Abstract

Food systems discourse has traditionally been absent from city planning. However, the growing links between the city and the food system make it impossible for the planning field to continue to omit food systems in their practice and study. Food systems have proving to affect the health, sustainability and economic development potential of a city. The following study examines the planning and policy framework of communities with existing and proposed localized food system clusters. Localized food system clusters are an even more nascent concept. These clusters seek to leverage the concept of industry clusters with food system core components. The following study uses an evaluation of city plans, ordinances and municipal websites in order to establish the policy and planning framework of communities that foster and sustain localized food system clusters. Considerable variations exist in the way in which municipalities address food systems in their planning documents. Though vastly different in their content, all six of the evaluated communities had at least one institutional plan that addressed food system objectives. Policy wise, five of the six communities evaluated had a form of city affiliated or city supported food policy group or food systems planning group. Based on my findings, a set of recommendations was compiled for the proposed localized food system cluster in Raleigh, NC. The study ultimately establishes that local government and planners are integral to the formation and existence of localized food system clusters.

Key words: Food Systems, Municipal Policy, Urban Planning, Localized Food System Clusters
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Chapter One: The Local Importance

The Localized Food System Cluster

Industry clusters are known to draw competitive advantage from their proximity to competitors, a skilled workforce, specialized suppliers and a shared base of sophisticated knowledge about their industry (Porter, 1990). Industries within clusters benefit from increased productivity, more rapid innovation and new business formation (Porter, 1990). Examples of clusters range from Hollywood to Silicon Valley, to the stretch of car mechanics and salesmen concentrated in one area of a local city. The success of these clusters exemplify the benefits clustering can offer. Planners have long leveraged clusters as an economic development tool. Cluster based economic development has been used to strategically bolster a number of industries, including most recently high tech industry and green technology.

The local food movement now seeks to introduce the concept of clusters by spatially linking food production, food processing, food distribution, food consumption and other related industries. Much of the food industry, local or otherwise, is geographically disconnected. Creating a localized food cluster is a unique opportunity for community and economic development. Local food has become a powerful trend in the world of food. A recent survey showed that 75% of American consumers favored food grown in the United States and preferred to obtain their food from local sources (Kerd, 2005). These numbers speak to a powerful consumer preference for supporting more localized food system components. While consumers have driven a lot of the movement towards local food, city officials are also seeing the benefits of local food systems. Giving its nature, local food systems help communities attain sustainability, health and economic development goals.
In the course of the following study I will use the term localized food system cluster to encapsulate food innovation districts and food corridors. Both innovation districts and corridors are nominally different but essentially the same concept. The essence of localized food system clusters remains consistent, it is a land use concept based on the economic benefits of business clusters, which arise when related businesses locate themselves in close proximity to each other. It can exist on the level of the city, district or corridor.

In 2014, the Michigan Good Food Charter defined a food innovation district as a geographic concentration of food-oriented businesses, services and community activities that local governments support through planning and economic development initiatives in order to promote a positive business environment, spur regional food system development and increase access to local food (Colasanti et al, 2010). The charter went on to state that food innovation districts would support the resource and idea sharing that occurs when food entrepreneurs and related initiatives work in close proximity. Activities in these districts would include: Regional food hubs, business incubators, farm-to-table retail and restaurants, farmers markets, food festivals and other events, nutrition and cooking education, healthy food assistance, urban agricultural production, community kitchens, public spaces and other neighborhood uses. The definition is a particularly thorough way of understanding localized food system clusters. The following study will be using the expansive definition stated in the charter as a means of identifying localized food system clusters. I settled on this definition because it tailored the industry cluster definition to the characteristics of localized food system clusters. The Michigan definition incorporates elements like food festivals and nutrition education, components that expand and move beyond the traditional conceptualization of an industry cluster, which can often be strictly business oriented.
The concept of localized food system clusters remains largely in its infancy. In the recent years localized food system clusters have been gaining some traction. The city of Raleigh, NC has a proposed food corridor that is currently in its planning stages. Other localized food system clusters are emerging; these localized food system clusters located throughout the country, will be the source of this studies evaluation (San Francisco, CA; Hardwick, VT; Holland, MI; Fort Collins, CO; Chicago, IL; Detroit, MI). These identified clusters are a mixture of emerging clusters and “wishful-thinking clusters.” Giving the early state of some of these clusters a critical mass of food system core components is not yet visible. However each of these clusters as evidenced later, hold a massive amount of potential.

The rise of food systems planning offers an opportunity for the implementation of more defined localized food system clusters throughout North America. The following study aims to (1) Establish localized food system clusters as an important tool in food systems planning, (2) Identify the planning and policy framework of municipalities who currently implement localized food system clusters, and (3) Provide recommendations for the implementation of the Raleigh Food Corridor.

The following questions will guide this research:

(1) How are localized food system clusters addressed in food systems planning?

(2) What planning and policy mechanisms do municipalities utilize to support localized food system clusters?

(3) What planning and policy considerations should the Raleigh Food Corridor take in for its process to implementation?
The Local Food System

At a time when so much of the American economy is externalized, from manufacturing factories to call centers, localized food initiatives are about establishing local economies, through the creation of new economic opportunities and sustenance of once neglected industries. Scholars and practitioners in a multitude of disciplines are realizing that local food systems not only offer an opportunity for economic development but that they also have measurable impacts on the health, environment and the social fabric of communities.

The local food movement is making visible and impactful changes to cities across America. Local food system infrastructure, like farmers markets, food hubs, and urban agriculture transform vacated inner cities, embrace local food culture, support small and middle size farmers and introduce a new language into community and economic development for city and local officials.

According to the latest Census of Agriculture, direct sales of food products from farmers to individual consumers rose by nearly 50 percent between 2002 and 2007 (USDA, 2014). Worth an estimated $1 billion in 2005, local food sales grew to $4.8 billion in 2007 and nearly $7 billion in 2013, according to industry estimates (USDA, 2014). Furthermore, for nearby businesses in major cities across the U.S., having a farmers market nearby means an average increase in sales of anywhere from $19,000 to $15 million. Research demonstrates that local farmers markets yield positive economic benefits and have positive spillover effects. A survey of Pike Place Market, the historic Seattle market, found the market was estimated to have generated nearly $87 million in gross revenue in 2002, which translated to almost $4 million in taxes to the city, county and state. Jobs in the market that year ranged seasonally from 1,500 in winter to about 2,400 in peak season (Pike Place
Market, 2004). While the Pike Place market can be slated as an exception giving its historical context, general trends have been in favor of the farmers market. Fueled by unprecedented consumer interest, the growth of farmers markets has been remarkable. In August 2014, 8,268 farmers markets were listed on the USDA National Farmers Market Directory, an increase of 76 percent since 2008. As the data reflects demand for farmers markets continues to increase across America. The popularity of farmers markets has not missed the City of Raleigh, North Carolina, which currently has five USDA listed farmers markets. Communities like Raleigh, NC are looking for ways to strengthen their local and regional food systems through promoting their farmers markets and other food system core components.

Farmers markets are one of several components of the food system showing similar positive economic trends. Urban agriculture within the city has been linked to increases in the value of neighboring residential properties. Residential properties in New York City were noted in having a 9.4% increase in value when a community garden opened up within 1000 ft. (Voicu & Been, 2008). Not only did the immediate property values increase, the city also estimated they would receive a financial benefit of $503 million from taxes over the next 20 years.

In a similar vein to urban agriculture and farmers markets, food hubs are another growing local food phenomenon. Food hubs facilitate a farmer's access to consumers by offering aggregation, storage, distribution and marketing services. Food hubs are quickly becoming an integral element of local and regional food systems. As a key piece of local food system infrastructure, food hubs bolster the ability for local farmers to enter consumer markets. In 2011, the USDA had identified 100 food hubs. Average food hub sales are estimated at 1 million dollars annually. In addition to bolstering local farmers, they also create in house employment opportunities (Starkman, 2011). Localized food system
clusters are not to be confused with food hubs. Food hubs are facilities that manage the aggregation, storage, processing, distribution or marketing of locally and regionally produced food. While they indeed incorporate a host of core components, localized food system clusters greatly expand on the concept of food hubs. Food hubs can often serve as an important anchor in localized food system clusters, but localized food system clusters incorporate a greater range of food system core components and are at a greater geographic scale. Food hubs should be viewed as a core component or element of a food system cluster.

While food hubs can be viewed as novel elements in the foodscape of many communities, restaurants are a staple whose benefits both historically and presently cannot be overlooked. Restaurants continually provide employment opportunities for a range of economic backgrounds. About 60% of workers in the food industry have a high school diploma or less, making food cluster jobs uniquely accessible to most residents (ICIC, 2013). Strengthening local food systems is a community and economic development initiative. From farm to table, local food systems are about creating a robust economic trail.

The benefits of a localized food system go beyond the compelling economic benefits. A resilient, sustainable and just food system encourages civic engagement, better health and ecological sustainability. Food system core components such as community gardens have been linked to raising social capital and fostering community cohesion (Glover, 2004). Community gardens depend upon a unified social network to organize and manage their program and access. People often congregate to work, relax, and enjoy communal spaces, and through these interactions build community (Assadourian, 2003). In addition involvement in community gardens can sometimes be linked to increased involvement in neighborhood issues (Jamison, 1985; Armstrong, 2000; Blair, Giesecke, & Sherman, 1991; Alaimo, Reischl, Allen, 2010; Baker, 2004; Lawson, 2005).
Over the last couple of years the links between our food system and health have been clarified. The rise of obesity in America has furthered these links. In recent years food deserts have been especially linked to obesity in urban communities. Food deserts are areas with little to no access to healthy and affordable food. Farmers markets, mobile markets and urban agriculture, have been used as strategies to improve food access and security in these communities (Golden, 2013).

Furthermore localized food production, distribution and consumption, allow cities to address the environmental health of their communities and regions. Localized food systems facilitate a decrease in greenhouse gasses emitted, because locally grown goods do not need to be transported across the country, or constantly cooled in large refrigerators (East Anglia Food Link, 2008). Local food systems also promote carbon emissions and energy efficiency, since consuming fresh local food can reduce waste, due to reduced packaging (Tutt & Morris, 1998).

The addition of food production services like gardens and farms within city limits serve as habitats for various birds and insects and increases impervious surfaces (Hancock, 2001). Green spaces like gardens help cool the city by utilizing solar energy, both in photosynthesis and in evaporating water from the foliage and soil (Assadourian, 2003). In conjunction with urban agriculture, these spaces return nature to cities and help restore the connection to natural processes.

Giving the numerous benefits highlighted it is clear why cities like Raleigh are interested in establishing a closely linked and geographically concentrated engine for local food movements. While the benefits to food systems are visible, understanding how receptive the urban environment is to food system core components is a separate matter. The following study will therefore be evaluating the policy and planning framework of
communities with localized food system clusters in order to inform municipalities like Raleigh who are interested in implementing their own clusters.
Chapter Two: The Rise of Food Systems Planning

The following section will be a literature review used to examine the discourse around food systems in the planning profession and the role of planners in shaping food systems. In addition, a review of literature in relation to localized food system clusters will be examined. First, the literature review will be important in establishing planners as a critical element in the food systems field. Secondly, the literature review will help establish why planners are important in the formation of localized food system clusters.

In order to understand the role localized food system clusters can have in the city, it is important to understand food systems planning. The field of food systems planning and its development in the last few years sheds light on the current challenges and opportunities in introducing food system core components into urban settings. The five core components of the localized food system clusters; food production, food processing, food distribution, food consumption, and food advocacy are all directly impacted by planning and policy environments. Food systems planning according to the American Planning Association is defined as the collaborative planning process of developing and implementing local and regional land-use, economic development, public health, and environmental goals and programs and policies to:

1) Preserve existing and support new opportunities for local and regional urban and rural agriculture;
2) Promote sustainable agriculture and food production practices;
3) Support local and regional food value chains and related infrastructure involved in the processing, packaging, and distribution of food;
4) Facilitate community food security, or equitable physical and economic access to safe, nutritious, culturally appropriate, and sustainably grown food at all times across a community, especially among vulnerable populations;
5) Support and promote good nutrition and health, and;
6) Facilitate the reduction of solid food-related waste and develop a reuse, recovery, recycling, and disposal system for food waste and related packaging.
Food systems planning, as the above definition demonstrates, is an integral structure in the successful implementation of localized food system clusters. Through the food systems planning process, local and regional governments can develop and implement a variety of public policies to influence and shape how food is produced, processed, distributed, accessed, purchased, consumed or disposed of. Cities can make laws and ordinances that regulate different parts of the food system; create public education programs; make financial investments, through grants and tax incentives, to support different parts of the food system; and make comprehensive or other official plans that support food systems in their goals, objectives and implementation actions;

The plan is one of the most effective planning tools. Planning departments can incorporate food system goals and objectives into their comprehensive plans, sustainability plans or create stand-alone plans. The comprehensive plan is a leading policy tool with legal significance often mandated by the state. Comprehensive plans can integrate food system objectives into long-range frame works. Comprehensive plans that include elements or sub elements appear in sections devoted to natural and agricultural resources, economic development, environmental stewardship or health. Municipalities can also incorporate food system goals and objectives into sustainability plans. Sustainability plans are a newly emerging influential planning document that can have a promising level of influence. The ability of many food related goals to improve the sustainability of a city makes it a natural link. Some communities prefer to go the route of creating stand-alone plans directed at food system objectives. These plans are an example of a powerful shift in mentality in the cities and regions they are adopted.
The Emergence of Food Systems Planning

The emerging field of food systems planning has its academic beginnings in the late nineties with the works of scholars like Feenstra, G. W. (1997) and Pothukuchi and Kaufman (1999, 2000). In the course of the early nineties and turn of the century these scholars moved the discussion of food systems from the realm of rural policy to urban policy. Food systems within the literature were addressed as a functioning and necessary element in urban environments and not simply a function within rural environments. Feenstra (1997) makes the case that a “logical and appropriate way to revitalize a community is through the development of a local food economy.” The paper examines the ways in which communities can develop their own local food systems, through an analysis of several ongoing studies, food system projects and other sources. In it, Feenstra identifies the need for research that examines how food policy with agricultural and land policy can be incorporated into city or regional planning. Pothukuchi and Kaufman (1999) further expand on Feenstra (1997) in their paper examining the role municipal institutions like, the food policy council and the city planning department should have in food systems planning. The scholars articulate a number of reasons for food systems being less visible within urban policy. Food is often taken for granted in the urban context giving a legacy of cities placing it in context of rural and agricultural interests. In addition, the mechanization of the food industry ensured that losses in hinterland farmlands went unnoticed in urban grocery stores. They argue for the significance of urban food systems on quality of life in urban communities and how city institutions can facilitate more comprehensive action.

Traditionally planners were not involved in the conversations around food systems. The discussion was primarily in the realm of sociologists, geographers, anthropologists and economists (Born and Purcell, 2006). However, the growing links between the city and the food system make it impossible for the planning field to continue to omit food systems in
their practice and study. A host of researchers in the last decade have now been leading much of the seminal research on the role of planners and the food system. (Pothukuchi and Kaufman 2000; Goodman 2003; Kaufman 2004; Pothukuchi 2004, Caton, 2004).

The failure of the planner to address food systems in the past and present was consistently noted. Pothukuchi and Kaufman (2000), examine the reasons contemporary planners fail to address food systems, and the constructive role planners can play in the food system. Pothukuchi and Kaufman (2000) surveyed 22 city planning agencies and found that 10 addressed food system issues in neighborhood plans and six in comprehensive plans. Of the six that addressed them in their comprehensive plans only three indicated that food issues were treated in a significant way. Of the 10 who addressed them in their neighborhood plans, none indicated that food issues were treated in a significant way.

Despite the low prioritization of food systems due in large part to the traditional lack of linkages between food systems and planners, 38% of planners surveyed stated that there was a need for more future involvement in the food system. Planners can help strengthen the food system by assessing the impact of current planning on the local food system. From land use policies that allow community gardens, to policies that restrict grocery store developments, planners can shape land use and zoning policies to support urban food production and economic development policies to foster food system friendly development in these communities (Pothukuchi and Kaufman, 2000).

These early articles cemented the rise of food systems planning and the possible role of the planner in addressing food system issues. While the early articles chronicled the void of food systems work in the planning world, the last few years has ushered in a new decade where food systems is no longer a stranger to the field. Instead academics and practitioners have become interested in refining and understanding the specifics of this budding relationship. Morgan (2013) boldly states in his editorial article titled “The Rise of
Urban Food Planning,” that in the years following the observations of scholars like Pothukuchi and Kaufman, planning academics and practitioners have largely begun to rectify years of neglecting food systems. Much as, Pothukuchi and Kaufman (1999, 2000) and Feenstra (1997) predicted, planners have become an important element in fashioning a new and more sustainable food system aligned with public health, ecological and social justice goals on both the domestic and international scale (Morgan, 2013).

The integration of food systems into planning institutions in this millennium has increased substantially (Pothukuchi, 2009; Kaufman, 2009, Hodgson, 2009; Morgan, 2009; Morgan, 2013; Soma, T. & Wakefield, S., 2011). Morgan (2009) goes as far as stating that food systems planning is the most important social movement of the early twenty-first century in the Global North. Over the last 10 years the amount of food policy councils has steadily increased in North America, and now number at more than a hundred in various cities and counties (Morgan, 2009). In 2009, the American Planning Association continued to demonstrate its commitment through a special issue in its monthly magazine, Planning (APA, 2009). In addition, Baltimore, Marin County, Kings County, New York and San Francisco have all proven to be some of the pioneering communities in strategically and systematically addressing food system issues (Morgan, 2009). Soma, T. & Wakefield, S. (2011) conducted in-depth interviews with a small number of planners in North America who identify themselves as food system planners. Though the sample was small, the existence of this new brand of planners speaks to the growing movement towards the establishment of food systems in the planning profession.

Kaufman (2009) states that food issues of particular relevance to planning include: food deserts, where access to affordable quality food is difficult; food traveling long distances, resulting in excessive use of fossil fuel energy; and environmental and social costs of food production, including processing, storage, distribution and waste. By creating local
planning policies that promote localized food system clusters, planners are able to directly impact all three of Kaufman’s stated food issues. Localized food system clusters can therefore be placed within a critical scope and aspect of food systems planning objectives. Food Systems planning is one of the most exciting new fields in the planning literature and practice, and is on the continual path to growth. By integrating economic and social initiatives like localized food system clusters, planners will be able to continue to cement their critical role in creating sustainable and just food systems.

Planning for Localized Food System Clusters

While much research has been done in the realm of local food systems, the idea of a localized food system cluster in the tradition of industry clusters, as a systematic and controlled entity has not yet entered mainstream academic discourse. However, the core components of a localized food system cluster are no different from the components of the local food system. Academic literature on food system policy and planning provides the necessary framework for identifying the challenges and opportunities for the implementation of localized food systems clusters like the proposed Raleigh Food Corridor.

By preparing the planning and policy ground for the implementation of food system clusters, municipalities are able to dramatically improve the health and sustainability of their local food systems. Communities that already lead in best practices for food systems planning and policy, organically create an environment that leads to the clustering of food related businesses. The role of the planner in this capacity is facilitating the joint interaction of these organizations and coordinating and promoting unity.

More recently, the practitioner sector has taken on the discussion of localized food system clusters, with the release of guides and reports. Food Innovation Districts: An Economic Gardening Tool in one of the first guides on how to create food innovation
districts, food corridors and other similar entities. The guide was released in 2013 with funding from USDA-Rural Development, the Northwest Michigan Council of Governments and the Center for Regional Food Systems at Michigan State University. The guide is a well-elaborated expansion on an idea born out of a recommendation from the Michigan Good Food Charter (2010) to establish food business districts for “the synergy that occurs when entrepreneurs co-locate and collaborate.” It is the first guide with a systematic approach to the creation of food system clusters. In the course of the last three years, a number of municipalities have proposed and implemented similar concepts (Raleigh Food Corridor, Northern Colorado Food corridor, Michigan Food Innovation District). Organically existing clusters have been giving new life and a new lens in places like San Francisco, Detroit, Chicago and Hardwick-VT. In addition, communities have also commissioned food systems cluster studies and plans (Vermont Food Cluster Plan, Danville Food Cluster Plan, Economic Analysis of Detroit’s Food System, San Francisco Food and Beverage Industry Cluster study). These studies and plans analyze the local food systems environment, and help identify both the current challenges and opportunities to fostering sustainable and healthy food systems. These reports and guides have specified the role of the planner in shaping community food systems (APA, 2007; Casey & Patterson, 2008; Hodgson, 2012; Neuner & Raja, 2012; Harvard Law School, 2012; Raja, Born & Kozlowski, 2008). This practitioner-based literature has revealed that the policy and planning environment of a community is integral to hindering or promoting a sustainable food system (Harvard Law School, 2012; Raja, Born & Kozlowski, 2008).
Policy

Neuner & Raja (2012) examine the recent best practices of local government policy and planning designed to strengthen community food systems. A number of regulatory tools, financial incentives and programs are examined. Some regulatory tools to support healthy food systems include

1. Supporting crop production through zoning and other regulations
2. Ordinances permitting agricultural live stocks
3. Food processing permitted uses

Another element examined was fiscal incentives that could be used in conjunction with regulatory tools for the promotion of a healthy food system. Some incentives highlighted included

1. In 2010 and 2011 the City of Madison awarded $43,689 and $56,328 respectively in federal Community Development Block Grant funds to support community gardens.
2. Austin, Texas, encouraged local food production by waiving platting requirements and water impact fees for community gardens.
3. Fresh Food Financing: NYC provides real estate tax reductions for both land and building, sales tax exemptions, and a mortgage recording tax waiver as part of its New York City Economic Development Corporation’s Industrial Incentive Program to FRESH stores

The above examples are a few of the myriad programs, policies and incentives being used by municipalities and planners to encourage healthy and sustainable food systems.
Plan

The discussion of food systems planning within the APA originated during a keynote address by Jerry Kaufman at the 2003 APA National Planning Conference in Denver. At the aftermath of this address, APA launched a food systems council and as a result has a number of guides and other resources for planning practitioners.

An APA (2012) report by Hodgson found that 80 (9%) of 843 respondents had either drafted or adopted comprehensive plans explicitly addressing an aspect of local or regional food systems. Meanwhile, 25(18.3%) of 136 respondents stated that their jurisdiction had either a draft or adopted sustainability plans that explicitly addressed local or regional food systems. Including food related goals and policies into traditional planning documents or creating all together new food system plans, are both important indicators of a communities and planners commitment to addressing food systems objectives.
Chapter Three: Plan and Policy Analysis

Methodology

Localized Food System Cluster Communities

In order to answer the research questions in this study, six communities with proposed or implemented localized food system clusters were evaluated in order to gauge the planning and policy environment in relation to food systems. The six communities examined are San Francisco, CA; Hardwick, VT; Holland, MI; Fort Collins, CO; Detroit, MI; Chicago, IL. The communities were selected based on mentions in practitioner-based literature and popular media for ongoing or proposed localized food system clusters.

Figure 3.1. Communities sorted by Type
Figure 3.1 illustrates the geographic and formation distinctions of the six localized food system clusters. Each of the clusters were identified as localized food system clusters, because the clusters were framed by their supportive entities as ways of spatially linking and supporting local food system components.

Two forms of localized food system clusters were distinguished based on geographic scale. The first scale is the citywide cluster and the second scale is the district. The city wide clusters (San Francisco, CA; Hardwick, VT; Fort Collins, CO) were all initiated as city wide initiatives. On the other hand district clusters (Detroit Eastern Market, Fulton Market, Western Gateway) have specific boundaries and are aimed at concentrating and supporting food system components within a specific area of the city.

The next distinction lies in planned versus historical or organic clusters. The concept of planned localized food system clusters labeled as food innovation districts or corridors remain a very nascent concept. Four of the six communities have localized food clusters that have formed historically or organically and are only now being reinvigorated through a contemporary understanding of the benefits of localized food system clusters (San Francisco, Hardwick, Fulton Market, Detroit Eastern Market). Two of the communities have recently proposed and planned food system clusters. (Holland, MI, Fort Collins, CO).

Planning Framework

The first phase of the study involved identifying whether or not the communities evaluated included food systems goals and objectives in their plans. Planning documents were identified on municipal websites. Raja, Born & Kozlowski (2008) note that planners can create; stand-alone plans focusing on food system plans or their components or include
food system components into comprehensive plans. Hodgson (2009) further emphasizes the trend of embedding food system goals into sustainability plans.

The two questions asked in the course of phase one were:

1. Where are food related goals and objectives addressed?
2. What kind of food related goals and objectives are addressed?

An exploratory approach was used to compile publicly available plans for each identified community. The initial task was to identify three groups of plans: Comprehensive plans, stand-alone plans and sustainability plans. A keyword search was done in each identified plan using the following words.

Plan keywords search:

1. Food System; Food
2. Food Production: Urban Agriculture, Community Gardens
3. Food Processing: Community Kitchen
5. Food Consumption: Restaurants
6. Food Advocacy: Food bank, Soup Kitchen

Next, an initial content analysis was conducted to determine how food system goals and objectives were addressed in these plans. The content analysis was used to evaluate whether food system goals and objectives were framed as economic development, public health or environmentally driven.


**Policy Framework**

The second phase of the study involved evaluating supportive food system policy and programs in each community. The policy framework was defined as the set of programs, fiscal incentives and regulatory tools used to address food system goals and objectives.

A content analysis of plans and municipal websites was done to identify programs and organizations aimed at supporting food systems planning in the identified communities. A list of mentioned programs and organizations were compiled from this search. The following indicators were used to identify programs:

- Does the municipality have a food policy council?
- Does the municipality have acts or regulations aimed at aiding food system goals and objectives?
- Does the city have specific programs city-initiated or city-supported to support food system components?

Specific language in regards to fiscal incentives was identified within planning documents. The following indicators were used to analyze the fiscal support system:

- Does the city have loan opportunities for the support of food system components?
- Does the city list additional outside loan opportunities?
- Does the city have grant opportunities for the support of food system components?
- Does the city list additional outside grant opportunities?
• Which financial mechanisms are mentioned for the support of food system components?

Lastly, local codes and planning documents were examined for zoning and other regulatory tools targeting various elements of the food system. Ordinances were searched for language in regards to farmers markets, urban farming/agriculture, community gardens, food production, and farm animals (Bees, Chickens, Goats). This search was supplemented and crosschecked with two policy documents that listed existing food policies and regulations in some of the identified communities (Neuner & Raja, 2012; Harvard Law School, 2012). The following indicators were used to evaluate the regulatory environment.

• Do specific permit and zoning regulations exist in regards to urban agriculture, community gardens, food production, food sale, mobile markets, farm animals, home based operations, and cottage industry?
• Do regulations exist in regards to the preservation of food system components?

Raleigh Food Corridor

The Raleigh Food Corridor is a proposal for a localized food system cluster that is quickly gaining traction in the city of Raleigh, NC. According to our Figure 3.1 diagram, the Raleigh Food Corridor is a planned district level cluster (See Figure 3.2). The aim of the
Raleigh food corridor is to use clusters of community-based local food projects to build a vibrant, sustainable urban food system and a healthy city. The proposed corridor is the first movement towards creating a localized food system cluster on a district level in North Carolina. Currently the corridor has not been a city driven or directly supported initiative like the six clusters featured in the study.

Community Food Lab, a design firm that proposed the concept, currently manages the food corridor process. In 2014, Community Food Lab partnered with a non-profit, The Jamie Kirk Foundation, to implement a program called Second Saturday. Second Saturday was aimed at building the discourse and partnerships around the food corridor initiative. Within the corridor the firm has identified a number of interested and potential partners that range from current restaurants to food related non-profit organizations.

In 2015, Community Food Lab is slated to commence a strategic planning process. The Raleigh Food Corridor is in a critical stage of planning. Findings from the study were used to create a set of recommendations for the planned corridor.
Chapter Four: Summary of Findings

Planning Framework

Goals and Objectives

Including food related goals and objectives into traditional planning documents or creating all together new food system plans, are both important indicators of a communities and planners commitment to addressing food system objectives. An exploratory search was done of the six identified communities to evaluate the inclusion of food system goals and objectives in their planning documents.

Based on my initial classifications about the differences between citywide clusters and district clusters both planned and organic, I found that plans were ubiquitous. All six of the communities have at least one institutional plan that addresses food system goals and objectives (See Table 4.1). Significant patterns do not exist based on geographic scale or formation, but considerable variation exists in what kind of plan each municipality uses to address food system objectives. Detroit, Hardwick, and Fort Collins, embedded food system objectives throughout their comprehensive plans. San Francisco was the only municipality to have its food system objectives embedded in a sustainability plan. Holland and Chicago both featured stand-alone food system plans. In addition to its two stand-alone food system plans (2004, 2013) and a regional plan with a section on food systems, Chicago also had a stand-alone plan for Fulton market its localized food cluster district (see Figure 4.1). Holland, MI had almost no mention of any food system objectives in its comprehensive plan; it did however have a specific plan developed for a state competition that outlined its proposed food innovation.

Figure 4.1

“The plan is designed to coordinate ongoing development in and around the city’s last remaining market district. The plan is intended to support its historic food system infrastructure along with its more recent evolution as a home to innovative industries, culture, nightlife, and housing.” Fulton Market Plan, Chicago IL.
district. Holland, MI was the only city that only had a plan addressing its proposed food innovation district, without any additional plans addressing food systems generally.

The plan analysis reveals that municipalities use a wide array of planning documents to address their food system objectives; Regional & city comprehensive plans, sustainability plans and stand-alone food system plans. Within these plans, food system objectives were framed under three main categories: Economic development, Public health or Sustainability. Some municipalities addressed the cross-sectional possibilities of food systems while others only focused on one aspect (See Table 4.1). The most common framework utilized was the economic development frame. Within each of the plans evaluated for food system objectives, the economic development possibilities of food system components were noted. Hardwick for instance, embedded food system objectives into its economic development frame by emphasizing the importance of supporting localized food system clusters as part of its development strategy (See Figure 4.2). Fort Collins likewise has directed policy to support its local brewing industry as an economic development initiative. Public health and Sustainability were the other frameworks food system goals and objectives fell under. Three of the six communities had public health related objectives. Chicago’s two stand-alone food system plans both emphasized food systems as a means of improving community health (A Recipe for a Health Place & Eat Local Live Healthy). Four of the six communities directly linked food systems to environmental benefits. The Detroit Future City plan emphasized the creation of integrated landscapes providing recreational, ecological and productive functions.
With the exception of San Francisco, which adopted its plan in the 1990’s, the other plans evaluated have all been adopted in the last five years. The recent adoption of these plans demonstrates how nascent food systems planning and localized food system clusters are. These plans we posit are a critical element to the sustenance of localized food system clusters. The plans allow for a positive environment for the creation of localized food system clusters. Their legal legitimacy in the urban landscape ensures a favorable political climate.

Table 4.1 Summary Table

<table>
<thead>
<tr>
<th>What kind of Plan?</th>
<th>Adoption date</th>
<th>Food systems addressed in a plan?</th>
<th>Goal and Objectives Framework</th>
<th>Localized Food Cluster Mention</th>
<th>Food Cluster (City or Independent)</th>
</tr>
</thead>
<tbody>
<tr>
<td>San Francisco, CA</td>
<td>1997-2002</td>
<td>Yes</td>
<td>Economic Development Public Health Environment</td>
<td>No</td>
<td>City</td>
</tr>
<tr>
<td>Fort Collins, CO</td>
<td>2014</td>
<td>Yes</td>
<td>Economic Development</td>
<td>No</td>
<td>Independent</td>
</tr>
<tr>
<td>Hardwick, VT</td>
<td>2010</td>
<td>Yes</td>
<td>Economic Development Environment</td>
<td>Yes</td>
<td>Independent</td>
</tr>
<tr>
<td>Western Gateway, Holland, MI</td>
<td>2014</td>
<td>Yes</td>
<td>Economic Development</td>
<td>Yes</td>
<td>City</td>
</tr>
<tr>
<td>Fulton Market, Chicago, IL</td>
<td>2004</td>
<td>Yes</td>
<td>Economic Development Public Health Environment</td>
<td>Yes</td>
<td>City</td>
</tr>
<tr>
<td></td>
<td>2013</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>2014</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Eastern Market, Detroit, MI</td>
<td>2013</td>
<td>Yes</td>
<td>Economic Development Public Health Environment</td>
<td>Yes</td>
<td>City</td>
</tr>
</tbody>
</table>
Policy Framework

In addition to the Plan, a policy framework is an important element of food systems planning. A content analysis of plans and municipal websites was done to identify supportive programs, fiscal incentives and regulatory tools for general food system objectives and localized food system clusters. The policy framework of a community can directly hinder or promote the growth of a local food system. In many municipalities, land use regulations like rigid zoning and permitting can hinder food system components like urban agriculture and community kitchens. Other land use regulations like permitting urban agriculture or creative financing like tax increment financing can be used to bolster localized food system clusters. The following examines what supportive policy framework have helped support localized food system clusters in the six municipalities.

Programs

The policy framework of a community is the ultimate reason for the success or failure of localized food system initiatives. While each of the communities, once again showed quite a bit of variety in their approaches, certain trends were generally consistent. The indicators we used to gauge the available supportive programs and organizations can be seen in table 4.2.
### Table 4.2 Food System Programs Table

<table>
<thead>
<tr>
<th>Municipality</th>
<th>Does the Municipality have a food policy Council or similar entity?</th>
<th>Does the municipality have acts or regulations aimed at aiding food system goals and objectives?</th>
<th>Does the city have specific programs, city initiated or city supported for food system components?</th>
</tr>
</thead>
<tbody>
<tr>
<td>San Francisco, CA</td>
<td>Yes</td>
<td>Executive Directive to promote healthy and sustainable food.</td>
<td>Sustainable Food Business Recognition Program Food System Policy Program</td>
</tr>
<tr>
<td>Fort Collins, CO</td>
<td>Yes</td>
<td>NA</td>
<td>Economic Gardening Program (Grow local businesses)</td>
</tr>
<tr>
<td>Hardwick, VT</td>
<td>Yes</td>
<td>NA</td>
<td>Center for an Agricultural Economy Programs • VT Equipment Access program • Farm to Co-packer Program Vermont Food Venture Center</td>
</tr>
<tr>
<td>Western Gateway, Holland, MI</td>
<td>No</td>
<td>NA</td>
<td>NA</td>
</tr>
<tr>
<td>Fulton Market, Chicago, IL</td>
<td>Yes</td>
<td>Illinois Food, Farms and Jobs Act.</td>
<td>NA</td>
</tr>
</tbody>
</table>

The first indicator used, was whether the identified municipalities had food policy councils or similar entities. Food policy councils have become a popular way to organize various food system stakeholders at the local, municipal, and state levels. Councils typically build partnerships with stakeholders; examine current policies, regulations, and ordinances related to food; and support or create programs that address food system issues. Food Policy Councils can therefore be integral to the development of localized food system clusters. Detroit, Chicago and San Francisco all have a food policy council/group/program (Detroit Food Policy Group, Chicago food Policy Advisory Council, San Francisco Food System Policy Program). San Francisco, in addition, has a food security task force that is organized in a similar fashion to a food policy group with the exception being its unilateral...
focus on food security. Both Hardwick and Fort Collins had entities with similar functions to food policy groups (Northern Colorado Food Cluster Members, Hardwick Center for an Agricultural Economy Members). The Northern Colorado Food cluster is a membership-based entity that manages the cluster and directs inter-business and organization collaborations. The Fort Collins entity is directly linked to the localized food system cluster, which sets it a part from the other food councils. In Hardwick, VT the non-profit, Center for agricultural Economy has a similar link to its localized food system cluster. The non-profit provides financial incentives, incubating space and organizes local food system businesses. The non-profit is particularly adept at creating linkages between the food related businesses in the town. Hardwick and Fort Collins are both communities with city independent clusters. City independent clusters are clusters that were not proposed by the city. All the communities with food policy councils were on the other hand communities with city-initiated clusters. Holland was the only municipality without an entity devoted to food systems policy or planning.

The next indicator was an examination of city supportive legislation. Chicago, Detroit and San Francisco all featured supportive city or state acts in relation to food system goals and objectives. (Illinois Food, farms and jobs act; Greening of Detroit Healthy, Hunger Free kids Act of 2010; San Francisco Executive Directive to promote healthy and sustainable food 2009).

The last indicator was supportive programs in relation to food system core components. Business support programs were the most mentioned (See Table 4.2). Two notable programs were the San Francisco food business recognition program, which highlights sustainable food businesses. A second noted program is a Farm to Co-parker Program in Hardwick, VT that is focused on developing fresh cut and frozen products made from local fruits and vegetables for a variety of markets – from schools to restaurants.
Financial Incentives

There was little overlap between the financial incentives offered or listed by municipalities. The indicators used to gauge the fiscal support system can be viewed in Table 4.3.

Table 4.3 Food System Financial Incentives Table

<table>
<thead>
<tr>
<th>City</th>
<th>Does the city have loan opportunities for the support of food system components?</th>
<th>Does the city list additional outside loan opportunities?</th>
<th>Does the city offer grants?</th>
<th>Does the city list/monitor outside grants?</th>
<th>Which other financial mechanisms are mentioned?</th>
</tr>
</thead>
<tbody>
<tr>
<td>San Francisco, CA</td>
<td>NA</td>
<td>Yes</td>
<td>NA</td>
<td>NA</td>
<td>Low power rates</td>
</tr>
<tr>
<td>Fort Collins, CO</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
<td>Manufacturers use tax rebate program</td>
</tr>
<tr>
<td>Hardwick, VT</td>
<td>Vermont Farm Fund Revolving Loan Fund</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
<td>Share Capital</td>
</tr>
<tr>
<td>Western Gateway, Holland, MI</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
<td>MDARD Value Added, Regional food system grant</td>
</tr>
<tr>
<td>Fulton Market, Chicago, IL</td>
<td>Yes</td>
<td>Fresh Food Fund Financing</td>
<td>NA</td>
<td>TIF</td>
<td></td>
</tr>
<tr>
<td>Eastern Market, Detroit, MI</td>
<td>Yes</td>
<td>NA</td>
<td>NIH Grant</td>
<td>Public-Private Partnerships</td>
<td>Tax Credits</td>
</tr>
</tbody>
</table>
The incentives ranged from a revolving loan fund set up in Hardwick, VT for new business ventures, to federal funding for Health Food Financing in Chicago, IL. Though mentioned only twice, tax increment financing was a particularly compelling finance tool. When an area is declared a TIF district, the amount of property tax the area generates is set as a base EAV amount. As property values increase, all property tax growth above that amount can be used to fund redevelopment projects within the district. The increase, or increment, can be used to pay back bonds issued to pay upfront costs, or can be used on a pay-as-you-go basis for individual projects. Chicago’s Fulton Market is located in a TIF, and the Holland, MI, Western Gateway district expressed an interest in creating a TIF. Both of these clusters are district clusters. Tax Increment Financing can be viewed as a creative financing tool for sustaining and developing a localized food system cluster. Giving that TIFs function on the district level, district clusters in particular are well situated to leverage it as a finance mechanism.
Regulatory Tools

The decades of separation between rural agriculture and urban systems have meant that the urban environment has evolved into an environment with often-restrictive conditions for the production and movement of food. Progressive zoning and other tools are integral in reversing this historical trend.

The indicators used to gauge the regulatory environment can be seen in table 4.4.

**Table 4.4 Food System Regulatory Tools Table**

<table>
<thead>
<tr>
<th></th>
<th>Do specific permit and zoning regulations exist in regards to food system components?</th>
<th>Do regulations exist in regards to the preservation of food system components?</th>
<th>Other regulatory tools</th>
</tr>
</thead>
<tbody>
<tr>
<td>San Francisco, CA</td>
<td>Yes</td>
<td>PDR Zoning District</td>
<td>Food Business Action Plan</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Food Procurement Ordinance</td>
</tr>
<tr>
<td>Fort Collins, CO</td>
<td>Yes</td>
<td>NA</td>
<td>NA</td>
</tr>
<tr>
<td>Hardwick, VT</td>
<td>Yes</td>
<td>NA</td>
<td>Industrial Park</td>
</tr>
<tr>
<td>Western Gateway, Holland, MI</td>
<td>NA</td>
<td>NA</td>
<td>SmartZone Satellite Designation (Pending)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Capital Improvement Plan</td>
</tr>
<tr>
<td>Fulton Market, Chicago, IL</td>
<td>Yes</td>
<td>Planned Manufacturing District</td>
<td>Design Guidelines</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Business District</td>
</tr>
<tr>
<td>Eastern Market, Detroit, MI</td>
<td>Yes</td>
<td>NA</td>
<td>Cluster Based Strategy</td>
</tr>
</tbody>
</table>

Recalibrating regulatory tools, like zoning and permitting was one of the foremost steps taking by municipalities on the path to achieving their food system objectives. Four of the six communities (San Francisco, Chicago, Detroit, Fort Collins), incorporated changes into their ordinances in relation to urban agriculture, community gardens and farmers
markets. One of these key changes is the permitting of urban agriculture in a myriad of zoning districts. Hardwick, VT giving its rural setting did not have permitting in relation to agriculture but rather an interesting permit tied to encouraging home-based enterprises.

Both Chicago and San Francisco took steps towards maintaining industrial and manufacturing within their cities. San Francisco created a PDR zoning district aimed at preserving approximately 7% of the cities usable land for “Production, Distribution and repair.” Chicago in efforts to maintain the industry within the Fulton area created a planned manufacturing district.

Summary

Food policy councils and zoning modifications were the most pervasive patterns. Five of the six communities had a form of food systems planning group. Communities with city initiated clusters with the exception of Holland all had food policy groups. Meanwhile city independent clusters had entities that functioned in many ways like policy groups but in addition were directly linked to the localized food system clusters. Five of the six communities featured amendments to their zoning codes in relations to integrating food system core components within municipal boundaries.

The population size and geographic scale of the city had bearing on the breadth and depth of food system planning goals and objectives. San Francisco, Detroit and Chicago all had a large range of programs and policies in relation to food systems compared to the mid sized cities of Holland and Fort Collins. The town of Hardwick, which is branded as an “agri-preneurs” paradise, was smaller in scale but also featured a good range of programs and policies in relation to food systems. The most common tools used to facilitate the strengthening and support of localized food system clusters on the city and district level are displayed in Table 4.5.
<table>
<thead>
<tr>
<th>Programs</th>
<th>Food Policy Councils</th>
</tr>
</thead>
<tbody>
<tr>
<td>Financial Incentives</td>
<td>Loans</td>
</tr>
<tr>
<td>Regulatory</td>
<td>Permitting urban agriculture, Preserving food systems infrastructure (Manufacturing, Processing), Permitting sale of produce, Standards for farmers markets</td>
</tr>
</tbody>
</table>
Chapter Five: Conclusion

The previous chapter discusses in depth the findings of this study in the hope of identifying the answers to three critical questions.

-(1) How are localized food system clusters addressed in food systems planning?
(2) What planning and policy mechanisms do municipalities utilize to support localized food system clusters?
(3) What planning and policy considerations should the Raleigh Food Corridor take in for its process to implementation?

The literature review established food systems planning as a fairly new planning area of study both in the academic and practitioner world. Localized food system clusters in relation to this area are even more emerging. Localized food system clusters as a tool have only entered discourse fairly recently. Of the evaluated communities, only two of the clusters were planned localized food system clusters. The other four are clusters that have been created organically and are now being framed as localized food system clusters. Four of the municipalities had mentions of the localized food system clusters within food system goals and objectives. The two communities that did not have mentions of the clusters with their food system goals and objectives were San Francisco and Fort Collins. Omission in the San Francisco sustainability plan can be attributed due to the fact that activity around the mention of a citywide food systems cluster in San Francisco is based on a study that came out in 2014 and a newly formed food policy wing. The San Francisco Sustainability plan predates these movements. Fort Collins on the other hand is in itself a fairly recent plan.
The lack of linkage between the food system cluster and city planning goals and objectives can be attributed to the fact that the cluster is city supported but independent of the city. Despite the lack of direct mentions of the cluster, Fort Collins has a planning and policy environment that is beneficial to the creation of a localized food system cluster as our findings demonstrate. General food systems goals and objectives are braided into their plan and they feature urban food system friendly policies, like permitting modifications for urban agriculture and farm animals. In light of our first research question we can conclude that localized food system clusters are often directly addressed in the scope of food system planning goals and objectives both directly and indirectly.

The implications of the findings are that localized food system clusters cannot be sustained in a vacuum. The findings have demonstrated that the participation and support of local government and planners is integral to the development of localized food system clusters. Local governments help shape the environment for localized food system clusters by eliminating barriers and promoting incentives for the core components of a food system. In the course of my study I was able to identify food-related policies and programs that municipalities with localized food system clusters implement. Both Chapter Four and Appendix C provide additional detail but here are some notable implementation practices that directly benefit and relate to localized food system clusters.

1. Incorporating food system objectives into comprehensive plans or stand-alone plans allowing for a legal structure and basis for their implementation.
2. Establishing food policy groups, task forces or food system planning bodies
3. Implementing progressive zoning for the elimination of barriers to urban agriculture and farmers markets.
4. Establishing loan funds and grants to attract new food related businesses
5. Establishing preservation districts to retain existing industry
These five implementation actions I believe are critical to the formation of localized food system clusters. I have translated these findings into a set of recommendations and considerations for the proposed Raleigh Food Corridor.
Chapter Six: The Raleigh Food Corridor Recommendations

In the following Chapter I will be using the key findings from the study to make a set of recommendations for the Raleigh Food Corridor. The Raleigh Food Corridor remains in a critical stage of development that would benefit greatly from the findings gleaned from the other active and proposed clusters.

Recommendation One: **Place the Raleigh Food Corridor within city planning goals and objectives.**

Localized food system clusters are an important food systems planning tool. In addition the planning and policy environment of municipalities are indicative of the possible success of a localized food system cluster. Besides the zoning and permitting accommodations that need to be made. Cities can provide financial incentives to help attract and support new food related businesses like food hubs. The city can also provide supportive programs and help sustain the unified approach to food system objectives. The ability for localized food system clusters to address economic development, public health and sustainability issues also make it well in the interest of the city to support localized food system clusters. A recent report found that a very small percentage of communities adopted comprehensive plans or stand-alone plans with mentions of food system goals and objectives. However, in my study all six of the communities addressed food systems in either a comprehensive plan or stand-alone plan. Plans allow a legal framework for clusters and in addition help with local branding, fostering a favorable political climate and ensure community involvement.
Recommendation Two: Establish an entity tasked with managing the food corridor.

Five of the communities evaluated, had a form of food policy group or food systems planning group either city affiliated or city supported. (Detroit Food Policy Group, Chicago food Policy Advisory Council, Northern Colorado Food Cluster Members, Hardwick Center for an Agricultural Economy Members, San Francisco Food Security Task Force). The Raleigh Wake Food Policy Council Task Force is currently working toward the development of a food policy council in Raleigh/Wake County, NC. Giving that the Raleigh Food Corridor is a city independent initiative we believe that in addition to a food policy council an entity devoted to the promotion and stabilization of the cluster is also imperative as exemplified in the city independent clusters in Hardwick and Fort Collins. Both models serve as an important way of creating linkages and opportunities for participating and existing food-related businesses and organizations.

Recommendation Three: Understand and address the current regulatory barriers to the growth of the food corridor.

One of the biggest barriers to the success of localized food system clusters can be the policy environment. Food is often taken for granted in the urban context giving a legacy of cities placing it in context of rural and agricultural interests. As a result a number of zoning and permitting restrictions have developed that have traditionally rendered the urban space unfriendly to a number of food system core components. Recalibrating regulatory tools, like zoning and permitting is one of the foremost steps taking by municipalities on the path to achieving their food system objectives.

Four of the six communities (San Francisco, Chicago, Detroit, Fort Collins), incorporated changes into their ordinances in relation to urban agriculture, community gardens and
farmers markets. It is important to know what barriers exist to creating a thriving local food system within Raleigh. Once these barriers are known, advocacy work should be done to eliminate these policy barriers.

**Recommendation Four: Identify creative financing that can help grow the corridor.**

Once you have a plan, identifying funding mechanisms to support existing food system infrastructure and attract new food related businesses is the next step. One creative financing option can be Tax Increment Financing (See Figure 6.1). Giving that TIFs function on the district level, district clusters like the Raleigh Food Corridor are well situated to leverage it as a finance mechanism.

North Carolina has not had much success in initiating traditional TIF, however there have been some synthetic TIF projects. Synthetic TIF can be particularly interesting in the case of the Raleigh food corridor giving that it extends into sites with future economic development opportunities. Charlotte, NC has had some success in the implementation of synthetic TIFs.
Final Conclusion

The following study establishes localized food system clusters within the food systems planning process. It is clear that localized food system clusters should be systematically utilized in food system planning initiatives. Municipalities that do not have a strong food systems planning framework, will have some difficulty in sustaining localized food system clusters. We posit that proposed clusters like the Raleigh Food Corridor should be incorporated into city food system goals. The policy landscape of a city can offer both significant barriers and incentives to the implementation of a localized food system cluster. City supported clusters are able to more easily eliminate these barriers, and leverage incentives for ultimate success.

Though local food system cluster remain in their infancy, localized food system clusters we predict are a promising tool that will be as ubiquitous to food systems planning as smart growth is to environmental planning. However, further research is needed in order to establish the possibilities of localized food system clusters. Currently there are only a small amount of active strategized localized food system clusters. The Raleigh Food Corridor is one of many proposed localized food system clusters. As these clusters get established further research is needed to understand the post implementation success of localized food system clusters.
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City of Detroit, MI. http://detroitfuturecity.com
Appendix

Appendix A: The Food Systems Figure

Adapted from “Designing an Inner City Food Cluster Strategy.” Initiative for a Competitive Inner City. Presentation given at Northeastern University, February 1, 2012. Available at: www.icic.org/icc_upload/pdf/foodclusterstrategy1.pdf
## Appendix B: Planning Framework

<table>
<thead>
<tr>
<th>City/Location</th>
<th>Official Plans That Include References to the Food System</th>
</tr>
</thead>
<tbody>
<tr>
<td>San Francisco</td>
<td>San Francisco five year <strong>sustainability plan</strong> has Food and Agriculture as a critical component. <em>(sustainability plan)</em></td>
</tr>
<tr>
<td>Hardwick, VT</td>
<td>Hardwick, VT <strong>Town Plan</strong>: Economic Development section <em>(comprehensive plan)</em></td>
</tr>
<tr>
<td>Fort Collins, CO</td>
<td>Fort Collins <strong>City Plan</strong>: Integrated throughout <em>(comprehensive plan)</em></td>
</tr>
<tr>
<td>Holland, MI</td>
<td>Western Gateway Place Plan: Integrated throughout <em>(stand alone plan)</em></td>
</tr>
<tr>
<td>Fulton Market (Chicago)</td>
<td>Eat Local, Live Healthy <em>(Food systems plan)</em>; Fulton Market Plan <em>(District Plan)</em>; <strong>A Recipe for Healthy Places</strong> <em>(Food Systems Plan)</em>; Chicago Metropolitan Regional Plan <em>(Local Food Section)</em></td>
</tr>
<tr>
<td>Detroit Eastern Market</td>
<td>Detroit Future City: Integrated throughout <em>(Comprehensive plan)</em></td>
</tr>
</tbody>
</table>
San Francisco, CA

San Francisco, CA is a city that boasts a host of local food system friendly policies and initiatives. It is also the site of a host of food and beverage entrepreneurs. Last year the city and some partners commissioned the San Francisco Food and Beverage Industry Cluster study. The study was aimed at developing an economic strategy to support and promote its food related businesses. The economic strategy, which will be implemented by the city and county of San Francisco, will help food and beverage producers and distributors start, stay and grow in the city.

The City of San Francisco has a stand-alone sustainability plan and a general plan that both address food systems.

**Sustainability Plan: San Francisco Sustainability plan (1997-2002)**

The city of San Francisco incorporated food and agriculture as critical components of a sustainability plan crafted in 1997. Local food purchasing, increasing local food production and access to nutritious food were three considerations embedded in this component. The plan stated that San Francisco could be on the road to sustainability by creating an environment in which local and regional agriculture could thrive while ensuring safe and affordable food for all residents. The plan stated that San Francisco had at the time more than 5,000 food related businesses that purchased fresh food. It committed to San Francisco making city policies that encouraged sustainable agriculture.

The six goals outlined in the plan included:

To increase individual, public and private-sector participation in a sustainable food system.

To establish and coordinate a community-based policy and educational program to achieve a sustainable food system.

To ensure access by all people at all times to enough nutritious, affordable, safe and culturally diverse food for an active, healthy life.

To create, support and promote regional sustainable agriculture.

To maximize food and agriculture production within the city itself.

To recycle all organic residuals, eliminate chemical use in agriculture and landscaping and use sustainability practices that enhance natural biological systems throughout the city.

**Comprehensive Plan: Sand Francisco General Plan (Adopted 96', amended subsequently)**

The San Francisco General plan does not make explicit reference to food systems. It however incorporates mentions of isolated components of the food system in the plan.

Community gardens are the only component embedded in a policy, under the Recreation and Open Space element updated in 2009.

Policy 2.12 Expand community garden opportunities throughout the city.
Hardwick, VT

Hardwick, VT is a small town of a little over 3,000 people that has become a beacon example of using localized food system clusters for economic development. In his novel “The Town that Food Saved,” author Ben Hewitt chronicles how the town went from a struggling economy to becoming a mecca for “agripreneurs.” The town now boasts an industrial park that is home to a number of value-adding processing businesses, a 15,000 square feet multi-purpose food processing center, and a host of newly incubated food related businesses and organizations.

Comprehensive Plan: Hardwick Town Plan
The Hardwick Town Plan 2014, addresses food systems under its economic development section, the plan notes that over the last decade the town has become a regional food business cluster hub. The “agricultural renaissance” has contributed to more than 100 jobs in the local economy.

Goal one under its economic development plan is for “Hardwick to have a diverse and resilient economy based on agriculture, small business and light industrial that is compatible with Hardwick’s scenic landscape and will raise income levels and provide employment for Hardwick’s residents”
Policies under the goal include;
Supporting initiatives that will make farming and forestry more economically viable into the future
Supporting industries which take advantage of local resources to produce value added products
Support “buy local” efforts of the chamber and town.

The Hardwick, VT town plan is a prime example of the ways in which, planners have framed localized food system clusters within the economic development frame.
The Northern Colorado Food Cluster is a city wide localized food cluster aimed at creating a healthy community through a resilient, local food system that supports and promotes local food production, distribution, and consumption. The food cluster is located in Fort Collins, CO and organized around a membership process. The cluster is currently supported by the city and populated by a mix of businesses and organizations. The members work on food policy, support community initiatives, work on “high impact projects,” and find a myriad of ways to work collaboratively.

**Comprehensive Plan: Fort Collins**
The City Plan Fort Collins was updated in 2010. Food system objectives are integrated throughout the plan but are featured most notably under safety and wellness. One of the objectives under the safety and health and wellness vision is to create access to healthy, locally grown or produced foods. However, as aforementioned the plan manages to link food system objectives, under directed principals and/or policies.
<table>
<thead>
<tr>
<th>Table 2. Fort Collins Comprehensive Plan</th>
<th>Policy</th>
</tr>
</thead>
<tbody>
<tr>
<td>Economic Health</td>
<td>Policy EH 3.4: Support the brewing industry</td>
</tr>
</tbody>
</table>
| Environmental Health                   | Policy ENV 4.5 – Support Community Horticulture  
Policy ENV 15.1 – Encourage Composting |
| Community and Neighborhood Livability  | Principle LIV 23: Neighborhoods will feature a wide range of open lands, such as small parks, squares, greens, play fields, natural areas, orchards and community gardens, greenways, and other outdoor spaces to provide linkages and recreational opportunities both for neighborhoods and the community as a whole.  
Policy LIV 27.5 – Cluster Development (to preserve blocks of agricultural land)  
Policy LIV 42.2 – Encourage Agricultural Uses |
| Safety and Wellness                    | Policy SW 3.1 – Encourage Community Gardens and Markets  
Policy SW 3.2 – Participate in Efforts to Enhance the Regional Food System  
Policy SW 3.3 – Encourage Private Community Gardens in Neighborhood Design  
Policy SW 3.4 – Include Garden Plots in Neighborhood Park Development |
| Culture, Parks and Recreation          | Policy CPR 5.2 – Provide Multi-Purpose Lands |
| Transportation                         | No direct mention of food systems |
Holland, MI

The Western Gateway District, in Holland, MI is a proposed food innovation district outlined in a plan submitted to PlacePlans, a Michigan competition. The western gateway district outlines a plan with Holland Farmers market as one of the anchors, while incentivizing and investing in food related business.

Comprehensive Plan: Holland, MI

The city of Holland, MI has a 1992 Master plan that has subsequently been updated. The original 1992 document does not include language around food systems. Over the years the city has provided updates to the plan on a neighborhood level. In a 2002 update of the plan, the central neighborhoods action plan, there is a reference, “to investigate the possibility of nurturing other completely new neighborhood gathering opportunities such as a Community Gardening program.” In sharpening the vision, a ten year update of the strategic plan for Downtown Holland and an update of the City's Master Plan adopted in 2007, support towards a farmers market is mentioned.

“Continue aggressive efforts to increase and sustain active and diverse use of the Eighth Street Market Place, including continuing support for the Farmers Market, for such events as community festivals featuring music and entertainment, and for other activities and programs that extend the season to more of a year-round venue and further energize surrounding properties.”

In general, there are no direct objectives in relation to any aspect of the local food system core components.

Stand-alone plan: Western Gateway PlacePlans

In 2014, Holland, MI created a plan for their Western Gateway area. The area is home to Holland’s farmers market and civic center building. The area has the potential to extend towards the downtown, and link it to the waterfront. The plan submitted envisioned promoting the area’s food industry and outlined a strategy for creating a “food innovation district.” The Holland proposal was one of eight plans submitted by communities around the state for PlacePlans, a joint project of the MML, Michigan State University’s School of Planning, Design and Construction, and the Michigan State Housing Development Authority.
<table>
<thead>
<tr>
<th>Table 3. Western Gateway Plan</th>
<th>Recommendation</th>
<th>Implementation</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Physical Design and Walkability</strong></td>
<td>No direct mention</td>
<td></td>
</tr>
<tr>
<td><strong>Environmental Sustainability</strong></td>
<td>Improve walkability, food access, and downtown economic activity</td>
<td>Create a food innovation district in the Western Gateway. Promote connectivity between downtown and Western Gateway, food producers, suppliers, and consumers. Increase interaction between growers and direct consumers. Incentivize grocery stores that sell local produce to open in near the city center in the walkable district.</td>
</tr>
<tr>
<td><strong>Cultural Economic development</strong></td>
<td>No direct reference</td>
<td></td>
</tr>
<tr>
<td><strong>Entrepreneurship</strong></td>
<td>Test additional venues for expansion with nontraditional such as food trucks and sidewalk stands</td>
<td>Try temporary pop-ups or food trucks to test new business ideas in the Western Gateway. Revise ordinances to welcome nontraditional vendors and direct them to locations where they will complement traditional storefronts.</td>
</tr>
<tr>
<td><strong>Welcoming All</strong></td>
<td>Address food access disparities across cultural groups</td>
<td>Equalize representation and access of fresh local food to Hispanic, Asian and other residents by creating a connection between food assistance programs and local food producers for people of all income levels. Tailor farmers market events to welcome Hispanic and other under-represented vendors and ensure access to farmers market.</td>
</tr>
<tr>
<td><strong>Messaging and Technology</strong></td>
<td>No direct reference</td>
<td></td>
</tr>
<tr>
<td><strong>Transportation Options</strong></td>
<td>Provide mass public transportation to community events, festivals, and farmers markets</td>
<td>Increase equality of access and attendance by offering a shuttle from low income neighborhoods to community events and farmers markets.</td>
</tr>
<tr>
<td><strong>Education</strong></td>
<td>No direct reference</td>
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</table>
Chicago, IL

Fulton Market is a historic market district in Chicago, IL. The district has traditionally supported food related business. Currently the district seeks to be a technology innovation district while still retaining its supportive food industry and business environment. The Fulton Market district is home to a number of wholesalers and area restaurants that source their raw materials from small farmers that specialize in organic, pesticide free, and/or humanely raised products, reflecting the area’s commitment to market-driven innovation, and representing a unique interplay between traditional wholesale food purveyors and restaurants that serve regionally sourced food.

Stand-alone plan: A Recipe for Healthy Places
“A Recipe for Healthy Places,” presents six community-based planning strategies to support healthy eating. In addition to changing the context in which people acquire and eat food, the plan’s strategies seek to foster business entrepreneurship, job growth, gardening, and other spin-off benefits that provide for a healthier city. This plan is an outgrowth of the city’s public health agenda, Healthy Chicago, which was launched by Mayor Emanuel in 2011. The plan was adopted in January 2013 by the Chicago plan commission. (Chicago Planning Department)

Stand-alone plan: Eat, Local Live Healthy

The 2004 “Eat Local Live Healthy” plan is a City of Chicago strategy to support aspects of the local and regional food industry in ways that enhance public health and create food-related business opportunities. The strategy aims to create a means of improving food quality, lowering its cost and increasing its availability for consumers. It also presents examples of public- and private-sector cooperation that could provide new employment and sustainable development opportunities.

Stand-alone plan: Fulton Market Innovation District Plan

The Fulton Market plan was adopted by the Chicago Plan Commission in July 2014. The plan is designed to coordinate ongoing development in and around the city’s last remaining market district. The plan is intended to support its historic food system infrastructure along with its more recent evolution as a home to innovative industries, culture, nightlife, and housing.

Comprehensive plan: GO TO 2040 comprehensive regional plan
The metropolitan Chicago plan was updated in October 2014. Metropolitan Chicago’s GO TO 2040 plan called to strengthen the region’s food systems. The regional plan included a section "Promoting Sustainable Local Food," which provides a wealth of information and targeted strategies for supporting local food systems.
## Table 4. A Recipe For a Healthy Place Vision

<table>
<thead>
<tr>
<th>Build Healthier Neighborhoods</th>
<th>Recommendation</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1.1 Develop and analyze data on obesity-related health disparities to identify priority communities</td>
</tr>
<tr>
<td></td>
<td>1.2 Focus physical and programmatic planning in communities with elevated risk for obesity-related diseases</td>
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<thead>
<tr>
<th>Grow Food</th>
<th>Create systems of productive landscapes</th>
</tr>
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<tbody>
<tr>
<td></td>
<td>2.1 Create a system of public open spaces for large-scale food growing, job training and food-related education activities</td>
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<td>2.2 Enhance and expand the existing system of community and school gardens</td>
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<td>2.3 Use environmental best practices to ensure that land is safe for growing food</td>
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<td>2.4 Explore strategies and partnerships to encourage the widespread use of private spaces to grow healthy food</td>
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<td>2.5 Collect data on urban food production</td>
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<thead>
<tr>
<th>Expand Healthy Food Enterprises</th>
<th>Support businesses and social enterprises that produce and distribute healthy food</th>
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<tbody>
<tr>
<td></td>
<td>3.1 Support the expansion of businesses involved in the production, processing and distribution of healthy food</td>
</tr>
<tr>
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<td>3.2 Expand the number and variety of healthy food retail options</td>
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<table>
<thead>
<tr>
<th>Strengthen the food safety net</th>
<th>Ensure that residents can eat well regardless of income</th>
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<tbody>
<tr>
<td></td>
<td>4.1 Set high nutrition standards for programs that provide supplemental food and serve meals to persons in need</td>
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<td>4.2 Expand the use of LINK cards and incentive programs at retail outlets</td>
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<td></td>
<td>4.3 Coordinate and expand food rescue and distribution networks to provide more high-quality food to more people</td>
</tr>
<tr>
<td></td>
<td>4.4 Connect more residents in need with food assistance programs</td>
</tr>
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<table>
<thead>
<tr>
<th>Serve healthy food and beverages</th>
<th>Change the culture of eating at work meetings, festivals, sports gatherings, community activities and places of worship</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>5.1 Provide healthy food choices in public buildings and at government-supported meetings and events</td>
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<tr>
<td></td>
<td>5.2 Encourage community- and faith-based organizations, nonprofits and private companies to provide healthier food at their facilities</td>
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<td>5.3 Explore opportunities to provide more free drinking water throughout the city</td>
</tr>
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<thead>
<tr>
<th>Improve Eating Habits</th>
<th>Help people discover appealing, nutritious foods</th>
</tr>
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<tbody>
<tr>
<td></td>
<td>6.1 Expand nutrition education for all age groups in a variety of settings</td>
</tr>
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<td></td>
<td>6.2 Develop a marketing campaign to promote healthy eating and water consumption</td>
</tr>
<tr>
<td></td>
<td>6.3 Support a system of training and technical assistance for healthy food programming</td>
</tr>
<tr>
<td>Table 5. Eat, Local Live Healthy Vision</td>
<td>Recommendation</td>
</tr>
<tr>
<td>----------------------------------------</td>
<td>----------------</td>
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</tbody>
</table>
| Increase the supply of locally grown produce and Value-Added Products | Preserve farmland in northeastern Illinois  
Leverage Chicago’s demand to stimulate the regional supply  
Develop training and support programs for existing and new farmers  
Connect local farmers to local markets |
| Increase food production and composting in Chicago Neighborhoods | Increase the number of city residents who know how to grow food in an urban setting  
Increase the number of city residents who know how to compost  
Help Children grow their gardening skills |
| Make Chicago the hub | Grow the food business  
Convert existing facilities to all-natural and organic processing |
| Improve access to locally grown, health food and value-added products | Increase the delivery of local and/or healthy food to Chicago’s oldest residents  
Place healthy, locally grown food in schools  
Improve the City of Chicago’s Farmers Market system  
Continue to attract new grocers |
| Increase Public Awareness | Coordinate messaging from the City of Chicago that encourages healthy eating through the consumption of fresh, local products |
Detroit, MI

The Dequindre/Eastern Market is a district envisioned as the center for food in Detroit and the region. Capitalizing on a historical land use pattern, the city seeks to leverage and invest in its food related businesses. The city aims to shape the district so it continues to support retail, wholesaling, packaging, and food/beverage processing. In addition it seeks to attract other food related businesses. The district is already home to the Detroit Eastern Market, a well-attended market that draws thousands from across the city for locally produced and grown food. The district currently includes urban farms and is in close proximity to a number of proposed productive landscapes. The goal of the district is to provide better access to fresh food and feed the processing and packaging activities that provide the greatest number of jobs in the food cluster.

City Plan: Detroit Future City
The Detroit future city is an ambitious and unique 50-year plan aimed at rebooting the Motor city. The plan was born out of the Detroit Works Long-Term Planning initiative, founded by former Mayor Dave Bing. In 2013, after three long years of community meetings and input, the initiative announced a 347-page outline and rebranded itself as DFC. The plan includes 6 priority areas and corresponding initiatives. Food systems objectives are an important element in the development of the city and are visible in each of the sections.
### Economic Growth

<table>
<thead>
<tr>
<th>Goal</th>
<th>Initiative or Strategies</th>
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</table>
| Goal 2: A city of Equitable Economic Growth: In the small-scale industrial sector, and especially in the food sector, shared production spaces can offer low-cost options for local entrepreneurs and more broad-based ownership or sharing of business assets. | Recovery Park Food System Support  
Recovery Park's mission is to create jobs for people with barriers to employment. The organization believes developing businesses in food production, processing and distribution centered on approximately 100 acres of blighted lots north and east of Eastern Market generally bounded by St. Aubin, I-94, Chene and Scott. Recovery Park will have the opportunity to create a large number of jobs and improve the local economy and neighborhood.  
Dequindre/Eastern Market  
Establishing a center for food related jobs and production in the region. Building on local assets, Dequindre/Eastern Market is envisioned as the center for food in Detroit and the region, with uses that support retail, wholesaling, packaging, and food/beverage processing. Investment will leverage this activity, and grow additional food-related businesses. |
| Goal 3: A City of Physically and Strategically Aligned Economic Assets: Important efforts to create districts of economic activity already exist, most notably in the food cluster around Eastern Market and the education and health-related clusters in Midtown. | |
| Goal 4: A Leader in Urban Industrial Activity: In the food cluster, for example, Detroit has the assets and knowledge to lead in the design and production of urban farming tools. | |
| Goal 5: A city of regional and Global Economic assets: Concurrently, local leaders remade traditional industries, including the Detroit Food Policy Council and Detroit Black Community Food Security’s work in creating a vision for the national movement in food justice and food security issues. | |

### Land Building and Assets

<table>
<thead>
<tr>
<th>Goal</th>
<th>Initiative or Strategies</th>
</tr>
</thead>
<tbody>
<tr>
<td>Goal Four: A new urban Landscape: It means that Detroit’s vast inventory of vacant land can be used for a variety of new purposes, to foster innovations in public open space, urban agriculture, clean energy, and more; and to build a new network of blue/green infrastructure to divert stormwater from the city’s overtaxed sewer system and clean the city’s air.</td>
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</table>

### City Systems

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<tr>
<th>Goal</th>
<th>Initiative or Strategies</th>
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<tbody>
<tr>
<td>No direct reference</td>
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### Land Use

<table>
<thead>
<tr>
<th>Goal</th>
<th>Initiative or Strategies</th>
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</table>
| Goal 3: A green city where landscapes contribute to health  
Goal 4: A city of distinctive, attractive neighborhoods: Green residential and green mixed-rise neighborhoods transform existing land vacancy into integrated landscapes, providing recreational, ecological, and productive functions. | A new open space network (innovative landscapes)  
Innovative productive includes urban farms-greenhouses, managed forests, and aquaculture facilities; research plots; deconstruction sites; and other active uses |

### Neighborhoods

<table>
<thead>
<tr>
<th>Goal</th>
<th>Initiative or Strategies</th>
</tr>
</thead>
</table>
| No direct reference | • Address Quality of Life Changes  
• Assess city wide ground conditions and feasibility of urban agriculture  
• Empower non profits to coordinate citywide urban food system initiatives  
• Leverage local food system economies  
• Create policy constraints that restrict the number of liquor and lotto stores that do not offer fresh food or healthy options  
• Repurpose Vacant Land  
• Target Disposition of public land for urban agriculture and community gardens  
• Incentivize commercial uses that leverage neighborhood based food economy  
• Incentivize institutional/commercial buying of locally produced food  
• Support efforts to establish local food networks  
• Utilize Productive Landscapes as basis for sustainable city  
• Partner with universities and research institutions to create innovation centers focused on agriculture/brownfield remediation, energy production and land research. |
## Table 7. Key Supportive Policy Framework

### San Francisco

<table>
<thead>
<tr>
<th>Programs</th>
<th>Food System Policy Program: Initiative in Planning Department 2009: Executive Directive to promote Healthy &amp; Sustainable food Board of supervisors food security task force Sustainable Food Business Recognition Program highlights sustainable food businesses</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fiscal Incentives</td>
<td>Loan options for businesses Southeast Asian community center: SBA micro loans Central Market Cultural District Loan Fund Pacific community ventures loans Valley Economic Development Center San Francisco Emerging Business Loan fund Mission Economic Development Association</td>
</tr>
<tr>
<td>Regulatory tools</td>
<td>Ammended zoning code to promote urban agriculture (Gardens less than one acre allowed in all districts). Zoning permit only allowed if primary use. Gardens larger than one acre restricted but can apply for conditional use permit San Francisco planning code recognizes multiple forms of food production including community gardens, neighborhood gardens, green houses, plant nurseries, and truck gardens. 2010 ordinance allows limited sale of produce on otherwise vacant land. Standards for farmers markets in code Farmers market needs assessment, to insure access to healthy food by low income residents and access to markets by regional farmers PDR zoning district: created to preserve approximately 7% of the cities usable land for “Production, Distribution and repair.” 2014 update to PDR The legislation made it easier for certain types of food businesses to operate (including breweries, meat and dairy producers, and fermented food producers), allowed multiple industrial businesses on a parcel to share retail space, and modified zoning incentives to encourage the production of new PDR space. Ordinance allowing mobile food facilities at Residential house, residential mixed, residential enclave and residential transit oriented SF Department of the Environment has drafted a Food Procurement Ordinance to ensure that a percentage of the City's direct food purchases support regional agricultural producers. Food Business Action Plan (FBAP) bundles together city incentives to promote healthy and sustainable food retail California Homemade Food Act – The state recently adopted a law that places a mandate on cities and counties to issue home business permits to individuals engaged in cottage food production.</td>
</tr>
</tbody>
</table>
### Table 8. Key Supportive Policy Framework
**Hardwick, VT**

<table>
<thead>
<tr>
<th>Programs</th>
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</thead>
</table>
| The center for an agricultural economy (featured on city website)  
Vermont Food Venture Center (shared-use kitchen incubator for value-added and specialty food producers who can rent the kitchen on an hourly basis or arrange for co-packing at the facility.)  
VT equipment Access program  
Farm to co-packer program  
Hardwick Area Chamber of Commerce active in marketing the area Food based learning initiative (2013-2014) |

<table>
<thead>
<tr>
<th>Fiscal Incentives</th>
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</table>
| Vermont Farm fund: low interest loans  
Share capital: Food related business within cluster share capital with each other (lent 300,000 in short term loans)  
Revolving loan fund to assist start up ventures (607,000 loans out to 13 local businesses). |

<table>
<thead>
<tr>
<th>Regulatory tools</th>
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</thead>
</table>
| Hardwick industrial park that is equipped with municipal water, sewers, roads and three phase power and plans for a second industrial park  
The Town recognizes the importance of home-based enterprises and encourages such activity as appropriate. |

### Table 9. Key Supportive Policy Framework
**Northern Colorado Food Cluster: Fort Collins, CO**

<table>
<thead>
<tr>
<th>Programs</th>
</tr>
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</table>
| Northern Colorado Food Cluster (membership based)  
Economic gardening program (supporting and growing local businesses)  
Northern Colorado regional food assessment project |

<table>
<thead>
<tr>
<th>Fiscal Incentives</th>
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</thead>
</table>
| Business expansion (150,000 included in the economic program leadership offer)  
Low power rates  
Manufacturers Use tax rebate program |

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<tr>
<th>Regulatory tools</th>
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</table>
| Establishing an urban agriculture licensing system allowing urban agriculture in all zone districts  
Allowing farmers markets in more zone districts.  
Scaling the number of allowable chickens based on lot size,  
Allowing ducks to be raised,  
Allowing two dwarf or pygmy goats per household for milk production, and  
Updating the beekeeping ordinance to reflect current best practices.  
Council adopted regulations that exempted hoop houses from building permit requirements. |
### Table 10. Key Supportive Policy Framework
**Western Gateway: Holland, MI**

| Programs | Michigan Good Food Charter (State initiative)  
|          | Macatawa resource center: exploring feasibility of food hub |
| Fiscal Incentives | MDARD Value Added/Regional food system grant  
|          | New state crowdfunding law (the Michigan Invests Locally Exemption, P.A. 264 of 2013)  
|          | MEDC crowd funding grant for public space  
|          | DDA TIF plan |
| Regulatory tools | City pursuing SmartZone satellite designation  
|                | Capital Improvement plan |

### Table 11. Key Supportive Policy Framework
**Detroit Eastern Market: Detroit, MI**

| Programs | Detroit Food Policy Council  
|          | Greening of Detroit Healthy, Hunger Free Kids Act of 2010  
|          | Garden Resource Program collaborative  
|          | Detroit Black Community Food Security Network  
|          | The City Planning Commission’s Urban Agriculture Work Group (UAW)  
|          | Detroit Business Support Network  
|          | New Economy Initiative  
|          | Healthy, Hunger Free Kids Act of 2010 (federal) |
| Fiscal Incentives | Public-Private partnerships  
|          | NIH grants  
|          | Tax credits, grants and low interest loans |
| Regulatory tools | Fast-food or carry-out restaurants must be located a min distance of 500 feet away from the nearest point of a school  
|          | Urban Gardens, Urban Farms, Greenhouses and hoophouses are either permitted by default or with permission from the city in all residential and business districts.  
|          | Farmers Markets, Aquaculture, Aquaponics and hydroponics are generally prohibited in all residential districts but may be permitted in some business districts as by-right or conditional uses. Industrial and general services districts are the most permissive.  
|          | Urban garden and farm properties may sell their own produce from farm stands on the property.  
|          | Farmers markets are permitted as accessory uses on the property of schools, churches, rec. facilities and non-profit neighborhood centers regardless of district.  
|          | Aquaculture, aquaponics, and hydroponics operations are allowed as accessory uses on urban farms.  
<p>|          | Cluster based strategy |</p>
<table>
<thead>
<tr>
<th>Table 12. Key Supportive Policy Framework</th>
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<tbody>
<tr>
<td><strong>Fulton Market: Chicago, IL</strong></td>
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<thead>
<tr>
<th>Programs</th>
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</thead>
<tbody>
<tr>
<td>Fresh Moves mobile grocery store</td>
</tr>
<tr>
<td>Illinois food, farms and jobs act</td>
</tr>
<tr>
<td>Chicago Food Policy Advisory Council</td>
</tr>
</tbody>
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<table>
<thead>
<tr>
<th>Fiscal Incentives</th>
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<tbody>
<tr>
<td>Fresh Food Fund Financing (state Pending)</td>
</tr>
<tr>
<td>Healthy Food Financing Initiative (Federal)</td>
</tr>
<tr>
<td>Federal Farm bill funding (Federal)</td>
</tr>
<tr>
<td>City financing Initiatives (sold city land to finance projects)</td>
</tr>
<tr>
<td>1998 Tax increment Financing plan Kinzie Industrial corridor (Fulton Market District)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Regulatory tools</th>
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<tbody>
<tr>
<td>Standards for Farmers markets in code: growers/producers must obtain a permit from the commissioner of cultural affairs and special events to sell products at farmers’ markets ($25.00/day). Food products are designated as appropriate, prohibited, or restricted for sale. The Commissioner is charged with establishing operation days/times and locations upon the public ways and other city property (following consultation with affected city departments) to be designated as farmers’ markets.</td>
</tr>
<tr>
<td>Language in relation to composting in municipal code: Permits composting subject to location, materials, and performance standards Amended code to allow Rooftop agriculture &quot;community gardens&quot; of up to 25,000 square feet in residential areas without a permit. urban farms of all sizes to operate in non-residential zoning districts ordinance allows for limited on-site produce sales in residential districts, relaxed parking and fencing rules, and the use of aquaponics systems. In Chicago, beekeepers are allowed up to five hives as an accessory use on residential and commercial properties. No specific language but chickens are not prohibited Planned Manufacturing District (Fulton Market) Fulton Market designated business district Fulton-Randolph historic district (pending) General design guidelines to maintain character</td>
</tr>
</tbody>
</table>