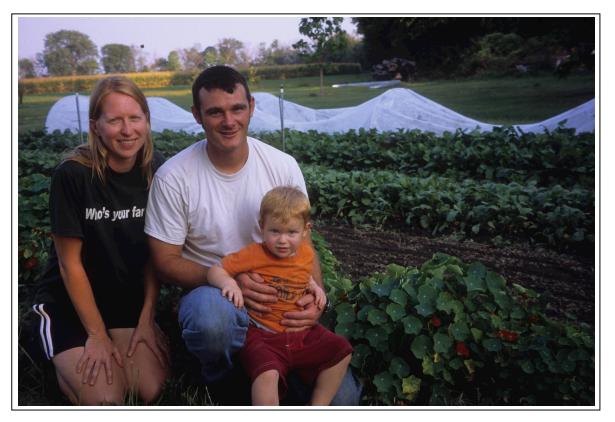


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Tools for Community Self-determination



Corinna, Kurt & Jed Bench, Elmore, Ohio — Photo © Ken Meter, 2010

Finding Food in Northwest Ohio

University of Toledo-Urban Affairs Center

Written by Ken Meter Crossroads Resource Center (Minneapolis) Available at http://www.crcworks.org/ohnwfood.pdf

Finding Food in Northwest Ohio

Executive Summary

Northwest Ohio can take significant steps to strengthen its local economy by expanding on persistent citizen efforts to build a resilient local food system.

The region has much to gain by doing so: our analysis of the region's farm and food economy shows that \$3.6 billion leaks out of Northwest Ohio each year as residents farm and eat, since farmers farm at narrow margins to produce commodities for export, while consumers eat food imported from far away. Losses promise to be even larger this year, when severe drought has decimated corn yields, and placed great stress even on livestock producers who rely on grass forage.

Even more troublesome, Northwest Ohio's food economy is deeply dependent on relatively low-cost fossil fuels, currently required to ship foods long distances. As oil prices rise, this transport will become more expensive. The region will be forced to produce more of its own food.

Happily, localizing the food economy will be the most effective way to turn the \$3.6 billion leakage into economic opportunity. Already, Toledoans are taking the first steps required to create this transformation. A solid core of growers and consumers have formed a vibrant farmers' market, which helps Toledoans build strong connections while trading in locally produced food.

Growers have begun to experiment by tilling new vegetable farms and testing innovative greenhouse technology that has been developed in Belgium and Holland. Pioneering urban farmers have set up operation close to downtown, using a combination of plastic growing frames and fish tanks to extend the growing season. Cattle growers have formed a marketing collaboration. Civic officials in Toledo have begun to wrestle with the possibilities of reclaiming urban brownfields for food production, mindful of the food-transportation systems that will be required to connect consumers and growers. New technologies for raising blackberries, and quickly freezing harvested fruits have been tested. The office of Congresswoman Marcy Kaptur has consistently supported such innovative efforts.

Newly launched to help coordinate and deepen this vision, the Northwest Ohio Food Council is poised to create a more strategic vision that will encompass the growth of effective clusters of food-related businesses, more focused attention to the food needs of low-income residents, greater coordination across counties, and more sustained innovation.

This work occurs in a supportive context. Northeast Ohio has long pursued a strategy of coordinating efforts to create competitive business clusters, drawing upon the vision, guidance and resources of the George Gund Foundation. Detroit's Eastern Market already clusters more than 80 food businesses at its site, and aims to create a regional food production, processing, wholesaling, retailing, and research center that will create immense

new opportunities for Northwest Ohio residents. Northeast Indiana spawns an energetic collection of food-related businesses that have formed around a world-class restaurant and inn in Roanoke, just west of Fort Wayne.

Indeed, Northwest Ohio must work diligently to hold its own among these burgeoning efforts, or the region will be left behind. Success in implementing this vision will require a combination of public and private investment, bi-partisan political activity, and a savvy ability to accomplish short-term business objectives while focusing on long-term sustainability.

If consumers dedicated themselves to purchasing food from local farms, they could make a substantial difference. If each Northwest Ohio resident bought \$5 of food each week from a local farm, this would generate \$345 million of new farm income—one third of the total cash receipts farmers now earn.

The task ahead is nothing less than to refashion the local economy in Northwest Ohio, using food as a central theme to engage the population broadly, unify civic efforts, and create economic structures that will prove resilient in the face of changing climate. These will increasingly be fueled by locally produced green energy, and coordinated by increasingly sophisticated civic leadership.

This will require taking many overlapping steps at the same time:

- 1. Invest in building solid relationships of trust among community members. Those regions with the strongest sense of social connection are the regions that will prove most resilient and comprehensive in their work.
- 2. Build citizen capacity to coordinate local food activity through the Northwest Ohio Food Council. Since so many complex steps need to be taken simultaneously, and since change is occurring so rapidly, effective coordination will be critical to making best use of local resources.
- 3. Compile comprehensive databases covering local health and environmental issues, economic conditions, business opportunities, and social conditions. Northwest Ohio should maintain effective data resources that inform civic discussion, strengthen strategic action, and help monitor success in creating systems change.
- 4. Create a "farm system" that grows new farmers. Effective efforts are already underway to engage inner-city youth in gardening, farming, and business management. If this were done in a systematic manner, as it is done to create new baseball players in major league "farm systems," Northwest Ohio will be able to feed itself.
- 5. The most effective public investments will be those that create efficiencies for local food trade. Building transportation networks that effectively convey locally produced food to Northwest Ohio consumers will be critical. Warehouses, root cellars, freezers, cold storage, and distribution facilities will be needed.

- 6. The future of Northwest Ohio will be fueled by green energy. The more the region produces the fuel it needs to power its own economic structures, the greater will be its competitive advantage as fossil fuel prices rise.
- 7. Create regional investment funds. Private investors are increasingly looking for choices to invest in local firms that may offer a lower return, but a greater sense of connection and resilience. Moreover, recycling interest payments so that they return to the region to continue to work for the benefit of the region will close one substantial financial leakage from Northwest Ohio.
- **8.** Create a culture of food and fitness. People cannot live healthy lives without getting regular exercise, eating well, and creating a culture that treasures healthy lifestyles.

By so doing, Northwest Ohio will transform itself into a region that creates health, wealth, connection and capacity for its residents.

The Emerging Food Sector in Northwest Ohio

This report begins with a few case examples of the groundwork that has already been accomplished by Northwest Ohio farm and food leaders. The work spans decades, and has been accomplished against great odds, with limited resources, and thin political support. Nevertheless, people have persisted, and have in fact built the very foundation that is required to launch a stronger farm and food economy in Northwest Ohio.

While resources do not allow a full account to be written covering all of the activity that has created this emergent farm and food sector, here are a few highlights.

Building upon a family tradition Kurt, Corinna, Jed & Josiah Bench — Shared Legacy Farms (Elmore)



Kurt, Corinna, & Jed Bench — Photo © Ken Meter, 2010

By day, Kurt Bench works for ADM, a global grain trading company. When he comes home, he has another full-time career to attend to: building a rapidly expanding farm business at Shared Legacy Farms. Kurt's family has a history of raising produce for their neighbors, and he is moving quickly because he sees an exceptional market opportunity right now. Kurt and his wife Corinna just purchased their grandparent's farm, where some of the sweetest corn in the region has been grown for decades. Making the land purchase delayed Kurt's plans to leave his day job to become a full-time farmer, but also gave him room to expand a thriving Community Supported Agriculture (CSA) operation. Their 160 members invest in a "share" of the farm at the start of the growing season, and get repaid with produce as it gets harvested from their three acres.

The Shared Legacy Farm gets its name in part from the fact that the farm is a collaboration with Kurt's parents, David and Cindy Bench, who are renowned for their produce. The elder Benches also have some long-standing accounts selling cucumbers, tomatoes and cabbage to processors. One cousin sells tomatoes to Hirzel, and another sells cucumbers to Vlasick Pickles.

Yet the shared legacy also belongs to Kurt and Corinna, who collaborate closely to make the farm work. Using special events, social networking, and her people skills, Corinna engages a community of people in supporting the farm. "We're selling the farm experience," Kurt says.

Corinna takes charge of marketing and evaluation, publishing the farm's web site, a members' newsletter. "She has the gift of writing," Kurt says of Corinna. Corinna admits that when she first heard Kurt speaking of building community, her eyes rolled a bit. "I thought he was really being pie-in-the-sky, too visionary. But he is doing that, too." Indeed, the farm boasts a 60% retention rate for CSA shareholders.

Kurt thinks building trust with neighbors is really the essential challenge. "Anyone can raise a box of vegetables," he adds. The farm's web site lists eighteen employees who help with planting, harvesting, packaging and childcare, making it possible for Kurt to keep working off the farm.

The farm offers seven membership options — an Organic Vegetable Share (both family-size and half-size), a Fruit Share (both full-size and half-size), an Egg Share, an Artisan Bread share, and a Food to Share program in which members can donate funds to support lowincome neighbors who purchase shares. Members can collect their share at one of five locations: the Perrysburg Farmer's Market, Jewish Family Services (Sylvania), Port Clinton, Owens-Illinois (O-I) in Levis Commons, or right from the farm in Elmore.

The Benches also provide members a choice of five farm events each year, including a planting day, tractor rides, pesto days, a pea pick, camping opportunities, canning lessons, a pumpkin hunt, and gleaning.

Kurt and Corinna supplement their farm income by raising 20 acres of commodity crops, and by holding off-farm jobs. Part of the rapid quest for growth, Kurt adds, is the need for health coverage. "If I could afford health coverage on my own, I would be doing this full time right now."



Learning a European way of planting tomatoes Wade Smith — Whitehouse Daylily Farm (Whitehouse)

Wade Smith raises heirloom tomatoes using LED lights and hydroponic technology — Photo © Ken Meter, 2010

Wade Smith moved to Whitehouse eleven years ago, after losing a job in real estate. He chose this 15-acre location because of its proximity to the city, and its excellent farmland. His first crop, as the name of his farm indicates, was daylilies. He developed a strong customer base, but also noticed that his neighbors were paying more and more attention to food. He decided to explore this himself.

Smith grew up planting tomatoes, so he gave them a try. To get a premium price, he aimed for an early market, so he constructed a greenhouse. Planting as early as January, he could harvest in early May, when most outdoor farmers were just beginning to plant their vines. "I have to differentiate my product," he added, so he plants several heirloom varieties that were hard to find in local stores.

He started by selling to local independent markets, but soon changed his course, because he did not receive a large enough share of the retail value of his crop. Now, he focuses on farm stand or farmers' market sales and order by selected restaurants, where he can get a higher price. He is happy with his sales, but adds, "You don't get rich living this way."

From a firm in Arkansas, he purchased small LED lighting units to augment the sunshine that filters through his greenhouse wall. They are mainly useful in the early spring, he says, since they extend the daylight hours early in the season when the vines are first developing. Although expensive to purchase, the lights draw very little electricity, so they are inexpensive to operate.

While meeting with other members of the Maumee Valley Growers Association, Smith gained an opportunity to visit greenhouse tomato growers in Belgium. When he saw the commercial greenhouse operations there, elaborately planned to provide maximum production for sale to high-end consumers, he knew he had found the heart of his next business approach. "One trip to Belgium and that was it, I was hooked," Smith recalls.

Upon his return, he began to view his greenhouse as an elaborate machine. With very little labor, he could monitor soil conditions, fertility, moisture, pests, and other aspects of the operation, and refine management systems as needed. He made plans to build a sophisticated greenhouse of a Dutch design, one that could be moved to rotate production through different fields. He chose glass because it would let more light through, and last longer, even though once again, it was more expensive to purchase on the front end. "I hope to construct a system that gets me off the grid." The greenhouse will help heat his home in the winter time, and a below-ground storage system will reduce heating costs.

When his new one-quarter acre Dutch greenhouse arrives, it will have a high enough ceiling that Smith hopes to grow the 20-foot tomato vines he saw in Belgium. Such an increase in the production per plant, Smith adds, is the key to profitability. He plants young seedlings in a peat moss mixture which he uses three times: twice in two successive crop seasons, and then a third use as an ingredient in compost that can be used for future fertility. He is also now branching out into a second crop, cucumbers.

Early in 2012, Smith, his wife, and two other growers took a journey to see the Belgian greenhouses first hand. His wife had been skeptical until she saw the lush, tall vines and full tomatoes. "Now she sees what I am talking about," Smith says. He adds, however, that the growers are "waiting to see how it works."

A family cluster creates a specialty in tomatoes Bill Hirzel — Hirzel Canning Company and Farms (Oregon)



Image courtesy of Hirzel Canning Company and Farms

Northwest Ohio has long fostered a vegetable industry that took advantage of hot summer weather and fertile soil to build world-class packing companies—global leaders in producing ketchup, tomato soup, and pickles. These factories were supported by a thriving greenhouse industry, which extended the growing season by drawing upon relatively low-cost natural gas, and the proximity of Toledo glass manufacturing factories, to build a competitive advantage.

Yet as gas reserves declined and fuel prices rose, greenhouse growers discovered that the steep costs of heating greenhouses erased their bottom lines. Moreover, laborers rose up to demand better working arrangements, and foreign competition undermined the former prosperity. Over time, dozens of acres of greenhouses have been idled or dismantled.

Yet the Toledo region did not stand still. By building upon the tradition of a previous generation of family farms, many growers have been able to retain vibrant businesses. One example is Hirzel Canning Company and Farms, in Oregon.

As Bill Hirzel walks through his family's vegetable packing plant southeast of Toledo, he moves past photos of the family members who founded and led the business for four generations. Hirzel now serves as chairman and manager of the firm, which employs 125 full-time staff. He has rich and poignant stories about his ancestors and siblings. In telling

these stories he also offers a weighty overview of the tomato industry in the Toledo area, because his family's firm has served as one key center of that industry.

The firm traces its origins to Hirzel's Swiss-German great grandfather, who had been a brewer. Forced to abandon the trade during Prohibition, the elder Hirzel decided that, since he was experienced in fermentation, he could produce sauerkraut with a distinctive flavor. He produced the kraut under a private label. "That private label is what gives the product its distinguishing character," Bill Hirzel states. "The others will be bought out by investors," and lose their customer appeal.

Over time Hirzel Canning broadened its scope to include tomatoes, which they pack in juiced, chopped, crushed and sauced forms under the Dei Fratelli label (the brand means "of the brothers," a nod to the siblings who started the firm). The firm also adds peppers and spices to create salsas and specialty sauces. Sauerkraut is still produced under the Silver Fleece label, a brand they purchased years ago from a former competitor. Years ago, Hirzel adds, the factory also packaged carrots and peas raised on nearby farms, but these were dropped as tomatoes became a specialized product of the Northwest region. The firm also does about half of its business packing foods for larger clients who hire Hirzel to produce foods under the customer's private label.

At one time, the largest ketchup cannery in the U.S. was located here in Northwest Ohio, a reflection of a unique combination of ideal growing conditions, inexpensive energy, efficient transportation corridors, collaboration among growers and canners, a fortuitous proximity to Toledo's glass industry, and limited competition from other packers. Hirzel recalls there were 179 local canners in the region, most of which are now gone. Two key reasons the industry was concentrated in this region, Hirzel adds, were first that the region had a combination of the raw materials needed for glass production (sand for its silicates and natural gas to fuel manufacturing plants and heat greenhouses), and second, that freeways constructed in the 1960s brought Chicago markets within easy reach of Ohio canners. Yet ultimately, those freeways also brought competing packers in California and Mexico within reach of those same markets.

In turn, that once-flourishing tomato packing industry has been largely displaced by foreign competition, largely from Mexico, where larger packers exploited cheaper labor, and lower land prices. As a result, the number of acres of tomato production in Lucas County fell 90% from 1992 to 2007, to 34 acres of tomatoes raised in the open.

Hirzel survived these transformations, buying out an old Heinz facility near Bowling Green that is now the research and incubation facility for the Center for Innovative Food Technology (CIFT — see below). Hirzel Canning owns the research center, and Bill Hirzel sits on its board.

This presence reflects a deep commitment to the industry. Hirzel not only grew up working in the cannery, and knows the physical plant intimately, he is also professionally trained as a microbiologist, and served on the national commission that established nutritional labels for packaged foods. Hirzel says that his family's firm survived because it was cautious about debt. One competitor, he noted, that started out at the same time as the Hirzel family, grew so fast it sold four times as much product as Hirzel Canning. Yet to do so, it had leveraged itself with too many loans. That competitor went under. What was the strategy that paid off for Hirzel? "Don't spend money you don't have," Bill cautions.

This is not to say that Hirzel Canning avoids spending money on the best technology available. This is also central to their strategy. "We certainly need high tech in the food processing industry," Hirzel said. "We were the first guys to use the ethernet to connect our operations on the factory floor. We were the first ones in the country to know which row each tomato comes from." Other highlights in technical innovation were the introduction of mechanical harvesting equipment, and mechanical soil sterilizers the firm was able to purchase at low prices when a former Green Giant plant closed.

The 38 growers who raise product for Hirzel have now converted almost entirely to mechanical harvesting, meaning "we don't have manual labor any more." Furthermore, he predicts that "the growers who use laptops or cell phones with GPS in their tractor cabs will be the ones who survive," because they will be able to test the wetness of plant leaves, or the temperature of the soil two inches below the surface, electronically with minimal labor.

For Hirzel, the possibility of technology transfer like this is one of the reasons he takes leadership in the food industry center. "We absolutely support our growers with technology, with information sharing," he added. "The growers know every single thing they do has to be recorded." Through advances like this, Hirzel continues, the region has boosted production from 12 tons per acre many years ago, to 63 tons per acre. Still, the region competes with California growers who can turn out 100 tons per acre.

This attention to detail is part of what assures customers of the quality of Hirzel's products, he adds. "It is brand loyalty that helped us retain business — not growth in size." He continues, "The larger firms have to spend more money marketing." Smaller firms may also have more investment in producing for local markets. Still, as Hirzel cautions, "It's great to buy local food, but you still have to preserve it," since the season is so short.

Bill then takes me to a busy laboratory in the middle of the plant where technicians sample canned product continuously to ensure that quality is exceptional. This care draws well upon Bill's background in microbiology, yet even while he exerts this care for safety he also criticizes what he considers to be "overregulation" of the food industry. "In order to cover for the worst case scenario," Hirzel adds, "we are forced to hit it [our manufacturing process] with a sledgehammer." The federal tendency to interpret regulations too stringently, he adds, "hurts our ability to innovate." He believes radiation will be an important technology for assuring safety in the future.

Growing new farmers Toledo GROWs Community Gardens (Toledo) *A project of Toledo Botanical Gardens*



Toledo GROWs cultivates youth skills and healthy food in this urban hoophouse — Photo © Ken Meter, 2010

Walking to the inner-city greenhouse maintained by Toledo GROWs, one receives a very tangible welcome, even though all people at the site are working diligently. A group of church volunteers made quick work of a pile of compost on this November morning; their visitor had to step back often to avoid a caravan of wheelbarrows that conveyed the rich compost to an outdoor field.

The compost is created by earthworms that are fed food scraps in containers inside the greenhouse. Nearby, tilapia and perch are being raised in small tanks; pumps lift the water containing their wastes into pipes that convey the fluid to watery plant beds. This fluid fertilizes greens and vegetables that thrive in the warm envelope of the greenhouse.

This greenhouse is one of 65 community garden spots managed by Toledo GROWs in the city. Many occupy land owned by Metroparks; the agency supports Toledo GROWs to manage these lands for urban food production. Toledo GROWs has constructed a larger training center which serves as a classroom for Owens Community College's Urban agriculture program and is adding a commercial kitchen that will allow students and residents to learn more about farming, greenhouse management, poultry raising, and business skills. It will also be a place where youth can create art.

This will allow Toledo GROWs to extend the work it is already accomplishing in using gardening as a path for inner-city youth to gain work skills, gain self-awareness, create zones of greater safety in the inner city, feed residents, connect with nature, and help beautify the landscape. At the time of this interview, Toledo GROWs was implementing a three-year \$950,000 job-training grant from the Department of Justice. The grant allows the program to employ local youth, engaging them in construction work and small engine repair, expand their job skills, and train them to build fertile soils and raise food in community gardens.

Nurturing old stories and a new generation of farmers Oscar Shaheer — Future Urban and Rural Agriculture Organizers (Oak Openings)



Mrs. Katie M. Thomas at her suburban farm which long supplied vegetables to Toledo consumers — Photo © Ken Meter, 2010

When Oscar Shaheer took me to see the land in Oak Openings he had just ordered tilled to create a training farm, he made sure to stop first at the home of Mrs. Katie M. Thomas, who lives near a new farm he is launching. Mrs. Thomas, at 91, sat in a chair overlooking her three-acre backyard farm on a warm spring morning, scrutinizing the rows of peppers and 150 tomato plants she had placed in the ground herself, just a few weeks before. All were standing tall.

Mrs. Thomas embodies the deep roots of the African-American community in Oak Openings, which has been recognized by the Nature Conservancy as an important nature preserve in the U.S. The community settled here at a time when Blacks were not allowed to own land. But a lawyer bought several tracts, and resold two parcels to Mrs. Thomas and her husband, as well as to her sister, where the family has stayed ever since. Several other families settled nearby, so a close-knit community was born.

The family had little choice but to grow food for themselves, since money was tight in wartime. "There was just a dirt road out here," Mrs. Thomas adds. "In 1946, we were growing beef, pork, chickens, eggs, vegetables, and melons." As a young girl, she took a job at a grocery store. The grocer told her she should sell the produce the family was raising. That launched her into commercial sales. When she tried to sell at the Toledo Farmers' Market, however, she was refused entry for many years, because of the color of her skin. She persisted, and claimed her rightful stand at the market.

To Oscar Shaheer, Mrs. Thomas represents not only a mentor who can teach youth heightened farming skills, but also a conduit for them to learn the history of their community. "We're going to be telling this story," he says, as he guides me to the new farm site. He adds that this is becoming increasingly critical as the elders age.



Oscar Shaheer leads a training farm for inner-city and rural youth — Photo © Ken Meter, 2010

His own farming experience was shaped by his grandfather, who farmed near Macon, Georgia, where Oscar grew up. He still believes the best melons come from Georgia, but

Shaheer can no longer farm that land, since the family sold it years ago. Now, he wants to impart some of his own tradition to youth by sharing some of the farming skills that he learned when he was young.

Shaheer has signed up 12 young people, who have agreed to stick with a program of training to become farmers. They are referred to him from a Youth Action Program, and also a rehab center. He told the referring organizations he wanted to create a positive setting. "I won't do this if it feels like punishment to the kids," he adds. "I want them to want to be here. But really, once they get here they like the work. It is relaxing to their minds."

To get the farm started, he is making use of land owned by a community elder who is no longer able to take care of the property. Shaheer asked a neighboring farmer to plow the three-acre field, but adds, "Next summer I would love to have some kid plow the soil with our own tractor."

Bringing all parties together Baldemar Velasquez — Farm Labor Organizing Committee (Toledo)

One person who foresaw the scaling back of the Northwest Ohio tomato industry was Baldemar Velasquez, head of the Farm Labor Organizing Committee, who dedicated himself to organizing field workers in the tomato industry in the mid-1960s. In an early victory, FLOC struck until it won agreements from 33 growers to negotiate with tomato workers as a union. Yet when large processors began to bring in strikebreakers, FLOC realized it had to deal directly with those processors who held the most power.

In 1979, as field workers struck Campbell's, the firm began to require its growers to mechanize, in an effort to undermine the power of the workers. FLOC responded by organizing consumers to boycott all of Campbell's products. "As early as 1978, we saw mechanization coming in the tomato industry," Velazquez recalls. "We also foresaw that the cucumber industry was our real future. The number one pickles could not be mechanized, so manual labor would always have a role. We struck Campbell's to get to Vlasic (a pickle canner with a factory in Bloomdale)."

Yet there was work to be done in the tomato industry, as well. By 1986, in a historic agreement, FLOC won the right to represent 3,100 farmworkers in the tomato and pickle industries in Ohio and Michigan. FLOC also insisted that all parties to the issue negotiate at once, so this agreement included farm owners and Campbell's as well as the farmworkers. In addition to guaranteeing the right of workers to bargain collectively, the agreement created a commission, once again involving all three stakeholders, to resolve differences that might arise among the parties.

By training field workers, FLOC was able to boost the quality of the harvest, and by bargaining collectively, the union was able to raise the prices they were paid. Velazquez said that when FLOC began working in the pickle industry, about 18% of those harvested were number one quality (the highest). Now, he says, some growers harvest as much as 40% of their crop as number ones. Where the price used to be \$7 for every 100 pounds a worker

picked, it is now \$24. FLOC won an incentive program from the canning company to pay workers better. Significantly, although the union invited growers to participate in creating this incentive program, the deal was made by the company directly with the union.

Velazquez cautions that the entire produce industry is threatened by calls for legalization of workers, because immigrants are so vital to produce farms. "You're going to put more farms in jeopardy" if authorities become more strict in enforcing labor laws, he adds. Velazquez says that drivers' licenses must continue to be made available. "Safety on the highways should not be an immigration problem."

As FLOC takes greater initiative to build the capacity of the workforce, it is also taking on new challenges. FLOC is interested in collaborating on the development of a hydroponic growing operation, perhaps raising tomatoes for an urban market that asks for high-quality local produce. Monitoring changing consumer tastes, FLOC sees economic development potential in local business creation. Once again, Velazquez may be noticing trends at a very early stage.

Planting seeds of innovation Dave Beck, Center for Innovative Food Technology (Toledo)

The state of Ohio has funded seven centers of innovation to promote "technology-based economic development," one for each of seven industries that are considered strategic to the state economy. CIFT is the state program for food processing and agriculture. Its research facility is the former property of Heinz, which used the complex near Bowling Green to run tomato trials and produce seeds for commercial production. As the tomato industry migrated to California and Mexico, Hirzel Canning Co. (see above) purchased the building and surrounding 100 acres. A group of local leaders put their heads together and decided the facility would make a good incubator for local food businesses. USDA Rural Development chipped in money to help them realize this vision.

Today, the CIFT incubator has 29 tenants, mostly using it on a "very part-time" basis, says director Dave Beck. The center also performs custom processing for others on a contract basis. "We should have bought a truck," Beck says with a smile. "Everyone tries to sell to Kroger or Sam's Club first." Seldom does it work that way; most of CIFT's clients feel lucky to find small niche markets. "The first thing is to get a 52-week supply," Beck cautions. "Then you can go to Kroger."

One of the key pieces of equipment that CIFT offers is a flash freezing unit that processes fruit and vegetables on a small scale. Last year, Beck says, CIFT froze 20,000 to 30,000 pounds of product. "We're never going to compete with large-scale commercial frozen food operations," Beck adds, "We're too small." But as an incubator, CIFT can help entrepreneurs to develop new products and production systems that could be mounted on a commercial scale elsewhere. CIFT has also enlisted the support of several frozen storage facilities, which are interested in participating as growers and purchasers expand the relationships started by the CIFT program. In this initiative, growers can gain experience in freezing their products, while purchasers can become familiar with purchasing local frozen

products. Beck hopes this will stimulate business growth to a level that is profitable for commercial facilities.

With a food laboratory, CIFT can also monitor the outcomes of these experimental batches, providing data that will help assure the product quality and safety of processes that are developed at CIFT. Currently they are running shelf-life tests to learn more about how long frozen food products can be stored safely.

When the institutional food service firm Bon Appétit Gourmet, LLC, sought to make contact with growers in the region who might offer to supply them with fresh and frozen produce, CIFT brokered the connections. This led to "the development of business relationships that will grow over the next several years," Beck added.

CIFT is also helping develop hydroponic growing facilities in the region, including a cluster for Mercy Hospital in Toledo, which will fund the installation of more than twenty high density, vertical hydroponic systems in inner-city neighborhoods at community facilities, schools, faith-based organizations, and others. Further, CIFT works with residents of a neighborhood near the University of Toledo to install and operate high-tunnel greenhouses. Beck hopes that "these facilities will form the basis of a neighborhood-based growing, processing, and marketing system to bring fresh vegetables into the inner city."

CIFT also helps connect this community group with several rural produce growers, and a regional wholesaler, to help form ties between rural growers and inner-city residents. "We think everyone can benefit from this," Beck adds.

The chef joins the farmers' market Elizabeth Bergman, Toledo Farmers' Market



Elizabeth Bergman started training as a chef, then started this farm near Genoa (Sage Organics), and now coordinates special projects for the Toledo Farmers' Market — Photo © Ken Meter, 2010

One younger pioneer in local foods production, Elizabeth Bergman, never imagined that she would become a farmer as she pursued her education. Yet after studying the history of food for her degree at Denison College, and studying to be a chef at the highly respected Culinary Arts Institute of America, in Hyde Park, New York, she found that her vision for her career deepened.

Working with her brother Henry, she started a two-acre farm in Genoa, southeast of Toledo. At her farm, Sage Organics, she produced more than thirty certified organic vegetables and herbs. She sold these at two area farmers' markets, and also provided food for twenty-five families who invested in her farm as Community Supported Agriculture (CSA) members. Believing that animals are pivotal to good soil fertility, she also raised laying hens, broiler chickens, pastured pigs and bees. She became the first certified organic vegetable grower in the Toledo area.

It was after reading Michael Pollan's *The Omnivore's Dilemma*, and working with several farmers in the Hudson Valley, that she decided that growing quality food was her calling. When reading the book, she said, "My blood boiled. I had assumed the government and the market were taking care of good food for Americans. I learned that was not the case at all. We've created a system where it costs much more to eat healthy than it does to eat badly."

Bergman decided she did not want to be a chef, after all. Rather, she wanted to give customers the option of buying better produce they could prepare for themselves.

With her cooking background and her passion for organics, she had no problem introducing herself to customers and getting them excited about her produce. At the same time, she says farming involved a steep learning curve. "Every year we get smarter," she adds, "But every year there are growing pains."

Ultimately, however, Bergman decided that she could do more to build the local food system by also working as part-time staff for the Toledo Farmers' Market. She scaled her farming back to three days per week, and now works only one acre of land. With the help of one college intern and one high school helper, she raises garlic, heirloom tomatoes, heirloom beets, greens and cherry tomatoes in her plots. She has stopped raising chickens or turkeys, because the animals require more day-to-day care than she can give. She also tutors geometry, and makes chocolates for Flying Rhino, in the off-season.

At the Market, she not only can create an inviting space for farmers and consumers to meet directly, but she also has more time, freed up from field work, to engage in coordinating food activity in Northwest Ohio. She works 20 hours per week for the market, managing the Westgate satellite market near Ottawa Hills, and a new market at Job & Family Services. About 25 farmers sell at the two markets.

Among the innovations the market has instituted is the doubling food dollars program launched by the Fair Food Network. Under this program, local and federal funders pledged money so that every dollar of SNAP coupons redeemed by low-income shoppers would be worth two dollars while buying fresh local produce. The Market has also organized a nonprofit partner, Friends of the Farmers' Market, to provide a vehicle for channeling funds for this initiative. Bergman hopes the Friends will also be well placed to assist educational efforts in the future.

Her vision for the future is to make the Toledo Farmers' Market "more of a community hub" where people gather to see each other more frequently than they do now. She would also like to see the market expand to new locations and new functions. "I want to build an entire food system around this market." Still, she cautions that she is just speaking personally at this point.

That vision of future expansion hits up against a sobering reality she has uncovered in the present-day operations of the Market. A few months ago, Bergman walked through the stalls, asking each family what they thought the status of their farm would be in ten years. She was caught short by the results of her informal poll. Many of the experienced farm families expected to be out of farming. "Only five of the farms are run by farmers less than 40 years old. 90% of our customers are over 50. Only two of the larger farm families have children who want to keep farming," Bergman warns. "There will be a major turnover. Toledo's not going to have any farmers, unless we grow new ones. Right now, we don't have a plan for the future."

Collaborating to Live Well Sarah Bucher, Live Well Greater Toledo

The "Live Well Coach" for Greater Toledo's effort to improve the health and well-being of its community, Sarah Bucher, started her career in worksite wellness. After graduating from Ohio State University with a degree in exercise science, she coordinated wellness programs for one firm, and then found an opportunity to move to the Toledo YMCA, where she assisted several companies in strengthening their wellness initiatives.

At the Y, she also worked on a "Pioneering Healthier Communities" project that was funded by the Robert Wood Johnson Foundation. The project engaged several work teams in Ohio, Illinois, and Michigan, giving its participants experience in local problem-solving as well as the national policy arena. Over time, the initiative also began to focus on setting more visionary goals, rather than running discrete programs. "When the money for a given program is gone, the program itself is gone," Bucher says.

Now, as Director of Healthy Living for the YMCA, Bucher guides a collaboration of community leaders and organizations, Live Well Greater Toledo, that has set its sights on promoting "policy, systems and environmental change for a healthier community." By focusing on increasing physical activity and improved eating habits in underserved communities, Live Well aims to improve the general health and well-being of the Greater Toledo region.

The specific goals of the initiative are to:

- Increase access to fruits and vegetables, especially among underserved communities
- Enhance infrastructure and traffic safety in areas where people walk and/or bike, with a special emphasis on areas near schools
- Increase availability of healthier food and beverage choices in public venues, including the Mudhens stadium and the Imagination Station
- Increase access to physical activity, including helping the city create a master plan for a healthier city.

Still in its early years, the initiative has learned that coordinating work among various leaders has been critical. "For our first year, we looked to pull people in for action teams. We found we were going off in different directions," Bucher adds. Now the team plays closer attention to weaving its efforts into a unified approach. "It would be silly for us to work separately."

As part of that collaboration, Bucher has joined the new Northwest Ohio Food Policy Council (see page 24). "I'd like to see schools have healthier food, and safe places for kids to play," she adds.

This reflects the collaboration's holistic view. Healthy eating, Bucher says, requires attention to the immense barriers that get in the way of living well. "We could write all the policy we want," she points out, but that would not mean in itself that Toledo had installed all the elements that need to be in place. "We have so many social and cultural impacts in our community. If we don't change these, how do we expect people to get healthy?"

Importing to the inner city Ralph and Gini Behrendt, Flying Rhino Coffee and Chocolates (Toledo)

Ralph and Gini Behrendt have an unlikely story about local foods. Settled into a brick storefront in inner-city Toledo, the couple sells gourmet coffee and chocolates. This is hardly a tale of local farmers conveying fresh foods to inner-city residents. Yet the Behrendt's coffee shop, Flying Rhino Coffee and Chocolates, serves as a gathering point for discussions of food in their community. Since Gini serves on the board of the Toledo Farmers' Market, their experience helps shape the future of food in Toledo. Moreover, they wrestle, even as importers, with some of the same dynamics faced by community foods practitioners in the rest of the state.

For Ralph and Gini, the core business approach they pursue, in dealing with producers in Central and Southern America, is similar to that of others covered in this report who trade with local farms: they focus on forming relationships of trust. This makes their business "local" in the sense that they have direct conversations with producers to negotiate mutual arrangements that work for all involved over the long term. While a "food miles" count might show thousands of miles, their trade is in very real ways community-based, and helps to build community in Toledo.

Both former glass artists, Ralph and Gini came to points in their lives where they yearned for new challenges. Ralph had been blowing glass for 17 years, and Gini had been making glass beads and jewelry for about 8 years. Both showed at some of the best art shows in the country. Yet the travel was tiring them out, and the costs of making glass had become too steep. Selling something to eat seemed like the best fit for both of them.

Gini tells stories about growing up on the north side of Pontiac, Michigan, helping weed her father's garden. "It gave me a love of growing things," she adds. Ralph developed a desire as an adult to live on a farm. Gini became involved in a goat farm near Chapel Hill, North Carolina. She sold gourmet cheeses to top-end restaurants and co-op groceries.

Their relative success also taught them the virtues of staying small. "I have 15 years working in corporations, so I know what that is like," Ralph adds. He does not want to repeat it. Gini, for her part, found that "if you grow too big, you lose the hands-on love." In launching Flying Rhino, they committed themselves to keeping that personal touch.

One of their suppliers introduced the couple to the Bobolink farm, in Southeast Brazil. A collective of small farmers, Bobolink raises coffee organically, in shaded fields to protect bird populations, but has chosen not to certify its products. The Behrendts liked their product, and started to purchase from them. What would make for stable trade across thousands of miles? "There has to be a lot of trust between us," Gini says. "They know who we are and who we stand for. They know we want high quality and freshness, and they deliver."

The couple also buys from a larger producer in Brazil, named Da Terra, with 12,000 acres of coffee on a 20,000-acre plantation. The owner's main business is selling tires, but the couple met him and found him to be "passionate about coffee," so they found something that

tempered their concerns about the size of the operation. Moreover, his coffee is Rainforest Action-certified, so they feature Da Terra as a limited edition product.

The Behrendts also feature coffee from Tanzania, Costa Rica, Guatemala, and Indonesia. To build their business, they adopted a strategy from their days as artists: they sold at the farmers' market. That introduced them to thousands of Toledo consumers. Word of mouth carried word of their products even further. Eventually, they built a strong enough clientele that they were able to open a storefront. Yet they continue to sell at the farmers' market on Saturday mornings, because, as Gini says, "It is family and community for us. I see frustration on the face of consumers who are unable to take the time to talk to us. The market has been a great launching-off place for our business."

They have since opened a soup-and-salad lunch place in downtown Toledo.

Expanding by instinct Martha Mora, Johnston Fruit Farms (Toledo)

Driving west of the Toledo airport, the suburban sprawl gives way to a welcome scattering of farms. One of these is Johnston Fruit Farms, well rooted in the past yet also devoted to expanding to meet new market.

Martha Mora nurtures apple trees that her grandfather started in the 1930s, in partnership with a family friend who was thinking about getting into the fruit business. It was not until Martha's father Dale Johnston launched this commercial orchard in 1954 that the old trees were taken seriously as a source of income. But Martha says Dale did not stop there. "My father was the first orchard in Ohio to convert fully to semi-dwarf trees," because they were prolific and cheaper to harvest as small trees. "He had a lot of assistance from OSU in those days."

Dale Johnston also ran this as an integrated farm that planted row crops, green tomatoes, hay and other produce. When Martha and her husband took over the operation, the farm carried 26 varieties of apples, planted on 25 of the farm's 80 acres. In the tradition of her father, the new owners found their own ways to innovate.

"We have hooked up with an organic grower who works with us to graft both antique and new varieties onto modern rootstock," Mora adds. "I keep searching for other varieties. We want to go to 80 acres of apples, but doing so would be very expensive."

The task was also made more difficult by the fact that in 2009, the couple had to cut down lots of trees, and pull out the roots, to change apple varieties. Not only that, but the grocers that Martha's father once sold to had gone out of business. "Alot of his outlets were midsized chain stores that no longer exist," she recalls. "He had a great business with strong relationships like that. He never advertised. He didn't do any pick-your-own."

Yet those options no longer exist for the new generation. Today, even as it expands, Johnston Fruit Farm sells to no grocers, because the stores wanted to work with larger

growers who could provide single-source purchasing. The couple does offer lower prices to individual customers who are willing to pick their own, because they recognize the retail price of apples has gotten too high for some of their neighbors. They cling to several traditional practices, refusing to wax their apples to make them look shinier, refusing to pasteurize the cider they make, and trying to use less spray. Still, Mora laments, "We haven't yet learned how to raise apples organically this far south. We are looking for a way to do so."

Rather than sell through wholesalers, the Moras prefer to sell as directly as possible. In addition to their own farm stand, the Moras sell their produce at two farmers' markets, and sell apples through two nearby orchards that carry some of the Johnston apples. They also donate some of their apples to the local food bank, out of a sense of mission for feeding the less privileged.

Collecting three generations of wisdom in farm marketing, Mora says there is no single strategy that will make things work. "It is always an agglomeration of things that makes our farm successful. We try to get into the media. We have billboards. We try to keep up with our web site." Essentially, she relies on intuition. "We just go with our feelings and hope people will agree with what we are passionate about. Of course, we also try to offer what we feel people would like."

Although Mora is happy for the recent focus on buying local, she cautions that "I don't feel like the Buy Local movement has flooded into our driveway. It is a huge buzzword, but you still have to work hard to earn a dollar."

What she values about local is the direct connection with the consumer. "To me, local is about not being too regulated by the government."

"Directly Market Your Livestock" Ohio Signature Beef—meeting in Ottawa, April 21, 2011

Cattle farmers are also finding strong value in marketing their animals more directly. With the assistance of Ohio State University, CIFT, and the Ohio Farmers Union, a collaborative purchasing effort has been mounted that hopes to attract consumer loyalty with the brand name, "Ohio Signature Beef." The initiative has been patterned loosely after a similar collaborative in the western states.

The impetus for this marketing initiative was propelled by the decline of meat processing plants in Northwest Ohio. Some growers reported long delays to get access to a slaughter house; others said they have found no affordable way to get more than a small number of animals processed. Dan Frobose, formerly a beef marketing agent for OSU, points out that Ottawa County alone once had three meat processing plants; now it has none. A once-thriving industry has abandoned meat production since it was no longer cost effective to raise the animals.

Growers had a wealth of other complaints, Frobose adds, ranging from competition from larger producers, delivery charges, costs of workmen's comp, energy costs, and packaging costs.

By combining together under a single regional brand, says Dave Beck of CIFT, farmers hoped to gain a premium price for the highest quality production. They hoped this would offset some of the costs, but more importantly, give the farmers leverage enough that processing plants would accept their animals without delay and charge an affordable price. Ultimately, they hoped to increase production enough that some local processor would add capacity. By working under the label, farmers would have access to health and safety training so they could meet high standards set by wholesale buyers. They also hoped to reduce the paperwork involved in making applications to various officials.

Coordinating the vision The Northwest Ohio Food Council

Since 2006, area food leaders have been convening a persistent effort to assess the food needs of low-income residents of the region. Initial funding was provided by the USDA Community Food Projects Grants Program to Toledo Area Ministries, which partnered with the University of Toledo Urban Affairs Center. A total of twenty-three organizations were involved in the effort, which aims to "identify systemic changes which could help reduce the need for...[food] emergency help."

After the grant was terminated, coordination of the effort continued under Paula Ross of the Urban Affairs Center of the University of Toledo as a part of their USDA-funded efforts to create opportunities for local growers. A dormant working group, the Hunger Task Force, co-ordinated by Toledo Area Ministries, re-emerged and continues to focus on emergency food needs. A broad coalition is working to form a food council. The team researched other such initiatives, and concluded that for Toledo, a hybrid form of food policy council representing both community initiatives and government leaders would be the most appropriate.

Their initial goals are to foster a network of local food leaders that promotes collaboration in the Northwest Ohio food system, to support and promote programs covering a whole range of issues that impinge on food, and to promote policies that support a healthy food system.

As of this writing, the founding board members include:

- Paula Ross, University of Toledo Urban Affairs Center (facilitator)
- Steve Anthony, Toledo Area Ministries
- Elizabeth Bergman, Sage Organics and Toledo Farmers Market
- Sarah Bucher, Live Well of Greater Toledo and YMCA
- Stephanie Cihon, Promedica Health Systems
- Carol Contrada, Lucas County Commissioner
- Rebecca Liebes, Area Office on Aging

- Joyce Litten, Lourdes University
- Polly Peterson, Infinitely Green Consulting
- Karen Ranney Wilkins, Toledo Botanical Garden
- Lee Richter, Ohio State Extension

They council has established a web site at: http://foodcouncil419.org/

An Economic Overview of the Northwest Farm and Food Economy

While Northwest Ohio farmers sell \$1.35 billion of food commodities per year (1989-2009 average), they spend \$1.30 billion to raise them. This is an average gain of \$50 million each year—only \$3,667 per farm for each of the 13,634 farms in the region.

Yet in the course of making these narrow gains, farmers spend an estimated \$700 million each year buying essential farm inputs (chemical fertilizers, machinery, fuel and oil, etc.) that are sourced outside of Northwest Ohio. This creates a substantial drain on the region's economy, whether farms make money or not.

Yet even more pronounced is the fact that this farm region, in the fifteenth-most important farm state in the U.S., imports well over 90% of the food it eats. This means consumers spend at least \$3 billion each year buying food that was sourced outside the region.

Totaling up these three figures, it is clear that Northwest Ohio suffers an annual loss of \$3.6 billion. This is nearly double the value of all the food commodities currently grown by the region's farmers in an average year.

Overall, farm producers earned a surplus of \$1 billion by producing crops and livestock during the twenty-one years from 1989 to 2009. However, farm production costs exceeded cash receipts for six years of that period. Moreover, 39% of the region's farms and ranches lost money in 2007 (Ag Census). Overall, Northwest Ohio farmers and ranchers earned \$115 million less by selling products in 2009 than they earned in 1969 (in 2009 dollars).

Farmers and ranchers have to turn to other sources to make ends meet. They earn another \$68 million per year (21-year average for 1989-2009) of farm-related income — primarily custom work, and income from renting farm land. Federal farm support payments averaged \$111 million per year for the entire region for the same years. Indeed, these federal payments were the most important source of net farm income from 1998 to 2006.

Yet the most solid underpinning farm families have found is to hold off-farm jobs. Not only are these jobs typically a more steady source of income, without seasonal variation, than farming, most off-farm jobs are important for providing health care coverage for the entire family. As the interviews above show, this off-farm income has proven critically important.

These data strongly suggest that Northwest Ohio, and the U.S. as a whole, need to find more effective ways of supporting commodity producers, since this production is vital to the

nation's economy. Yet these tallies also show that the perceived costs of switching to more localized food production are not as great as imagined. Rather, making this shift represents an extraordinary economic opportunity.

Currently, only \$6.8 million of food products (0.5% of farm cash receipts and 0.2% of the region's consumer market) are sold by farmers directly to consumers. These direct sales have been rising rapidly, with the number of farms selling direct increasing 24% from 2002 to 2007, and sales rising by 10%. They are important, however, since farmers get full retail value for their food when they sell direct.

Northwest Ohio consumers spend \$3.3 billion buying food each year, including \$2 billion for home use. Most of this food is produced outside the region.

Moreover, the region's households have suffered a profound loss of net worth in recent years. The change in net assets (that is, assets minus liabilities) for all region households combined was a loss of \$3 billion in 2009 alone (BLS). There has not been a positive year for net assets since 2001. This places additional pressure on Northwest Ohio consumers trying to buy food.

Summarizing these data, the total loss to the region from the food economy alone is \$3.6 billion of potential wealth *each year*. This loss amounts to more than twice the value of all food commodities raised in the region.

If consumers dedicated themselves to purchasing food from local farms, they could make a substantial difference. If each Northwest Ohio resident bought \$5 of food each week from a local farm, this would generate \$345 million of new farm income—one third of the total cash receipts farmers now earn.

More detailed data can be found in the Appendix, page 29.

Strategic recommendations

Transforming the farm and food economy of Northwest Ohio will require taking many overlapping steps at the same time:

- 1. Invest in building solid relationships of trust among community members. Those regions with the strongest sense of social connection are the regions that will prove most resilient and comprehensive in their work.
- 2. Build citizen capacity to coordinate local food activity through the Northwest Ohio Food Council. Since so many complex steps need to be taken simultaneously, and since change is occurring so rapidly, effective coordination will be critical to making best use of local resources.
- 3. Compile comprehensive databases covering local health and environmental issues, economic conditions, business opportunities, and social conditions. Northwest Ohio should maintain effective data resources that inform civic discussion, strengthen strategic action, and help monitor success in creating systems change.
- 4. Create a "farm system" that grows new farmers. Effective efforts are already underway to engage inner-city youth in gardening, farming, and business management. If this were done in a systematic manner, as it is done to create new baseball players in major league "farm systems," Northwest Ohio will be able to feed itself.
- 5. The most effective public investments will be those that create efficiencies for local food trade. Building transportation networks that effectively convey locally produced food to Northwest Ohio consumers will be critical. Warehouses, root cellars, freezers, cold storage, and distribution facilities will be needed.
- 6. The future of Northwest Ohio will be fueled by green energy. The more the region produces the fuel it needs to power its own economic structures, the greater will be its competitive advantage as fossil fuel prices rise.
- 7. Create regional investment funds. Private investors are increasingly looking for choices to invest in local firms that may offer a lower return, but a greater sense of connection and resilience. Moreover, recycling interest payments so that they return to the region to continue to work for the benefit of the region will close one substantial financial leakage from Northwest Ohio.
- 8. Create a culture of food and fitness. People cannot live healthy lives without getting regular exercise, eating well, and creating a culture that treasures healthy lifestyles.

Appendix

Northwest Ohio (and Southeast Michigan) Local Farm & Food Economy

Highlights of a data compilation by Ken Meter, Crossroads Resource Center $(Minneapolis)^1$ for

University of Toledo Urban Affairs Center

This section was originally released July 15, 2011

Covers Defiance, Erie, Fulton, Henry, Huron, Lucas, Ottawa, Sandusky, Seneca, Williams & Wood Counties in Obio; and Hillside, Lenawee, & Monroe Counties in Michigan

Northwest Ohio Region (Bureau of Economic Analysis, 2008)

1,328,359 residents receive \$43 billion of income annually. Personal income rose 55% from 1969 to 2009, after dollars were adjusted for inflation. The largest source of personal income is transfer payments (from government programs such as pensions or unemployment compensation), which account for \$10.2 billion of personal income [see below]. Capital income (from interest, rent or dividends), ranks second, bringing in \$6.2 billion of personal income. Manufacturing jobs produce \$6 billion of personal income, but this is 33% less than in 2001. Government jobs rank fourth, with \$5 billion. Retail jobs rank fifth, with \$2 billion. Note that income from public sources makes up one third of all personal income in the region.

Income earned from transfer payments includes \$3.6 billion of retirement and disability insurance benefits; \$4 billion of medical benefits; \$958 million of income maintenance benefits; \$728 million of unemployment insurance; and \$151 million of veteran's benefits.

Government income includes \$332 million of income earned by federal workers and \$166 million earned by members of the military, and \$4.2 billion for state and local government workers.

Although population has increased 9% since 1969, there has been only limited public planning to assure a secure and stable food supply.

Issues affecting low-income residents of Northwest Ohio:

Over 360,000 residents (28%) 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 \$730 million each year buying food, including \$100 million of SNAP benefits (formerly known as food stamps) and additional millions in WIC coupons. The region's 13,634 farmers receive an annual combined total of \$111 million in subsidies (21-

¹ Nick Wojciak contributed considerable data compilation to this report.

year average, 1989-2009), mostly to raise crops such as corn or soybeans that are sold as commodities, not to feed Northwest Ohio residents. *Data from Federal Census of 2000, Bureau of Labor Statistics, & Bureau of Economic Analysis.*

8% percent of the region's households (more than 103,000 residents) earn less than \$10,000 per year. *Source: Federal Census of 2000.*

17% of adults aged 18-64 in Metro Toledo carry no health insurance. Source: Centers for Disease Control. Note: this data is only compiled for metro areas, or for each state as a whole.

Food-related health conditions:

20% of Metro Toledo residents reported in 2009 that they eat five or more servings of fruit or vegetables each day. 80% do not. This is a key indicator of health, since proper fruit and vegetable consumption has been connected to better health outcomes. *Source: Centers for Disease Control.*

49% of Metro Toledo adults report they have at least 30 minutes of moderate physical activity five or more days per week, or vigorous physical activity for 20 or more minutes three or more days per week. *Source: Centers for Disease Control.*

10% of Metro Toledo residents have been diagnosed with diabetes. *Source: Centers for Disease Control.* Medical costs for treating diabetes and related conditions in the metro region are estimated at \$768 million per year. Costs for the state of Ohio as a whole total \$6.6 billion. *Source: American Diabetes Association cost calculator.*

71% of Metro Toledo residents are overweight (40%) or obese (31%). Source: Centers for Disease Control.

The region's farms (Agricultural Census, 2007)

Agricultural Census data for 2007 were released February 4, 2009

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:

- 13,634 farms.
- The Northwest Ohio region had 4% more farms in 2007 than in 2002. Some of this may be due to census takers making better contact with small farms.
- 673 (5%) of these farms are 1,000 acres or more in size.
- 5,800 (43%) farms are less than 50 acres.
- Average farm size is 212 acres.
- The region has 2.9 million acres of land in farms.
- The Northwest Ohio region holds 2.4 million acres of harvested cropland.

- At least 24,306 of these acres are irrigated. Note that data for acreage of irrigated land in Defiance County are suppressed by the USDA in an effort to protect confidentiality, so this total is incomplete.
- Average value of land and buildings per farm was \$699,850.

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.

- The region's farmers sold \$1.4 billion of crops and livestock in 2007.
- Farm product sales increased by 66% from 2002 to 2007.
- \$1.1 billion of crops were sold (79% of sales).
- \$300 million of livestock and products were sold (21% of sales).
- 6,946 (51%) of the region's farms sold less than \$10,000 of products in 2007.
- Total sales from these small farms were \$12.2 million, 1% of the region's farm product sales.
- 2,576 (19%) of the region's farms sold more than \$100,000 of products.
- Total sales from these larger farms were \$1.2 billion, 86% of the region's farm product sales.
- 39% of the region's farms (5,355 of 13,635) reported net losses in 2007.
- 9,844 (72 %) of the Northwest Ohio region's farmers collected a combined total of \$60 million of federal subsidies in 2007.

Top farm products of Northwest Ohio Region (2007)

Product	\$ millions
Corn	422
Soybeans	365
Milk	160
Cattle	94
Vegetables	87

Production Expenses:

- Fertilizer and lime were the largest single expense for the Northwest Ohio region farmers in 2007, totaling \$169 million (15% of production expenses).
- Land and building rental totaled \$119 million (10%).
- Purchases of seeds also totaled \$119 million (10%).
- Farmers charged \$117 million to depreciation (10%).
- Feed purchases totaled \$102 million (9%).
- Hired farm labor totaled \$92 million (8%).
- Supplies, repairs, and maintenance cost farmers \$87 million (8%).

- Purchases of livestock and poultry totaled \$78 million (7%).
- Pesticides cost a total of \$72 million (6%).

Cattle and Dairy:

- 2,330 farms hold an inventory of 152,452 cattle.
- 123,536 cattle were sold by farmers in 2007 for total sales of \$94 million.
- 1,110 farms raise beef cows.
- 269 farms raise milk cows.
- 346 farms produced 536,000 tons of corn for silage on 31,755 acres.
- 2,977 farms produced 269,918 tons of forage crops (hay, etc.) on 85,204 acres.
- 1,830 farms sold at least \$8.4 million of forage in 2007. Note that data for forage sales in Hillsdale, Lenawee, Williams, and Wood counties are suppressed by the USDA in an effort to protect confidentiality, so this total is incomplete.

Other livestock & animal products:

- 497 farms hold an inventory of 184,000 hogs and pigs.
- 611 farms sold 503,000 hogs and pigs in 2007, worth at least \$53 million. Note that data for sales of hogs and pigs in Wood County are suppressed by the USDA in an effort to protect confidentiality, so this total is incomplete.
- 500 farms hold an inventory of 16,109 sheep and lambs.
- 650 farms sold at least \$1.4 million worth of sheep, goats, and lambs in 2007. Note that data for sales of sheep, goats, and lambs in Henry County is suppressed by the USDA in an effort to protect confidentiality, so this total is incomplete.
- 636 farms hold an inventory of at least 61,000 laying hens. Note that data for inventory of laying hens in Williams and Wood counties are suppressed by the USDA in an effort to protect confidentiality, so this total is incomplete.
- 138 farms raise broiler chickens.
- 19 farms engage in Aquaculture.
- 354 farms raise horses and ponies.

Grains, oil seeds, and edible beans:

- 7,213 farms produce \$875 million of grains, oil seeds, and edible beans.
- This includes 5,536 farms producing 133 million bushels of corn on 915,000 acres, worth \$422 million.
- The average price per bushel of corn is \$3.17.
- 6,205 farms produce 46 million bushels of soybeans on 1 million acres worth \$365 million.
- The average price per bushel of soybeans is \$7.90.
- The total value of corn and soybeans amounted to 56% of all farm product sales in 2007

Vegetable & Melons (some farmers state that Ag Census data does not fully represent vegetable production):

- 455 farms worked 30,000 acres to produce \$87 million worth vegetables.
- This represents an 8% increase in the number of farms (from 427) over 2002 levels.

Fruits (some farmers state that Ag Census data does not fully represent fruit production):

- 208 farms in the region that hold at least 2,657 acres of orchards. Note that data for acreage of orchards in Williams and Wood counties are suppressed by the USDA in an effort to protect confidentiality, so this total is incomplete.
- 239 farms sold at least \$8.6 million of fruits, nuts and berries. Note that data for sales fruits, nuts and berries in Fulton, Henry, Ottawa, Williams, and Wood counties are suppressed by the USDA in an effort to protect confidentiality, so this total is incomplete.

Nursery and Greenhouse plants:

- 289 farms sold at least \$71 million ornamentals in 2007. Note that data for sales of nursery and greenhouse plants in Hillsdale County are suppressed by the USDA in an effort to protect confidentiality, so this total is incomplete.
- This represents a decline of 18% in the number of farms selling ornamentals (from 354) since 2002.
- 79 farms sold at least \$433,000 of Christmas trees. Note that data for sales of Christmas trees in Lenawee, Fulton, Henry, Ottawa, and Williams counties are suppressed by the USDA in an effort to protect confidentiality, so this total is incomplete.

Direct and organic sales:

- 1,015 farms sell \$6.8 million of food products directly to consumers. This is a 24% increase of amount of farms (818 in 2002) selling direct over 2002 and a 10% increase in direct sales over 2002 sales of \$6.2 million.
- This amounts to 0.5% of farms sales, more than the national average of 0.4%.
- Lucas County leads the region in direct sales, with \$1.1 million. Erie County is a close second, with \$1 million.
- 71 farms in the region sold at least \$4.7 million of organic products. Note that data for sales of organic food products in Hillsdale, Defiance, Erie, Fulton, Huron, and Wood counties are suppressed by the USDA in an effort to protect confidentiality, so this total is incomplete.
- 73 farms market through community supported agriculture (CSA).
- 392 farms produce and sell value-added products.

Conservation practices:

- 5,862 farms use conservation methods such as no-till, limited tilling, filtering field runoff to remove chemicals, fencing animals to prevent them from entering streams, etc.
- 938 farms practice rotational or management intensive grazing.
- 58 farms generated energy or electricity on the farm.

Small family farms:	Farms	Percent	Acres	Percent
Limited-resource	1,515	11%	98,872	3%
Retirement	2,761	20%	286,095	10%
Residential/lifestyle	5,541	41%	483,409	17%
Farming occupation/lower sales	1,375	10%	151,483	5%
Farming occupation/higher sales	691	5%	306,727	11%
Large family farms	651	5%	531,133	18%
Very large family farms	582	4%	913,717	32%
Nonfamily farms	518	4%	124,541	4%
Totals	13,634		2,895,977	

Limited-resource farms and others in Northwest Ohio (Census of Agriculture, 2007)

Definitions of terms used in the Census of Agriculture 2007:

Limited-resource farms have market value of agricultural products sold gross sales of less than \$100,000, and total principal operator household income of less than \$20,000.

Retirement farms have market value of agricultural products sold of less than \$250,000, and a principal operator who reports being retired.

Residential/lifestyle farms have market value of agricultural products sold of less than \$250,000, and a principal operator who reports his/her primary occupation as other than farming.

Farming occupation/lower-sales farms have market value of agricultural products sold of less than \$100,000, and a principal operator who reports farming as his/her primary occupation.

Farming occupation/higher-sales farms have market value of agricultural products sold of between \$100,000 and \$249,999, and a principal operator who reports farming as his/her primary occupation.

Large family farms have market value of agricultural products sold between \$250,000 and \$499,999.

Very large family farms have market value of agricultural products sold of \$500,000 or more.

Nonfamily farms are farms organized as nonfamily corporations, as well as farms operated by hired manager.

Employment in food-related businesses in Metro Toledo:

Source: U.S. Federal Census, County Business Patterns (2009)

Metro Toledo	Employees 262,624	\$1,000s Payroll 9,490,101	Establishments 14,902
Support of Agriculture	153	5,882	8
Food manufacturing	2,538	102,934	50
Grocery & Related Wholesale	1,577	57,619	45
Farm Product Raw Material	392	18,691	29
Beer, Wine, & Alcohol	341	16,031	7
Farm Supplies, Wholesale	313	13,983	19
Food & Beverage Stores	5,226	111,933	316
Food Services & Drinking	25,509	286,562	1,421
Total	36,049	613,635	1,895
Percent of Metro area total	14%	6%	13%

Note: this chart does not show six food warehousing businesses whose employment and payroll totals were suppressed to protect confidentiality. Nor is this a complete view of food-related trade in the metro area: for example, a warehouse or distributor that primarily handles nonfood items would not be included in these totals, even if food were part of their business.

The geography covered in this table is the Metropolitan Statistical Area for Toledo, not the entire Northwest Ohio region.

County and State Highlights

Defiance County highlights (Agriculture Census 2007):

- 1,141 farms, 16% more than in 2002.
- Defiance County has 233,213 acres of land in farms.
- Farmers sold \$87 million of products in 2007.
- \$64.4 million (74%) of these sales were crops.
- \$22.6 million (26%) of these sales was livestock.
- The most prevalent farm size is 50 to 179 acres with 398 farms (35%) in this category.
- The next most prevalent is 10 to 49 acres with 350 (31%) farms.
- 52 farms (5%) are 1,000 acres or more.
- 439 farms (38%) are less than 50 acres.
- 600 farms (53%) sold less than \$10,000 in farm products.
- 190 farms (17%) sold more than \$100,000 in farm products.
- 31 farms sold \$135,000 of food directly to consumers. This is a 22% decrease in the number of farms selling direct (40 in 2002) and a 101% increase in direct sales over 2002 sales of \$67,000.
- Direct sales are 0.2% of farm product sales, one half the national average of 0.4%.
- Defiance County ranks 9th in Ohio for acreage of soy beans, with 105,500.

Erie County highlights (Agriculture Census 2007):

- 403 farms, 3% more than in 2002.
- Erie County has 84,085 acres of land in farms.
- Farmers sold \$40.4 million of products in 2007.
- \$35.2 million (87%) of these sales were crops.
- \$5.2 million (13%) of these sales was livestock.
- The most prevalent farm size is 10 to 49 acres with 140 farms (35%) in this category.
- The next most prevalent is 50 to 179 acres with 108 (27%) farms.
- 22 farms (5%) are 1,000 acres or more.
- 193 farms (48%) are less than 50 acres.
- 178 farms (44%) sold less than \$10,000 in farm products.
- 85 farms (21%) sold more than \$100,000 in farm products.
- 70 farms sold \$1 million of food directly to consumers. This is a 56% increase in the number of farms selling direct (45 in 2002) and a 32% increase in direct sales over 2002 sales of \$769,000.
- Direct sales are 2.5% of farm product sales, more than 6 times the national average of 0.4%.
- The county ranks 3rd in Ohio for sales of fruits, nuts, and berries, with \$2 million.
- Erie County ranks 4th in Ohio for acreage of popcorn, with 2,178.
- The county ranks 5th for aquaculture sales in the state, but *sales figures were not released by the USDA in an effort to protect confidentiality.*

• Erie County ranks 9th in Ohio for inventory of pullets for laying flock replacement, but *inventory figures were not released by the USDA in an effort to protect confidentiality.*

Fulton County highlights (Agriculture Census 2007):

- 763 farms, 3% less than in 2002.
- Fulton County has 183,913 acres of land in farms.
- Farmers sold \$134 million of products in 2007.
- \$78 million (58%) of these sales were crops.
- \$56 million (42%) of these sales was livestock.
- The most prevalent farm size is 10 to 49 acres with 230 farms (30%) in this category.
- The next most prevalent is 50 to 179 acres with 195 (26%) farms.
- 48 farms (6%) are 1,000 acres or more.
- 335 farms (44%) are less than 50 acres.
- 316 farms (41%) sold less than \$10,000 in farm products.
- 223 farms (29%) sold more than \$100,000 in farm products.
- 63 farms sold \$230,000 of food directly to consumers. This is a 6% decrease in the number of farms selling direct (67 in 2002) and a 28% decrease in direct sales since 2002 sales of \$319,000.
- Direct sales are 0.2% of farm product sales, one half the national average of 0.4%.
- Fulton County ranks 2nd in Ohio for sales of cattle and calves, with \$36 million.
- The county ranks 6th in Ohio for inventory of cattle and calves, with 31,513.

Henry County highlights (Agriculture Census 2007):

- 881 farms, 4% more than in 2002.
- Henry County has 232,238 acres of land in farms.
- Farmers sold \$107 million of products in 2007.
- \$93 million (87%) of these sales were crops.
- \$14 million (13%) of these sales was livestock.
- The most prevalent farm size is 50 to 179 acres with 253 farms (29%) in this category.
- The next most prevalent is 10 to 49 acres with 228 (26%) farms.
- 53 farms (6%) are 1,000 acres or more.
- 327 farms (37%) are less than 50 acres.
- 293 farms (33%) sold less than \$10,000 in farm products.
- 232 farms (26%) sold more than \$100,000 in farm products.
- 51 farms sold \$201,000 of food directly to consumers. This is a 410% increase in the number of farms selling direct (10 in 2002) and a 78% increase in direct sales over 2002 sales of \$113,000.
- Direct sales are 0.2% of farm product sales, one half the national average of 0.4%.
- Henry County ranks 2^{nd} in the state for acreage of vegetables, with 3,531.
- The county ranks 4th in Ohio for sales of vegetables, with \$7 million.

- Henry County ranks 5th in the state for acreage of wheat, with 31,550.
- The county ranks 7th in Ohio for sales of grains, oilseeds, dry beans and peas, with \$85 million.
- Henry County ranks 9th in the state for crop sales.

Hillsdale County, Michigan, highlights (Agriculture Census 2007):

- 1,674 farms, 11% more than in 2002.
- Hillsdale County has 269,916 acres of land in farms.
- Farmers sold \$121 million of products in 2007.
- \$66 million (55%) of these sales were crops.
- \$55 million (45%) of these sales was livestock.
- The most prevalent farm size is 50 to 179 acres with 683 farms (41%) in this category.
- The next most prevalent is 10 to 49 acres with 617 (37%) farms.
- 59 farms (4%) are 1,000 acres or more.
- 723 farms (43%) are less than 50 acres.
- 1,194 farms (71%) sold less than \$10,000 in farm products.
- 160 farms (10%) sold more than \$100,000 in farm products.
- 137 farms sold \$746,000 of food directly to consumers. This is a 52% increase in the number of farms selling direct (90 in 2002) and a 141% increase in direct sales over 2002 sales of \$309.
- Direct sales are 0.6% of farm product sales, more than the national average of 0.4%.
- Hillsdale County ranks 4th in Michigan for inventory of sheep and lambs, with 3,537.
- The county ranks 6th in Michigan for sales of sheep, goats, and their products, with \$266,000.
- Hillsdale County ranks 9th in the state for acreage of soybeans, with 63,716.

Huron County highlights (Agriculture Census 2007):

- 793 farms, 8% less than in 2002.
- Huron County has 219,369 acres of land in farms.
- Farmers sold \$113 million of products in 2007.
- \$94.4 million (84%) of these sales were crops.
- \$19.6 million (16%) of these sales was livestock.
- The most prevalent farm size is 10 to 49 acres with 260 farms (33%) in this category.
- The next most prevalent is 50 to 179 acres with 234 (30%) farms.
- 51 farms (6%) are 1,000 acres or more.
- 343 farms (43%) are less than 50 acres.
- 414 farms (52%) sold less than \$10,000 in farm products.
- 184 farms (23%) sold more than \$100,000 in farm products.
- 65 farms sold \$184,000 of food directly to consumers. This is a 13% decrease in the number of farms selling direct (75 in 2002) and a 72% decrease in direct sales since 2002 sales of \$648,000.

- Direct sales are 0.2% of farm product sales, one half the national average of 0.4%.
- Huron County ranks 1st in Ohio for sales of vegetables, with \$23 million.
- The county ranks 1st in Ohio for acreage of vegetables, with 4,054.
- Huron County ranks 7th in the state for crop sales.
- The county ranks 8th in Ohio for inventory of broilers, with 245,000.
- Huron County ranks 8th in the state for acreage of wheat, with 22,470.

Lenawee County, Michigan, highlights (Agriculture Census 2007):

- 1,686 farms, 17% more than in 2002.
- Lenawee County has 348,611 acres of land in farms.
- Farmers sold \$161 million of products in 2007.
- \$108 million (67%) of these sales were crops.
- \$53 million (33%) of these sales was livestock.
- The most prevalent farm size is 10 to 49 acres with 614 farms (36%) in this category.
- The next most prevalent is 50 to 179 acres with 582 (35%) farms.
- 84 farms (5%) are 1,000 acres or more.
- 723 farms (43%) are less than 50 acres.
- 1,036 farms (61%) sold less than \$10,000 in farm products.
- 262 farms (16%) sold more than \$100,000 in farm products.
- 113 farms sold \$723,000 of food directly to consumers. This is a 40% increase in the number of farms selling direct (81 in 2002) and a 110% increase in direct sales over 2002 sales of \$345,000.
- Direct sales are 0.4% of farm product sales, the same as the national average of 0.4%.
- Lenawee County ranks 2nd in Michigan for sales of grains, oilseeds, and dry beans and peas, with \$95 million.
- The county ranks 2^{nd} in Michigan for acreage of soybeans, with 102,731.
- Lenawee County ranks 2nd in the state for acreage of corn for grain, with 100,266.
- The county ranks 4th in Michigan for acreage of wheat, with 31,416.
- The county ranks 9th in Michigan for acreage of corn for silage, with 10,017.

Lucas County highlights (Agriculture Census 2007):

- 372 farms, 8% less than in 2002.
- Lucas County has 62,906 acres of land in farms.
- Farmers sold \$47.9 million of products in 2007.
- \$46.3 million (97%) of these sales were crops.
- \$1.6 million (3%) of these sales was livestock.
- The most prevalent farm size is 10 to 49 acres with 153 farms (41%) in this category.
- The next most prevalent is 1 to 9 acres with 75 (20%) farms.
- 17 farms (5%) are 1,000 acres or more.
- 228 farms (61%) are less than 50 acres.

- 181 farms (49%) sold less than \$10,000 in farm products.
- 78 farms (21%) sold more than \$100,000 in farm products.
- 54 farms sold \$1.1 million of food directly to consumers. This is a 46% increase in the number of farms selling direct (37 in 2002) and a 101% increase in direct sales over 2002 sales of \$529,000.
- Direct sales are 2.2% of farm product sales, more than 5 times the national average of 0.4%.
- Lucas County ranks 4th in Ohio for acreage of vegetables, with 2,260.
- The county ranks 6th in Ohio for sales of vegetables, with \$5.3 million.
- Lucas County ranks 7th in the state for sales of ornamentals, with \$17 million.

Monroe County, Michigan, highlights (Agriculture Census 2007):

- 1,119 farms, 5% less than in 2002.
- Monroe County has 207,812 acres of land in farms.
- Farmers sold \$130 million of products in 2007.
- \$122 million (94%) of these sales were crops.
- \$8 million (6%) of these sales was livestock.
- The most prevalent farm size is 10 to 49 acres with 445 farms (40%) in this category.
- The next most prevalent is 50 to 179 acres with 275 (25%) farms.
- 51 farms (5%) are 1,000 acres or more.
- 586 farms (52%) are less than 50 acres.
- 544 farms (49%) sold less than \$10,000 in farm products.
- 210 farms (19%) sold more than \$100,000 in farm products.
- 114 farms sold \$628,000 of food directly to consumers. This is a 2% decrease in the number of farms selling direct (116 in 2002) and a 51% decrease in direct sales since 2002 sales of \$1.3 million.
- Direct sales are 0.5% of farm product sales, more than the national average of 0.4%.
- Monroe County ranks 1st in Michigan for aquaculture sales, with \$1.4 million.
- The county ranks 4th in Michigan for sales of vegetables, with \$19 million.
- Monroe County ranks 5th in the state for sales of ornamentals, with \$35 million.
- The county ranks 6^{th} in the state for acreage of soybeans, with 70,797.
- Monroe County ranks 7th in Michigan for acreage of wheat, with 21,122.
- The county ranks 8th in Michigan for acreage of vegetables, with 6,707.
- Monroe County ranks 8th in the state for sales of grains, oilseeds, dry edible beans and peas, with \$67 million.
- The county ranks 9th in Michigan for crop sales.
- Monroe County ranks 9th in Michigan for inventory of pheasants, but *inventory figures* were not released by the USDA in an effort to protect confidentiality.

Ottawa County highlights (Agriculture Census 2007):

- 589 farms, 14% more than in 2002.
- Ottawa County has 115,145 acres of land in farms.
- Farmers sold \$46.1 million of products in 2007.
- \$43.9 million (95%) of these sales were crops.
- \$2.2 million (5%) of these sales was livestock.
- The most prevalent farm size is 10 to 49 acres with 202 farms (34%) in this category.
- The next most prevalent is 50 to 179 acres with 170 (29%) farms.
- 19 farms (3%) are 1,000 acres or more.
- 256 farms (43%) are less than 50 acres.
- 254 farms (43%) sold less than \$10,000 in farm products.
- 113 farms (19%) sold more than \$100,000 in farm products.
- 66 farms sold \$472,000 of food directly to consumers. This is a 50% increase in the number of farms selling direct (44 in 2002) and a 60% increase in direct sales over 2002 sales of \$295,000.
- Direct sales are 1% of farm product sales, more than double the national average of 0.4%.
- Ottawa County ranks 10th in Ohio for acreage of vegetables, with 1,412.

Sandusky County highlights (Agriculture Census 2007):

- 781 farms, 3% less than in 2002.
- Sandusky County has 181,337 acres of land in farms.
- Farmers sold \$79.3 million of products in 2007.
- \$74.1 million (93%) of these sales were crops.
- \$5.2 million (7%) of these sales was livestock.
- The most prevalent farm size is 10 to 49 acres with 227 farms (29%) in this category.
- The next most prevalent is 50 to 179 acres with 213 (27%) farms.
- 45 farms (6%) are 1,000 acres or more.
- 334 farms (43%) are less than 50 acres.
- 298 farms (38%) sold less than \$10,000 in farm products.
- 186 farms (24%) sold more than \$100,000 in farm products.
- 67 farms sold \$631,000 of food directly to consumers. This is a 31% increase in the number of farms selling direct (51 in 2002) and a 24% decrease in direct sales since 2002 sales of \$829,000.
- Direct sales are 0.8% of farm product sales, double the national average of 0.4%.
- Sandusky County ranks 2nd in Ohio for sales of vegetables, with \$8.2 million.
- The county ranks 3rd in the Ohio for acreage of vegetables, with 2,586.
- Sandusky County ranks 4th in the state for inventory of pheasants, with 3,250.
- The county ranks 7th in the state for sales of fruits, nuts and berries, with \$1.6 million.

Seneca County highlights (Agriculture Census 2007):

- 1,147 farms, 3% less than in 2002.
- Seneca County has 269,371 acres of land in farms.
- Farmers sold \$107 million of products in 2007.
- \$84 million (79%) of these sales were crops.
- \$23 million (21%) of these sales was livestock.
- The most prevalent farm size is 50 to 179 acres with 428 farms (37%) in this category.
- The next most prevalent is 10 to 49 acres with 275 (24%) farms.
- 56 farms (5%) are 1,000 acres or more.
- 369 farms (32%) are less than 50 acres.
- 440 farms (38%) sold less than \$10,000 in farm products.
- 246 farms (21%) sold more than \$100,000 in farm products.
- 67 farms sold \$286,000 of food directly to consumers. This is a 22% increase in the number of farms selling direct (55 in 2002) and a 7% increase in direct sales over 2002 sales of \$268,000.
- Direct sales are 0.3% of farm product sales, less than the national average of 0.4%.
- Seneca County ranks 1st in Ohio for acreage of wheat, with 37,516.
- The county ranks 6th in Ohio for colonies of bees, with 800.
- Seneca County ranks 7th in the state for acreage of oats for grain, with 1,889.
- The county ranks 10th in Ohio for inventory of sheep and lambs, with 2,770.

Williams County highlights (Agriculture Census 2007):

- 1,116 farms, 2% more than in 2002.
- Williams County has 212,509 acres of land in farms.
- Farmers sold \$103 million of products in 2007.
- \$55 million (53%) of these sales were crops.
- \$48 million (47%) of these sales was livestock.
- The most prevalent farm size is 50 to 179 acres with 426 farms (38%) in this category.
- The next most prevalent is 10 to 49 acres with 371 (33%) farms.
- 39 farms (3%) are 1,000 acres or more.
- 437 farms (39%) are less than 50 acres.
- 710 farms (64%) sold less than \$10,000 in farm products.
- 153 farms (14%) sold more than \$100,000 in farm products.
- 58 farms sold \$134,000 of food directly to consumers. This is a 38% increase in the number of farms selling direct (42 in 2002) and a 1% decrease in direct sales since 2002 sales of \$136,000.
- Direct sales are 0.1% of farm product sales, one quarter the national average of 0.4%.
- Williams County ranks 7th in Ohio for milk production, selling \$30 million.

Wood County highlights (Agriculture Census 2007):

- 1,169 farms, 10% more than in 2002.
- Wood County has 275,552 acres of land in farms.
- Farmers sold \$125 million of products in 2007.
- \$109 million (87%) of these sales were crops.
- \$16 million (13%) of these sales was livestock.
- The most prevalent farm size is 10 to 49 acres with 408 farms (35%) in this category.
- The next most prevalent is 50 to 179 acres with 318 (27%) farms.
- 77 farms (7%) are 1,000 acres or more.
- 507 farms (43%) are less than 50 acres.
- 488 farms (42%) sold less than \$10,000 in farm products.
- 254 farms (22%) sold more than \$100,000 in farm products.
- 59 farms sold \$335,000 of food directly to consumers. This is a 9% decrease in the number of farms selling direct (65 in 2002) and a 16% increase in direct sales over 2002 sales of \$290,000.
- Direct sales are 0.3% of farm product sales, less than the national average of 0.4%.
- Wood County ranks 1st in Ohio for inventory of ducks, but *inventory figures were not* released by the USDA in an effort to protect confidentiality.
- The county ranks 2nd in the state for sales of grains, oilseeds, dry edible beans and peas, with \$97 million.
- Wood County ranks 2nd in Ohio for acreage of wheat, with 37,337.
- The county ranks 3rd in Ohio for crop sales.
- Wood County ranks 5th in Ohio for acreage of corn for grain, with 93,768.
- The county ranks 6th in Ohio for acreage of popcorn, with 1,700.
- Wood County ranks 7th in the state for sale of vegetables, with \$4.6 million.
- The county ranks 8th in the state for acreage of soybeans, with 107,698.

State of Ohio highlights (Agriculture Census 2007):

- 75,861 farms, 2% less than in 2002.
- Ohio has 14 million acres of land in farms.
- Farmers sold \$7.1 billion of products in 2007.
- \$4.1 billion (58%) of these sales were crops.
- \$3 billion (42%) of these sales was livestock.
- The most prevalent farm size is 50 to 159 acres with 25,809 farms (34%) in this category.
- The next most prevalent is 10 to 49 acres with 24,361 (32%) farms.
- 2,714 farms (4%) are 1,000 acres or more.
- 32,128 farms (42%) are less than 50 acres.
- 42,706 farms (56%) sold less than \$10,000 in farm products.
- 12,044 farms (16%) sold more than \$100,000 in farm products.
- 6,827 farms sold \$54 million of food directly to consumers. This is a 10% increase in the number of farms selling direct (6,205 in 2002) and a 46% increase in direct sales from 2002 sales of \$37 million.
- Direct sales are 0.8% of farm product sales, double the national average of 0.4%.
- If direct food sales made up a single commodity, the value of these sales would outrank the state's 13th most important product, sweet corn.
- 687 farms farm organically, with a total of 42,088 acres of harvested cropland, and 9,437 acres of pastureland.
- 14,836 acres on 426 farms are undergoing organic conversion.
- 629 farms in Ohio sold \$25.7 million of organic food products, including \$12.2 million of crops (this may include ornamental and greenhouse crops), \$1.5 million of livestock and poultry, and \$12 million of products from livestock and poultry (such as milk or eggs).
- 424 farms market through community supported agriculture (CSA).
- 2,899 farms produce value-added products.
- 27,166 farms use conservation methods such as no-till, limited tilling, filtering field runoff to remove chemicals, fencing animals to prevent them from entering streams, etc.
- 11,335 farms practice rotational management of intensive grazing.
- 569 farms generate energy or electricity on the farms.
- Ohio is ranks 2^{nd} in the U.S. for inventory of laying hens, with 27 million.
- The state ranks 6th in the country for acreage of soybeans, with 4.2 million.
- Ohio ranks 6th in the country for inventory of pullets for laying flock replacement, with 6.8 million.
- The state ranks 8th in the U.S. for sales of grains, oilseeds, and dry beans and peas, with \$3.4 million.
- Ohio ranks 8th in the country for sales of ornamentals, with \$445 million.
- The state ranks 8th in the U.S. for sales of hogs and pigs, with \$572 million.
- Ohio ranks 8th in the U.S. for acreage of corn for grain, with 3.6 million.
- The state ranks 10th in the U.S. for sales of tobacco, with \$10 million.
- Ohio ranks 10th in the country for inventory of hogs and pigs, with 1.8 million.

Ohio's top farm products in 2009 (Economic Research Service)

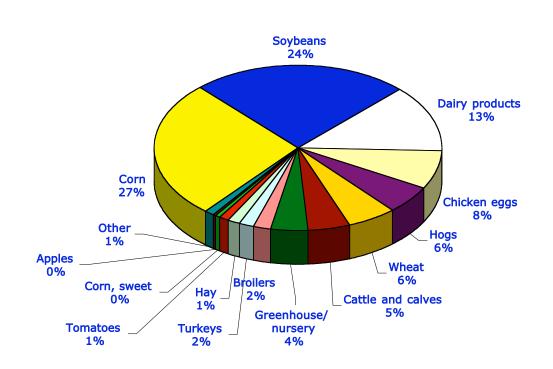
Due to data suppression at the local level, such a chart cannot reasonably be constructed for the Northwest Ohio region itself. The data in the table and pie chart below are for Ohio as a whole. See chart on next page.

Product		\$ millions
1	Corn, field	2,071
2	Soybeans	1,874
3	Dairy products	1,005
4	Chicken eggs	585
5	Hogs	435
6	Wheat	424
7	Cattle and calves	357
8	Greenhouse/nursery	325
9	Broilers	148
10	Turkeys	134
11	Hay	108
12	Tomatoes	79
13	Corn, sweet	36
14	Apples	32
15	Other	83

Note also that at \$54 million, direct sales from farmers to consumers amount to more than the value of the 13th-ranking product, sweet corn.

Ohio's top farm products in 2009 (Economic Research Service)

See table on previous page

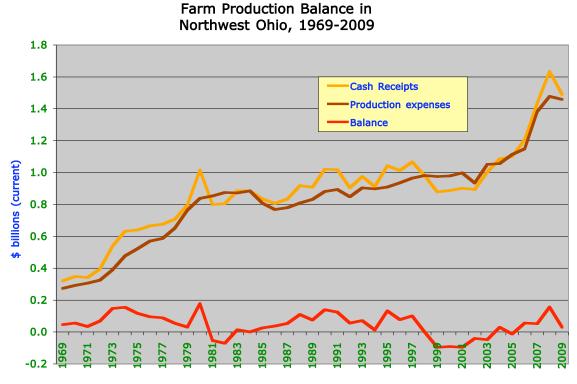


Top Farm Products in Ohio, 2008

Source: USDA Economic Research Service

State of Michigan highlights (Agriculture Census 2007):

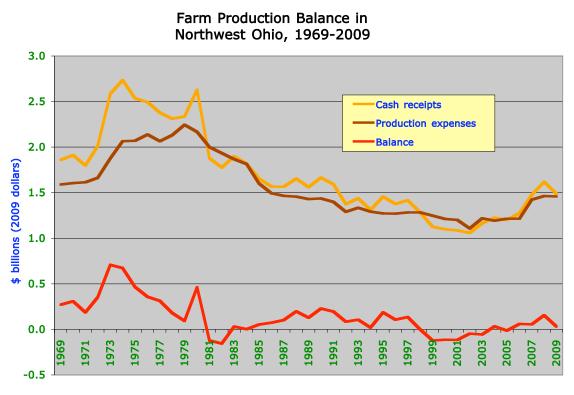
- 56,014 farms, 5% more than in 2002.
- Michigan has 10 million acres of land in farms.
- Farmers sold \$5.7 billion of products in 2007.
- \$3.3 billion (58%) of these sales were crops.
- \$2.4 billion (42%) of these sales was livestock.
- The most prevalent farm size is 10 to 49 acres with 20,726 farms (37%) in this category.
- The next most prevalent is 50 to 179 acres with 19,206 (34%) farms.
- 1,969 farms (4%) are 1,000 acres or more.
- 24,945 farms (45%) are less than 50 acres.
- 34,671 farms (62%) sold less than \$10,000 in farm products.
- 7,966 farms (14%) sold more than \$100,000 in farm products.
- 6,373 farms sold \$59 million of food directly to consumers. This is a 29% increase in the number of farms selling direct (4,925 in 2002) and a 58% increase in direct sales from 2002 sales of \$37 million.
- Direct sales are 1% of farm product sales, more than double the national average of 0.4%.
- If direct food sales made up a single commodity, the value of these sales would outrank the state's 16th most important product, Christmas trees.
- 632 farms farm organically, with a total of 40,830 acres of harvested cropland, and 4,709 acres of pastureland.
- 13,659 acres on 477 farms are undergoing organic conversion.
- 582 farms in Michigan sold \$32 million of organic food products, including \$18 million of crops (this may include ornamental and greenhouse crops), \$4 million of livestock and poultry, and \$10 million of products from livestock and poultry (such as milk or eggs).
- 463 farms market through community supported agriculture (CSA).
- 2,194 farms produce value-added products.
- 15,220 farms use conservation methods such as no-till, limited tilling, filtering field runoff to remove chemicals, fencing animals to prevent them from entering streams, etc.
- 7,151 farms practice rotational management of intensive grazing.
- 147 farms generate energy or electricity on the farms.
- Michigan ranks 3rd in the country for sales of Christmas trees, with \$29 million.
- The state ranks 5th in the U.S. for sales of fruits, nuts, and berries, with \$392 million.
- Michigan ranks 6th in the U.S. for sales of ornamentals, with \$623 million.
- The state ranks 7th in the country for milk production, selling \$1.3 billion.
- Michigan ranks 7th in the country for acreage of corn for silage, with 297,000.
- The state ranks 9th in the country for sales of vegetables, with \$347 million.



Source: Bureau of Economic Analysis. Data is in dollars as valued in each year shown.

Forty years of commodity production for Northwest Ohio farmers shows steady growth in markets, but equally steady growth in production expenses, so the net cash income from farming (called the farm production balance on the chart) has improved little, even though farmers have doubled productivity over these four decades.

The following chart adjusts this data for increases in the cost of living.

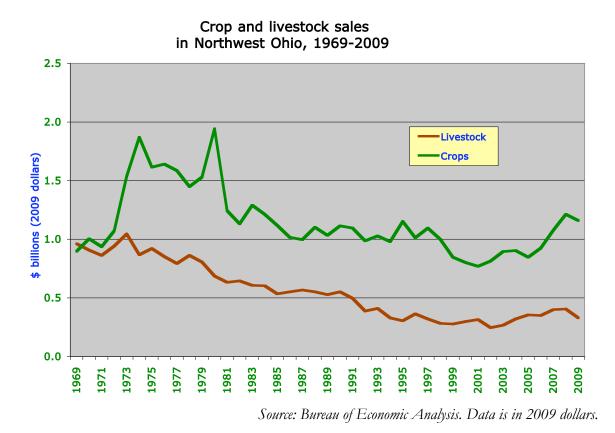


Source: Bureau of Economic Analysis. Data is in 2009 dollars.

Once adjusted for inflation, however, the same data shows strikingly different patterns. Looking first at the maroon line, it becomes clear that farmers have worked diligently to reduce production costs over this forty-year period, but the cash receipts have fallen even faster. This suggests that farmers do not know of other ways to reduce their production costs. This downward trend also reflects the fact that many farmers have simply stopped farming.

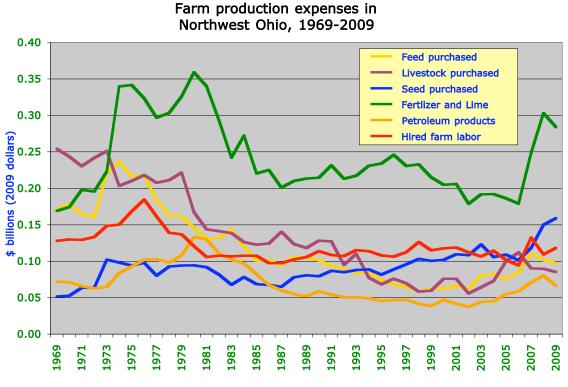
Since dollars earned in the early years of this chart are worth nearly six times as much as dollars shown in later years, it becomes clear that farmers earn less money, once dollars are adjusted for inflation, today than they did four decades before. This, too, reflects farmers going out of business.

Overall, farmers earned \$115 million less by selling products in 2009 than they earned in 1969 (in 2009 dollars).



This chart breaks the orange line from the earlier chart into income from selling crops (green line) and livestock (maroon line). Data have been adjusted for inflation. This shows that despite remarkable growth in production, and more sophisticated technology, farmers earn no more selling crops today than they did four decades ago, and they earn less than half as much selling livestock now as they did in 1969.

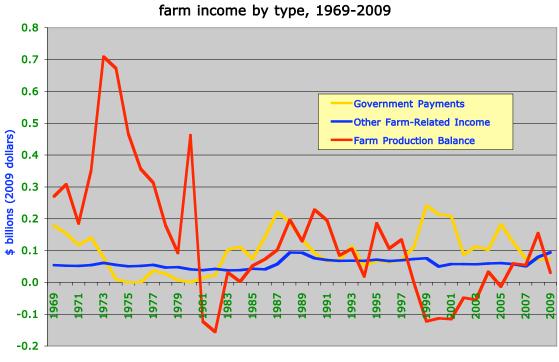
Surely one of the best ways to strengthen the region's farm economy would be to ensure that livestock and milk producers get paid adequately for their production.



Source: Bureau of Economic Analysis. Data is in 2009 dollars.

This chart breaks the maroon line from the first two charts into the main categories of expenses farmers take on to produce crops and livestock. Note that the largest single expense tracked here are chemical and fertilizer costs, which total about \$300 million. The chart also shows that farmers abandoned livestock production, since both feed costs and livestock purchases declined. Labor costs have actually decreased. Costs for buying seed, which increasingly are owned by corporate entities, are rising steadily.

Estimates by the author based on this data show that farmers spend more than \$700 million each year buying farm inputs that are sourced outside the regeion.



Northwest Ohio

Source: Bureau of Economic Analysis. Data is in 2009 dollars.

This chart compares three sources of net farm income for farmers: crop and livestock production (red line; this is the same line seen on other charts, but looks more spiked because the scale has changed); farm-related income (blue line, such as cash rental for farmland); and government payments (orange line). Note that for many of the most recent years, government payments have been the number one source of net farm income. Offfarm jobs also play a strong role, but are not measured in these data sets.

Balance of Cash Receipts and Production Costs (BEA):

Northwest Ohio farmers sell \$1.35 billion of food commodities per year (1989-2009 average), spending \$1.30 billion to raise them, for an average gain of \$50 million each year. Note that these sales figures compiled by the BEA may differ from cash receipts recorded by the USDA Agriculture Census (above).

Overall, farm producers earned a surplus of \$1 billion by producing crops and livestock during the twenty-one years from 1989 to 2009. However, farm production costs exceeded cash receipts for six years of that period. Moreover, 39% of the region's farms and ranches lost money in 2007 (Ag Census). Overall, Northwest Ohio farmers and ranchers earned \$115 million less by selling products in 2009 than they earned in 1969 (in 2009 dollars).

Farmers and ranchers earn another \$68 million per year of farm-related income — primarily custom work, and rental income (21-year average for 1989-2009). Federal farm support payments averaged \$111 million per year for the entire region for the same years. Indeed, they were the most important source of net farm income from 1998 to 2006.

The region's consumers:

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

Northwest Ohio consumers spend \$3.3 billion buying food each year, including \$2 billion for home use. Most of this food is produced outside the region. Only \$6.8 million of food products (0.5% of farm cash receipts and 0.2% of the region consumer market) are sold by farmers directly to consumers.

Estimated change in net assets (that is, assets minus liabilities) for all region households combined was a loss of \$3 billion in 2009 alone (BLS). This places additional pressure on Northwest Ohio consumers trying to buy food.

Farm and food economy summary:

Farmers gain \$50 million each year producing food commodities, and spend \$700 million buying inputs sourced outside of the region, for a total loss of \$650 million to the region.

Meanwhile, consumers spend \$3 billion buying food from outside. Thus, total loss to the region is \$3.6 billion of potential wealth *each year*. This loss amounts to more than twice the value of all food commodities raised in the region.

Northwest Ohio: markets for food eaten at home (2009):

Northwest Ohio residents purchase \$3.3 billion of food each year, including \$2 billion to eat at home. Home purchases break down in the following way:

	millions
Meats, poultry, fish, and eggs	\$ 422
Fruits & vegetables	341
Cereals and bakery products	282
Dairy products	232
"Other," incl. Sweets, fats, & oils	761

If Northwest Ohio residents purchased \$5 of food each week directly from farmers in the region, this would generate \$345 million of new farm income for the region.

Note: the fruit and vegetable market can be further broken down:

	millions
Fresh Fruits	\$ 116
Fresh Vegetables	102
Processed Fruits	63
Processed Vegetables	59

Toledo Metro Area: markets for food eaten at home (2009):

Metro Toledo residents purchase \$1.7 billion of food each year, including \$1 billion to eat at home. Home purchases break down in the following way:

	millions
Meats, poultry, fish, and eggs	\$ 213
Fruits & vegetables	172
Cereals and bakery products	143
Dairy products	117
"Other," incl. Sweets, fats, & oils	385

State of Ohio: markets for food eaten at home (2009):

Ohio residents purchase \$29 billion of food each year, including \$18 billion to eat at home. Home purchases break down in the following way:

	billions
Meats, poultry, fish, and eggs	\$ 3.7
Fruits & vegetables	3.0
Cereals and bakery products	2.4
Dairy products	2.0
"Other," incl. Sweets, fats, & oils	6.6

Estimated markets for specific vegetables in Northwest Ohio

ated markets for spee	million
	pounds
Artichokes	2.06
Asparagus	1.94
Beans, Dry	8.41
Beans, Lima	0.52
Beans, Snap	10.14
Beets	0.72
Broccoli	11.08
Brussels Sprouts	0.43
Cabbage	12.15
Carrots	14.05
Cauliflower	2.90
Celery	8.28
Cucumbers	13.26
Eggplant	1.14
Garlic	3.68
Greens, Collard	0.56
Greens, Turnip	0.44
Kale	0.38
Lettuce, Escarole	0.31
Lettuce, Head	22.41
Lettuce, Romaine	14.76
Mushrooms	5.05
Mustard greens	0.46
Okra	0.60
Onions	30.66
Peas, Dry	0.94
Peas, Green	3.81
Peppers, Bell	13.08
Peppers, Chili	8.17
Potatoes	159.59
Pumpkins	6.48
Radishes	0.69
Spinach	3.28
Squash	5.54
Sweet Corn	2.41
Sweet Potatoes	6.68
Tomatoes	114.90
Total	521.94

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/locales.html

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

To view a PowerPoint presented in March, 2008, by Ken Meter at Rep. Collin Peterson's (D-MN) Minnesota agricultural forum, called the "Home Grown Economy": http://www.crcworks.org/crcppts/petersonkm08.pdf

To get a brief list of essential food facts, many of which are cited in the presentation above, http://www.crcworks.org/foodmarkets.pdf

To link to further analysis of farm and food economies in the U.S.: http://www.crcworks.org/econ.html

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