sustainability

MDPI

Article

Markets in Municipal Code: The Case of Michigan Cities

Amanda Maria Edmonds [1,2,3,*] and Gerrit J. Carsjens [1]

[1] Landscape Architecture and Spatial Planning Group, Wageningen University & Research, 6700 AA Wageningen, The Netherlands; gerrit-jan.carsjens@wur.nl
[2] AM Edmonds LLC—Sustainable Food Systems Consultancy, London W52HY, UK
[3] AM Edmonds LLC—Sustainable Food Systems Consultancy, Ypsilanti, MI 48198, USA
* Correspondence: amanda.edmonds@wur.nl

Abstract: Food's place on the urban, municipal agenda has become an increasing focus in the emergent fields of food policy and food planning, whose leaders argue that food needs to be more explicitly added to the urban agenda. Yet, public food markets are a food system activity that municipal governments have been long engaged in. Reports from leading health, planning, and food organizations assert that farmers markets—the dominant form of public retail food markets in the US today—should be explicitly included in zoning and other municipal codes to ensure that they can be created and sustained. Despite their popularity as a local sustainable food system and healthy food access strategy, it is unclear whether markets have been codified through municipalities' planning and policy instruments, and research has largely not addressed this topic. This study aims to elicit whether markets have been codified into law, focusing on US municipal charters, codes and zoning ordinances, using Michigan, an upper Midwest state, as a case. After analyzing municipal documents to determine whether and where markets have been codified into law in ninety Michigan cities, this study concludes that markets are highly underrepresented in municipal policy, rarely defined in code, and mostly absent from zoning ordinances, even among those cities with currently operating markets. Market presence in code is, however, associated with the presence of historically operated markets. These findings raise questions about why markets are missing from codified food policy and what risks this poses to the future of markets. They also highlight the need to better document the market sector and underline the importance of including historic perspectives when examining the efficacy of current food policy efforts.

Keywords: food market; farmers market; municipal charter; municipal code; zoning ordinance; local food policy; food planning

Citation: Edmonds, A.M.; Carsjens, G.J. Markets in Municipal Code: The Case of Michigan Cities. *Sustainability* **2021**, *13*, 4263. https://doi.org/10.3390/su13084263

Academic Editor: Alfonso Morales

Received: 30 January 2021
Accepted: 6 April 2021
Published: 12 April 2021

1. Introduction

Public food marketplaces have been central to civic life and food procurement since the earliest human settlements [1,2]. These public places are signified by multiple, independent vendors gathering at designated times to sell fresh ingredients to the local populace. Food has long been a key concern for local governments who needed to make sure their residents' basic needs were met [3], and markets were the earliest form of urban food distribution that served this purpose. In the past, municipalities operated most markets in the United States, aiming to ensure affordable food supply. Despite a major shift in recent decades *away* from municipal market operators (and largely to nonprofit operators), municipalities have historically played, and still play, vital roles in markets in regard to land use permissions, permitting, and operating regulations; markets' existences are dependent on municipalities allowing them to be there.

Today, farmers markets are the predominant form of public food marketplace in the United States. They are viewed as an important Policy, Systems, and Environmental Change (PSE) strategy for sustainable local food systems, specifically around increasing healthy food access and supporting small farmers [4]. In the last 15 years, there has been

exponential growth in the number of farmers markets, expanding from 3706 in 2004 to 8140 in 2019 [5]. Between 1992 and 2007, direct-to-consumer sales—including farmers markets—increased three-fold nationally, which was twice as fast as the growth of total agricultural sales [6]; in 2006, the USDA estimated that farmers markets were a billion dollar industry [7]. The current rise of markets began in 1990s, peaking in approximately the period 2012–2014 (Figure 1). Not unlike the earliest iterations of markets, healthy food access for the local community is a primary aim of many markets today [8], and the focus of much of the recent research literature about markets [9]. Farmers markets are a visible form of the food system, connecting the food producer with its end user in a single location, in stark contrast to the long supply chains and disconnection from food producers in mainstream food retail such as supermarkets. Farmers markets today are also popular among municipalities, who—whether they or another entity operate them—see them as strategies to increase healthy food access, foster local entrepreneurism, revitalize urban cores, and promote sustainability [10–15].

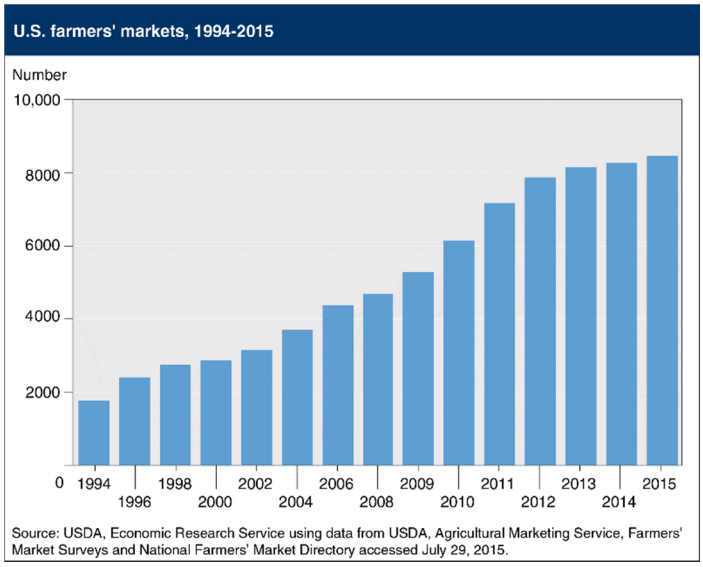

Figure 1. US Farmers Markets between 1994 and 2015. [Source: USDA, Economic Research Service, using data from the USDA, Agricultural Market Surveys and National Farmers' Market Directory accessed on 29 July 2015].

The relationships between public food marketplaces and municipalities, however, have not always been positive, as markets have fallen in and out of favor—and often, as a result, existence—based on the social, economic, and global contexts of the time. Over the last century, drastic changes in settlement patterns, the globalization of the food system, and the rise of supermarkets make the continued reemergence of local food markets surprising. In some places, markets have persisted amidst these major shifts. In others, new generations of markets have arisen, or old ones given new life, as a direct antidote to negative impacts of these changes. Markets have emerged to counter urban disinvestment, chronic disease, and disconnection between consumers and the origins of their food. Yet, despite the apparent resilience (or at least repeated cycle of reappearance) of markets in cities, and the broad favor they have enjoyed in recent decades [16], their continuity is not guaranteed.

Reports from leading health, equity, food system, planning, and public space organizations assert that farmers markets need to be explicitly included in zoning and other municipal codes to both encourage their creation and ensure that they can be sustained [12,13,17–25]. These recommendations emerge in part from the recent trend of using land use regulation as a way to shape a healthier food environment, and are embedded in a recognition that food retail is the most visible part of the food system to the consumer [26].

Despite their popularity with local governments, it is unclear whether and how markets have been codified through municipal planning and policy instruments. Additionally, while markets are impacted by state and federal policy, most policy issues relevant to markets occur at the local government level [24,27,28].

While there is an emergent, but still small, body of academic and non-academic research examining the existence of local food policy in the United States, in particular in the area of zoning, much of it focuses on urban agriculture, a topic that has caused significant contention among governmental and non-governmental actors in US cities [27,29–36]. Studies are also beginning to look at the degree to which food is included in European urban policy, finding it largely not well represented on the urban agenda [37–39], but these studies do not address farmers markets specifically. In the US literature, farmers markets are at times mentioned briefly, but most often only in their role as a sales outlet for urban agriculture harvests. Two major reviews of recent market literature, from 2011 and 2019, identify gaps in research about markets overall, including an understanding of their basic trends and characteristics, and the need for further research both as related to and for the purpose of informing policy [9,40]. Other studies that have performed content analysis on local policy and planning documented in the fields of sustainability [41] and local food systems [34] did include markets among search criteria, but results provided little detail in regards to markets. In North Carolina, researchers examined the allowance of farmers markets among other healthy elements in zoning codes, finding that more supportive zoning was associated with more farmers markets. High-income communities were twice as likely to have zoning codes allowing farmers markets when compared to low-income communities [42–44]. These studies show how zoning can impact markets' ability to provide healthy food access. Additionally, because multiple studies have found that shopping at farmers markets is associated with increased intake of fruit and vegetables [43,45–50], examining markets' presence in zoning and other municipal code is important when assessing barriers to and designing interventions around healthy food access.

This exploratory study aims to elicit whether and how markets have been codified into law in US cities. While cities are only one among multiple forms of local municipalities, including townships, villages, cities, and boroughs, only those municipalities incorporated as cities were considered for a few reasons. First, cities are a form of government universal among US states (and internationally). Second, cities are often the oldest developed areas, allowing historic analysis of their trends over time and comparison among one another, unlike, for instance, a suburban township developed in the 1970s. To assess the degree of codification of markets into city's laws, this study assesses whether farmers markets are present in municipal charters, codes and zoning ordinances—three types of policy instruments over which municipalities have full authority—through a systematic search of municipal code databases and other public city documents. Codified municipal policy is more likely than other policy instruments (such as informational and economic) [51] to outlast political transitions, budgetary changes, and shifting municipal agendas, and thus become institutionalized in the municipality [35]. Secondarily, this study catalogues the presence or absence of historic or current markets, municipalities' roles in operating markets, and the provision of public space for markets, and examines whether any of these market characteristics are associated with whether and how markets have been codified into law. Michigan, an upper Midwest US state, was selected as a case. Michigan has a strong historic tradition of markets, a large number of present-day farmers markets, a diverse, food-producing agricultural sector, and a thriving local and regional food movement; these factors provide fertile ground to examine markets and municipal policy. Ninety cities in Michigan with populations above 10,000, all operating under the same state enabling legislation that grants cities their authority and responsibilities, were studied and compared. See Appendix A for an explanation of Michigan's enabling laws relevant to city charters, codes of ordinances, and zoning authority. This population range allows both a large sample size, and an exploration of codes in cities not often studied, since much urban scholarship, including in food systems, focuses only on a state's largest metropolis. In

Michigan, 34.34% of the state's residents live in cities with populations between 10,000 and 199,999; in fact, only the city of Detroit has a population over 200,000.

Based on a literature review, the next section will elaborate further on how the relationship between markets and US municipalities has developed in time. Then, recommended best practices for market policy will be summarized, and serve as a framework for this study's analysis. Afterward, the methods and results of the case in Michigan will be presented and discussed.

1.1. The Market and the Municipality

Individual historical accounts of the relationship between markets and their municipalities are plentiful, as markets were most often municipally operated institutions in the United States through the early 20th century, the tradition having been brought from Europe [52–57]. However, there is a distinct gap in the literature about the current status of these relationships, with little known more than a few data points about who manages markets today. The following briefly traces the literature around the market and municipal relationships, providing context for this study and how corresponding market policies may have evolved. It concludes with characterizing the different roles municipalities play in markets today, noting in Table 1 which of these roles are addressed in this study.

Table 1. Municipal Roles in Markets and What This Study Addresses.

Key Municipal Roles in Markets	Does This Study Address This?
Including market in municipal plans	No
Including markets in municipal policies/codes/regulations	Yes
Permitting space for markets to be held, whether on public land or in municipally owned structures	Yes
Playing an administrative or management role	Yes
Providing financial or other resources towards a market (outside of direct management)	No

Markets have been part of US cities since their inception, modeled after European cities often designed around a market square. Markets were so central to municipal life that during the founding of East Coast colonial-era towns in the 1700s, part of the requirements when submitting a plan for a new settlement was to specify the location of the market [58]. Municipalities saw markets as a core responsibility because they were critical to the economic survival of a city; without them, inefficient competition and food provisioning risked poverty and starvation for the populace [58–60]. Through the early 20th century, it was illegal to sell food outside of these markets in many US cities [61], even though some privatization of markets and food retailing began towards the end of the 19th century (depending on when cities changed their regulations to allow for it). Still, municipally operated markets remained or even emerged as a key form of food retailing in many US cities and towns for another several decades, even though established markets experienced a period of decline in the last few decades of the 19th century due to inefficiency and corruption in municipalities. Market decline during this period was a physical manifestation of cities' and the governments' woes [59]. Noted market historian Helen Tangires reflects that public markets acted as "'thermometers' from which to gauge a city's health and well-being" [59] (para. 8). Markets' importance reemerged during subsequent eras of municipal reform in the first decades of the 20th century; they both represented at times squalor, overcrowding, and unsanitary conditions, and (re)investment in them acted as a tangible example of a city improving these conditions [40,59,62]. The message that was returned to time and again was the need to ensure an affordable food supply, and markets were the most efficient way to do that in both war and peacetime. It was not until the mid-20th century that market decline resulted not in a period of new

investment, but instead widespread destruction and displacement; modernization and efficiency were now the focus, along with an increasingly automobile-dependent lifestyle, and markets occupied prime real estate in city centers that civic leaders eyed for other purposes [61]. Many markets were lost in this age of urban renewal, colloquially referred to in retrospect by many today as 'urban removal.' While there were no national counts of markets between 1946 and 1976, scholars estimate that the lowest number of markets existed through this period [63]. Markets experienced a renaissance in the 1970s after Congress passed Public Law 94–463, the Farmer-to-Consumer Direct Marketing Act of 1976. This law stressed the importance of markets to the viability of small farms who were increasingly being excluded from the new large-scale, industrialized distribution channels that had become dominant since WWII [63], and whose demand for low prices threatened farm viability. Rising food prices due to the oil embargo and societal concerns about toxicity in the environment, among other concerns, also rekindled consumer interest in markets. There was a significant rise in the number of markets in this time, followed by a decline in the 1980s [63]. Then, in the 1990s, markets rose in popularity again, followed by exponential growth in the last 15 years, with an estimated 8140 farmers markets operating today [5]. This latest era is characterized by a new generation of markets, many of which are being operated by nonprofit organizations, aiming to reduce health disparities through increasing healthy food access, provide opportunities for small business development, connect consumers to the local food system, and serve as a vehicle for community revitalization [23].

Municipalities still operate many farmers markets today, though a smaller percentage than they did historically. This may be a result of a general trend in the US towards indirect governance [35], where nonprofits have taken over services long provisioned by the government, relying instead of the philanthropic sector and donations to keep these functions alive [64]; the same has happened in the food system [65]. In the US, unlike in Europe, it is very rare for farmers markets to be operated by private companies, though some public markets (more akin to shopping malls in their physical form) may be privately owned.

Markets took different physical forms throughout history, from open-air gatherings on a street or in a town square, to linear market sheds running down the middle of downtown boulevard, to grand market halls; most market structures were built and owned by municipalities [53]. Today, this variety of physical forms still occurs in both new and historic markets, though many of the historic market halls were lost to the mid-20th-century era of modernization that led to either the total destruction of markets or their transformation into wholesale-only markets that were relocated to the urban fringe [59]. The sources of markets' food supply have varied and evolved over time, though from the earliest eras—and through the late 1800s—most perishable food supply was local. As railroads and refrigeration allowed food to travel over greater distances, public markets, even in Victorian times, included food from afar in addition to (and out of community demand for) fresh, local product [53]. In some communities, though, particular smaller ones, markets remained either producer only or a mix of producers and resellers. This article uses the term market as an umbrella term for public retail markets; historically, these were interchangeable called municipal markets, public markets, and farmers markets, among other terms. This study looks at farmers markets today as both the dominant form of market in Michigan and the US.

Municipalities today still play a number of key roles in markets, most vitally in allowing their existence through municipalities' land use authority. Markets may be included in municipal plans, and thus given tacit approval that they are a desirable part of the municipality's present or future vision. Municipalities can also choose to require permits for markets to operate, dictate operating standards, regulate licensing among vendors, and oversee food safety. These regulations may be evident or referenced in municipal code (legislative policy) and may be documented in internal forms and processes (administrative policy), or a combination of the two. Municipalities' land use

authority means that they decide—and codify through zoning ordinances—what activities are permitted to occur in what places (i.e., zoning districts) in a community; if a land use is not specified in a zoning code, technically it is illegal. Municipalities, then, play a key role in markets being permitted in (any at all) or a given location. Additionally, municipalities frequently provide public, municipally controlled space for markets to operate, whether on a city street, in a park, or in a municipal facility. As was the case historically, and to a lesser degree today, municipalities can play a direct administrative or management role, acting as the market operator. Finally, municipalities can provide funding, marketing, data, and other in-kind resources and support for markets in their community, no matter the operator. Table 1 summarizes these roles.

1.2. Guidance and Recommendations for Markets in Municipal Policies and Plans

Numerous resources, toolkits, and reports on local policy and land use provide guidance for how and where local governments can include of food on their agendas [12,13,17–25]. That these resources are from prominent health, equity, food systems, planning, and public space organizations shows the interdisciplinary nature of food and relevance to many goal areas. Markets were framed in these documents as a strategy around promoting local and regional food systems, urban agriculture, healthy communities (in particular around healthy food access), and/or more broadly, sustainability. Below is an overview of what, how, and why these organizations assert that markets should be included in municipal code. A compilation of these recommendations reveals those that appear most frequently and provides a basis for the inquiry questions used in this study. Essentially, this study fills a clear gap between understanding policy recommendations versus implementation. Despite there being fairly clear concurrence on set of policy recommendations, research has largely not examined whether these policy recommendations are being adopted.

While varying in level of detail, these reports all assert that markets' inclusion in municipal plans and codes is essential to ensure that they can be created and sustained. The first of these, from 2005, resulted from a study of existing policies—and policy barriers—through an inventory of local, state, and federal policies related to markets [17]. Hamilton found that most municipalities dealt with markets on an ad hoc basis instead of through clear policies, and that in doing so put markets at risk. He underlines the importance of markets' inclusion in policy, "A series of discrete but significant policy issues in the relation of markets to local governments can be the most significant in determining not just the success but the very existence of a market" [17] (p. 14). A 2015 report with a similar charge, though from a global perspective, also noted the importance of markets' presence in policy, " . . . given the important role that markets play in promoting public health, linking urban and rural economies, providing economic opportunity, bringing diverse people together, and creative active public spaces, it is important to develop policies that preserve and protect these important community assets" [19] (p. 4). While there is no existing research showing that markets being codified in policy secure their permanence, this paper is not aiming to justify that assumption, instead noting that many professionals among several disciplines concur that this is an important component of being able to establish, protect, and sustain markets. Future research should examine whether and to what extent markets that have been codified relate to their resilience, or ability to last over time.

The American Planning Association (APA), the professional association of planners in the US, is among those whose policy and planning best practices guide includes markets. The best practice in these guides emerged in part from the work of Pothukuchi and Kaufman, two academic planners credited with introducing the contemporary food planning to both the professional and academic planning communities. Their 1999 article "Placing food issues on the community agenda: The role of municipal institutions in food systems planning" laid the framework for APA guidance in subsequent decades. APA's 2007 Policy Guide on Community and Regional Food Planning is the titular document for planners on this topic; it frames in great detail the current US food system and its connections to local governments. It outlines both broad areas of engagement and types of policies for local

governments to enact to support local and regional food systems [24]. Because of its wide scope, its policy recommendations are not detailed, for instance guiding municipalities to ensure zoning barriers are removed or provide sufficient space or infrastructure but not detailing further. Other APA publications that followed have provided more detail, such as a 2009 Zoning Practice focusing on public markets and street vending [22].

Table 2 summarizes these recommendations for local government policies impacting farmers markets. It includes those relevant to zoning and other land use, and other market operations, such as streamlining of permitting, restrictions on hours and days, and acceptance of food assistance benefits. In the discussion, a comparison table summarizes how each of these recommendations that were examined in this study were addressed in the analyzed municipal code.

While there is some variation in the best practices recommended, there is general concurrence among most items. Per these recommendations, markets should be included as an allowed use in municipal land use plans and zoning ordinances (in fact in multiple zoning districts), public land should be made available for markets, permitting processes for markets should be clear and streamlined, municipalities should support markets financially and/or through in-kind support, and acceptance of food assistance benefits at the market should be either encouraged or mandated. One note: While many of the guides did not recommend an explicit need for defining markets, zoning ordinances begin with a set of definitions of all uses, so it may have been assumed that a market definition was inherent when recommending markets' inclusion in zoning.

Given this consensus around some of the ways markets should be represented in municipal policies and plans, it is unclear—beyond those cities cited as case studies and model ordinance examples in these reports—the extent to which these recommendations have been implemented. The modern fields of local food policy and planning are still relatively young, and one might not yet expect widespread adoption of these recommendations. However, markets' presence in cities are as old as cities themselves, with previous eras of markets dominated by markets directly operated by cities. Are these longstanding market traditions represented in municipal policy? In other words, have markets been codified on the urban agenda?

Table 2. Summary of Recommendations for Local Government Policies to Support Farmers Markets.

Title of Publication	**A: Farmers Market Policy: An Inventory of Federal, State, and Local Examples**	**B: Community and Regional Food Planning Policy Guide**	**C: A Planners Guide to Community & Regional Food Planning**	**D: Establishing Land Use Protections for Farmers' Market**	**E: Zoning for Public Markets and Street Vendors**	**F: Food Access Policy & Planning Guide**	**G: Innovative Local Government Plans and Policies to Build Healthy Food Systems in the U.S.**	**H: Zoning for Healthy Food Access Varies by Community Income**	**I: From the Ground up—Land Use Policies to Protect and Promote Farmers' Markets**	**J: Healthy Foundations for Farmers Markets: Recommendations for Cities and Counties**	**K: Policies that Support Local Fresh Food Markets**	**L: Good Laws Good Food: Putting Local Food Policy to Work for Our Communities**
Author	Project for Public Spaces	American Planning Association	American Planning Association	National Policy & Legal Analysis Network to Prevent Childhood Obesity	American Planning Associa-tion	Northwest Center for Livable Communities—U-Washington	Food Systems Planning & Healthy Community Lab—U-Buffalo SUNY	Bridging the Gap	Changelab Solutions	Farmers Market Coalition & Commu-nity Food Security Coalition	Healthbridge Interna-tional	Harvard Law School Food Law & Policy Clinic
Year Published	2005	2007	2008	2009	2009	2011	2011	2012	2013	2013	2015	2017
Zoning												
Define markets in code				X		X			X	X		
Include market as allowed land use in zoning	X	X	X	X	X	X	X	X	X	X	X	X
Include market in multiple zoning districts		X	X	X	X		X		X	X	X	X
Include market by right; not needing conditional/special use/temporary use	X				X		X		X	X		
Other Land Use												
Include markets in master plans		X	X	X	X			X	X	X	X	
Help markets find appropriate sites	X	X	X	X	X	X	X		X	X	X	

Table 2. *Cont.*

Title of Publication	**A: Farmers Market Policy: An Inventory of Federal, State, and Local Examples**	**B: Community and Regional Food Planning Policy Guide**	**C: A Planners Guide to Community & Regional Food Planning**	**D: Establishing Land Use Protections for Farmers' Market**	**E: Zoning for Public Markets and Street Vendors**	**F: Food Access Policy & Planning Guide**	**G: Innovative Local Government Plans and Policies to Build Healthy Food Systems in the U.S.**	**H: Zoning for Healthy Food Access Varies by Community Income**	**I: From the Ground up—Land Use Policies to Protect and Promote Farmers' Markets**	**J: Healthy Foundations for Farmers Markets: Recommendations for Cities and Counties**	**K: Policies that Support Local Fresh Food Markets**	**L: Good Laws Good Food: Putting Local Food Policy to Work for Our Communities**
Make public land available for markets	X	X		X	X	X	X		X	X	X	
Encourage/require developers to make space for market						X			X		X	X
Operations												
Regulate market operating standards				X	X		X		X		X	
Provide streamlined and affordable permitting process	X		X	X	X	X			X	X	X	X
Offer incentives, financial, or in-kind support to markets	X	X	X	X	X			X	X	X	X	X
Support/promote acceptance of food assistance benefits		X	X	X		X	X	X	X	X	X	X
Mandate acceptance food assistance benefits						X	X	X	X	X	X	X

X = Recommendation included in publication.

2. Methods

In this exploratory study, we analyzed existing public documents, available online, to determine whether and where markets have been codified into municipal law in 90 cities in one US state. First, an introduction of both the case and study population selection outlines the reasons and criteria for inclusion. Next, methods and data for analyzing the presence or absence of markets in code are introduced. Then, methods and data sources used to gather and catalog presence and characteristics about any current and historic markets are shared. Finally, an overview of both descriptive and inferential statistical analysis of results is discussed.

2.1. Case and Study Population Selection

Michigan cities were selected as cases. The selection of cities instead of other forms of local government (in Michigan, that includes villages, townships, and charter townships) was made because cities are the most urban in form, making them more easily comparable to scholarship in urban food systems around the world. By choosing criteria that would yield a large study population, but in a single state, trends could be analyzed across many places that share the same type of government and are afforded the same level of authority under the state government. The choice of a wide range of city population size was purposeful, as most research in local food policy focuses only on large cities (500,000 population and above), leaving a gap in understanding of the trends among smaller and medium sized cities (populations below 500,000). In Michigan, cities of these sizes, while still concentrated in the state's population centers in the bottom half of the lower peninsula, capture cities throughout the state. This helps to understand the conditions outside of not only the largest cities, but also beyond the most populous metropolitan regions.

All cities in the US state of Michigan with populations above 10,000 (N = 92) were initially included in the sample. Population data were taken from the 2010 census, the most recent comprehensive population count [66]. In Michigan, 41.56% of the population live in cities with populations of 10,000 or above, and even if Detroit (the largest city, by far, with 2010 population of 713,777) is excluded, this still accounts for around one third of the state's population (34.34%). While there is a popular perception that a large portion of the US population live in large cities, in fact, only 20% reside in incorporated places (mostly classified as cities) with populations above 500,000. In fact, 53% of the US population live in incorporated places with populations between 10,000 and 199,999, which is the size of the populations in the study cities included here, with the exception of Detroit. In other words, studying cities outside of the largest is relevant for generalizing to the places where a majority of the US reside. Some of these cities are part of broader metropolitan areas, but this study is concerned only with the scale of the municipality itself and what is happening within its borders.

To select the study population among these 92 cities, only those cities whose municipal code was digitized and publicly available online were included. The availability of digitized code was determined for these 92 cities by searching each of the most commonly used code digitization services' websites (Municode, AMLegal, eCode360, Code Publishing Co, searched between 9 Nov 2020 and 4 Jan 2021). Municode hosted the most of these (70%), with AM Legal second (18%), and the others making up the remaining few. For any cities whose code is not digitized with one of these services, the city website was searched to find how to access the code. For three cities, their code is available on the city website. Two cities were excluded from this study based on lack of or difficulty accessing their code. The first, Benton Harbor (2010 census population 10,038), does not use a publicly searchable code digitization service nor include the code on the city website; the city clerk did not respond to an email request to obtain a digital copy of the code. The second, Troy (2010 census population 80,980), includes the code on the city website, but each of 106 chapters, plus the city charter must be individually downloaded and searched. Due to the burden of

107 separate searches needed, Troy was excluded. The final number of cities included in this study was 90.

All of the cities using code digitization services included both their city charter and code of ordinances in the searchable database, with the exception, for some cities, of their zoning ordinance. When this was the case, the zoning ordinance was posted on the city website. Tables of Contents are available on each of these coding services, and if the zoning ordinance was not included, it was retrieved separately from the city website, where it was most commonly available as a single, searchable pdf.

The 90 cities, shown in Figure 2 on a map of Michigan showing county outlines, included in this study represent all but two (those mentioned above as excluded) of the most populous cities in Michigan, with a total combined population of 4,016,731 in the 2010 census [64]. Collectively, these populations represented 41% of Michigan's population in 2010. Their populations range from 10,355 to 713,777, with a mean of population of 44,630 and a median of 23,992. They spread among thirty-seven total counties, including five cities whose jurisdictions cross two counties and one that spans three. Forty-nine cities—54% of the total—are in Wayne, Oakland, or Macomb County, adjacent counties in Southeast Michigan (Wayne County is home to Detroit) that are also the three most populous counties in the state.

Cities were included regardless of whether they have, or once had, a market. Table 3 presents the distribution of population size of cities, the percentage of cities in that population range with current markets, and the total number of markets present among those cities. Some cities have more than one market.

2.2. Analyzing the Presence or Absence of Markets in Code

After testing potential terms in search functions in each of the code digitization databases, it was determined that searching for "market" was the most accurate and comprehensive across all services. While searching for variations of "farmers market" "municipal market" and similar terms at times yielded more precise results, many different terms and variants are used for markets in municipal code, and any limiter to the word market ended up excluding relevant items. Using 'advanced search' features did not improve results. By searching "market", the author had to visually interpret greater numbers of results and make determinations as to what were relevant and irrelevant results. See Appendix B for terms that led to inclusion or exclusion of items among search results.

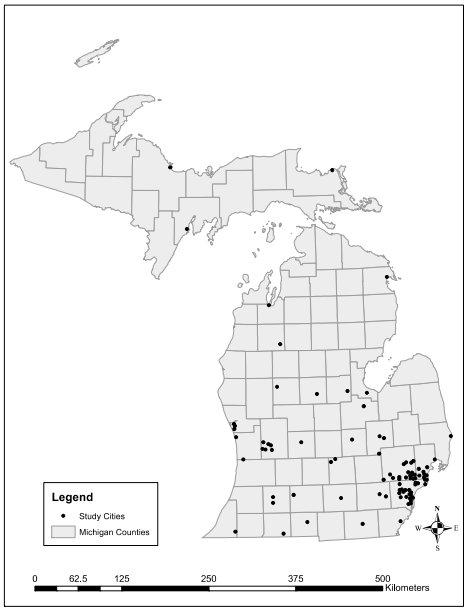

Figure 2. Study Cities [67,68].

Table 3. Study Cities by Population Size and Presence of Current Market.

Population	Number of Study Cities	Percent of Study Cities with At Least One Current Market	Total Number of Current Markets
10–19,999	37	49%	20
20–29,999	17	53%	10
30–39,999	8	88%	8
40–49,999	5	80%	4
50–59,999	7	57%	4
60–69,999	1	100%	1
70–79,999	5	40%	2
80–89,999	1	100%	1
90–99,999	2	100%	2
100–109,999	1	100%	1
110–119,999	2	100%	5
120–129,999	1	100%	1
130–139,999	1	100%	1
180–189,000	1	100%	3
710–719,999	1	100%	9
Total	90		72

Other studies in this field that analyze municipal policy instruments develop and utilize a numeric coding chart, resulting in ranking and rating of degrees of inclusion of a given topic [34,38,41,43]. Because this initial inquiry is so narrow in focus—focusing just on markets—a simpler coding was adequate. A Yes/No dichotomy was sufficient to code the presence or absence of markets in code.

The dimensions selected for coding were chosen initially based on a subset of the recommendations found in Table 2. These included whether the market was present in the code of ordinances and/or the zoning ordinance (a subset of the code of ordinances) specifically. Based on results of preliminary searches, the list of dimensions was refined to including the following:

1. Market Defined

A market being explicitly defined is an important part of understanding where markets fit and what rules apply to them. This is particularly poignant in the zoning ordinance, where anything not defined and explicitly included is considered an illegal use. In sample searches, the presence of a market definition was recorded as one of the ways markets could show up in zoning ordinances. These searches revealed, however, that sometimes a market was defined elsewhere in the municipal code or charter, outside of the zoning ordinance. If that was the case, it may not have also been defined in the zoning code. Market Defined was elevated to its own dimension. If a market either has its own definition, or is included in this definition of another item, anywhere in the codified policy, it was coded as Yes.

2. Market in City Charter

The city charter is a different type of policy document than the code of ordinance, but is included in digitized code, generally as a preamble. The charter is the foundational governance document and can only be changed through a vote of the public, something that occurs quite infrequently. While none of the recommendations mentioned in Table 2 spoke directly to city charters, it is included because of its importance in understanding the historic role of the municipality and the market. When a market is included in the charter, it is because the municipality recognized the market as something that it holds (or at one point held) some degree of authority, or even direct responsibility, over. As a result, the city charter was considered in this study as its own dimension. If there was any mention of a market in the charter, it was coded as Yes.

3. Market in Code of Ordinances

If a market is mentioned in the non-zoning part of the code of ordinances once or more, it is marked as Yes.

4. Market as Permitted Zoning Use

If a market is mentioned as an allowed use—whether by right, as a primary or accessory use, conditionally, or through special use permit—in any zoning districts, it is coded as Yes. Most of the recommendation documents previously mentioned zoning as crucial, as without their express inclusion, markets are an illegal use, or could be interpreted as such if they don't readily and clearly fit within another defined use. While some of the reports summarized in Table 2 recommend markets be allowed by right—versus needing conditional or special use approval—and others add that they should be allowed in multiple zoning districts, this study did not address those details. Like the other dimensions, it stopped at whether there was any inclusion of markets in any zoning district, which was coded as a Yes.

5. Market Section

Sample searches revealed that there are degrees of inclusion of markets. Some codes mention a market in one passage primarily about another topic; others have entire code chapters dedicated to them. Because this study is only an initial look at market presence, we did not consider scoring degrees of inclusion. To differentiate some degree of inclusion, the market section was added as its own dimension. If a market had its own subheading, section, or chapter in the code of ordinances, charter, or zoning, it was coded as Yes.

One of the dimensions of food policy related to markets not addressed in detail in this study is food safety and health regulations. With only a few exceptions, food and health regulations in Michigan are in the domain of the county government, not the city. Food safety at markets is regulated under both the county health department and the state department of agriculture, depending on the product or activity. While there are policy barriers around the unclear and/or overlapping levels of authority that state versus county departments have over food safety at farmers markets, because the municipality is largely uninvolved, these issues have been left out of this study. Municipal code might mention health and food safety matters, particularly around land use (e.g., disposal of waste), but their regulation is largely not in the city domain.

2.3. Analyzing the Market Characteristics

As a secondary research inquiry, markets' presence in codified policy was analyzed for any association with the following: (1) the presence or absence of a historic (pre-1950) market in that city; (2) the presence or absence of at least one current market in that city; (3) for cities with current markets, (a) whether the municipality operates the market, (b) whether the market takes place on public (municipally controlled) land, and (c) the type of location of the market. This information also served to contextualize results, as little has been compiled in the market sector around these characteristics. These descriptive findings, then, may fill research gaps on their own, outside of their measures of association with the aforementioned dimensions. The following data sources were used to gather this information.

1. Historic Markets

Three national or state-wide reports catalogued markets at key points in the first half of the 20th century, along with recording details such as stall fees, vending rules, and sales figures. The US Bureau of Census published "Municipal Markets in Cities Having A Population of Over 30,000: 1918" in 1919 [56], the Agriculture Experiment State of Michigan State College (the forerunner to Michigan State University) published Public Produce Markets of Michigan in 1936 [57], and the USDA published Farmers Produce Markets in the United States in 1948 [54]. Based on these reports, this study defines a historic market as one existing at any point between 1918 and 1948.

The 1919 study was limited to public markets that were municipally run in US cities with populations over 30,000, so does not include some study cities and may miss some

cities with markets operated by others beyond the municipality. At that time, though, privately owned produce markets were rare, so the chance of exclusion of many markets is low. Because the latter two studies included the date of market establishment, they catch those markets that existed in 1918 but were excluded from the 1919 census. The terminology used for markets in these eras was different from today, most commonly used were municipal market, public market, city market, curb market, retail market, produce market, or farmers market. These markets were similar in form and function to farmers markets today.

If a city had one or more historic markets between 1918 and 1948, it was coded as Yes in this category. Date of establishment, type of market, and market operator were also noted.

2. Current Farmers Market

Using a spreadsheet from the Michigan Farmers Market Association's (MIFMA) directory [69], a list of all of the currently operating farmers markets in Michigan was assembled. MIFMA defines a farmers market as a public and recurring assembly of farmers or their representatives selling direct-to-consumer food and products which they have produced themselves [70]. Farmers markets are by far the most dominant form of markets both in Michigan and the US, with approximately 240 currently operating in Michigan. A few markets paused operating in 2020 due to the pandemic but were included unless it was clear that their closure was permanent. Some operating organizations facilitate multiple markets, generally in two locations on different days in the same community. Those are listed as two markets. Increasingly, markets that were once operated outside seasonally are extending into the winter, often moving to an inside location for the coldest months; those markets were not included as separate listings, as they are a modification of a market than a separate entity. If a city has one or more current farmers markets, it was coded as Yes in this category.

MIFMA provided the author with both the physical address, and the longitude and latitude, of each market in their database, as shown on the interactive 'Find A Farmers Market' map on the MIFMA website. In Michigan, physical addresses are inconclusive as to what jurisdiction an address is in, as the place names (what is considered "CITY" in a postal address) and zip codes often cross municipal boundaries. For instance, Ypsilanti as the city on an address could indicate an address in the City of Ypsilanti, Ypsilanti Charter Township, or Superior Charter Township. In order to determine what jurisdiction each market is in, each market location was plotted on an ArcGIS map layer, whose base map was built with publicly available jurisdictional outlines and labels. Using these location determinations, the list of markets was then filtered by those in cities in the study population. A total of 72 markets operate currently in 55 (61%) out of the 90 cities included in this study.

3. Current Market Operator

The market operator for any current market was determined through a combination of web searches, vendor application searches and personal communication with market managers or other market contact persons as designated in the Find A Farmers Market directory. The market operators were then grouped into nine categories (chamber of commerce/business organization, co-operative, health care organization, nonprofit or community organization, private, university, city, DDA, other government agency). Those categories were then collapsed into three to create units for easier statistical analysis. Since the chief concern of this study is the role of the municipality. The resulting groupings were as follows: municipally run (including city, DDA, other government agency); non-municipally run (all of the remaining); and mixed (the city includes at least one market in each of those two categories).

4. Market Location

The market location was determined through a combination of web searches, Google satellite image analysis, marketing materials, photographs on web and social media, and

personal communication with market operators. Even when a market location is listed, it can be difficult to determine whether that market takes place in the street, a parking lot, sidewalk, inside a building, or other space associated with that location. When in doubt, personal communication confirmed or clarified where the market takes place. The primary, outdoor market location was used. For markets who operate an extended season inside during the winter, only the location of the market in this main season (i.e., where it operates through the summer) was used. These locations were categorized as one of the following: Street/Sidewalk, Parking Lot, Park, Pavilion/Shed, Building.

If there is more than one market in a city, and the location types are different, it is categorized as Mixed. This location type proved difficult to categorize discreetly, as there is overlap. A market may operate, for instance, in the parking lot of a park. As a result, it is unclear how useful analysis on these characteristics will be beyond painting a general picture of trends in market location.

5. Market Land Ownership:

Who owns the land, building, and/or structures where a market takes place was determined in the same ways as market location. Publicly owned means owned by a municipal or other government agency, usually the municipality, but at times the county, state, or federal government. Universities, although potentially public entities, were classified as privately owned, as they have significant jurisdiction over the activities on their property. Streets/sidewalks and parks are assumed to be municipally owned; when there was any question, such as at universities, personal communication with market operators provided clarity. If there is more than one market in a city, and the ownership of land they are held on falls into multiple categories, it was marked as Mixed.

2.4. Statistical Analysis

Once the aforementioned information was gathered into the coding form, data were loaded into the SPSSv27. Frequencies were generated to identify trends. Crosstabs using Pearson's chi-square tests or the Fisher–Freeman–Halton exact test, including observed and expected frequencies, were then performed in SPSSv27 to identify whether any statistically significant associations exist between any of the market dimensions (A-E above, dependent variables), and market characteristics (I-V above). Phi and Cramer's V analysis were used to determine the strength of any statistically significant associations. These tests are suited when searching for associations among nominal variables. Pearson's chi-square test was used whenever possible (with Phi used as the accompanying measure of strength of association), but when an individual cell's expected or actual count had a value below 5, the Fisher–Freeman–Halton exact test was used instead (with Cramer's V as the measure of strength of association). The measure of strength for Phi or Cramer's V was determined using the scale provided by Khamis, who notes that while there is not one hard and fast scale for strength of association, Phi value under 3 or 35 can be considered not meaningful [69]; for this study, we used 3 as the minimum threshold.

3. Results

The results below include both descriptive statistics around study dimensions and markets and statistical analysis of associations among these items. First, detailed descriptive statistics around historic and current markets are provided. Afterwards, frequency results from charter, code, and zoning ordinance searches are shared, followed by the results of the statistical analysis. The full file of coded market data is available upon request.

3.1. Historic Markets

Michigan has a strong history of markets, unsurprising given its diverse agricultural tradition on farms of a variety of scales, and located across the state, producing many edible products. Among the 90 cities in this study, 26 cities (29%) were home to a total of 34 markets between 1918 and 1948. The vast majority of these markets were retail markets, with only a handful including both retail and wholesale aspects, and even fewer solely

wholesale. However, some markets' primary function (retail vs. wholesale) either changed over time or may have been recorded under different categories, as reports from 1919, 1936, and 1948 at times list the same market as a different type. Largely, though, most markets were focused on selling directly to consumers. The predominance of retail markets is largely unsurprising, as a pressure to transition markets retail to wholesale (also referred to terminal markets) had not taken hold; this shift occurred more after the mid-century mark [61].

Municipalities operated the vast majority of markets, though in a few places county governments either operated them or did so in partnership with the municipality. A small number were run by co-operatives, and for some markets, the 1918, 1936, and 1948 reports (particularly the latter two) showed different operators at different times. It is unclear whether a different entity took over the market's operation, or whether, as is common today, the market was run as a partnership among multiple entities. Or, there could be a discrepancy between the way the authors of each report coded market types.

The markets in the twelve Michigan cities included in the 1919 report were assumed to be municipally operated, as the report was about municipal markets specifically. In 1936 and 1948 the vast majority of markets in study cities were government (municipal or county) operated, 84% and 83% respectively, as shown in Table 4. The full table showing each market and its origin year and operating organization, as reported in the 1919, 1936, and 1948 reports, can be found in Appendix C. Because each report was authored by a different entity, employed different methodology to collect information, and categorized markets through lenses of their different areas, there is unsurprisingly conflictual information that cannot be easily verified. For instance, one report lists a market's establishment date as 1932, and another lists that city as having a market in 1918. The same markets may also be listed under different names. Without detailed research on each city, it is impossible to know precisely what market began when and which markets listed are duplicates. Additionally, markets both historic and current evolve in level of formality, change names, and move locations, resulting in potentially different classifications.

Table 4. Number of Historic Markets by Type of Operating Organization [54,56,57].

	1918 *		1936		1948	
	Number	**Percentage**	**Number**	**Percentage**	**Number**	**Percentage**
Municipality	12	100%	18	69%	20	69%
County or County-Municipality	*	*	4	15%	4	14%
Farm Bureau	*	*	2	8%	0	0%
Co-Operative	*	*	2	8%	4	14%
Private	*	*	0	0%	1	3%
Total	*	*	26	100%	29	100%

* The 1918 census report was of municipal markets in cities over 30,000; it is not inclusive of all study cities, as many had populations under 30,000. It also did not include markets not operated by municipalities.

3.2. Current Markets

Table 5 shows the number of markets per cities. Among the 90 cities in this study, 55 (61%) have farmers markets operating today. Most cities (47) have a single market in their community, while 7 cities have 2 or 3 markets. Detroit, the most populous city in Michigan has 9 markets.

Table 5. Number of Markets Per City.

Number of Markets per City	Number of Cities	Total Current Markets	%
0	35	0	38.90%
1	47	47	52.2%
2	5	10	5.6%
3	2	6	2.2%
9	1	9	1.1%
Total	90	72	100%

3.2.1. Market Operators

Among the 72 current markets, just over half—37 (51.4%)—are run by nonprofits, including both charitable organizations (501c3s), and business associations such as Chambers of Commerce (501c6s), and unincorporated nonprofit groups. (See IRS guidance for definitions of types of nonprofits.) Only 31 (43.1%) are run by the municipality, either directly by the city, or through a city-related agency, most commonly the city's Downtown Development Association (DDA—see Appendix A for more) and, in one case, a regional parks agency shared among three municipalities That is in stark contrast to a vast majority of markets in the first half of the 20th century being municipally operated. Only three current markets (4.2%) are run by private entities, and one 'Other' is run by a member-based, co-operative grocery store, which falls somewhere between a private and a nonprofit entity. Among cities that have more than one current market, in all but two cases, the operators all fit into one organizational category, i.e., all markets in that city were run by nonprofits, OR run by government agencies.

When compared to national data from the USDA's 2019 Survey of Farmers Market Managers, the Michigan markets among cities in this study are far more likely to be operated by a municipality (43.1%) than nationally, where nonprofit operate almost two thirds (64.1%) of markets and municipalities only 15%, as show in Table 6.

Table 6. Markets' Operating Organizations in the US Compared to Study Sample.

	United States	%	Markets in This Study	%	How Study Sample Markets Compare to the US
Government	1221	15.0%	39	43.3%	Significantly higher
Nonprofit	5218	64.1%	46	51.1%	Slightly lower
Private/For-Profit	1302	16.0%	4	4.4%	Significantly lower
Other	399	4.9%	1	1.1%	Lower
Total	8140	100%	90	100% *	

* Rounded up from 99.9%.

For the statistical analysis in this study, the market operators were collapsed into three categories: municipal, non-municipal, and mixed operator (Table 7).

Table 7. Number of Markets by Type of Market Operator.

	N	%
Mixed	2	4%
Municipal	28	51%
Non-Municipal	25	45%
Total	55	100%

3.2.2. Market Land Ownership and Location

Among the 55 cities with at least one current market, almost three-quarters (72.7%) have a market or markets that take place solely on public land (Table 8). This can include

in a street, on a sidewalk, in a public park, on a public plaza, in or around a publicly owned building, or in a publicly owned parking lot. Another 18.2% take place solely on private land, which most commonly includes in or around a private building or on a privately owned parking lot, such as in a church parking lot. The remaining 9.1% have mixed ownership, meaning there are multiple current markets in the city, and at least one takes place on public land and at least one on private land.

Table 8. Number and Percentage of Markets by Land Ownership.

Ownership	N	%
Mixed	5	9.1%
Private	10	18.2%
Public	40	72.7%
Total	55	100%

It was more difficult to determine the exact market location because of the overlap of categories. For instance, a market may be set up in a parking lot in a public park, under a pavilion that is in a park, or both on a street and under a pavilion. Almost one-quarter (23.6%) of cities' markets were set up in a parking lot; just over one-fifth (21.8%) under a pavilion, market shed, or similar open-air structure; another one-fifth (20%) take place in parks (Table 9).

Table 9. Number of Markets by Market Location(s).

Location	N	%
Building	4	7.3%
Mixed	6	10.9%
Park	11	20.0%
Parking Lot	13	23.6%
Pavilion	12	21.8%
Street	9	16.4%
Total	55	100%

3.3. Frequency of Market Presence in Codes

The codes of ordinances, including the city charter, code of (non-zoning) ordinances, and the zoning ordinance were digitally searched for the presence of markets in the ninety cities included in this study.

In each of the five codified policy dimensions, markets were included in fewer that 50% of the cities (Figure 3). Among the dimensions, markets were present the most in the code of (non-zoning) ordinances (48%) and city charter (41%).

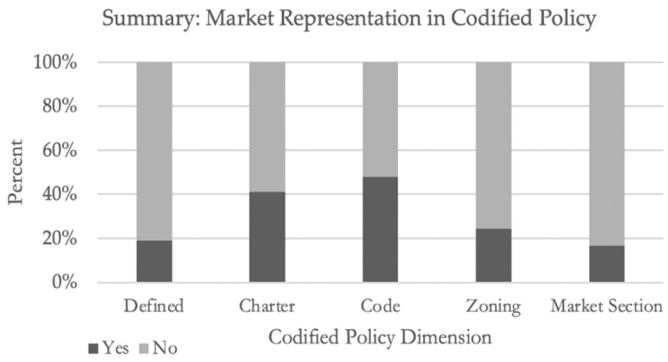

Figure 3. Market Representation in Codified Policy—All Study Cities.

Since not all cities in the study population have current markets (N = 55), we could assume that market inclusion in codified policy would be more common in cities with current markets. Reanalysis of the same data with those cities without current markets excluded reveals that largely not to be the case (Figure 4). Only the inclusion of markets in the code of (non-zoning) ordinances was higher when comparing cities with current markets (56%) versus all study cities (48%).

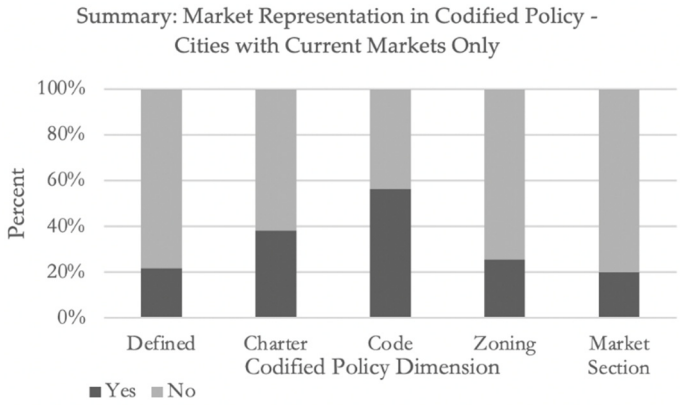

Figure 4. Market Representation in Codified Policy—Cities with Current Markets.

The analysis was conducted again, this time including only cities that had historic markets (N = 25). These results show a higher frequency in all dimensions, with markets being included more frequently in codes of (non-zoning) ordinances (72% vs. 48% in all study cities) and, though to a lesser extent, in zoning and market sections (Figure 5). This suggests that codification is more common among cities with a longer tradition of farmers markets.

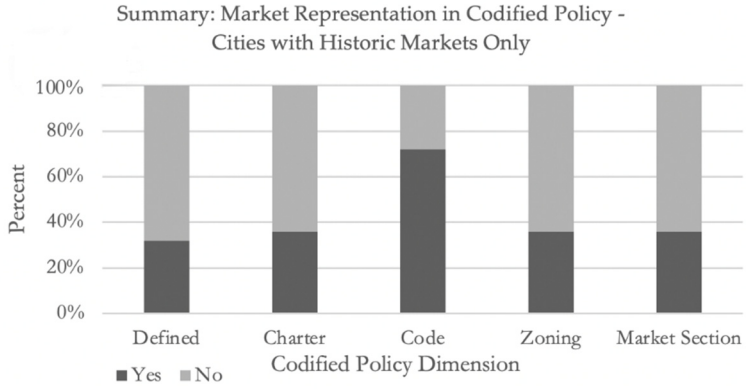

Figure 5. Market Representation in Codified Policy Cities with Historic Markets Only.

Comparing the three, the results found that whether looking at all cities, or cities with current or historic markets, there is still a low level of market representation in codified policies. The recommendations that markets should be represented in code, as summarized in Table 2, have largely not been heeded.

The following sections provide further detail into the frequencies of market inclusion in each dimension, followed by statistical analysis of the associations between these frequencies and market characteristics described in Sections 3.1 and 3.2.

1. Market Defined

Definitions of markets were found in only 17 (18.9%) of the city's codes (zoning and otherwise) or charter. In 12 of these cities, market definitions were present in the zoning codes, which commonly include a list of definitions used therein. One city included the

definitions elsewhere in the code of ordinances and another in the city charter. Three cities were not explicit about defining a farmers or public market but did list markets in a definition of Temporary Uses/Seasonal Events, Open Air Businesses, or Outdoor Display, Sales, and Storage; those are italicized in Table 10. For some cities, their definition of market clarified that they were talking about a specific (municipal) market; it is unclear, then, how other markets that have or may operate in those cities would be classified. In Kalamazoo, the 'Market or Public Market' is defined as "The Kalamazoo Municipal Market", making it unclear how any of the provisions for that market (which does have a dedicated section in the code) would or would not apply to a market in the city established by another entity, or whether another market would even be allowed to operate.

2. Market in City Charter

Markets were included in city charters of 37 (41.1%) of the cities. These organizing documents, developed at the founding of a city, spell out the roles, responsibility, and authority of the municipality (see Appendix A). Markets—often referred to in the charters as "marketplaces and market houses"—were frequently among those entities a city has authority to acquire or operate, in the same way they do with other public amenities. While initially a promising finding, in that a sizeable portion of the cities in this study included markets in their charters, it was later found that the language is likely taken directly from Michigan's PA279, the Home Rule City Act. This act established municipal authority through the allowing the incorporation of cities; it set out details of city governance and includes markets among a long list of permissible municipal roles. These results, then, are more likely reflective of the broader thinking among state leaders in 1929 when PA279 was amended to include this language than drafted by city leadership. While city leaders might have shared that sentiment, the inclusion of the template language doesn't necessarily suggest that there was a pointed consideration of the city's roles in markets. In other words, it was common for cities to use boiler plate language provided by the state. Table 11 shows excerpts from some of those city charters.

While this was the case for most of those cities including markets in the charter (as shown through identical or near-identical verbiage), some others did use the charter to define or outline the city's role with more specificity. Lincoln Park calls out (and simultaneously defines) their authority to regulate markets, while Ypsilanti fleshes out this authority even further in their charter, including management, fees, and placement. While charters are part of cities' laws, and these examples articulate the city's roles in markets, they are likely not the first place a city staff member looks when querying for guidelines under which a market falls. Still, a market presence in a charter—a city's foundational law—illustrates that markets were, at least one time, considered a part of the urban agenda.

Because city charters are largely historic documents and involve significant effort (popular vote) to change, they have not been the focus of recommendations for policy changes, nor should they be. They serve as a lens to understand the place of market's in the city's structure and history.

Table 10. Market Definitions in City Codes, Charters, and Zoning Ordinances.

City	Section	Language
Auburn Hills	Zoning: Definitions	Roadside Stands or **Markets**: A roadside stand or market is the temporary use of property or facilities for the selling of vegetables, fruits and flowers.
Battle Creek	Zoning: Urban Ag: Definitions	**Farmer's market**. A place where vendors and individuals can sell products from their crops.
Detroit	Zoning: Definitions	**Farmers' Market**: A pre-designed non-municipality-owned or -operated area, with or without temporary structures, where vendors and individuals who have raised the vegetables or produce or have taken the same on consignment for retail sale, sell vegetables or produce, flowers, orchard products, locally-produced packaged food products and/or animal agricultural products.
Eastpointe	Code of Ordinances: Farmers Market	**Farmers' market** means a place where fresh foods and articles from a defined local area are sold by the people who have grown, gathered, raised or created them (Ord. No. 1061, 4-17-2012)
Escanaba	Code of Ordinances: Peddlers, Solicitors, Transient Merchants, Vendors: Farmers Market Article	**Farmers' market** or market shall be the space designated by the city council on which shall be carried on the buying and selling of products during specified days and hours; Producer shall mean a person who offers for sale articles for human consumption such as fruits, vegetables, eatable grains, nuts, berries, apiary products, maple sugar syrups, bakery products, and fish and/or nonedible articles such as cut or potted flowers, which articles have been grown, produced, or prepared by the grower or producer. Producers shall be limited to residents of Delta, Schoolcraft, Menominee, and Dickinson Counties.
Fenton	Zoning: Definitions	*Temporary uses and seasonal events: Seasonal outdoor events intended for a limited duration within any zoning district. Such a temporary use shall not be interpreted to be a continuance of a nonconforming use. Temporary uses and seasonal sales events may include carnivals, circuses,* ***farmers market****, art fairs, craft shows, sidewalk sales, antique sales, Christmas tree sales, flower sales, flea markets and similar events, and may also include temporary residential uses.*
Grand Rapids	Zoning: Definitions	**Farmers' Market**: The temporary outdoor sale, for an extended period, of an array of agricultural products, handmade goods, and similar locally produced items (not including secondhand goods).
Hamtramck	Code of Ordinances: Business Regulations: Restaurant and Food-Related Services and Products: Public Markets (chapter)	**Public Markets: Public Market or Market Place**. A place on vacant property used for buying and selling farm products and the accommodation of producers' and hucksters' wagons in which the products are brought to or taken from the place.
Kalamazoo	Code of Ordinances: Kalamazoo Municipal Market	**Market or Public Market**: The Kalamazoo Municipal Market.
Lincoln Park	Charter: Powers of City and Council: Section 24—Markets	The Council shall have power to establish and **regulate markets and market places** for the sale of meats, fish, vegetables and other provisions and articles necessary for the sustenance and convenience of the inhabitants.

Table 10. *Cont.*

City	Section	Language
Marquette	Zoning: Definitions	**Farmers Market**: A location established in accordance with local ordinance and operated in compliance with Act No. 92, the Michigan Food Law, as amended, where farmers may transport and sell to the public fruits, vegetables or other agricultural products. Vendors of other retail items may also be permitted by the City.
Monroe	Zoning: Definitions	*Open Air Business: Businesses operated on a seasonal or year-round basis which are not conducted from a wholly enclosed building and which include, but are not limited to: A. Product sales or rentals; B. Outdoor product display; C.* ***Fruit and vegetable markets****; D. Nurseries and garden supply and equipment; and E. Commercial recreation businesses.*
Muskegon Heights	Zoning: Definitions	**Farm Market**: A temporary use within the City, which sells produce and other farm products.
Rochester Hills	Zoning: Definitions	Roadside Stand and **Market**. The temporary use of property or facilities for the selling of produce.; Temporary Use. A use permitted and regulated pursuant to this ordinance for periods of time that are limited in duration as specified by this ordinance, including, but not limited to carnivals, circuses, farmers market, art fairs, craft shows, sidewalk sales, antique sales, Christmas tree sales, flower sales, flea markets and similar events.
Traverse City	Zoning: Definitions	Market, municipal. "**Municipal market**" means a publicly owned and operated building or space where vendors offer a wide range of different products from open stalls.
Wyoming	Zoning: Definitions	*Outdoor display, sales, or storage: Outdoor display, sales, or storage that is accessory to a permitted commercial use or a business operated substantially outside of any building, including: retail sales of garden supplies and equipment (including, but not limited to, trees, shrubbery, plants, flowers, seed, topsoil, trellises, and lawn furniture); sale of building and lumber supplies; automobiles, recreational vehicles, boats, mobile homes, garages, swimming pools, playground equipment, mowing equipment, farm implements, construction equipment and similar materials or equipment; rental and leasing establishments; and year-round flea markets,* ***farmer's markets****, roadside stands, and auctions.*
Ypsilanti	Zoning: Definitions	**Farmers' market** means an indoor or outdoor market open to the public offering for sale at retail vegetables, produce.

Table 11. Market Language in City Charters.

City	Section	Language
Holland	Municipal Powers & Liabilities: General Powers	*Public facilities; construction, maintenance*, etc. To construct, provide, maintain, extend, operate, and improve: Grounds, parks, plants, systems, water, sewage, etc. Either within or without the corporate limits of the city or of Ottawa county: Public parks; recreation grounds and stadiums; municipal camps; public grounds; zoological gardens; museums; airports and landing fields; facilities for the landing of helicopters; cemeteries; public wharves and landings upon navigable waters; levees and embankments for flood control and other purposes related to the public health, safety, and welfare; electric light and power plants and systems; gas plants and systems; public heating plants and systems; waterworks and systems; sewage disposal plants and systems; storm sewers; garbage disposal facilities; refuse and rubbish disposal facilities; **market houses and market places**; public transportation facilities; facilities for the storage and parking of vehicles; hospitals; facilities for the docking of pleasure crafts and hydroplanes; and any other structure or facility which is devoted to or intended for public purposes within the scope of the powers of the city.
Lincoln Park	Powers of City and Council: Section 24—Markets	The Council shall have power to establish and regulate **markets and market places** for the sale of meats, fish, vegetables and other provisions and articles necessary for the sustenance and convenience of the inhabitants.
Ypsilanti	Parks and Public Property—City Market	Designation of place for **market**. (a) The council shall, by resolution, from time to time designate such places for the **city market** as it may deem proper. All vehicles and stands upon the market shall be parked or placed in such a manner as the market manager shall designate. The market manager may make such other regulations not inconsistent herewith as may be necessary for the proper conduct of the market. (b) Fees for the use of the Farmer's Market Freight House shall be set by resolution of the city council.

Table 12. Markets in (Non-Zoning) Codes of Ordinances.

City	Section	Language
Battle Creek	Vendors: Exempt Activities	The provisions of this chapter shall *not* apply to any of the following: A person handling vegetables, fruits or perishable farm products at an established **City market**.
Eastpointe	Farmers Market	Any person desiring to operate a **farmers' market** shall file a written application with the city clerk, on a form to be furnished by the city clerk. Said application shall be subject to the review of the building official who shall forward his/her recommendation to the city manager. The city manager shall review and make final determination on the application. All persons desiring to sell foods or articles at a farmers' market shall be required to complete a registration form which shall be filed with the city clerk and subject to the approval of the city manager.
Big Rapids	Business Regulations: Mobile Food Vendors	Not operate on public property within a block of a City-authorized street fair, public festival, **farmer's market**, or special event without authorization from the event sponsor.
Grosse Pointe Park	Administration: Dept of Public Service	The Department of Public Service shall have the following specific functions: (6) It shall have charge of the control and regulation of the planting of trees, and of the planning, development, maintenance, management and operation of parks, boulevards, cemeteries, municipal parking lots, **markets** and recreation facilities.

3. Market in Code of Ordinances

Of the five dimensions included in this study, the most common place for markets to appear was in the non-zoning code of ordinances, with almost half (47.8%) having some direct mention of markets. Table 12 shows examples of a variety of ways market appears in code. Most frequently, this was listed in a section about peddlers/transient merchants stating (something to the effect of) those selling fruits and vegetables they produced themselves were exempt from peddler licensing requirements, as shown by the examples from Battle Creek in Table 12. The intention of this language seems to be that market vendors are not required to apply for this permit, since they already submit some form of application to sell at the market to its operating organization. Eastpointe's code is an example of a market section that sets out the process for farmers market approval. Big Rapid's mention of markets is in a list of restrictions for mobile food vendors in proximity to the market. Additionally, Grosse Pointe Park includes markets when describing the purview of a city department. As these examples show, the presence of markets in the non-zoning code is highly variable, and their inclusion—a 'Yes' score in this analysis—does not address the type and degree of inclusion. The market section and market definition dimensions (both of which may be part of the non-zoning code of ordinances), may provide further insight as to what extent the code includes markets, whether a passing mention or a topic with more content.

4. Market as Permitted Zoning Use

In Table 13, we see that markets were only explicitly listed as an allowable land use in 22 (24.4%) of the 90 cities' zoning codes, despite the fact that 55 of these cities have at least one current market. When the data were filtered to look at only those cities with current markets, still 41, or almost three-quarters (74.5%), of those cities *do not* include markets as an allowed land use. Even among the 28 cities with municipally operated markets, only 6 allowed farmers market as a use in their zoning ordinance. This means that these cities that operate markets may be ignoring their own zoning ordinances.

Table 13. Number of Markets in Zoning—Land Use By Market Operator.

		Mixed	Muni	Non-Muni	None	Total	%
Zoning—Land Use	No	2	22	17	27	68	75.6%
	Yes	0	6	8	8	22	24.4%
	Total	2	28	25	35	90	100%

This is one of the most surprising findings because it means that many markets are technically operating illegally. This puts especially those markets operated by non-municipal entities at risk, should someone challenge their existence. Additionally, it gives legal backing for anyone who wanted to voice an objection to a new market opening in the future. Compounding this risk is the fact that even fewer cities for whom markets are an explicitly allowable land use have actually defined in codified policy. One would expect that all of the cities allowing markets as a land use would have defined them, but this is not the case. Of these 22, only nine include definitions of a market anywhere in the code, making what one considers a market open to interpretation.

5. Market Section

More substantial inclusion of markets in the code of ordinance was likely to be in a market section; 15 cities (16.7%) included such sections, though they were not always in the codes of ordinances. Some were included in the city charter, and others in the zoning ordinance. Overall, most cities (N = 75, or 83.3%) did not include market sections anywhere in their codified policy.

In summary, markets are largely underrepresented in codified municipal policies, and while there is some variation among the dimensions included, it does not appear obviously

explainable by the most obvious characteristics, such as the city having a current market, or a market being municipally operated. To test whether these dimensions and market characteristics are associated with each other in a statistically significant way, crosstab analysis in SPSSv27 was performed.

3.4. Comparisons between Market Representation in Code and Other Factors

Cross tabs with Pearson's chi-square test or Fisher's exact test examined whether any of the five dimensions of market representation in codes is associated with other factors examined. In many cases, Fisher's exact test had to be used instead of Pearson's chi-square test, because individual cells had values of less than 5, making Pearson's chi-square test inaccurate in showing an association. Whichever test was used, Phi or Cramer's V was then used to study the strength of association for any results with $p > 05$ (dark highlight) and with $p > 07$ (light highlight). These tests were performed both with the entire set of 90 cities, and then separately looking at only those 55 cities with current markets. The latter tests were performed because several of the factors were relevant only to those cities with current markets (market operator, market location, market land ownership), to determine whether once the large number of "None" responses from those cities without markets impacted which associations were statistically significant. While there was slight variation, for the most part, the findings of significance were the same. The results for the entire set of 90 cities are shown below in Tables 14 and 15, and the results for only the 55 cities with current markets can be found in Appendix D.

Table 14. *p*-Values for Pearson's Chi-Square Test Or Fisher's Exact Tests of Association Between the Market Representation in Code and the Market Characteristics—All Study Cities.

	Market Defined	Market in Charter	Market in Code	Market Zoning-Land Use	Market Section
Current Market	0.373	0.479	0.041	0.78	0.287
Historic Market	0.07	0.541	0.004	0.114	0.004
Market Operator	0.284	0.704	0.054	0.795	0.15
Market Location	0.225	0.003	0.015	0.457	0.002
Land Ownership	0.13	0.872	0.024	0.266	0.007

Table 15. Cramer's V or Phi: Strength of Association Between the Market Representation in Code and the Market Characteristics—All Study Cities.

	Market Defined	Market in Charter	Market in Code	Market Zoning-Land Use	Market Section	df
Current Market			0.215			1
Historic Market	0.208		0.301		0.322	1
Market Operator			0.287			3
Market Location		0.456	0.41		0.493	6
Land Ownership			0.318		0.418	3

The statistical analysis revealed that market presence in the non-zoning code and the presence of a market section are associated the most with the market characteristics. The presence of market in non-zoning code is associated with each of the five market characteristics, though only marginally with the market operator ($p = 054$). The strength of association is trivial for current market and market operator and moderate to strong for the other characteristics [71]. As previously described, market presence in code is the most widely varied dimension in both degree and type of inclusion, spanning from (most frequently) brief mentions in listings of peddler permit exemptions, to entire market

sections, to references around other items such as keeping the peace. Because presence was considered to be there as long as the market was mentioned even once, it had the lowest entry bar, and it is therefore not surprising that it is associated with a number of factors. That market presence is associated with the presence of a historic market is predictable, in that those early markets seemed more likely to have been codified in municipal law.

Whether a city's non-zoning code includes a section about markets is associated with three factors: whether there was a historic market, the market location, and market land ownership, all with a moderate or high degree strength of association. The associations between a market section and either the presence of a historic market and market land ownership is not unsurprising, as these sections tend to refer to a (historic) municipally operated markets that take place on public land.

The multiple associations with market location are the most confounding, as that characteristic had the most possible answer categories (street/sidewalk, pavilion, park, et al.) and not always a clear differentiation that allowed a straightforward classification into one category. Yet, it came out strongly associated with three dimensions. To assess whether one or two values were contributing disproportionately to the Pearson's chi-square test values, i.e., an outlier skewing the results and causing the associations, further calculations were performed on the results of these three factors to understand the contribution of each response. That analysis did not find any clear pattern. It is unclear whether these associations are meaningful. Further analysis could involve regrouping or reclassifying the values into fewer options and seeing if the statistical associations remain.

The most striking absence of association is that of market as a permitted land use in the zoning ordinance with any of the characteristics. One could assume that at least those cities with current markets may be more likely to have food policy advocates working to ensure that markets are included in municipal policy including zoning. These data do not suggest that is the case. This follows on the surprising low frequency of inclusion of markets in zoning codes, as shown in the previous sections. Whether markets are not on the radar of those supporting local food policy and planning is an area for future inquiry.

4. Discussion

Despite the assertion from the fields of food policy, food planning, and healthy communities, among others, that markets should be codified into municipal law, this study found that this is not the case for the vast majority of Michigan's cities with populations over 10,000, including those with either historic and/or current markets. With respect to the recommendations in Table 2, this study examined whether or not a number of those recommendation had been implemented in the form of codified municipal policy. Table 16 summarizes what was found during this study, and Table 17 compares the policy recommendations presented in Table 2.

Table 16. Percentage of Cities with Markets Representation in Codified Policies.

	Defined	City Charter	Code of Ordinance	Zoning	Market Section
All Study Cities	18.9%	41.1%	47.8%	24.4%	16.7%
Cities with Current Markets	21.8%	38.2%	56.4%	25.5%	20.0%
Cities with Historic Markets	32%	36%	72%	36%	36%

This study found that a small minority of cities have defined markets in their code (18.9%) or included markets as an allowed land use in their zoning ordinance (24.4%). Broadly, the implications of this study are that despite a clear set of best practices and recommendations for the codification of markets in municipal law, codes of ordinances are not being updated to include markets in most places. Additionally, those that have codified markets might have done so many decades—even up to one century ago—during the establishment of their own municipally operated market, making it unclear whether their

presence is reflective of adopting these more recent recommendations. Future research could explore the timeline of market policy adoption. Zoning ordinances, however, tend to be more current, in contrast to the overall city code, as they are periodically revised in their entirely, particularly in recent decades as cities have begun to switch to a more contemporary zoning system (form-based code). Zoning ordinances are the legal codification of master plans in Michigan (and many other states), and cities undertake this type of comprehensive planning periodically (every 5–20 years).

The professional organizations that created these recommendations note that this both puts current markets at risk and can hinder future efforts at market development. While codified policy does not guarantee permanence, these recommendations from leading organizations in multiple sectors concur that it is an important component. Per Kaufman and Pothukuchi, codification could be considered a step towards making the invisible urban food system visible within local planning and policy. Whether or not the assertion on the importance of codification is correct has not been studied and is a topic for future research. Still, this research explored the question of whether food policy and planning recommendations have been adopted and implemented; the answer is by and large they have not. This reasons behind this disconnect between policy recommendations and adoption is in itself an area for future research and can inform how food policy and planning should be approached to achieve greater efficacy. After all, what use is putting forth best practice ideas if they are never implemented?

Table 17. Summary of Findings as Compared to Policy Recommendations.

Zoning	***Corresponding Dimension or Characteristic***	***Summary of Findings***
Define markets in code	Market Defined	Rarely included (18.9%), even less than frequency of inclusion in zoning
Include market as allowed land use in zoning	Market Zoning	Included in only under one-quarter (22.4%) of cities
Include market in multiple zoning districts	Market Zoning	Not examined directly, but could be for future studies
Include market by right; not needing conditional/special use or temporary use	Market Zoning	Not examined directly, but found several references to market defined or regulated as a temporary use
Other Land Use	***Corresponding Dimension or Characteristic***	***Summary of Findings***
Make public land available for markets	Market Location	A majority of current markets utilize public land (72.7%), suggesting there is permission by a public body to do so
Operations	***Corresponding Dimension or Characteristic***	***Summary of Findings***
Regulate market operating standards	Market Section	Rarely included (16.7%), though may be regulated outside of code (i.e., in other city administrative documents)
Provide streamlined and affordable permitting process	Market Section	These criteria were not examined, though permitting process was included in some codes; this, too, might be regulated outside of code
Mandate acceptance of food assistance benefits	Market in Code	There was no evidence of this among mentions of market in the code

Why do markets need to be defined explicitly in municipal code? The obvious answer is because zoning law dictates that if a use is not explicitly included in zoning code as allowed, it is otherwise illegal. Thus, to ensure markets have legal protection

to operate, they need to be included. However, what if a market can be interpreted as fitting into another definition, such as open-air business or temporary outdoor use, grouped with flea markets, or similar categories? Markets are frequently a strategy used by nonprofits and municipalities to increase healthy food access and decrease diet-related health disparities [16]. One hundred years ago, markets that emerged from Progressive-era reformers were built for similar reasons. These reformers, along with planners from the time, thought food markets should be part of governments' public service responsibility, as food is as much of a necessity as water, transportation, and sanitation [61]. Markets are different than fireworks stands or flea markets, for instance, because of this public purpose. As a result, they merit their own definition, and then different treatment in the code for such considerations as permissible operating locations. For instance, farmers market policy recommendations cited in Table 2 suggest markets should be allowed in all types of zoning districts because of the lack of access to fresh food retail close to people's homes in many (especially low-income and minority) American communities. The same case would not be relevant for a flea market, or other temporary uses such as an annual festival or fireworks stand. A flea market or craft market may, like a farmers market, be supporting local entrepreneurs and offering places for sociable community interaction. However, the access to fresh food—the core function of a market—makes it different. Those in the field of food planning note that food is inherently a part of planning decisions, as components of our food system occurs all around us, but that it is not actively considered as different from other types of activities. A grocery store may be considered in the same retail category as any other type of retail. COVID-19-era classifications of food retail (including markets in most places), along with agricultural activities, as essential services has highlighted what food policy and planning advocates and researchers have long asserted—that food is an essential, core community need meriting its own consideration in planning and policy, including (and especially) at the most local levels.

Despite a lack of attention to markets, in the fields of food policy and planning, there has been considerable attention on whether and how best practice policy recommendations have been adopted. This research and advocacy has focused primarily on the codification of urban agriculture. A growing body of recent research and gray literature describes increasing numbers of communities, of varying sizes and geographies, addressing this issue by adopting urban agriculture-related policies [29,35,72]. Supportive urban agriculture policy is seen as being necessary to allow both the establishing and continuation of urban agriculture activities. Just as with markets, if not explicitly included in zoning, these activities are by default illegal. Why, then, has research explored this question of policy implementation around urban agriculture but not markets? One could note that markets are a much longer standing (and more formal) urban institution and impact more people (as consumers and producers) than what are often small urban agriculture projects.

The difference is that urban agriculture is often a contentious issue, its activities rubbing against (1) what is seen as appropriate or not in an urban environment, (2) unclear definitions of what activities constitutes it and thus where it fits into land use plans, (3) where and whether food production is considered a 'best and highest use' of land in the economic development sense, and (4) related tenancy and displacement of urban agriculture activities [29,33]. Markets, while not without conflict around location, and perceived competition with brick-and-mortar business (including competition for parking), on the whole are not clouded in conflicts that urban agriculture is often engulfed in. By giving disproportionate attention to one type of food system activity (urban agriculture) because it causes headline-generating conflict puts other activities (like markets) at risk of being overlooked and ignored. Lessons from the history of markets in the US show that this is more than just a cautionary tale, and that markets have a pattern of falling in and out of municipal favor, and thus existence.

Another key issue related to several of this study's findings is that of market permanency. First, the presence in code represents an institutionalization of markets, and while not guaranteed, codification suggests permanency. Markets' underrepresentation in

code in itself suggests a lack of permanency. The lack of market definitions furthers this, suggesting that even as municipalities certainly know markets in their community exist (and may even be the ones operating them), by not defining and then placing them in land use and other code suggests that they may be viewed as temporary [73]. Additionally, the rise and fall of markets in the US over the last century shows that this could put markets at risk; markets' continued existence is not a given. Second, this study found that a minority of cities that had included markets in their code defined markets as temporary uses. Finally, the location of markets themselves—at least 40% of those in this study take place on streets or in parking lots—suggests both a secondary importance and an impermanency. In rural areas, there is often an abundance of space, but in urban areas space is more limited and contested. Markets can and do thrive in parking lots and on streets, and while this issue of market locations and permanency is an area needing future research, this author has observed that municipalities in Michigan (in particular smaller ones) who consider a market a core or aspirational part of their community tend to invest in permanent market structures, whether entirely dedicated to the market, or a multiuse pavilion in, for instance, a city park or plaza.

These issues of classification as temporary or permanent use can be placed in the context of a number of discourses. For example, urban agriculture can provide a cautionary tale around an activity being either perceived or defined as temporary, and the resultant displacement. Policy aims of urban agriculture advocates often include establishing it as a legitimate, permanent use, working to secure long-term leases of public land, move gardens into land trusts, and adding urban food production as an allowable use by right in zoning ordinances. In the way that modern urban agriculture has been threatened by speculative land investment, seen as a temporary use in otherwise "vacant" space, and often expelled under the excuse that it is not explicitly allowed (even if it has been allowed to exist for decades), so, too, is the risk to markets [23]. Moreover, as land in urban areas becomes more and more valuable, conflict over land uses, particularly for business or municipalities aiming to maximize profits from land sale or development, markets without this permanency may be at greater risk of repeating the fates they were met with multiple times in the last 120 years. The issue of market displacement emerged both when we contacted market management to clarify market characteristics for this study and in researching the historic presence of markets. In many cities markets (in the past and still today) have been forced to move locations, a disruptive and destabilizing occurrence for any enterprise.

The market policies, as recommended in best practice reports, assert that markets' exclusions from codified municipal policy puts their existence at risk. However, might the pattern of markets' rises and falls be acceptable? From an economics perspective, there will be natural balancing between supply and demand; markets will appear and disappear as these fluctuate. However, a primary aim of markets past and present has been to assure or reintroduce an affordable, accessible food supply [16,23]. Water, sanitation systems, and electricity are not seen as negotiable public amenities, filling essential functions for modern life, and thus are owned or regulated by government in order to ensure their consistent provision. Food, however, in being transitioned to the domain of private market in the 20th century, has led to deep disparities in food access in many urban areas that are devoid of supermarkets and plentiful with unhealthy options [26,74]. Even in the earliest days of privatization of food retail in the late 19th and early 20th century, municipalities still felt compelled to ensure consistent food access through public markets. Additionally, today, markets have received significant attention because of their ability to play that role. While periodic in occurrence, in that most markets operate only certain days of the week, and potentially only part of the year, periodic is not synonymous with temporary. Food will never be a temporary need.

This study also gathered previously uncompiled data about current and historic market trends. This is helpful because it provides context to help us understand how policies may affect markets differently. For instance, 72.7% of the cities hosted current

markets on public land. This has implications for the regulation and management of public space [73]. A statewide history of markets, has never been published in Michigan, and while this study only began to catalog their chronology, it opens the doors for further research that can help to understand the history of Michigan's local food system, and provide insight into the evolution of markets and market policies. Additionally, understanding the degree to which cities in Michigan still operate markets, and how that differs from national trends, elucidates a particularly direct role municipalities are playing still today in Michigan markets; this can inform approaches to policy and institutionalization of city's own operations.

- Limitations and considerations for future research

Examining only codes in Michigan does not allow generalization to other parts of the US, although the populations of cities included are not unlike city population ranges across the country. This study could be repeated in other states, or with other types of municipalities, such as townships. Additionally, the relatively small dataset may have limited the statistical analysis, especially when looking at the subsets of cities for whom markets are present in code.

This study does not assign a value to the presence of a policy, recognizing that the impact of a policy or regulation can be positive, negative, or neutral, depending on what audience is judging it [29]. The presence of a policy, then, does not automatically indicate support for an activity—in this case, farmers markets. Policy can do the opposite, such as restricting locations where a market can operate, or putting up regulatory barriers such through conditional use permits [17]. This study does not acutely assess—ordinance by ordinance—whether the presence of markets in code is positive or negative; it only assesses presence or absence; future research could examine that. Still, some generalizations can be made. This study posits that the absence of markets altogether in code is negative, because it leaves them in unclear regulatory space. Additionally, it assumes that the presence of markets has a degree of positivity, because it gives them a legal framework to work from; it defines the rules of the game. Their presence also acts as signal of markets being in the purview of the municipality and thus on the public, municipal agenda.

In this study, we used a Yes/No dichotomy for the presence or absence of markets, and therefore did not show the degrees of inclusion of some of the items in the recommended policies. Future studies could use content analysis tools or numeric scoring to uncover the nuances and differences among places where policies do exist.

Given that markets' presence in code was associated with cities having historic markets, this could suggest that the codification of markets may have been done during the first half of the 20th century. The age of ordinances was not considered in this study and is a limitation in understanding whether municipalities today consider or value markets as on their urban agendas. The types of policy instruments assessed in this study are, by their nature, cumulative. Codes of ordinances are a collection of all of the laws that have been passed or amended, minus those that have been later struck down. They represent the combined thinking and agendas of those in office, civil servant staff, and (in theory) the public from multiple eras. This is unlike other policy instruments such as master plans that are updated or rewritten periodically, each time giving comprehensive look at a community's vision and priorities at that moment in time. Future research will examine further the development of market policies over time, including by tracing the development and amendment of policies, and by looking at markets' presence in master plans. This follow-up study will also compare market representation in master plans to the findings in this study of market presence in codes. It will contrast how markets are included among different types of policy instruments, hypothesizing that markets are more often present in plans, i.e., the aspirational documents of a city's future, than in zoning and other codes, where these ideas become law.

Overall, further research is needed to uncover the reasons for this underrepresentation and the implications to both current and historic markets, as well as gain insight from those cities that have codified markets.

6. Conclusions

This manuscript is the first looking at how best practice/recommended market policies have or have not been codified into law in Michigan cities. Despite some other areas of sustainable food systems policy—notably urban agriculture—having received a lot of attention in both grey and research literature, there is a significant gap in any research discussing this in terms of markets across the United States. There is also a gap in documentation of markets, both historically and currently, across geographic areas—in this case, in cities of a certain size in one state. This manuscript also begins to bring together that data through a compilation of historic and current records.

This study catalogued some of the characteristics of markets among Michigan cities, and began to explore how and where they are included in codified municipal law. It found that such codification is greatly underrepresented, particularly in comparison to the numbers of cities that currently operate markets. Today, as markets are still experiencing a period of popularity with communities and municipalities, under the assumption that these bodies believe that they should continue, it is important to consider how municipalities impact markets' ability to last. Among cities in Michigan with a population of over 10,000, more than four in ten municipalities operate markets, and three-quarters allow markets in their jurisdiction to set up on public property. In addition to those direct governance roles, municipalities regulate land use through their zoning authority, and by default deem markets illegal by not including them as an expressly permitted land use. Given markets, at minimum, a legal status through inclusion in the zoning code is important for their continuation.

Does a market's presence in code guarantee its resilience over time? Of course not. However, it takes away some of the barriers to markets both beginning and persisting. Additionally, their inclusion in code can represent that a municipality both validates and values markets as an important function in their jurisdiction, at least in contrast to the devaluing that their exclusion suggests. As markets are still experiencing a period of popularity in the United States, further institutionalizing them in code now can cement their role both in the landscape of cities and of their municipal organizations.

When planners Pothukuchi and Kaufmann wrote their seminal article about the role of food on the urban agenda, they noted that food as a policy issue was often invisible in urban life, despite its significance as a basic need [75]. While the work that has followed in the last two decades has changed that, markets—as visible and tangible as they are—are too often invisible amidst the municipal food policy and planning spheres. Overall, markets as a sector have been given very little attention in research literature, mostly covered in historic retrospect [76] and in laying out future aspirations for their role in food systems [77]. Moreover, market sector data from the USDA have been gathered irregularly, making it difficult to understand and analyze sector trends, or to situate research findings. While popular and at times cited as central to a sustainable local food system and as a policy and environmental strategy to promote healthy food access, markets as a sector are in need of attention—in the form of data, research, financial support, and policy. Significant attention, coupled with philanthropic and government funding, has been given to the food access and nutrition incentive programs built on the backs of (and entirely dependent on) markets. Rarely, though, has this type of investment (in research, financial support, or as this study finds, through enacted policy) been made in markets themselves, a sector still almost half run by volunteers [5]. This may both explain the underrepresentation in policy *and* the importance of shifting attention to these institutions that so many deem vital. If there is interest—as much literature and practice suggests that there is—for markets to last, then both cities and advocates should turn their attention to how markets can be both supported and protected through local policy and planning. Academic research on farmers markets as both individual organizations and as a sector could support markets in many ways, filling major gaps both about demographics and trends among markets overall, examining the role of different actors (municipal and otherwise) in the resilience of

markets, and understanding further the role of markets amidst the accelerating fields of sustainable food policy and planning.

Author Contributions: Research design, A.M.E.; data curation, A.M.E.; formal analysis, A.M.E.; interpretation of data, A.M.E. and G.J.C.; writing—original draft preparation, A.M.E.; writing—revising, A.M.E. and G.J.C.; visualization, A.M.E.; supervision, G.J.C. Both authors have read and agreed to the published version of the manuscript.

Funding: This research received no external funding.

Informed Consent Statement: Not applicable, this study did not involve humans or animals.

Data Availability Statement: Study was based on publicly-available data. Compiled data set is available upon request to the authors.

Acknowledgments: Thank you to the Michigan Farmers Market Association for providing general guidance on farmers markets in Michigan, and to Jason Evans for GIS support.

Conflicts of Interest: The authors declare no conflict of interest.

Appendix A. Michigan Enabling Legislation: Cities, Zoning, and DDAs

Appendix A.1. Michigan Home Rule City Act

In Michigan, the Home Rule City Act enacted by the state legislative (Public Act 279 of 1909) grants the authority for cities to create their own government through adoption of a city charter. The charter outlines how the government is structured and operates, including elections and the makeup of its governing body, taxation and budgets, maintenance of public peace and health, general authorities and responsibilities, and adoptions of local laws. Changes to the charter require both action from the legislative body and a vote of the public, and such are not often modified.

A 1929 amendment to PA 279 specified the types of public property a city could own. The list includes municipal buildings such as city hall and police states, parks and recreation grounds and facilities, utility systems, among other areas. Market houses and market places are among this list, establishing explicitly that markets are within the city's possible domains.

117.4e Public property; condemnation of private property; permissible charter provisions.

Sec. 4e. Each city may in its charter provide:

(1) For the acquisition by purchase, gift, condemnation, lease, construction or otherwise, either within or without its corporate limits and either within or without the corporate limits of the county in which it is located, of the following improvements including the necessary lands therefor, viz.: City hall, police stations, fire stations, boulevards, streets, alleys, public parks, recreation grounds, municipal camps, public grounds, zoological gardens, museums, libraries, airports, cemeteries, public wharves and landings upon navigable waters, levees and embankments, watch-houses, city prisons and work houses, penal farms, institutions, hospitals, quarantine grounds, electric light and power plants and systems, gas plants and systems, waterworks plants and systems, sewage disposal plants and systems, market houses and market places, office buildings for city officers and employees, public works, and public buildings of all kinds; and for the costs and expenses thereof; Municipal codes are the collection of laws passed by a local governing body. They may be referred to as ordinances or bylaws. An ordinance— equivalent to a statute at the state or federal level— is the legislation that has passed that are then codified to become part of the code of ordinances. Ordinances may be created, deleted, or amended by vote of the legislative body, as outlined in the city charter.

Appendix A.2. Michigan Zoning Enabling Act

In the United States, municipalities' land use authority, as codified in their zoning ordinance, regulates what types of land use are allowable in a given area, usually called a zoning district. By default, if a use is not expressly defined and permitted in a zoning ordinance, it is illegal. Zoning ordinances are examined separately than the rest of the code of ordinances in this study. This is because they are different in nature than the rest of the code; they spell out allowable land uses through a series of definitions, maps, and regulations. They are granted this authority under a different state law that PA279. The Michigan Zoning Enabling Act (Act 110 of 2006) empowers and outlines how local units of government (including cities and other forms of local government, be them townships, villages, and counties) can authorize and regulate land use. Act 110 provides for a limited set of definitions of some land uses, though local zoning ordinances include their own more comprehensive lists. It grants portions of authority of land use to a municipal Planning Commission and a Zoning Commission, the latter of whom may make legal rulings on issues related to the ordinance So, while the zoning ordinance is part of the code of ordinances, it operates somewhat differently.

Appendix A.3. Michigan Downtown Development Authorities

Under the Downtown Development Authority (Act 197 of 1975, revoked and replaced with Act 57 in 2018), Michigan municipalities with a downtown district primarily used for business can create an authority that can use a tax increment finance mechanism to raise funds that must be used to catalyze development and improve conditions in that district. The board may be appointed by city council, (though in municipalities of less than 5000 can be the same as the planning commission) and include the municipality's chief executive (e.g., the mayor) and other board members, the majority of whom should have a financial interest (business or property owners, employees or residents) in the district.

Appendix B. Code and Charter Search Terms

The following describes what search results were included, excluded, or considered on a case-by-case basis during municipal code, charter, and zoning ordinance searches.

Included:

- Farmers market,
- Market house,
- Public market,
- City market,
- Municipal market, and
- Marketplaces (and spaces).

Excluded:

- Market study or market analysis or market needs assessment or market demand,
- Market area,
- Utility market,
- Housing market,
- Market, when referring to the general concept of an economic market, versus a physical place,
- Flea market,
- Open market,
- Fair market value, and
- Outdoor market lot type.

Depends on context:

- Marketplace. Reading further around this section was needed to determine the intent of this term, but after doing so, it was fairly straightforward. Some cities had a zoning or commercial district they referred to as marketplace, but in reading it had nothing to do with a farmers market or similar market. Those instances were not

included. In other places—most commonly in city charters—part of the city's areas of responsibility included "marketplaces and market houses"—generally listed among other public amenities such as parks and sewers—and this author concludes, based on knowledge of historic development and operating of markets by municipalities, that those references intended the type of market in this study.
- Those were included.
- Food markets, fish markets, meat markets. Generally, these seemed to be referring to retail shops selling general or specific types of foods, but at other times they appeared to be referring to a farmers market or other type of public, multivendor market.
- Farm market. At times, this appeared intended to refer to a farmers market, i.e., a gathering of multiple vendors, and at other times seemed to reference a farm stand (single vendor).
- Open-air market (when context showed it was referring to a farmers' or produce market).
- Seasonal market (when context showed it was referring to a farmers' or produce market).

Appendix C. Historic Markets among Study Cities

The Table below shows all the Michigan markets in the study cities as represented in the three historic documents, their market type, and their operating organization, each as named in their respective report. Market names are not included, but each line represents a different market in that community. The historic documents sometimes show names for the markets, and others just list them by city (noting, for instance, how many of each type of market are in that city). The cells labeled "not-specified" refer to markets that are included in the 1919 document but were not detailed in market type or operator. The 1919 census report is a large national document, and while it includes a complete list of markets that existed in 1918, only a select number of cities' details were included in its tables describing market attributes.

Table A1. Historic Markets Among Study Cities in 1918, 1936, and 1948 [54,56,57].

		1918—Municipal Markets in Cities Having a Population of Over 30,000	1936—Public Produce Markets of Michigan	1948—Farmers' Produce Markets in the United States	1918—Municipal Markets in Cities Having a Population of over 30,000	1936—Public Produce Markets of Michigan	1948—Farmers' Produce Markets in the United States
City	**Year Market Founded**	**Type**	**Type**	**Type**	**Operator**	**Operator**	**Operator**
Adrian	1944	-	-	retail	-	-	municipal
Alpena	1944	-	-	retail	-	-	county
Ann Arbor	1920	-	retail	retail	-	municipal	municipal
Battle Creek	1928	(not specified)	retail	retail	(municipal)	municipal	municipal
Bay City	1927	(not specified)	regional wholesale	wholesale	(municipal)	county	municipal
Cadillac	1941	-	-	retail	-	-	municipal
Coldwater	1931	-	retail	retail	-	municipal	co-operative
Detroit	1891	wholesale-retail	wholesale-retail	wholesale	municipal	municipal	municipal
Detroit	1891	wholesale-retail	wholesale-retail	wholesale	municipal	municipal	municipal
Detroit	1920	-	retail	retail	-	municipal	municipal
Escanaba	1924	-	retail	retail	-	municipal	municipal
Ferndale	1928	-	retail	retail	-	municipal-county	municipal-county
Flint	1919	(not specified)	retail	retail	(municipal)	municipal	municipal
Grand Rapids	1922	retail	retail	retail	municipal	municipal	municipal
Grand Rapids	1896	wholesale	regional wholesale	wholesale	municipal	municipal	municipal
Grand Rapids	1917	-	retail	retail	-	municipal	municipal
Grand Rapids	1917	-	retail	-	-	municipal	-
Grand Rapids	1917	-	-	retail	-	-	municipal
Highland Park	1918	(not specified)	-	-	(municipal)	-	-
Jackson	1932	wholesale-retail	retail	retail	municipal	co-operative	co-operative
Kalamazoo	1924	wholesale-retail	retail-wholesale	retail	municipal	municipal	municipal
Lansing	1918	retail	retail-wholesale	retail	municipal	municipal	municipal
Midland	1945	-	-	retail	-	-	municipal
Monroe	1935	-	retail	retail	-	municipal	co-operative
Mt. Clemens	1931	-	retail	-	-	municipal	-
Muskegon	1921	-	retail-wholesale	-	-	farm bureau	-
Muskegon	1921	-	retail	-	-	farm bureau	-
Muskegon	1921	-	-	retail	-	-	municipal
Muskegon Heights	1932	-	-	retail	-	-	private
Pontiac	1925	-	retail-wholesale	retail	-	municipal-county	municipal-county
Port Huron	1933	-	retail-wholesale	retail	-	co-operative	co-operative
Royal Oak	1926	-	retail	retail	-	municipal-county	municipal-county
Saginaw	1914	retail	wholesale-retail	retail	municipal	municipal	municipal
Ypsilanti	1921	-	retail	retail	-	municipal	municipal

Those markets in parentheses were assumed but not confirmed to be municipally operated. There is a discrepancy in the founding date of the Battle Creek market, as it was listed in 1918 as a city with a municipal market, but later listed in 1936 with a founding date of 1918, i.e., two of the historic sources provided conflicting information. Repeating records, such as Detroit, are referring to multiple, similar markets at different locations in a city that were founded in the same year.

Appendix D. Additional Pearson's Chi-Square Test Results—Cities with Current Markets Only

Table A2. *p*-values for Pearson's Chi-Square Test or Fisher's Exact Tests of Association—Cities with Current Markets Only.

	Market Defined	Market in Charter	Market in Code	Market Zoning-Land Use	Market Section
Current Market	-	-	-	-	-
Historic Market	0.1	0.561	0.02	0.292	0.001
Market Operator	0.268	0.632	0.243	0.646	0.313
Market Location	0.253	0.001	0.044	0.364	0.002
Land Ownership	0.124	0.9	0.068	0.14	0.005

Table A3. Cramer's V or Phi: Strength of Association—Cities with Current Markets Only.

	Market Defined	Market in Charter	Market in Code	Market Zoning-Land Use	Market Section	df
Current Market	-	-	-	-	-	-
Historic Market			0.314		0.449	1
Market Operator						2
Market Location		0.583	0.449		0.572	5
Land Ownership			0.301		0.48	2

References

1. Morales, A. Public Markets as Community Development Tools. *J. Plan. Educ. Res.* **2009**, *28*, 426–440. [CrossRef]
2. Parham, S. *From the Agora to the Modern Marketplace: Food Markets as Landscapes of Pleasure, Purpose and Plenty in Historical Review*; Routledge: London, UK, 2018. [CrossRef]
3. Vitiello, D.; Brinkley, C. The Hidden History of Food System Planning. *J. Plan. Hist.* **2014**, *13*, 91–112. [CrossRef]
4. Lee, E.; Dalton, J.; Ngendahimana, D.; Bebo, P.; Davis, A.; Remley, D.; Smathers, C.; Freedman, D.A. Consensus Modeling to Develop the Farmers' Market Readiness Assessment and Decision Instrument. *Transl. Behav. Med.* **2017**, *7*, 506–516. [CrossRef] [PubMed]
5. U.S. Department of Agriculture. National Farmers Market Managers 2019 Summary. 2020. Available online: https://downloads.usda.library.cornell.edu/usda-esmis/files/pz50hd694/gx41n598k/jd473j98z/nfar0820.pdf (accessed on 6 April 2021).
6. Tropp, D. *Why Local Food Matters: The Rising Importance of Locally-Grown Food in the U.S. Food System*; U.S. Department of Agriculture, Agricultural Marketing Service: Washington, DC, USA, 2014. Available online: https://www.ams.usda.gov/sites/default/files/media/Why%20Local%20Food%20Matters.pdf (accessed on 6 April 2021).
7. Shaffer, J.; Cox, B. *USDA Releases New Farmers' Market Statistics*; U.S. Department of Agriculture: Washington, DC, USA, 2006. Available online: http://www.dairyprogramhearing.com/ams.printDataf840f840.html (accessed on 6 April 2021).
8. Farmers Market Coalition. Farmers Markets Support Healthy Communities. Available online: https://farmersmarketcoalition.org/education/farmers-markets-support-healthy-communities/ (accessed on 25 January 2021).
9. Figueroa-Rodríguez, K.A.; Álvarez Ávila, M.; Castillo, F.; Rindermann, R.; Figueroa, B. Farmers' Market Actors, Dynamics, and Attributes: A Bibliometric Study. *Sustainability* **2019**, *11*, 745. [CrossRef]
10. Bowling, A.B.; Moretti, M.; Ringelheim, K.; Tran, A.; Davison, K. Healthy Foods, Healthy Families: Combining Incentives and Exposure Interventions at Urban Farmers' Markets to Improve Nutrition among Recipients of US Federal Food Assistance. *Health Promot. Perspect.* **2016**, *6*, 10–16. [CrossRef] [PubMed]
11. Jilcott Pitts, S.B.; Wu, Q.; Demarest, C.L.; Dixon, C.E.; Dortche, C.J.; Bullock, S.L.; McGuirt, J.; Ward, R.; Ammerman, A.S. Farmers' Market Shopping and Dietary Behaviours Among Supplemental Nutrition Assistance Program Participants. *Public Health Nutr.* **2015**, *18*, 2407–2414. [CrossRef] [PubMed]
12. Ringstrom, E.; Born, B. *Food Access Policy and Planning Guide*; Northwest Center for Livable Communities, University of Washington—Department of Urban Design and Planning: Seattle, WA, USA, 2011. Available online: http://www.nyc.gov/html/ddc/downloads/pdf/ActiveDesignWebinar/King%20County%20Food%20Access%20Guide.pdf (accessed on 6 April 2021).

13. Neuner, K.; Kelly, S.; Raja, S. *Planning to Eat? Innovative Local Government Plans and Policies to Build Healthy Food Systems in the United States*; Food Systems Planning and Healthy Communities Lab, University at Buffalo, The State University of New York: Buffalo, NY, USA, 2011. Available online: https://ubwp.buffalo.edu/foodlab/wp-content/uploads/sites/68/2017/06/planningtoeat5.pdf (accessed on 6 April 2021).
14. U.S. Centers for Disease Control and Prevention. Current Practices in Developing and Supporting Farmers' Markets. 2016. Available online: https://stacks.cdc.gov/view/cdc/78756 (accessed on 6 April 2021).
15. Farmers Market Coalition. About Farmers Markets. Available online: https://farmersmarketcoalition.org/education/qanda/ (accessed on 25 January 2021).
16. Project for Public Spaces; Columbia University Institute for Social and Economic Research and Policy. *Farmers Markets as a Strategy to Improve Access to Healthy Food for Low-Income Families and Communities*; Project for Public Spaces: New York, NY, USA, 2013. Available online: www.pps.org/wp-content/uploads/2013/02/RWJF-Report.pdf (accessed on 25 January 2021).
17. Hamilton, N.D. *Farmers' Market Policy: An Inventory of Federal, State, and Local Examples*; Drake University Agricultural Law Center: Des Moines, IA, USA, 2005. Available online: https://s3.amazonaws.com/aws-website-ppsimages-na05y/pdf/FarmersMarketPolicyPaperFINAL.pdf (accessed on 6 April 2021).
18. Vaage, A.; Taylor, G. *Municipal Zoning for Local Foods in Iowa: A Guidebook for Reducing Local Regulatory Barriers to Local Foods*; Leopold Center, Iowa State University Extension and Outreach: Ames, IA, USA, 2015; p. 117. Available online: https://store.extension.iastate.edu/product/15801 (accessed on 6 April 2021).
19. Daniel, K.; Nestico, S. *Policies That Support Local Fresh Food Markets: International Examples*; HealthBridge International: Ottawa, ON, Canada, 2015. Available online: https://healthbridge.ca/images/uploads/library/Policies_that_Support_Local_Fresh_Food_Markets_final.pdf (accessed on 6 April 2021).
20. National Policy and Legal Analysis Network (NPLAN) to Prevent Childhood Obesity. Establishing Land Use Protections for Farmers' Markets. 2009. Available online: https://www.ca-ilg.org/sites/main/files/file-attachments/resources__establishing20land20use20protections20for20farmers2720markets_final_091203.pdf?1441322984 (accessed on 19 January 2021).
21. Hodgson, K.; Campbell, M.C.; Bailkey, M. *Urban Agriculture: Growing Healthy, Sustainable Places*; American Planning Association: Chicago, IL, USA, 2011; p. 145. Available online: https://planning-org-uploaded-media.s3.amazonaws.com/publication/book_paperback/PAS-Report-563.pdf (accessed on 6 April 2021).
22. Morales, A.; Kettles, G. Zoning for Public Markets and Street Vendors. In *Zoning Practice*; American Planning Association: Chicago, IL, USA, 2009. Available online: https://www.planning.org/publications/document/9027458/ (accessed on 6 April 2021).
23. Miller, S.; Thompson, J.; Kalb, M. *Building Healthy Foundations for Farmers Markets: Recommendations for Cities and Counties*; Community Food Security Coalition: Portland, OR, USA, 2013. Available online: https://farmersmarketcoalition.org/wp-content/uploads/2013/10/FMC_CFCS_Farmers_Market_Brief.pdf (accessed on 6 April 2021).
24. American Planning Association. *APA Policy Guide on Community and Regional Food Planning*; American Planning Association: Chicago, IL, USA, 2007. Available online: https://www.planning.org/policy/guides/adopted/food.htm (accessed on 25 January 2021).
25. Clippinger, E.; Balkus, O.; Rice, C.; Nielsen, A.; Broad Leib, E. *Good Laws, Good Food: Putting Local Food Policy to Work for Our Communities*; Harvard Law School Food Law and Policy Clinic and Johns Hopkins Center for a Livable Future: Boston, MA, USA, 2017. Available online: https://www.chlpi.org/wp-content/uploads/2013/12/good-food-good-laws_toolkit-10.23.2017.pdf (accessed on 6 April 2021).
26. Feldstein, L.M. Zoning and Land Use Controls: Beyond Agriculture. *Maine Law Rev.* **2012**, *65*, 467.
27. Martinez, S.W. Policies Supporting Local Food in the United States. *Agriculture* **2016**, *6*, 43. [CrossRef]
28. Wooten, H.; Ackerman, A. *From the Ground Up: Land Use Policies to Protect and Promote Farmers' Markets*; ChangeLab Solutions: Oakland, CA, USA, 2013. Available online: http://changelabsolutions.org/sites/default/files/From_the_Ground_Up-Farmers_Markets_FINAL_20130415.pdf (accessed on 6 April 2021).
29. Meenar, M.; Morales, A.; Bonarek, L. Regulatory Practices of Urban Agriculture: A Connection to Planning and Policy. *J. Am. Plann. Assoc.* **2017**, *83*, 389–403. [CrossRef]
30. Brinkley, C.; Vitiello, D. From Farm to Nuisance: Animal Agriculture and the Rise of Planning Regulation. *J. Plan. Hist.* **2014**, *13*, 113–135. [CrossRef]
31. Mukherji, N.; Morales, A. Zoning for Urban Agriculture. In *Zoning Practice*; American Planning Association: Chicago, IL, USA, 2010.
32. Blecha, J. Regulating Backyard Slaughter: Strategies and Gaps in Municipal Livestock Ordinances. *J. Agric. Food Syst. Community Dev.* **2015**, *6*, 33–48. [CrossRef]
33. Butler, W.H. Welcoming Animals Back to the City: Navigating the Tensions of Urban Livestock through Municipal Ordinances. *J. Agric. Food Syst. Community Dev.* **2012**, *2*. [CrossRef]
34. Haines, A.L. What Does Zoning Have to Do with Local Food Systems? *J. Agric. Food Syst. Community Dev.* **2018**, *8*, 175–190. [CrossRef]
35. Halvey, M.R.; Santo, R.E.; Lupolt, S.N.; Dilka, T.J.; Kim, B.F.; Bachman, G.H.; Clark, J.K.; Nachman, K.E. Beyond Backyard Chickens: A Framework for Understanding Municipal Urban Agriculture Policies in the United States. *Food Policy* **2020**, 102013. [CrossRef]

36. Horst, M.; McClintock, N.; Hoey, L. The Intersection of Planning, Urban Agriculture, and Food Justice A Review of the Literature. *J. Am. Plan. Assoc.* **2017**, *83*, 277–295. [CrossRef]
37. Doernberg, A.; Horn, P.; Zasada, I.; Piorr, A. Urban Food Policies in German City Regions: An Overview of Key Players and Policy Instruments. *Food Policy* **2019**, *89*, 101782. [CrossRef]
38. Sibbing, L.; Candel, J.; Termeer, K. A Comparative Assessment of Local Municipal Food Policy Integration in The Netherlands. *Int. Plan. Stud.* **2019**, 1–14. [CrossRef]
39. Moschitz, H. Where is Urban Food Policy in Switzerland? A Frame Analysis. *Int. Plan. Stud.* **2018**, *23*, 180–194. [CrossRef]
40. Morales, A. Marketplaces: Prospects for Social, Economic, and Political Development. *J. Plan. Lit.* **2011**, *26*, 3–17. [CrossRef]
41. Jepson, E.; Haines, A. Zoning for Sustainability. *J. Am. Plann. Assoc.* **2014**, *80*, 239–252. [CrossRef]
42. Pitts, S.B.J.; Gustafson, A.; Wu, Q.; Mayo, M.L.; Ward, R.K.; McGuirt, J.T.; Rafferty, A.P.; Lancaster, M.F.; Evenson, K.R.; Keyserling, T.C. Farmers' Market Use Is Associated with Fruit and Vegetable Consumption in Diverse Southern Rural Communities. *Nutr. J.* **2014**, *13*, 1. [CrossRef]
43. Jilcott Pitts, S.B.; Acheson, M.L.; Ward, R.K.; Wu, Q.; McGuirt, J.T.; Bullock, S.L.; Lancaster, M.F.; Raines, J.; Ammerman, A.S. Disparities in Healthy Food Zoning, Farmers' Market Availability, and Fruit and Vegetable Consumption Among North Carolina Residents. *Arch. Public Health* **2015**, *73*, 35. [CrossRef] [PubMed]
44. Mayo, M.L.; Pitts, S.B.J.; Chriqui, J.F. Associations Between County and Municipality Zoning Ordinances and Access to Fruit and Vegetable Outlets in Rural North Carolina. *Prev. Chronic Dis.* **2013**, *10*, E203. [CrossRef] [PubMed]
45. Minaker, L.M.; Olstad, D.L.; Thompson, M.E.; Raine, K.D.; Fisher, P.; Frank, L.D. Associations Between Frequency of Food Shopping at Different Store Types and Diet And Weight Outcomes: Findings From The NEWPATH Study. *Public Health Nutr.* **2016**, *19*, 2268–2277. [CrossRef] [PubMed]
46. Robles, B.; Montes, C.E.; Nobari, T.Z.; Wang, M.C.; Kuo, T. Dietary Behaviors among Public Health Center Clients with Electronic Benefit Transfer Access at Farmers' Markets. *J. Acad. Nutr. Diet.* **2017**, *117*, 58–68. [CrossRef] [PubMed]
47. Pellegrino, S.; Bost, A.; McGonigle, M.; Robien, K.; Rosen, L.; Colón-Ramos, U. *Evaluating Fruit and Vegetable Intake among Farmers' Market Incentive Participants in DC*; Milken Institute School of Public Health Poster Presentations: Washington, DC, USA, 2016.
48. Pellegrino, S.; Bost, A.; McGonigle, M.; Rosen, L.; Peterson-Kosecki, A.; Colon-Ramos, U.; Robien, K. Fruit and Vegetable Intake Among Participants in A District of Columbia Farmers' Market Incentive Programme. *Public Health Nutr.* **2018**, *21*, 601–606. [CrossRef]
49. van den Bogerd, N.; Maas, J.; Seidell, J.C.; Dijkstra, S.C. Fruit and Vegetable Intakes, Associated Characteristics and Perceptions of Current and Future Availability in Dutch University Students. *Public Health Nutr.* **2018**, 1–9. [CrossRef]
50. Savoie-Roskos, M.; Durward, C.; Jeweks, M.; LeBlanc, H. Reducing Food Insecurity and Improving Fruit and Vegetable Intake Among Farmers' Market Incentive Program Participants. *J. Nutr. Educ. Behav.* **2016**, *48*, 70–76.e1. [CrossRef] [PubMed]
51. Vedung, E. Policy Instruments: Typologies and Instruments. In *Carrots, Sticks & Sermons: Policy Instruments and Their Evaluation*, 4th ed.; Bemelmans-Videc, M.-L., Rist, R.C., Vedung, E., Eds.; Transaction Publications: New Brunswick, NJ, USA, 2007; pp. 21–58.
52. Pyle, J. Farmers' markets in the United States: Functional anachronisms. *Geogr. Rev.* **1971**, 167–197. [CrossRef]
53. Mayo, J.M. The American Public Market. *J. Archit. Educ.* **1991**, *45*, 41–57. [CrossRef]
54. Wann, J.L.; Cake, E.W.; Elliot, W.H.; Burdette, R.F. *Farmers' Produce Markets in the United States*; U.S. Department of Agriculture: Washington, DC, USA, 1948.
55. Kurland, N.B.; Aleci, L.S. From Civic Institution to Community Place: The Meaning of the Public Market in Modern America. *Agric. Hum. Values* **2015**, *32*, 505–521. [CrossRef]
56. U.S. Census Bureau. *Municipal Markets in Cities Having a Population of over 30,000*; Government Printing Office: Washington, DC, USA, 1919.
57. Ulrey, O. *Public Produce Markets of Michigan*; Agricultural Experiment Station, Michigan State College of Agriculture and Applied Science: East Lansing, MI, USA, 1936.
58. Tangires, H.; Schuyler, P.D.; Conniff, G.; Muller, P.E.K. *Public Markets and Civic Culture in Nineteenth-Century America*; Johns Hopkins University Press: Baltimore, MD, USA, 2003. [CrossRef]
59. Tangires, H. Feeding the Cities: Public markets and municipal reform in the progressive era. *Prologue Mag. Spring* **1997**, *29*, 17.
60. Guardia, M.; Bañales, J.; Garriga, S. Markets and Market Halls. In *The Routledge Companion to the History of Retailing*, 1st ed.; Routledge: London, UK, 2018; pp. 101–118.
61. Donofrio, G. Attacking Distribution: Obsolescence and Efficiency of Food Markets in the Age of Urban Renewal. *J. Plan. Hist.* **2014**, *13*, 136–159. [CrossRef]
62. Donofrio, G.A. Feeding the City. *Gastronomica* **2007**, *7*, 30–41. [CrossRef]
63. Brown, A. Counting Farmers Markets. *Geogr. Rev.* **2001**, *91*, 655–674. [CrossRef]
64. Salamon, L. The New Governance and the Tools of Public Action. *Fordham Urban Law J.* **2002**, *28*. Available online: https://ir.lawnet.fordham.edu/ulj/vol28/iss5/4/ (accessed on 6 April 2021).
65. Roberts, W. *The No-Nonsense Guide to World Food: New Edition*; New Internationalist: Oxford, UK, 2013. Available online: https://books.google.co.uk/books?id=hn76AwAAQBAJ (accessed on 6 April 2021).
66. U.S. Department of Commerce, U.S. Census Bureau. *U.S. Census Bureau, Michigan: 2010, Population and Housing Unit Counts*; U.S. Census Bureau: Washington, DC, USA, 2012.

67. State of Michigan. Michigan Minor Civil Divisions (Cities & Townships) (v17a). In *Michigan Open Data*; State of Michigan: Lansing, MI, USA, 2019.
68. State of Michigan. Michigan Counties (v17a). In *Michigan Open Data*; State of Michigan: Lansing, MI, USA, 2019.
69. Michigan Farmers Market Association. Michigan Find a Farmers Market Directory. Available online: https://mifma.org/find-a-farmers-market/ (accessed on 25 January 2021).
70. Michigan Farmers Market Association. About MIFMA. Available online: https://mifma.org/about/ (accessed on 25 January 2021).
71. Khamis, H. Measures of Association: How to Choose? *J. Diagn. Med. Sonogr.* **2008**, *24*, 155–162. [CrossRef]
72. Brinkley, C. Avenues into Food Planning: A Review of Scholarly Food System Research. *Int. Plan. Stud.* **2013**, *18*, 243–266. [CrossRef]
73. Francis, M.; Griffith, L. The Meaning and Design of Farmers' Markets as Public Space: An Issue-Based Case Study. *Landsc. J.* **2011**, *30*, 261–279. [CrossRef]
74. Leib, E.M.B. All (Food) Politics is Local: Increasing Food Access through Local Government Action. *Harv. Law. Policy Rev.* **2013**, *7*. [CrossRef]
75. Pothukuchi, K.; Kaufman, J.L. Placing the Food System on the Urban Agenda: The Role of Municipal Institutions in Food Systems Planning. *Agric. Hum. Values* **1999**, *16*, 213–224. [CrossRef]
76. Brown, A. Farmers' Market Research 1940–2000: An Inventory and Review. *Am. J. Altern. Agric.* **2002**, *17*, 167–176. [CrossRef]
77. Cross, J.; Morales, A. *Street Entrepreneurs: People, Place and Politics in Local and Global Perspective*; Routledge: London, UK, 2007; Volume 66, pp. XVIII–XXII. [CrossRef]