	Government admin and enterprise	37,038	8.23%
2	Food services & drinking places	30,223	6.72%
3	Admin support svcs	22,771	5.06%
4	Professional- scientific & tech services	20,908	4.65%
5	Construction	20,596	4.58%
6	Wholesale Trade	17,272	3.84%
7	Transportation eqpmt mfg	16,202	3.60%
8	Ambulatory health care	15,971	3.55%
9	Hospitals	14,229	3.16%
10	Fabricated metal prod mfg	12,470	2.77%
11	Real estate	12,461	2.77%
12	Nursing & residential care	11,553	2.57%
13	Miscellaneous mfg	10,780	2.40%
14	Social assistance	10,198	2.27%
15	Religious- grantmaking- & similar orgs	9,949	2.21%

Total employee compensation (wages, salaries, and benefits) in the region tell a slightly different story than employment. Government is still the largest sector however, it is worth noting that government accounts for a larger share of the compensation in Northeast Indiana than it does for employment. This indicates that government pays a relatively higher wage than average in the region. Likewise, food services and administrative services are both large sectors in terms of employment, but not in employee compensation.

Table 2 – Top sectors by total gross employee compensation paid in Northeast Indiana in 2013

Rank	Sector	2013 Gross Wages Paid	Percent of Total Wages Paid
1	Government admin and enterprise	\$1,904,072,752	10.51%
2	Wholesale Trade	\$1,196,474,976	6.60%
3	Transportation eqpmt mfg	\$1,136,617,480	6.27%
4	Miscellaneous mfg	\$1,008,239,673	5.56%
5	Ambulatory health care	\$898,977,561	4.96%
6	Hospitals	\$845,407,837	4.66%
7	Construction	\$773,381,689	4.27%

8	Professional-scientific & tech services	\$720,535,024	3.98%
9	Fabricated metal prod mfg	\$670,575,219	3.70%
10	Insurance carriers & related	\$544,156,799	3.00%
11	Admin support services	\$536,284,899	2.96%
12	Food services & drinking places	\$505,414,505	2.79%
13	Plastics & rubber prod mfg	\$458,997,315	2.53%
14	Primary metal mfg	\$424,628,949	2.34%
15	Truck transportation	\$418,843,475	2.31%

The average employee compensation (wages and benefits) across all sectors in Northeast Indiana is \$40,300. This is somewhat lower than the national average employee compensation of \$48,500. Likewise, only 8 of the 84 sectors analyzed paid above the national average for the sector. However, some notable sectors in Northeast Indiana pay significantly higher than do comparable sectors on average across the nation. For example, miscellaneous manufacturing in Northeast Indiana pays an average compensation of \$93,500. By comparison, the national average compensation for that sector is only \$71,100. The other notable sectors in Northeast Indiana that paid above the national average were “leather and allied product manufacturing” and “truck transportation”. However, although the wages in most sectors is below the national average for that given sector, Northeast Indiana has a good industry mix with employment in sectors that nationally have relatively high wages. In other words, the primary reason why per worker labor income is low in Northeast Indiana is not because the region is specialized in low paying industries, but rather because the relatively high paying industries in the region pay below the national average for that industry. The low per worker labor income, therefore is more of a “bad wages” problem than a “bad industry” problem. An extension to this discussion is that if an economic development goal is to raise the wages in the region, increasing the human capital and productivity of the labor force is likely to be more effective than attracting different industries to the region.

Table 3 - Top sectors by average wage by sector in Northeast Indiana

Rank	Sector	2013 Average Wage	2013 Gross Employment
1	Miscellaneous mfg	\$93,529	10,780
2	Rail Transportation	\$93,205	675
3	Utilities	\$89,768	1,068
4	Computer & other electronics mfg	\$82,333	4,989
5	Chemical Manufacturing	\$81,373	1,239
6	Management of companies	\$76,064	3,115
7	Pipeline transportation	\$73,212	36
8	Primary metal mfg	\$71,068	5,975
9	Transportation eqpmt mfg	\$70,153	16,202
10	Wholesale Trade	\$69,273	17,272

11	Telecommunications	\$68,156	2,620
12	Credit intermediation & related	\$67,601	932
13	Mining	\$64,983	209
14	Machinery mfg	\$62,799	6,195
15	Paper Manufacturing	\$62,433	1,622

Economic Base Analysis

The employment and employee compensation data presented above are based on “gross” measures of economic activity. For the purposes of this report, the term “gross” refers to the observed measures of economic activity that are reported in secondary data sources (e.g. Bureau of Economic Analysis (BEA), Bureau of Labor Statistics (BLS), Federal Census). For example, if you were to ask a restaurant how many people are on their payroll and they answer ten, then the gross employment of that restaurant is ten. However, just looking at gross employment can create a misleading picture of what drives economic production in a region. An alternative accounting framework that provides a different picture of what sectors are responsible for employment and income in a given region is an economic “base” analysis. Base analysis measures a sector’s ability through its exports to bring in new dollars to the region and how those dollars generate economic activity (i.e. jobs and income) in other sectors of the economy. Across all sectors of the Northeast Indiana economy, the total jobs and employee compensation in the gross analysis will be the same total number as in the base analysis, they will simply be distributed differently. Gross analysis measures where people actually work, and base analysis measures who brings money into the regional economy that then generates jobs and income.

Definitions of gross and base:

Both gross and base economic activity (i.e. employment and wages) are important aspects to consider when analyzing a regional economy.

- **Gross** values are the directly observable employment and wages paid in a given sector. These are the values that are reported in government statistics.
- **Base** values are economic contributions that include the regional economic effect of that sector’s production and how it spawns activity within other sectors. The total base contribution is calculated as the sector’s sales outside the state times the sector’s multiplier.

In total, gross economic activity and base economic activity are equivalent. However, the gross and base measures of economic activity for a given sector are likely to be quite different.

An example of a store selling a tire to a farmer clarifies the difference between these two measures. The gross metric would attribute the tire sale (and associated jobs and employee compensation) to the non-base retail tire store. The tire sale is possible only because the base industry (the farmer) brings the new dollars (exports) into the Northeast Indiana economy; and the base analysis credits the tire sale to the farming industry. In summary, the base metric is propelled by exports and could be more accurately labeled as the “contribution of exports”. The base metric implies that the source of economic growth is exports, thus the base analysis is useful for developing policies that increase sales, jobs, and income, through exports. Exports, however, are but one source of regional economic growth; the others are substituting local production for imports, improving productivity by technological innovation, and attracting capital investment.

When looking at base analysis, a different picture of what drives the Northeast Indiana economy emerges. While service sectors such as food services and administrative services were large in the gross analysis, the largest sectors of the base analysis are manufacturing, construction and government. Also, households. This provides a better metric of the importance of manufacturing in the region and quantifies just how much the sector contributes to income across the economy. In an economic base analysis, households become a major generator of jobs in the region. This does not mean that people are working in the household directly; it means that non-labor income or commuter income brought into the region directly by local households is responsible for generating economic activity across the sectors of the local economy. The explicit inclusion and quantification of the economic contribution that households have on the local economy is an important feature of the economic base methodology. For example, by including households in the analysis, one can trace the sources of income to households that help drive household spending. In Northeast Indiana, major sources of outside income to households include 1) government transfers (Social Security, Medicare, transfer payments, etc.), 2) dividend payments by non-local businesses, and 3) drawing down of capital assets (incurring debt, 401(k), etc.). The base analysis considers these “exports” in the sense that they bring new money into the region, similar to how a manufacturing firm sells goods to the outside world and brings money in. When these new dollars are spent in the region, they create income for other sectors.

Table 4 - Top sectors by base employment in Northeast Indiana

Rank	Sector	2013 Base Employment	Percent of Total Employment
1	Transportation eqpmt mfg	51,211	11.38%
2	Construction	36,476	8.11%
3	Government admin and enterprise	26,778	5.95%
4	Miscellaneous mfg	24,286	5.40%
5	Food products mfg	24,244	5.39%
6	Fabricated metal prod mfg	21,425	4.76%
7	Primary metal mfg	19,489	4.33%
8	Households 50-75k	16,039	3.57%
9	Households 35-50k	14,621	3.25%

10	Professional- scientific & tech services	14,060	3.13%
11	Households 25-35k	13,696	3.04%
12	Households 15-25k	13,002	2.89%
13	Insurance carriers & related	11,096	2.47%
14	Machinery mfg	9,856	2.19%
15	Plastics & rubber prod	9,781	2.17%

In terms of wages, again, manufacturing, construction, and government show up as the largest generator of employee compensation (Table 5). Government shows up as a base industry in the region because transfer payments from the federal or state government to Northeast Indiana are considered injections of dollars from the outside into the region. Similarly, transfer payments, commuting income, and outside investment income that goes directly to households is a sizable portion of the Northeast Indiana economy. Together households are responsible for generating over 9% of the wages in the region, which if aggregated, would represent the second biggest single sector of the economic base.

Table 5 - Top sectors by base employee compensation in Northeast Indiana

Rank	Sector	2013 Base Compensation Paid	Percent of Total Wages
1	Transportation eqpmt mfg	\$2,554,056,036	14.09%
2	Miscellaneous mfg	\$1,434,871,951	7.92%
3	Construction	\$1,258,116,928	6.94%
4	Government admin and enterprise	\$1,233,108,968	6.80%
5	Primary metal m	\$973,254,496	5.37%
6	Fabricated metal prod	\$972,638,626	5.37%
7	Food products	\$781,605,654	4.31%
8	Insurance carriers & related	\$520,173,391	2.87%
9	Households 50-75k	\$519,863,736	2.87%
10	Machinery mfg	\$486,528,080	2.68%
11	Plastics & rubber prod	\$480,018,957	2.65%
12	Households 35-50k	\$475,729,021	2.62%
13	Professional- scientific & tech svcs	\$464,854,346	2.56%
14	Households 25-35k	\$446,536,484	2.46%
15	Households 15-25k	\$424,928,915	2.34%

Competitive Advantage Analysis

Competitive advantage is a fundamental concept to evaluate when developing an economic development plan. It is simply a measure of what a given region can produce better and more efficiently than other regions. Competitive advantage comes from natural factors such as location, climate, natural resources, natural amenities, and geography. It can also arise from

historic investments in infrastructure, human capital, built amenities, and quality-of-life factors. From an economic development standpoint, the most successful strategies involve identifying current competitive advantages and continuing to expand on those, while targeting investments in infrastructure, physical capital, human capital, and amenities to cultivate new competitive advantages in desirable sectors.

One way to characterize the competitive advantages of a region is through a quantitative SWOT analysis which uses a measure of relative concentration of a given sector across space and time to calculate the region’s strengths, weaknesses, opportunities, and threats (Table 6). The measure of relative concentration that we use here is called a location quotient (LQ) which is a ratio of the concentration of employment in a given sector in the region to the concentration of that industry in the U.S. as a whole. We also calculate the percent change in that LQ from 2008 to 2013 to indicate if the relative concentration is growing or shrinking over time. Together the current LQ and the percent change in LQ provide a nice picture of what sectors in Northeast Indiana represent current or emerging competitive advantages.

Strengths

These are sectors that are relatively concentrated in Northeast Indiana and that concentration has been growing over time. This indicates that there is a strong internal competitive advantage for these sectors in Northeast Indiana. It is also worth noting that many of these sectors have a relatively high average wage. A successful economic development strategy should recognize, leverage, and build on these strength sectors. Northeast Indiana should continue to build on these sectors while leveraging these strengths to create new competitive advantages. The strongest strength sectors in the Northeast Indiana economy are as follows:

SECTOR	2013 LQ	% CHANGE IN LQ	2013 EMPLOYMENT	AVERAGE WAGE
MISCELLANEOUS MFG	6.7397	18.28%	10,780	93,529
TRANSPORTATION EQPMT	4.3391	604%	16,202	70,153
FABRICATED METAL PROD	3.4045	17.58%	12,470	53,775
LIVESTOCK	2.6709	58.56%	7,248	6,172
FURNITURE & RELATED PROD	2.8780	31.23%	2,792	41,610
PRINTING & RELATED	2.8459	2.80%	3,827	47,367
NONMETAL MINERAL PROD	2.0596	51.96%	2,062	53,584
WOOD PRODUCTS	2.2926	23.01%	2,300	40,966
TEXTILE PRODUCTS	1.5873	86.82%	495	36,744
COMPUTER & OTH ELECTRONIC	2.0890	1.16%	4,989	82,333

Weaknesses

Weaknesses are sectors where the region does not seem to have a current competitive advantage. These sectors are relatively less concentrated in Northeast Indiana than would be expected and the concentration is actually decreasing. These would be sectors of the economy where Northeast Indiana would seem to be at a disadvantage and trying to invest in these sectors would likely not be successful. The strongest weaknesses in Northeast Indiana are as follows:

SECTOR	2013 LQ	% CHANGE IN LQ	2013 EMPLOYMENT	AVERAGE WAGE
AIR TRANSPORTATION	0.3196	-66.55%	385	60,815
INFORMATION SERVICES	0.2948	-54.29%	157	51,790
DATA PROCESSING, HOSTING AND RELATED	0.3733	-57.57%	401	51,806
COURIERS & MESSENGERS	0.7789	-57.85%	1,644	28,686
MINING	0.3614	-8.86%	209	64,983
PUBLISHING INDUSTRIES	0.6785	-34.93%	1,466	44,498

Opportunities

Opportunity sectors are where the current relative concentration is low but has been growing over time. In other words, the region does not seem to currently have a competitive advantage in these sectors, however if the concentration continues to grow, the region may be able to develop a competitive advantage in these sectors. These sectors represent areas where targeted investments may be helpful in continuing to cultivate these emerging competitive advantages. The strongest opportunity sectors in Northeast Indiana are as follows:

SECTOR	2013 LQ	% CHANGE IN LQ	2013 EMPLOYMENT	AVERAGE WAGE
FUNDS- TRUSTS & OTHER FINANCIAL	0.5510	339.91%	914	\$20,362
BEVERAGE & TOBACCO	0.2710	118.44%	143	\$35,412
PERFORMING ARTS & SPECTATOR SPORTS	0.6343	100.43%	2,863	\$5,849
CREDIT IN-MEDIATION & RELATED	0.3769	41.36%	932	\$67,601

Threats

Threats are sectors where the region currently has a competitive advantage but its relative concentration in a sector is shrinking. These are sectors where the region currently has a competitive advantage, but that advantage is slipping. If the region continues in this trend, then these sectors will become weaknesses. If these sectors are deemed valuable sectors into the future, then Northeast Indiana should also consider

investing in infrastructure and policies which will help these sectors stay competitive.
The strongest threat sectors are as follows:

SECTOR	2013 LQ	% CHANGE IN LQ	2013 EMPLOYMENT	AVERAGE WAGE
PRIMARY METAL MFG	5.8619	-9.26%	5,975	71,068
PLASTICS & RUBBER PROD	4.5330	-1.60%	7,437	61,718
MACHINERY MFG	2.2070	-22.56%	6,195	62,799
ELECTRICAL EQPT & APPLIANCES	2.3233	-1.38%	2,198	57,758
RAIL TRANSPORTATION	1.3543	-69.08%	675	93,205
LEATHER & ALLIED	1.3826	-64.01%	151	48,795

Summary of Food Sectors

In terms of the food sector, the region has a strong competitive advantage in livestock production and somewhat of a strength in food product manufacturing (Table 6 and Figure 2). Crop farming is an area where Northeast Indiana has a current competitive advantage (as measured by the location quotient), but that advantage has been slipping since 2008. We therefore classify that sector as a threat.

Table 6 - Competitive advantage analysis for food sectors in Northeast Indiana

Sector	2013 LQ	% Change in LQ 2008-2013	2013 Employment	Average Wage	SWOT
Beverage & Tobacco	0.2710	118.44%	143	\$35,412	Opportunity
Ag & Forestry Svcs	0.5576	7.28%	924	\$10,706	Opportunity
food & beverage stores	0.6726	1.61%	4,655	\$22,185	Opportunity
Livestock	2.6709	58.56%	7,248	\$6,172	Strength
Food products	1.3897	7.46%	5,925	\$46,086	Strength
Crop Farming	1.2638	-35.01%	4,857	\$5,089	Threat
Food svcs & drinking places	0.9765	-4.65%	30,223	\$16,723	Weakness

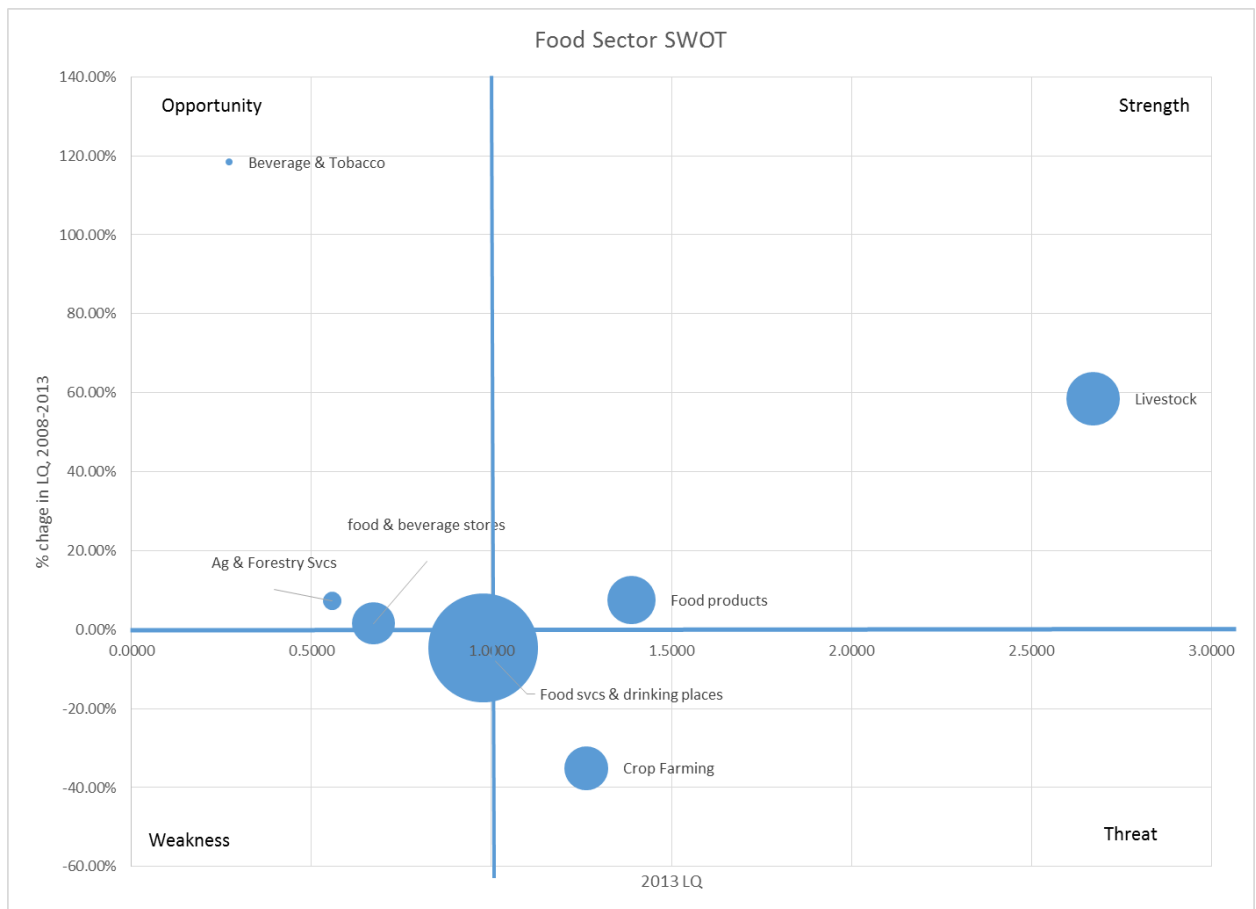


Figure 2 - Graphical presentation of the SWOT analysis for food sectors in Northeast Indiana

Additional data

Table A1 - Gross and base employment and wages for Northeast Indiana in 2013

NAICS	Sector	Gross Employment	Gross Wages	Base Employment	Base Wages
111	Crop farming	4,857	\$24,719,476	9,774	\$190,732,959
112	Livestock	7,248	\$44,734,804	951	\$13,845,484
113	Forestry & logging	62	\$392,807	5	\$75,822
115	Agric & forestry services	924	\$9,892,239	8	\$139,548
211	Oil & gas extraction	51	\$989	96	\$1,614,947
212	Mining	209	\$13,581,446	377	\$19,245,993
213	Mining services	19	\$727,616	34	\$1,237,377
221	Utilities	1,068	\$95,872,150	152	\$7,825,139
23	Construction	20,596	\$773,381,689	36,476	\$1,258,116,928
311	Food products	5,925	\$273,061,842	24,244	\$781,605,654
312	Beverage & tobacco	143	\$5,063,942	272	\$10,356,036
313	Textile mills	234	\$9,892,707	321	\$12,904,644
314	Textile products	495	\$18,188,046	701	\$25,654,965
315	Clothing and accessories	141	\$3,791,200	17	\$511,513
316	Leather & allied	151	\$7,368,118	110	\$4,879,573
321	Wood products	2,300	\$94,222,130	3,523	\$137,018,139
322	Paper manufacturing	1,622	\$101,267,003	4,305	\$205,829,453
323	Printing & related	3,827	\$181,274,117	5,496	\$222,083,626
324	Petroleum & coal prod	229	\$23,481,049	174	\$9,054,258
325	Chemical manufacturing	1,239	\$100,821,503	3,103	\$157,070,744
326	Plastics & rubber prod	7,437	\$458,997,315	9,781	\$480,018,957
327	Nonmetal mineral prod	2,062	\$110,490,989	1,160	\$52,684,075
331	Primary metal mfg	5,975	\$424,628,949	19,489	\$973,254,496
332	Fabricated metal prod	12,470	\$670,575,219	21,425	\$972,638,626
333	Machinery mfg	6,195	\$389,040,646	9,856	\$486,528,080
	Computer & other				
334	electronics	4,989	\$410,759,884	6,739	\$382,516,687
335	Electrical eqpt & appliances	2,198	\$126,952,950	4,050	\$195,568,786
336	Transportation eqpmt	16,202	\$1,136,617,480	51,211	\$2,554,056,036
337	Furniture & related prod	2,792	\$116,176,097	3,858	\$152,443,066
339	Miscellaneous mfg	10,780	\$1,008,239,673	24,286	\$1,434,871,951
42	Wholesale trade	17,272	\$1,196,474,976	6,568	\$328,845,650
	Motor vehicle & parts				
441	dealers	3,783	\$154,320,679	462	\$17,431,230
	Furniture & home				
442	furnishings	1,235	\$35,969,582	13	\$393,265
443	Electronic & appliance retail	1,151	\$36,743,034	5	\$175,221
	Bldg materials & garden				
444	dealers	3,945	\$127,180,344	1,444	\$46,709,914
445	Food & beverage stores	4,655	\$103,271,568	50	\$1,240,172
	Health & personal care				
446	stores	2,700	\$82,341,858	130	\$4,028,819
447	Gasoline stations	2,791	\$55,066,021	540	\$12,455,350

	Clothing & accessories				
448	stores	2,744	\$51,562,992	243	\$5,545,239
451	Sports-hobby, book, music	1,706	\$25,572,624	55	\$1,044,295
452	General merchandise stores	8,602	\$208,759,338	2,433	\$65,222,664
453	Misc retailers	4,705	\$49,899,395	414	\$5,860,843
454	Non-store retailers	5,961	\$70,532,280	2,521	\$46,097,115
481	Air transportation	385	\$23,413,622	603	\$25,749,903
482	Rail transportation	675	\$62,913,258	256	\$14,638,804
484	Truck transportation	8,647	\$418,843,475	6,138	\$249,755,893
	Transit & ground				
485	passengers	934	\$18,496,096	544	\$13,222,718
486	Pipeline transportation	36	\$2,635,642	9	\$442,421
487	Sightseeing transportation	2,464	\$26,802,025	1,602	\$31,456,885
492	Couriers & messengers	1,644	\$47,159,565	400	\$11,989,317
493	Warehousing & storage	1,936	\$81,090,652	186	\$7,110,588
511	Publishing industries	1,466	\$65,233,634	1,698	\$66,628,932
	Motion picture & sound				
512	recording	394	\$7,299,710	222	\$4,795,538
515	Broadcasting	807	\$39,393,841	776	\$29,189,738
517	Telecommunications	2,620	\$178,569,523	3,819	\$175,777,089
	Data processing, hosting &				
518	related	401	\$20,774,191	687	\$26,774,975
519	Information services	157	\$8,131,007	449	\$16,899,562
521	Monetary authorities	4,320	\$214,466,690	1,371	\$54,937,842
	Credit in-mediation &				
522	related	932	\$63,004,440	111	\$5,570,413
523	Securities & other financial	4,640	\$85,067,329	580	\$14,429,941
524	Insurance carriers & related	9,259	\$544,156,799	11,096	\$520,173,391
525	Funds-trusts & other financ	914	\$18,611,185	43	\$1,013,095
531	Real estate	12,461	\$87,790,764	898	\$18,600,075
532	Rental & leasing services	1,278	\$38,089,380	101	\$3,168,919
	Lessor of nonfinance				
533	intangible assets	56	\$584,577	166	\$4,913,096
	Professional-scientific &				
541	tech services	20,908	\$720,535,024	14,060	\$464,854,346
551	Management of companies	3,115	\$236,938,980	707	\$37,252,212
561	Admin support services	22,771	\$536,284,899	6,505	\$165,054,235
	Waste mgmt & remediation				
562	services	992	\$52,361,668	941	\$41,115,452
611	Educational services	8,664	\$221,163,803	2,362	\$63,831,736
621	Ambulatory health care	15,971	\$898,977,561	57	\$2,655,825
622	Hospitals	14,229	\$845,407,837	4,299	\$203,609,736
623	Nursing & residential care	11,553	\$353,482,819	5,560	\$171,294,986
624	Social assistance	10,198	\$211,761,353	1,867	\$43,222,515
	Performing arts & spectator				
711	sports	2,863	\$16,746,096	208	\$2,039,317
712	Museums & similar	254	\$6,569,870	32	\$878,346
713	Amusement-gambling &	3,206	\$51,573,098	29	\$563,449

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	recreation				
721	Accommodations	1,697	\$36,100,256	62	\$1,499,122
722	Food svcs & drinking places	30,223	\$505,414,505	1,663	\$32,967,129
811	Repair & maintenance	8,076	\$270,022,676	2,333	\$77,875,155
812	Personal & laundry services	6,796	\$96,687,030	135	\$2,468,447
	Religious-grantmaking & similar orgs				
813		9,949	\$264,130,053	3,852	\$106,632,908
81	Private households	1,272	\$11,570,520	0	\$0
	Government admin & enterprise				
99		37,038	\$1,904,072,752	26,778	\$1,233,108,968
N/A	Households LT10k			6,266	\$195,266,348
N/A	Households 10-15k			4,434	\$143,694,064
N/A	Households 15-25k			13,002	\$424,928,915
N/A	Households 25-35k			13,696	\$446,536,484
N/A	Households 35-50k			14,621	\$475,729,021
N/A	Households 50-75k			16,039	\$519,863,736
N/A	Households 75-100k			8,356	\$268,474,199
N/A	Households 100-150k			7,889	\$250,408,176
N/A	Households 150k+			5,515	\$171,739,175
	TOTAL	449,891	\$18,124,236,969	449,891	\$18,124,236,473

Table A2 - Competitive advantage SWOT analysis for all sectors in the Northwest Indiana Economy

Sector	2013 LQ	% Change in LQ	2013 Employment	Average Wage	SWOT
Miscellaneous mfg	6.7397	18.28%	10,780	\$93,529	Strength
Primary metal mfg	5.8620	-9.26%	5,975	\$71,068	Threat
Plastics & rubber prod	4.5330	-1.60%	7,437	\$61,718	Threat
Transportation eqpmt	4.3391	0.60%	16,202	\$70,153	Strength
Fabricated metal prod	3.4045	17.58%	12,470	\$53,775	Strength
Furniture & related prod	2.8780	31.23%	2,792	\$41,610	Strength
Printing & related	2.8460	2.80%	3,827	\$47,367	Strength
Livestock	2.6709	58.56%	7,248	\$6,172	Strength
Electrical eqpt & appliances	2.3234	-1.38%	2,198	\$57,758	Threat
Wood products	2.2926	23.01%	2,300	\$40,966	Strength
Machinery mfg	2.2070	-22.56%	6,195	\$62,799	Threat
Computer & other electronics	2.0890	1.16%	4,989	\$82,333	Strength
Nonmetal mineral prod	2.0596	51.96%	2,062	\$53,584	Strength
Paper manufacturing	1.7259	18.94%	1,622	\$62,433	Strength
Truck transportation	1.7050	-17.68%	8,647	\$48,438	Threat
Textile products	1.5873	86.82%	495	\$36,744	Strength
Sightseeing transportation	1.4552	57.19%	2,464	\$10,877	Strength
Food products	1.3897	7.46%	5,925	\$46,086	Strength
Leather & allied	1.3826	-64.01%	151	\$48,795	Threat
Nursing & residential care	1.3708	-5.96%	11,553	\$30,597	Threat
Non-store retailers	1.3623	73.47%	5,961	\$11,832	Strength
Rail transportation	1.3544	-69.08%	675	\$93,205	Threat
Religious-grantmaking & similar orgs	1.2694	-2.71%	9,949	\$26,548	Threat
Crop Farming	1.2638	-35.01%	4,857	\$5,089	Threat
Gasoline stations	1.2205	3.56%	2,791	\$19,730	Strength
Bldg materials & garden dealers	1.2065	7.01%	3,945	\$32,238	Strength
Insurance carriers & related	1.1980	-8.50%	9,259	\$58,771	Threat
Hospitals	1.1891	3.19%	14,229	\$59,414	Strength
Misc retailers	1.1751	30.65%	4,705	\$10,606	Strength
General merch stores	1.1604	-5.77%	8,602	\$24,269	Threat
Motor vehicle & parts dealers	1.1256	3.44%	3,783	\$40,793	Strength
Wholesale trade	1.0995	-11.04%	17,272	\$69,273	Threat
Telecommunications	1.0675	-15.88%	2,620	\$68,156	Threat
Repair & maintenance	1.0283	-3.73%	8,076	\$33,435	Threat
Waste mgmt & remediation services	0.9813	-8.92%	992	\$52,784	Weakness
Food services & drinking places	0.9765	-4.65%	30,223	\$16,723	Weakness
Construction	0.9662	13.22%	20,596	\$37,550	Opportunity
Broadcasting	0.9610	-15.08%	807	\$48,815	Weakness
Furniture & home furnishings	0.9465	-7.58%	1,235	\$29,125	Weakness
Educational services	0.9296	10.25%	8,664	\$25,527	Opportunity
Sports- hobby- book & music stores	0.9239	6.72%	1,706	\$14,990	Opportunity
Social assistance	0.9179	-4.75%	10,198	\$20,765	Weakness
Warehousing & storage	0.9079	15.42%	1,936	\$41,886	Opportunity
Monetary authorities	0.9006	-5.77%	4,320	\$49,645	Weakness
Health & personal care stores	0.8783	5.47%	2,700	\$30,497	Opportunity
Admin support services	0.8340	5.97%	22,771	\$23,551	Opportunity
Petroleum & coal prod	0.8139	17.31%	229	\$102,537	Opportunity
Ambulatory health care	0.8094	-9.43%	15,971	\$56,288	Weakness
Electronics & appliances stores	0.7859	2.71%	1,151	\$31,923	Opportunity

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Couriers & messengers	0.7789	-57.85%	1,644	\$28,686	Weakness
Textile mills	0.7587	-8.43%	234	\$42,277	Weakness
Utilities	0.7479	6.27%	1,068	\$89,768	Opportunity
Museums & similar	0.7339	2.53%	254	\$25,866	Opportunity
Personal & laundry services	0.7131	-19.75%	6,796	\$14,227	Weakness
Rental & leasing services	0.6958	2.61%	1,278	\$29,804	Opportunity
Publishing industries	0.6785	-34.93%	1,466	\$44,498	Weakness
Real estate	0.6752	41.13%	12,461	\$7,045	Opportunity
Clothing & accessories stores	0.6749	6.63%	2,744	\$18,791	Opportunity
food & beverage stores	0.6726	1.61%	4,655	\$22,185	Opportunity
Government admin and enterprise	0.6594	1.71%	37,038	\$51,409	Opportunity
Amusement-gambling & recreation	0.6585	24.83%	3,206	\$16,086	Opportunity
Private households	0.6531	37.73%	1,272	\$9,096	Opportunity
Chemical manufacturing	0.6464	48.25%	1,239	\$81,373	Opportunity
Performing arts & spectator sports	0.6344	100.43%	2,863	\$5,849	Opportunity
Professional-scientific & tech services	0.6096	24.29%	20,908	\$34,462	Opportunity
Management of companies	0.5690	25.79%	3,115	\$76,064	Opportunity
Agric & forestry services	0.5576	7.28%	924	\$10,706	Opportunity
Funds-trusts & other financial	0.5510	339.91%	914	\$20,362	Opportunity
Transit & ground passengers	0.5285	0.25%	934	\$19,803	Opportunity
Securities & other financial	0.5201	10.84%	4,640	\$18,333	Opportunity
Accommodations	0.4714	10.69%	1,697	\$21,273	Opportunity
Lessor of nonfinance intangible assets	0.3801	234.80%	56	\$10,439	Opportunity
Clothing and accessories	0.3797	0.00%	141	\$26,888	Weakness
Credit in-mediation & related	0.3770	41.36%	932	\$67,601	Opportunity
Data processing, hosting and related	0.3733	-57.57%	401	\$51,806	Weakness
Mining	0.3614	-8.86%	209	\$64,983	Weakness
Pipeline transportation	0.3281	111.40%	36	\$73,212	Opportunity
Motion picture & sound recording	0.3269	0.86%	394	\$18,527	Opportunity
Air transportation	0.3196	-66.55%	385	\$60,815	Weakness
Information services	0.2948	-54.29%	157	\$51,790	Weakness
Beverage & tobacco	0.2710	118.44%	143	\$35,412	Opportunity
Forestry & logging	0.2109	-57.79%	62	\$6,336	Weakness
Oil & gas extraction	0.0359	-69.65%	51	\$19,000	Weakness
Mining services	0.0150	125.76%	19	\$38,296	Opportunity