SUPPORTING SMALL SCALE FOOD MANUFACTURING:
AN ANALYSIS OF CHALLENGES AND OPPORTUNITIES

Jessica Bartlett
Rebecca Lucas
Ariel Patterson
Valerie Weiner
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Tufts University Urban and Environmental Policy and Planning

Spring 2018 Field Projects
Acknowledgements

Our field project team would like to thank the many individuals who made this project possible.

Tufts University
We wish to extend gratitude to Professor Penn Loh and our Teaching Assistant Christian Brandt for their guidance and advice throughout this project.

CommonWealth Kitchen
We would like to sincerely thank our project partner Nathaniel Brooks special thanks, to Jennifer Faigel and Roz Freeman of CommonWealth Kitchen, without whom support this project would not be possible.

CommonWealth Kitchen Former Members
We extend sincere admiration to the passionate and charismatic former members of CommonWealth Kitchen who shared their stories and offered their time.

Lastly, our team holds a tremendous sense of esteem for the policy leaders across the country who bestowed their time, to offer our team a stronger understanding of food manufacturing polices from coast to coast.
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Executive Summary

There can never be enough support of small food businesses in large metropolitan cities. The high cost of rent, combined with constant competition, make for an unstable environment for businesses of this size. Cities should not let these businesses fail; many of these small food businesses use their products as a way of representing culture or uniqueness in an otherwise homogeneous food scene. This is especially the case for the small food businesses fostered by this project’s partner organization, CommonWealth Kitchen.

CommonWealth Kitchen (CWK) is a non-profit kitchen incubator in Boston, Massachusetts, that promotes economic development by supporting the growth of local food businesses. CWK helps food entrepreneurs with the critical task of beginning their business; they also recognize that this population needs support beyond the services they can provide.

In January 2018, CWK partnered with a Field Project team from Tufts University’s Urban and Environmental Policy and Planning program to address and characterize challenges facing their member businesses once they leave their facility. The organization wanted to better understand and develop strategies for supporting small scale food manufacturers, a subset of food businesses, in their growth beyond the incubator shared space. CWK defines food manufacturers as businesses that sell packaged products direct-to-consumer (retailers) or third-party distribution (wholesalers). CWK hypothesized that this population faces unique and specific challenges. Furthermore, CWK was interested in finding programs and policies from other areas that could inspire Boston to better support this population of businesses.

This Field Project team investigated the specific challenges food manufacturers face and programs and policies in other cities and states to address them. The final recommendations offer suggestions for Boston to use, create, or modify their own policies and programs to better support this population.

This report identifies five primary interrelated challenges former CWK food manufacturing members experienced: capital and operating costs, space, markets, regulations and labor. These challenges are impacted by the qualities of being a small scale business.

- **Capital** refers to obtaining the necessary funds for up-front costs at the beginning of the business; i.e. purchasing necessary equipment, packaging and labeling costs, securing a place to produce as a rental or for purchase, obtaining loans or borrowing money from an appropriate source, etc.

- **Operating costs** continue over time, including the purchase of more equipment, retention of a staff through wages, continuing rent payments or mortgages, electricity bills, maintenance, etc.

- **The challenge of space** refers to the need to acquire both affordable and appropriate space—related to size, zoning adequacy, storage requirements, etc.—and space that fits necessary health regulations per food product produced.
♦ Related challenges to *markets* refer to difficulties of access to market channels to generate revenue, difficulty of entry into the physical markets themselves—including fees necessary for places like farmers markets—unreliability of certain income streams related to specific markets, logistical issues related to distribution, etc.

♦ Understanding *regulations* can be a challenging and burdensome task, due to unclear variation among what is necessary depending on the food product. Furthermore, general difficulties understanding requirements, combined with a lack of guidance, complicate the process.

♦ The challenge of *labor* refers to difficulties, including the ability to hire employees and concerns with quality control when scaling up, as well as outsourcing production.

Using these challenges, the research team was able to identify **six interrelated lever categories**: supportive tax policy, appropriate or flexible zoning, financing, access to markets, mentorship and networks, and understanding regulations.

♦ **Supportive tax policies** can include those at the state and local level. They give appropriate tax credits or rebates on property, equipment, infrastructure improvements, among others.

♦ Adopting more **appropriate or flexible zoning** can increase available lots for small scale food manufacturers when looking for spaces to rent or purchase for production.

♦ **Financing** can support small scale food manufacturers through various programs, such as state rebates, localized municipal support structures, loan forgiveness and grant programs. In doing so, it can help business owners increase available capital to cover necessary costs or help them continue to grow.

♦ **Access to markets**, through methods such as purchasing pledges for local products, creating a local brand to indicate what was made within city or state limits, and increasing relationships with bigger markets, can all increase sources of income.

♦ **Regulation assistance and reform** is necessary to ensure non-burdensome and appropriate processes. It can greatly enable easier and more efficient compliance among new and growing food businesses.

♦ **Mentorships and networks** can create relationships and support systems where business owners can help one another address these challenges.
Recommendations

Cities across the United States have established policies and programs that serve as models for addressing the challenges food manufacturers face in Boston. City officials have an opportunity to implement programs and policies that better support its food manufacturing sector, a growing and important sector of Boston’s economy. Based on these findings, the team offers the following recommendations, which are explained in more detail in Chapter 6: Recommendations.

♦ **Enact Supportive Tax Policies.** The implementation of appropriate incentives, credits, or rebates on property tax or sales tax for necessary equipment could alleviate the financial burden during the initial stages of starting of a new business. This can benefit not only small scale food manufacturers but other small businesses and manufacturers as well.

♦ **Create a Local 'Boston' Brand.** The creation and marketing of a specific Boston-made brand can streamline promotion and economic development for local food manufacturing businesses, and enable access to a larger customer base.

♦ **Enable a Cluster Zone for Food Manufacturers.** Other cities have used this approach to preserve areas for food manufacturers and increase density on those parcels. This ensures that food manufacturers have space set aside for them in lucrative areas of the city, and allows more businesses to share a single parcel. This distributes the high cost of rent and provides an opportunity for information sharing among businesses.

♦ **Dedicate Staff to Demystify Regulations.** The creation of a strategic interdepartmental municipal team, or singular consultant, for regulation assistance and reform can greatly alleviate the burden and lack of clarity many food manufacturers experience with compliance.

♦ **Create a One-Stop Center for Business Service and Guidance.** Collating all resources and services related to starting a food manufacturing business can significantly reduce time and effort spent on navigating processes. It also allows business owners to refocus on growth during the nascent stages.

We believe these recommendations are valuable ideas for Boston’s support of the small scale food manufacturing economy. In turn, these recommendations also preserve the important values and culture these businesses represent.
Chapter 1 Introduction
“To be a good cook you have to have a love of the good, a love of hard work, and a love of creating.”

-Julia Child

From creation to consumption, food is a personal experience. The desire to own a food business is the desire to share that personal experience. This desire may be an obvious extension of someone’s passion, fostered through years of training, launched to celebrate a family recipe, or born from a curiosity to create something new. No matter the cause, food businesses often aim to share their love for the product with others. Dedication to their work and the desire to share it fosters a resilience that withstands a multitude of challenges. Challenges for food business owners range from changing consumer trends and fluctuating regulations to affording rent and costly equipment. Many businesses are not profitable for years after opening, and many fail within the first year. For some food business owners, however, profit is not the point. While owning a food business may be challenging, the struggle is one that is worth the fight.

1.1 Project Introduction

CommonWealth Kitchen (CWK), a non-profit food business incubator in the Dorchester neighborhood of Boston, MA, supports entrepreneurs to turn their visions into new food businesses. CWK commissioned this Field Projects team to investigate the problems that some of their former members face following their transition from the incubator kitchen. CWK’s vision of equitable economic development inspires this project to help food businesses grow, remain, and thrive in an otherwise unstable environment. Local, small scale food manufacturers experience similar challenges as all food businesses, such as becoming profitable or affording expensive kitchen space. They also, however, face challenges unique to small scale businesses and food manufacturing. CWK wanted to better understand these challenges and possible strategies for addressing them in Boston. This report aims to both characterize the unique qualities of small scale food manufacturers and identify policies and programs from other cities and states that could be inspire Boston to provide greater support.

The CommonWealth Kitchen Vision Statement:

WE BELIEVE that an equitable and resilient local economy requires closing Boston’s growing wealth divide by PROMOTING INCLUSIVE ENTREPRENEURSHIP and CREATING SUSTAINABLE EMPLOYMENT, with a focus on people who have been impacted by racial, social, and economic inequality.

Source: CommonWealth Kitchen website
The overall goal of this project is to understand the challenges facing small scale food manufacturers and explore opportunities for public policies and programs to address them in the Boston area.

**This project is guided by two primary research questions:**

1. **What are the challenges facing former CommonWealth Kitchen members that are food manufacturers?**
2. **What policies and programs from other cities and states can be adapted to support food manufacturers in Boston?**

### 1.2 Why Open a Food Business in Boston?

Compared to other major cities, Boston’s food scene is relatively new. A 2016 *Boston Globe* article concluded that Boston is the ideal space for food companies to grow because this community is receptive to innovative ideas and a pursuit of food (Nanos, 2016). Whether it is due to the area’s 50+ higher education institutions or the interest in the local food scene, Boston is a growing food hub (Kummer, 2016).

**What Makes Food Manufacturers Unique?**

Food manufacturers are different from other business types because they create a product but do not facilitate a restaurant experience. This is usually because they produce far fewer goods and are limited to one food type, like baked goods or sauces. This dependence on a single product can result in unreliable profit margins (Segal, 2015).

**How Can Boston Better Support Food Manufacturers?**

Boston currently offers some useful resources for food manufacturers, but there are still significant gaps. Its farmers markets or institutions like the Boston Public Market, offer great opportunities for food manufacturers to sell their product and market their brand, although the associated fees and logistical challenges make it difficult to act on these opportunities as they are intended. The Imagine Boston 2030 Plan outlines great opportunities for economic development in the city through new zoning measures and investment. In the plan, Boston Mayor Martin Walsh notes,

"Now, more than ever, cities play a critical role in expanding opportunity for their residents and making sure that the benefits of growth and economic success are experienced by everyone."

*(City of Boston 2017, p. 5)*
Unlike typical strategic plans, Imagine Boston 2030 looks beyond land use and development. Upon his election, Mayor Walsh focused on the city’s housing pressures and released “Housing a Changing City: Boston 2030” in 2014, initiating the planning process for Imagine Boston 2030 (Interview: Natalia Urtubey 2018). Though economic development and business support are components of the plan, increasing housing stock is its primary goal. Small food businesses need advocates throughout this continual planning process to inform city officials about their challenges and offer alternative methods of support.

This project aims to support these advocates by providing information and data. The rest of this report expands upon this introduction. Chapter two outlines the food manufacturing sector within the United States, detailing the impact of scale, production options available for food manufacturers and related trends. Chapter three introduces this project’s community partner, elaborates on the history, and describes the membership model. Chapter four explains the research methods and chapter five discusses the research findings in-depth. Chapter six offers final recommendations for the city of Boston and direction for future research inquires in this field.

Image Source: Lucas
This report focuses on challenges faced by wholesale and retail food manufacturers. Wholesalers are individuals and businesses that make a packaged food product and sell through a third-party distributor and a retailer is an individual or business who makes a packaged food product and sells directly to a consumer. While CWK works with other types of businesses, like food trucks and caterers, this project focuses on food manufacturers, who make up the largest share of its members.

2.1 Food Manufacturing Definition

Food Manufacturers

“Industries in the Food Manufacturing subsector transform livestock and agricultural products into products for intermediate or final consumption. The industry groups are distinguished by the raw materials (generally of animal or vegetable origin) processed into food groups. The food products manufactured in these establishments are typically sold to wholesalers or retailers for distribution to consumers, but establishments primarily engaged in retailing bakery and candy products made on the premises not for immediate consumption are included.”

More specifically, “food and beverage manufacturing is an important part of a connected system of agriculture and consumption, transforming raw commodities into edible form... and transforming commodities into value-added products” (Schmit et al. 2012, p. 1).

Typical characteristics of retailers include a storefront to sell goods and may include a counter or seating area for customers. The kitchen may be in the store or in an off-site location. Wholesalers, on the other hand, may not require a storefront, but do require a commercial kitchen to fulfill their distributor’s orders. Both groups experience delays with financial transactions due to up-front costs on inputs.
**Food Trucks and Caterers**

Sometimes food manufacturers transition to a food truck or a catering business and vice versa. Food trucks have become incredibly popular over the last 10 years, especially among a younger, millennial audience due to social media marketing and diverse cuisines (Mealy, 2018; Wessel, 2012). There is also a cultural connection to food trucks resulting in ‘cult followings,’ earning a loyal customer base (Wessel, 2012). Since 2012, the overall revenue for the industry rose above $2.7 billion dollars (Hendrix, 2017). In general, catering is more lucrative than only pursuing a food truck or food manufacturing business model and helps market their brand (Consumer Trends: Catering Trends, 2012; Technomic, 2018 n.d.). While caterers may have similar challenges to food manufacturers like finding kitchen space, they have more flexibility in their day-to-day operations.

**2.2 Small Businesses and Scale**

The food manufacturers discussed throughout this report are considered “small scale.” Small scale is defined as a business entity with a maximum of 30 employees and $750,000 in assets or are in the startup growth phase (Steinmetz, 1969; Picken, 2017; Food Safety Authority of Ireland, 2011). When a small business needs to ‘scale’ its operations to meet demand, a new set of challenges arise. A study from the Kelley School of Business categorizes the stages of a small business as startup, transition, scaling, and exit. The startup phase in growing a business is unpredictable and usually does not result in high returns on investment (Steinmetz, 1969; Picken, 2017). Because food businesses normally join CWK in their startup phase, they are particularly susceptible to financial vulnerability.

**2.3 The Food Manufacturing Sector**

The food manufacturing sector in the United States is expanding. The most recent data (Q3 2017) shows that the number of food manufacturing establishments was 33,374, an additional 686 establishments since Q3 2016 (United States Department of Labor Bureau of Labor Statistics, 2018b). This growth of the food manufacturing sector is consistent with forecast growth figures for 2018-2023 (IBISWorld n.d.). Employment is expected to rise 0.7% and the number of businesses will increase 0.8% during the same period (IBISWorld n.d.).

**Employment Growth in Food Manufacturing**

In the United States there has been a 12% increase in employment in the food manufacturing sector since 2010. See Figure 3. In 2017, the average number of people employed in the food manufacturing sector in the United States was 1,603,325.
Figure 4 shows the breakdown of employees in the food and beverage manufacturing sector by industry. The meat processing industry employed the largest percentage of food and beverage manufacturing workers in 2015 (31 percent), followed by bakeries (16 percent), and fruits and vegetables (11 percent) (USDA, 2018).

Younger generations are also shifting behavior and want non-GMO (genetically modified organism), allergen-free products and organic foods (Labs, 2016). Furthermore, “processors are also making improvements to production and processing methods and deciding how to increase their capabilities. Automation and new equipment purchases are helping to keep up with throughput while processors scramble to find qualified employees and increase distribution channels” (Labs, 2016).

**Shifting Trends**

Traditional trends in the food manufacturing sector, where large corporations dominate the industry, are shifting. In Harvesting Opportunity, “smaller brands and private-label manufacturers have been growing considerably faster than the largest food manufacturers in recent years, at 4.9 percent and 4.0 percent annually, respectively, between 2009 and 2013, compared to only 1.0 percent annually among the 25 biggest food companies.” (Tropp and Moraghan, 2017, p. 30).
2.4 Production Options for Food Manufacturers

Food manufacturers can choose from a variety of production space options. Considerations for deciding among these options include start-up costs, growth potential, regulatory conditions, and the type of food. A few of these options include residential food manufacturing, co-packing and co-manufacturing services, commercial kitchen construction, and incubator kitchens, further described in this section. The figure below depicts production space options in greater detail.

Residential Food Manufacturing

The passage of “Cottage Food” laws in many states, including Massachusetts, has enabled many people to begin food businesses from their homes (Conдра, 2013). These laws permit individuals to produce potentially non-hazardous food products directly for consumption in residential kitchens. These “cottage” foods include jams, jellies, granola, popcorn, dry mixes, and baked goods, i.e. foods that do not have the same risk level as other processed foods (Conдра, 2013; “Cottage Food Laws by State: Selling Your Homemade and Home-Canned Foods”, 2018). Most of the United States has passed the law with varying specifics; some states have established caps on sales, ranging from $5,000-$50,000, or set restrictions on where food can be sold, i.e. only farmers markets and/or retail or wholesale options (Conдра, 2013; “Cottage Food Laws by State: Selling Your Homemade and Home-Canned Foods”, 2018). Some states mandate certain licenses or permits and many have specific requirements for labeling, including verbiage or in some cases, disclaimers that the foods have not been state-inspected (“Cottage Food Laws by State: Selling Your Homemade and Home-Canned Foods”, 2018). In many states the cottage food laws have enabled many food business ideas to be tested on a small scale, though at times the laws hinder growth beyond the infancy stage, as scaling up is not often possible in a residential kitchen (Colpaart, Grahn, Seymour, 2017).
One major benefit of starting a home food business is the extremely low overhead costs, because the kitchen and associated equipment already exist (Bylander, 2016). Additionally, as many small businesses face the challenge of finding affordable and well-located real estate, working from home undoubtedly has its inherent benefits (City of Boston n.d.). Specific regulations of each law may make it difficult to scale the business and new challenges may emerge with associated growth. Further, some food manufacturers have warned that enabling home-based production encourages non-sustainable business practices by limiting growth and expansion possibilities (Neumann, 2012).

Co-Packing and Co-Manufacturing Services

Food manufacturers can scale up production beyond a residential kitchen by utilizing co-packing or co-manufacturing services. Using this option, food manufacturers can start producing higher volumes without necessarily needing to find commercial space or purchase necessary equipment (Blan-Byford and Holcomb n.d.). Co-packing (contract packing) is the outsourcing of packaging or processing (Young, 2011; PACA Foods, 2016; Organic Processing Institute, 2014). Co-packing services are often used when food businesses do not have the machinery, capacity, training or skills to package the product themselves (PACA Foods, 2016). According to Paul Young, Director of Product Development for DHL Supply Chain, food manufacturers can benefit from using co-packing services in a variety of ways, including, “greater product visibility, increased management of costs, [and] flexibility and environmental benefits.” (2011). Similar to co-packing, co-manufacturing (contract manufacturing) involves outsourcing the manufacturing process (Organic Processing Institute, 2014). Co-packing and co-manufacturing are sometimes used interchangeably.

There are many reasons why small businesses or entrepreneurs take advantage of co-manufacturing services. According to Kate Bertrand of Food Processing, co-manufacturing, as well as co-packing, “provide the opportunity to commercialize a product even if they lack manufacturing resources” (2005). The primary reasons for utilizing co-packing or co-manufacturing services are to avoid high up-front costs of infrastructure investment and to save time and resources needed to navigate regulations (Blan-Byford & Holcomb n.d.). Additionally, a business saves time by contracting out production and avoids the costs of maintaining its own production space (Organic Processing Institute, 2014). Finding an appropriate or adequate co-packer or co-manufacturer can be a lengthy and difficult process. Losing a degree of control or involvement by outsourcing production may raise quality concerns (Blan-Byford & Holcomb n.d.; Organic Processing Institute, 2014).

Commercial Kitchen Construction

If a food manufacturer has adequate start-up capital and available space, building a commercial kitchen is a viable option for starting or growing a food business. A commercial kitchen adheres to health codes to meet food safety requirements (Gartenstein, 2018; Condra, 2013). Commercial kitchens are necessary to sell certain types of food, at certain outlets or to the public in general, depending on state laws (Hawkins n.d.; Benson, 2017). Cooking Equipment Specialist, L.L.C., a Texas consulting and service firm specializing in the food sector, classifies a “small” commercial kitchen as one between 200-1000 square feet (“What is a Small Commercial Kitchen” n.d.). In 2015, the average commercial kitchen cost about $250 per square foot and overall, the construction of a small commercial kitchen can cost between $15,000-$100,000, depending on what food is produced (“What is a Small Commercial Kitchen.” n.d.). Another report
indicated that building out a commercial kitchen space from scratch could cost upwards of $100,000 (Benson, 2017). The most significant cost is preparing the space for equipment, including plumbing, gas, appropriate ventilation, and electrical wiring ("What is a Small Commercial Kitchen." n.d.). One estimate for a general-purpose commercial range, a piece of cooking equipment with separate heating zones, is between $1,100-10,000 (Decker, 2017; “Commercial Range: Everything You Need to Know." n.d.). Ventilation for ovens or stoves can cost up to $1,500 per foot (Decker, 2017).

Defined in a 2016 industry report, “a kitchen incubator is a culinary production facility that can accommodate multiple tenants and is dedicated to growing early-stage wholesale, retail, and/or catering food businesses” (Econsult Solutions, 2016). Food incubators generally provide licensed production space, cold storage, dry storage, and commercial-grade equipment (Benson, 2017). Cited benefits of food incubator kitchens include relatively inexpensive access to both commercially-certified kitchens and equipment, help with individual food safety certifications, services to aid in business development and assistance with logistics related to distribution, and marketing (Benson, 2017; CommonWealth Kitchen, 2018b).

In 2017, there were approximately 135 kitchen incubators across the U.S. with the primary purpose of helping food entrepreneurs create and grow an economically viable business (Benson, 2017). Rents are charged hourly or monthly and range from $8-$42 per hour or $95-$4,000 per month (Benson, 2017; Econsult Solutions, 2016). Non-profit organizations generally average higher hourly rates and sometimes employ minimum hour requirements (Benson, 2017; Econsult Solutions, 2016).

There can be drawbacks to the pricing and membership models of incubator kitchens. As kitchen and storage space rentals are generally the only source of income for incubators, it can be difficult for them to stay in business (Danovich, 2016; Econsult Solutions, 2016). According to a 2013 report, 39% of for-profit incubators were making a profit, while 57% were only breaking even (Danovich, 2016). Among non-profit incubators, only 15% were making money and 31% were operating at a loss (Danovich, 2016). A 2016 report by U.S. Kitchen Incubators demonstrates progress since 2013 (Econsult Solutions, 2016). 82% of the 61 incubators surveyed indicated that their revenue had increased since 2013 and 84%
were breaking even or making money (Econsult Solutions, 2016). Of those 61 incubator kitchens, 91% had members who were producing baked goods (food manufacturers), followed by catering (84%) and food trucks (71%) (Econsult Solutions, 2016).

Some incubator kitchen managers may slow the growth process to continue collecting rent payments for a longer period of time (Benson, 2017). Slowing growth can also be an unintended effect of an entrepreneurs' desire to stay in a supportive space, increasing dependency on incubator’s support services and decreasing reliance on support external to the kitchen (Benson, 2017). An incubator kitchen in San Francisco, CA, for example, has a three-stage model of pre-incubation, incubation and graduation into a commercial kitchen space and these businesses take four to six years on average to complete the stages (Danovich, 2016). Incubator kitchens can have limited availability for new entrepreneurs and entry remains very competitive (Smith, 2014).

2.5 Sector Trends

Food Entrepreneurship

Food entrepreneurs are difficult to define. The Kelley Indianapolis Hub from Indiana University describes them best, as those who facilitate "new ventures that [redefine] how we grow, deliver, and enjoy our food and drink. Food entrepreneurs can tackle global challenges or celebrate the value of being local. They can inspire intense loyalty from a small group of valued customers, or aspire to address sweeping issues like sustainability and hunger" (Saxton, 2014). Despite the attractiveness of this budding sector, there are structural challenges that nascent food businesses cannot change, such as the variability of consumer trends and the process of scaling up.

Consumer Trends

Consumer trends create new opportunities for local, mission-driven food businesses, precisely those that CWK supports. However, consumer trends also affect the volatility of the food business market. Current trends include a preference for online sales outlets and increasing demand for artisanal, niche, local, and/or organic products. Some trends are attributed to shifting preferences of the 'Millennial' generation, defined as “anyone born between 1981 and 1996” (Dimock, 2018). This population has the unique experience of aging with the internet and social media, resulting in an expectation of immediate gratification and mass dissemination of information (Nielsen, 2016a). The share of Millennial shoppers who purchase food online increased 25% over the last two years (”Share of Millennial Shoppers Who Have Used an Online-Only Retailer for Groceries in the United States from 2015-2017”, 2017). These are important statistics for Boston’s food landscape since the city has the largest percent of Millennials in the country (Florida, 2018). In the past 10 years, there has also been a noticeable shift in consumer preferences towards local, organic products. A Nielsen survey found that people are willing to purchase more expensive products if they are marketed as having any sort of health benefit or exclusion of chemicals—even without fully understanding what the labels mean (Nielsen, 2016b; “Amid the FMCG Downturn, Small Manufacturers are Tapping Big Growth”, 2017). The local food industry made $4.8 billion dollars in the U.S in 2008, and organic products sales surpassed $26.7 billion over the last decade (Buck, 2014). Additionally, studies show that brands that market themselves as having a 'deep core mission' get the most consumer interest regardless of the product (Poinski, 2016).
Chapter 3 CommonWealth Kitchen

Image Source: Lucas Mulder
CommonWealth Kitchen (CWK) is a non-profit food business incubator located in the Dorchester neighborhood of Boston, MA. CWK helps individuals turn their ideas into viable food businesses by providing shared commercial kitchen space and business and operational support services. Individuals can apply for membership and go through the predetermined phases of business growth. Existing food businesses interested in scaling production can utilize CWK’s contract manufacturing services without officially becoming members.

To fulfill the organization’s vision of creating an equitable and resilient local economy, CWK promotes inclusive entrepreneurship by focusing on supporting businesses of people who have experienced racial, social, and economic inequality (CommonWealth Kitchen, 2018a). The organization works directly with Boston residents, by employing citizens in their neighborhood, and creates jobs by supporting the growth of their food businesses. Of the 50+ member businesses, 70% are owned by women or people of color (CommonWealth Kitchen, 2018a).

CWK was formed in 2009 as CropCircle Kitchen, located in the Jamaica Plain neighborhood of Boston. In 2011, CWK partnered with the Dorchester Bay Economic Development Corporation to redevelop the vacant Pearl Meats Factory in the Grove Hall area of Dorchester (CommonWealth Kitchen, 2018a). CWK relocated to the 36,000 square foot Bornstein and Pearl Food Production Small Business Center in June 2014 (CommonWealth Kitchen, 2018a). In 2015, CropCircle Kitchen officially changed its name to “CommonWealth Kitchen,” and has since expanded its business service offerings. All material in this section has been provided by CommonWealth Kitchen’s staff.

3.1 Facilities

CWK facilities include a commercial kitchen space, a commissary kitchen, storage for members (including dry, cold, and frozen), shared office space and conference rooms. The CWK commercial kitchen features equipment such as still ovens, slicers, blast chillers, convection ovens, stockpot range stoves, 60-quart mixers, burners and burner range. In 2016, CWK began offering small-batch contract manufacturing services to members and other food businesses, after starting a commissary kitchen in 2015.

3.2 Member Services

CWK works with a variety of businesses, including wholesalers (food manufacturers), retailers (food manufacturers), food trucks and caterers.

Mission Statement:

“CommonWealth Kitchen is a collaborative community, providing shared kitchens combined with business assistance to help aspiring entrepreneurs build great food companies, create jobs, improve healthy food access, and strengthen our regional food economy.”

Source: CommonWealth Kitchen website
CWK accepts new members through an application process and takes them through three phases: "Incubation" to "Startup" to "Growth," usually over the course of 2-4 years. Specific activities are catered to what would be the most useful to foster growth for each particular business phase, and membership fees are tailored to suit the stage. Members can access kitchen training and technical assistance ranging from business seminars to in-class lessons. CWK helps its new entrepreneurs with certifications, food testing, recipe development, scaling, ingredient sourcing and distribution. Established and growing food businesses get more advanced help with packaging, labeling, food safety testing, business planning, legal matters, branding, and other financial services. Additional services include, but are not limited to, identifying distributors, staffing, marketing, business pitches, and accessing capital.

**FIGURE 6: CommonWealth Kitchen Timeline**

**2009**

*Crop Circle Kitchen established—Jamaica Plain*

*Services offered:*
- Renting kitchen space and/or storage space
- Limited business support; including help with overall business idea and plan, set-up and permitting
- Limited production support; including labeling, packaging, logo design, and food safety testing Support of community and network of food entrepreneurs

**2014**

*Moved to Pearl facility (Dorchester neighborhood location). Organization experienced a change of executive leadership; entrepreneurship manager; kitchen managers; business managers joined full-time to enable more support.*

**2015**

*Crop Circle Kitchen changed name to CommonWealth Kitchen*

*Commissary kitchen developed Connections to support for trademarking, insurance, and branding*

*Recipe development and scaling Connections to sources of capital*

**2016**

*Contract manufacturing/production services*

*Connection to markets (distributors, retailers, food service buyers, etc.)*
Incubation Phase

During the incubation phase, members are not producing in the kitchen yet and are focused on initial business development. At this point, members need to become fully licensed and permitted, develop basic branding and initial recipes and secure startup funding. They also have access to specific parts of the facility including mailboxes, shared office space, and conference rooms. Community forums, events and peer mentoring with their cohort is available at this stage, as well as certain workshops and office hours.

Startup Phase

At the beginning of this phase, member businesses are fully permitted and licensed and can begin working in the shared kitchen spaces. They are now able to access the dry, cold and frozen storage; shipping and receiving points; and kitchen equipment. They also receive training with kitchen equipment, assistance with recipe development and scaling, as well as support sourcing ingredients. Peer mentoring and community events remain available options and recent graduates, or those at the growth phase, can become mentors.

Growth Phase

At about a year and a half into membership, businesses are generally well established and focused on expansion. At this point, the business aims for profitability and continued investment and looks to hire staff, outsource production, or become ready to leave CWK. The member businesses have access to the same resources and continue to receive more operational support, including utilizing the co-packing or co-manufacturing services,
contracting equipment, and more product development, in order to expand to other market channels. At this stage, business owners can serve as mentors and can pair with an industry expert outside of CWK.

*Leaving CommonWealth Kitchen*

There is no specified graduation date, as moving out of the shared kitchen space is based on members’ desire to do so. Annually, about 3-6 businesses "graduate," by transitioning from CWK to continue their business independently of CWK’s space and operational and business support.

**FIGURE 7:** CommonWealth Kitchen Member Services by Growth Stage

- **Incubation**
  - Typically 1-3 months
  - Key activities include:
    - Developing and completing initial business plan and financials
    - Appropriate certifications and licenses
    - Prototyping product
    - Secure start-up funding
    - Key CWK support services include:
      - Initial business training
      - Facilitating access to startup resources by connections to labelers, insurers, packing, etc.
      - Coaching on business basics, overall goal setting and more

- **Startup**
  - Typically 6-18 months
  - Key activities include:
    - Establishing a financial system and beginning initial sales
    - Brand building and development of a customer base
    - Validating and scaling of recipes
    - Secure funding
    - Key CWK support services include:
      - Business training with differing workshops
      - Facilitating access to markets through connections, demos, pop-ups, etc.
      - Facilitating access to early-stage funding and start-up capital
      - Coaching on branding, operations, marketing, etc.

- **Growth**
  - Typically up to 48 months
  - Key activities include:
    - Scaling up production
    - Expanding market avenues
    - Hiring staff
    - Pursue working capital
    - Key CWK support services include:
      - Business training continued with external partners
      - Continued facilitation of access to markets and capital through larger connections and partners
      - Continued coaching on branding, operations, marketing, etc.

Some of the key activities that CWK members experience through the three stages of growth at CWK and some of the key supports offered by CWK depending on development phase.

Source: CWK’s Membership Model Overview 2018
Image created by Rebecca Lucas.
3.3 CommonWealth Kitchen Members

Similar to CommonWealth Kitchen, many former members identify themselves as mission-driven. As such, they design their business model and product(s) around values that are important to them. Alex Bourgeois of Alex’s Ugly Sauce notes that being a small scale, family-oriented business is very important to him.

Like many CWK members, Adam Hirsch of Exodus Bagels started his business out of his home as an experiment. He wanted to create a high-quality, affordable product that everyone could enjoy. Now, he has two retail locations in Boston and a following of loyal customers in Boston’s Roslindale and Jamaica Plain neighborhoods.

“Success for us is finding consumers that haven’t had this product before—when we hear back that our lactose consumers are ice cream lovers and can participate with friends and family—that for us, is measured success.”

-Katy Flannery, Minus the Moo

Of the 42 food manufacturing businesses formerly at CWK, seven are either closed or are presumed to be, due to lack of an online presence. The remaining 35 businesses sell an array of goods, from sushi to cream pies to healthy meal kits. Many businesses have small shops in the greater Boston area and delivery options. Whether they have a storefront, access to loans, or offer delivery services, all factors impact their entrepreneurial experience.

For the purposes of this report, the term “former member” refers to individuals or businesses who were involved with CWK in some capacity since its founding in 2009.
Chapter 4 Methods
The following primary research questions have guided this report:

1. What are the challenges facing former CommonWealth Kitchen members that are food manufacturers?
2. What policies and programs from other cities and states can be adapted to support food manufacturers in Boston?

Two primary methods were employed to inform this research: semi-structured interviews and a case study approach.

4.1 Semi-Structured Interviews

To understand the challenges that former CWK members have faced after transitioning out of the shared kitchen space, the research team conducted semi-structured interviews with food manufacturing businesses. These interviews informed an understanding of challenges faced by this specific set of small scale food manufacturers.

The researchers reached out to the 42 identified food manufacturers who were former CWK members for in-person or phone interviews. The research team completed 12 interviews from mid-March through April of 2018.

The following sub-questions focused the semi-structured interviews:

- How do former CWK members measure success in their own businesses?
- What were the difficulties in transitioning out of the CWK shared space?
- What more can CWK do for its members to ease the process of transitioning out of the kitchen?
- What policies and programs exist in the Boston area that can help former members after graduating from CWK?

Prior to outreach, the research team gathered available data from the internet on every former CWK food manufacturing member including type of product, years in operation, market avenue (i.e. online store, specialty grocer) and other attributes. See Appendix B: Methods Continued for semi-structured interview sampling and data procedures, Institutional Review Board process and challenges and limitations. See Appendix C: Data Collection Tools for the semi-structured interview guide used.

4.2 Case Studies

Using a case study approach, the research team examined existing academic and grey literature, websites, government documents, and organizational reports to compile programs and policies related to food manufacturing across the United States. The research team also used this approach to understand the challenges that food manufacturers face in general and to corroborate, further contextualize or highlight incongruences with the findings from former CWK member interviews. There is a limited body of academic research regarding this population and as such, a larger reliance was placed upon available grey literature.

The following sub-questions focused the case studies:

- What policies exist that create an enabling environment for successful food manufacturers in the Boston area?
- What models and best practices exist in other cities for food manufacturing businesses?
- How do policies impact the success and viability of food manufacturers?
- What general trends are relevant to small scale food manufacturers in the U.S.?
- What challenges are currently facing small scale food manufacturers in the U.S.?
The research team identified policies and programs through conversations with the project partner, preliminary research, interviews with former members and key experts.

These included:
- Regulations; relevant permits and licensing
- Zoning
- Taxation
- Real estate; cost and availability
- Public funding streams and organizational support for food manufacturers
- Private funding streams and organizational support for food manufacturers

The researchers began by identifying policies and programs within Boston, as well as Chicago, IL; San Francisco, CA; Philadelphia, PA; Burlington, Vermont; and New York City, NY. The analysis of policies and programs from other cities enabled us to identify "levers," that is, potential policy interventions to combat the challenges food manufacturers may face.

See Appendix B for case study sampling and data procedure, Institutional Review Board process and challenges and limitations. See Appendix C: Data Collection Tools for the key informant questions.
Chapter 5 Findings
5.1 Challenges

The primary challenges for small scale food manufacturers are grouped into five categories: capital, space, markets, regulations, and labor. These categories emerged as major themes from former CWK food manufacturing members and key informant interviews, as well as through conversations with CWK staff. The definitions compiled below are based on these findings. The definitions are intentionally broad and interrelated.

*The Impact of Scale*

While the following challenges affect most business types, small scale food manufacturers are especially vulnerable to their impacts. Being of a small scale business can make the following challenges more difficult because of constraints on capital, labor, space, access to markets, and capacity to comply with regulations.

Many of the businesses interviewed were at a pivotal moment in their development, deciding when and how to scale up. Scaling up requires expansion, which is costly (Picken, 2017). As a small food business grows in scale, costs do not decrease unless strategic investments are made. This growth puts extreme pressure on production, but because of high labor costs, hiring a new person to meet the increased demand may not be feasible for a small business. Therefore, the economic viability for a food business is unpredictable and possibly unstable. For some individuals, fluctuating conditions can be motivating and exciting. For most, scale sets the framework and the context for all other challenges.

For the particular products that these food manufacturers produce, scaling posed a challenge of quality versus quantity. As stated succinctly by Amy Haimerl in a 2016 *New York Times* article, "That conundrum — how to stay true to what made you great while producing larger and larger batches — is the top concern small business owners face as they look to expand. "ile producing larger and larger batches — is the top concern small business owners face as they look to expand."
Food manufacturers need capital to purchase equipment, pay rent and other necessary costs to open their business. Making these up-front financial investments requires access to capital, which many small businesses do not have. In Harvesting Opportunity, Dr. Lisa Benson, Executive Director of the National Association of State Departments of Agriculture (NASDA) Foundation, validates the challenge of securing financing: “early stage businesses with modest margin potential and entrepreneurs who lack business planning skills have more trouble accessing capital. Although these businesses may find innovative ways to contribute to the food systems economy, they are usually not in the position to take on conventional financing, especially if their leadership team lacks strong financial skills. The lack of entrepreneur development and business discipline is among the biggest challenges food systems enterprises face.” (2017, p. 227)

Start-up costs for necessities like equipment and real estate continue to rise, as the availability of space declines (Benson, 2017; Colpaart, Grahn, Seymor, 2017). For decades, food businesses of all sizes have expressed concern around rising rents as well as property taxes (Adelaja et al., 1999). Commercial kitchens could cost upwards of $100,000, sometimes as much as $500,000 or more (Benson, 2017). The actual cost is decided by permit cost, legal requirements, and the specific equipment needed for the product (Benson, 2017; Decker, 2017). Some experts suggest always having emergency funding and/or constant comparison of prices when considering purchasing necessary equipment or outfitting a commercial kitchen (Decker, 2017).

Besides rental costs and equipment purchases, the benefit of finding the right business partner can ideally alleviate some of the financial burden as mentioned in some interviews. Partnerships and collaborations are powerful financing options for food businesses (Benson, 2017). In a private partnership, the business is somewhat at the mercy of the partner’s requests or stipulations on the loan. One option is to ‘shop around,’ take time to look through both private and public financing options and compare interest rates and requirements (Benson, 2017). Ingredient costs also present potential financial burdens for food manufacturers. Organic and local farm products cost more to source than non-organic or non-local (Buck, 2014; Neilsen, 2016b). Food manufacturers that source locally and organic may have a more difficult time producing large enough quantities to make a profit (Buck, 2014).

**Former CWK Member Testimony**

**Start-Up Costs**

Multiple former members identified access to capital as a challenge faced while transitioning from CWK. Some identified high front-end costs as particularly challenging. Some former members were able to use personal savings and business savvy skills to get operations started. In one interview, a former member said that they began by being self-funded and are currently working for free. The same person stated that there is generally a period of 3-5 years where no personal salary is generated and any profit is funneled back into growing the business.

**Affordable Real Estate**

Multiple former members mentioned high rental costs in the Boston area. Rent was indicated as a determinant of whether a food business would be able to sell in lucrative areas like downtown Boston. One former member, who was able to acquire a new storefront that allows for production and retail, explained that,
“the company has been able to grow our wholesale business quite a bit. We have invested in equipment that has taken a lot of the cost out—so it’s become reasonably profitable to do a wholesale business. That’s been a big success for us.”

Alternatively, some interviewees said it was also too expensive to stay at the incubator. Membership costs became "prohibitive" for one interviewee, so moving into a new space was a better option.

Borrowing and Loans

A few former members noted that securing a bank loan is difficult when a business is still in its early stages. Some members mentioned they had already accrued debt throughout the very early stages of starting their business, making it particularly difficult to secure a loan. Adam Hirsch of Exodus Bagels said that the bank could not loan him money based on lack of sales. He launched a successful Kickstarter campaign, an online crowdfunding platform, and raised over $63,000 to support his business. One member mentioned the importance of private benefactors; finding the right financial partner made a difference for their businesses’ trajectory.

One interviewee said that the City reached out to him about supplementing signage costs but he did not have time to complete the application process. He noted that these types of programs often do not offer enough money to incentivize completion of the lengthy application process. Other former members explained, “We were not aware of any public funds available to us except for some kind of loan system [but] because of our credit history, we were unable to get any type of loan.”

Operational and Infrastructure Expenses

Two former members indicated that purchasing production equipment was a challenging component while moving out of CWK. One former member said that once they think they are turning a corner and on their way toward profitable operations, a new piece of equipment needs to be replaced and big up-front cost(s) are incurred.

Another member mentioned the challenges associated with front-end costs, stating, “We buy our packaging – its custom printed for us, so we buy a lot of it before we need it. When we pay for it, I do not receive the revenue for that product until a few months later.”

One member expressed concern with maintaining a consistent cash flow to hire employees. Some members mentioned that store upgrades, interior improvements and website modifications have to roll out slowly because of cost. Finding the time to keep up with bookkeeping was mentioned as an ongoing worry for one. Other former members have hired a finance expert to assist in this part of the business, have a business background themselves or have a partner with a financial background.

One member also noted that the cost of sourcing local goods when seasonally available may not be more expensive at the time, but the cost of storage for the processed goods throughout the year raises overall expenses. This was noted to be worth the cost because it supports their business’ mission and enables co-branding opportunities with local producers.

Finding adequate and affordable space for production and storage is a primary challenge for small scale food businesses. The main issues related to space include a shortage of affordable real estate; limited inventory of suitably sized spaces for smaller food manufacturers; restrictive regulations on production spaces (i.e. cross-contamination regulations may limit certain types of businesses from sharing facilities with one another); insufficient storage space; lack of shared commercial kitchens;
and difficulty finding conveniently located spaces necessary for successful business operations. Factors food manufacturers consider when finding adequate space include cost, location, size, distance to customer base and distributors, access to roadways for deliveries and proximity to public transportation.

**Discussion**

Though initially the research team thought that public funding might play a substantial role in supporting new and emerging businesses, none of the former CWK members mentioned public funding or grants used to jumpstart their businesses. Many of the former members were unique in their ability to begin with self-funding or borrowing from friends or families. Without accessible capital, it is hard to launch new businesses. Resources like emergency funds or back-up plans are also difficult to build when these small businesses are not yet turning a profit. The more expensive inputs (i.e. local or organic) used by some former members may also constrain working capital.

**Space**

Reports show that for smaller-scale local food entrepreneurs, finding production space is paramount (Compat, Grahn, Seymour, 2017). Food manufacturers need to find space that is large enough to support production while also being affordable (Smith, 2014). Kathryn Hawkins, a writer for the Intuit QuickBooks Resource Center, adds that renting time from facilities that have commercial kitchens, like restaurants, schools, or churches, during their off hours is an alternative and potentially less costly (n.d.).

According to the Boston Small Business Report, the three main barriers preventing small businesses from obtaining the real estate they need to thrive include "availability, affordability, and awareness (i.e. limited market information about the available and appropriate spaces that do exist in Boston)" (City of Boston 2016, p. 31). Part of space challenge has to do with the lack of physical land in Boston and the high population density in a relatively small city. But nevertheless, people living and working in Boston are facing a real estate crisis. According to a 2015 Boston Globe article, industrial real estate is limited and in high-demand within Boston (Logan). The city has only 3.6 square miles of land zoned for industrial use – and this land is increasingly under pressure from non-industrial uses (Logan, 2015).

**Former CWK Member Testimony**

*Health Regulations (Cross-contamination issues)*

Several businesses interviewed, many of which are bakeries, concluded that working in a shared kitchen presented challenges due to cross-contamination of products. Amanda Bauman of Chica de Gallo needed a very clean space without animal proteins nearby to make her salsa and guacamole products. She moved from CWK to a former chip factory in nearby Everett, MA. The new space also allowed her to scale up production.

Another discussion point among the former members are the restrictions of the Cottage Food Laws, as previously discussed, that prohibits them from producing their types of food out of their home kitchen. For some former members, this limitation was the impetus for joining CommonWealth Kitchen. One stated that using a shared kitchen was necessary to scale their product. Another mentioned that they were unable to produce at home because of the type of food.
Affordable and adequate space
The majority of former members interviewed started their business from their home kitchen. Once they grew out of their kitchen, they joined CWK to use their commercial kitchen and storage space until they could move into their own space. Increasing available space was a concern among most interviewees. One interviewee is planning to expand operations by purchasing a larger production facility in the Boston suburbs and transporting their goods to the Boston store.

For Alex Bourgeois of Alex’s Ugly Sauce, adequate space was needed to be comfortable moving around the kitchen and accessing his storage units. His production process requires a lot of storage space, as he buys in season ingredients, then processes and stores them for use throughout the year. Furthermore, he throws very little out and recycles almost everything leaving empty reusable containers and unused parts around his facility.

He says that although "being in the building is expensive...having the relationship with [CWK] and them being a presence is enormously helpful."

Two former members indicated they “lucked out” finding a retail space that was affordable, ideally located, and with flexible lease terms. However, finding affordable space is an issue for many of CWK’s former members. One interviewee moved outside the city to open a retail store because the cost of rent was too high in Boston. For one former member, the commute from Sudbury, MA to Dorchester to utilize CWK’s kitchen was difficult and put a strain on their business. They never found an adequate space and ultimately had to sell the business.

When asked about searching for real estate a former CWK member stated, “I looked quite a lot before CWK, afterwards, and during. It was kind of a continuous search.” For one former CWK member, the process of finding an appropriate space was overwhelming. Another stated, “I looked online. I had a realtor that was doing searching on my behalf. I was speaking to other bakers in the business.” One is sharing a space with another small food business. Others networked with other food manufacturers to find shared spaces while another former member was able to construct their own kitchen space.
Discussion

There are many different challenges woven into the category of space: affordability, compliance with food-specific regulations and spatial requirements, and suitability for food production. Health codes restrict production of baked goods close to meat products. Baked goods that cater to people with food allergies need to be especially cautious of any outside ingredients that could contaminate their product.

Though many of the former members did not discuss zoning, the real estate available to them, as manufacturers, is in many cases restricted by zoning. Thus, zoning can limit mixed-uses in areas that may be more beneficial for their business or more affordable and may continue to constrict the affordable and appropriate options available for small scale food manufacturers.

Markets

Access to markets and physical sales outlets, are critical for developing an income stream and for building a customer base. For food manufacturers, “markets” can encompass both a diversity of physical or cyber spaces and a variety of distribution avenues. Physical market spaces include farmers markets, expos, and supermarket demonstrations, all valuable spaces for food manufacturers to build their brand.

Though farmers markets are a great marketing tool, they are noted as particularly fickle sources of income (Lucan 2015). Further, farmers markets tend to be located in ’food clusters’, where there are other nearby sources of food like supermarkets or natural food stores and having substitutions so close by can make it difficult for farmers market vendors to sell at the price point necessary to turn a profit or break even (Lucan, 2015; Lee et al., 2010). Combined with the high entrance cost, farmers markets are not a necessarily viable source of income for small food businesses (Lucan, 2015; Lee et al., 2010). In addition, farmers markets are mostly seasonal while other food businesses surrounding the market area are generally open year-round; consumers may prefer the more stable option (Lucan, 2015; Lee et al., 2010). However, a Nielsen article found that supermarkets and other larger food distributors are making more space for small scale food products; of the 900 food and beverage items added to supermarkets since 2013, 88% came from small and medium sized companies (“Amid the FMCG Downturn, Small Manufacturers are Tapping Big Growth”).
Online ordering also has its benefits and challenges. The skyrocketing popularity of household aids like Alexa and services like AmazonPrime indicates a major shift to online purchasing (FoodService Director, 2017). Amazon’s recent acquisition of Whole Foods could also have an impact on online sales of small food business’ products as shelf spaces become digitally accessed (Girotra, 2017). Statista projects that 20% of all grocery products will be purchased through online sources by 2025 (“Share of Millennial Shoppers Who Have Used an Online-Only Retailer for Groceries in the United States from 2015-2017”, 2017).

Given Millennial purchasing patterns, online is a promising distribution method for small food manufacturers (Nielsen, 2016b). The process to get picked up by an online distributor like Whole Foods requires the business to sign up for a program called RangeMe and create a product profile that is then scrutinized by the Whole Foods category buyer—if the business makes it through multiple rounds of elimination (Whole Foods, 2018). With Amazon’s acquisition of Whole Foods, changes are happening in stores processes as well: demonstrations used to be a low-cost way to market product direct to consumer in store, but policies recently changed and almost all demonstrations and tastings now charge a fee to the business to use the space (Bhattarai, 2018)

**Former CWK Member Testimony**

*Physical Market Spaces*

While a few former members interviewed identified entry into physical markets, like farmers markets, to be a challenge, many continued to pursue them as opportunities for brand-building. One former member indicated the high fees required at each farmers market as a major barrier to entry. Two former CWK members mentioned that farmers markets used to be the primary source of income, but now, the increase of farmers market fees make it impossible to turn a profit. They have since come to rely on other market avenues as main sources of income. A few former members interviewed also found the act of physically getting to the markets themselves to be a challenge. They also mentioned that there are few lucrative markets and are very competitive to enter.

Additionally, one of the former members indicated that the lack of control over whether they would be able to sell at farmers market—whether they were accepted as a vendor—made the market too unreliable to be a significant source of income.

**Access to Market Channels**

The majority of the former members interviewed identified access to markets as a challenge. Some former members also mentioned that the process of entry to some markets is entirely unknown. One former member spoke to the challenging aspects of understanding pricing structures upon entry into the larger-market level. More specifically, some interviewees discussed how approaching stores to sell products and working with a buying company to increase product presence in a variety of markets can be difficult to navigate without guidance.

Alex B.’s demonstration of his product was noticed by a Whole Foods “local forager,” i.e. one who scouts new products, at a food expo. He claims that this person walked him through the process of selling his product, got him into the right meetings, and introduced him to the right people.

“...if you were brought in by a forager, they basically championed you through the process in their store. And then once you work in their store, you could then go to all the stores in the region and say, ‘hey! We’re in the system, you should really sell this,’ and then it’s easy...we got into Whole Foods through one person championing us through their process, which is just insanely difficult and is worse now than it was then. And then we did a lot of legwork to expand our footprint”

-Alex Bourgeois of Alex’s Ugly Sauce
Distribution Methods

Because physical markets present many logistical challenges, many food manufacturers take advantage of online markets, and sell direct-to-consumers that may be outside of the Boston area. The majority of the interviewees, and all who indicated that markets were a challenge, have online websites to sell their products. While one former member mentioned internet subscriptions of their product to be a time-saver as well as a steady income stream, multiple former members mentioned that in order to turn a profit with online orders, they must require a minimum purchase. For that reason, online orders do not make up the majority of their revenue.

Discussion

As farmers markets are an ideal setting for food businesses to build their brand, high fees for entry, indicated by some interviewees, can put a serious damper on business growth. Selling at farmers markets was more of a way to market their brand, rather than to earn a steady income.

Given the indicated trends of supermarkets embracing small scale products, it may be more lucrative for small food manufacturers to pursue wholesale to supermarkets and the food businesses surrounding farmers markets, than to sell at the market itself. Distribution through major chains could also require larger quantities than is possible with the production capacity of small food businesses. The kind of product also makes a difference; if the food product has a shelf-life of multiple years, it is much easier to fill larger orders using product pulled from storage. Products with shorter shelf life, like baked goods, may have a more difficult time filling large orders required by chain stores.

Regulations are compulsory for food manufacturers to abide by throughout their business’ lifetime to be able to sell their products to the public. These regulations vary based on business type and food product and include municipal health permits, food safety certificates, and business licenses. There is a lot of "red tape" in navigating the regulations necessary to start a food business (Metro Focus, 2012). Food manufacturers have a great responsibility to produce safe products. The process of food manufacturing can be repetitive and monotonous; it is possible to succumb to mistakes if health regulations are not meticulously followed. America’s food industry has lost $55.5 billion dollars due to violations of the safety regulations (Kowitt, 2016). Small scale food manufacturers have the opportunity for greater quality control, but that does not mean they are immune to these issues. Industry advocates constantly push for more transparent or clearer regulations (Adelaja et al., 1999).

The licensing process within cities and fees associated with necessary permits, among other things, can be very confusing to navigate alone (Metro Focus, 2012). Misunderstanding or ignorance of these issues is not, however, an excuse for violating health or any kind of regulatory code.
**Former CWK Member Testimony**

*Unclear Variation*

Former members who produce baked goods face very different regulations and requirements than a sauce producer for example. One former member, a sauce producer, was able to circumvent certain nuances of regulations by only using one recipe for all of his different sauces—he only changes the kind of pepper used. One recipe means he can maneuver within fewer regulations and fewer check-ins from the health department. Another former member, who also had a product that needed to have licensed recipes, noted that the regulation process can be an unreasonable burden.

"Certification can be prohibitive for doing one-off recipes...[and] need to do larger production to make it all worth it, in a sense."

- Former CWK member

*Difficulty Understanding the Process*

Overall, for many interviewees, the primary challenge in complying with regulations is the difficulty navigating the process. A few former members interviewed found that health regulations were confusing and difficult to understand. One of the former members noted that even the state inspectors were not totally clear on the regulations that needed to be complied with or followed for particular types of businesses. The same former member noted their desire to be fully compliant, though acknowledged that this wasn't always realistic, given what they did not know and could not find out either.

While one of the interview participants knew they needed to get licenses for their product, they were unsure how to begin the process. Another interview participant indicated that navigating the different certification processes was incredibly challenging. For some former members, complying with regulations was difficult when the language was too complex. They noted that the process is overly complicated and there is a lack of guidance by city and state employees. Some had to hire a lawyer; a high cost that is an unrealistic expense for many food businesses.

A former CWK member said that they wished there was a formal mentorship program or office within the city or state department that could have helped ease the process of complying with regulations. Understanding necessary procedures can be immensely difficult, especially for small nascent businesses that only have one person dedicated to regulation compliance among all other obligations.

**Discussion**

Many of the former members interviewed acknowledged the fact that compliance with regulations is a necessary component of operating a legitimate business. The former members seem concerned with more short-term problems like understanding current regulations, not how often they change over time. Many of the interviewees had product-specific and recipe-based concerns that are not necessarily translatable across the different types of food manufacturers. Working with just one fully licensed recipe, like one of the interview participants, is not necessarily a model other food businesses can emulate.
Labor is a part of all businesses and is an issue of particular importance for the small scale food manufacturing sector. Challenges related to labor include availability of workers, automation, proper training, maintaining enough consistent cash flow to retain employees, and reliability.

“Without skilled labor, production is slowed and expansion is difficult” (Hobbs, 2017). The decreased availability of skilled labor is a problem facing U.S. businesses at large, challenging the manufacturing sector and food producers in particular (Hobbs, 2017; Gillespie, 2018). Food preparation requires some amount of training and in a small business, there is little time to train those who do not have any experience at all. Health codes require extensive training to ensure safety and health of the product; it includes training as simple as how to use gloves and how often to change them as well as how to avoid cross contamination and proper methods of heating and cooling (Green and Selman, 2005). This cost of time and capital can often be too burdensome for small businesses.

Primarily, these problems are associated with scale (Steinmetz, 1969; Picken, 2017). Small businesses often have cash flow problems and many are not profitable for years after they open (Steinmetz, 1969; Picken, 2017; Adelaja et al., 1999). If a business is interested in scaling up and increasing production, however, they usually need to hire more workers. State and federal labor policies—like a minimum wage—have a large impact on the business’ ability to hire workers. Massachusetts has one of the highest minimum wages at $11.00 an hour, and labor activists are still fighting for an increase (Norton, 2017). As noted previously, many of the businesses interviewed are transitioning or in a pre-transition phase, deciding how and when to scale. Transition requires new, additional resources like equipment and labor to maintain production and growth (Picken, 2017). It is precisely this interplay between capital for labor versus equipment and the scale of production output where so many challenges lie.

Former CWK Testimony
Hiring Additional Employees

Finding appropriate labor, with adequate training, was an issue identified by many former CWK members. One interview participant indicated that finding consistent labor was a problem during the initial growth period. They were able to address their labor shortage problem by purchasing specialized equipment, which initiated a new period of growth. Kelly Sanders of Klean Plate, a company that makes Bliss, a protein pancake-mix, also indicated finding talented help and the cost associated with taking the time to do so as a challenge. Even with the availability of skilled labor, it is still difficult and not possible for her to pay anyone a salary. Another former CWK member indicated that inconsistent revenue makes the ability to retain full-time employees difficult; thus they have to hire on a part-time basis. Adam Hirsch of Exodus Bagels spoke about the difficulties inherent in training hired labor, especially when it comes to food products. Needing to teach instinct and specific know-how of producing a particular item can be difficult and time-consuming.

Automation

One former CWK member was able to purchase equipment that significantly reduced the amount of time they spent creating their product. Bakery items can often take a lot of individual hand-work. With the purchase of certain machinery, this former member was able to replace the need to hand-scoop, taking care of much of the labor constraints on production.
Utilizing Co-packing or Co-manufacturing Services

In lieu of purchasing machinery, some food manufacturers decide to engage in contract-manufacturing or co-packing services. One former CWK member talked about the science behind scaling recipes from something done by hand, to one level of machinery, to a larger co-packing level, as a challenge that is difficult to anticipate before you begin the scaling process.

Another former member indicated concerns about the quality of the product changing when needing to adapt to co-manufacturing services to keep growing. One former member hired a liaison between her and her co-packer, while another former CWK member spoke to the logistical challenges that having a co-packer presents; i.e. still needing to take the time to transport inputs and pick up after, etc. One former member noted the cost of using hourly packing services to be too expensive to make sense financially.

Discussion

Many of these former CWK members began their businesses by doing everything individually by hand. As the business becomes successful and grows, the level of production needed often outpaces the amount one person can do alone. It is unsurprising that the question of labor—who and how much—presents a challenge. With the fluctuating flow of profit and losses at the beginning phases of a business, it is difficult to hire employees on a full-time basis, much less be able to pay themselves a salary as well. Additionally, the work required is not always constant or consistent; thus flexibility is necessary within available labor. As additional labor would most likely help to grow the business and grow revenue, a paradox emerges. How can the food manufacturer grow the business enough alone to be able to hire someone else to then keep the business growing?

Many of the challenges that are presented with utilizing a co-packer—needing to scale recipes to a certain level to be able to utilize equipment, losing a degree of control over quality when it is contracted out, not enough capital to afford the rates—could be avoided by hiring additional employees. Co-packing services can also be very expensive and not financially feasible during certain periods of business growth. Sometimes these are precisely the periods in which some form of scaling needs to happen to continue being an economically viable business. Nevertheless, while co-packing rates may be expensive, hiring employees can be even more unattainable. Not because the manufacturers do not want to hire employees, indeed, some mentioned retaining employees as very important to their business. They are just not at that scale or are unable to hire for anything beyond flexible part-time work.

Depending on the type of product, proper machinery can replace employees, although it can be a costly undertaking. Deciding to invest in machinery can require thorough research and financial planning that may be too challenging or time-consuming to undertake during certain stages of business growth and development.

Alex Bourgeois of Alex’s Ugly Sauce rents space in the same facility as CWK and while internal labor is not necessarily a challenge for him, he has noted that CWK staff members are always around and able to help facilitate logistics and deliveries, even when he is not there.
FIGURE 9: Policy Levers to Address Challenges

The policy "levers" of supportive tax policies, appropriate or flexible zoning, financing, access to markets, mentorship and networks, and understanding regulations are defined below and examples are given for how they work to combat the identified challenges in states and cities across the United States. Some levers, as identified in the matrix can address multiple challenges and some are only relevant to a select few.
FIGURE 10: Challenge-Lever Matrix

<table>
<thead>
<tr>
<th>Challenges Identified by Food Manufacturers</th>
<th>Supportive Policy Levers</th>
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<tr>
<td></td>
<td>Tax Policies</td>
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<td>Capital</td>
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<td>Regulations</td>
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<td>Labor</td>
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This matrix summarizes the relationship between the identified challenges and levers that will address them. Challenges are listed in the vertical column and "levers" are listed along the horizontal row. The 'x' signify where policies or programs could mitigate the challenges identified.

5.2 Challenge-Lever Matrix

The matrix below shows the relationship between the challenges identified and policy and programs "levers" to support food manufacturers. The x-marks show where each lever can help address multiple challenges. The Challenges section opens with a discussion about what was gleaned from interviews with former CWK food manufacturing members and relates them to the wider context of challenges that food manufacturers encounter. From those challenges the research team identified policy-related "levers," that is, possible public interventions that can help address the challenges, based on city or state-level examples from across the United States.

5.3 Levers

Levers are mechanisms that can address the challenges identified above. These findings are based on case studies from other cities and the steps they take to support small scale food manufacturers. We identified six distinct components of support: supportive tax policy, appropriate or flexible zoning, financing, access to markets, mentorship and networks, and understanding regulations. The programs and policies within this list have been selected for their relevance to Boston. Please see Appendix D for expanded definitions of select policies and programs related to food manufacturers.

Supportive Tax Policies

Cities adjudicate supportive tax policies, in part, to support industries and markets that they deem publicly valuable. The presence of supportive tax policies can help certain businesses become more economically viable by relieving some of the financial burden inherent to beginning and operating a business. Implementing tax breaks for new and emerging food businesses, including incentives and flexible tax structures, can alleviate challenges related to space, capital, labor, and regulations. Relaxing or providing

Image source: Lucas Mulder
rebates or incentives on property taxes can help food manufacturers directly address challenges related to the reality of ever-more expensive real estate and rent.

The Property Tax Incentive in Chicago supports specialty food manufacturers in order to revitalize and support the food economy in specific neighborhoods. This is a real estate tax incentive for the development of new industrial facilities, rehabilitating existing industrial structures, and the reutilization of abandoned structures. If eligible, properties would be assessed at 10% of market value for the first 10 years, 15% in the 11th year, and 20% in the 12th year—resulting in significant tax savings (Cook County Assessor’s Office, n.d.). In one instance, the Class 6(b) tax incentive enabled a small food manufacturer and distributor to add 14 jobs through a total savings of $432,000 (City of Chicago, Office of the Mayor, 2011).

New York City’s Property Tax Credit works similarly in that it provides a 20% tax credit on state property taxes to eligible manufacturers resulting in savings that can then be reinvested in the business (New York City Economic Development Corporation: Financing and Incentives, 2018). The New York State Tax Relief Commission estimated in their 2013 Final Report that this credit would create an annual tax relief of $136 million to over 21,000 businesses. New York also has the Industrial & Commercial Abatement Program (ICAP), which provides abatements for up to 25 years for commercial or industrial buildings that have been built or physically improved in some way (New York City Department of Finance, n.d.). Applicable within certain restrictions, related to the amount spent updating or constructing the building, this can be impactful for food manufacturers as many need to build their own production space or update existing buildings to include necessary equipment and infrastructure. The predecessor of ICAP, the Industrial & Commercial Incentive Program, resulted in $672.7 million in tax exemptions in 2014 (Fiscal Policy Institute, 2015; New York City Department of Finance, 2014).

Beyond property expenditures, equipment is a major financial drain for food manufacturers. New York City enacted the Equipment Tax Credit, specifically for its manufacturing sector. The policy establishes that certain purchases of machinery or equipment that are used directly in the production process to be tax exempt. Similarly, the Sales & Use Tax Exemptions:
Manufacturing Machinery & Equipment in Austin, Texas mandates that leased or purchased equipment, machinery, or necessary replacements and accessories that are used in manufacturing are exempt from state and local sales and use tax (Austin Chamber of Commerce, n.d.). Tax relief for specific food production equipment can significantly lessen the financial burden of purchasing needed infrastructure.

There are also tax credits that help food businesses ease into the regulatory environment. JumpStart Philly helps new businesses and entrepreneurs in Philadelphia by exempting them from the Business Income and Receipts Tax during the first two years of operation. While the businesses still need to apply for relevant licenses, eligible program participants do not need to pay for them, allowing them to use those initial years to ease into the market by decreasing up-front costs (City of Philadelphia Business Services, 2017).

Chicago, Illinois has particularly favorable tax policies for food manufacturers including the Flexible Personal Property Lease Transaction Tax which extends the payment deadline for the property lease transaction tax if the business owner needs additional time to review ordinance changes. At the state level, Louisiana’s Enterprise Zone Tax Credit, or EZ program, is a good example of designating location-based tax incentives. While technically labeled as a “jobs incentive program,” the EZ program gives either a one-time income or franchise tax credit, or more incremental, smaller credits for every new job created in one of four target groups (Louisiana Economic Development, n.d.). The target groups include residents living in identified ‘Enterprise Zones,’ people lacking “basic skills,” “unemployable by traditional standards,” or recipients of approved public assistance. Additional program benefits include options for state

### Zoning Changes

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<tr>
<th>Challenges</th>
<th>Appropriate or Flexible Zoning</th>
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<tr>
<td>Capital</td>
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<td>Space</td>
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can increase the available options for small-scale food manufacturers when looking for spaces to rent or purchase for production., and help provide access to lucrative markets.

Chicago, Illinois has particularly favorable tax policies for food manufacturers including the Flexible Personal Property Lease Transaction Tax which extends the payment deadline for the property lease transaction tax if the business owner needs additional time to review ordinance changes. At the state level, Louisiana’s Enterprise Zone Tax Credit, or EZ program, is a good example of designating location-based tax incentives. While technically labeled as a “jobs incentive program,” the EZ program gives either a one-time income or franchise tax credit, or more incremental, smaller credits for every new job created in one of four target groups (Louisiana Economic Development, n.d.). The target groups include residents living in identified ‘Enterprise Zones,’ people lacking “basic skills,” “unemployable by traditional standards,” or recipients of approved public assistance. Additional program benefits include options for state sales and use tax rebates for qualifying purchases and a refundable investment tax credit (Louisiana Economic Development, n.d.). As food businesses may cluster, or certain areas of cities could be designated as food manufacturing zones, this is a strategy that could target groups of food manufacturers.

**Appropriate or Flexible Zoning**

Zoning dictates what land is available for food manufacturers by limiting areas where their business can operate. If the zoning code is overly restrictive for the food manufacturing sector, then there are fewer
real estate opportunities. However, appropriate or flexible zoning regulations can address the identified challenges of finding ‘space’, ‘markets’, and ‘capital.’ Some examples include establishing zoning districts for light manufacturing, food processing centers, clusters, food zones, and small businesses. Zoning regulations typically follow a city or regional plan that sets aside land for small businesses to support economic growth. Plans can create new spaces or revitalize under-utilized or vacant ones for food manufacturers. Reserving designated spaces for small businesses helps support the local economy and encourages business development. The Burlington Municipal Development Plan (VT) requires all local brownfields be redeveloped and rezoned to a Central Market for local food businesses. The Plan acknowledges that food manufacturers need support and the City was willing to change its zoning codes to address the lack of space in a creative way (Burlington City Council, 2014). Similarly, the Philadelphia2035 Comprehensive Plan sets guidelines to repurpose its once thriving industrial and manufacturing areas with new business centers and mixed-use land uses (Philadelphia City Planning Commission, n.d.). Amending zoning regulations and coordinated efforts to reuse vacant land and structures in innovative ways are integral to the city’s growth of new businesses and can be streamlined to support specific business development.

San Francisco’s Production, Distribution, and Repair (PDR) Districts: In 2008, San Francisco created a zoning district for “Production, Distribution and Repair” (PDR) uses, which includes food manufacturers, to set aside needed land (approximately 7%) in a highly competitive and expensive real estate market. Then again in 2014, the City amended its PDR zoning to provide greater support to certain business types and “allowed multiple industrial businesses on a parcel to share retail space, and modified zoning incentives to encourage the production of new PDR space.”

San Francisco Planning Department, Office of Economic and Workforce Development (OEWD) and San Francisco Planning and Urban Research (SPUR) San Francisco’s Food and Beverage Production & Distribution Cluster Strategy has specific policy recommendations to support food and beverage production and distribution businesses. The San Francisco Planning Department created the San Francisco Property Map, an interactive map that can be used to find vacant real estate across the city. Users can find information on a property’s vacancies, square footage, building permits, zoning, planning applications, preservation history, and a transportation analysis (San Francisco Planning Department, 2018).
Financing measures directly address the challenges of space and capital, while helping indirectly with labor, regulations, and markets. They give business owners an opportunity to focus on growing the business itself. Financial tools include lowered interest rates on loans, public grants and funds, loan assistance and forgiveness, and rebates on business-related purchases. Once financial matters are secured, a business owner theoretically has more time and resources available to focus on labor, regulations, and market access. For example, the Efficiency Vermont Rebate Program is a public-private partnership that offers rebates on performance-based kitchen equipment for food businesses. Eligible equipment includes energy efficient fryers, griddles, commercial ovens, and steam cookers (Glitman, 2018). This rebate allows businesses to afford otherwise expensive kitchen equipment that can increase revenue by saving on long-term energy costs. For example, Orleans County (VT) officials found that two major buildings reduced their energy use by 57% on average and had $8,400 in energy cost savings (Glitman, 2018). The program also works with distributors to discount products in stores (Burlington Electric Department, 2016). The New York City Incubators and Workspace Resources, Office of Economic Development Corporations’ Business Incentives Rate is similar to Vermont’s Rebate Program in that it offers a discount on Con Edison’s electric delivery charges. The New York program could reduce a business owner’s electricity bills by 30-35% (NYCEDC, n.d.a).

Broader funding sources, like economic development grants or loan forgiveness programs, are also critical forms of capital. New York City’s Manufacturers Growth Fund expands economic opportunities in New York City by providing more jobs in food manufacturing. By understanding food manufacturers’ importance in the City’s economy and their business expenses, this fund provides necessary capital at key points in a business’ growth stages. The loan can be used to purchase equipment, buy inventory to match growing orders, or hire workers to increase output (New York City Economic Development Corporation: Financing and Incentives, n.d).

There are also private enterprises that support food manufacturers through local procurement policies. These programs serve as testimony for local government to enact official procurement policies, since some private enterprises are already doing so.
Whole Foods Market has a Local Producer Loan Program that provides low-interest loans to local farmers and food entrepreneurs to ease the process of bringing small scale production capacities up to the demand required at the Whole Foods level (Whole Foods, n.d.). Food manufacturers, including a cookie producer in East Walpole, MA and a soup maker in Oakland, CA, used the funds to purchase equipment necessary to scale up production (Whole Foods, 2018). Since ‘scaling’ has been identified as a challenge, especially when attempting to access markets requiring a larger production capacity, a low-interest loan directly from the source, to support the very equipment needed to scale, can be key in easing that process.

Philadelphia’s InStore Forgivable Loan Program helps eligible retail, food, and creative arts businesses buy equipment and make interior improvements to the City’s targeted commercial corridors (City of Philadelphia, 2017). The forgivable loan amount for a project is $15,000–$50,000. Recipients don’t need to make payments and must follow the program’s guidelines for five years (City of Philadelphia, 2017). Loan programs, like these, can help emerging food businesses enter the market by lowering the barriers to entry.

Federal grants can be taken advantage of by cities, like the U.S Economic Development Administration (EDA) Grants—that awarded a $150,000 federal grant to a Philadelphia organization, The Food Trust. The funds were used to train local food entrepreneurs and host community events featuring local products like the Night Market program. The Local Food Promotion Program Grant is another federal grant administered by the U.S. Department of Agriculture that offers funds “to support the development and expansion of local and regional food business enterprises.” Last year, Common Market Philadelphia was awarded almost $500,000 to strengthen its existing food hub infrastructure and connect at least 65 farmers, small processors, cooperatives, and other producers with Mid-Atlantic institutional and wholesale markets (USDA, 2017). Philabundance, a Philadelphia non-profit organization, was also awarded money to conduct a feasibility study of new food manufacturing opportunities for locally purchased produce and dairy products (USDA, 2017).
Access to Markets

Having suitable access to markets is critical for food manufacturers to build a customer base, make business connections and encourage growth. This can be accomplished through different avenues, including farmer’s markets, expos, local branding, and local procurement. Alternatively, many programs that facilitate food manufacturers’ market access are initiated by public-private partnerships or through private companies directly related to sourcing products. Incubators like The Hatchery in Chicago host expositions for its participants and invite major distributors like Target and Walmart to sample their products. Public and private funding enable The Hatchery to host these expos and other networking events (The Hatchery, 2018).

Another method could be to create a local brand as a marketing technique. In Kentucky, a public-private partnership was created between Kroger supermarkets and the Kentucky Department of Agriculture to promote Kentucky Proud products. In Fall 2015, Kroger announced that it would participate in the state’s marketing program and stocked the shelves of 88 Kentucky supermarkets with 125 items from 34 “Kentucky Proud” members (“Kroger Buys Local”, n.d.). Local procurement is another option for food manufacturers, but a complicated one. A small scale manufacturer may have trouble filling large orders, but it could be helpful to have an institutionalized relationship with a large organization. Other city and states policies and programs around procurement include:

The Good Food Purchasing Pledge, supported by the Center for Good Food Purchasing in Los Angeles, California and other cities across the United States, focuses on institutional procurement as an entry point for local producers into larger markets (“Healthy Food in Your Community: A Toolkit for Policy Change”, 2014; Center for Good Food Purchasing, 2018). In L.A., the purchasing pledge created over 150 new food-chain related jobs and rerouted $12 million to local produce (“Measuring Impact”, n.d). While many of the target producers for the programs are farmers, they provide a sourcing framework that can also apply to small scale food manufacturers. A state-wide program in North Carolina, the NC 10% Campaign, is a partnership between North Carolina’s Cooperative Extension and the Center for Environmental Farming Systems advocating for a 10% shift of individual and businesses’ food dollars to be spent on locally-produced foods. Similar to
L.A.’s Purchasing pledge, the program focuses primarily on farmers and North Carolina agriculture, but the broad focus on local food producers leaves room for value-added manufacturers (i.e. jammers or picklers) using North Carolina grown produce to be included as well ("NC 10% Campaign", n.d).

A 2012 study on consumer choice preferences in Kentucky and Ohio associated an increased consumer willingness-to-pay when there was some specific designation of “local” on the product label (Hu et al.). Similarly, in Vermont, the Vermont Farm to Plate Strategic Plan was initiated in 2009 as a 10-year food system plan and aimed at creating jobs around the food economy within the state, specifically through local procurement (FarmtoPlate, 2018). In only 5 years, the state has seen increases in food-related jobs by 10% and local food purchasing by 6.9% (Egelhoff, 2016).

Essensa is a group purchasing organization that was created to combine purchasing volume among a group of businesses. The city of New York works along with Essensa to reduce administrative costs, and ensure availability of New York State Food Products for human service partners and nonprofits (Group Purchasing 101, 2017). Combining purchasing volume helps to obtain discounts based on the collective buying power. This is a strong example of a public private partnership in New York City. Essensa connects members, wholesalers, distributors, and manufactures to streamline the procurement process to make food purchasing easy for businesses (Group Purchasing 101, 2017). Essensa’s purchasing framework is currently designed for the health industry, not food, but could be adapted.

More locally, A New England Food Vision: 50 by 60 Initiative advocates for a regional food system in which at least half of the region’s consumption of food is produced within that region (Donahue et al., 2014). The vision supports local food manufacturers by encouraging procurement of local goods by functioning as a liaison between impact investors and small scale food manufacturers and organizations that need food (Donahue et al., 2014). Since its introduction in 2011 the plan has inspired various policymakers in Maine and Rhode Island to introduce bills that support the vision (Jaidka, n.d.).

Image Source: Lucas Mulder
**Regulation Assistance and Reform**

Regulations that are transparent, as well as appropriate and non-burdensome, would be incredibly helpful to food manufacturers. The following programs help food entrepreneurs navigate through this tedious, yet necessary, process to obtain needed permits. In Philadelphia, PA, the office provides a “customer-driven, solution-oriented approach to cultivate and expand new economic opportunities for the food and agricultural sector” (Department of Agriculture and Rural Development, n.d.).

**Office of Food Protection** is a one-stop resource for food businesses. The Office helps business owners better understand and navigate the process of operating a food business in Philadelphia (Office of Food Protection, 2015). All food businesses in Philadelphia work closely with the Department of Public Health and the Department of Licenses and Inspections to ensure they comply with local zoning ordinances, the local building code, and the health code (Office of Food Protection, 2015). The application procedures, form and fee schedules are easy to find and available for download. For example, Philadelphia’s guide, *Opening a Stationary Food Business: A Guide to Permits and Licenses* is a manual for stationary food businesses that food manufacturers can utilize. The steps to start the process are in a matrix, with clear checklists and instructions. Additional services targeted specifically to food manufacturers include “visiting hours” three days a week at the Licenses and Inspections Department. In these meetings they can review the *Michigan Food Law, Act 92 of 2000* which covers all pertinent licensing and regulations for the food manufacturing sector. The Act is easy to comprehend and it shows the transparency of the state’s policies.

The **Vermont Health Department Requirements** include meeting with the public health inspector to discuss plans to acquire proper health safety status and ensure that all necessary components are in order (Vermont Department of Health, n.d.). Food managers, including food manufacturers, are required to create a plan identifying how they will achieve food safety certification. The Vermont Health Department essentially walks small food manufacturers through the process of attaining health regulations which could be helpful for food manufacturers to have consistent help throughout the process.

In addition, *Chicago’s Food Protection Division* offers many of similar services to Boston’s Food Access Division and Small Business Assistance Program.
Business, but all in one place. They offer information about food inspections, how to get a new food business license, the food service sanitation manager certification program, and other relevant information for food business manufacturers (City of Chicago, n.d.c).

The *Chicago Flexible Personal Property Lease Transaction Tax*, which extends the deadline for the property lease transaction tax, is also a good example of how to help businesses understand their taxes and avoid issues throughout the process of starting their business (City of Chicago, n.d.b). There are also public programs to help food businesses better understand how to run a successful operation. Chicago offers a *Restaurant Start-Up Workshop Series*, where participants learn how to estimate start-up costs and secure funding, legal considerations, writing and creating menus that will engage people, and accounting and tax information for food businesses (City of Chicago, 2014). This series can be modified to food manufacturers, or all other food businesses, and function as somewhat of a working group to answer questions and problem solve the complex regulatory process.

**Mentorship and Networks**

In addition to these other levers, many cities have facilitated support networks to help small food businesses work through the challenges of being in the open market. As previously mentioned, New York City’s *Incubators and Workspace Resources through their Office of Economic Development* fosters the creation of a network of incubators, co-working, and commercial spaces for small businesses. The city has supported some of the incubators in the network and funded some ventures. They also help connect incubators and food businesses together to problem solve issues that arise. In addition, 42Floors, a site created by the New York City Incubators and Workspace Resources, allows the user to search *any* city for open real estate spaces (42Floors, n.d). New York City also offers *Entrepreneur Space*, a city-sponsored food business incubator in Queens that uses city funding to help locals start their food business (NYCEDC, n.d.b). Clients receive business counseling, technical assistance, and networking opportunities. City officials in Queens regularly visit the facility to promote its businesses, which helps create networks and establish brands. Similarly, *The Bay Area Urban Manufacturing (BAUM) Initiative* established by SFMade in 2016 is a 3-year initiative to facilitate the creation of an interconnected regional manufacturing ecosystem. The initiative also makes connections between food businesses and recommendations to city officials on how to better support this population.
Chapter 6 Recommendations
6.1 Recommendations

These recommendations are meant to provide Boston with options and ideas for how they could better support food manufacturers in the city. Though they are focused primarily on supporting small scale food manufacturers, other businesses in Boston may benefit as well.

It should be noted that the departments suggested to implement the recommendations is not a complete list. The suggested departments have potential to expand services specifically for food manufacturers. Although different departments offer loans and incentive programs for small food businesses, they are not as accessible, relevant to, easily attainable, robust or as helpful as they could be in comparison to examples found in other cities.

1. Enact Supportive Tax Policies

Implementing appropriate tax credits and incentives, aimed at lowering the financial burden for nascent businesses, could help many business owners during their initial growth stages. Boston could implement a city-wide property tax credit for small food businesses, or localize incentives to specified neighborhoods targeted for economic development. This could help not only food manufacturers, but all food businesses obtain space in high density areas.

Hefty equipment costs is a main concern among many food manufacturers, especially new businesses. State and local government equipment rebates could significantly impact a food manufacturer’s ability to purchase needed equipment to expand production. Rebates or credits on specific types of equipment, like energy efficient ones, could be even more financially effective for business owners who would save money with lower energy bills over time.

Who is impacted?

These beneficial tax policies could impact all small businesses, especially small food businesses. By subsidizing taxes for small food manufacturers, the City would demonstrate its support, and encourage business development, for this population who make significant contributions to the local economy. To keep these types of incentive programs afloat, the City could impose a cap on the amount of funding it would disburse to eligible businesses. In addition, to ensure fairness, the City could institute a sliding scale on available funding to ensure profitable businesses are not awarded funding that could be given to more less profitable business owners. Under this proposed scenario, all parties benefit: the City encourages small business development who contribute to the local economy and the business owners are given much needed funding to launch their business.

Who could be involved in implementation?

The City of Boston’s Office of Economic Development and its Small Business
Development team are the most likely municipal departments to implement and oversee supportive tax policies. These departments already offer micro loans and assistance for small businesses to obtain loans for equipment purchases (City of Boston 2017a). Furthermore, they "support economic growth through job creation and developing local commercial districts." Another benefit of charging these departments with administering tax policies, is that they have an existing relationship with the United States Department of Housing and Urban Development (HUD), that funds one of its loan programs. This relationship bridges the gap between local businesses and federal government. At the state level, the Massachusetts Office of Business Development (MOBD) helps businesses expand their operations, among other responsibilities.

2. **Create a Local 'Boston' Brand**

Food manufacturers commonly sell more products online than other kinds of food businesses. Boston has an opportunity to create a Boston-specific brand or certification that endorses local food manufacturers at the city level. To bring these products to a larger audience, Boston could create a one-stop shop online that links to the business' website so that people can more easily purchase their goods. At the state level, a variation of 'Produced-in Massachusetts' label or branding strategy could bring locally made products to the forefront within the state and across the nation. The creation of either a local Boston brand or state-level brand can not only build on the robust tourist economy that Boston presents, but it also something that can be spread outside the state.

*Who is impacted?*

This program would impact food manufacturers, as well as other food businesses and individuals in the agricultural field, by drawing attention to local products. Creating a 'Boston' brand would also impact consumers who are more likely to purchase goods with a 'home grown' or 'local' label. Consumers are becoming increasingly mindful about supporting local producers, contributing to the local economy and reducing their carbon footprint by purchasing items that are closer to home.

Local grocery stores and large grocery chains have an opportunity to partner with the City of Boston. By entering into a contractual relationship, these entities form an alliance and a mutually beneficial relationship that would support local food businesses and agricultural sector.

*Who could be involved in implementation?*

At the local level, Boston's Office of Food Access, could implement a 'Boston' brand. At the state level, the Massachusetts Department of Agricultural Resources is the main department that could be responsible for administering this program.

3. **Change zoning to facilitate a cluster zone for food manufacturers:**

Zoning changes in favor of industrial development in these areas could help provide more space for food manufacturers. Cluster zoning preserves space for a certain use within a dense area. Other cities have set aside land specifically for industrial use, with
an overlay for food manufacturing. They also increase density on those parcels so that
more businesses could share the space. This method allows the high cost of rent to be
distributed among multiple businesses, and the close proximity could be helpful for
information and technology sharing. If one business is struggling with an accounting
issue, or a misunderstanding of regulations, there would be other small food
manufacturers nearby to come to their aid. Cluster zoning could create an invaluable
network for food manufacturers in the city.

*Who would be impacted?*

Manufacturers across sectors. Other businesses could locate to these niche retail
locations that would benefit from agglomeration and retail economies; likewise,
consumers and residents living close by, may find the diverse production a vibrant living
space.

*Who could be involved in implementation?*

The Zoning Board of Appeals and Zoning Commission within the Boston Planning and
Development Agency (BPDA) could make these changes and incorporate them into the
implementation of the Imagine Boston 2030 plan.

4. Dedicate Staff to Demystifying Regulations

It would be a smart investment for the city to create programs that help demystify and
explain health, tax, and property regulations for food manufacturers. These programs
could help many businesses and cut down on instances of health code violations or late
property payments by ensuring compliance.

Some cities have entire departments or programs dedicated to helping food
manufacturers understand the regulations they face. Boston could dedicate a staff
member or an inter-departmental staff team to explaining regulations to those food
businesses who need these services. Other successful programs involve as many
departments as possible, and facilitate constant conversation between them so no
regulation is overlooked. Other examples provide a consultant for food manufacturers
specifically who would be available to answer questions or help fill out necessary forms.

*Who would be impacted?*

Small food manufacturing businesses would benefit greatly from this program, as would
all food businesses and possibly small businesses in general.

*Who could be involved in implementation?*

In Massachusetts, the Department of Revenue. The department actually hosts Small
Business Workshops (Department of Revenue n.d.) already but are not specific enough
to new food manufacturing businesses who are unfamiliar with the entire process. A
staff member at the Boston Planning and Development Agency could be dedicated
specifically for assisting food businesses. This person could float between the Economic
Office departments..
5. **Create a One-Stop Center for Business Service and Guidance**

A one-stop center for businesses could help to streamline the process of starting a new food manufacturing business. It could include services such as offering informative guides to help a business owner navigate the often burdensome process of launching a company. The one-stop center could provide meeting times for a business owner to meet with a City official and answer any questions.

*Who would be impacted?*

Food manufacturers would benefit greatly from a one-stop business center. Providing personalized assistance for these individuals would help provide clarity in a murky regulatory environment.

*Who could be involved in implementation?*

In Boston, the Office of Economic Development, the Small Business Development Office, the Public Health Commission and the Inspectional Services Department would be involved in creating and managing a one-stop business center for food businesses. Coordination between these departments is critical in ensuring success of a one-stop center for small food business owners.

6.2 **Next Steps and Conclusions**

Next steps should include a feasibility study to make concrete plans on how these recommendations can be implemented in Boston. This would better help the city understand the opportunities available and the potential for growth and change.

These recommendations are important because many of the challenges food manufacturers face are either avoidable or easily diminished. Some may believe that these challenges—capital, space, labor, regulations, markets—are inherent to being a small food manufacturing business. It is clear, however, that cities and states have the power to lessen these burdens. Supportive programs and policies can change the course of a small food business, allow them to thrive, and increase the economic stability of a city. It is a necessary cause if Boston aims to support the future of its diversity, small businesses, and good food products.

*Image Source: Lucas Mulder*
Appendix A
Appendix A: Selected policies and programs related to food manufacturing in Boston

A 2016 article published in the *Boston Globe* concluded that Boston is the ideal space for food companies to grow because the population is receptive to innovative ideas and a pursuit of food and there are many companies, investors, and organizations that work to elevate this particular economy (Nanos).

Boston has multiple markets, mechanisms to create market pathways, and business supports of which food manufacturers could advantage. Though these opportunities could bring benefits like increased revenue or spread brand awareness, they still incur many challenges and leave gaps of support. Some of these markets or mechanisms include:

**Boston Public Market**

The Market’s mission is to “provide fresh, health food to consumers of all income levels, nourish [the] community, and educate the public about food sources, nutrition and preparation” (Boston Public Market). It is a non-profit market space that houses over 35 permanent vendors, and it is looking for more. The application process is a short, free online form. The available spaces have water and electric utility hook-ups but does not include permanent kitchen space. The Market’s StreetWise MBA Program, launched along with Interise and CropCircle Kitchen, also provides business training to local food vendors.

However, it is very expensive and competitive to get space in this market. The application process requires that the Boston Public Market team look over the business’ plan, goals, and financials up until that point. This process requires a certain level of success prior to entering this market that many business do not have. In addition, renting space is very expensive because the building is inside so the business is able to sign a 6 or 12 month lease. Food manufacturers who wholesale and retail their products may not be able to make that kind of commitment. Still, the market is a good model for the kind of environments that could support this population moving forward.

**City of Boston Farmers Market Resources**

Farmers markets are a great way for food manufacturers to sell food direct to consumer, and the city of Boston claims there are almost 30 in the area for business owners to participate in. The website, offers a map of where the farmers markets are located, their hours, and information on how to starts a farmers market, what you can sell at a farmers market, and weights and measures regulations (Farmers Markets Boston 2018). The regulations on what you can and cannot sell at a market, presumably most relevant to food manufacturers, are clear and direct as to both the items itself and its’ preparation. The site offers resources that could be very helpful to food manufacturers if they do not know the rules and regulations around these markets.

Unlike Boston Public Market, however, these markets are seasonal and are not always in profitable locations. It is anecdotally known that a food business cannot make a profit off of farmers markets alone; there needs to be some other source of income for the business to
succeed. This is not helped by the fact that entry fees into these markets have increased over the past 10 years. This has resulted in the perception that, in some cases, the cost of entry is higher than the predicted sales for that day (Bourgeois 2018). While these markets are a great resource, change is necessary to better support food manufacturers in the competitive market.

**Back Streets Program** (Now defunct, Will Be Replaced by Imagine Boston 2030)

The Back Streets Program was a model of neighborhood economic development because it essentially functioned as a one stop business development center for small businesses, and made favorable zoning changes that supposed local, small businesses as well. Adalberto Teixeira, Director of Business Engagement and Outreach, coordinates the City of Boston’s Backstreets Program, the entry point and guide for the city’s industrial and commercial businesses. This program assists businesses which are looking to grow or relocate in Boston with guidance on licensing and permitting, site selection and finding staff. (Back Streets: City of Boston).

**Imagine Boston 2030**

Imagine Boston 2030 is the city’s first citywide plan in 50+ years and it lays out its’ future goals for issue like housing, health, education, economy, energy and environment, open space, transportation, and more. It identifies the central issue within each topic, and provides action steps to address them by 2030 and beyond (Boston 2030). One of the plans’ goals is to “continue to make [Boston] attractive by providing amenities for workers, visitors, and the growing residential population”, which the Executive Director of the plan, Natalia Urtubey, argues could include creating space for food manufacturers. For example, IB2030 identified areas for economic and residential development that could support this population; they have identified several “expanded neighborhoods” including Sullivan Square and Newmarket/Widett (185). Unlike the focus of typical strategic plans, Imagine Boston 2030 looks beyond land use and development. Upon his election, Mayor Walsh focused on understanding the housing pressures in the city and released Housing a Changing City: Boston in 2030, which sparked the need for planning for our future and thus led to the creation of Imagine Boston 2030.

However, it is clear in the language of the plan that it is written to address the housing problems in Boston, not the challenges that face food manufacturers. The plan defines economic development as ‘mixed-use’ as opposed to simply creating new space for businesses. For example, they plan to redevelop the Newmarket area into mixed-use by retrofitting housing on top of industrial spaces (214). Newmarket was zoned as the ‘Newmarket Industrial-Commercial Neighborhood District’ (“NIC District”) in Boston. When the Zoning Commission approved Article 90 in January 2014, it was home to more than 700 companies specializing in food processing, distribution, and other light manufacturing industries. This zoning method establishes Newmarket as its own zoning district, and reinforces the Newmarket name, brand, and identity. The Boston 2030 Plan aims to re-zone this area to incorporate residential housing, as opposed to expanding its’ business development opportunities.

This, still, does not create new space for food manufacturers to rent for their business. There is opportunity for food manufacturers to still be a part of the process, however. There are local, neighborhood hearings and community meetings to address the implementation of the plan that anyone can attend. This is an opportunity to have their voices heard and advocate for their needs
to be more supported by the Imagine Boston 2030 plan.

**Boston Small Business Plan**

This initiative could address the limited real estate inventory dilemma in Boston by piloting innovative space solutions for restaurant and retail businesses that increase access and affordability and reduce risk. Programs to match under-utilized, ground-level commercial space and publicly owned space with interested retail and restaurant entrepreneurs, including both traditional leases as well as “pop-ups,” sub-leases, incubators, shared spaces, or other models could be created (City of Boston 2016).

**Massachusetts also has funding and support systems that could help food manufacturers transition from CommonWealth Kitchen. Many of these are not tailored for small, food businesses, but could be good models for new Boston funding or support systems:**

**50 by 60 Initiative**

50 by 60 initiative started by the Federal Reserve Bank of Boston aims to support New England manufacturers and producers to produce half of the area’s fresh food within the next 42 years. The initiative functions as a financial liaison between impact investors and small food manufacturers and producers, and already small food businesses have seen investments of 1 to 18 million dollars (Higgins 2018). As local food manufacturers, this program is a great opportunity for CWK food manufacturers to receive funding to start their business after graduating. The program as a whole is more focused on farmers and supporting agriculture, but there are some working groups like the New England Village, that are working directly with food manufacturers.

**New England Village**

This working group resulted from 50 by 60 program, the group offers opportunities for food manufacturers to sell their goods at fairs and expos, and well as introducing them to funding streams. They were just a feature of the Boston Local Food Festival to highlight food manufacturers from around the New England area. The idea was to demonstrate how easy it is to support local vendors and share their food. None of the vendors, however, listed on this program were from Boston, so it could be a great organization for CWK members to collaborate with (Food Solutions New England).

**Massachusetts Growth Capital Corporation**

The Massachusetts Growth Capital Corporation (MGCC) was created following the union of the Massachusetts Community Development Finance Corporation and the Economic Stabilization trust. Under the bill, MGCC will provide 50% of the cost for working capital, technical and loan assistance, while the company being assisted MGCC will invest the other 50% (MGCC, 2018). The MGCC works with nonprofit organizations on a variety of small business job development projects. This resource could potentially help a food manufacturer with the front-end costs associated with independent operation and has a strong message for inclusive entrepreneurship among women and people of color. However, it has limited capacity and purposely does not
advertise the loans and grants they do offer so as to not over stretch their resources. Their model could still serve as a useful reference for Boston.

**Massachusetts Workforce Training Fund**

Massachusetts offers grants ranging from 10,000 to 250,000 to employers to train newly hired full or part time employees. There are no size restraints, and employers who are minority or female-owned that are registered with the State Office of Women and Minority Business Assistance are encouraged to apply. This grant could help small scale food manufacturers pay for food safety and health trainings that may otherwise slow down production.

**Cottage Foods Act**

Many states have developed regulations around food processing in the home, referred to as Cottage Foods Act. The Department of Public Health Food Protection Program receives more than 200 inquires a year from citizens wanting to start their own home-based food businesses (MA Department of Public Health 2016). The Massachusetts Act limits residential kitchens “to the preparation of non-potentially hazardous foods (non-PHFs), such as baked goods, confectioneries, jams and jellies. Non-PHFs, such as cakes and cookies, which have PHF ingredients are acceptable” (MA Dept of Public Health, 2016). Processes such as acidification, curing, smoking, vacuum packaging and hot fill are prohibited. The Act only allows family members to be employed by the operation, the use of and wholesalers, brokers, and warehouses by kitchen for storage, distribution and selling is also prohibited.

Under this regulation, Massachusetts places no revenue cap on food products produced in the home. The Act disallows products made in a home kitchen to be sold as wholesale items for distribution, but allows for degree of flexibility for food manufacturers. Still, operating legally does require a license and approval. The Cottage Foods Act limits the business opportunity for prospective food manufacturers, and is therefore an important consideration when deciding how and where one would produce their product.
Appendix B
Appendix B: Methods Continued

To address the research questions the research team used two main methods: (1) semi-structured interviews to understand the experiences of former CWK members after they transitioned out of the shared space and (2) a case study approach to identify challenges and opportunities for small scale food manufacturers in Boston and across the nation. The case studies from other cities have identified supportive food manufacturing policies and programs and upon cross-comparison, identifying those that do not exist in Boston. The findings from the former CWK member interviews, combined with the case studies, has informed the discussion of challenges and related levers that help to combat the challenges identified.

**Method #1: Former CWK Member Semi-Structured Interviews**

*Sampling & Data Collection*

This was a purposeful sample, drawing from a list of 53 former CWK members that was provided by CWK and targeted the 42 food manufacturers. This is not a representative sample and as such, findings from the interviews are not generalizable to the larger population of small scale food manufacturers.

Of those 42 businesses, seven appear to have closed or otherwise not part of the original food business anymore. Prior to conducting interviews, all available data on each food manufacturer was gathered including; type of product, years in operation, market avenue (i.e. online store, specialty grocer), etc.

12 former food manufacturing members were interviewed from mid-March through April 16, 2018. Semi-structured interviews were conducted either in person or over the phone. Pending appropriate consent, notes and recordings from interviews were partially transcribed. Challenge categories were developed and interview notes were coded accordingly; where interview participants indicated desires for support in municipal offices, the appropriate levers were noted. The discussion of challenges was synthesized across the different interview participants.

To better understand the policy and programming landscape in Boston, interviews were conducted with experts (Key Informants) in related fields during March and April of 2018. Five key informants were identified and interviewed, three in Boston, two in San Francisco, using a purposeful sample of those in relevant and related offices. Semi-structured interviews were conducted either in person or over the phone. Pending appropriate consent, notes and recordings from interviews were partially transcribed.

**Method #2: Case Study**

*Sampling and Data Collection*

To collect information of supportive policies and programs related to food manufacturers across the U.S., main sources of information reports and findings from relevant national organizations,
as well as conversations with experts in the field.

The research time began our process using the research tools provided by Tufts University (i.e. library resources, periodical databases, etc.) in addition to public search engines to identify relevant peer-reviewed material, public documents, and organizational reports. The scholarly research on food manufacturing policies is limited. Therefore, the team decided to incorporate additional types of publications into our work including recent newspaper articles, business reports and key informant interviews.

The research team identified policies and programs within Boston, congruent with the areas of interest including taxation policies, regulations, zoning ordinances, real estate, and private and public financing streams and organizational supports. The cross-examination of policies and programs from other cities to Boston and their relationship to identified challenges enabled us to identify "levers," that is, different potential policy interventions to combat the challenges food manufacturers may face.

**Institutional Review Board Process**

The Protocol Application for Exempt Status was submitted to the Tufts University Social, Behavioral, and Educational Institutional Review Board (IRB) on March 6, 2018 and received official approval on March 14, 2018. The application included the protocol application for exempt status, Additional Investigators Study Personnel so that all team members are either Principal Investigators or Co-Investigators, the Recruitment script (phone/email), Informed consent, Final consent email and Interview guide (See Appendix C for the interview guide within Data Collection Tools). The initial application was approved without any changes needed.

An exempt addendum to the approved research protocol, “CommonWealth Kitchen and Tufts Urban and Environmental Policy and Planning Field Projects: Exploring barriers and opportunities for expanding food manufacturing sector in Boston,” was submitted on March 16, 2018 to include Key Informant interviews for the experts in the field and was subsequently approved (See Appendix C for Key Informant interview questions within Data Collection Tools)

**Limitations and Challenges**

The rise in popularity of the small scale food manufacturing sector has been recent. As a relatively novel field of inquiry, many limitations to this secondary research are presented. Primarily, there is very limited data availability in academic literature. The existing research examining food manufacturing is typically about larger companies, food safety concerns, or internationally-focused which does not necessarily apply to the United States. Therefore, much of the literature we are reviewing originates from organizations, governmental bodies, or other non-scholarly sources.

Regarding the former member interviews, the personalized nature of the questions (i.e. personal definitions of success, challenges, etc.) and eliciting information about what they did
instead of observing is giving us largely subjective data. Given that the sample size is both purposeful and small, the findings are not generalizable to a wider population. Furthermore, though we are independent researchers, our team’s association with CWK may provoke biased answers from former members. In our consent language we indicate that their answers will not impact their relationship with CWK however our affiliation with them may influence the responses we receive.
Appendix C
Appendix C: Data Collection Tools
CommonWealth Kitchen Semi-Structured Alumni Interview Guide:

Thank you so much for taking the time to speak with me today. We appreciate you sharing your experience with CommonWealth Kitchen and in Boston as a food manufacturer. As we just described, this research is being conducted so CommonWealth Kitchen can better understand the challenges that you’ve faced when you graduated and since you’ve left the incubator kitchen space. Today, we are interested in hearing about your vision for your food business, how you define success within your business and what the most impactful challenges have been for you as you exist as your own independent business now.

Before we begin, do you have any questions for us?

1. To get us started, can you tell us a little bit about your business?
   a. Prompts if not covered in the response: what kind of food do you produce? Do you sell wholesale or directly to consumer at different retail points?
   b. What is the ultimate goal for your business? What is your vision?

2. Have you taken advantage of any local or state funds or programs to help your business?
   a. If yes: which ones?
   b. If no: why not?

Now we are going to ask you some questions about success within your business and challenges you may have faced in growing.

3. What are the areas of your business that have been the most successful?
   a. To what do you attribute your success?
      i. Prompts if not covered in response: services provided by X, your product, help from various outlets?

4. How do you measure your success?
   i. Prompts if not covered in response: financially? Social impact? Ability to expand, market channels or just larger within the same ones?

5. What challenges are you currently facing?
   a. What makes __ (fill in with individual response) __ challenging?

6. What have been the most impactful challenges?
   a. What challenges have you been able to overcome? How?

Now we are going to ask you some questions more specifically about your experience with CommonWealth Kitchen; just a reminder, your responses will not impact any past, present, or future relationship with CommonWealth Kitchen.

7. Can you tell us about your experience in transitioning out of the CommonWealth Kitchen
kitchen space?

8. How do you feel about the experience that you had while you were at CommonWealth Kitchen as a member/entrepreneur?
   a. Are there some areas in which you wish you had received more support?

9. What do you wish you knew before transitioning into the from Commonwealth Kitchen?

   Thank you! We are done with our questions now, (try to summarize the main points of the interview)

10. Does that sound like an accurate description of what we've talked about today?
11. Is there anything you else you feel is important to share that we haven’t yet talked about?

**Key Informant Questions**

**For Boston (programs and policies):**
What kinds of programs are there within your organization that support food manufacturers (wholesalers and retailers of food products)? How do they support them?
How do you feel food manufacturers fit in the Boston economy? What would you consider to be their biggest barriers to success?
Do you think supporting this population is a priority of your organization? Why or why not?
Do you know of any other programs or policies that support food manufacturers and, if so, what are they?
Have you heard of or worked with CommonWealth Kitchen? If so, in what capacity?
Where is the most suitable land for new businesses?
Is it possible to re-zone vacant commercial land into industrial use for food businesses?
Would the city support food businesses transforming vacant industrial buildings and lots into food manufacturing sites?

**For Other Cities (programs and policies):**
What kinds of programs are there within your organization that support food manufacturers (wholesalers and retailers of food products)? How do they support them? What are some areas they could be more supportive?
How do you feel food manufacturers fit in the [insert city here] economy? What would you consider to be their biggest barriers to success?
How does zoning impact these types of businesses?
Do you think supporting this population is a priority of your organization? Why or why not?
Do you know of any other programs or policies that support food manufacturers and, if so, what are they?

**For Kitchen Incubators:**
How does your kitchen incubator work?
Do you provide services to members and alumni?
What policies and programs exist to help new food businesses?
Appendix D

Image Source: Lucas Mulder
Appendix D: Relevant policies and programs for food manufacturers across the U.S.

Bay Area Manufacturing Initiative (SFMade) San Francisco, CA

Description: SFMade is a San Francisco non-profit organization committed to building San Francisco’s economic base, by developing their local manufacturing sector (SFMade 2018). This organization works directly with entrepreneurs of small businesses to help them grow, by providing resources for training and education. The Bay Area Urban Manufacturing (BAUM) initiative created by SFMade was created in 2016 as a 3-year initiative to facilitate the creation of an interconnection regional manufacturing ecosystem. The authors of the BAUM report made a series of recommendations for the Bay Area to protect the industry by securing affordable real estate. To achieve this, the authors ask for manufacturers to use land preservation protection, and other mechanisms to ensure affordability. The Bay Area Urban Manufacturing encourages cities to work together to advocate for tax breaks on the state level similar, to tax breaks giving for affordable housing and industrial development. The report asks cities to support efforts to reform Proposition 13, which would require commercial office and retail users pay a more proportional amount of property taxes (BAUM 2016).

Relevance: Many of these recommendations may be implemented or used to influence Boston Massachus- setts in decision making.

Burlington Municipal Development Plan Burlington, VT

Description: Enacted in 2014, this plan states that sustainably sourced food was a priority of the local residents (Burlington City Council 2014). It emphasizes the importance of local food supply by redeveloping a brownfield into a Central Market and supporting local food manufacturers through small business investments. This plan actualizes the goal of ‘supporting local food businesses’ through its redevelopment of a brownfield.

Relevance: Boston could consider a more creative way to supply land for local food businesses, like redeveloping remediated land, to get around the limitations of zoning and property costs.

Chittenden County Environment, Community, Opportunity, and Sustainability Plan Burlington, VT

Description: In a process that included non-profits, 19 municipalities, and multiple governmental agencies, the Chittenden County Environment, Community, Opportunity, and Sustainability Plan was enacted in 2010 with a $1 million-dollar grant from the United States Department of Housing and Urban Development Sustainable Communities Project. The plan included programs to support job training for refugees in the food industry, as well as substantial community investments (ECOS 2018).

Relevance: Boston’s 2030 plan has a similar focus on Environment, Community, Opportunity, and Sustainability, but Chittenden County’s Plan has a specific focus on food and food business protection. Its planning process and final portfolio of investments is a great resource on how to support food manufacturers going forward.

Efficiency Vermont Rebate Program, Vermont

Description: Efficiency Vermont and the Burlington Electric Department have formed a partnership that offers programs to help commercial kitchens make cost-effective improvements. They offer rebates on fryers, griddles, commercial ovens, and steam cookers. They also work with distributors to discount products in stores (Burlington Electric Department 2016). This partnership may change in the 2018 fiscal year, but it is still a model of a successful public-private partnership.
Relevance: This program is a great way to help subsidize the cost of expensive kitchen equipment in Boston, it may require some sort of public-private partnership, but it could be a great opportunity for CWK alumni and other food businesses in the city.

Incubators & Workspace Resources, Office of Economic Development Corporation New York City, NY

Description: The NYEDC has fostered the creation of a network of incubator, co-working, and commercial spaces for small businesses. The city has supported some of the incubators in the network and some have been funded by different ventures. The website contains an interactive map of the city, noting the different spaces and foci of the various locations. There is a possibility to focus on those that offer not only space, but other food-business related services.

Relevance: This type of resource could be very helpful for food entrepreneurs, including the alumni of CWK, who are looking for shared spaces or different commercial options. Though there are similar programs in Boston (see Back Streets Program) there is not such an obvious centralized search tool to make this more feasible.

InStore Forgivable Loan Program Philadelphia, PA

Description: The Philadelphia Department of Commerce’s InStore Forgivable Loan Program helps eligible retail, food, and creative arts businesses buy equipment and make interior improvements on the City's targeted commercial corridors (City of Philadelphia 2017). The forgivable loan amount for a project is $15,000–$50,000. Recipients don’t need to make payments and must follow the program’s guidelines for five years.

Relevance: Loan programs administered by the City help emerging food businesses enter the market by lowering the barriers to entry. The program is funded by the Community Development Block Grant (CDBG) program which is administered by the U.S. Department of Housing and Urban Development (HUD). The City of Boston should consider this federal grant opportunity as a way to fund businesses in the food manufacturing sector. Coordinated efforts between City departments and grant writers is essential.

JumpStart Philly Philadelphia, PA

Description: JumpStart Philly is a City-funded program that helps new businesses and entrepreneurs by waiving license fees for the first two years of operation. Additional fees are waived, depending on business type, to attract new businesses and entrepreneurs who create jobs for residents.

Relevance: Programs like JumpStart Philly help entrepreneurs enter the marketplace and compete with established businesses. Such programs can be initiated in Boston, possibly through the City's Department of Economic Development. Support from other municipal agencies like the Licensing Board is needed to replicate this type of program in Boston.

Local Food Promotion Program (LFPP) Grant Philadelphia, PA/United States

Description: The Local Food Promotion Program (LFPP) is a federal grant administered by the U.S. Department of Agriculture that offers funds “to support the development and expansion of local and regional food business enterprises.” Last year, Common Market Philadelphia was awarded almost $500,000 to strengthen its existing food hub infrastructure and connect at least 65 farmers, small pro-
cessors, cooperatives, and other producers with Mid-Atlantic institutional and wholesale markets (USDA 2017). Philabundance was also awarded money to conduct a feasibility study of new food manufacturing opportunities for locally purchased produce and dairy products.

Relevance: Federal programs like LFPP are available to qualified applicants in the United States, not exclusively to Philadelphia. According to LFPP guidelines, “eligible entities may apply if they support local and regional food business enterprises that process, distribute, aggregate, or store locally or regionally produced food products.” The City of Boston and CWK are considered eligible entities, as well as many other organizations in the region. This grant opportunity has potential to make a big impact in Boston’s food manufacturing sector.

NYC Food Manufacturers Growth Fund New York City, NY

Description: The New York City Economic Development Corporation has partnered with Goldman Sachs 10,000 Small Businesses project to create the NYC Food Manufacturers Growth Fund. In recognition of both the distinct importance food manufacturers play in the NYC economy and the barriers that the pricey landscape in New York presents, this fund provides necessary capital at key points in the growth of food manufacturing businesses. These loans can allow for expansion and enable economic opportunity in NYC by providing more jobs. The loans can be used to purchase equipment, buy inventory to match growing orders, or hiring workers to increase output.

Relevance: Goldman Sachs 10,000 Small Businesses is present in Boston but could do more to expand and support the local food manufacturing scene. The Boston Economic Development office could be a partner to work on providing more loans for small businesses in the area, expanding their focus beyond food trucks and onto more general food manufacturing.

Philadelphia2035 Comprehensive Plan Philadelphia, PA

Description: Adopted by the Philadelphia City Planning Commission in June 2011, the Philadelphia 2035 Comprehensive Plan outlines policy measures to support food business entrepreneurs and the food manufacturing sector. Economic development and land management are key elements of the Plan. Philadelphia intends to re-purpose its once prosperous industrial and manufacturing areas with new business centers and mixed-use land uses.

Relevance: Amending zoning regulations and coordinating efforts to reuse vacant land and structures in innovative ways are integral to the city’s growth of new businesses (Philadelphia City Planning Commission 2011). The City of Boston can follow Philadelphia’s lead in its support and encouragement of food business entrepreneurs and the food manufacturing sector.

Restaurant Start-Up Workshop Series Chicago, IL

Description: The Restaurant Start-Up Workshop Series is offered by the City of Chicago Small Business Center as an opportunity to teach people how to start their own food business. It is held monthly, for a duration of 6 months, and each workshop offers different services based on a new theme. Participants can hope to learn how to estimate start-up costs and secure funding, legal considerations, writing and creating menus that will engage people, and accounting and tax information for food businesses (City of Chicago: Small Business 2014).

Relevance: This Series is a great model for Boston because it is a direct method of making sure that food businesses, including food manufacturers, are prepared for the realities of the market. A similar model could serve as a great transitional tool for food manufacturers once they choose to leave CWK.
StartupPHL Philadelphia, PA

Description: StartupPHL is a collaborative effort between the City of Philadelphia’s Department of Commerce and PIDC that supports entrepreneurs who bring energy, ideas and vitality to Philadelphia as well as further enable the existing entrepreneurial talent that resides in the City’s different neighborhoods to flourish (StartupPHL).

Relevance: One of StartupPHL’s tools, the Directory of Entrepreneurial Spaces, helps Philadelphians find a coworking, incubator, or multi-tenant space based on an address. See Figure 3 in Appendix C. These types of interactive tools could be incredibly helpful to new food businesses in Boston. Although the BPDA has interactive tools, this tool is easy to locate online and is very user-friendly.

The Hatchery Chicago, IL

Description: The Hatchery is a food business incubator supported by public and private funding. It is a collaboration between two non-profits, the Industrial Council of Nearwest Chicago and Accion Chicago, the former of which receives millions of dollars in public funds. ICNC’s mission is to "strengthen companies in the Kinzie Industrial Corridor and to facilitate economic and community development" through providing services to 2,000 food business on Chicago’s Nearwest side (The Hatchery 2018).

Relevance: This public-private partnership is a great model for CWK and Boston because it is a great success as continues to be an important driver of economic stability for food manufacturers in Chicago, and could be cause for more public investment in CWK.

U.S. Economic Development Administration (EDA) Federal Grants Philadelphia, PA/United States

Description: The U.S. Economic Development Administration (EDA) awarded a $150,000 federal grant to a Philadelphia organization called The Food Trust. The funds were used to train local food entrepreneurs and host community events featuring local products like the Night Market program.

Relevance: Similar to the Local Food Promotion Program (LFPP), federal grant programs like EDA’s are available to qualified applicants in the United States, not exclusively to Philadelphia. Boston is eligible to receive these funds and could apply for these types of grants. Or, non-profit agencies and other organizations can apply for funding if the City is unable to do so.

Vermont Farm to Plate Plan Burlington, VT

Description: Initiated in 2009 as a 10-year food system plan, the Vermont Farm to Plate Plan aimed at creating jobs around the food economy within the state, through 25 specific goals, recommendations and actions. Local government leaders sit on Farm to Plate working groups and ensure that the plans are followed through (FarmitoPlate 2018).

Relevance: This model would be helpful for Boston because it combines public and private resources, and creates an accountability model to make sure that the plans are enforced.

**RELEVANT POLICIES:**

Application for License to Operate a Food Establishment Process Vermont

Description: The process of becoming a food business (including food manufacturing business) in Vermont requires completion of the Application for License to Operator a Food Establishment, a check for
non-refundable license fees, water test results, documentation of a process authority review required by the Health Department, Hazard Analysis Critical Control Point plan, and a wastewater permit from the Vermont Department of Environmental Conservation (Vermont Dep. Of Health 2018). Once the application is processed, the public health inspector will contact the applicant to discuss their plans and ensure that all necessary components are in order. The HACCP, Hazard Analysis Critical Control Point, is a risk-based system for managing food safety. It covers physical, biological and chemical hazards during food handling and preparation (Vermont HACCP Training 2018). Food managers—which includes food manufacturers—are required to create a plan identifying how they will achieve certification through HACCP.

Relevance: The constant check-ins by the public health department can help to enforce that food manufacturers have plans for every point in the business start-up process. It will take significant salary time, but it would be a great way to keep businesses accountable.

California Competes Tax Credit California

Description: On July 11, 2013, former California Governor Edmund G. Brown Jr. signed legislation affecting business incentives in California (State of California 2018). This credit is available to business owners that want to locate, stay, and grow in California. As part of the plan, businesses must commit to certain employment and project investments. The tax credit agreements are negotiated between taxpayers and GoBiz, an organization created by former Governor Edmund Brown (State of California 2018). The credit may be carried forward for a total of 6 years (State of California 2018).

Relevance: This program could be implemented in Boston and ultimately create more job opportunities for food manufacturers by reducing the cost associated with opening a business. This program may also serve as beneficial encouraging entrepreneurs from other cities to come to Boston.

City of Boston Zoning Policies Boston, MA

Description: The city has only 3.6 square miles of land zoned for industrial use – and this land is increasingly under pressure from non-industrial uses (City of Boston Small Business Plan 32). Due to the limited amount of land zoned for the food manufacturing sector, the market is tight for affordable real estate.

Relevance: One initiative, in the Boston Small Business Plan, that could address the limited real estate inventory dilemma is to pilot innovative space solutions for restaurant and retail businesses that increase access and affordability and reduce risk. Programs to match under-utilized, ground-level commercial space and publicly owned space with interested retail and restaurant entrepreneurs, including both traditional leases as well as “pop-ups,” sub-leases, incubators, shared spaces, or other models could be created (City of Boston 2016). In addition, we can look to examples like the successful Newmarket Industrial-Commercial Neighborhood District (“NIC District”) in Boston. When the Zoning Commission approved Article 90 in January 2014, it was home to more than 700 companies specializing in food processing, distribution, and other light manufacturing industries. The new zoning establishes Newmarket as its own zoning district, and clearly defines the area’s boundaries, reinforcing the Newmarket name, brand, and identity. The NIC District example can be applied to other parcels of vacant and under-utilized land that could benefit the food manufacturing sector in Boston.

Cluster Strategy (zoning, real estate, production and distribution) San Francisco, CA

Description: In 2014, San Francisco’s Planning Department, Office of Economic and Workforce Development (OEWD), and Production and Urban Research departments worked together to create a strategy to support the thriving food and beverage production and distribution in the city (7). “The Bay Area has
grown into a leading center of a nationally resurgent food and drink culture that places a high value on personal craftsmanship, unique offerings, and local sourcing”. The Food and Beverage Cluster Strategy explores trends in production and distribution of food and beverage products by companies in San Francisco. The Production and Distribution Cluster Strategy focuses on several core components of the Food and Beverage Industry Cluster, including food manufacturers (e.g., bakeries, confectioneries, seafood processors), beverage manufacturers (e.g., breweries, wineries, specialty drink makers), and food and beverage wholesalers and distributors that connect manufacturers to suppliers, grocery stores, public institutions, food banks, and restaurants” (10).

Relevance: The Boston 2030 plan is reviewing a cluster strategy to help provide space for food manufacturers in the lucrative downtown area (Boston 2030).

Equipment Tax Credits for Manufacturing Sector New York City, NY
Description: Manufacturers who need to purchase machinery or equipment used directly and predominantly in the production process may be tax exempt on those purchases, according to the NY sales tax code.

Relevance: Adopting incentives for equipment purchases in the food manufacturing sphere may alleviate some of the financial burden associated with moving out of a shared kitchen space with existing infrastructure.

Flexible Personal Property Lease Transaction Tax Chicago, IL
Description: The City of Chicago is particularly flexible with its tax codes to allow food businesses time to fully understand their billing systems. In 2015, the City extended the deadline for the personal property lease transaction tax to give more time to business owners and to review ordinance changes aimed at solving some emergent problems for local business owners (City of Chicago: Taxation).

Relevance: Accommodations like this for food manufacturers to better understand their taxes would be a great way to help establish longevity in these small businesses.

Food Protection Division Chicago, IL
Description: The Chicago Food Protection Division offers many of similar services to Boston’s Food Access Division and Small Business, but all in one place. It is a food inspection, education, and support program for food business. They offer information about food inspections, how to get a new food business license, the food service sanitation manager certification program, and other relevant information for food business manufacturers (City of Chicago n.b.c).

Relevance: Right now, many of the resources that food manufacturers need are spread through different departments. It would be a great convenience to have them all in one place, similar to Chicago’s Food Protection Division, and could help decrease barriers to success and stability in Boston.

Property Tax Credit New York City, NY
Description: Manufacturers may be eligible for a 20% tax credit on real property taxes paid on NY state business property.

Relevance: Adopting tax credit for real estate property could significantly alleviate the financial burden of already high prices for real estate in the Boston area, making it potentially easier for smaller food manufacturers to afford it.
Property Tax Incentive Chicago, IL

Description: A property tax incentive to support a specialty food manufacturer was approved by the city in 2011. The goal was to revitalize and support the food economy in the East Garfield Park and North Park neighborhoods. The Class 6(b) tax incentive allowed a small Japanese food manufacturer and distributor to keep costs low and still add 14 jobs. They had a total savings of $432,000 through this incentive (Taxation: City of Chicago 2011).

Relevance: This form of tax incentive would promote food manufacturer's success and stability in the Boston market.

The Sherman Food Law California

Description: In September 2012, California implemented the Sherman Food, Drug, and Cosmetic Law. This act regulates the packaging, labeling and advertising of foods, drug, and cosmetics (CA Department of Public Health 2018).

Relevance: This law is particularly relevant for food manufacturers. The Sherman Food Law establishes a detailed set of guidelines for labeling, packaging, and advertising. Chapter 5 of the law prohibits proper registration for manufacturing, packaging, or holding processed foods in California without a valid registration from the department. Under the legislation, the California Department of Public Health deems it unlawful to make false representation on processed and manufactured food. The law includes penalties for failure to disclose certain facts in the application or registration renewal of a food product (CA Department of Public Health 2018). Understanding how other municipalities are enforcing food manufacturing labeling may serve as a resource to the city of Boston.

Statewide Municipal Health Regulations Massachusetts

Description: The Food Protection Program is overseen by the Bureau of Environmental Health and the Massachusetts Department of Public Health. It regulates and examines all wholesale and retail food businesses in the Commonwealth of Massachusetts. In addition to the above-mentioned services, the Program conducts routine inspections and investigates complaints concerning food-borne illnesses. It also regulates licenses and permit applications for all food products (Commonwealth of Massachusetts 2018).

Relevance: In recent years, Massachusetts has experienced an increased interest in home-based food businesses. The Massachusetts Department of Public Health, the Bureau of Environmental Health and the Food Protection Program allow home-based food businesses but there are specific regulations for production. New food businesses should review these regulations before transitioning to a home-based business model.
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