## The 25% Shift-Summary\*

# The Benefits of Food Localization for Northeast Ohio & How to Realize Them

By Brad Masi, Leslie Schaller, and Michael H. Shuman 11/16/2010

#### **Sponsors:**

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## For Further Information, Contact:

Michael H. Shuman 2203 Quinton Road Silver Spring, MD 20910 202-669-1220 shuman@igc.org

<sup>\*</sup>The final report will be released at the end of November 2010. This Summary document excerpts key findings and recommendations, and also updates and supersedes the version distributed on November 13.



## **Executive Summary**

The local food revolution has come to Cleveland—big time. The city now has so many community gardens, farmers markets, community-supported agriculture (CSA) subscriptions, urban farms, celebrity chefs, and local-food procurement programs that the environmental web site, Sustain-Lane, ranked Cleveland as the second best local-food city in the United States. But the region has only just begun to tap the myriad benefits of local food.

The following study analyzes the possibility of the 16 counties of Northeast Ohio (NEO) moving 25% of the way toward fully meeting local demand for food with local production. It suggests that this 25% shift could create 27,664 new jobs, providing work to about one in eight unemployed residents. It could increase annual regional output by \$4.2 billion and expand state and local tax collections by \$126 million. It could increase the food security of hundreds of thousands of people and reduce near-epidemic levels of obesity and Type-II diabetes. And it could significantly improve air and water quality, lower the region's carbon footprint, attract tourists, boost local entrepreneurship, and enhance civic pride.

Standing in the way of the 25% shift, however, are formidable obstacles. New workforce training and entrepreneurship initiatives are imperative for the managers and staff of these new or expanded local food enterprises. Land must be secured for new urban and rural farms. Nearly a billion dollars of new capital are needed. And consumers in the region must be further educated about the benefits of local food and the opportunities for buying it.

To overcome these obstacles, we offer more than 50 recommendations for new programs, investment priorities, and policies. In a period of fiscal austerity, a strategic priority must be to create "meta-businesses" that can support the local food movement on a cash-positive basis. For example:

- To mobilize consumers in the region to buy local food, we suggest creation of local debit, credit, and gift cards, and deployment of purchasing platforms that connect local food businesses to one another and to government procurement agencies.
- To increase the competitiveness of local food businesses, we recommend the creation of local business alliances that facilitate peer learning and new kinds of delivery services, local-food malls, and joint procurement cooperatives.
- To make more capital available to local food businesses, we propose creation of new revolving loan funds, municipal food bonds, and a local stock market.
- To support a new generation of local food entrepreneurs, we recommend deployment of a network
  of food-business incubators and "food hubs" operating in concert with new programs for enterprise
  support.

Our final – and most ambitious – recommendation is the creation of a NEO Food Authority, potentially owned and capitalized by thousands of shareholders in the region. This Authority might issue tax-exempt bonds and provide seed capital for many of our initiatives.

#### Introduction

#### A. The Local Food Revolution

With little fanfare, the local food revolution has come to Cleveland—big time. The environmental web site, Sustain-Lane, ranks Cleveland the second best city in the country for local food and agriculture (Minneapolis is number one). Here's its explanation: "Cleveland takes second place in our bakeoff with 12 farmers' markets and 225 community gardens reported, serving truckloads of fresh food to its population of over 450,000. A nearly 600 percent increase in total number of farmers' markets and a sizable increase in community gardens since 2006 explain Cleveland's ascent in this rankings category."

Many Clevelanders, however, do not yet recognize the huge significance of this revolution. They appreciate that local food is aesthetically pleasing, tastes good, and supports farmers markets. However, they perceive local food efforts as confined to a small number of boutique "foodie" businesses and symbolic policies helping a few trendy urban farms. The bottle line, they believe, is that local food is too expensive for most residents.

In fact, local food is fast becoming a powerful economic development strategy, its players expanding to the many thousands, and its products and services increasingly competitive. Among the many benefits of local food are stronger local economies, ecological sustainability, better nutrition and health, and more civic engagement.

It is true that, at the moment, local food tends to cost more. But two points are worth making. First, the biggest reason local food prices are high is that demand exceeds supply. A lack of distribution and aggregation infrastructure reduces efficiencies and potential cost savings from the local food system. As local food businesses grow and spread, prices will adjust downward. Second, economic success does not just occur with provision of the lowest price goods and services. No one, for example, would criticize Starbucks as a failed economic engine for many neighborhoods, despite the fact that its lattes are the most expensive in town. Consumers of all incomes are not only looking for the lowest priced food but also the *best value* for a given price. And in many ways, consumers – even low-income consumers – are finding that local food, even if it's nominally pricier, delivers better value.

Still, for the local food movement to achieve its full potential, the price gap between local and conventional food, where it exists, will have to shrink. This may well be on the verge of happening. At least five trends are likely to lower local food prices over the next decade: the increasing inefficiency of global food systems, rising energy prices, homeland-security concerns about depending on distant food supplies, the spread of the internet and mobile phones (critical tools for local food entrepreneurs), and emerging innovations in small-business finance.

A final factor that is increasing the competitiveness of local food is that local food businesses themselves are learning how to compete more effectively. In fact, in *every* food category of the North American Industrial Classification System (NAICS), there are more examples of successful small business than examples of successful large business. Moreover, as pointed out in a recent study on *Community Food Enterprise* funded by the Kellogg and Gates Foundations, locally owned businesses are deploying more than a dozen strategies – such as low-cost technology, the internet, vertical integration, consumer ownership – to compete effectively against large-scale players. And networks of local food businesses and non-food businesses are forming – creating joint procurement cooperatives, for example—that are improving their economies of scale. Many local food advocacy groups and intermediaries deploy peer learning strategies and network "communities of practice" to more effectively diffuse innovation for model replication.

In short, the local food movement is here to stay and likely to intensify. And Cleveland is already well positioned to take full advantage of it. But significant barriers abound, and the region will only be able to realize the full array of benefits if it undertakes significant private, public, and civic initiatives.

#### B. What Is Local Food?

To many, local food is about *proximity*, with discriminating consumers demanding higher quality food grown, raised, caught, processed, cooked, distributed, and sold by nearby people that they know and trust. But equally important is local *ownership* of the food businesses involved in the region's "value chains." This report is primarily about the economic benefits that flow from reduced food miles, with NEO businesses growing, raising, processing, packaging, distributing, cooking, and serving NEO customers. It assumes that nearly all the new businesses involved will be small and locally-owned. However, involvement of non-local businesses as market partners or investors in these initiatives is welcomed and encouraged.

#### C. About the Study

Even though this study was initiated by major institutions in Cleveland – the Cleveland Foundation, ParkWorks, the Urban Design Center of Kent State University, Neighborhood Progress, Inc. and the Cleveland-Cuyahoga County Food Policy Coalition – the leaders of these institutions understood the importance of building a *regional* food system. Broadly speaking, a regional perspective enables one to connect rural farms with urban consumers, and to envision a market broad enough to create appropriate, right-scaled businesses in nearly every food sector. The study therefore focuses on 16 counties surrounding Cleveland, as shown in Chart 1.

Cleveland+
Region
Lake Erie

\*\*Cleveland

Youngstown

\*\*Canton

\*\*Canton

\*\*Canton

Chart 1
The North East Ohio Region

We began this study by synthesizing and analyzing existing studies, reports, and databases. While no resources were available to undertake new studies, we did try to tap into on-the-ground expertise in the region by speaking to literally hundreds of people involved in the local food movement or in state, regional, and local economic-development. Some of these conversations occurred individually and in small groups, but a large proportion of input was received through a web site we created the NEOFoodWeb.org . We organized experts in the region into 35 "affinity groups," each contributing an important part to the local food economy. The

affinity groups fell into five broad sectors: agricultural production, markets, supply-chain infrastructure, supporting businesses, and food-system capacity.

Taking input from our steering committee, from members of the AgBio Leadership council (an initiative between Ohio State University and the Fund for Our Economic Future), and from leaders in farm organizations and food policy councils, we identified representatives for the affinity groups and invited them to participate in several public events we held between June and November 2010. Many participated in a viritual think tank hosted on the NEOFoodWeb.org. The site became an important portal for their input through surveys, discussion topics, and comments on early drafts of this assessment. NEOFoodWeb also provided a clearing house of reports, previous regional food studies, and video vignettes highlighting cases and diverse perspectives about local food topics in the region.

#### I. A Tale of Four Cities

The North East Ohio (NEO) region studied here encompasses 16 counties surrounding Cleveland. It represents a land mass of 7,624 square miles with a remarkable diversity of human settlements—dense urban neighborhoods, rural areas with rich farmland, and many suburbs. According to data from the U.S. Census, the total population in the region in 2008 was 4,146,249, residing in about 1.7 million households. The total workforce in May 2010 was 2,149,007, with 214,148 people unemployed.

Annual consumer demand for food in the NEO region is just over \$11 billion, \$6.5 billion purchased at stores and \$4.6 billion spent eating out. Additionally, NEO residents spent three quarters of a billion dollars each year on alcoholic beverages. Consumer spending is just part of the overall demand picture. We estimate that total demand by institutions and residents (but not businesses) is \$15 billion.

Efforts to scale up both the demand and supply sides of the food equation can be seen across the region, with initiatives as diverse as the region itself. The post-industrial cities in Northeast Ohio are turning to local food systems to address challenges with poverty, public health, vacant land, and declining neighborhoods. And rural areas in the region see local food as a way to connect profitably with urban markets.

#### A. Cleveland and Cuyahoga County

As the largest and most populous city in Northeast Ohio, Cleveland has struggled with almost two generations of industrial decline. The city population peaked at almost one million in the 1950s and has since declined to about 430,000. But a bright spot has been the spectacular growth of urban farming.

Cleveland's support for community gardens goes back to the 1970s, but in recent years it has pioneered the reutilization of vacant land for urban agriculture, increasingly viewing its gardens as important sources of jobs and food. A market garden training program, launched in 2006, has generated more than 50 urban farm enterprises. This year community partnerships created two urban farm incubators, both about six acres, on the east and west sides of the city.

Seeing the connections between urban farming and other social issues, many groups have joined the local-food movement, including OSU Extension, ParkWorks, Neighborhood Progress, Inc, and the Kent State University Urban Design Collaborative. Farms are being developed with programs to deliver other innovative social services, including community mental health treatment, drug and alcohol addiction recovery, youth entrepreneurship, nutritional education, and preventative health care.

Accompanying the rise of urban farming has been the proliferation of other local food businesses. About 25 independently-owned restaurants now feature locally grown ingredients as a major part of their menu. Farmers markets in Cuyahoga County have expanded from three in the 1990s to more than 20 today, and they are increasingly used by urban farmers as points of sale. Local Crop and Fresh Fork have formed in the past two years to help deliver local food to restaurants. City Fresh sets up neighborhood-run distribution and nutrition-education centers called "Fresh Stops."

Local food is increasingly appearing in city-sponsored public-health programs. Beginning in 2004, the City of Cleveland organized Steps to a Healthier Cleveland, a broad-based campaign to improve nutrition and healthy lifestyles. The Corner Store initiative at Case Western Reserve University is working to get more healthy and locally grown food options into corner stores. The Cuyahoga County Board of Health has launched programs to establish community gardens and healthy food options. The three primary health care institutions in Cleveland -- Metro-Health, University Hospitals, and the Cleveland Clinic – all have integrated local food into their preventative health-care programs.

Pulling all these initiatives together now (including the commissioning of this report) has been the Cleveland-Cuyahoga County Food Policy Coalition (CCC-FPC), formed in 2007. The CCC-FPC has worked with city and county government to develop several landmark policies to support local food systems, including a zoning category for urban gardens and farms, legislation that expands opportunities for urban chicken raising and bee keeping, and a local purchasing policy for county and municipal agencies.

Urban agriculture in Cleveland continues to grow in its sophistication and reach. What once was a movement to sponsor community gardens has ripened into multi-level partnerships to build a thriving local food sector.

#### **B.** Youngstown

A mid-sized city located near the Pennsylvania border, the population of Youngstown peaked at 162,000 and has since shrunk to about 72,000 residents. Like Cleveland, the city has seen an enormous loss of its manufacturing base. Now, however, the city is coming back to life by embracing sustainable re-development.

The Youngstown 2010 plan, unveiled in 2005, functions as a participatory process to define the future of the city. The plan emphasizes "right-sizing" around the smaller population, reducing infrastructure services in abandoned sections of the city, and revitalizing the downtown core. It also advocates converting significant swaths of urban land into green space and urban farms.

Local food networks in the city, and in the surrounding Mahoning/Turnbull County region, have grown so significantly over the past three years that Youngtown is emerging as a model green city (as recognized in a 2007 article in the *Wall Street Journal*). Given the city's history, local food is as much about rebuilding the city's civil society as it is about economic development.

A number of impressive nonprofit initiatives are now engaged in local food work, including Goodness Grows, Flying High, the Youngstown Neighborhood Development Corporation (YNDC), and Common Wealth. The urban farming projects launched by these programs are all linked with the "Resettle Youngstown" initiative, another part of the Youngstown 2010 Plan, which aims to attract green-minded entrepreneurs. Resettle Youngstown has helped to develop and market "urban homesteads" – houses with an adjacent 1-2 acre area for intensive urban food production.

Another nonprofit, Grow Youngstown, has worked with the Mahoning Valley Organizing Collaborative (MVOC), a collaborative of government and civic organizations, to launch a food policy council for the three counties along the northeast edge of Ohio. The MVOC has spearheaded regional efforts to remedy the food deserts in innercity Youngstown and Warren. All together, these local food initiatives have reached a tipping point in Youngstown, one that might grow into the kind of broader movement that has taken hold in Cleveland.

#### C. Oberlin

Oberlin is a small college town of about 6,500 year-round residents and a college with 2,800 students. With a local food purchasing initiative that began in 1988, Oberlin College is one of the early, nationally recognized pioneers for local food systems development. The combined purchasing of its student-run cooperatives and dining halls put more than \$1 million into the local economy each year. The college dedicated 70 acres of its land to support a working farm and a young farmer incubator, and the recently unveiled "Oberlin Project" is working to link green downtown development with 20,000 acres of sustainable farms supplying local food, energy, and materials.

Perhaps the most important contribution of Oberlin has been its annual crop of students committed to promoting local food in the region. One of the co-authors of this report initiated the New Agrarian Center. Joe Waltzer started the Black River Café and the Agave burrito bar, both of which use locally grown foods, and is now starting-up Common Goods in an abandoned grocery store south of downtown Oberlin as to provide green products, including local food, to area businesses. Sam Merrett took over an abandoned gas station south of downtown Oberlin to establish Full Circle Fuels, a fuel station that dispenses only vegetable oil and bio-diesel fuels and converts vehicles (with contracts across the mid-west) to operate on vegetable oil. Oberlin's visionary curriculum empowered these students to become change agents across the NEO region.

#### D. Wooster and Wayne County

The 25,000 residents of Wooster comprise 25% of the population of Wayne County, the NEO county with the greatest farmland acreage and largest number of farmers. Agriculture has become the centerpiece of the county's economic development strategy.

Local food initiatives can be seen throughout the county. Several are linked to the AgroEcosystems Management Program (AMP) at the Ohio Agriculture Research and Development Center (OARDC), which provides a state-wide resource for research related to agro-ecosystems, including organic farm research, intensive polyculture management, and a wide-range of collaborative networking tools (such as the web site *localfoodsystems.org* and the AgBio Industry Cluster Leadership Council for Northeast Ohio). The Small Farm Institute runs out of the AMP program office helps develop family-farm-based agricultural and forestry ventures. Another educational institution, the Agricultural Technical Institute (ATI), is in the beginning stages of developing a two-year sustainable agriculture certification associates program. Wooster College is also purchasing its food locally and engaging its in local food and farming initiatives.

Another important driver for local-food innovation in Wayne County has been Local Roots, a hybrid producer-consumer cooperative. Formed in 2009, the cooperative currently has 400 consumer members and 110 agricultural producer members. Since opening in March 2010, monthly sales have averaged almost \$27,000 in monthly revenue. Local Roots also plans to develop a shared-use commercial kitchen facility that can be used by its members for everything from home-canning to producing FDA-approved value-added products.

Another model for agglomeration can be found in the Greenfield Cooperative. A small group of Amish farmers and businessmen started the cooperative to improve market access to nearby urban centers. The cooperative owns a truck that handles pick-up and deliveries to to a wide-range of markets in Northeast Ohio, Pittsburgh, and Chicago.

These innovations in Wayne County underscore the synergies that can occur, even in a rural setting, when multiple local food businesses operate in close proximity. These "agglomerations" of simpatico food businesses create economies of scale and spin-off effects as local businesses develop in mutually-supportive ways.

#### II. An Assessment of the Current NEO Food System

To get a deeper sense of the strengths and weaknesses of the NEO food system, we surveyed affinity group and targeted stakeholders to implement a SWOT analysis – for the system overall and for their specific sector within the system. SWOT stands for strengths, weaknesses, opportunities, and threats.

#### A. Strengths

- (1) Diversity The NEO region has a diversity of agricultural systems, driven by climate, topography, and culture, that now support many scales of farming in both rural and urban settings.
- (2) Cleveland/Cuyahoga County The City of Cleveland has emerged as an innovation center for urban agriculture, with pioneering zoning, procurement, and land-bank policies. The Cleveland/Cuyahoga County Food Policy Coalition is one of the largest and most active food policy councils in Ohio and the mid-west.
- (3) Innovative Models The NEO region has a number of highly innovative models for local-food production, including the Cuyahoga Countryside Conservancy, the Local Roots cooperative in Wooster, the City Fresh distribution network, and the Youngstown 2010 Plan promoting urban farmsteads.
- (4) Business Linkages -- Cleveland has a rich history of businesses that support local farms through local purchasing and investment. Early adopters include the Mustard Seed Market, Parker's Bistro (now Light Bistro), and Oberlin College.
- (5) Urban Agriculture -- Cleveland has more than 210 community gardens and market gardens, with 50 new gardens created in 2009 alone. Community gardens in Cuyahoga County are estimated to produce between \$2.6-3.0 million of produce a year on 56 acres of urban land. The number, economic clout, and supporters of these farmers are all growing.
- (6) Rural Production Capacity Given a diverse base of small, medium, and large scale farms throughout Northeast Ohio, there is significant untapped capacity for production that can connect rural producers with urban markets. A diverse base of farmers in many counties has significant potential for increasing production to supply urban markets.
- (7) Non-Profit Resources Extensive resources educational, technical, even financial are available to support the local food system from Ohio State University Cooperative Extension, the Ohio Agricultural Research and Development Center (OARDC), and the Agricultural Technical Institute (ATI). Dozens, perhaps even hundreds, of non-profits have activities that relate, directly or indirectly, to local food,

including the Small Farm Institute in Wooster, the Cleveland Botanical Gardens GreenCorps program, the New Agrarian Center, and the Cuyahoga Countryside Conservancy.

#### B. Weaknesses

- (1) **Rural and Urban Poverty** The NEO region has heavy concentrations of poverty in both urban and rural areas, which limits the investment, entrepreneurship, and purchasing power available for local food.
- (2) **Food Deserts** Most urban-core neighborhoods in the NEO region (Cleveland, Youngstown, Akron, and Lorain) have significant numbers of neighborhoods where residents cannot find nearby full-service grocers and lack the transportation to reach them in other neighborhoods. Large stretches of rural areas also have few healthy food outlets.
- (3) Infrastructure Gaps The lack of accessible and efficient aggregation, distribution, and processing infrastructure limits opportunities for local-food producers, both urban and rural, to expand to retail and institutional markets.
- (4) Divisions An overall lack of regional collaboration increases competition between municipalities and poisons potential collaborations. Racial divides are particularly severe. In Cleveland, for example, even though 52% of the population is African-American, the majority of local food advocates and local food consumers are white.
- (5) Public Skepticism Much of the public still regards local food as experimental or trendy. Some political and economic leaders do not see local food efforts as much more than a hobby or feel-good activity. Economic development practitioners view local food systems as having marginal job or wealth creation impacts.
- (6) **Bootstrapping** While more support has been allocated to local food initiatives through private philanthropy, the majority of local food efforts are carried out on shoe-string budgets. The absence of sufficient funding leads to balkanization among groups who look at each other more as competitors.
- (7) **Seasonality** Many markets, gardens, and farms in the NEO region do not have the capacity to supply a twelve-month market. Creating a local food system year-round requires a physical infrastructure of year-round markets, greenhouses, storage space, and distribution which, as noted, is under-developed.
- (8) **Environmental Degradation** While there is a large supply of vacant land in many urban centers, there is a history of land-use that has led to problems with pollution and contamination. Significant stretches of rural land also have lost soil-nutrients and topsoil through erosion and compaction.
- (9) **Loss of Entrepreneurial Culture** As an industrial manufacturing center, the NEO region historically relied on large-scale businesses with large unions, neither of which left it prepared for entrepreneurial culture needed today.
- (10) Job Readiness There is a need for a stronger base of vocational and job-training programs through community colleges or vocational schools to provide people with skills and aptitudes for the new local food economy.

#### C. Opportunities

- (1) **Financial Investment** Even though more than a quarter of its residents live at or below the poverty level, Cleveland has sizable capital resources, including a number of well-endowed private foundations and health-care institutions committed to strengthening the local-food system.
- (2) **Corporate Giving** Cleveland has a rich base of civic-minded businesses, such as the Great Lakes Brewery, Progressive Insurance, CitiBank, and Bon Appetit Management that make generous contributions to the health and welfare of local communities, including local-food programs.
- (3) **Leadership** Both the mayors of Cleveland and Youngstown have embraced *sustainable* development, with significant local-food programs.
- (4) **New National Narrative** Cleveland's continued ascendancy as a local food haven could create a new national narrative for selling the region.
- (5) **Vacant Land** The large amount of vacant land in cities such as Cleveland and Youngstown represents a huge opportunity for urban farming.

## D. Threats

- (1) **Culture of Self-Deprecation** Abandoned buildings, vacant land, pollution of Lake Erie, the burning of the Cuyahoga River, and even the disappointing (if short-term) departures of hallmark sports teams and player a psychic quicksand in Cleveland which prevents people from seeing opportunities.
- (2) *Urban-Rural Divide* An urban and rural divide in Northeast Ohio runs deep, politically and culturally, that impedes collaboration.
- (3) **Energy and Climate Change** The region faces huge uncertainties ahead with the prospects of rising oil prices and climate disruption.
- (4) Government Corruption -- Government corruption in many communities has undermined faith in public institutions and weakened the ability of these institutions to forge effective partnerships, collaborations, and policies.

#### E. Affinity Group Views

Another tool we used to assess the health of the current NEO food system was a survey of the affinity group participants. The 80 survey responses provided insights into, among other things, indicators, assets, needs, and barriers affecting the local food system. More specifically:

- Respondents care more about the community and economic impacts than they do about the environmental impacts.
- Respondents identified the three critical assets for the successful growth of the local food system: more financial resources, greater skills and knowledge, and stronger social networks.

- Respondents want to work on local food systems because of their concerns about strengthening the
  economy and retaining dollars, increasing the accessibility of local food to all socio-economic
  groups, and improving quality of life and public health.
- Respondents thought that the strongest features of the NEO food system right now are its
  agricultural production capacity, its strong collaborative networks, and its growing markets. The
  weakest features are the lack of food access by all socio-economic groups, gaps in processing and
  distribution infrastructure, and inadequate urban-rural linkages.
- Responds said that the biggest barriers to the growth of local food systems were poor distribution
  infrastructure, uninformed consumers, the unavailability of capital, the absence of facilities for
  value-added processing, and unsupportive public policies.

#### III. A Localization Scenario

To imagine a plausible scenario for food localization for the NEO region, we propose a 25% shift. What we mean is that the localization gap in each food-business sector – that is, the gap between the level of business in a food sector that exists today and the level needed to achieve self-reliance in that sector—is closed a quarter of the way. We further propose achieving this shift over a decade.

#### A. The Current Food Economy

What does the current food economy in the NEO region look like, and how does it compare with other regions in the United States? There are just under 16,000 establishments involved in food in the NEO region employing 293,000 people. All but eight of these establishments employ fewer than 500 people. To put this in perspective, recall the NEO region has a workforce of 2,379,904 individuals. That means roughly one out of eight workers in the region is currently involved in a business linked with food, and nearly all of them are small businesses. But about a third of all food business employees are working for branches of nonlocal companies.

#### B. Economic Impacts of 25% Shift

To analyze the impacts of a 25% shift toward total food localization, we make an important assumption that food exports do not change. Instead, the only changes in the economy are by local purchasers – that is, residents, businesses, and government institutions. This increased local demand, in turn, expands the size and number of local food businesses in all sectors of the economy.

Using the IMPLAN input-output model, which is widely used by economic-development authorities across the United States, we estimate that the 25% shift would create 27,664 jobs –15,723 directly, 6,856 through new business spending, and 5,085 through new consumer spending. By far, the largest number of new jobs, roughly 10,000, comes from farming (4,100), animal raising (3,300), horticulture (400), and production-support activities (3,200). About 5,000 come from retail, restaurants, and consumer service. And about 4,000 come from food processing. The remaining 8,500 jobs come from the indirect and induced impacts in other sectors. An important point here concerns wages. Even though direct jobs are primarily in lower wage areas of food service and farming, indirect jobs are spread throughout the economy, including many high wage sectors.

To put these numbers in perspective, recall that unemployment in the region right now is over 214,000. Unemployment throughout Ohio is now above 10% and in some of the counties in the region it's over 12.5%. The 25% shift has the potential to put one out of eight currently unemployed workers in the region back to work.

A huge job stimulus is not the only economic benefit of the 25% shift in food localization. Additionally, *each year* there would be:

- \$4.2 billion of additional output
- \$1.5 billion in additional value-added activity
- \$868 million in additional wages
- \$126 million of additional state and local tax revenues (primarily through sales and property taxes)

The last item, additional tax revenue, seems especially important. It suggests that annual expenditures by Ohio state and NEO county and local governments up to \$126 million per year would actually be net money-makers.

There are other economic benefits of this 25% shift that are harder to quantify, but nevertheless are worth mentioning. For example:

- **Tourism** As the epicenter of a local food renaissance, the greater Cleveland area will be creating a powerful new magnet for tourism.
- **Business Attraction** A dynamic food economy fits into Richard Florida's notion of a creative economy, and that naturally attracts and retains non-local businesses.
- **Entrepreneurship** –The 25% shift will lead to an entrepreneurship revolution, with positive spillovers throughout the economy.
- **Public Assistance** Increased employment and entrepreneurship will result in dramatic reductions in public assistance outlays in unemployment, food stamps, housing vouchers, health subsidies, and other government supports. Putting 27,000 back to work would save \$133 million of state unemployment benefits per year.
- **Fiscal Health** Reduced government outlays and increased tax revenues will improve the fiscal health of various county and local governments in the region. This will improve the credit worthiness of the entities, lower the cost of capital, and reduce payments on existing and future bonds and other debts.
- Capital Improvements The 25% shift will also allow more investments in public schools (human capital) and infrastructure (built capital), both of which will add to the economic vitality, foster entrepreneurship, and increase the attractiveness to outside businesses and investors.
- Rural Economies The 25% shift will provide a stimulus for the rural counties in the NEO region to
  help to expand existing farms, diversify farm economies, and revive farms that have gone bankrupt
  or are otherwise abandoned.
- **Economic Security** Diversification of the local food system will inoculate the region against sudden cut-offs in food that could occur because of contamination, war, terrorism, or global shortages.

#### C. Noneconomic Benefits of a 25% Shift

The 25% shift would also generate a host of other benefits concerning the environment, public health, and quality of life. Again, these benefits are difficult to quantify in strictly dollar terms, but they are nevertheless significant.

#### (1) Environmental Benefits

The expansion of farming in both rural and urban areas in the region will generate significant environmental benefits. Well-managed farms can improve water retention, prevent floods, sequester carbon, and protect habitat for natural species. The same observations apply to urban farming, only with greater force, because the parcels of land being redeployed right now fall into the category of "blight."

Another important environmental benefit of local food is a lower carbon footprint. Food localization could reduce the two million metric tons per year associated with food transportation (total annual emissions from Cuyahoga County are about twelve million metric tons).

#### (2) Public Health Benefits

Another clear benefit of local food is improved public health. A copious amount of scientific literature underscores that Americans have been becoming fatter and unhealthier as they have consumed more processed foods. According to the Centers for Disease Control, household eating habits have shifted away from fresh foods bought at a grocery store to *ready-to-eat* processed food at corner stores, gas station mini-marts and fast-food restaurants has led an epidemic of Type II diabetes and obesity, even in small children. By raising the availability and value of fresh fruits, vegetables, grains, eggs, meats, and dairy products, food localization is becoming recognized as a critically important tool for fighting this epidemic.

The NEO region has more than its share of "food deserts." Because of widespread poverty, all but two of the 36 neighborhoods in Cleveland have at least a quarter of residents receiving food stamps or other public food assistance. Estimates in 2006 suggest that a third of Cleveland residents are obese and another third overweight – well over the statewide average. An assessment of the Cuyahoga County Planning Commission in 2008 found that residents of Cleveland can find fast food 4.5 times more easily than large grocery stores. The rate was three times greater in Cuyahoga County. The comparable rate in surrounding suburbs is about twice the accessibility, itself a problem. One out of four Cleveland households on average does not own a vehicle to travel to a distant grocery store (the rate is one out of seven in the suburban communities in Cuyahoga County).

Not surprisingly, we found that all the major health-care institutions in Cleveland – all highly ranked nationally in terms of their services – recognize the importance of educating the public to eat more locally. The Cleveland Clinic, for example, sponsors a regular farmers market in their parking lot, has gotten rid of soda machines, and makes smoking and obesity negative factors in its hiring decisions. Three of its hospitals are growing their own food in hospital gardens, incorporating fresh produce in their cooking classes for diabetes prevention.

#### (3) Quality of Life Benefits

A final benefit worth mentioning is the synergistic impact of a 25% shift on quality of life. The combination of economic, ecological, and health benefits could well transform both the local and national perceptions of the region. Once identified with the song "Burn on Cuyahoga," Cleveland could be recognized as the most innovative region in the country for its local food initiatives.

#### D. Caveats about the Model

Like all economic models, IMPLAN needs to be treated critically. Parts of the model may well understate the potential benefits of a 25% shift. Other parts may overstate them. And above all, a model is no better than an educated guess about an uncertain future.

#### E. Challenges

Envisioning a 25% shift, of course, is easier than making it happen. Five challenges are worth weighing:

## (1) Economic Reality

Mainstream economists are skeptical about localization studies, arguing that what exists today is the natural result of supply and demand efficiently intersecting. As noted earlier, however, many factors are likely to shake apart the existing food system. Nevertheless, localization of some food sectors should be regarded as implausible because of natural resource constraints like land, water, and weather. A good way to ascertain this is to determine if there are some categories of food business in which there is no present activity. This turns out to be the case for only eight of the 57 food sectors in IMPLAN.

#### (2) Human Capital

One undeniable obstacle to the 25% shift is people. Can enough entrepreneurs be found with the skills to lead this revolution? And are there enough properly skilled workers to be employed by them? With over 214,000 unemployed individuals recorded in May 2010, there appear to be ample numbers of people to fill the 27,000 new jobs with a 25% shift. But do the unemployed have the necessary skills? Can they be trained to fill the emerging new jobs?

Perhaps the biggest challenge is recruiting 10,000 new people into farming and raising livestock. The good news is that beginning farmers represent a growing fraction (now nearly a third) of all farmers in the NEO region, and they are increasingly women and non-whites. The proliferation of urban farming in high poverty areas in Cleveland suggests that transformation of unemployed city dwellers into new farmers is possible. To support 10,000 new farmers, however, many more programs like these will be essential.

The human-capital challenge for 4,000 more food manufacturing jobs and 5,000 more food service jobs seems manageable. These jobs generally involve very limited training, and that training generally is possible on the job.

Another big challenge is finding new entrepreneurs. Hundreds of new food businesses will be necessary, which will certainly strain the existing entrepreneurship and small-business support programs in the region. There are a number of recent initiatives in the region that, if successful and expanded, could significantly help to cultivate new entrepreneurs in the local food system.

#### (3) Land

Another big obstacle facing the 25% shift is the land required. The 25% shift, based on agricultural as usual, implies tripling the number of farmers in the region from 2,000 to 6,000 and expanding the number of animal growers by 40% from 8,300 to 11,600. This could imply as much as a doubling or tripling of the 1.6 million acres in the NEO region dedicated to agriculture—an extraordinarily difficult goal. Four considerations, however, may make the shift more plausible.

First, as recently as 1997, another 100,000 acres were available in the region for agriculture. Some of this land was lost to subdivisions and cannot be easily reclaimed for agriculture, but not all. Moreover, research currently under way by the Fund for Economic Future suggests that substantially more land in the region could be put into the service of farming.

Second, urban lots can contribute modestly to the land needed for the 25% shift—but not as much as advocates sometimes assert. Cuyahoga County alone has an estimated 17,500 vacant lots with 3,423 acres with decent growing potential—a tiny percentage of what's needed. Plus, the quality of vacant city land remains a challenge. But not all available urban land is officially classified as *vacant*. There are residential and commercial properties, not to mention schools, churches, and apartment buildings that could have their properties deployed or leased for small-scale farming. Also possible is the use of gardens on rooftops, alongside highways, and in the walls of green buildings. This kind of comprehensive inventory needs to be put together.

Third, those just entering farming in recent years have shown an interest in applying new intensive growing methods. There is some evidence that these methods can increase yields per acre, and profits, by one or two orders of magnitude.

Finally, farming may be a sector where it makes sense to relax our assumption in IMPLAN that exports and percapita consumption remain constant. Shifting agriculture away from the commodity crops that dominate farming today to fruits, vegetables, nuts, and grains, which would reduce exports, could increase the income of existing farmers and meet local demand for a healthier diet without necessarily requiring more land. Additionally, shifting diets in the NEO region to require less meat would also bring down the land requirements of the 25% shift.

#### (4) Financial Capital

According to the Ohio's Department of Agriculture, Director Robert Boggs, one of the biggest impediments to food localization is the availability of capital, whether to expand existing food enterprises or to start up new ones. Farmers and small businesses always have some difficulty getting credit, but the challenges have become acute ever since the recent financial crisis.

How much additional capital might be needed for the 25% shift? We estimate, very roughly, that just under \$1 billion would be required. There's no question that this capital, in theory, is available in the region. NEO residents have approximately \$105 billion in local financial institutions in checking accounts (\$4 billion), savings accounts (\$83 billion), and money market accounts (\$18 billion). But unless banking institutions feel confident to lend these savings to local food businesses, they cannot be relied upon for the 25% shift.

Equity capital for small business today is virtually nonexistent, and the disparity between available resources and actual investments is even more stunning. The total level of long-term savings for residents in the area – in corporate stocks and bonds and in pension, mutual, and life insurance funds (based on national trends) -- is \$367 billion. Changes under way in the financial sector could lead to the allocation of as much as \$183.5 billion dollars (half the \$367 billion above) for new or expanded local business—more than enough to finance the less than \$1 billion needed for the 25% shift and to support parallel efforts in local energy, distributed manufacturing, and material economies. Just looking at public employees in the 16-county NEO region, we estimate there are assets of \$28 billion in OPERs (most public employees) and \$23 billion in STRS (public teachers).

#### (5) Consumers

Another challenge for the 25% shift is to convince consumers, including business and public agency consumers, to buy more local foodstuffs. Shifting a quarter of all purchasing will not be easy. For individual consumers, it will require broad education about the health, environmental, and economic benefits of local food, about which stores are locally owned, and about which foodstuffs are locally produced. For businesses, institutions, and other mainstream food purchasers this will require simplification in purchasing bulk food items, prepared foods, and partially processed foods (i.e. chopped or diced vegetables) from local sources. Aggregation will also be critical to enabling larger-volume buyers to access the products of a large number of local producers, without having to work individually with each of them. For public agencies or institutions such as schools, this will require an overhaul in procurement practices which can provide the market stability needed to convince growers or businesses to take risks in developing greater capacity for production and processing within the region.

#### IV. Ideas for Achieving the 25% Shift

How can the NEO region maximize the probability of achieving the 25% shift over the next decade? To answer this question, we first share the recommendations of our affinity group experts and project stakeholders. We then elaborate public policy shifts at the state, regional, and local levels.

#### A. Affinity Group Recommendations

The first place we turned for ideas on how to implement the 25% shift were our affinity group members, among the best experts and practitioners in the region, on what is and is not achievable. We asked them to indicate the most promising approaches for overcoming the obstacles to the 25% shift through a mix of public meetings and online surveys.

#### (1) Food Access and Public Health

- Education at Food Access Points Efforts to improve the long-term health of urban and rural communities will benefit from public-health education at places where healthy food is sold or distributed, such as corner stores, natural food stores, farmers markets, Fresh Stops, or CSA drop-off points.
- Aggregation Centers Farmers markets and individual CSA initiatives all represent low-cost, low-capital
  approaches to connecting producers of local food with mixed-income urban consumers, but they need
  to reach more customers. A cooperative distribution system could make local food available in corner
  stores, neighborhood food cooperatives, or other outlets that have longer and more convenient hours.
- Healthy Food Business Start-ups Use existing business-planning and entrepreneurial programs to support the start-up of corner stores with larger healthy food sections, neighborhood buying clubs, food cooperatives, or mobile food carts with healthier options.
- Urban Farm and Garden Infrastructure Promote mapping projects that identify opportunities for smaller aggregation hubs in low-income neighborhoods that can more readily connect with urban farms and gardens.
- Public Education Better coordinate education efforts among public-health agencies, non-profit organizations, and health care institutions on the value of healthy, locally-grown food.

- Farm-to-School Programs Better use schools in lower wealth neighborhoods to provide resident families access to healthy foods through school lunches, cooking classes, and small farmers markets.
- Food Assistance Expand the ability of low-income consumers to use EBT, Senior Vouchers, and WIC coupons for buying local food, including CSA shares and prepared meals using healthy ingredients.
- Emergency Food Relief- Better incorporate local food into emergency food relief programs for the unemployed, homeless, or disabled.

#### (2) Urban Agriculture

- Urban Planning —Help city and county planners make urban agriculture central to their economicdevelopment work and appreciate the long-term benefits of urban agriculture to green space, food access, community strength, and, ultimately, property values.
- Job Creation- Study, support, and replicate emerging urban farming models in Cleveland/Cuyahoga County that hold the potential to achieve higher economies of scale and provide a large number of new jobs for unemployed or under-employed residents.
- *Community Gardens* Continue to study, support, and replicate smaller urban-farm operations that emphasize non-financial goals like education, local food self-reliance, or donated food.
- Financial Resources Even though more financial resources have been made available to support urban
  farming enterprises, these programs need to be made more flexible, simple, and accessible. They also
  need to be expanded to include development of businesses providing inputs and value-adding services.
- Advanced Design Models To develop more viable models for urban farming, innovative urban farmers should be better linked with extension and other learning organizations, which can provide education and training in such advanced methods as permaculture design, Small Plot Intensive (SPIN) farming, aquaculture, incorporation of small livestock, and advanced greenhouse designs.
- Season-Extension Programs To overcome the competitive disadvantage of the short growing season in
  the NEO region, urban farmers need to develop strategies to move toward year-round production,
  including permanent market outlets (such as Local Roots), more greenhouse production, and more
  processing and storage of peak harvests.
- *Urban-Agrarian Commons*—Develop a "commons" in which ownership is retained by a public or civic organization, but long-term leases are offered to growers or food entrepreneurs. Such commons also can serve as the sites for food-business clusters and industrial ecology parks.
- Soil Testing To expand land available for healthy urban farms, public programs are needed for broader testing and remediation of contaminated soil.
- Learning Network- Urban and rural farmers each have unique experiences and skills that can and should be shared with one another through mentoring programs, workshops, and informal learning exchanges.

- Support Businesses- A range of supporting businesses and social enterprises are needed to enhance the success of urban farmers, including greenhouse builders, waste composters, raised-bed builders (perhaps through deconstruction materials), and seedling providers.
- Supply-Side Infrastructure Just as points of aggregation, distribution, and processing are essential for rural farms, the same supply-side infrastructure is needed to connect urban farms with local food businesses.
- Regional Food Systems Through networks, forums, and events that bring rural and urban farmers together, there can be more coordination around product specialization appropriate to each.

#### (3) Rural-Urban Collaboration

- Strengthen CSAs and Farmers Markets CSAs and farmers markets provide low-cost ways to bring large numbers of urban residents in direct contact with farmers. Other models need to be developed, like the Local Roots cooperative in Wooster, that require less time from farmers and expanded hours for consumers.
- Urban-Rural Farmer Associations Ohio's strong organizations for rural farmers, including the Ohio Ecological Food and Farm Association and the Innovative Farmers of Ohio, should create chapters in urban centers and encourage greater rural-urban collaboration.
- Medium-Scale Producers- The most rapidly disappearing segment of our agricultural system includes
   "farmers in the middle"- those running farms too small for commodity markets, but too large for direct
   markets. These farms can be matched with larger-scale purchasers of food, such as schools, institutions,
   or grocery chains.
- Carbon Sequestration Strategies One promising area of urban-rural partnership is in management of
  regional carbon emissions. Greater efforts are needed to spread best practices like keyline plowing or
  grass-fed livestock production to sequester carbon in rural soils, adding to soil fertility while off-setting
  the carbon impacts of cities.
- Regional Policies—Since there is not a formal government structure that works across the 16 county
  NEO region, we recommend developing a network that fosters collaboration and cross-learning among
  all the local food initiatives. Among the tools that would be valuable are expanded web sites, virtual
  libraries, regional brands, an annual Food Congress, an exchange for municipal collaboration, and a
  regional council for oversight.

#### (4) Education and Skill Training

- Learning Farms- Support the development of urban and rural learning farms. These farms can be
  incubators for the local food economy and facilitate research, mentoring, peer learning, partnerships,
  business incubation, and equipment sharing.
- *Grassroots Learning Networks*—Growers can learn from each other through grassroots networks, which in turn support technical assistance, mentorships, workshops, and collaborations.

- Vocational Education and Workforce Development—Existing vocational schools and cooperative
  extension programs need to be re-tooled to support education of new farmers and food entrepreneurs.
- *K-12 Schools*—The Cleveland Public School District needs to revive its historical support for school gardens, where students can connect with nature, become better aware of good nutrition, and apply this knowledge in courses.
- Colleges and Universities—The NEO region also can better tap the food-system expertise of its higher learning institutions, including several nationally-ranked liberal arts colleges and private universities, two state universities, and several community colleges.

#### (5) Supporting Businesses

Another significant gap identified for the NEO regional food system involves a lack of local non-food businesses, which can support and profit from the expansion of local food activities. Businesses that deserve special nurturing include those that convert agricultural and food waste into compost, energy, building materials like straw bale, or other products.

#### **B.** Policy Recommendations

Below are key recommendations for state, county, and local public-policy action, some of which came from affinity group members and advisors and some of which we offer ourselves. In making this list, we are mindful that public budgets are running large deficits and that the best public policies must cost little or nothing.

#### (1) Comprehensive Policies That Apply to All Levels of Government

- Agricultural Viability Expand the Farm Link programs, which help to link beginning or prospective
  farmers with older farmers who are nearing retirement but who want to see their land continue to be
  used for agriculture. Increase support for farmland preservation efforts. Spread urban farm
  homestead acts, which provide seed land grants and low interest loans to new and beginning farmers
  who are committed to transforming vacant urban lots into farms.
- Access-to-Capital Agricultural Programs Expand the Ag-Link Deposit Program and other state loan
  and grant programs to low-wealth food entrepreneurs and underserved urban and rural farmers.
  Regional food policy councils and coalitions should more aggressively pressure community and
  institutional lenders to provide more agricultural loans.
- Agricultural Training and Technical Support for NEO Farmers Better coordinate technical-assistancegap analysis and training efforts by farm associations (OEFFA, IFO, Farm Bureau, etc.), OSU Cooperative Extension, regional food policy councils, community colleges, and other educational institutions. Target new programs to support urban farmers, beginning farmers, underserved rural farmers, and farmers transitioning to local-food value chains.
- Healthy Food Link any government support, including agricultural production incentives, to the
  production of foods that comport with the USDA's dietary recommendations for fruit, vegetable,
  meat, and dairy consumption.

#### (2) Ohio State Policies

- Procurement Selectively purchase food and food services from local businesses, perhaps through a
  procurement system crediting the high tax revenues the government would receive from local
  businesses.
- *Economic Development* Shift funds from obsolete programs to attract and retain local businesses to Agriculture Finance bonds that focus on local food businesses and meta-businesses.
- Securities Law Reform state securities laws to expand financing of local food cooperatives and other food businesses. For example, create a low-cost mechanism, as New Mexico has, for local businesses to issue a direct public offering tradable only intrastate.

#### (3) Policies for City of Cleveland and Cuyahoga County (Also Applicable to Other Cities)

The following policies, undertaken by Cleveland, Cuyahoga County, or a partnership of the two, could play a catalyzing role in regional food systems development:

- Slow Munis Use municipal bonds, the interest of which is tax exempt, to provide capital for local-food-business loan funds, either directly or indirectly through loan guarantees. The Port Authority of Cleveland has indicated interest in exploring the viability of these bonds, but this also could be done through our proposed NEO Food Authority (below).
- Streamlined Process for Agricultural Buildings —The City Planning Office and Deputy Code Administrator should clarify and improve the process for constructing buildings for agricultural usage.
- Public Health and Land-Use –The Cuyahoga County Board of Health and Cuyahoga Planning Commission, which have already co-convened two sessions on the connections between public health and land-use, should develop land-use plans that incorporate the conditions to insure healthy food access and opportunities for physical exercise within neighborhoods.
- City Land Bank Cleveland should develop a more streamlined process by which urban agriculture entrepreneurs can access vacant land bank parcels. There is a need for greater collaboration between the city and county land bank systems to inventory potential agricultural land more accurately and to develop urban food districts (see below).
- Urban Farm Development Fund—Create an off-set fund from costs the city avoids as vacant properties become used for urban agriculture. These monies would then support expansion of urban farm enterprises.
- *Urban-Food Districts*—Cleveland should designate certain areas of the city as urban food districts where it could strategically create clusters of land and buildings dedicated to local food. These sites can mix urban food production with storage, aggregation, and processing of non-urban food stuffs.
- Public Health Campaigns —The City Department of Public Health and Cuyahoga County Board of Health should co-convene an initiative with the major health-care institutions in Cuyahoga County to elevate

food deserts in the city and county as a threat on a par with tobacco use. The ultimate goal should be a comprehensive public campaign promoting consumption of local foods.

- Climate Policy- The city and county should incorporate local food systems development as a component of a carbon reduction and sequestration.
- Local Food Infrastructure—The Cleveland/Cuyahoga County Food Policy Coalition can work through its community partners to facilitate development of county and municipal initiatives that support expanded food processing, aggregation, and distribution.
- Federal Policies- The CCC-FPC should organize a working group that collects information about federal policies that can affect local food systems, both positively and negatively, and mobilize municipal and county resources to influence these federal policies.
- Cleveland Municipal School District- The Cleveland Municipal School Board should lead a district-wide
  effort to connect healthy school meals with local food systems. This could include more gardens on
  school grounds, better nutrition curricula, and increased local-food procurement.

#### V. A Strategy to Implement the 25% Shift

To prioritize and implement the lengthy "to-do list" in the previous section, we recommend the use of "meta-business" tools, a focus on infrastructure businesses that tie together regional food consumers and producers, and the creation of a new institution we call the NEO Food Authority.

#### A. Key Meta-Business Tools

By "meta-business," we mean a cash-flowing business design that supports a variety of local food businesses. Whereas ideas enumerated by the affinity groups cost money – private money, foundation money, or public money – a meta-business design makes money. And the cash flow from the first metabusinesses, if well designed, can then support additional metabusinesses—and ultimately many other needed initiatives.

#### (1) Consumer Mobilization

If residents of the NEO region demand local food, the supply will naturally follow. We believe there are nine meta-businesses that can help mobilize local demand, including: local-business directories, advertisers, debit cards, credit cards, and gift cards: local currencies and Time Dollars; and brokers who put together contracts (for finders' fees) among local businesses, and between local businesses and government procurement agents.

### (2) Local Business Competitiveness

Networks of local food businesses in the NEO region could improve their competitiveness through a procurement cooperative, local business malls, and more direct-delivery services.

#### (3) Local Land

The existing land banks in the region have focused on identifying vacant properties, clearing titles, and leasing it to urban farming. There are intriguing meta-business opportunities, within the land banks or perhaps in new entities, that could come from creating a commercial land trust. This would make it easier to provide urban farmers with long-term leases, and also create a better framework for attracting capital (perhaps the

endowments of community foundations) and buy adjacent parcels of land to create appropriately scaled-farms and urban food districts. Additionally, a land trust like this would be in a better position to negotiate easements onto urban and suburban properties. It could, for example, buy "gardening rights" on the lawns of interested subdivisions. These income-generation opportunities also could be integrated into rural land conservancies.

#### (4) Local Investment

New capital can be pumped into local food businesses in the NEO region through new community loan funds, brokerages for angel investors, and small-stock creators. One particularly exciting new tool to connect local investors with local businesses might be a NEO stock exchange.

#### (5) Local Entrepreneurship

Among the metabusinesses that could expand the quality and quantity of entrepreneurs are mentorship programs, virtual universities, and incubators. To become self-financing and expand, the incubator could work with each incubated company, issue local stock, and then upon graduation claim 5-10 percent of the shares as payment for its services. This could increasingly be done for virtually incubated companies (with the incubator claiming a smaller percentage of the stock).

#### B. Local Food Infrastructure

Although customer demand for local food is expanding, we believe that a critical obstacle facing urban and rural farmers in the NEO region is the inadequate regional infrastructure for processing, storage, aggregation and distribution. Energetic entrepreneurs on both the demand and supply sides are trying to bridge this gap, but they need support. Among the innovations that can provide greater capital and technical support for entrepreneurs are:

#### (1) Kitchen Incubators

Kitchen Incubators need to take a comprehensive approach to preparing entrepreneurs for market. The facilities should be licensable for food manufacturing, food-service, food handing and aggregation with dedicated space for processing, packaging, mixed-use operations, and warehousing. Local food entrepreneurs in an incubator setting need comprehensive technical assistance to comprehend the alphabet soup of FDA regulations: GAP (Good Agricultural Practices), GMP (Good Manufacturing Practices) and HACCP (Hazardous Analysis Critical Control Points). They also need to be sufficiently trained to operate commercial equipment and follow safe food handling practices.

#### (2) Shared-use Licensed Kitchens

For-profit, shared-use facilities provide another model of easy entry for new food entrepreneurs. These kitchens target start-up entrepreneurs needing licensed commercial kitchens, with designated areas for preparing, packaging, catering and baking. Many of the for-profit facilities run cooking classes, nutritional training programs, and "pop-up" restaurants to attract aspiring food entrepreneurs.

#### (3) University Food Innovation Center

Food Innovation Centers harness the research and industry resources to assist food processors in business development, market research, product and process innovation, food science, workforce development and training, regulations and compliance support, and quality assurance and food safety systems.

#### (4) Community Food Hubs

Community based local food hubs address the distribution gaps within low-wealth communities and provide small and mid-size farmers with the ability to expand aggregation and distribution capacity for direct,

restaurant, and wholesale markets. Prospective anchor tenants and users of these facilities could include underserved rural farmers, urban farmers, urban market growers, and members of farmer and producer cooperatives, value chain producer partnerships, and marketing cooperatives.

#### (5) Shared-use Facility Collaborations

In every community, public and privately held food-processing facilities exist, but local food entrepreneurs are unable to access these commercial kitchens. This model serves entrepreneurs unable to meet co-pack minimum runs, local food brand programs, or producer cooperatives in need of centralized warehousing. It would explore the legal and governance structures necessary for local food and farm entrepreneurs to access private or publicly held commercial processing and distribution facilities or to develop new leasing/co-packing services with privately held enterprises.

#### C. Next Step: A NEO Local Food Authority

We propose the creation of the NEO Food Authority (NFA), an entity that would provide loans and entrepreneurial support to those clusters of local enterprises with the greatest catalytic potential in helping the region realize the 25% shift. Specifically, we envision the NEO Food Authority prioritizing assistance for:

- meta-businesses that support a number of local businesses in the region;
- infrastructure businesses described above, including incubators, food hubs, and shared-use facilities;
- clusters of businesses involving one or more food businesses, such as industrial ecology operations
  where the waste of one business serves as the input to another;
- clusters of businesses from multiple counties that span the supply chain; and,
- any other local food business that, if it succeeds, can strengthen the value-chains and bottom lines of many food businesses in the region.

We use the word "Authority" to indicate that the proposed entity should have some kind of official support from Cleveland and Cuyahoga County, although actual investments would include enterprise clusters throughout the 16 county region. Like the Cleveland Port Authority, the NFA would be charged to lead initiatives that can better account for the public and private benefits of local food initiatives, such as increased tax revenues, improved public health, greater tourism, and lower welfare and unemployment expenses. But official support of the NFA could range from oversight and finance to loose endorsement. There's value in exploring the relative merits of making the entity a non-profit, a private for-profit, a cooperative, a business development corporation, a public body, or a hybrid of all of these.

The ultimate choice made about structure will influence, among other things, what kinds of funds are available. Among the most promising funding streams available are:

- grants and program-related investments from foundations;
- grants, loans, and loan guarantees from federal, state, and local economic development programs;
- proceeds from bond sales, the interest of which might be tax exempt;
- regional funds that administer New Markets Tax Credit monies;
- capital from banks seeking to improve their Community Reinvestment Act performance; and
- individual and institutional investors in the region.

While the NFA could make loans directly to promising entities, we suggest it would be easier to work with existing banks, credit unions, and revolving loan funds to administer each loan. The NFA could provide a loan

guarantee or even place funds on deposit to serve as collateral, and then pay the lending institution a fee for servicing the loan. Loans would only issue to food businesses that received two approvals – one from the NFA and another from the administering institution.

Consider just one of many plausible scenarios for launching the NFA. Start-up funding of \$1 million, for example, might come from a combination of state and local economic-development funds and program-related investments from foundations in the region. Another \$5 million might come from a direct public offering (DPO), in part to raise public awareness of the viability of this kind of emerging financing option for other local food businesses. Just the selling of the shares in the region would provide enormous opportunities for raising excitement in the region about the potential benefits of the 25% shift. Shares could be bought for as little as \$100, and the aim would be to sell these to 50,000 purchasers in the NEO region. The \$6 million or so obtained from shareholders would provide the first tranche of capital for lending. The NEO Food Authority might then seek to leverage its equity capital of \$6 million by a factor of five – to \$30 million – through additional sources described earlier, such as municipal food bonds.

Two existing organizations will be especially critical in launching the NFA:

- As the leading coordination and advocacy body for local food in the NEO region, the Cleveland-Cuyahoga County Food Policy Coalition (CCC-FPC) can play an invaluable role in continuing to make the case for the NFA and, more broadly, for more ambitious city, county, and regional initiatives. Its working groups and consultation with other food policy councils in the Northeast Ohio region can help to identify those local food business clusters that are the strongest candidates for NFA capital.
- The work of the Ag-Bio Industry Cluster (ABIC) also will help identify the best business clusters for NFA funding. Through extensive stakeholder sessions, the ABIC has identified more than 250 "business cases" in the regional food system, with special emphasis on those that harness local agricultural resources and transform agricultural production clusters from low-value commodity production to higher-value specialty crop and bio-product production.

One critical recommendation for immediate action is to catalyze a broad discussion of the NFA and commission a business plan around it. With public support and a detailed business plan, leadership in the region —which is already formidable — should be able to obtain seed funding. As this report lays out, the case for the 25% shift is a powerful one, and a critical mass of talented business people, social entrepreneurs, and policymakers in the region are eager to implement it. While capital is not the only challenge standing in the way of the shift, it probably is the biggest. Providing loans to the most promising business ideas could unleash the creative potential of hundreds, perhaps even thousands, of new local food businesses.