

Review

Policies Supporting Local Food in the United States

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Abstract: Local food has been the subject of federal, state, and local government policies in recent years throughout the United States as consumer demand has grown. Local foods have been linked to several government priorities—including enhancing the rural economy, the environment, and supporting agricultural producers. This article provides an overview of U.S. Federal, State and regional policies designed to support local food systems. It details the latest economic information on policy, relying on findings from several national surveys and a synthesis of recent literature. Federal policies related to local food systems were greatly expanded by the 2008 Farm Bill, and are further expanded in the Agricultural Act of 2014. United States policies address several barriers to the further expansion of local food markets, including scaling up output of small farms to address the needs of larger commercial outlets, lack of infrastructure for increasing local food sales, ability to trace product source, and producer education regarding local food expansion.

Keywords: Farm Bill; farm to school; Farmers' Market Promotion Program; state food policy councils; farmers markets; food hubs; intermediated marketing channels; direct-to-consumer outlets

1. Introduction

In 2012, local food sales in the United States totaled an estimated \$6.1 billion [1]. There were 163,675 farms (7.8 percent of U.S. farms) selling local foods, defined as conducting either direct-to-consumer (e.g., farmers' markets, roadside stands, pick-your-own sites) or intermediated (e.g., direct to restaurants, institutions or regional distributors) sales of food. Of these farms, 70 percent used only direct-to-consumer marketing channels. The remaining 30 percent used a combination of direct-to-consumer and intermediated channels or only intermediated channels. In recent years, consumer interest in local food has grown, including but not limited to the following locations: farmers markets, supermarkets, and institutions (such as schools and hospitals) [2].

Government programs and policies that address barriers to growth in local food production and directly support local food purchases can serve as a catalyst for further growth of local food markets. Currently, the primary Federal policy that supports local and regional food systems is the Agricultural Act of 2014, or 2014 Farm Bill [3]. Policies and provisions enacted in the 2008 Farm Bill are generally continued or expanded. Most notably, support for intermediated marketing channels has greatly increased in response to capacity constraints for small farms and lack of distribution systems for moving local food into mainstream markets. A number of states have also passed legislation to address access to and expand urban agriculture. At the local levels, zoning and regulation, fiscal incentives, and institutions are used to strengthen local food systems.

Though "local" has a geographic connotation, there is no consensus on a definition in terms of the distance between production and consumption. Definitions related to geographic distance between production and sales vary by regions, companies, consumers, and local food markets [4]. In addition, there may be other characteristics associated with local food, including sustainable agriculture and community development [5]. Conceptually, we consider "local food" to be defined by proximity

and by relationship [4,5]. Proximity includes both a distance measure and a geographic or political boundary, such as states, regions of states, or counties. We refrain from specifying a specific distance as defining local because it is a term best determined by stakeholders in the food system. Geopolitical boundaries may influence how food and agricultural policies (at the state, national, or other level) may support certain types of agriculture over others [4,5]. Local relationships refer to closer personal connections between participants in a local food system. Although there is also no single definition, we define “local food systems” as geographic clusters of agricultural producers, along with consumers and organizations involved in processing, distributing, and selling foods.

Other factors may influence an operation’s participation in a local food system, including size and type of operation [4]. Small farms (those with less than \$50,000 in gross annual sales) account for most farms reporting local food sales and are more likely to rely exclusively on direct-to-consumer marketing channels, such as farmers markets and roadside stands [6]. In addition, for small and medium-sized farms (those with gross annual sales between \$50,000 and \$250,000) that sell local foods, operators devote more time to their farm operation than similarly sized farms without local sales, and vegetable, fruit, and nut farms dominate local food sales.

In this study, barriers to local food expansion in the United States are first discussed. We then document how policies and programs are addressing these barriers. In this way, we reveal changes occurring in support of local food systems, and the types of policies that can best encourage future growth. The major federal, state, and local programs and policy levers that affect growth of local food systems are examined. Federal policies are further delineated by the agency responsible for administering the program.

2. Key Barriers to the Development of Local Food Systems

Examining barriers to growth can assist policymakers in identifying key focus areas. Several barriers exist that may hinder increases in production and purchase of local foods. From an economic standpoint, it is important to understand key obstacles to growing local food systems and how policy measures could help overcome such barriers and strengthen the local economy. A discussion of key market barriers follows.

2.1. Production and Distribution Limitations

For producers of local foods, who often run small-scale farm operations, it can be difficult to meet intermediary demands for high volumes, consistent quality, timely deliveries, and out-of-season availability [7–11]. It may be difficult for small local growers to scale up, since much time is spent off-farm, selling products to consumers. Findings from the USDA Agricultural Management Survey (ARMS) indicate that growers who work off-farm generally have fewer incentives to expand and become more efficient than do small growers who do not participate in alternative, off-farm marketing activities [12]. Time involved in customer relations, travel and delivery, processing and packing, and scheduled harvesting to meet the needs of direct marketing varies across direct-marketing venues, but is particularly extensive for farmers markets and u-pick operations [13].

Producing and selling fresh, local products includes inherent risks that may also impede production, such as exposure to inclement weather, pest infestations, quality inconsistencies, food safety liability, and fluctuating input prices. Local food production and distribution often requires education and training at the local level to meet market requirements and expand access to local customers on issues related to risk management; appropriate postharvest practices; recordkeeping; and liability insurance requirements [7,14,15]. For example, Beamer [16] found that retailers in Virginia believed local producers were capable of producing fresh produce of retail quality, but lacked the commitment, expertise, and resources to cool, grade, and package the produce in a commercially acceptable manner. Lack of accounting skills for direct sales to retail food stores or foodservice outlets has limited further increases in direct marketing [15]. For producers who had never sold directly to local foodservice operations, Gregoire et al. [9] found some obstacles to be more important, including

local and State regulations; knowledge of foodservice's purchasing practices; and ensuring a safe food supply.

Marketing risks faced by farmers when selling in local markets include price competition from multiple sellers with the same product and local angle, rejection based on quality requirements, inability to meet specifications and logistical requirements, and buyers renegeing on contracts [13]. These concerns are not easily managed by the smallest farmers, particularly with differences in specifications and packaging across outlets. Costs and uncertainties related to food safety and processing regulations affect direct-to-consumer marketing activities, especially on-farm production and post-harvest handling practices [14]. For example, there may be costs related to compliance with State rules on processing, and uncertainty about whether direct farm sales are exempt from existing food safety regulations in certain locations.

New food safety guidelines established by the U.S. Department of Health and Human Services, Food and Drug Administration (FDA) under the 2011 Food Safety Modernization Act (FSMA) aim to shift the focus of federal regulators from ex post control and reaction to food safety incidents to risk-based preventive action. While the smallest operations are exempt from most of the FDA's new rules and requirements, intermediated marketing channels such as restaurants, grocery stores, schools, hospitals, or regional food aggregators are increasingly demanding that local suppliers meet certain food safety requirements. Lack of infrastructure related to distribution of local and regional food has also been reported as a barrier to local food market development [7,11,17,18]. The local food supply chain lacks mid-scale, aggregation and distribution systems that move local food into mainstream markets in a cost-effective manner [2]. Lack of investment capital for supply chain infrastructure, such as vehicles, temperature-controlled storage facilities, and processing plants can be a significant barrier to starting local aggregation and distribution businesses. Farmers have stated that processing barriers to meat and value-added product sales present significant obstacles to increasing local sales [19]. Small-scale meat processing facilities often lack capacity, equipment, acceptable inspection status, and human/financial capital to meet demand requirements [20]. In addition, both producers and buyers express a need for more midscale food processing to improve efficiencies in institutional food preparation [2]. Entrepreneurs who have access to funding or in-kind resources for infrastructure, professional marketing, and other services have clear advantages in the supply chain [2].

2.2. Barriers to Procurement by Intermediated Marketing Channels

Many of the barriers expressed by farmers are reiterated by those involved in procuring local food in intermediated marketing channels. From the perspective of restaurants, obstacles include inconsistent availability and quality, difficulty identifying reliable local suppliers, difficulty in making purchases (due to farmers ordering procedures), and dealing with multiple suppliers [21]. These concerns are echoed in surveys of institutional buyers summarized by Hardesty [22]: year-round availability, local and State regulations, working with multiple vendors, obtaining adequate supply, reliable food quantity and on-time delivery.

Similarly, Vogt and Kaiser [17] found that while food service directors (or buyers) (schools, colleges, universities, hospitals, health care facilities, prisons) may be interested in regional foods, it was seldom a priority due to too few supporting programs and inadequate distribution channels. Commonly cited barriers included inconvenience of current ordering methods, complicated logistics for negotiations, unreliable supply and on-time delivery due to seasonality or small farm size that make planning difficult, and information about regional farmers. In addition, many directors noted problems finding farmers who have the needed product, price, and delivery capacity. In some cases where farmers lacked the delivery capacity to deliver to multiple schools, foodservice staff had to arrange transportation or deliver the food themselves [23].

Many school systems are not prepared to handle foods delivered directly from farms. Further processing of products, such as whole carrots, potatoes, and chickens present problems for small, understaffed school kitchens, and may discourage school districts from "scaling up" their purchases

of local foods [23]. This suggests a role for distributors in purchasing and processing farm products, and ensuring that foods meet sanitation standards.

Foodservice directors in Minnesota have expressed interest in a wide variety of locally produced products, but many felt that they had limited knowledge about what products were available locally and seasonally [23]. Time needed to negotiate terms and coordinate deliveries was cited by many directors as reasons for purchasing a limited number of local products. A significant number of foodservice directors also expressed displeasure with products not being delivered in a timely manner, and within the quality dimensions specified. In most cases, the districts relied on a single farmer and had no contingency plan.

Food hubs are defined as a business or organization that actively manages the aggregation, distribution and marketing of source-identified food products, primarily from local and regional producers, to strengthen their ability to satisfy wholesale, retail and institutional demand. They serve as a drop off point for multiple farmers and a pick up point for customers that want to buy source-verified local food in the desired volumes. The 2015 National Food Hub Survey found that securing more product supply was the most commonly identified barrier to further growth, increasing to 57 percent of survey respondents compared to 47 percent in 2013 [24]. Securing more capital ranked as the second most common barrier, increasing from 33 percent of food hub respondents in 2013 to 46 percent in 2015. Other barriers increasing in importance included truck capacity/delivery, warehouse space, and processing facilities.

2.3. Traceback Mechanisms

The use of multiple local suppliers suggests that the supply chain can be complex and fragmented, making safety control more difficult. Because most small farmers must combine their products with other farmers to make processing and shipping more economical, challenges are posed for product quality, consistency, and traceability. Once a product is aggregated with others, it is no longer identified with the origin and production processes of a particular farm. Many enterprises communicate this information using multiple strategies tailored to distinct market segments [2]. In many cases, knowing how the food was produced superseded third-party certification to differentiate products.

Without traceability in place, buyers must assume higher levels of risk and liability in cases of foodborne illness. Because these buyers attempt to reduce risk, they often look for established recordkeeping processes before purchasing local food from their supplier. However, many small and local farmers lack the knowledge or resources necessary to create monitoring systems that would facilitate quick and easy product identification and trace back [7]. Traceability requirements could hinder the growth of local foods because they may be cost-prohibitive for small producers [25]. Adoption of easy-to-use recordkeeping devices and farm-level information labeling can facilitate identification of farm source during a foodborne illness outbreak and encourage local food purchases by large commercial buyers.

3. Federal Policies that Address Local Food Barriers

Federal food and farm policy and programs have evolved to address the needs of small farmers, development of food system infrastructure, and sustainable agriculture [5]. Legislative and regulatory changes are essential to establish meaningful, sustainable improvements in the local food system. The 2014 Farm Bill provides support for several significantly revamped programs that promote local food production and marketing. In addition, the 2014 Farm Bill reauthorizes many programs from the 2008 Farm Bill that support local food systems with minor modifications to funding levels. The 2014 Farm Bill represents an additional \$501.5 million investment over the next five years in programs that may affect local food systems, more than a 50 percent increase from the 2008 Farm Bill [5]. However, based on survey responses from nearly 2000 municipalities and counties across the United States in 2013, a modest number were accessing USDA resources to support farm or food business development [26]. This suggests that greater awareness of these programs may be needed to address

barriers to further expansion of local food systems. The programs, administered at the state level, are described in the following sections (Table 1):

Table 1. USDA agencies administering programs that address barriers to local food systems.

Agency	Program
USDA, Food and Nutrition Service	Farm to School Program
USDA, Agricultural Marketing Service	Federal State Marketing Improvement Program
USDA, Agricultural Marketing Service	Farmers' Market and Local Food Promotion Program ^{1,2}
USDA, Agricultural Marketing Service	Specialty Crop Block Grant Program ²
USDA, Rural Development	Community Facilities Direct Loan and Grant Program
USDA, Rural Development	Community Facilities Guaranteed Loan Program
USDA, Rural Development	Business and Industry Guaranteed (B&I) Loan Program ³
USDA, Rural Development	Value-Added Producer Grant Program ²
USDA, Rural Development	Rural Microentrepreneur Assistance Program ³
USDA, Farm Service Agency	Farm Storage Facility Loan Program ²
USDA, Farm Service Agency	Microloan Program ³
USDA, National Institute of Food and Agriculture	Food Safety Outreach Program

¹ This program expands the National Farmers' Market Promotion Program to include the Local Food Promotion Program in order to extend support to intermediated marketing channels (e.g., farm-to-institutions, food hubs), in addition to direct-to-consumer outlets.; ² programs expanded under the 2014 Farm Bill.; ³ reauthorized programs by the 2014 Farm Bill.

3.1. Food and Nutrition Service

While the USDA has been engaged in farm to school efforts for a number of years, a USDA National Farm to School Program was formally created by the Healthy-Hunger Free Kids Act of 2010 to increase access to local foods by schools, including grants, training, technical assistance, and research. The Farm to School Grant Program assists eligible entities in implementation of farm to school programs that improve access to local foods in eligible schools. On an annual basis, the USDA awards up to \$5 million in competitive grants for training, supporting operations, planning, purchasing equipment, developing partnerships, and implementing farm to school programs. Seven regional offices around the country have a Farm to School Regional Lead available to provide farm to school related support to state agencies and other entities in the region. The Farm to School Program also collects information through the Farm to School Census. According to the 2015 Census, during the 2013–2014 school year, school districts purchased \$598 million in local food, an increase from \$386 million during the 2011–2012 school year when the first Census was conducted. In addition, forty-six percent of school districts report they will buy more local foods in the future. At the national level, 42 percent of the 12,500 school districts that responded to the Census are operating farm to school programs as of the 2014–2015 school year and another 16 percent have plans to implement the program in the future. Farm to school programs have grown rapidly over the last decade (Figure 1). According to the census data, 5254 school districts participated in 2014, up from 400 districts in 2004. Farm to school programs now exist in every state in the country and Washington DC, USA.

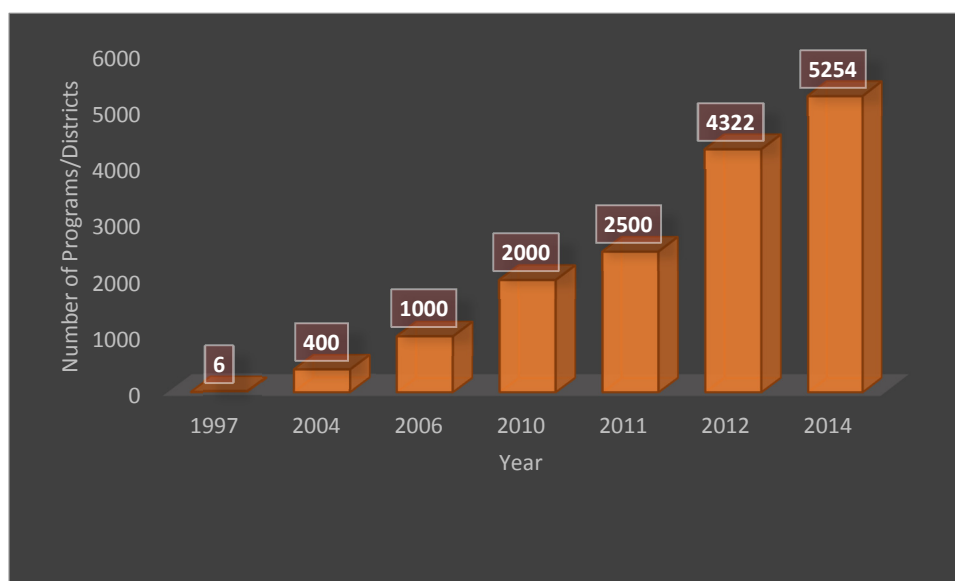


Figure 1. Growth in farm to school programs.

3.2. Agricultural Marketing Service Programs

USDA's Agricultural Marketing Service administers several grant programs supporting local food initiatives across the country. The Federal State Marketing Improvement Program (FSMIP) provides matching funds to State agencies to assist in exploring new market opportunities for food and agricultural products, and encourage research to improve food marketing system performance. In 2015, eight out of 15 grants awarded went to projects dealing with local food barriers, such as funding for egg grading workshops to encourage uniformity and consistency in commercial practices ; determining the best marketing practices to enhance sales of local food identified under the Certified South Carolina label; identifying strategies to further develop value chain infrastructure and relationships needed for selling products to schools; and creating a statewide institutional procurement strategy to substitute products produced in Wisconsin, in place of products available through traditional distribution systems.

The 2014 Farm Act expanded the National Farmers' Market Promotion Program (FMPP) to include a new program: the Local Food Promotion Program (LFPP), jointly referred to as the Farmers' Market and Local Food Promotion Program (FMLFPP). Introduced in the 2002 Farm Bill, the FMPP is a competitive grants program for local governments, agricultural cooperatives, farmers markets, and other eligible groups to improve and expand farmers markets, CSAs, and other direct-to-consumer outlets. Projects that were awarded grants in FY 2015 included creating a Georgia Farmers Market Association to standardize farmers market policies, practices, marketing, and training and technical assistance; increasing the number of vendors at the On the Ranch Farmers and Artisan Market in Nevada by acquiring infrastructure that transports, stores, and preserves agricultural products for the market; and increasing access to local, fresh and safe food products for Chesapeake region consumers at area markets by coordinating on-farm Good Agricultural Practices (GAP) certification trainings to help local food producers prepare for GAP certification (The goal of the National GAP program is to reduce microbial risks in fruits and vegetables by developing a comprehensive extension and education program for growers and packers.) Through the LFPP, the FMLFPP broadened the program's authority to provide grants for local and regional food enterprises that are not direct-to-consumer markets, but act as intermediaries between producers and consumers, such as farmers sales to local retail, restaurant, and regional distribution outlets. Under the 2014 Farm Bill, the FMLFPP receives a three-fold increase in mandatory funding of \$30 million per year from 2014 to 2018, which is split equally between FMPP and LFPP.

Lack of distribution systems for moving local foods into mainstream markets has spawned the need for collaborative supply chains to market local food. Small local producers sometimes overcome scale limitations by pooling resources and diversifying tasks within the supply chain to expand local food sales. Production pooling allows small local farmers to capture the advantages that come with larger scale production systems (economic and logistical efficiencies), and may work to meet the supply requirements of large institutional markets [8]. Producers can move higher volumes of local food along the supply chain by using an intermediary to pack, distribute, or ship local products to consumers through traditional supermarket channels, restaurants, or institutions. Such intermediaries allow farmer operators to spend more time managing the farm and scaling up.

One way the new LFPP can assist producers in expanding local food is by providing support for food hubs. Food hubs serve several functions including: (1) providing greater delivery reliability than can be obtained through purchasing from many producers selling independently; (2) facilitating access for agricultural producers to market outlets requiring larger volumes and providing consumers with access to a larger number of local food producers; (3) assisting in getting product from a production or aggregation point to the designated market outlet; (4) connecting farmers with the correct market outlet to fit their scale of production and their production practices; (5) extending the quantity of offerings to those consumers who expect greater variety and less seasonality in the availability of products; (6) providing technical assistance to producers; and (7) facilitating information sharing and risk reduction related to assurances of production processes and product quality [27]. According to the 2013 National Food Hub Survey, over 40 percent of the food hubs offered production and post-harvesting services, business management services, and food safety training [28].

The LFPP offers planning and implementation grant funds with a 25 percent match to support intermediated channels such as farm-to-institution, food hubs, and other businesses that aggregate, distribute, process or store locally or regionally-produced products within a 400 mile radius. Grants awarded in FY 2015 included expanding local food markets and access through an online food hub on the Lower Kenai Peninsula, Alaska; aggregating locally-produced wheat/flour and other ingredients for artisan bread; and use of an advisory committee, surveys and stakeholders meetings to investigate challenges and opportunities associated with aggregating and distributing local product to institutional markets.

The Specialty Crop Block Grant Program (SCBGP), authorized in 2004 and expanded in 2014, provides grants to states to enhance the competitiveness of specialty crops, which include fruits, vegetables, and floriculture. State departments of agriculture are eligible to apply for grant funds. It supports a variety of local food projects such as farm to school programs, food safety training, food hubs, and marketing research, thus providing a broad base of support for the development of local and regional food systems. Examples of funded projects in FY 2015 include those that increase the sales of Kentucky specialty crop farmers who are looking to scale up their production by offering a series of conferences and meetings designed to help farmers take advantage of underused resources in terms of capital, certifications, and marketing opportunities to help producers overcome the barriers that prevent them from entering agriculture supply chains; mitigate specialty crop food safety risks by reducing barriers to implementing Good Agricultural Practices (GAP) programs through specialty crop producer technical assistance, training programs, and one-on-one assistance on developing GAP programs; and partner with Michigan State University Extension to address a set of barriers for increased institutional food service procurement of specialty crops through implementation of a training curriculum for food service professionals to increase knowledge and skills to handle and prepare seasonal Michigan specialty crops. The 2014 Farm Bill increased mandatory funding from \$55 million per year authorized by the 2008 Farm Bill to \$72.5 million per year through 2017 and \$85 million per year starting in 2018.

3.3. Rural Development

USDA's Rural Development administers the Community Facilities Direct Loan and Grant Program that supports rural communities by providing loans and grants for construction, acquisition, or renovation of community facilities or the purchase of equipment for community projects. Projects must benefit the community as a whole rather than private, commercial entities. Examples include projects that support local food systems such as food hubs or greenhouses. The Community Facilities Guaranteed Loan Program provides loan guarantees to eligible private lenders to help build essential community facilities in rural areas.

The 2014 Farm Bill reauthorizes the Business and Industry Guaranteed (B&I) Loan Program to aid rural food enterprise entrepreneurs and local food distribution. Locally and regionally produced food is supported through a set-aside within the B&I loan program for facilitating the storing, processing, and distribution of local and regional food products. The 2008 Farm Bill mandated that at least five percent of the funds made available to the program will be reserved for local food initiatives, which is maintained under the 2014 Farm Bill. In 2014, USDA announced that \$48 million in loan guarantees is available for local food projects.

The Value-Added Producer Grant Program (VAPG), provides grant funding for agricultural producers who add value to their products through processing or marketing, thereby raising farm income. Under the 2014 Farm Bill, veteran farmers were added to the list of farmers that priority projects will focus on to increase opportunities for small and midsized family farms and beginning and socially disadvantaged farmers. In addition, the USDA must now prioritize those projects that "best contribute" to creating or increasing these marketing opportunities. Producers of food that is marketed locally are eligible for the program, which supports activities such as assisting in the startup of a regional fresh produce food hub and packinghouse created to enhance access to wholesale markets for the local farm economy; working capital to process, package, market and deliver local, non-homogenized, pasteurized milk and ice cream and other dairy products; and expanding baking and milling capacity of local food products, including specialty breads and bread mixes. The 2014 Farm Bill provides \$63 million in mandatory funding for the program over the 2014 to 2018 time period. The program also sets aside funds reserved for developing local and regional supply networks that connect small- and medium-sized farms to markets.

The Rural Microentrepreneur Assistance Program (RMAP) was created by the 2008 Farm Bill to provide grants and loans to organizations that then provide microloans of up to \$50,000 and business development technical assistance to rural microentrepreneurs. Although not directed specifically at agriculture-related businesses, examples include funding to provide loans and technical assistance for small farmers to obtain to purchase the building space and equipment necessary to modernize a honey bottling facility in Nebraska; assist an organic fruit and vegetable farm in Nevada County, CA transition from selling exclusively through a community supported agriculture (CSA) model to expanding to also selling at farmers markets and a co-op grocery store; and provide working capital to package and market fresh locally grown basil. The 2014 Farm Bill reauthorizes and provides \$3 million in mandatory funding for RMAP each year from 2014–2018.

3.4. Farm Service Agency

Outside of the 2014 Farm Bill, the Farm Storage Facility Loan Program (FSFL), administered by USDA's Farm Service Agency, provides low-interest loans for producers to build, upgrade, or purchase permanent or portable facilities for cold storage, sorting, washing, packing, and other food-safety-related buildings and equipment. Historically, these loans have primarily benefited grain farmers, but a provision in the 2008 Farm Bill extended the program to fruit and vegetable producers for cold storage. In 2014, FSA took several actions to improve the program, particularly for small and mid-sized farms. For example, the loans can now also finance certain handling equipment, such as cold dip tanks, grading bins and tables, and waxers, among others. This will improve the ability of farmers selling in local and regional food markets to finance the storage and packing sheds required to

keep food fresh and safe prior to marketing. For fruit and vegetable growers, especially small and mid-scale family farmers, packing and storage sheds are critical elements of their farm operations, where fresh produce is washed, sorted, graded, labeled, packaged, and stored before market delivery.

The purpose of the FSA's Microloan Program is to meet the credit needs of small, beginning, socially disadvantaged, and veteran farmers through a simplified loan application process. Capital barriers are particularly problematic for small and beginning farmers, farmers in urban areas, and those with diversified operations selling directly to consumers. This program may be appropriate for farmers serving local and regional food markets, including urban and diversified farmers. Operators of these types often have difficulty obtaining financing due to a lack of credit history, increased risk associated with lending to a new or young farmer, or unfamiliarity with small, diversified farming operations. The Microloan program was created in order to meet the smaller credits needs and reflect the scale of operations of small, beginning farmers and diversified farms serving local markets. Loans of up to \$50,000 are provided to cover costs of operating the farm and can be used in conjunction with FSFLs. The Microloan program was launched in 2013 and is permanently authorized by the 2014 Farm Bill.

3.5. National Institute of Food and Agriculture

The Food Safety Outreach Program (FSOP), while not a Farm Bill program, awards grants to projects that implement food safety training, education, extension, outreach, and technical assistance related to the Food Safety Modernization Act (FSMA). In 2015, both USDA's National Institute of Food and Agriculture (NIFA) and the Food and Drug Administration collaborated to establish the National Food Safety Training, Education, Extension, Outreach and Technical Assistance Competitive Grant Program. FSOP was established to complement and expand this program to help smaller operations comply with the new food safety regulations created by FSMA. The grants are offered through FSOP and are administered by NIFA. The projects address the needs of small- to mid-sized farms, beginning farmers, socially-disadvantaged farmers, small processors, or small fresh fruit and vegetable merchant wholesalers. To address the safety concerns associated with the growth in local food sales, USDA offered \$4.7 million in funding for the program in 2016.

4. State and Local Policies

State and local governments have also taken on new roles in food system governance [5]. Most regulations that directly affect local food systems take place at the state or local level, such as those related to zoning laws that affect farmers' operation of a farm stand, public safety and health, or application of sales taxes. States and municipalities can support farmers markets by supporting land use policies that favor small farms, and zoning ordinances that make space for markets. State and local policies can also have important impacts in areas such as farm to institution procurement policies, such as Massachusetts's mandated preference for food products grown or produced within the state [29].

A number of states and localities have created Food Policy Councils to help establish state or local food policy that address concerns such as availability and marketing of local food. Food Policy Councils are comprised of a broad range of individuals from farm and consumer groups, retailers, academia, and state government. In some cases, the councils are created by governmental sanction, such as an executive order, or through an existing state or local agency. In other situations, grassroots efforts drive and maintain the Food Policy Council structure. These councils may have a relationship with the government or be completely separate and distinct from the government. In 2015, there were 215 food policy councils in 45 states and the District of Columbia as compiled by the John Hopkins Center for a Livable Future.

4.1. State Food Policies

At the state level, a range of policies help create the environment in which farmers markets operate. These include programs to expand the number of farmers markets and use the markets

to accomplish other economic development goals, such as the marketing of state identified food. Legislatures in a few States have funded efforts to increase access to farmers markets and strengthen local food systems. States have appropriated funds for the construction and maintenance of farmers market spaces, and enacted policies that develop local and regional wholesale farmers markets. In the past five years, 26 states and the District of Columbia have passed legislation to increase access to healthy food through farmers markets [30].

State legislatures have also supported the growth in food hubs. USDA recently awarded four grants to Massachusetts food hubs and other similar facilities through its Local Food Promotion Program. In 2014, the legislature enacted a bill creating the Massachusetts Food Trust Program, which included a wide-ranging set of duties to increase healthy food access and strengthen community food systems. The program is tasked not only with providing funding and support for grocery retail, but also with expanding urban agriculture, farmers markets, food hubs and other food security efforts in the state.

There are also policies at the state level on broader system-wide legislation. For example, North Carolina created a Sustainable Local Food Advisory Council in 2010 to consider and develop policies to build a local food economy. Additionally in 2010, Colorado created a Food Systems Advisory Council to develop recommendations that promote local food economies.

The National Conference of State Legislatures [31] lists state legislation in all 50 states enacted between 2012 and 2014 that aim to strengthen various components of local food systems. Over half of these bills address development and promotion of farmers markets and farm to school programs. For example, in 2014, Missouri passed a bill that permits the state's Agricultural and Small Business Development Authority to make grants, loans or loan guarantees to Missouri businesses for accessing and processing locally grown agricultural products for use in schools. In 2012, Florida, New York, and North Carolina appropriated funds for the construction, repair, and maintenance of capital infrastructure for farmers markets. Other legislation that addresses barriers to local food production include establishing a task force to encourage the purchase of local products that have traceable points of origin in the state; directing the appropriate state agencies to provide a training program for small food and farm businesses to navigate the procurement process; and providing funds to food hubs.

4.2. Local Policies

Most policy issues facing farmers markets develop at the local level because farmers markets are a local activity [32]. The most commonly encountered local policy issues relating to farmers markets are operational questions, such as where the market can operate, parking, security, and conflicts with adjacent businesses. These policies can be most significant in determining the success and existence of a market. Cities also address issues related to regulation of farmers markets, such as the need for permits, licenses, zoning exceptions, or approval of a market ordinance. Cities may also be involved in promoting and developing markets as part of a local food policy initiative, or may assume responsibility for operating and funding markets. For example, Berkshire Grown, originally the Berkshire Regional Food and Land Council, promotes food, flowers, and plants produced in the Berkshire region of Massachusetts, and builds partnerships between farmers and food buyers (www.berkshiregrown.org).

In recent years, Chicago, Cleveland, Madison, and San Diego, among others, have liberalized their zoning rules to allow urban land to be used for a range of agricultural activities [33]. A variety of cities and counties including San Francisco, CA; Albany County, NY; Cabarrus County, NC; Cleveland, OH; Los Angeles, CA; and Woodbury and Linn Counties, IA, have also passed resolutions supporting regional and/or sustainable procurement [29]. Based on an assessment of local policy databases, local policies that help to overcome local food barriers focus on supporting or enabling local food production; procuring local food for institutions (such as farm to school); and facilitating the development of food system infrastructure (processing and aggregation) [5]. Local government institutions that support

local and regional food systems may exist directly within local government agencies, such as the department of planning.

5. Conclusions

Local food has been part of federal, state and local government policy discussions as consumer interest and demand has grown. More than 163,000 farmers marketed local food in 2012 with sales totaling \$6.1 billion [1]. This provided important information that was used to inform support for local and regional food systems in the 2014 Farm Bill. The 2014 Farm Bill reflects shifting priorities over the past decade, where issues like local and organic food have become elevated in response to growing consumer demand for agricultural products produced locally and strong growth in the development of local and regional food systems. The new farm bill contains continued and enhanced support for programs that aid local and regional farm and food-related businesses, and rural business development. Local food is linked to many USDA priorities, including enhancing the rural economy, the environment, food access and nutrition and strengthening agricultural producers and markets. USDA grants, loans, and other resources provide opportunities for producers and food businesses to compete in this expanding agricultural sector. The extension of the National Farmers' Market Promotion Program to include support for intermediated marketing channels addresses the growing importance of these outlets in further growth of local food markets. State and local agencies' support and promotion of local food markets is also vital to continued growth of the local food sector.

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Abbreviations

The following abbreviations are used in this manuscript:

CSA	Community supported agriculture
GAP	Good Agricultural Practices
USDA	US Department of Agriculture
NIFA	National Institute of Food and Agriculture
FDA	Food and Drug Administration

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