

CLOSUP Student Working Paper Series
Number 22

April 2017

Feeding Urbanized Farmland: Food Policy in the Midwest

Claire M. Griffin, University of Michigan

This paper is available online at <http://closup.umich.edu>

Papers in the CLOSUP Student Working Paper Series are written by students at the University of Michigan. This paper was submitted as part of the Winter 2017 course *Environ 302: Energy and Environmental Policy Research*, made possible through funding provided by the University of Michigan Third Century Initiative.

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Center for Local, State, and Urban Policy
Gerald R. Ford School of Public Policy
University of Michigan

FEEDING URBANIZED FARMLAND: FOOD POLICY IN THE MIDWEST

Claire M. Griffin

Abstract:

The connection of food systems to the urban environment cannot be ignored as cities require outside production to provide the bulk of resources needed to sustain their residents' physical, social, and economic needs. Literature suggests that food policy is coming to the forefront of city planning as case studies of various cities are encouraging planners to incorporate food policy into city planning; this research looks to quantify the extent to which this planning is happening, focusing on the Midwest region of the United States. This inventory of the largest Midwestern cities' comprehensive plans shows that in this region, most cities have not yet incorporated food policy. Among those that do, most plans focus on food access, public health, and land use, allowing for integration of food policy among diverse disciplines.

Introduction:

Food policy has historically been thought of as a responsibility primarily of the federal government: the Food and Drug Administration, the United States Department of Agriculture, food stamps, and school lunch programs. These policies regulate the production, processing, distribution, purchasing, consumption, and disposal of food. Additionally, food policy was formerly regarded as synonymous with agricultural policy, and largely taken up as a rural issue. Agricultural and food policy, though, are becoming increasingly distinct entities. Food policy is coming to the forefront of city planning as urban sprawl claims more land for development and federal policies are limited in policy provision at the local level. Food systems are inherently tied to traditional planning focuses such as transportation, economic development, and environmental planning. More specifically, this concerns designating land use, food transportation from

production to distribution centers, access and means of food distribution, public health, environmental constraints, and economic revenue and employment to the consideration of local planning.

This connection of food systems to the urban environment cannot be ignored as cities require outside production to provide the bulk of resources needed to sustain their residents' physical, social, and economic needs. 54% of the world lives in urban areas, a number that is only going to increase as the world's population is expected to grow by 2.5 billion people by 2050 (UN, 2014). "Managing urban areas has become one of the most important development challenges of the 21st century... and sustainable cities will be a major factor in [global] success" (UN, 2014). Cities must be able to sustain the basic needs of their populations—as housing is built up and then out, more agricultural land is being taken for urban development. "Urbanization puts pressure on food systems and natural resources. All cities can and must help build the sustainable, resilient food systems of the future," according to the director of the Food and Agriculture Organization (Jurriaans, 2016, p. 1). How has food policy been included in future-oriented comprehensive city plans?

Literature Review

Community programming is often implemented to begin the discussion of food systems at the governmental level, often through community gardens, farmer's markets, and community supported agriculture; however, these programs are limited by the absence of policy to provide governmental, legal, and institutional support (Raja, Born & Russel, 2008). Food policy councils advocate for effective policy within the local government through assessment and advising on a community's food system and comprehensive plans. Communities can then implement regulations to promote the food environment, including components in a comprehensive city

plan. Planning with the inclusion of food policy is important as zoning plays a crucial role not only in land development, but also in the character and needs of a community. Zoning can limit the presence of food distribution centers, whether they be restaurants, markets, vendors, or stores, acting as a barrier to businesses that can improve the food system while simultaneously promoting agricultural cultivation (Raja et al., 2008). Through six case studies of geographically diverse cities, PAS Report 554 detailed the importance of local assessment to provide the most effective policy for developing a viable community food system. These cities created healthful food environments through coordination of city and county governments with community groups to facilitate programs, policies, and regulations. Strategies for promoting food policy can be widespread and community-specific, so planning must be both regulatory and active.

As food systems and city planning are interconnected, 192 American Planning Association members of various concentrations were surveyed by Raja, Born, and Russell (2008). The results indicated widespread support for planning involvement in food issues, where planning for farmland preservation had the greatest support for planning priority. After this priority, the most support was for promotion of food access and planning mixed-use development to include destinations for food distribution (Raja et al., 2008). These planners largely supported modification of comprehensive plans and zoning codes to include community and regional food issues, indicating the priority that food policy should have on a smaller, city-wide scale. This involves a community food system that is place-based and emphasizes local and regional networks, promoting environmental sustainability and social justice, rather than a conventional food system with industrial scale food production and processing, demanding many miles traveled to distribution.

Community concern for food policy is founded upon growing interest in environmental conservation, food consciousness, and rising energy and food costs creating issues with accessibility (Raja et al., 2008). As a start, many comprehensive plans in the United States include discussion of agricultural land preservation and local production, but often leave out food access and retail, necessitating a need for revision of planning priorities (LiveWell Colorado, n.d.). Food systems are threatened by population and development pressures, as “growth in the form of urban, suburban and exurban sprawl may be the single largest barrier to a food secure future” (Raja et al., 2008, p. 42). The inclusion of food systems in city plans allows for a community to have a successful and functioning food system in the future—just as the plans should be concerned with housing, employment, open space, and transportation.

Urban Sprawl

Urban sprawl has had a large impact upon the planning of cities, calling upon a city’s past growth trends to plan for the appropriate resources to sustain the future. This planning encompasses land use, designating which land may be used for development or agricultural production. Food is directly impacted by this, both in limits of production of local food and the ability to transport food to and distribute it within communities.

As land use directly correlates to sustainability of some food policies, Daniels (2001) critiques the pattern of sprawling development in the United States, claiming that it “is not economically, environmentally, or socially sustainable” (Daniels, 2001, p. 271). Various states have implemented different policies to attempt to limit sprawl by defined growth boundaries, affordable housing, redevelopment of brownfield sites, and mass transit connections. However, these policies are limited by poor connections in the government. Maryland has created a program to combat these limitations by working between state and local governments to create

efficient development with preserved lands, connecting management of growth with improvements upon cities. A component of their growth programs is rural legacy, which is designed to preserve rural lands through restricting their development. This is achieved through state investment that focuses on local and regional planning. The containment of sprawl is dependent upon rural land owners and the profitability of farming—factors that are reliant upon the economy, developmental pressures, and land-use regulations (Daniels, 2001). Food systems are economic, environmental, and social systems, demanding regulation of other forces, such as land development, to maintain the security of the population.

Globalization and technology as advancers of urban sprawl have had a large impact on the way food is approached nationally and locally. Wekerle (2004) redefines food issues as “food justice”, highlighting the “systemic change and the necessity for engaging in political and policy processes” when addressing food. Wekerle (2004) argues that food issues need to be brought back to a local policy to challenge globalization as a driver of urban sprawl and create local sustainability (Wekerle, 2004, p. 379). Toronto is chosen as a case study to focus on the feasibility of creating local policy by local government. The city focused on containing urban sprawl to preserve agricultural lands, proposing an initiative for urban agriculture development by zoning, energy, brownfield development, and a food eco-industrial park. After addressing the gaps in the policy, initiatives were later developed that included farmland preservation with food, health, and social services (Wekerle, 2004). The results of the focus on local resources demonstrate the benefits of community-based policy as it can engage resources in the most appropriate manner and create the most widespread benefits across disciplines to ensure food security in a growing city.

Environment and Agriculture

With the rise of technology comes changes in the way the world approaches agriculture. Beginning in 2004, there has been an increasing focus on and support for agricultural and food policies from legal, political, social, and economic institutions driven by increasing populations and urbanization (Kalen, 2011). As individuals have populated cities, they have lost a connection to their surrounding environment and food legislation has become a federal concern; communities have the resources to solve food and environmental problems through place-based local legislation. This change from rural to urban has resulted in large-scale farming, producing a negative impact on water, air quality, and human health with agricultural greenhouse gas emissions from use of fossil fuels. Many of these environmental problems can be solved by changing the control of food production from industrial agriculture and “root[ing] it within local food systems that attempt to ensure food access for the urban poor” (Kalen, 2011, p. 6).

The benefits of purchasing food locally have environmental, economic, and health effects, but Morgan (2009) argues against singularly local purchasing. In the consideration of sustainability, a product’s carbon footprint as a result of food miles transported cannot be the only factor to consider; local food may not be as sustainable as food imported from afar. Morgan (2009) supports a combined approach of locally-produced, seasonal food and fairly-traded global food to promote the highest level of sustainability. Cities should be concerned with maintaining their local community in so much as it fits in with the scope of the broader food system, using the nature of the global world to their advantage, and embracing the “phenomenal power [of food] to transform not just landscapes, but political structures, public spaces, societal relationships, [and] cities” (Morgan, 2009, p. 347). The seriousness of food policy is due in part

to a ‘new food equation,’ developed by the 2007-2008 food price surge and resulting concern of food security, climate change effects, land conflicts of food-stressed countries, and rapid urbanization demanding cities become more conscious of their ability to source food for a large population (Morgan, 2009). By focusing on a place-based system, a community can properly address its needs, prioritize them, and use other resources to serve the needs it cannot provide for.

Local Food Policy Response

Food policy is included in the comprehensive plans of Seattle, WA; Marin County, CA; New Orleans, LA; the Boston Metro Region, and the Southern California Association of Governments (Neuner, Kelly, & Raja, 2011). Cities across the United States are becoming concerned with food policy and its connected implications, using public policy to strengthen community food systems. Local governments can use official plans to have an influence upon on these food systems and the residents’ health through food access. References to the food system can appear under agricultural resources or environmental awareness, in sections about health, or be woven throughout the plan. These city plans can make recommendations, set goals, and institute new and continuing policy.

Literature points to a need for food policy, whether it be concerned with feeding a city’s population, managing development of agricultural lands, or sustainability of a community. While this policy is necessary, how many cities are including this in their own community focus? The Midwest, known for its large agricultural base and abundant natural resources, is the home of almost 60 million people (US Census Bureau, 2016). Most studies have addressed larger cities on the coasts of the United States; but does Midwest policy prioritize food in the same way? This inventory presents the trends of a region as it applies to food policy, focusing on a comparable

base of a cohesive area rather than a nationwide city-by-city approach that encompasses varying land types, demographics, and needs. This inventory of the city plans of Midwestern cities addresses the food policy priorities of a region marked by both its large urban centers and its agriculture.

Methods

How do larger Midwestern cities incorporate food policy into city planning?

To determine how larger Midwestern cities incorporate food policy into city planning, this paper inventories comprehensive city plans. The geographic scope of this study is limited to the Midwest region of the United States, as defined by United States Department of Agriculture's Agricultural Research Service. This map by the USDA ARS is divided by each region's natural resource base, the environment, and agricultural economy in order to focus on agricultural problems that affect American's every day from field to table (USDA ARS, 2017). Continuity across the region is a priority, allowing these parameters of the Midwest to best serve the inventory's purpose. The thirty largest cities in the Midwest are inventoried to analyze significant urban centers that have been impacted by urbanization, sprawl, and the resulting food issues. Each state appears at least twice on the inventory, ensuring analysis of each state within the region.

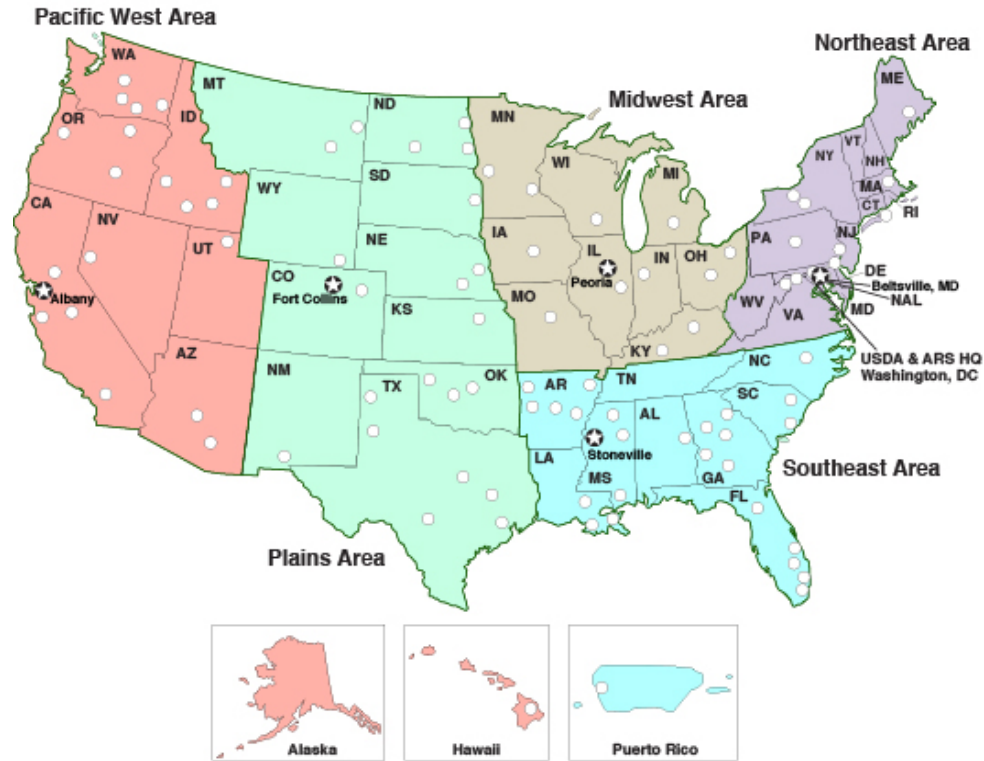


Figure 1: United States Department of Agriculture Agricultural Research Services Geographical Areas

Presence or absence of food policy within comprehensive city planning is the primary focus of this inventory. To identify whether the comprehensive plan includes food policy, I search each city’s comprehensive or master plan for the terms “food,” “nutrition,” and “agriculture.”

If the presence of food policy is determined, the context will be assigned by reading the text around the key word. The categories of context to be addressed are: economy, environment, food access, food security, land use, and public health. These contexts have been chosen as “the multifunctional character of the food system means that it has profound effects on a host of other sectors—including public health, social justice, energy, water, land, transport, and economic development” (Morgan, 2009, p. 341).

Table 1: Contextual categories for inventorying comprehensive plan food policy

Context	Description
Economy	Jobs; industry; local profits
Environment	Preservation; sustainability; emissions
Food Access	Distribution; food deserts; low income; food insecurity
Food Security	Ability to provide long term; ability to provide for a growing population
Land Use	Designation or restriction of land specifically for food production and distribution; urban agriculture
Public Health	Health concerns (diabetes, obesity), child development, community nutritional education, social justice

In addition to these categories, the inventory also includes population size, population density, and percentage of residents in poverty in each of the thirty cities. Population size and population density is important to demonstrate the significance of need that is put upon the food system of the city. The percentage of the city population in poverty is included to show the dependence upon food assistance. These demographic trends are important as the food system has a significant impact upon the economy, especially as food spending is a large part of consumer budget, and policy changes in the food system affect economic interests and city development (Austin & Overholt, 1988).

In some plans, the keywords are present but do not relate to food policy. “Agriculture” is frequently mentioned in comprehensive plans, but is indicating presence of land and restrictions to development. “Food,” if it is present and not referring to food policy, often refers to vendors in

public places. This does not fit into this inventory’s approach to food policy or the contextual categories. “Nutrition” is not present if it is not referencing food policy. If food policy is not present, it is indicated in the data.

Results

The following tables show the results of the inventory, reframing the data for ease of viewing and understanding. The full inventory can be found in Appendices A, B, and C for reference.

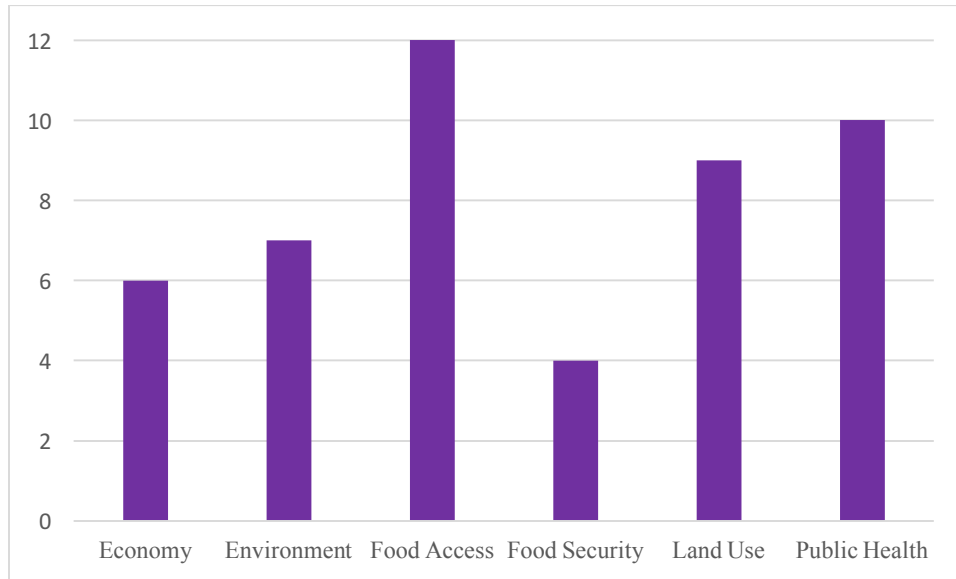
Table 2: Inclusion of Food Policy (alphabetical by state)

State	City	Include Food Policy?	State	City	Include Food Policy?
Illinois	Aurora ¹	No	Michigan	Warren ¹⁶	No
Illinois	Chicago ²	Yes	Minnesota	Minneapolis ¹⁷	Yes
Illinois	Rockford ³	Yes	Minnesota	St. Paul ¹⁸	No
Illinois	Joliet ⁴	No	Missouri	Independence ¹⁹	No
Illinois	Naperville ⁵	No	Missouri	Kansas City ²⁰	No
Indiana	Evansville ⁶	Yes	Missouri	Springfield ²¹	No
Indiana	Fort Wayne ⁷	No	Missouri	St. Louis ²²	No
Indiana	Indianapolis ⁸	Yes	Ohio	Akron ²³	Yes
Iowa	Cedar Rapids ⁹	No	Ohio	Cincinnati ²⁴	Yes
Iowa	Des Moines ¹⁰	Yes	Ohio	Cleveland ²⁵	No
Kentucky	Lexington ¹¹	Yes	Ohio	Columbus ²⁶	No
Kentucky	Louisville ¹²	No	Ohio	Dayton ²⁷	No
Michigan	Detroit ¹³	Yes	Ohio	Toledo ²⁸	No
Michigan	Grand Rapids ¹⁴	No	Wisconsin	Madison ²⁹	Yes
Michigan	Sterling Heights ¹⁵	No	Wisconsin	Milwaukee ³⁰	Yes

“Food” appeared in 70% of the plans, “nutrition” appeared in 30% of the plans, and “agriculture” appeared in 63% of the plans. 12 of the 30 cities inventoried include food policy in the comprehensive plan. Wisconsin is the only state that includes food policy in both inventoried

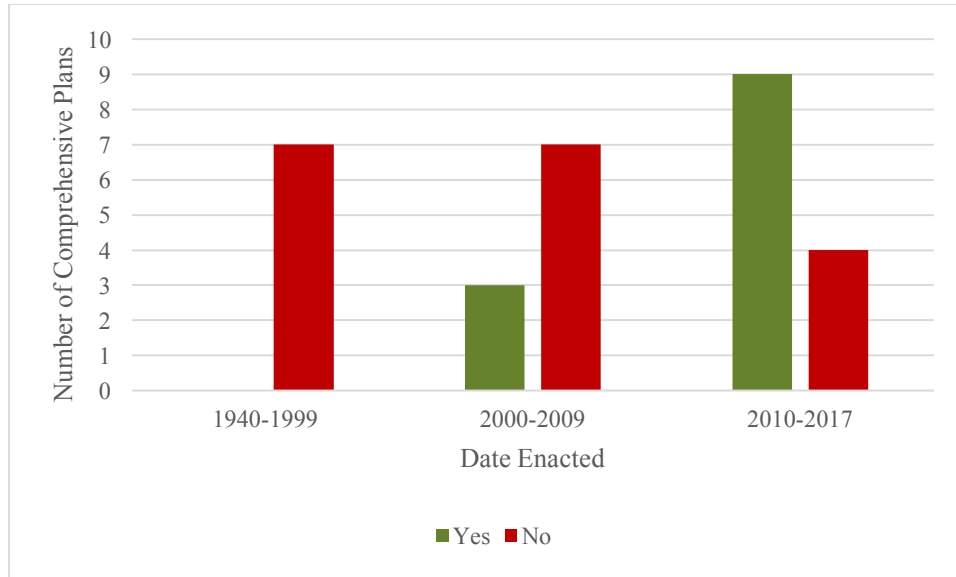
plans. Missouri is the only state that does not include food policy in any of the four plans inventoried.

Table 3: Frequency of Context



The context is taken only in plans that include food policy. Chicago, Illinois, Rockford, Illinois, Lexington, Kentucky, and Detroit, Michigan are the four cities that include all six contextual categories when addressing food policy, and are the only cities that address food security. Food access appears as a context for every city’s food policy followed by public health and land use. Urban agriculture was often mentioned in conjunction with these three terms, focusing on using the space available to the city to increase urban farming and community gardens while providing healthy food access and benefits to the public.

Table 4: Inclusion of Food Policy by Decade



This table displays the inclusion of food policy by decade until the present year. 1940-1999 is condensed into one bar as zero comprehensive plans dated within that time period include food policy. The earliest plan in this period is Warren, Michigan dated in 1947. 2000-2009 shows the beginning of food policy inclusion with a larger increase in inclusion beginning in 2010. Cedar Rapids, Iowa is the most recent plan in 2017, but does not include food policy. The greater inclusion of food policy in the more recent plans supports food policy in city planning as an emerging institution.

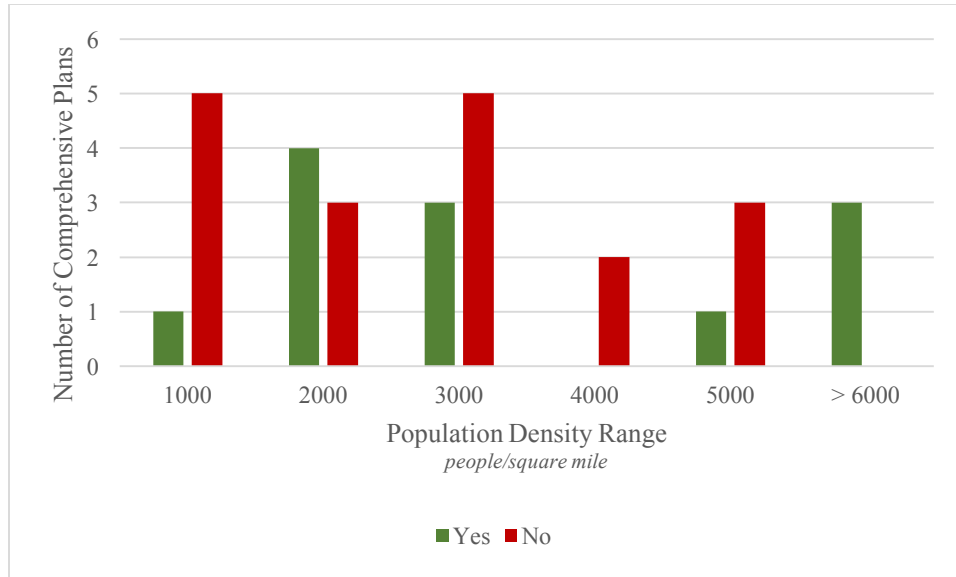
Table 5: Food Policy and Population Size³¹

City	Include Food Policy	Population ³²	City	Include Food Policy	Population ³²
Chicago	Yes	2,695,598	Des Moines	Yes	250,433
Indianapolis	Yes	852,866	Madison	Yes	233,209
Columbus	No	787,033	Akron	Yes	199,110
Detroit	Yes	686,888	Aurora	No	197,889
Louisville	No	597,337	Springfield	No	191,458
Milwaukee	Yes	594,833	Grand Rapids	No	188,040
Kansas City	No	459,787	Rockford	Yes	152,871
Cleveland	No	396,815	Joliet	No	147,433
Minneapolis	Yes	387,753	Naperville	No	141,853
St. Louis	No	319,294	Dayton	No	141,527
Cincinnati	Yes	296,943	Warren	No	134,056
Lexington	Yes	295,803	Sterling Heights	No	129,699
St. Paul	No	288,488	Cedar Rapids	No	126,326
Toledo	No	287,208	Evansville	Yes	117,429
Fort Wayne	No	260,326	Independence	No	116,830

When sorted by population size, there is little correlation between inclusion and non-inclusion as food policy is present in both the largest cities and one of the smallest cities.

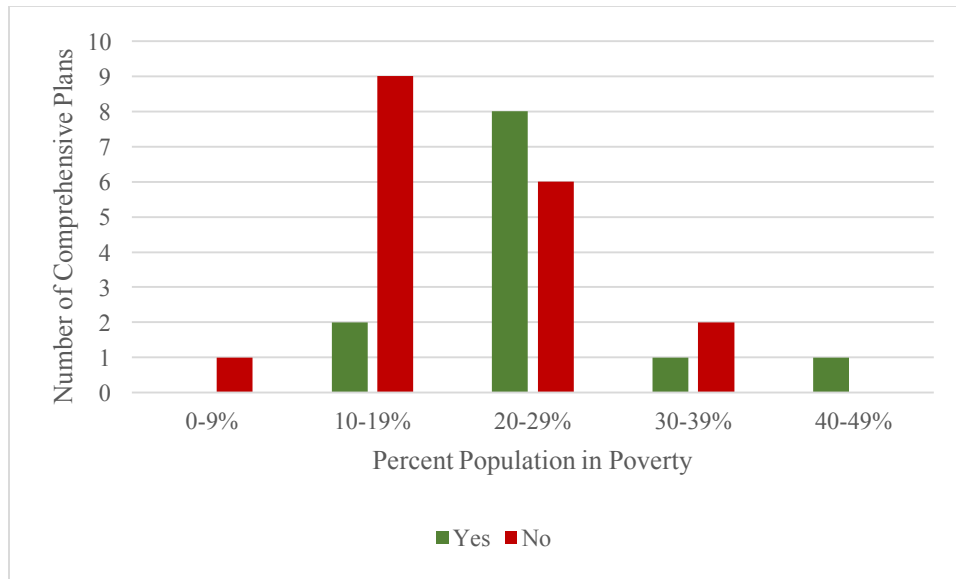
However, 9 of the 17 of cities greater than 200,000 people include food policy in the comprehensive plan, creating a majority.

Table 6: Food Policy and Population Density³²



Population density is sorted into a range for the table above and labeled by the first number of that range. Food policy is present in the smallest plan beginning with 1042.8 people/sq. mile in Lexington, Kentucky and ranging to the largest density of 11841.8 people/sq. mile in Chicago, Illinois. 17% of cities with a population density between 1000-1999 people/sq. foot include food policy in the comprehensive plan. 57% of cities with a population density between 2000-2999 include food policy in the comprehensive plans. 24% of cities with a population density between 3000-3999 include food policy in the comprehensive plans. No cities with a population density between 4000-4999 include food policy. 25% of cities with a population density between 5000-5999 include food policy. Although the food policy is included in almost every range, the cities with the largest population density all include food policy in the comprehensive plans.

Table 7: Food Policy and Poverty Rate



The majority of cities have a 10-29% poverty rate with the bulk of those cities having a poverty rate between 20-29%. The city with the least rate of poverty does not include policy in the comprehensive plan. 18% of cities in the 10-19% range include food policy. 57% of cities with a poverty rate between 20-29% include food policy; 50% of cities in the 30-39% range include food policy in the comprehensive plans. The city with the highest poverty rate, above 40%, includes food policy in the comprehensive plan. This is true more generally as cities with high poverty rates are more likely to include food policy, often mentioning concerns of food access for those in poverty.

Analysis

Food policy is a crucial part of city planning, but less than 50% of the cities inventoried in the Midwest include it in the comprehensive plans—a plan that is designed to direct the growth and success of a city. The need for food policy has been supported, but few cities address this need. However, the comprehensive plans that do include food policy have a focus on the sustainability of its resources and residents.

Food access is a top priority for all cities that presented food policy in the city plan. This term was tied to all other contexts in the inventory, highlighting the significance of an interdisciplinary approach. Food access highlighted food deserts, disparities between social classes, transportation restrictions, and the need for sustainable approaches to food, agriculture, the environment, and land use, to name a few. The policy solutions were based locally, focusing on what the city could do to improve, provide for more, and create a lasting program as “increased food access has been linked to results as diverse as improved educational outcomes and crime reduction” (Leib, 2013, pg. 322).

Many of these community programs considered public health, the second most referenced context in addressing food policy. While some plans mentioned overall health concerns such as obesity, the purpose was to create programming. This programming included community gardens and educational programs oriented toward social justice and healthy living. Cities are working to give residents the resources they need to thrive which will produce a thriving city.

Land use is the next context for including food policy in city comprehensive planning. Land use is most tied to agriculture, preserving the city’s ability to produce its own food. The sprawling nature of development was mentioned, regulating use of agricultural land for development as well as reclaiming developed land for urban agriculture. Land use also created community gardens, noting the need to produce affordable food while connecting residents to the land.

The economy and the environment are both mentioned among the least amount of times. The economy was addressed by maintaining an agricultural base for employment and support of a state’s industry, keeping with the agricultural nature of many Midwest communities. As cities in the Midwest, many plans prioritize preservation of its resources in opposition to fostering

urban development that could have a negative long-term impact. This environmental approach is important to creating a sustainable food system within a sustainable city.

Food security was the least included context. Some cities are concerned with providing resources for the future. However, there is a lack of consideration for sustainable food planning and long term provision is not a high priority, which is troubling given increasing urbanization and a growing population. Large cities are inventoried, but there is a closeness to the land throughout the agricultural region, which may create food security itself.

While there are significant poverty rates and large population sizes, the priorities of the cities that included food policy reflect these demographics. As the most prominent context, food access demonstrates the cities' awareness of community need and the desire to solve it. Food access encompasses many disciplines, allowing for solutions to a wide range of problems. Land use, as another top context, demonstrates awareness for a city's demographics; citizens need a place to live, but they also need land to sustain them.

The four cities that had the most involved comprehensive plans are those that can be categorized among the largest populations, highest poverty levels, and highest population densities. Detroit, Michigan, the city with the highest poverty rate and one of the largest populations, is one of the four cities that most prioritized food policy. The demographics show that the city has a large base of people to provide for, but also that it is not providing the appropriate resources. The city created a section in the comprehensive plan dedicated specifically to food security, highlighting an urban farming movement on city land that will increase food access, create jobs, and increase the health of its community (Detroit, 2012). This highlights the cultural and personal nature of food policy. The city is creating the tools it needs to

support its community by using a localized approach, focusing on the needs of the community it is serving.

Conclusion

The Midwest does not reflect the other cities that dominate food policy research. Why is food policy not a priority for cities in this region? To further research, this question could be answered by evaluating the agriculture of the region. A large part of the Midwest is agricultural, seen in the restrictions on land use development and focus on its economic impact. Does this agricultural context create food security for the millions who live in cities? This inventory is limited in its approach; a coded presence of themes could take it further, allowing it to be compared to other regional studies.

This paper demonstrates that food policy should be incorporated in city planning, especially due to the interconnectedness of food to basic planning disciplines. Food policy is best addressed as a local issue and should be prioritized this way, putting the needs of a land, a region, a community, and its people first. Many of the plans in this inventory are dated, even to 71 years ago. I recommend that the comprehensive plans be updated to reflect the current needs of the city. Planning can be expensive, but if it is to guide city policy and development into the future, it should reflect emerging priorities.

Appendix A: Inventory Demographics

State	City	Population	Population Density	% Poverty
Illinois	Aurora	197,889	4404	14.80%
Illinois	Chicago	2,695,598	11841.8	22.30%
Illinois	Joliet	147,433	2373.6	12.20%
Illinois	Naperville	141,853	3658.9	4.80%
Illinois	Rockford	152,871	2502.7	24.80%
Indiana	Evansville	117,429	2659.8	21%
Indiana	Fort Wayne	260,326	2293.4	19%
Indiana	Indianapolis	852,866	2270	21.30%
Iowa	Cedar Rapids	126,326	1784.3	12.30%
Iowa	Des Moines	250,433	2515.6	20%
Kentucky	Lexington	295,803	1042.8	18.90%
Kentucky	Louisville	597,337	1836.6	18.10%
Michigan	Detroit	686,888	5144.3	40.30%
Michigan	Grand Rapids	188,040	4235.6	26%
Michigan	Sterling Heights	129,699	3552.9	12.90%
Michigan	Warren	134,056	3899.2	19.70%
Minnesota	Minneapolis	387,753	7088.3	21.90%
Minnesota	St. Paul	288,488	5484.3	22.30%
Missouri	Independence	116,830	1506.1	17.90%
Missouri	Kansas City	459,787	1459.9	19%
Missouri	Springfield	191,458	1951.8	25.70%
Missouri	St. Louis	319,294	5157.5	27.10%
Ohio	Akron	199,110	3209.8	26.50%
Ohio	Cincinnati	296,943	3809.8	30.50%
Ohio	Cleveland	396,815	5107.2	36.20%
Ohio	Columbus	787,033	3624.1	21.70%
Ohio	Dayton	141,527	2543.1	35.50%
Ohio	Toledo	287,208	3559.3	27.80%
Wisconsin	Madison	233,209	3037	19%
Wisconsin	Milwaukee	594,833	6188.3	28.70%

Appendix B: Inventory Presence and Absence

State	City	Date of Plan	Include Food Policy	"Food"	"Nutrition"	"Agriculture"
Illinois	Aurora	1984	No			
Illinois	Chicago	2010	Yes	✓	✓	✓
Illinois	Joliet	2007	No	✓		✓
Illinois	Naperville	1998	No	✓		✓
Illinois	Rockford	2004	Yes	✓		✓
Indiana	Evansville	2016	Yes	✓	✓	✓
Indiana	Fort Wayne	2007	No	✓		✓
Indiana	Indianapolis	2013	Yes	✓	✓	
Iowa	Cedar Rapids	2017	No	✓		✓
Iowa	Des Moines	2016	Yes	✓		✓
Kentucky	Lexington	2013	Yes	✓	✓	✓
Kentucky	Louisville	2002	No	✓	✓	
Michigan	Detroit	2012	Yes	✓		✓
Michigan	Grand Rapids	2002	No	✓		✓
Michigan	Sterling Heights	2008	No			
Michigan	Warren	1966	No			
Minnesota	Minneapolis	2009	Yes	✓	✓	
Minnesota	St. Paul	2010	No	✓		✓
Missouri	Independence	1993	No			
Missouri	Kansas City	2014	No	✓	✓	✓
Missouri	Springfield	2001	No			✓
Missouri	St. Louis	1947	No			
Ohio	Akron	2016	Yes	✓		
Ohio	Cincinnati	2012	Yes	✓	✓	✓
Ohio	Cleveland	2007	No			
Ohio	Columbus	1993	No			✓
Ohio	Dayton	1999	No			
Ohio	Toledo	2011	No	✓		✓
Wisconsin	Madison	2006	Yes	✓	✓	✓
Wisconsin	Milwaukee	2010	Yes	✓		✓

Appendix C: Inventory Context

State	City	Economy	Environment	Food Access	Food Security	Land Use	Public Health
Illinois	Aurora						
Illinois	Chicago	✓	✓	✓	✓	✓	✓
Illinois	Joliet						
Illinois	Naperville						
Illinois	Rockford	✓	✓	✓	✓	✓	✓
Indiana	Evansville		✓	✓			✓
Indiana	Fort Wayne						
Indiana	Indianapolis	✓		✓			✓
Iowa	Cedar Rapids						
Iowa	Des Moines			✓		✓	✓
Kentucky	Lexington	✓	✓	✓	✓	✓	✓
Kentucky	Louisville						
Michigan	Detroit	✓	✓	✓	✓	✓	✓
Michigan	Grand Rapids						
Michigan	Sterling Heights						
Michigan	Warren						
Minnesota	Minneapolis			✓		✓	✓
Minnesota	St. Paul						
Missouri	Independence						
Missouri	Kansas City						
Missouri	Springfield						
Missouri	St. Louis						
Ohio	Akron			✓			✓
Ohio	Cincinnati		✓	✓		✓	
Ohio	Cleveland						
Ohio	Columbus						
Ohio	Dayton						
Ohio	Toledo						
Wisconsin	Madison	✓	✓	✓		✓	✓
Wisconsin	Milwaukee			✓		✓	

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