

May 2016

Food Inequities, Urban Agriculture, and the Remaking of Milwaukee, Wisconsin

Margaret Pettygrove

University of Wisconsin-Milwaukee

Follow this and additional works at: <https://dc.uwm.edu/etd>



Part of the [Geographic Information Sciences Commons](#)

Recommended Citation

Pettygrove, Margaret, "Food Inequities, Urban Agriculture, and the Remaking of Milwaukee, Wisconsin" (2016). *Theses and Dissertations*. 1188.

<https://dc.uwm.edu/etd/1188>

This Dissertation is brought to you for free and open access by UWM Digital Commons. It has been accepted for inclusion in Theses and Dissertations by an authorized administrator of UWM Digital Commons. For more information, please contact open-access@uwm.edu.

FOOD INEQUITIES, URBAN AGRICULTURE, AND THE REMAKING OF
MILWAUKEE, WISCONSIN

by

Margaret Wolfe Pettygrove

A Dissertation Submitted in
Partial Fulfillment of the
Requirements for the Degree of

Doctor of Philosophy
in Geography

at

The University of Wisconsin-Milwaukee

May 2016

ABSTRACT

FOOD INEQUITIES, URBAN AGRICULTURE, AND THE REMAKING OF MILWAUKEE, WISCONSIN

by

Margaret Wolfe Pettygrove

The University of Wisconsin-Milwaukee, 2016
Under the Supervision of Professor Rina Ghose

Evidence of growing food insecurity and diet-related disease (e.g., diabetes) in North America has raised concerns among scholars and community groups about the quantity and quality of food available to urban residents (Guthman 2012). Research indicates that low-income and racial or ethnic minority populations experience disproportionately limited food access (Zenk et al 2005). Scholars hypothesize that limited physical proximity to full-service retail food stores or to sources of affordable fresh produce leads to unhealthy dietary practices (such as overconsumption of fat) that then produce diet-related illness. This “obesogenic environment thesis” has shaped much of the geographic research on food access, which has predominantly focused on measuring proximity to retail food sources (Caspi et al 2010). Recent critiques, however, call greater attention to other dimensions of access, including how individuals interact with and experience their environments, how they obtain food, and broader political economic processes (Alkon et al 2013; Cummins & MacIntyre 2006; Hirsch & Hillier 2013). Without understanding, for example, where individuals actually shop for food, evaluating retail food quality in individuals’ residential neighborhoods is unlikely to lead to accurate identification of causal factors and linkages. This research intervenes by examining, via a case study of Milwaukee, Wisconsin: (1) food procurement patterns of low-income residents and (2) the ways in which local governance and political economic processes shape local

food environments. It does so through a combination of quantitative and qualitative methodologies that draw on spatial analytical and political ecological perspective.

© Copyright by Margaret Wolfe Pettygrove, 2016
All Rights Reserved

TABLE OF CONTENTS

LIST OF FIGURES	vi
LIST OF TABLES	vii
ACKNOWLEDGEMENTS	viii
CHAPTER 1: INTRODUCTION	1
CHAPTER 2: MODELING URBAN FOD PROCUREMENT PATTERNS: AN ANALYSIS OF SUPPLEMENTAL NUTRITION ASSISTANCE PROGRAM (SNAP) BENEFIT USAGE	21
CHAPTER 3: FROM ‘RUST BELT’ TO ‘FRESH COAST’: FOOD JUSTICE, URBAN AGRICULTURE, AND ECONOMIC DEVELOPMENT	55
CHAPTER 4: THE NETWORKED CONSTRUCTION OF FOOD POLITICS	109
REFERENCES	156

LIST OF FIGURES

Figure 1: Comparison of food access measures	48
Figure 2: SNAP benefit disbursement at 500 m resolution and benefit redemption per store	49
Figure 3: Analytical areas	50
Figure 4: Spatial clusters (Moran's Local I) of high and low values of net benefits	51
Figure 5: Net SNAP benefits per grid cell	52
Figure 6: Food Environment Index (FEI)	53
Figure 7: Estimated versus reported SNAP recipients in 2013	54
Figure 8: Vacant city-owned lots in Milwaukee for the year 2014	67
Figure 9: Areas receiving top 5% of Supplemental Nutrition Assistance Program (SNAP) benefits (per 0.25 km ² cell) in 2013	74
Figure 10. Milwaukee's northside and southside	83
Figure 11. Ezekiel Gillespie Park following its opening in 2015	94
Figure 12. Actors and networks involved in Milwaukee food projects	120
Figure 13. Excerpts from Lindsay Heights Quality of Life Plan (cover page and asset map)	127
Figure 14. Milwaukee Childhood Obesity Prevention Project (MCOPP) Healthy Asset Map	140

LIST OF TABLES

Table 1: Food Environment Component Scores Extracted by Principal Component Analysis	32
Table 2: Descriptive Statistics for Selected Analytical Areas.	40
Table 3: Pearson correlation coefficients (R) and significance levels (p-values) for selected variables	40
Table 4: Ordinary Least Squares (OLS) Regression Model Summary	41
Table 5. Spearman correlation coefficients (S) and significance levels (p-values) for food environment index (FEI), socioeconomic variables, and SNAP benefit usage at the Census block group level	47
Table 6. SNAP redemptions by store type for Milwaukee County (year 2013)	47
Table 7: Milwaukee food projects.	69
Table 8: Food project practices	73
Table 9: History of Milwaukee food projects	75
Table 10: Milwaukee urban agriculture land use code and policy changes	76

ACKNOWLEDGEMENTS

This work would not be what it is without the support and inspiration of many people along the way. I am immensely grateful to the organizers and activists who gave their time to answer my questions and provide insight to inform my research. The intellectual and institutional support of the Geography Department at UWM has been essential to my overall development and success throughout the last seven years; I particularly wish to thank Professors Anne Bonds and Zengwang Xu, for providing guidance and insightful feedback at all stages of my dissertation. I also extend my appreciation to Professors Renee Walker and Marc Levine for their support, and kind but provocative questions. And, to my mentor and advisor, Professor Rina Ghose, whose honesty, intensity, and unwavering belief in me has given me the tenacity to tackle all sorts of challenges, it has been a great joy and a privilege to work with you. Finally, there are those in my life who have contributed in myriad ways to my wellbeing and general quality as a person. My grandmothers, Willa Jane and Marian Warner, gave me an abiding sense of what it means to be strong, smart, thoughtful, and kind. My father, Stuart, instilled in me a great curiosity. My mother, Willa, taught me to value my own voice and to listen well. Lastly, my partner, Nick, has helped in more ways than he probably knows, but above all has given me courage and lightness whenever I needed it.

CHAPTER 1: INTRODUCTION

1. Introduction

Rising levels of food insecurity, diet-related illness (e.g., diabetes), and disparities in food accessibility in North American cities have spurred extensive bodies of research (Gregory, Smith & Wendt 2011, Guthman 2012; Kirk et al 2010; Ver Ploeg et al 2009; Walker, Keane & Burke 2010). While much of this research has focused on modeling relationships between urban food environments (the physical and social surroundings that influence diet), consumption practices, and health, there is also growing scholarly interest in how communities attempt to mitigate urban food inequities (Alkon & Agyeman 2011). Work in both veins raises methodological and political questions about the tendency (in research and policy arenas) to conceptualize dietary health primarily as a function of physical proximity (i.e., exposure) to beneficial or harmful foods (Guthman 2012; Shannon 2014a). Scholars contend that focusing on local environmental factors that potentially mediate individual behavior ignores significant complexities and makes assumptions about how individuals actually procure food (Alkon et al 2013, Block et al 2012, Donald 2013; McClintock 2011). Further, this focus may obscure consideration of structural processes and support pathologizing or moralizing discourses that re-embed race-class difference and advance processes of dispossession (Guthman & DuPuis 2006; Shannon 2014). The ways in which dietary health inequities are conceptualized have important public health and social justice implications, as they shape policy solutions.

The research presented here addresses these critiques by developing a nuanced, multidimensional, and place-sensitive understanding of urban food environments as produced

through intersecting political, economic, and environmental processes at multiple scales. In pursuit of complex representations of these processes, I investigate actual food procurement patterns alongside measures of potential food access and local political activities that intervene in food environments in particular ways. I do so through a combination of quantitative and qualitative methodologies, drawing on an empirical case study of metropolitan Milwaukee, Wisconsin. As a Midwestern city historically supported by a robust manufacturing economy, it has experienced many of the social and economic changes typically associated with post-Fordist deindustrialization and restructuring over the last 40 to 50 years. It is also a place that has produced and emerged from profound racism and racialized inequities, as evidenced (for example) in the disproportionate rates at which African-American residents are incarcerated or subjected to other forms of state violence and surveillance (Quinn & Pawasarat 2014).

This research contributes to theoretical and empirical understandings of urban dietary health inequities in four main ways. First, by comparing spatial representations of urban food environments with representations of food procurement patterns, this will address a major gap in current research in terms of the absence of studies of how residents actually navigate urban food environments (Caspi et al 2012b). Understanding the relationship between potential and actual access will provide more precise and relevant information to guide effective policy solutions and public health campaigns (Alkon et al 2013). It will also contribute to scholarship on place-specific forms and impacts of neoliberalization and critical poverty research. Finally, this research contributes to understanding how knowledge about urban dietary health inequities is constructed in particular contexts and how this knowledge influences the materialities of dietary health.

This research draws on perspectives from political ecology, health geography, and critical geographic information science (GIS) to investigate food access inequities and examine how discourses about urban food and health, produced by various actors, shape local food environment contexts by promoting or discouraging particular solutions.

2. Urban Geographies of Food and Health

Within the last decade, most geographical studies of urban food access have employed spatial analytical, epidemiological approaches to model variation in food environment quality and to associate this variation with dietary behaviors, health outcomes, and demographic factors (Caspi et al 2012b, Charreire et al 2011, Guthman & Mansfield 2012; Shaw 2006). The appearance of disparities in diet-related illness prevalence on the basis of neighborhood racial or class composition is then interpreted as evidence that these populations experience disproportionately poor levels of healthy food access (Richardson et al 2012; Zenk et al 2005). This kind of approach, which encompasses a vast and evolving variety of analytical techniques, treats the urban environment as a setting that influences individual dietary health by limiting or facilitating exposure to nutrient-rich foods (e.g., fresh fruits and vegetables and whole grains) and nutrient-poor foods (e.g. high-fat, highly processed foods). Although the specific pathways by which the environment affects health are not fully understood, scholars have identified multiple environmental characteristics (e.g., abundance of fast food restaurants or local retail food prices) that appear to shape individuals' food procurement and eating habits. These characteristics together constitute the food environment, or the context in which individuals obtain and consume food.

Urban food environments have generally been characterized along two primary axes (Caspi et al 2012b). The first distinguishes between community food environments—the variety and distribution of food sources within an area—and consumer food environments—the quality, cost, and variety of food within retail stores (Glanz et al 2007; Kelly, Flood & Yeatman 2011). The second distinguishes between different dimensions of access, including availability, accessibility (i.e., proximity), affordability, and cultural acceptability (Charreire et al. 2010). Retail food (stores and restaurants) has been the predominant proxy measure for food environment quality, although farmers markets and emergency food assistance networks have occasionally been considered (Evans et al 2012; Freedman et al 2013; Larsen & Gilliland 2009; McCormack et al 2010). This overlooks the possible role of non-retail food sources such as emergency food pantries and community gardens (Armstrong 2000; Mares 2013).

Although mapping potential food accessibility provides a useful method to begin exploring food inequities, there are important limitations to such an approach. Firstly, evidence from quantitative statistical food access studies using conventional measures of the food environment (e.g., proximity to chain grocery stores) provides mixed support for causal links between food environment characteristics and health outcomes (Alkon et al 2013, Black & Macinko 2008, Cummins & MacIntyre 2006, Guthman 2012, McEntee 2009). In part, this may be due to methodological challenges, such as boundary and scale effects resulting from the use of pre-defined administrative units that do not accurately represent the spatiality of individual behavior and mobility (Kyureghian, Nayga & Bhattacharya 2013, Shannon & Harvey 2013). However, it may also indicate that physical proximity is less important in determining food procurement than has been hypothesized (Shannon

2016). A singular focus on locational proximity is likely to obscure the varied ways that people navigate their surroundings and the broader political economic processes that contribute to the distribution of material resources and power across urban space and societies (Block et al 2012; Pine & Bennett 2014; Hillier et al 2011). It also denies individual agency by assuming that all individuals conceptualize health in the same way and have identical goals related to avoiding health risk (Guthman 2012). Studies of how and where individuals actually obtain food (although they are relatively few) suggest that individuals will travel beyond their neighborhoods of residence to shop at stores with lower prices, higher quality products, or specific items not available elsewhere (Alkon et al 2013; Kyureghian et al 2013; Shannon 2014b).

Accordingly, I follow calls to attend to subjective and relational understandings of urban food environment and health relationships (Cummins et al 2007, Short, Guthman & Raskin 2005, Townshend & Lake 2009). I conceptualize locales as interconnected and embedded in particular sets of historical-social relations, such that the quality of the food environment in one place is not divorced from conditions in others (Block et al 2012, Donald 2013). I do this in part through examining how different community groups in a particular context frame and mitigate constraints on food access and dietary health concerns (see Miller & Branscum 2012). In describing how various actors frame or ascribe meaning to food and health, I employ the concept of *foodways*, or “cultural, social and economic food practices, habits and desires,” including “how and what communities eat, where and how they shop and what motivates their food preferences” (Alkon et al 2013: 127). These foodways are shaped by multiple complex and overlapping social, political, and economic factors.

However, I also take inspiration from discussions in critical geographic information science (GIS) that emphasize the importance of critiquing from within; that is, utilizing GIS techniques and other tools of spatial analysis and visualization to develop alternative representations that challenge existing understandings (Crampton & Krygier 2005; Galt 2011). Thus, I address the absence of research on actual food access by utilizing spatial analytical techniques to model patterns of low-income food procurement (Shannon 2014b).

2.1. Urban political ecologies of food

In order to further theorize the complexities of urban food and dietary health inequities, I follow recent work in political ecology that locates food and health inequities at the intersection of political, economic, and environmental processes (King 2010, Guthman & Mansfield 2012). Urban political ecology conceptualizes urban spaces and bodies as at once biological and social (Heynen 2006; Heynen, Swyngedouw & Kaika 2006). Geographically contingent political economic processes produce cities and their inhabitants, and in turn affect (and are affected by) biological or environmental processes. Health is similarly produced by interactions between social and ecological processes (Guthman & Mansfield 2012). From this perspective, malnutrition (resulting from over or under-consumption) links the metabolism of food in human bodies to political economic processes at larger scales (Heynen 2006, 2009; Marvin & Medd 2006). Political ecologists also theorize knowledge production (i.e., discourse) as part of the constellation of processes that produce health (King 2010). So, for example, dominant biomedical conceptions of disease may exclude other ways that particular conditions are experienced and understood (Jackson & Neely 2015). Political ecology

shares certain elements with spatial epidemiological approaches, in terms of its focus on structural or environmental factors that contribute to health inequalities. However, political ecology contributes a broader conception of environment, wherein environment (built or otherwise) is constituted through multiscalar political and ecological processes (Guthman & Mansfield 2012).

Political ecology explains unequal access to grocery stores in urban areas as a function of uneven development due to cycles of capital accumulation and devaluation (Bedore 2013; McClintock 2011). In the US, beginning in the 1960s, concentration and consolidation within the retail food industry resulted in growth of larger chain retailers (Ducatel & Blomley 1990, Wrigley 2000). These food retailers then left increasingly disinvested urban areas in favor of wealthier areas, resulting in further capital flight and devaluation, and leaving many urban neighborhoods with a predominance of convenience stores, fast food restaurants, and gas stations (Eisenhauer 2001; McClintock 2011, Morland & Filomena 2007).

Neoliberalization in the US over the last 50 years has also contributed to inequities in food access and dietary health, particularly through its impacts on social welfare systems (Cook 2012, Poppendieck 2008). Neoliberalization refers to processes of political economic restructuring, often complemented by programs of social regulation, oriented towards market liberalization, entrepreneurial governance, and retrenchment of state welfare (Brenner & Theodore 2002). Neoliberalization in practice has typically entailed privatization, the ‘roll-out’ of more punitive welfare and criminal justice policies, and shifts from government to governance (Peck & Tickell 2002). At the urban scale, municipal governments have reduced funding for social services and adopted development strategies aimed at attracting capital through large-scale urban redevelopment

projects (Smith 2002, Weber 2002; Wilson 2004). Efforts to reduce barriers to capital accumulation have occurred in part through the growth of low-wage economies based on the production of cheap goods with cheap labor (Guthman & DuPuis 2006). This has increased poverty and dependence on cheap food. It has also made nutrient-poor foods (e.g., fast food) more affordable and abundant relative to nutrient-dense foods (Donald 2013).

The 1996 Personal Responsibility and Work Opportunities Reconciliation Act (PRWORA), which instituted Temporary Assistance for Needy Families (TANF) as a replacement for Aid to Families with Dependent Children (AFDC), shifted federal welfare to a workfare system with lifetime limits on the receipt of benefits and mandatory work requirements (Himmelgreen & Romero-Daza 2010, Peck 2001). While promoted as an effort to stem poverty and welfare dependence, PRWORA has intensified poverty by pushing more individuals into unstable, temporary, and low-wage employment (Cook 2012, Piven 1998). Welfare restructuring has also resulted in greater spatial variability in welfare provisioning due to the decentralization of welfare regulatory structures (Jessop 2001, Mohan 2002). Local administrators now tend to have more discretionary power, although the pressure to meet PRWORA mandates encourages aggressive efforts to transition individuals out of welfare (Jessop 2001). Ultimately, welfare reform has tended to reproduce inequities along lines of race, class, gender, ethnicity, and country of origin (Bondi & Christie 2000, Mares 2013).

In order to compensate for the restructuring of government social safety nets, individuals increasingly rely on services provided by private or nonprofit philanthropic organizations (Cook 2012, Mares 2013). This is reflected in rising demand for and growth in emergency food providers

(Curtis & McClellan 1995, Himmelgreen & Romero-Daza 2010). Indeed, in 2015, the State of Wisconsin added a work requirement for all able-bodied adult recipients of FoodShare (the state level program that administers federal Supplemental Nutrition Assistance Program (SNAP) benefits), in which they must be employed or enrolled in an employment training program, or lose benefits for 3 years. Since the implementation of this policy, the number of FoodShare recipients in Milwaukee County has dropped precipitously, while the use of food pantries has remained steady relative to previous years (Hunger Task Force 2016).

Scholars also contend that neoliberalization has occurred through the discursive promotion of particular rationales of governance, centered on citizen-subjects who behave as responsible, self-disciplining consumers (Kearns 1995; Painter & Philo 1995). In the context of diet and health, by delineating between citizens who behave appropriately and self-regulate according to certain norms, and individuals who fail to do so, neoliberal discourse constructs a form of biopolitics, in which controlling illness becomes a function of regulating populations, through the construction of norms distinguishing more or less healthy bodies (Brown 2009, Foucault 1985, Guthman & DuPuis 2006, Keil 2009). The use of epidemiological statistics and food desert maps, along with policy interventions promoting neighborhood-level solutions to food access, may spatialize these biopolitical discourses by casting particular urban neighborhoods as abnormal (Shannon 2014a; Slocum 2011).

2.3. Race and economic geographies

In my theorization of political economic processes, I also draw on work that considers the intersection of economic geography, race, and racialization (Barracclough 2009; Bonds 2013b; Lai 2012; Pulido 2006; Wilson 2009). Such work conceptualizes race not as an effect or outcome of political economic processes, but as a fundamental structuring component of these processes. So, for example, neoliberal discourses about individual responsibility and the supposed color-blindness of market-based systems have served to simultaneously obscure and reproduce race and racism as organizing principles of society (Roberts & Mahtani 2012). This perspective also underscores the ways in which whiteness (and white supremacy) is reproduced through various practices and policies, including land use planning, economic development, mortgage lending practices, and incarceration (Bonds 2013a; Delaney 2002; Pulido 2000, 2015). In the case of food justice organizing, scholars have also noted that the pervasive whiteness of many organizations contributes to reinforcing racialized exclusion through the creation and defense of white spaces (Ramirez 2015; Slocum 2007). I employ the term ‘white supremacy’ throughout this work to refer to the various ways in which bodies racialized as non-white continue to be marginalized by processes and structures that make and uphold whiteness as superior (Bonds & Inwood 2015; Leonardo 2004; Goldberg 2009; Pulido 2015; hooks 1989). I recognize that white actors are not necessarily motivated by conscious racial animus or intent to discriminate, but consider it equally important to acknowledge that racial bias continues to manifest both discursively and in material inequities (Gilmore 2007). The existence of white privilege, in other words, depends on the existence of racial hierarchies, in which whiteness is the normative ideal. The processes through which white supremacy is maintained are not limited to

individual acts of apparently extreme racist violence, but include the “taking or appropriation of land, wages, life, liberty, community, and social status” (Pulido 2015: 810).

2.4. Social movement geographies

Finally, I incorporate theorizations of social movement networks to facilitate my analysis of discourses that animate local government and community-based dietary health interventions. Within geography, there has been a profusion of research examining community-based food activism oriented around creating alternative food systems or promoting food justice (see, e.g., Alkon & Agyeman 2011). Although constituted by a wide variety of practices, goals, and political ideologies, such forms of activism tend to be classified together by their concern for food systems, in addition or in contrast to forms of hunger relief centered on direct food provision. Food activist organizations engage at varying (and often multiple) points within food systems, including production, distribution, retail, and consumption (Alkon & Norgaard 2009; Allen et al 2003). At each of these points, organizations may target different elements perceived to be problematic, including environmental conditions, food quality, economic access to food, labor conditions, and regulatory structures and policies. Forms of food activism include farmers markets (Alkon & McCullen 2011), anti-hunger initiatives (Johnston & Baker 2005; Heynen 2009), legislative advocacy (Gottlieb & Fisher 1996), food literacy campaigns, and organic food consumption (Johnston, Biro & MacKendrick 2009). These practices reflect a range of discursive goals and political critiques, many of which center on the promotion of ecologically sustainable, economically viable, socially just, and locally- or regionally-scaled food systems (Gottlieb & Joshi 2010; Hassanein 2003).

This body of research, however, has given only cursory attention to the specific networked spatialities of food movements (for exceptions, see Levkoe & Wakefield 2014 and Wekerle 2004). Accordingly, I draw from the broader field of social movement geographies to theorize my analysis. Within this field, social networks are broadly conceptualized as collections of actors, bound together through material or ideological relations, that structure political identities and spaces (Cox 1998; Featherstone 2005; Nicholls 2009). Social network studies tend to focus on the role of networks in social movement trajectories (e.g., successes or failures), how interactions among actors emerge, or how network interactions shape the practices of individual actors (Levkoe & Wakefield 2014).

Social movement networks have been shown to serve many different strategic functions, including alliance building, transmitting information, and sharing resources (Ghose 2007; Nicholls 2009). Networks also function as spaces through which actors construct political identities and forms of resistance or contestation (Cox 1998; Featherstone 2005). According to Levkoe and Wakefield (2014: 304), social movement networks are “locations where ideas, identities, and frames are shared and exchanged, contributing to the development of a broader discourse and practice.” conflict within networks may itself constitute the terrain over which political conflicts are negotiated. Featherstone (2003: 408) thus argues for utilizing networks to

consider the political as the site of multiple conflicts and antagonisms. For actors craft their political identities through the ways they engage with geographies of power relations. They do not have fixed interests constituted in relation to already existing spatial configurations of power.

While networks often reproduce social constructions of difference, arrangements of power within networks are not predetermined, and contestation or resistance can take various forms with varying degrees of confrontation and compromise among actors (Ghose & Pettygrove 2014a).

2.5. Theoretical Framework

My theoretical framework thus integrates perspectives from spatial analysis of urban food environments and dietary health inequities, political ecology, critical race theory, and social movement geographies. I conceptualize urban dietary health inequities as produced relationally through social, political, economic, and environmental processes occurring at multiple scales and intersecting in place-specific ways. I argue for a broader definition of the urban food environment that incorporates multiple sources of food (retail and non-retail) and addresses how individuals actually procure food. I regard material conditions and practices as shaped by and shaping social constructions of knowledge (including spatial forms of knowledge). Following political ecological approaches, I regard the relationship between the social and the environmental as mutually constitutive. I recognize the role of social structures and individual agency and consider power to flow in multiple directions, meaning that discourses can be contested and individuals can be simultaneously constrained and empowered (Roy 2010). I utilize these perspectives to frame my analysis, which is based on a case study of Milwaukee, Wisconsin.

3. Study Area: Milwaukee, Wisconsin

Milwaukee provides a useful context in which to study urban food geographies. Like many US cities, Milwaukee has undergone significant changes over the past five decades due to deindustrialization, urban disinvestment, suburbanization, white flight, and neoliberalization. These trends have heightened socioeconomic polarization and worsened economic conditions in many Milwaukee neighborhoods. Rising poverty levels have increased demand on emergency food providers in the City of Milwaukee over the last several years. In 2011, Hunger Task Force, Milwaukee County's largest emergency food provider, served an estimated average of 41,000 clients per month (Gibbs-Plessl 2012). Research from the Hunger Task Force indicates that there are citywide spatial variations in the quality and affordability of retail food that correspond with neighborhood socioeconomic characteristics.

The local city and county governments have adopted characteristically neoliberal priorities, promoting public-private partnerships and commercial and real estate development (Perkins 2009b; Zimmerman 2008). Generally, competition for resources among nonprofit and community organizations in Milwaukee has increased, and many organizations struggle to sustain funding. Simultaneously, as a consequence of economic restructuring (both locally and at the state-level) and welfare retrenchment, demands on community-based organizations for basic social services have increased, particularly in lower-income neighborhoods (Ghose 2005; Perkins 2009a). Grassroots citizen groups have emerged to compensate for reduced government spending on services such as parks maintenance and emergency food provision (Perkins 2010; Roy 2011).

Historically, Milwaukee has been site of significant community organizing and activism around food. During the late 1960s and early 1970s the Black Panther Party in Milwaukee operated

a series of free breakfast programs for children in predominantly Black neighborhoods throughout the city, in an effort to contest racist political economic structures and support the social reproduction of Black communities (Heynen 2009). Currently, there is a diverse array of nonprofit and grassroots organizations working to address various forms of food system inequities. Many of these organizations (e.g., Growing Power, Milwaukee Urban Gardens, Walnut Way Conservation Corps) focus on the development of urban agriculture and community gardening as a way to increase access to affordable fresh food and stimulate local economic activity. Others, such as the Milwaukee Food Council, aim to influence local policy and create networks to support local food enterprise.

4. Methodology

This research employs multiple quantitative and qualitative methods and data sources. The details of each method are described in brief in the following section and in full detail in the corresponding chapters. To model patterns of food procurement, I utilize areal interpolation techniques along with spatial statistical analysis and GIS-based visualization. I employ a qualitative case study approach to examine the production of dietary health discourses in relation to political economic and environmental processes in the context of Milwaukee. The case study approach is ideal for in-depth, contextually sensitive analysis of social processes and relations (Yin 2009). I use qualitative methods that facilitate interpretive exploration of social constructions of knowledge, including semi-structured interviews, participant observation, and document analysis (Dittmer 2010; Dunn 2010).

5. Dissertation Structure

The research project comprising this dissertation is organized around three chapters. In the first (Chapter 2), I utilize data on Supplemental Nutrition Assistance Program (SNAP) benefit distribution and redemption in Milwaukee County to examine the food procurement patterns of low-income residents in terms of SNAP benefit usage. By comparing the balance of benefits distributed and redeemed in each section of the study area (defined by an imposed square grid), it becomes possible to model how benefits ‘flow’ throughout the area. Where the quantity of benefit redemptions is lower than that of benefits distributed to a given unit, this indicates a net outflow of benefits, which in turn suggests individuals are (as a whole) redeeming benefits outside of that unit (whereas most studies of food access have assumed individuals’ diets are most influenced by the food environment in their neighborhoods of residence). While this approach does not enable determination of why individuals might leave their immediate neighborhood to spend SNAP benefits elsewhere, it provides useful insight into procurement patterns.

In order to model SNAP benefit usage in this way, I first contend with multiple methodological issues. The smallest unit at which SNAP data¹ are available is the zip code level, so any analysis at finer resolution requires interpolation. I address this challenge by using a dasymetric areal interpolation technique (following Shannon and Harvey 2013) to disaggregate benefit distribution (as a density of SNAP benefits received per areal unit) to a 30m raster grid covering

¹ SNAP benefit disbursement data were obtained from the Wisconsin State Department of Health Services (DHS). SNAP redemption data were obtained from the US Department of Agriculture (USDA) Food and Nutrition Service (FNS).

Milwaukee County and benefit redemption to individual store level (for the year 2013). This approach also helps to address boundary issues that can arise with the use of pre-defined administrative units (e.g., census tracts). To further address boundary and scale issues, I compare benefit distribution and redemption with a grid overlay. I then identify for each grid cell the net benefits (redemptions minus receipts). This analysis indicates, among other findings, that areas with the highest density of SNAP benefits dollars tend to have net outflows of SNAP benefits.

In the second part of this chapter, I utilize additional data drawn from various sources to examine potential relationships between the modeled patterns of SNAP usage, food environment metrics, and demographic variables. To represent food environment quality, I construct a *food environment index*, modeled after Cutler, Boruff, and Shirley's (20003) "social vulnerability index," that combines proximity to and density of four types of urban food resources (full-service grocery stores, convenience stores, farmers markets, and urban agriculture sites), along with the diversity of food sources, at the US Census block group level. I calculate the criteria that constitute this index using GIS-based network analysis. This index, along with demographic variables from the US Census American Community Survey (ACS), is analyzed for correlations with SNAP benefit usage (because the grid cells that contain SNAP benefit data are generally smaller in area than census block groups, I compare each grid cell with the block group in which its center falls).

To further explore possible correlations between SNAP benefit usage and food environment quality, I compare benefit usage patterns to metrics representing price and nutritional quality at retail food locations across Milwaukee County. The raw store data for this analysis come from a 2011 Hunger Task Force (HTF) survey of SNAP-authorized stores in Milwaukee County. HTF used a

modified version of the Nutrition Environment Measures Survey (NEMS), a standardized survey instrument, to quantify the price, variety, and nutritional value of foods available at selected stores. Stores for the survey were selected by stratified random sampling: a list of all SNAP-authorized stores was classified into 5 categories (convenience store, gas station, drug and other, midsize grocery, and large grocery), and a representative random sample was selected from each, resulting in a sample size of 128 stores (Gibbs-Plessl 2012). Thus, for this analysis, I consider only those areas of SNAP benefit usage that contain a store from the HTF sample. The findings of this analysis indicate that the nutritional quality of a given store (i.e., the price and availability of nutritious foods) is significantly positively correlated with net SNAP benefits (as a percentage of benefits received) for the area in which it is located. Areas with relatively high inflow of SNAP benefits (more benefits spent than originally distributed), then, tend to have relatively high store nutritional quality (compared to areas with benefit outflow).

In Chapter 3, I use a case study of groups involved in food organizing and policymaking in Milwaukee to explore relationships between urban environmental production, governance practices, and discourses of dietary health. Based on a collection of data from interviews, participant observation, and analysis of documents, I examine how forms of knowledge about food-health relationships lead to (or support) particular practices of environmental (re)production by state and civil society actors. I also investigate how discourses about dietary health are deployed in relation to practices not related to conventional health concerns, such as economic development. Finally, I examine relationships between municipal economic development initiatives and food projects (particularly those involving urban agriculture) in order to trace the particular forms of racialization

(and racism) that occur with efforts to ‘remake’ and ‘revitalize’ cities according to narratives of environmental sustainability and food system localization. I emphasize how state-led urban agriculture development in Milwaukee racializes the spaces of its intervention and reproduces marginalization and exclusion (given that ‘revitalization’ efforts here are already embedded within historic and ongoing white supremacist land use practices). In this discussion, I consider how discourses surrounding public health and food contribute to racialization by constructing particular populations and their neighborhoods as ‘unhealthy’. However, I also note how the city’s urban agriculture development initiative provides opportunities for residents to advance their own interests.

Finally, in Chapter 4, I examine how social movement geographies—with particular attention to networks—shape the range of discourses and practices associated with food and dietary health in Milwaukee, or the ‘space’ of food-related politics. I discuss the general characteristics and contours of networks among food projects in this context and the ways that political contestations and identities are constituted through the negotiation and configuring of networks. Examining social movements or forms of contestation through the lens of networks brings into view the dynamic and heterogeneous identities, interests, and agendas that constitute what might otherwise appear to be a singular, internally homogeneous movement (Featherstone 2005). In the case of Milwaukee, while the discursive goals of food projects reflect various interests and concerns, the ways in which actors seek to pursue these goals, and the prioritization of particular goals over others, in part reflects the organizational context, of which network relationships are a key component.

However, various examples presented in this chapter demonstrate the ways in which the construction and configuration of organizational networks involve creating both connections and

separations that define the identity and space of the political. This, in some instances, leads to a homogenizing of identities through efforts to create a unified movement. Conversely, networks function as a site of contestation and resistance, as some actors within food project networks challenge the ways that the space of food politics has been discursively constructed. In particular, these different antagonisms within the space of Milwaukee food organizing appear around issues of race and racism.

CHAPTER 2: MODELING URBAN FOOD PROCUREMENT PATTERNS: AN ANALYSIS OF SUPPLEMENTAL NUTRITION ASSISTANCE PROGRAM (SNAP) BENEFIT USAGE

1. Introduction

Evidence of growing food insecurity and prevalence of diet-related illnesses (e.g., diabetes) in North America has raised concerns among scholars and community groups about the quantity and quality of food available to urban residents, particularly in low-income communities of color (Gregory, Smith & Wendt 2011; Walker et al 2010; Zenk et al 2005). Scholars hypothesize that limited physical proximity to full-service retail food stores or to sources of affordable fresh produce (or, conversely, exposure to unhealthy foods) leads to unhealthy dietary practices (such as overconsumption of sugar) that then produce illness. This “obesogenic environment thesis” has shaped much of the geographic research on food access, which has predominantly focused on measuring proximity to retail food sources (Caspi et al 2012; Guthman 2012, 2013b). Critiques contend that this concentration on quantifying potential access overlooks important questions about actual food procurement patterns, and tends to encourage interventions that target individual behavior through localized environmental modifications (Hillier et al 2011; Kirkland 2011; Shannon 2014a). Without understanding, for example, where residents actually shop for food, evaluating food environments in the immediate residential context is unlikely to lead to effective policy solutions (Alkon et al 2013; Block et al 2006). Further, centering environmental quality as a proxy for eating habits and related health outcomes may contribute to reproducing harmful assumptions about low-income residents and people of color, while obscuring structural causes of health inequalities (Guthman 2011, 2014).

Accordingly, this research intervenes by examining, via a case study of Milwaukee, Wisconsin, food procurement patterns of low-income residents and their relationships to food environment characteristics. While I recognize that focusing on low-income populations carries the potential of reinforcing pathologizing narratives about these groups, it is my intention to challenge such narratives by producing more nuanced representations of how these groups navigate urban space. In this paper, I utilize data on Supplemental Nutrition Assistance Program (SNAP) benefit distribution and redemption in Milwaukee County to examine the food procurement patterns of low-income residents in terms of SNAP benefit usage. By comparing the balance of benefits distributed and redeemed in each section of the study area (defined by an imposed square grid), it becomes possible to model how benefits ‘flow’ throughout the area. Where the quantity of benefit redemptions is lower than that of benefits distributed to a given unit, this indicates a net outflow of benefits, which in turn suggests individuals are (as a whole) redeeming benefits outside of that unit (whereas most studies of food access have assumed individuals’ diets are most influenced by the food environment in their neighborhoods of residence). While this approach does not enable determination of why individuals might leave their immediate neighborhood to spend SNAP benefits elsewhere, it provides useful insight into procurement patterns.

2. Conceptualizing and Measuring Urban Food Access

To date, within geography, public health, and related fields, research on urban food accessibility and diet-related health inequities has predominantly focused on the physical accessibility or availability of food (i.e., food supply) in urban areas (Caspi et al 2012; Charreire et al 2011; Shaw

2006). This approach treats the built urban environment as a setting that influences dietary health by limiting or facilitating exposure to nutrient-rich foods (e.g., fresh fruits and vegetables and whole grains) and nutrient-poor foods (e.g., high-fat, highly processed foods). Urban food environments are primarily conceptualized in terms of access to retail food (i.e. grocery stores), although a few studies have explored the role of farmers markets, produce stands, and emergency food assistance networks (Evans et al 2012; Freedman et al 2013; Larsen & Gilliland 2009; McCormack et al 2010; Widener, Metcalfe & Bar-Yam 2011). Proximity-based conceptions of food accessibility are evident in the way that the US Department of Agriculture (USDA) Economic Research Service defines areas of “low access” (previously termed “food deserts”) as US Census tracts where “a significant number or share of residents is far [more than 1 mile] from a supermarket” (USDA).

Although ongoing methodological development has enabled increasingly nuanced and dynamic representations of urban food environments and their interactions with human health, there are various dimensions of access that a model centered on the urban food supply does not adequately capture, such as the role of perception (Alkon et al 2013; Walker 2011). Further, such a model presumes a particular uniform and straightforward relationship between humans and their environments; namely, that individual food purchasing habits are most strongly influenced by proximity, and that food accessibility can be precisely approximated from objective environmental measures (Larson & Moseley 2012). Aside from the political implications of such a rigid treatment of human agency, evidence from quantitative food access studies provides mixed support for causal links between proximity-based measures of access and health outcomes (Alkon et al 2013; Black & Macinko 2008; Cummins & MacIntyre 2006; Jeffery et al 2006; Kyureghian et al 2013; McEntee

2009). The relative dearth of research regarding how and where individuals actually obtain food also makes it challenging to confidently define the relevant influences (spatial or otherwise) on individual eating habits (Guthman 2012; Kyureghian et al 2013). Existing research finds, however, that individuals will travel beyond their neighborhoods of residence to shop at stores with lower prices, higher quality products, or specific items not available elsewhere, even when this requires navigating economic or social barriers to mobility (Alkon et al 2013; Clifton 2004, Coveney & O'Dwyer 2009; Hillier et al 2011; Shannon 2016; Whelan et al 2002). This work emphasizes the importance of considering factors other than proximity and availability of food, and suggests the need for further research investigating how urban residents procure food.

The research presented here responds to these openings by examining urban food procurement patterns, with a focus on low-income populations, as they are typically considered most susceptible to spatial or economic food access barriers. In order to assess how populations within a particular urban context interact with the food environment, I follow techniques developed by Shannon and Harvey (2013) in utilizing data from the Supplemental Nutrition Assistance Program (SNAP), known colloquially as food stamps or FoodShare (after the Wisconsin program that administers SNAP statewide), to estimate generally where low-income residents purchase food relative to where they reside (see also Shannon 2014b). SNAP, a federal program administered by the US Department of Agriculture (USDA), provides food assistance benefits to approximately 44 million low-income individuals (USDA 2012). USDA estimates that as of 2008, approximately two thirds of eligible low-income individuals received benefits (Leftin 2008). USDA also oversees retail participation in SNAP, requiring stores to sell particular staple foods and defining what items are

eligible to be purchased with SNAP benefits (prepared foods, for example, are ineligible for purchase with SNAP benefits). SNAP-eligible stores generally include large chain supermarkets, convenience stores, as well as some gas stations, dollar stores, and liquor stores that sell food.

Utilizing SNAP benefit data to model food access also enables contending with boundary and scale concerns that tend to arise with analyses based on census or other administrative units. Rather than defining the neighborhood or unit of analysis based on the theorized potential environment where residents obtain food, SNAP benefit data allows for defining neighborhoods based on spatial patterns of benefit usage (Shannon 2014b). Within a given city, for example, neighborhoods could be delineated based on the degree to which benefit redemption exceeds benefits disbursed. Although there has been relatively minimal research on SNAP benefit usage at the metropolitan scale, a study in Chicago identified patterns of SNAP benefit movement away from low-income, predominantly Black areas and towards areas with chain supermarkets (Block et al 2008).

Through my analysis of SNAP benefit usage, then, I explore an alternative approach to visualizing urban food accessibility. This will also provide a means to identify possible inequities in urban food access. Finally, I will consider how low-income food procurement patterns relate to measures of the supply of food in an urban context (including proximity to grocery stores and the quality of food within stores). Because this research is part of a broader project examining food inequities in Milwaukee County, Wisconsin, I focus my analysis here.

3. Methodology

3.1. Modeling low-income food procurement patterns

In this study, I represent low-income food procurement patterns with SNAP (food assistance) benefit usage data, following techniques described by Shannon and Harvey (2013) and Shannon (2014b). Although SNAP usage cannot capture all low-income individuals, it provides a proxy for assessing relative patterns of low-income food purchasing in a given urban context. Due to how SNAP data are collected, it is also not possible to directly identify how individuals in a given locale redeem their SNAP benefits. These data can be used, however, to infer patterns of SNAP benefit movement through space by comparing the quantity of benefits received and redeemed in various locales across that space.

SNAP is administered by federal and state government agencies. The United States Department of Agriculture (USDA) Food and Nutrition Service (FNS) manages retail food vendor enrollment and reimbursement for benefits redeemed. In Wisconsin, the Department of Health Services (DHS) enrolls clients and disburses benefits. Accordingly, I obtained SNAP redemption data from the USDA FNS and SNAP benefit disbursement data from the Wisconsin State DHS. Redemption data provide total SNAP dollars redeemed per zip code (at all SNAP-eligible stores), where there are 4 or more stores. If there are fewer than 4 stores, USDA combines zip codes to ensure that redemptions are not traceable to individual stores. Disbursement data provide total SNAP dollars disbursed per zip code. For my analysis, I used annual data reported for the year 2013, the most recent year for which complete datasets were available.

The finest scale at which these SNAP datasets are available is the US zip code (in Milwaukee County, each zip code typically covers multiple US census tracts). In order to model SNAP usage at a

finer scale (to enable comparability with Census data and mitigate boundary or scale issues that often arise with the use of administrative units), I use dasymetric areal interpolation techniques to disaggregate SNAP benefit data to finer scales. In particular, I employ a three-class method to model SNAP benefit distribution density over a 30 m resolution raster grid (covering Milwaukee County) and SNAP redemptions per store (Mennis 2003; Shannon & Harvey 2013). This approach uses two weighting variables: areal proportion and relative proportion of SNAP recipients. This allows SNAP benefit data (of which the finest spatial resolution is the zip code level) to be modeled at finer spatial scales and limits boundary effects associated with the use of administrative units. To begin, I disaggregate SNAP benefit recipient density at the zip code level to Census tract level, based on the areal proportion of each tract within a zip code and percentage of SNAP-receiving households per tract reported in the 2009–2013 ACS. I then disaggregate tract level data to a 30 m raster grid using remote sensed land use data (National Land Cover Database 2011) and residential zoning (from the Southeastern Wisconsin Regional Planning Commission (SEWRPC) and City of Milwaukee) as population weighting variables. SNAP recipient density is converted to SNAP benefit dollars received based on the average benefit amount per recipient for each tract.

SNAP redemptions, also estimated using areal interpolation, are modeled as dollars redeemed per retail vendor for the year 2013. SNAP-accepting retail food locations are derived from a USDA list of SNAP-authorized retailers, and cross-referenced with the *ReferenceUSA* online business database to validate locations and identify store types by North American Industrial Classification System (NAICS) code. The US Census Bureau NAICS classifies full-service groceries and supermarkets under a single code, as businesses “primarily engaged in retailing a general line of food,

such as canned and frozen foods; fresh fruits and vegetables; and fresh and prepared meats, fish, and poultry,” excluding convenience stores. Convenience stores are classified separately as establishments “primarily engaged in retailing a limited line of goods that generally includes milk, bread, soda, and snacks” (US Census Bureau). Other SNAP-eligible store types include gas stations with food, pharmacies, and liquor stores (see Table 6).

I assess the effectiveness of this disaggregation method by reaggregating SNAP recipient population per ziptract to the Census tract level and comparing this value with household SNAP participation per tract as reported in the 2009-2013 ACS (see Figure 7). A strong linear relationship between estimated and reported values indicates that the disaggregation accurately represents the data value distribution.

Once disaggregated, I compare SNAP redemption and disbursement by covering the entire study area in uniform square grid cells at several different spatial resolutions (500 m, 1 km, 2 km, and 5 km) and reaggregating redemption and disbursement values to these grid units. I evaluated SNAP usage across these grids in terms of net total benefits per unit (redemption minus disbursement) and net benefits per unit as a percentage of benefits disbursed. I classify units with negative values (i.e., where redemption values are lower than respective disbursement values) as having a net “outflow” of SNAP benefits, in that more of residents’ benefits are redeemed outside of their unit of residence than are redeemed inside their unit. I classify units with positive values as having a net “inflow,” in that more benefits are redeemed than are disbursed to a unit. I utilize different grid resolutions to examine how spatial patterns of benefit outflow and inflow change depending on the analytical scale (e.g., where areas with large net outflow at the 500 m scale appear

at relative equilibrium in the 2 km scale, this suggests that the apparent outflow results from localized movement of SNAP benefits).

To examine SNAP benefit usage in low-income areas, I define 7 analytical areas that correspond to units (in the 500 m grid) with the highest density of SNAP benefits received (per square meter) in Milwaukee County for the year 2013. Selected units fall in the top 3 percent of benefits disbursed at this scale (see Table 2 and Figure 3). I use this 3 percent benchmark because it produces the clearest boundaries, which define the analytical areas (as compared to 1 percent and 5 percent benchmarks, also considered, which do not give substantially different areas).

3.2. Modeling the urban food environment

In order to analyze patterns of low-income food procurement in relation to environmental measures of food accessibility (i.e., measures related to the supply of food), I consider characteristics of the community food environment (the variety and distribution of food sources within an area) and consumer food environments (the quality, cost, and variety of food within stores) that are often used in food access studies (Glanz et al 2007, Kelly, Flood & Yeatman 2011). To represent the community food environment, I calculate proximity to food sources at the Census block group level across Milwaukee County. I use this analytical unit here because it is the smallest unit for which a variety of basic demographic data are available. In order to capture a range of food sources that potentially contribute to residents' diets, I consider proximity to SNAP-accepting retail food vendors (including full-service groceries, convenience stores, gas stations with food, liquor stores, pharmacies, and other general stores with food), as well as urban agriculture sites (community gardens and farms)

and farmers markets (many of which also accept SNAP). I use the same list of retail food locations as in my analysis of SNAP benefit usage described above. I obtain Farmers market locations from the Southeastern Wisconsin Farm Atlas, and community garden locations from a local nonprofit organization, Milwaukee Urban Gardens (MUG). Although this identification method does not capture all types of locales that provide food in an urban context, it provides a representative proxy for comparing potential retail food access across a study area.

To quantify proximity for each block group, I compute physical distance along road networks (using the Network Analyst extension in ArcMap 10.1) from the block group center to the nearest of each of four source types: grocery store, convenience store (which includes all retail vendors not classified as “grocery”), farmers market, and urban agriculture. I also calculate a value representing diversity of source types within a 0.5-mile radius of the block group center (along road networks), using Simpson’s Diversity Index, which measures the total number of classes (richness) and the relative abundance (evenness) of each class.² I use this radius because it has been employed elsewhere as a distance that pedestrians are reasonably likely to travel to obtain food (Caspi et al 2012; Howard, Fitzpatrick & Fulfroost 2011; Larsen & Gilliland 2008; Whelan et al 2002). I calculate diversity to capture both density and variety of proximate sources, in recognition of the theoretical possibility that choice is an important component of accessibility (Alviola et al 2012; Walker 2011).

² Simpson’s Diversity Index is typically used in ecology to evaluate species diversity. However, it provides a useful way to quantify overall density of food source types while also accounting for the relative balance of different types, as compared to a simple density measure, which would not distinguish between an area with many stores (but only of a single type) and an area with fewer stores (but of all different types).

I then model food environment quality based on these metrics, following the concept of a “social vulnerability index,” which involves combining multiple variables into a single index value that the researcher can visualize over space (Cutter et al 2003). To create a food environment index, I first standardize (using linear conversion) each of the five variables representing proximity and diversity of food sources at the block group level. I then conduct principle components analysis (PCA) to identify potential correlation among these variables. Results of this PCA indicate that standardized distance to each of the four food source types (grocery, farmers market, convenience store, and urban agriculture site) at the block group level is significantly correlated. These four variables are accordingly combined into a single component, while the diversity variable remains as a distinct component (see Table 1). These two components are then combined to produce the “Food Environment Index” (FEI). Higher values of this FEI indicate a higher quality food environment (with closer food sources and greater diversity).

Representing consumer food environments is more challenging methodologically, because data on individual store characteristics are not as readily available as locational data. Obtaining information about store inventories typically requires resource- and time-intensive field surveying, which limits the quantity of data points that can be collected by a single researcher. In order to navigate this challenge, I utilize data collected by the Hunger Task Force (HTF), Milwaukee County’s largest food banking organization. In 2011, HTF staff conducted a survey of the price and nutritional quality of foods sold at 129 SNAP-eligible stores across Milwaukee County. Stores for the survey were selected by stratified random sampling to include a representative quantity of each of five store types (convenience store, gas station, pharmacy, midsize grocery, and large grocery). HTF used

a modified version of the Nutrition Environment Measures Survey (NEMS), a standardized survey instrument, to survey the price and variety of foods available at all stores in the sample (see Glanz et al 2007). In addition to ten standard food groups included in NEMS (e.g., dairy, cereal, fruits, vegetables, and meat), HTF incorporated ten foods identified as “culturally appropriate” for Black and Latino populations (e.g., tropical fruits, okra, collard greens, black beans, black-eyed peas, avocado, tomatillos, and sweet potatoes). HTF used the survey data to calculate a composite nutritional quality score, Black and Latino food scores, and an affordability score for each store in the sample. Affordability was defined relative to a benchmark determined by the average price of each food item at large grocery stores. A description of the survey methodology and results is available in a published report from HTF (Gibbs-Plessl 2012).

Using the composite store data provided by HTF, I examine relationships between consumer food environments, community food environments (represented by FEI values), SNAP benefit usage, and demographic characteristics in a sample of 500 m grid cells across Milwaukee County. By selecting cells that contain surveyed stores, I define a set of 90 cases that have values for all of these variables.

	Component 1 (distance)	Component 2 (diversity)
<i>Variable</i>	<i>Component loading</i>	
Grocery (distance)	0.288	-0.058
Farmers market (distance)	0.299	0.175
Convenience store (distance)	0.291	0.068
Urban agriculture site (distance)	0.266	-0.115
Diversity	0.075	0.963
	<i>Variance explained (%)</i>	
	61.90	21.03

Table 1. Food environment component scores extracted by Principal Components Analysis.

Throughout this study, I utilize basic statistical analysis (and, when warranted, spatial statistics) to evaluate relationships between variables. I use regression modeling, which, in its most basic form, models the relationship between a dependent variable of interest and one or more explanatory (independent) variables. Regression enables the researcher to determine the degree to which variation in one variable explains variation in another, while holding all other variables constant. I use regression modeling first to analyze how SNAP usage varies in relation to physical proximity to food sources or demographic characteristics. If variation in demographic characteristics is associated with variation in proximity to food resources, this suggests that there are demographic inequities in food access as measured by proximity. If built environment characteristics are associated with variation in food access, this may also indicate the role of (uneven) urban development processes that scholars have suggested are responsible for the emergence of food deserts (Bedore 2013; McClintock 2011).

4. Results

Across Milwaukee County, SNAP benefit disbursement (at the 500 m grid scale) tends to be highest in core areas of the City of Milwaukee, corresponding with areas of relatively low median income and high proportions of the population below the federal poverty level (see Figure 2). In 2013, SNAP benefit disbursement countywide amounted to \$443.03 million, while SNAP redemptions at retail vendors totaled approximately \$408 million. Within the 7 selected analytical areas, which represent units in the top 3 percent of benefits disbursed (per 500 m unit) countywide, all residents combined received \$109.5 million in SNAP benefits in 2013. During this time, \$91.1 million in benefits were redeemed at vendors in these selected areas.

In Milwaukee County, 87 percent of all SNAP benefits (for the year 2013) were redeemed at grocery stores (defined by NAICS code 445110), despite grocery stores constituting only 29 percent of the 893 SNAP-accepting food vendors in the county (Table 6). Convenience stores, gas stations (and other similar small food retailers), despite constituting approximately 70 percent of SNAP-accepting stores countywide, received only 12.9 percent of all SNAP benefits distributed during the year 2013. The remaining less than 1 percent of benefits were redeemed at farmers markets countywide. In the selected analytical areas, grocery stores constitute approximately 34 percent of stores (slightly higher than the proportion for the county overall), while convenience stores and gas stations comprise a slightly smaller proportion (50.3 percent) of vendors (and receive 43 percent of benefits redeemed) as compared to the proportion countywide. This runs counter to the typical conception of food access in low-income areas, which holds that these areas have more convenience stores and fewer full grocery stores. However, the analytical areas contain no SNAP-accepting farmers markets. Further, of benefits redeemed in these areas, only 48 percent went to grocery stores, while 52 percent of benefits went to convenience stores, gas stations, and other small food retailers.

Comparison of SNAP benefit disbursement and redemption, at each grid resolution, indicates a generally consistent pattern of SNAP usage across the study area, with areas of highest benefit outflow falling primarily in the north-central area of the county (primarily within the Milwaukee municipal borders; Figure 5). There is also a small area of high benefit outflow in the southeast part of the county (roughly corresponding to the municipalities of Cudahy and South Milwaukee). At 5 km resolution, there is a distinct area of outflow (with net losses per unit over \$6 million) in the center of the study area, directly bordered by an area of inflow (with net gains per

unit greater than \$4.6 million) to the south. When compared with USDA “low access and low income” areas, it is evident that these areas do not neatly correspond, although there is some overlap (Figure 1). At 2 km resolution, most of the central core of the city of Milwaukee has a net outflow per unit (greater than \$2.25 million), except for a portion of the northeast edge of the city where there is a net inflow (greater than \$5 million). This is despite the abundance of grocery stores throughout most of the core areas. Spatial statistical analysis using Local Moran’s I confirms this visual evaluation, indicating significant low value clusters (for the value of net benefits per unit, for which lower values correspond to larger benefit outflow) in the north-central area of the county (Figure 4). At 1 km and 500 m resolutions, these patterns become less visually apparent. However, statistical analysis with Local Moran’s I indicates that these patterns of clustering of large net benefit outflows persist at smaller scales. While benefit disbursement and redemption are not significantly correlated at 500 m resolution, disbursement and redemption are positively correlated at coarser scales resolutions (1 km and larger). This is likely explained by the relatively small cell size at 500 m resolution (0.25 km², which is smaller than many Census block groups in the study area), which increases the possibility that one or more stores with high redemption values will exceed benefits disbursed to residents of that cell.

Among the selected analytical areas, at 500 m resolution, 6 of 7 have a net SNAP benefit outflow (see Table 2). Although the area with net inflow also happens to be the largest (at 7.75 km²), there is no evident linear relationship between the size of the analytical area and the magnitude of net benefits (either as total dollars or as a percent of benefits disbursed). Benefit outflow among these areas varies from 18.5 percent to 86.8 percent of benefits of benefits disbursed. Statistical analysis of

the units (82 total) that comprise these areas indicates that the value of net benefits (as a percentage of benefits disbursed) is significantly (albeit weakly, with coefficient values less than 0.3) correlated (with p-value less than 0.05) with population racial and ethnic composition (based on ACS data): as the percent of the population that is Hispanic increases, the net benefits value increases (outflow decreases or becomes inflow); as the percent of the population that is African American increases, the net benefits value decreases (inflow decreases or becomes outflow).

SNAP usage patterns in Milwaukee County correlate with particular aspects of physical food accessibility, as represented by the food environment index (FEI) computed at the Census block group level. FEI, which combines measures of proximity to, and diversity of, various food source types, displays significant spatial dependence across Milwaukee County (see Figure 6). This is to be expected given that FEI is defined by inherently spatial properties (proximity and areal density). The value of FEI is generally highest in the north-central area of Milwaukee (city and County) and in a few outlying suburban areas of the county. Higher values correspond to theoretically higher food accessibility, in that they reflect closer proximity to food sources and greater diversity of food sources. Spatial statistical analysis using Local Moran's I indicates significant clustering of high FEI values in the center of the county. Visualization of grocery store proximity alone reflects a generally similar spatial pattern of accessibility, with block groups in the center tending to have at least one grocery store within 0.25 mile, and block groups further from the center tending to have grocery stores access at 0.5 to more than 1 mile.

Statistical analysis indicates that higher FEI values correlate significantly to *lower* net benefit values (i.e., larger outflow or smaller inflow of benefits), *larger* African American population (as

percent of total population), and *lower* median home values (see Table 5). This is not surprising since core urban neighborhoods have higher diversity and concentration of all food store types (and I considered proximity to convenience stores as adding to FEI value). It also indicates these neighborhoods tend to have higher outflows of SNAP benefits over the course of a year, relative to neighborhoods with lower FEI values. This is despite the fact that grocery store access (measured both in total quantity of grocery stores and distance to nearest grocery store) is highest in these core urban areas.³ However, farmers market proximity is negatively correlated with SNAP benefit disbursement (which tends to be higher in central urban areas), such that as the quantity of SNAP benefits disbursed increases, the distance to the nearest farmers market tends to also increase.

Ordinary Least Squares (OLS) regression modeling with net benefits (as percent of benefits disbursed) as the dependent variable and FEI as the explanatory variable produces a fairly weak model, with an adjusted R-squared value less than 0.1 (and standardized residuals that are highly correlated with the dependent variable), suggesting that while the net quantity of SNAP benefits may covary with food environment characteristics (as represented by FEI), the quality of the food environment explains a negligible amount of the variance in SNAP usage. OLS regression modeling with FEI as the dependent variable, and poverty level (measured as the percent of the population at or below the federal poverty level), African American population (as percent of total population), and white population (as percent of the total population) as explanatory variables, produces a moderately robust model, with an adjusted R-squared value of 0.477 (Table 4). However, the

³ In part, this may have to do with the way that the USDA classifies SNAP-eligible stores based on NAICS, which a manual perusal of stores indicates includes both large chain grocery stores, e.g., Pick ‘n’ Save, and smaller, independent stores—in the selected zones, for example, only six of the 67 stores classified as “grocery” by NAICS are large chain stores, and only about 3.5% of SNAP benefits are redeemed at these stores.

standardized regression residuals are significantly spatially autocorrelated (with p-value less than 0.0001), indicating that the model has a significant degree of spatial dependence. Modeling the relationship between these variables using geographically weighted regression (GWR) indicates that the poverty level and racial composition variables explain a relatively greater portion of the variation in FEI in the northern part of Milwaukee County (based on local R-squared values) than in the southern and central parts of the county.

Comparing FEI and SNAP usage patterns to store nutritional quality and affordability variables (from the HTF survey) provides several notable findings. A majority of surveyed stores (approximately 63 percent of the surveyed sample) have “low” to “very low” nutrition scores, although most of these are smaller grocery or convenience stores; 86 percent of convenience and gas station stores have low or very low nutrition scores, compared to 0 percent of large grocery and superstores (see Gibbs-Plessl 2012: 17). Affordability (which ranges from -29 to 27, with higher values corresponding to lower prices) on average for all surveyed stores is -9.2, and approximately 88 percent of all stores have affordability scores less than 0. In the selected analytical areas, which together contain 36 of the surveyed stores, mean store affordability is -2.92 (higher by approximately 6 points than the survey mean) and mean nutrition score is 4.38 (lower by approximately 10 points than the survey mean).

Among surveyed stores, nutritional quality (as measured by “total nutrition score”) and availability of “culturally-relevant” foods (as measured by Latino and Black Food Scores)⁴ positively

⁴ I acknowledge the racialized and racializing nature of the conventional conceptualization of “culturally-relevant” food, which often serves to implicitly normalize white “culture” in contrast to non-white “cultures,” even as it attempts to recognize the diversity of cultural food preferences. I include it here as a variable

correlate with affordability (see table 3). This makes some intuitive sense, given that the nutritional quality variable includes a measure of the relative price of healthy and unhealthy items within a given store (and is the nutritional quality score will be higher where healthy items are relatively more affordable). However, it is worth noting, as affordability is a critical dimension of food accessibility (Caspi et al 2012). Indeed, while the survey's author, Gibbs-Plessl (2012: 11), found no significant correlation between "SNAP usage" and store affordability, my analysis indicates significant *positive* correlation between affordability and SNAP benefits redeemed (at the 500 m grid scale). Affordability also positively correlates with net benefits (in total dollars), indicating that as store affordability increases, benefit outflow decreases.

Simultaneously, my analysis finds significant *negative* correlation between affordability and SNAP benefits disbursed, and between affordability and percentage of the population with incomes below the federal poverty threshold (per 500 m grid cell). My correlation analysis thus confirms the HTF survey's finding that affordability *decreases* with increasing poverty level (as measured by the US Census 2009-2013 ACS). At 500 m resolution, net benefits (as percent of benefits disbursed) correlate significantly and positively to the store nutritional quality measure (total nutrition score) and negatively to Latino and Black food scores (see Table 3). Thus, areas with higher nutrition scores appear to have higher inflows (or smaller outflows) of SNAP benefits, while areas with greater availability of "culturally relevant" foods tend to have greater outflow of SNAP benefits.

OLS regression modeling with net benefits (as percent of benefits disbursed or as total dollars) as the dependent variable, and store variables, FEI, and socioeconomic factors as

measured by Gibbs-Plessl's (2012) store survey, because it provides a metric to evaluate availability of specific food items not otherwise included in nutrition environment measures.

independent variables, produces a poorly fitted model (the adjusted R-squared value is less than 0.1 and the standardized regression residuals highly correlate with the dependent variable). Thus, these explain a minimal amount of the variation in benefit outflow for any given unit.

Area	Size (km ²)	SNAP benefits redeemed (total \$millions)	Net Benefits (total \$millions)	Net benefits (% of benefits received)	White (% of population)	African American (% of population)	Hispanic (% of population)
1	7.75	51.67	5.05	0.108	49.98	9.56	66.52
2	5.75	23.71	-5.87	-0.198	12.63	81	6.58
3	2.25	21.32	-9.74	-0.820	36.98	48.655	6.65
4	2.25	68.60	-3.82	-0.357	22.89	67	4.98
5	1.25	50.70	-1.15	-0.185	18.8	75	4
6	0.5	1.31	-0.88	-0.403	15.7	70.5	3.6
7	0.5	0.31	-2.06	-0.868	22.83	69.9	3.3
Total	20.25	91.07	-18.47	-0.167	31.06	48.46	28.25

Table 2. Descriptive Statistics for Selected Analytical Areas. All SNAP figures are for the year 2013. Data sources: USDA FNS, Wisconsin DHS, US Census 2009-2013 ACS, Hunger Task Force.

		Benefits disbursed (total \$)	Benefits redeemed (total \$)	Net Benefits (% of benefits received)	Affordability Score	Total Nutrition Score
Total Nutrition Score	R	0.318	0.12984	0.23193	0.34142	
	p-value	0.0000	0.008	0.00895	0.00001	
Affordability	R	-0.303	0.18129			0.34142
	p-value	0.0000	0.040			0.00001
Black Food Score	R			-0.050	0.42368	0.64388
	p-value			0.0000	0.0000	0.0000
Latino Food Score	R		0.18578	-0.067	0.35351	0.52832
	p-value		0.007	0.0000	0.0000	0.0000
Population below poverty level (%)	R	0.561			-0.176	
	p-value	0.0000			0.0470	

Table 3. Pearson correlation coefficients (R) and significance levels (p-values) for selected variables. Variables include SNAP benefit usage, store quality, and socioeconomic variables (all at 500m scale). Only statistically significant correlations (with p-value less than 0.05) are reported here.

Model summary		<i>R-squared</i>	<i>Adjusted R-squared</i>	<i>Standardized Error of the Estimate</i>	<i>F-statistic (significant at 0.001 level)</i>	
		0.316	0.315	1.1705	540.286	
Variable	<i>Standardized coefficients (beta)</i>	<i>t</i>	<i>Significance</i>	<i>Tolerance</i>	<i>VIF</i>	
White (%)	-0.142	-6.151	0.000	0.365	2.743	
African American (%)	0.270	17.786	0.000	0.848	1.180	
Median Income	-0.334	-15.176	0.000	0.401	2.492	

Table 4. Ordinary Least Squares (OLS) Regression Model Summary. FEI is the dependent variable. Income level (median income) and population racial composition (percent white and percent African American) are the explanatory variables.

5. Discussion and Conclusion

Analysis of SNAP benefit distribution and vendor redemptions provides critical insight into the general food procurement patterns of low-income Milwaukee County residents. Countywide, convenience stores (and other retailers that are not full-service grocery stores, including those classified as liquor stores, gas stations with food, and pharmacies) comprise more than two thirds of all food vendors eligible to redeem SNAP benefits. Grocery stores comprise approximately one quarter of all SNAP-accepting vendors, but receive more than three quarters of all benefits redeemed countywide. In areas of the county with the highest densities of SNAP benefit disbursement to residents (generally coinciding with lower-income areas at the center of the county and within the boundaries of the city of Milwaukee), convenience stores comprise a slightly smaller proportion of SNAP-accepting stores, but still account for approximately two-thirds of all stores. The proportion of grocery stores in these areas is higher (by approximately 2 percentage points) than it is across the county as a whole. This contradicts popular narratives and findings from previous studies that point to the relative dearth of grocery stores in urban areas as a contributor to malnutrition (Larsen & Gilliland 2008; Zenk et al 2005). However, only half of all redemptions in these areas occur at

grocery stores (with the remainder redeemed at convenience stores), which may constitute a health concern, given various studies that find limited (or relatively expensive) healthy food options at convenience stores (Larson et al 2009). Simultaneously, small corner stores have been found to improve access to affordable, healthy food in some places (Short et al 2005). My analysis of survey data for a sample of SNAP-eligible stores in Milwaukee County suggests that in this case, convenience stores have low affordability (on average) relative to grocery stores, and that affordability tends to be lower in low-income areas (as compared to higher-income areas). Because affordability tends to correlate positively with store nutritional quality (among the sampled stores), this raises the possibility that food available for purchase in lower-income areas (or areas with larger SNAP recipient populations) is both more expensive and less nutritious.

Although it is challenging (if not impossible) to infer from SNAP usage data precisely where and how SNAP users spend their benefits, comparison of relative spatial patterns of benefit disbursement and redemption provides evidence that some SNAP benefits are redeemed outside of the neighborhood in which they were disbursed. Particularly in north-central areas of Milwaukee County, SNAP benefits flow out of neighborhoods and are presumably redeemed elsewhere, as indicated by the existence of distinct areas where more benefits are redeemed than are disbursed (see Figure 5). There are various hypothesized explanations as to why some residents procure food outside of their neighborhood of residence, most of which frame it as a strategic pursuit of more affordable food, higher quality service, or specific items not found locally (Alkon et al 2013; Hirsch & Hillier 2013; Shannon 2016). The spatial coincidence, in my analysis, of SNAP benefit outflow and lower food affordability and nutritional quality, supports these hypotheses (or, at least, does not negate

them). It is also possible that SNAP usage patterns follow movement associated with travel to and from places of employment or other daily activity (such as childcare centers), although it is beyond the scope of this study to assess this. However, the patterns of SNAP usage revealed through my analysis at minimum suggest the need to consider accessibility of food environments other than the residential neighborhood (and to consider multiple scales for defining the relevant food environment), given that residents may not obtain most or all of their food from stores closest to their homes. They also suggest that factors other than proximity to grocery stores may contribute to how low-income individuals purchase food. It is worth noting, for example, that high inflows of SNAP benefits tend to coincide with relatively abundant availability of foods defined by Gibbs-Plessl (2012) as “culturally-relevant” to Latino communities, suggesting that individuals may be traveling to areas specifically to obtain these items.

Ultimately, a focus on availability of retail food in the residential vicinity belies the multiple ways that low-income individuals strategically navigate economic constraints, often through spatial mobility (Cummins & McIntyre 2002; Gilbert 1998; Rogalsky 2009). It may also reinforce discourses that construct low-income communities (particularly those that are communities of color) as subject to their environment in ways that other communities are not (Guthman 2012). As my analysis of food environment quality (represented by the Food Environment Index (FEI)) in Milwaukee County demonstrates, proximity to and diversity of food sources (including grocery and convenience stores, as well as places for community groups to grow food) is generally highest in the urban core of Milwaukee, which includes the selected analytical areas where SNAP benefit disbursement is densest (see Figure 6). Evidence from modeling the relationships between FEI and

socioeconomic variables at the Census block group level suggests that variations in population racial or ethnic composition and income level explains a significant portion of the variation in the value of FEI; however, the strength of this relationship varies spatially.

Nevertheless, the value of FEI alone does not explain a significant amount of the variation in net SNAP benefits (as percent of benefits received). This is indicated by the poor fit (R-squared value less than 0.003) of the linear regression model of net benefits as a function of FEI (at the block group level). Although there is a small, statistically significant, negative correlation between the values of net SNAP benefits and FEI, the regression standardized residuals are strongly correlated with the dependent variable, and the Spearman correlation coefficient (-0.4) is larger in magnitude than the Pearson coefficient (-0.054), indicating that the relationship between these variables is nonlinear.

Broadly, the use of SNAP benefit data to model low-income food procurement patterns is significant in that it provides a means to examine spatial variation in urban food access in terms of variables that more closely approximate behavior. It also provides an alternative analytical mechanism to determine the relevant scale at which to define the spatial context of an individual's food supply. This approach can be used to identify areas within a city where food access is potentially limited (based on high net outflows of SNAP benefits) or areas that attract high volumes of low-income food shoppers, which may provide clues about what characteristics positively influence food procurement patterns (e.g., stores located near major transit hubs). Comparing areas defined by high SNAP benefit outflow to areas of low food access defined by distance from a supermarket (the USDA's

primary definition) demonstrates the difference between these approaches (Figure 1). SNAP data thus provides a different way to represent or identify low access areas.

The use of dasymetric areal interpolation to disaggregate SNAP data from zip code level to finer spatial resolutions, as I have done in this study, is crucial, as it allows for more nuanced analysis and direct comparison with Census data at block group level. The efficacy of this interpolation technique is indicated by the strong linear relationship between the estimated value of SNAP benefits disbursed and the proportion of SNAP-receiving households reported ACS at the Census tract level (see Figure 7). By first disaggregating SNAP benefit data to a 30 m raster grid (or individual stores, for benefit redemptions), it becomes possible to model SNAP usage at a variety of spatial scales and to compare how the pattern of benefit outflow and inflow changes with these scales (Shannon & Harvey 2013).

Understanding the distribution of low-income food purchasing among different retail store types has important public healthy and policy implications, given concerns about relative nutritional quality and affordability of foods available from convenience stores, as compared to larger chain grocery stores. There is some evidence to suggest that chain supermarkets tend to offer the most affordable prices, but evidence is more mixed regarding healthy food accessibility at different store types (Shannon 2016; Short et al 2005). As my analysis of store survey data shows, the average nutritional quality among convenience stores in Milwaukee County is lower than the average for grocery stores. However, it also indicates that store nutritional quality tends to increase with increasing density of SNAP benefits disbursed to an area and increasing SNAP benefit spending (whether considered alone or as relative to benefits disbursed). This would suggest that low-income

residents do not categorically lack access to nutritious food and that neighborhoods with higher store nutritional quality attract low-income shoppers.

Using NAICS to classify retail type introduces a notable complication to my analysis, in that both large chain supermarkets and smaller, independently owned, neighborhood stores are classified under the same “grocery” category. A manual review of the Milwaukee County retailers listed under this category reveals great variety, and visits to a few stores suggest that what NAICS labels “grocery” may be experientially challenging to distinguish from a convenience store. Determining the importance of this distinction depends on refining theoretical and empirical knowledge about what makes any given store more or less accessible and health-promoting. It is likely that this would require more detailed data collection (beyond what publically available quantitative datasets can provide), as well as consideration of subjective, experiential qualities. There is also opportunity here to consider elements of retail environments that shape accessibility, but are less directly related to food, such as the experience of racial profiling (which presumably acts as a disincentive to patronize particular stores), practices that police the poor, or concerns about store ownership in communities of color (see Chapter 3). While SNAP data cannot explain why urban residents procure food as they do, or determine what particular factors constitute a health-promoting food environment, they do enable visualizing general patterns of low-income food procurement that can inform more precise identification of where (and at what scales) SNAP benefits move into or out of particular neighborhoods. Perhaps most importantly, they challenge dominant discourses that pathologize low-income places or suggest low-income individuals are subject to their environments.

Food Environment Index (FEI)	Net Benefits (% of benefits disbursed)		Home Value (median)	Hispanic (% of population)	African American (% of population)	White (% of population)	Benefits redeemed (\$)	Benefits disbursed (\$)
	S		-0.241	-0.18	0.123	-0.56	0.309	0.176
	p-value		0	0	0	0	0	0

Table 5. Spearman correlation coefficients (S) and significance levels (p-values) for food environment index (FEI), socioeconomic variables, and SNAP benefit usage at the Census block group level. Only statistically significant correlations (with p-value less than 0.01) are reported here.

Store Type	NAICS code	Number of stores	Number of stores (% of total)	2013 SNAP benefit redemptions (\$millions)	SNAP benefit redemptions (% of total for all stores)
Grocery	445110	258	28.89	355.57	87.113
Small stores		626	70.1	52.597	12.89
<i>Convenience</i>	445120	335	37.51	26.88	6.585
<i>Liquor</i>	445310	39	4.37	3.46	0.848
<i>Pharmacy</i>	446110	70	7.84	5.59	1.369
<i>Gas station</i>	447110	182	20.38	16.67	4.085
Farmers Market	445230	9	1	0.0027	0.001
Total		893	100	408.17	100

Table 6. SNAP redemptions by store type for Milwaukee County (year 2013). Data source: USDA FNS.

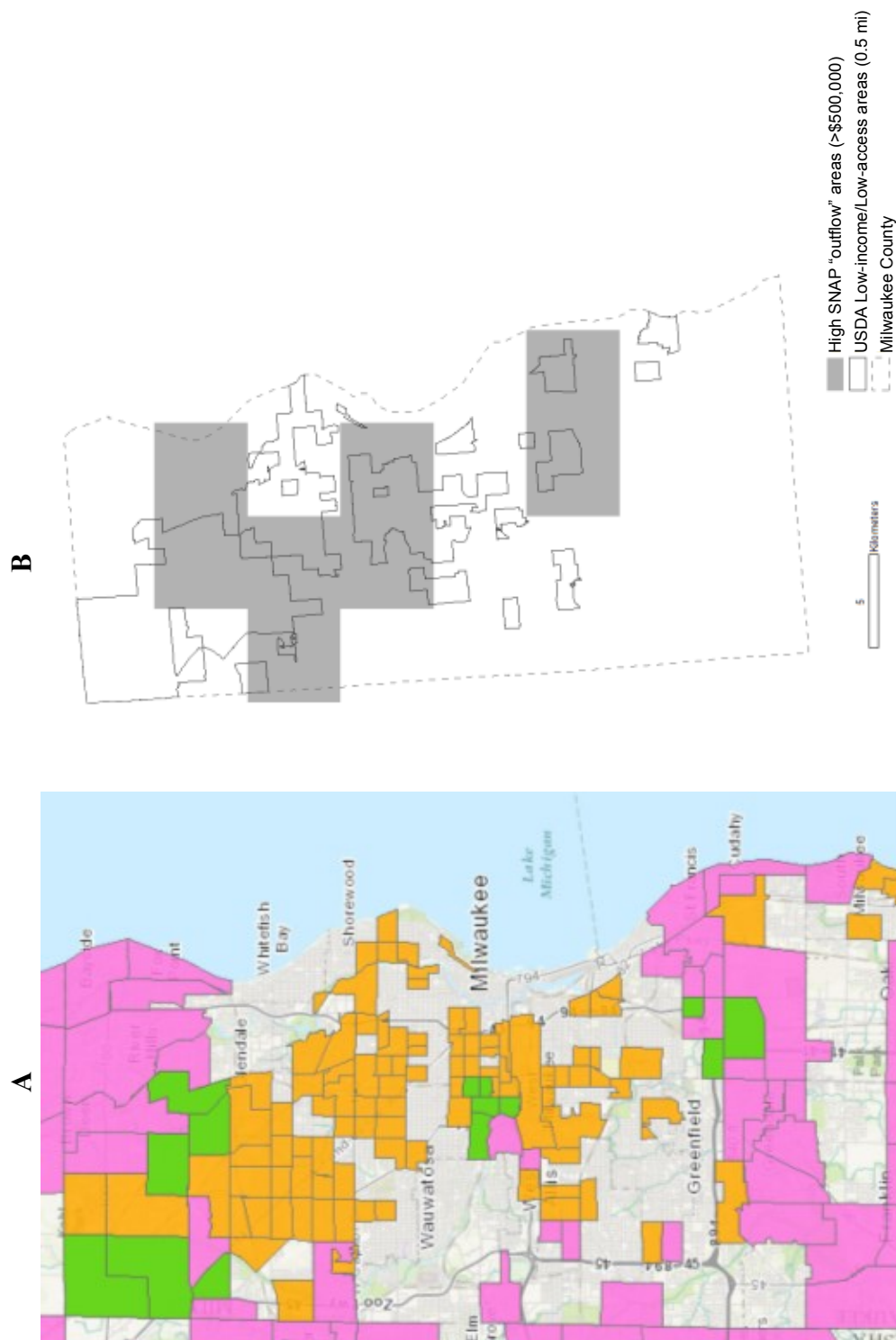


Figure 1. Comparison of food access measures. (A) “Low Income and Low Access” Census tracts in Milwaukee County, as defined by the USDA. These tracts are more than 1 mile (green) or more than 0.5-mile (orange) from a supermarket and low-income. Pink areas are more than 1 mile from a supermarket, but not low-income. Source: USDA Food Environment Research Atlas. (B) High SNAP outflow areas (net loss greater than \$500,000 per 25km² grid cell) of Milwaukee County, overlaid with USDA Low Income and Low Access (0.5-mile) Census tracts.

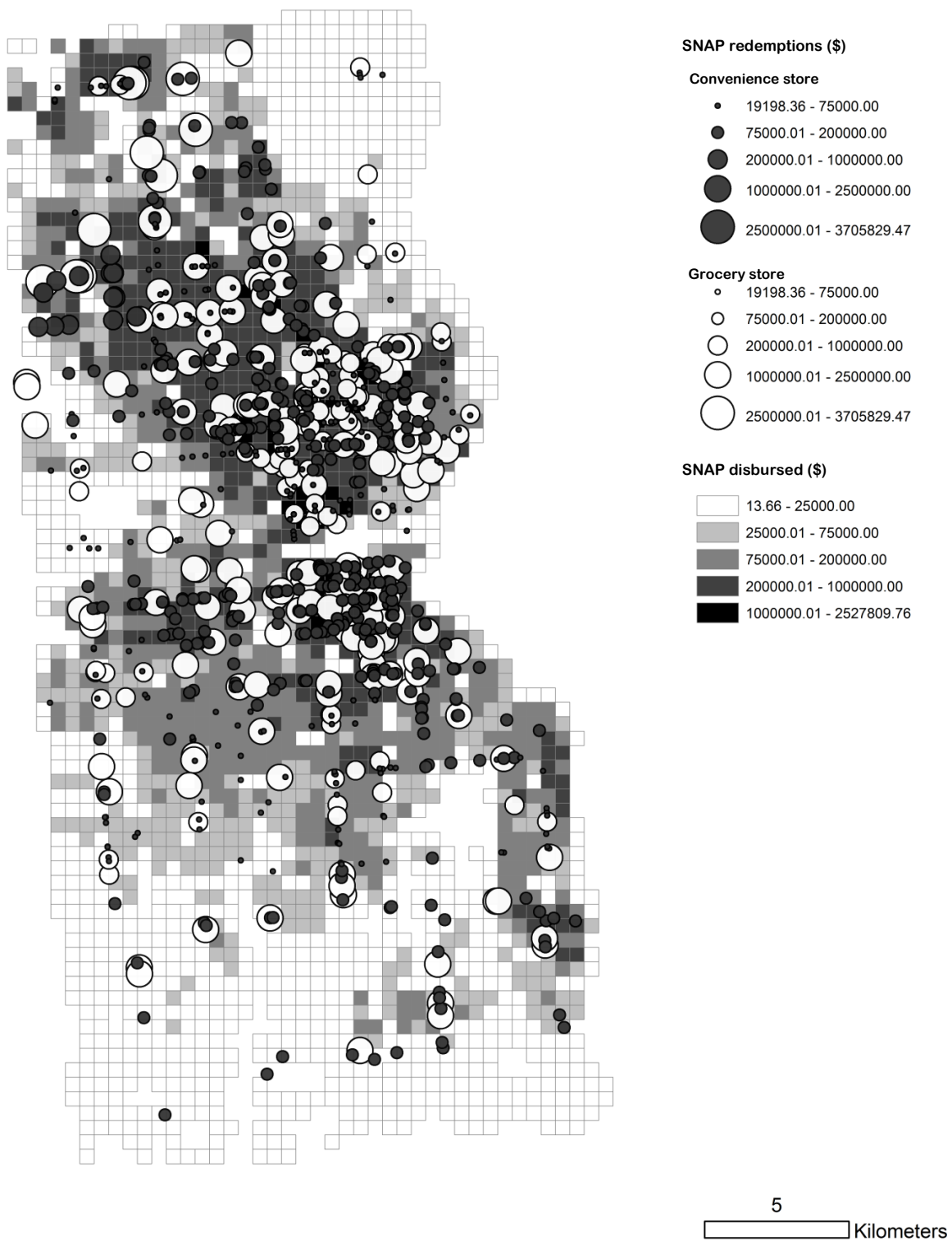


Figure 2. SNAP benefit disbursement at 500 m resolution and benefit redemption per store. Data for Milwaukee County. Source: USDA FNS and Wisconsin DHS.

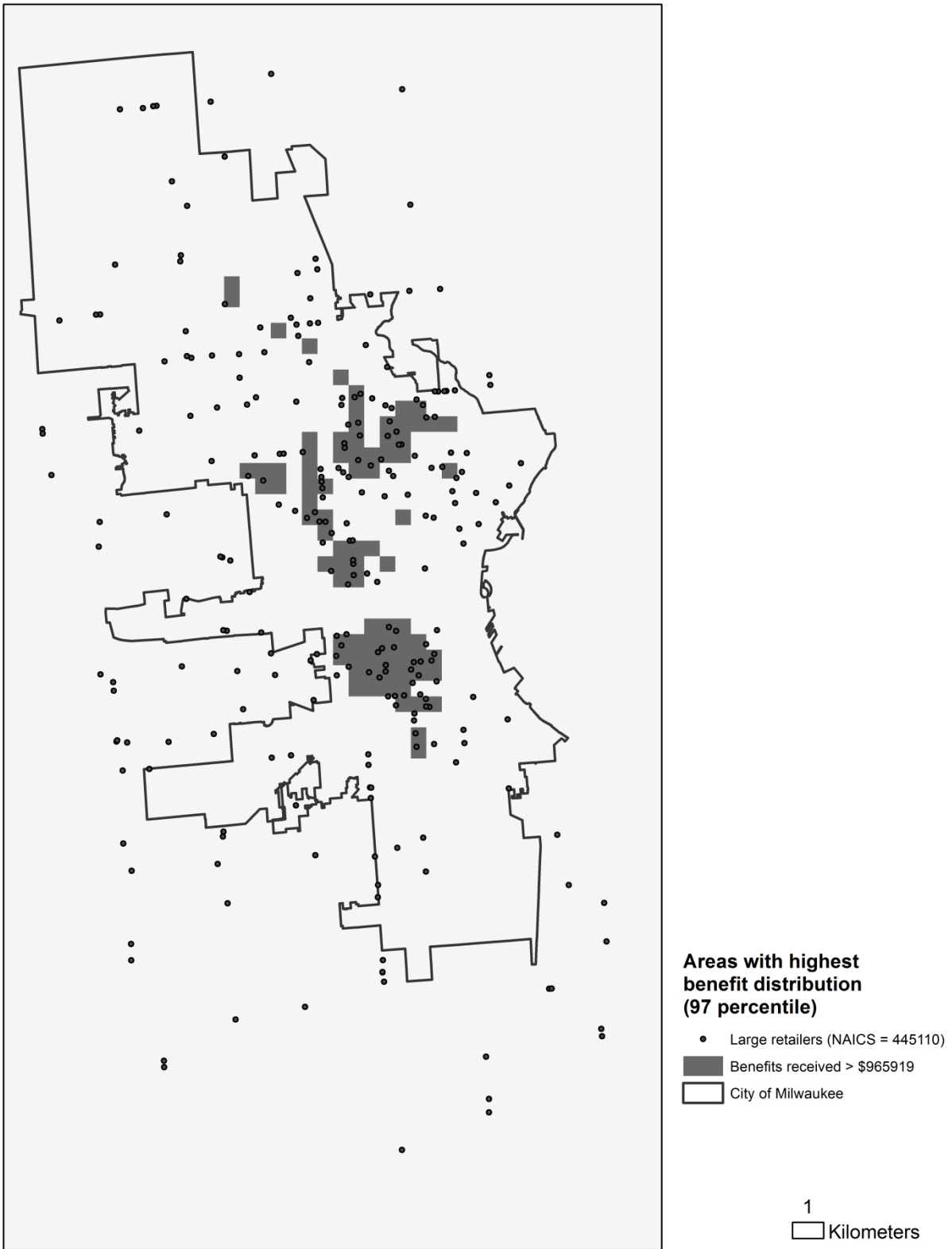


Figure 3. Analytical areas. These areas are in the top 3% (by density) of SNAP benefits disbursed across Milwaukee County in 2013. Grocery store locations are also shown.

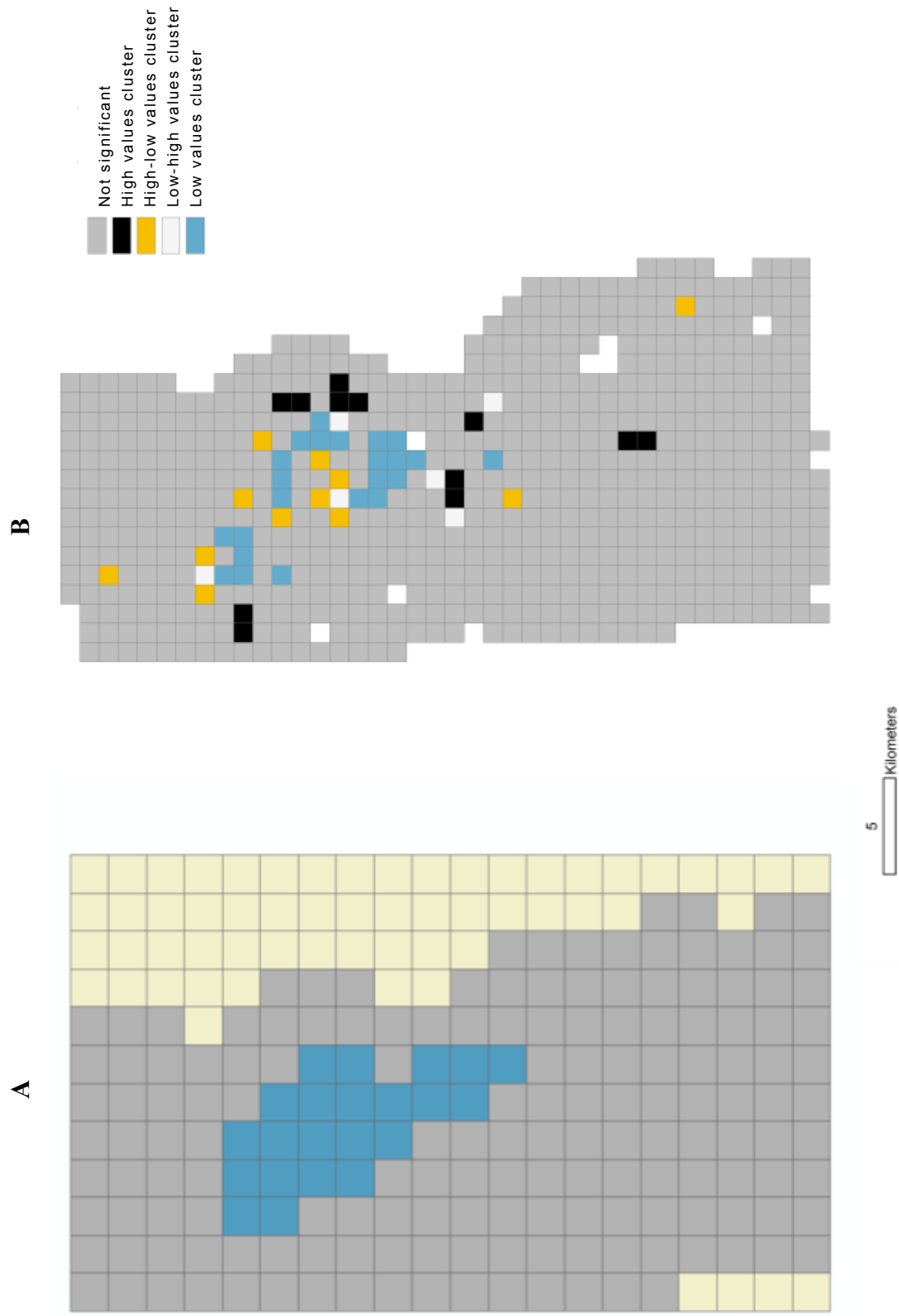


Figure 4. Spatial clusters (Moran's Local I) of high and low values of net benefits (redemptions minus disbursement) per (A) 2 km cell and (B) 1 km cell.

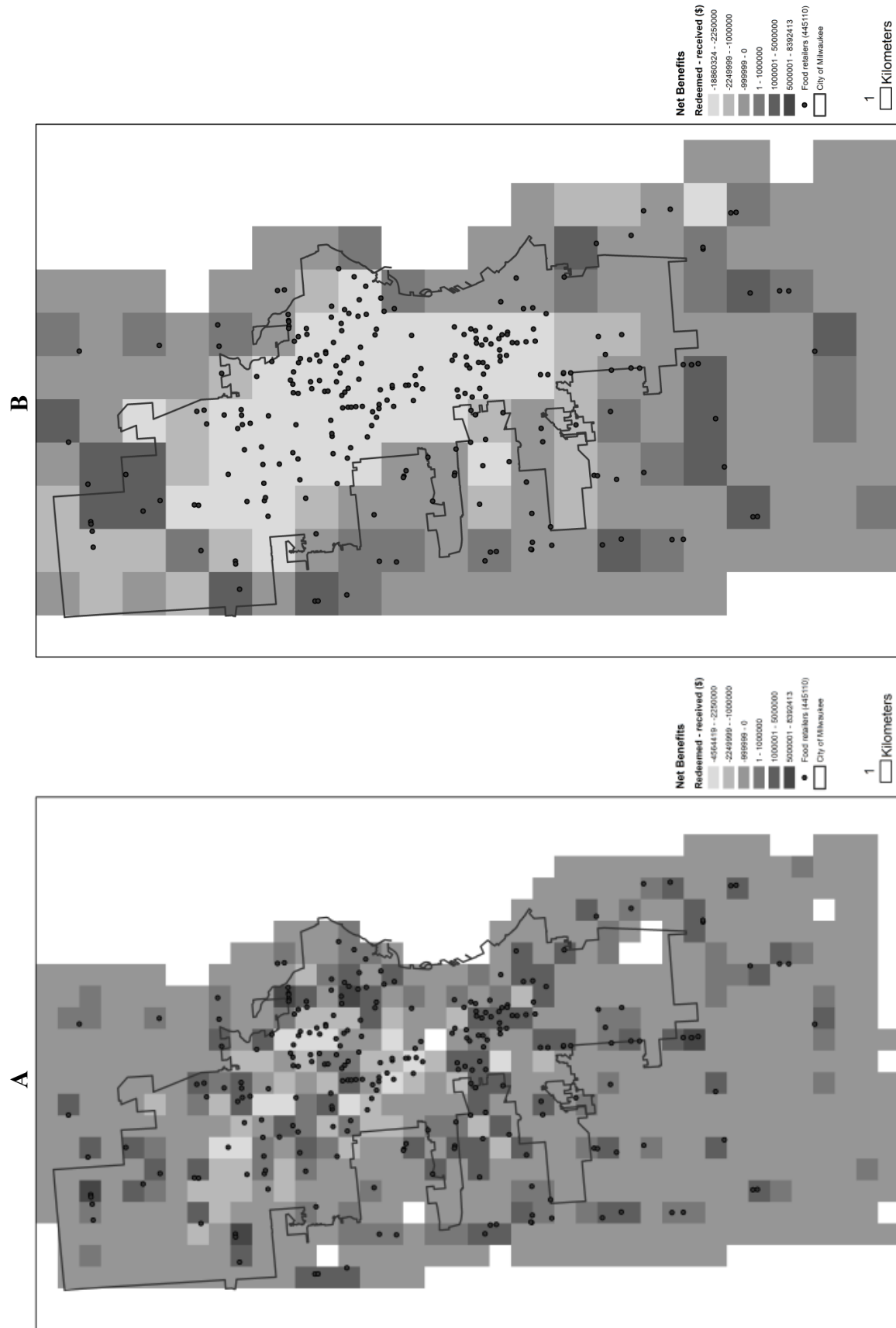


Figure 5. Net SNAP benefits per grid cell at (A) 1 km and (B) 2 km resolution. Lighter shaded cells indicate negative values (outflow); darker shaded cells indicate more positive values (inflow).

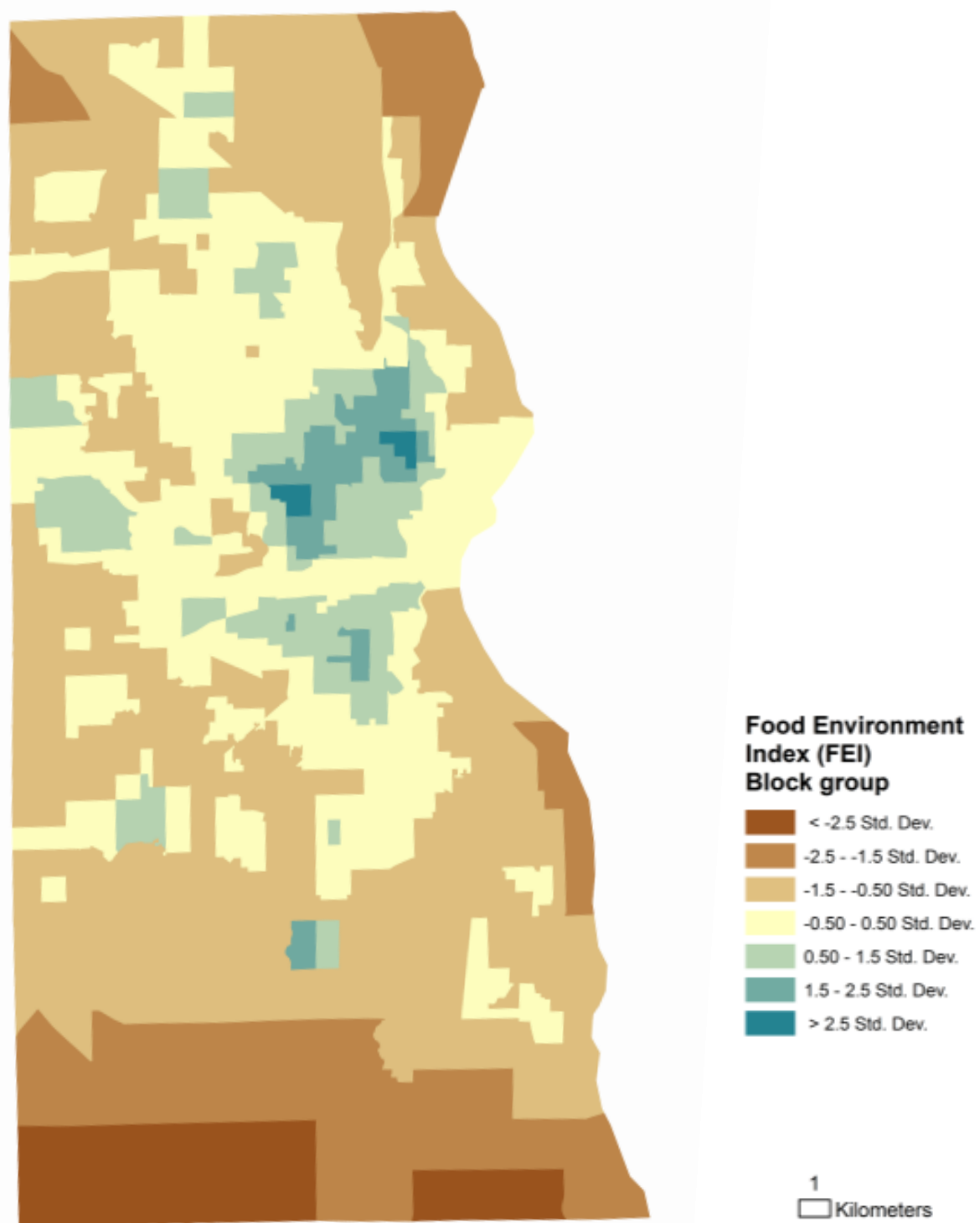


Figure 6. Food Environment Index (FEI). FEI represents proximity to and abundance of grocery and convenience stores, farmers markets, and urban agriculture sites, at the Census block group level.

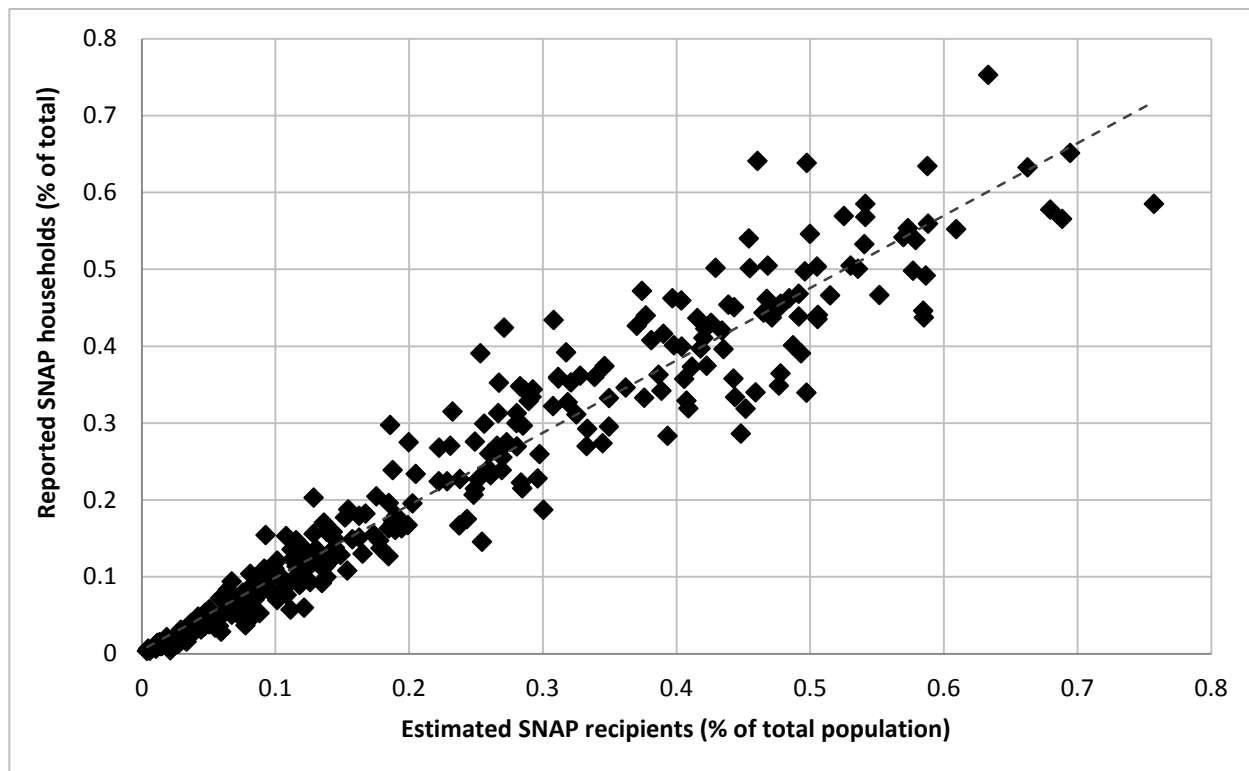


Figure 7. Estimated versus reported SNAP recipients in 2013. Reported percentage of SNAP-receiving households per Census tract (from 2009-2013 American Community Survey) is plotted against estimated percentage of SNAP recipients per tract in 2013 (from disaggregation of zip code level Wisconsin Department of Health Services data). The slope of the linear function is 0.942, and R-squared is 0.927, indicating a strong correlation between the variables.

CHAPTER 3: FROM 'RUST BELT' TO 'FRESH COAST': FOOD JUSTICE, URBAN AGRICULTURE, AND ECONOMIC DEVELOPMENT

1. Introduction

In 2013, the City of Milwaukee Office of Environmental Sustainability launched HOME GR/OWN, an initiative endeavoring to increase fresh produce consumption and reduce obesity rates citywide through the development of urban agriculture. In doing so, the city joined a growing number of government and community-based organizations, in Milwaukee and other cities across North America, seeking to improve food access and alleviate dietary health inequities. Such efforts are often informed by variations on the obesogenic environment thesis, which posits that environmental exposure or proximity to sources of unhealthy foods promotes unhealthy dietary practices, such as the overconsumption of fat (Guthman 2012).⁵ Some are also informed by critiques of industrial agro-food systems, typically associated with the concept of food justice (Alkon & Agyeman 2011; Heynen, Kurtz & Trauger 2012).

The innumerable benefits produced by such efforts notwithstanding, recent scholarship reveals the ways in which dietary health promotion initiatives in many cases contribute to reproducing racialized poverty and dispossession by encouraging neoliberal governmentalities, pathologizing communities of color, or advancing whiteness (Barracough 2009; Guthman 2008a; Ramirez 2015; Slocum 2007). Scholars accordingly call for attention to the political implications of popular dietary health interventions (Guthman 2012; Shannon 2014a; Vaughn 2014). Additionally,

⁵ Scholars have begun to develop broader conceptualizations of food access, emphasizing the multiple contextual influences on individual dietary health that together constitute the urban food environment (Caspi et al 2012). Yet, geographic exposure remains the predominant way of conceptualizing dietary health inequities (Guthman 2013b; Lytle 2009).

recent work in political ecology emphasizes the role that political economic processes play in the production of health, as they structure resource distribution and the ways that health problems and solutions are defined (Guthman 2014; King 2010; McClintock 2011).

In this article, I explore the particular discourses about dietary health that animate Milwaukee food initiatives, including HOME GR/OWN and many others, in order to identify the logics that propel these initiatives and their effects on urban space. I argue that efforts to develop urban agriculture (UA) and local food systems, while framed as public health interventions, are also driven by economic development agendas that identify these activities as mechanisms to generate value from vacant spaces in disinvested neighborhoods. As such, these kinds of food projects reproduce racializing discourses that constitute “inner city” communities, cultures, and spaces as “unhealthy” and thus viable to be leveraged in the interest of (and even standing to benefit from) neoliberal economic development. Simultaneously, the city appropriates discourses from long-established Black, inner city community-based UA organizations to legitimize its development efforts. Yet, because the city now actively champions and collaborates with these organizations, neoliberal development activities paradoxically create openings for these organizations to advance their own interests, which challenge in various ways systems of racism.

Before discussing my empirical research, which is based on in-depth qualitative fieldwork and data analysis conducted over the course of approximately 3 years (2013 through 2015), I situate this project relative to existing research on urban food environments, health, and food-related social movements. I consider how particular health discourses serve to promote biopolitical modes of governance. I also examine how scholars have conceptualized the racializing and neoliberalizing

effects of initiatives to improve urban food access and dietary health (within the realms of community organizing and government policy). Finally, I draw attention to the ways in which urban spatial processes (including economic development) are inherently raced and racializing.

2. Political Ecologies of Urban Food Environments and Health

I theorize this research broadly in relation to work in political ecology, which, as a field, addresses the intersections of social and environmental processes (Heynen, Swyngedouw, & Kaika 2006; Robbins 2012). Political ecology provides frameworks for analyzing the production of dietary health and urban environments in terms of material and discursive processes. Political ecologies theorize health (how it is produced, experienced, and defined) as contingent and uneven, shaped by class structures and processes of racialization. Health, from this perspective, extends beyond clinical or biomedical metrics of harm and recovery to include vulnerabilities and varying notions of wellbeing (Guthman & Mansfield 2012; Jackson & Neely 2015; King 2010; Mansfield 2008). Finally, political ecologies conceptualize knowledge production and application as factors that contribute to producing health, in part by shaping decision-making processes that affect health vulnerabilities beyond the presence or absence of specific diseases. This leads to the consideration of non-dominant health narratives and the ways that orthodox disease representations might serve to reproduce social difference (Guthman 2014). According to King (2010: 50), “a political ecology of health would seek to understand the ways in which diseases are discursively understood and represented by institutions, and how these discourses align or conflict with local understandings.” Thus, a broad aim of this paper is to examine the health discourses that animate food projects and

the ways that conceptions of dietary health and disease shape the production of space in particular ways.

Through the lens of political ecology, scholars have theorized contemporary urban dietary inequities in North America as outcomes of historical and ongoing capitalist dynamics, mediated by political regulatory structures at various scales, that structure urban space and society, including uneven spatial development and wealth distribution (Donald 2013; Heynen et al 2012). These dynamics contribute to the production of social marginalization and polarization, which in turn contribute to resource access inequities (Mohan 2002). Scholars emphasize two interrelated processes that produce unequal food access: uneven urban spatial development in conjunction with changing geographies of retail food (Bedore 2013), and neoliberalization (Guthman & DuPuis 2006). Uneven urban development has produced spatial variation in urban food environment quality through historical processes of capital accumulation and devaluation facilitated by political processes—including racist mortgage lending practices, residential zoning, policies promoting suburban development, and deindustrialization—that produce particular configurations of the built environment and the distribution of retail food across it (Eisenhauer 2001; McClintock 2011).

Neoliberalization refers to processes of political economic restructuring and to particular programs of social regulation, oriented towards market liberalization, entrepreneurial governance, and retrenchment of state welfare (Brenner & Theodore 2002; Peck & Tickell 2002). Although neoliberalization has by no means been identical across places (as its path depends on the context in which it emerges), in many places it has increased poverty and dependence on cheap food and made nutrient-poor foods more affordable and abundant relative to nutrient-dense foods (Donald 2013;

Guthman & DuPuis 2006). Neoliberal welfare reform in the US has also contributed significantly to rising food insecurity and declining health, by reducing welfare benefits and pushing more individuals into temporary and low-wage employment (Cook 2012; Lightman et al 2008).

While food justice organizing and other efforts to improve retail food access in disinvested urban areas are often conceived as responses to processes of neoliberalization and uneven development, research indicates that these efforts often have minimal impact on slowing these processes, or at worst, serve to reinforce them. In particular, scholars have highlighted the tendency of community-based food projects to reproduce neoliberal governmentalities, by encouraging reforms centered on volunteerism and consumer choice (Ghose & Pettygrove 2014b; Pudup 2008). Neoliberal governmentalities create specific imperatives around individual responsibility, delineating between active citizens who behave appropriately and self-regulate to conform to certain norms, and individuals who fail to self-discipline, thus attributing conditions of health or illness to individual action. The construction of diet-related illness as individual failure to self-discipline reflects a biopolitics of public health, in which controlling illness becomes a function of regulating populations, through the construction of norms distinguishing more or less healthy bodies or urban environments (Brown 2009; Foucault 1985; Guthman & DuPuis 2006; Keil 2009).

These forms of neoliberal governance may also be spatialized through urban land use processes, where environmental design is utilized to incentivize or compel idealized behaviors. Such interventions often reference narratives about “place-based” health that code for the privatization of health care (Carter 2015: 375). Shannon (2014a: 10) argues that efforts to alleviate dietary health inequities through highly localized (neighborhood-level) environmental modification (e.g.,

developing a grocery store in a low-income neighborhood) produce a form of neoliberal paternalism that nudges individuals into healthy behaviors while disconnecting the problem from larger political economic systems.

Research also indicates that local governments may promote activities associated with improving food accessibility, particularly urban agriculture (UA) development, as an economic development strategy (Draus et al 2014). Walker (2015) theorizes UA in this context as a kind of sustainability fix that allows local states to resolve crises of accumulation by building sustainable infrastructure (i.e., green space) and positioning the city as innovative (see also Castree 2008; While et al 2004). UA may thus contribute to processes of eco-gentrification, wherein green space and community gardens become amenities that elevate property values (Quastel 2009). As urban green space development and management under neoliberal regimes is increasingly delegated to civil society organizations or private investors, this has tended to favor forms of green space that are economically productive (Domene & Sauri 2007; Perkins 2009b).

Accordingly, one broad aim of this paper is to examine, in the case of Milwaukee, a range of actors leading projects to address perceived food inequities, in order to understand the discourses that animate them and the spatial practices in which they engage. In particular, I explore how these projects connect to political economic processes. Further, despite concerns about the relationship between food activism and neoliberal structures, there has been comparatively minimal examination of the role of state actors in responses to food inequities. In Milwaukee, as in other US cities, the local state has taken an active role in recent years in promoting healthy food access and food system localization. The extent to which local government actors actively support community-based food

activist projects provides an intriguing opportunity to explore the ways that food discourses and practices confront or support state interests.

2.1. Racialization, Whiteness, and Food Spaces

In considering the production of dietary health discourses and the ways that food projects contribute to neoliberalization, it is important to emphasize that these processes are thoroughly intertwined with processes of racialization and the construction of racial hierarchies (Barraclough 2009; Brown 2009; Wilson 2009). Neoliberalization itself can be theorized as an inherently raced and racializing process. Neoliberal discourses about individual responsibility and the supposed color-blindness of market-based systems have served to simultaneously obscure and reproduce race and racism as organizing principles of society (Melamed 2006; Roberts & Mahtani 2012).

A central concern within research on food organizing has been the extent to which food activist projects reproduce or reinforce racist-classist social structures, through the production of discourses and material spaces informed by white upper-middle class identities and imaginaries (Guthman 2008b; Harper 2011; Ramirez 2015; Slocum 2007). The predominance of whiteness in food activist organizations, scholars contend, has resulted in the tendency of these organizations to promote implicitly white ideals about food and health and white spaces of food practice that obscure racial inequities within food systems (Slocum 2011). Alkon and McCullen (2011: 939), for example, describe how participants at two Northern California farmers markets are motivated by a “white farm imaginary” that valorizes white farmers. They argue that through this imaginary, the farmers markets become spaces “for a form of food politics that reflects liberal, affluent, white identities and

positionalities.” Because these discursive constructions may shape material conditions by enabling or inhibiting political economic processes, such as capital investment or public policy-making, they should be considered as part of the political ecological production of dietary health and urban food environments.

Because I aim to understand how food project discourses and practices both shape and are shaped by urban political economic processes, my analysis will consider the ways in which food projects (discourses and practices) intersect with other urban socio-spatial practices—including economic development, collaborative governance, land use policy, and environmental production. To do so, it is helpful to understand economic development and other forms of spatial production as processes that are thoroughly raced and classed, and that contribute to (re)producing particular patterns of racialization and social exclusion (Barracough 2009; Bonds 2013a; Dwyer & Jones 2000; Lawson, Jarosz & Bonds 2010).

3. Methodology

With reference to the bodies of literature described in the preceding section, the remainder of this paper elaborates on the following research questions. First, I explore the various forms of food organizing and policymaking that occur in Milwaukee, and the way that these practices construct food-environment-health relationships. I then examine the effects of these discourses, in terms of the production of space and social constructions of difference, in relation to processes of neoliberalization and racialization.

Semi-structured interviews, participant observation, and document analysis provide the primary sources of qualitative data for this research. Because my research questions center on subjective meanings and social constructions of knowledge, semi-structured interviews were used, as they facilitate the capture of nuanced meanings, unexpected connections between topics, and non-verbal cues, while also allowing the researcher to guide participants to address certain themes of interest (Dunn 2010). Between February 2014 and August 2015, I conducted 24 semi-structured interviews with representatives or members of Milwaukee organizations whose missions and activities relate to food justice or dietary health (see Table 7). I sought and conducted interviews with several distinct types of organizations: nonprofit organizations with food equity or food-related social justice as the primary component of their mission, community-based organizations with food equity as one (but not the sole) component of their mission, emergency food providers, and government entities (including public universities). Interview participants were identified through purposive sampling to select individuals actively involved in organizations in leadership roles, and to ensure that all types of organizations are represented, with the ultimate goal of reaching saturation in data collection (Charmaz 2000). I asked each interviewee questions regarding their organization's mission, goals, and activities, its understanding of food access or dietary health issues, and the solutions it proposes to these issues. I transcribed and coded all interviews.

Participant observation was conducted most intensively between January 2014 and August 2015. However, I also engaged consistently in periodic participant observation at some organizations (including Milwaukee Food Council (MFC), Milwaukee Childhood Obesity Prevention Project (MCOPP), and Victory Garden Initiative (VGI)) since 2011. This provided important information

about organizational dynamics and discourses beyond those that could be deduced from texts or interviews. Finally, documents (including promotional materials, strategic planning documents, public organizational correspondence, social media feeds, and local news publications) collected between 2011 and 2015 were analyzed.

4. The Politics of Food and Health in Milwaukee, Wisconsin

The sociospatial landscape of Milwaukee and its surrounding metropolitan area reflects many characteristic urbanization processes that have occurred since the mid-1960s in cities across the US. As a city historically fueled by a robust industrial manufacturing economy, the period of deindustrialization and post-Fordist political economic restructuring led to particularly significant impacts via employment loss, urban disinvestment, suburbanization, and white flight. Milwaukee is also significantly racially unequal, in terms of housing patterns, employment, transportation access, and incarceration rates (Pawasarat & Quinn 2013; Rast 2014). Since the early 1980s, the City of Milwaukee has pursued various forms of neoliberal economic development, including downtown redevelopment initiatives and defunding municipal public services such as parks management (Ghose 2007; Perkins 2010; Zimmerman 2008). In response, voluntary organizations have proliferated to fill social service needs (Roy 2011).

More recently, in the wake of economic recession and a housing and mortgage crisis that began in 2006, home foreclosures and land vacancy have increased significantly (Derus 2007; Pawasarat & Quinn 2007). In 2014, the City Mayor's Office reported a total of 2,283 bank-filed

home foreclosures, and 440 vacant properties demolished (City of Milwaukee 2015). Land vacancy has disproportionately occurred in northside neighborhoods, according to the city (Figure 8).

Evidence indicates that disparities in food access exist in Milwaukee, in terms of the availability of food (Gibbs-Plessl 2012) and individuals' abilities to afford food (as reflected in the distribution of food assistance benefits). In 2013, the highest density of Supplemental Nutrition Assistance Program (SNAP; administered in Wisconsin via the FoodShare program) benefits received was located in North-central and South-central areas (see Figure 10). Although these areas of Milwaukee tend to have relatively abundant access to grocery and convenience stores (in terms of density and physical proximity), they also tend to have net losses of SNAP benefits, as most of their benefits are redeemed in other areas (see Chapter 2). Milwaukee's Center for Urban Population Health reports that in 2013, 68 percent of all Milwaukee residents consumed less than 5 servings of fruits or vegetables daily, and 37 percent were clinically obese; these percentages increase for lower socioeconomic groups (Greer, Baumgardner, Bridgewater, et al., 2013).

It is in this general context that numerous organizations and initiatives have emerged to address food access and dietary health (Table 7). These food projects⁶ encompass a variety of motivations, interests, and practices. The practices in which actors most commonly engage include direct food service and emergency food assistance, green space production for urban agricultural or community garden uses, development of non-conventional food markets and food-related enterprise

⁶ Throughout this chapter, I use the phrase "food project" to describe organizations or initiatives, led by civil society or state actors (or combinations of both), for which urban food systems are a target of intervention or a means to other goals (or both). The ways in which actors engage with food systems vary. While food is my entry point, and a common interest of all actors included in this research, I also consider how various efforts are propelled by other kinds of concerns. I refer to all as food projects to avoid unintentionally misrepresenting or reducing the goals and ideologies of particular efforts to laden terms (e.g., "food justice" or "activist").

(such as farmers markets, healthy corner stores, and urban community supported agriculture, and small farmer training), education and advocacy (information production and dissemination), and local state policymaking (Table 8).

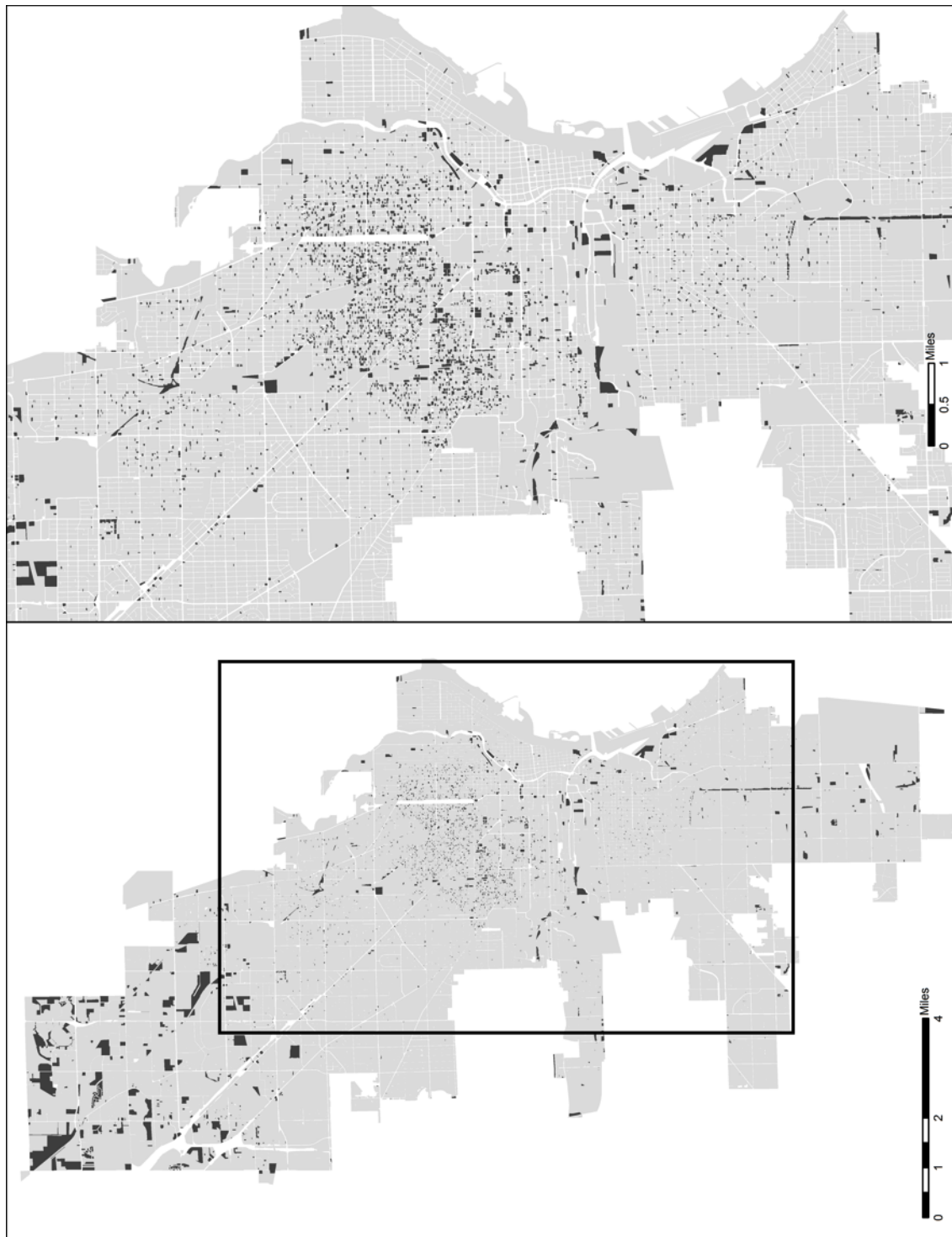


Figure 8. Vacant city-owned lots in Milwaukee for the year 2014. Vacant lots are shaded dark grey. Data source: City of Milwaukee.

4.1. Milwaukee food projects

While discourses about food and health are central to the practices of the actors considered here, many of these practices are animated by discourses that are not solely about food or dietary health. Food projects encompass discourses connected with historical and contemporary political economic processes, including economic development agendas, land use practices, and systemic racism. Of particular significance to the trajectory and geography of food projects in Milwaukee have been deindustrialization and urban renewal projects during the 1960s and 1970s that uprooted predominantly Black neighborhoods, ongoing racialization and neoliberalization, and recent economic change that has produced high rates of home foreclosure and land vacancy in certain parts of the city.

Contemporary community-based food projects in Milwaukee can be traced back to the 1960s, when multiple hunger relief programs (e.g., community meal programs), and the University of Wisconsin Extension (UWEX) Milwaukee County community garden rental program, first came into being (see Table 9). Among these early organizing efforts was the Black Panther Party's (BPP) Free Breakfast Program, which sought to alleviate hunger by providing free breakfasts to school children in Milwaukee from 1969 through 1970 (Heynen 2009; Witt 2005). A central significance of this program was its contribution to the social reproduction of low-income Black communities in Milwaukee in the context of the shrinking welfare state and systemic white supremacy (Heynen 2009). Although this BPP program is no longer active, its practices and political aims (particularly the focus on basic material needs) in some ways mirror those of contemporary Black-led food projects.

<i>Organization</i>	<i>Reference Name</i>	<i>Type</i>
City of Milwaukee Office of Environmental Sustainability	OES	City government
HOME GR/OWN	HG	City government
City of Milwaukee Health Department	Health Department	City government
Milwaukee Food Council	MFC	Nonprofit
Cooperative Institute for Urban Agriculture and Nutrition	CIUAN	
Milwaukee Urban Agriculture and Water Policy Task Force	MUAWP	
Milwaukee Urban Gardens/Groundwork Milwaukee	MUG	
Milwaukee Childhood Obesity Prevention Project	MCOPP	
Growing Power	GP	
Alice's Garden	Alice's Garden	
Fondy Food Center	FFC	
Victory Garden Initiative	VGI	
CORE/El Centro	CORE	
16 th Street Community Health Center	SSCHC	
Latinos por la Salud		
Walnut Way Conservation Corps	WWCC	
All People's Church	APC	
Center for Resilient Cities	CRC	
United Neighborhood Centers of Milwaukee	UNCOM	
Northside food pantry		
Northside community center		
Hunger Task Force	HTF	
University of Wisconsin-Extension	UWEX	Public higher education institution
University of Wisconsin-Milwaukee	UW-Milwaukee	
Medical College of Wisconsin	MCW	Private higher education institution
Pete's Market	Pete's	Business
Zilber Family Foundation	Zilber	Philanthropic

Table 7. Milwaukee food projects.

During the 1970s the Hunger Task Force (Milwaukee County's largest food banking organization) was established, along with the precursor to Fondy Farmers Market, the Center Street Market. It was also during this time that the UWEX Milwaukee County community garden program assumed ownership of a garden built on a parcel of land (which later became the principal site of Alice's Garden) that was razed as part of the 1960s Park East Freeway development project.

Since the 1980s, numerous food projects have emerged, many involving urban agriculture (UA) and local food system development. In the 1990s, Growing Power and Walnut Way Conservation Corps (WWCC) formed, and Fondy Farmers Market became Fondy Food Center (adding the promotion of healthy food access as an explicit organizational mission). All three organizations have since worked to develop local and regional food production and distribution. The early focus on UA and local food helped set the stage for the contemporary identification of Milwaukee as an UA hub and pioneer (Personal communications).

In the early 2000s, Milwaukee Urban Gardens (MUG) formed to advocate for protecting community gardens in the city. As a result of MUG's early efforts, the first municipal permitting process for community gardens was soon established through the Department of City Development (DCD) Real Estate Office, allowing citizen groups to build community gardens on vacant city-owned lots with temporary leases of up to 3 years. The following years then saw the emergence of various other community-based food and UA projects (including Alice's Garden, Milwaukee Food Council, and Latinos por la Salud; see Table 7 for a complete list). Many of these projects work to develop UA spaces and increase citizen participation in growing food, while others focus on advocacy, policymaking, or education surrounding diet-related health and food access equity.

Most recently, in 2013, the City of Milwaukee announced the creation of HOME GR/OWN (HG), the first municipal program devoted solely to food and UA in Milwaukee.⁷ HG, operated by the Office of Environmental Sustainability (OES), began as an initiative proposed by Milwaukee Mayor, Tom Barrett, for a 2012 national grant competition (the Bloomberg Mayor's Challenge). Although the initiative was not awarded funds through the contest, it was established (with initial city budget funding for a single staff person) in the city's 2013 sustainability plan as one of two "catalytic projects," designed to demonstrate and advance key priorities of the plan (*ReFresh Milwaukee* 2013).⁸ HG operates through an explicitly public-private partnership model, with the goal of developing spaces that will come under the long-term care of community organizations (with potential transfer of ownership to these organizations). Its current phase of development is funded with a \$75,000 grant from the Greater Milwaukee Foundation⁹ and matching funds from other philanthropic organizations (Northwestern Mutual Foundation, the Fund for Lake Michigan, and the Zilber Family Foundation). HG then functions as a local grant-giving initiative, wherein residents and neighborhood groups apply and are selected to have their projects funded. Selected projects are designed collaboratively between community groups and OES. Construction and maintenance during the first year is provided through city-contracted labor from organizations including Growing Power and Walnut Way's Blue Sky Landscaping. Community groups are then encouraged to raise money or apply for funding (through, e.g., Neighborhood Improvement

⁷ The City of Milwaukee Health Department provides services at its clinics for the Women, Infants, and Children (WIC) program.

⁸ The other catalytic project is the Inner Harbor Redevelopment initiative.

⁹ The Greater Milwaukee Foundation received this "Partners for Places (P4P)" grant in collaboration with the Funders' Network for Smart Growth and Livable Communities, and the Urban Sustainability Directors Network (the latter happens to be one of the investors for Bloomberg Philanthropies, which held the Bloomberg Mayor's Challenge, to which the City of Milwaukee applied in 2012).

Development Corporation (NIDC)) to cover costs in the years following. HG has promised to fund installation of at least 20 orchards and 6 parks on city-owned vacant lots in this manner. To date, HG development projects include Ezekiel Gillespie Park, All People's Orchard, Alice's Garden Herbal Farm expansion, and Groundwork's Metcalfe Park Garden, all of which involve repurposing vacant lots into green spaces with varying degrees of food production capacity and, in a limited number of cases, small-scale commercial production (see Figures 10 and 11). Simultaneously, HG has worked with the Department of City Development (DCD) and Milwaukee Common Council to write and implement land use and building code changes that will enable a broader range of UA activities in the city.

The establishment of HG is significant both for the substantial policy shift that it represents (from the previous tolerance of community gardens to the active promotion and financing of urban agriculture projects on city-owned land) and for the extent to which it embodies many of the dominant discourses surrounding food projects in Milwaukee (which I discuss in proceeding sections). HG, like many food projects in Milwaukee, orients itself around activities that promote consumption of particular kinds of food through altering the food environment or educating individuals (although these are often not the only goals). In accordance with their concerns for dietary health, many promote (albeit in varying degrees) urban agriculture as a means to their goals, linking urban environmental quality to dietary health. Indeed, HG has positioned itself as a continuation of Milwaukee's long history of community-based food organizing, drawing on popular perceptions of Milwaukee as an urban agriculture center. HG accordingly highlights how the local state simultaneously co-opts community narratives to further its own interests (particularly, in this

case, as related to neoliberal economic development) and supports these narratives to the benefit of community activists.

<i>Practice</i>	<i>Examples</i>	<i>Representative organizations</i>
Direct food service or emergency food assistance	Food banking, food box distribution, community meal programs	Northside community center, Hunger Task Force (HTF)
Urban agricultural (UA) green space production	Community gardens, production farms, orchards, public parks with perennial food plants, soil remediation, compost production, land stewardship	Milwaukee Urban Gardens (MUG), HOME GR/OWN (HG), Walnut Way Conservation Corps (WWCC)
Food market/retail development	Healthy corner stores, farmers markets, urban community supported agriculture (CSA), wellness commons with pop-up co-op grocery store	Fondy Food Center (FFC), WWCC, Alice's Garden, Latinos por la Salud
Food enterprise development	Farmer training and support, local food business networking, urban CSA, restaurant supported agriculture (RSA)	Groundwork Young Farmers Program (YFP), University of Wisconsin Extension (UWEX) Milwaukee County emerging farmer program
Education and advocacy	Healthy asset mapping, data collection, advocacy, organizational networking or conferencing, nutrition education, food demonstrations, resource fairs, strategic planning	Latinos por la Salud, Core/El Centro (CORE), Milwaukee Food Council (MFC)
State policymaking (primarily municipal level)	Municipal land use code (re)definition to support UA and food entrepreneurial practices, creation of state initiatives and programs, sustainability plan, establishment of governing bodies	HG, Milwaukee Food Council
Collective action resistance	Protesting fast food restaurant development	WWCC

Table 8. Food project practices.

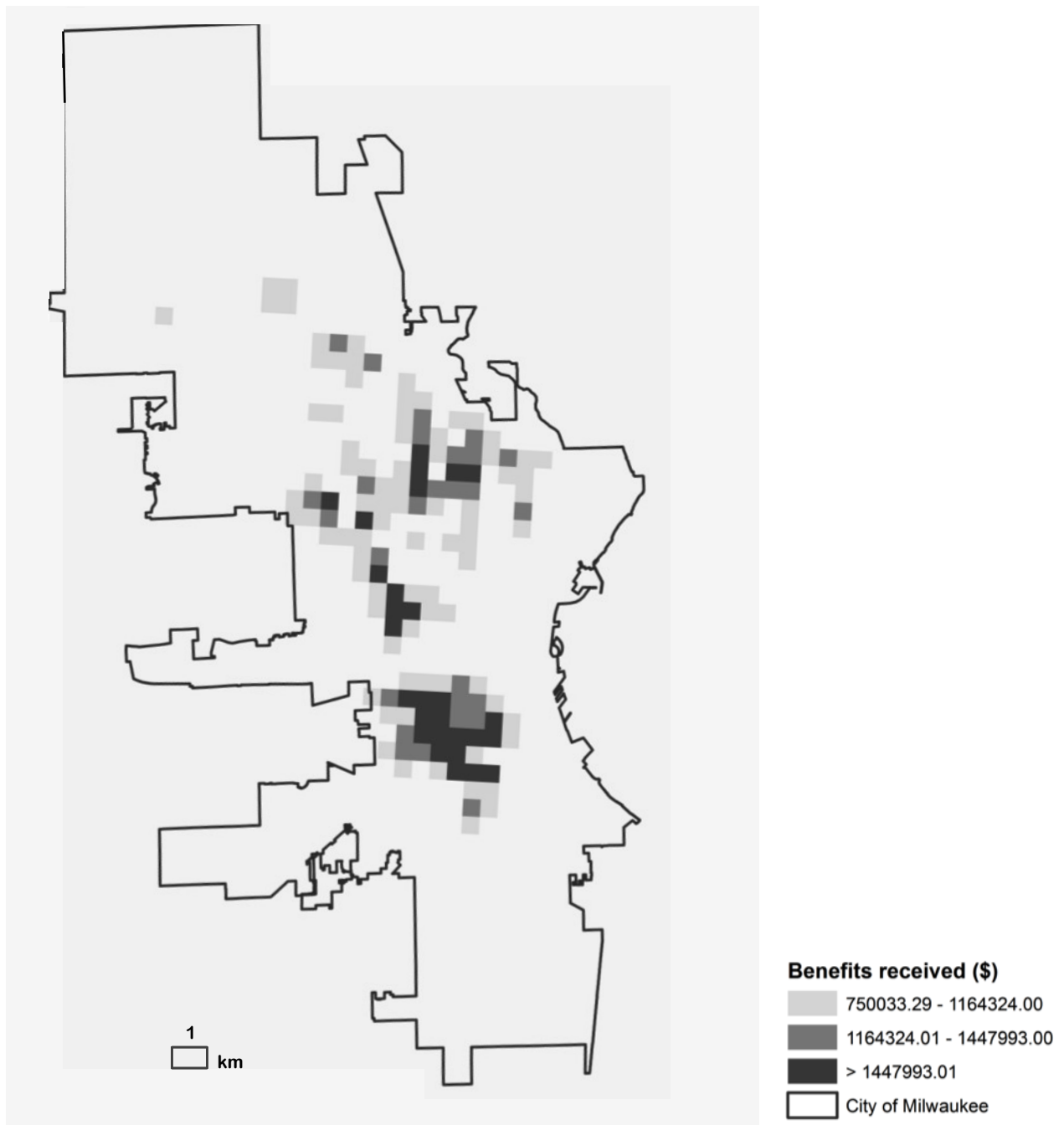


Figure 9. Areas receiving top 5% of Supplemental Nutrition Assistance Program (SNAP) benefits (per 0.25 km² cell) in 2013. Data source: State of Wisconsin Department of Health Services.

<i>Date</i>		<i>Event</i>
	1963	University of Wisconsin Extension (UWEX) Milwaukee County community gardens program begins
	1968	St. Ben's Community Meal program begins
	1969	Black Panther Party (BPP) free breakfast program for children in Milwaukee (1969-1970)
1970		Center Street Market (predecessor to Fondy farmers Market) begins
		UWEX-Milwaukee County takes over of community garden that later forms Alice's Garden
		Funding cutbacks to UWEX gardens program (staff reductions)
	1974	Hunger Task Force (HTF) begins
	1985	SHARE Wisconsin (food buying club) begins
1990		Early urban agriculture organizations form: Walnut Way, Growing Power
	1997	Fondy Farmers Market becomes Fondy Food Center, in partnership with HTF
2000		Milwaukee Urban Gardens (MUG) forms
		Department of City Development (DCD) establishes permitting process for community gardens on vacant city-owned residential lots
		CORE/El Centro Garden and Nutrition Program begins
	2004	HTF begins operation of farm in Franklin to produce food for their network
	2006	Alice's Garden established (under leadership of SeedFolks Youth Ministry)
	2007	Milwaukee Food Council (MFC) forms
		Milwaukee Urban Agriculture Network (MUAN) forms
		Groundwork Milwaukee begins organizing community gardens
	2008	Zilber Neighborhood Initiative launches, Lindsay Heights Health Alliance forms, Lindsay Heights Quality of Life Plan is produced
		Lindsay Heights Healthy Corner Store Initiative begins
	2009	Milwaukee Childhood Obesity Prevention Project (MCOPP) begins
		Victory Garden Initiative forms
		Increasing volume of home foreclosures in Milwaukee (peaks 2010-2012)
	2010	16 th Street Community Health Center Healthy Choices Program established
		Latinos por la Salud Healthy Grocery Store Campaign
		Milwaukee Common Council passes ordinance allowing beekeeping within city limits
	2011	Milwaukee Common Council passes ordinance allowing hen keeping within city limits
		CORE/El Centro rooftop garden opens
		EPA Region 5 conducts UA code audit (published 2012)
	2012	SHARE Wisconsin shuts down (after 27 years) due to funding shortage
	2013	City of Milwaukee produces ReFresh sustainability plan, formally establishes HOME GR/OWN as program within Office of Environmental Sustainability
		Mayor launches Strong Neighborhoods Plan
	2014	UA land use and building code changes passed by Milwaukee Common Council
		Groundwork Milwaukee and MUG merge
		HOME GR/OWN pilot projects implemented (including Gillespie Park)
		UWEX Milwaukee County Urban Discovery Farm begins

Table 9. History of Milwaukee food projects.

<i>Date</i>	<i>Policy</i>
2000	City Real Estate Office begins issuing seasonal permits and 3-year leases for community gardens on vacant city-owned lots
2010	<i>City Code of Ordinances</i> amended to allow beekeeping on private property
2010	Milwaukee Water Works (MWW) raises possibility of discontinuing policy of permitting community gardens to source water from fire hydrants
2010-2012	MWW continues to allow hydrant usage in response to objections from citizens and community groups
2011	<i>City Code of Ordinances</i> amended to allow hen-keeping on private property (with permit)
2012	EPA Region 5 conducts urban agriculture code audit in City of Milwaukee
2013	City of Milwaukee institutes HOME GR/OWN initiative within the Office of Environmental Sustainability; Mayor Barrett declares commitment to developing urban agriculture and local food systems
2014	Milwaukee Common Council passes set of zoning and land use code changes that define and permit multiple categories of public and private urban agricultural land use, including community gardens, commercial agriculture, and commercial composting

Table 10. Milwaukee urban agriculture land use code and policy changes.

4.2. Constructing dietary health: Neoliberal paternalism and racialization

Most food projects considered here engage in activities framed as intended to increase access to affordable, health promoting (hereafter, “healthy”) foods within Milwaukee, where access is predominantly conceptualized as physical proximity. Healthy food typically means fresh produce (fruits and vegetables), although it also often encompasses natural, organic, minimally processed, or even “real” foods.¹⁰ Although the specific scope and objectives of organizational activities vary, government and community-based efforts to expand healthy food access commonly focus on creating new food sources or altering existing ones to meet identified needs within particular

¹⁰ Milwaukee actors often use chain grocery stores as a referent for ideal (quality) retail food sources, although development of such stores is rarely pursued as a solution to food access concerns. When one organization assessed local healthy food accessibility, they counted stores as healthy food sources, “if they had a good, decent selection, or a really nice, like, Pick ‘n’ Save kind of thing” (Personal communication 2014). This reflects, as I argue later, an emphasis on “non-conventional” sources of food.

neighborhoods. So, with HOME GR/OWN (HG), city leaders claim, they will create healthy food access in neighborhoods where it is lacking by developing spaces for residents to grow food.

Community-organized initiatives have sought to improve the availability of healthy food, for example, by persuading existing grocery or convenience stores to modify their inventories. Between 2010 and 2012, Latinos por la Salud, a coalition comprised of community health advocates and staff from 16th Street Community Health Center (SSCHC) and CORE/El Centro, successfully lobbied two major grocery stores (Pete's Fruit Market and El Rey Foods) to carry requested healthy items, including whole grains, high fructose corn syrup-free bread, healthy deli salads, and antibiotic- and hormone-free eggs and dairy. According to a leader of the coalition, this project represents an attempt to pursue one of their central goals, which is "to create an environment that offers more healthy options" (Personal communication 2014). A 2011 initiative in the northside Lindsay Heights neighborhood¹¹ worked to stock local convenience store with fresh vegetables and fruits. In describing the rationale for this project, one organizer explains, "we want a store where, *when you walk through the door, you're making a healthier choice*" (emphasis added). This statement illustrates a common discourse: that changes to the urban environment will engender healthier behaviors through positive pressure.

Discourses surrounding food projects also suggest concerns about exposure to unhealthy foods, which typically include high calorie, industrially processed, "junk," and "fast" foods, and are often discursively associated with convenience stores and fast food restaurants (places that are

¹¹ Organizations involved included: Walnut Way, Alice's Garden, Lindsay Heights Neighborhood Health Alliance (led by Walnut Way and housed in the Center for Resilient Cities), City of Milwaukee Health Department, and University of Wisconsin Extension Milwaukee County's Youth Development program. The initiative received funding (approximately \$200,000) from Medical College of Wisconsin's Healthier Wisconsin Partnership Program.

themselves often characterized as unhealthy, threatening, or aesthetically unpleasant; one community organizer describes corner stores as “creepy, dark, nasty,” (Personal communication 2014). A senior staff person in the City of Milwaukee Health Department frames food access as “a big problem in Milwaukee,” precisely because it is a “food swamp,” abounding with detrimental foods (Personal communication 2014). Other local government and community leaders echo these sentiments, emphasizing that even where residents have access to healthy food sources, the relative proportion of unhealthy sources constitutes significant risk to their health. This narrative serves to construct certain kinds of food as environmental hazards, to which exposure should be actively mitigated in order to ensure a healthy population.

Animated by these concerns, some projects have sought to actively eliminate sources of potential exposure to unhealthy food. In 2010, a northside nonprofit community center removed “junk food” vending machines and began implementing new food service policies for their youth programs and weekly free community meals (e.g., eliminating desserts). The center’s director explains these policies, which informally extend to policing the foods children may carry with them from elsewhere:

I’ve gone down and said to some kids, “put the Doritos away”...I yanked out all of our vending machines, and I’m just really glad that we did...because we would have kids come in off the street just to get candy and junk...if the kids are out on a field trip for a day, they used to take soda and candy on the bus, and just crap; they don’t do that anymore; I just don’t allow it (Personal communication, 2014).

In 2014, a food pantry located on the near northside began a similar overhaul of its food provision practices, formally committing (via its strategic plan) to provide more healthy foods (particularly fresh produce and minimally processed, low-fat, or low-sugar items) and reduce availability of foods deemed unhealthy. Although choice in inventory is constrained by the pantry's need to meet client volume and to procure items through established food banking distribution networks, the pantry manager has been able to make small changes, such as replacing breakfast pastries (which are donated and typically served while clients wait to pick up food boxes) with healthier items.¹² Pantry organizers emphasize that while clients enjoy sweets, it is not in their best interest to consume them; thus, eliminating them is the pantry's most ethical choice. When asked whether treats might provide emotional benefit (e.g., for children living in poverty who otherwise lack access), organizers acknowledged the possibility, but countered that "junk" food is already abundantly accessible and thus should not be provided. While desiring to prioritize nutritional essentials and promote clients' health is admirable, the narratives surrounding these efforts reinforce the construction of low-income individuals as unable or unlikely to act in their own best self-interest (as determined by others), and thus reproduce tropes that pathologize and even infantilize the poor.¹³

As the above examples suggest, Milwaukee food project leaders often justify the need to modify food environments out of concern for the health of urban residents (rather than, e.g., concern about inadequate caloric intake). Perceptions of the degree and scope of risk posed by

¹² The significance of this change was explained by way of a cautionary tale about the weekly service of donuts to a group of homeless men by a local church, which purportedly caused many of the men to develop diabetes.

¹³ Indeed, discussions among pantry steering committee members, most of whom were volunteers, revealed numerous misconceptions and negative stereotypes about both the causes of poverty and those who live in poverty (for example, the perception that clients' reliance on the pantry indicates a lack of awareness of how to navigate oneself out of poverty).

inadequate healthy food access vary, but inadequate healthy food access (or over-exposure to unhealthy food sources) is generally framed as a central contributor to unhealthy dietary habits and the prevalence of associated maladies (particularly diabetes and obesity). This coincides with predominant scientific and popular discourses that correlate human health outcomes to qualities of the urban food environment (Guthman 2013b; Shannon 2014a).

According to local government leaders, there is a significant need to increase the availability of healthy food because “69 percent of Milwaukeeans do not eat consume the recommended number of servings of fresh fruits and vegetables daily,” and rates of obesity are high (City of Milwaukee 2013: 29). The director of HG attributes city hall’s recent interest in food access issues to their growing awareness, since 2012, of “public health issues...when all the research started coming out about, ‘boy, Americans are getting really fat’” and “the obesity issue really started to hit the front page” (Personal communication 2014). While the City of Milwaukee Health Department’s most recent (2008) citywide health assessment did not find obesity or healthy food access among the highest priority concerns, a Health Department staff member emphasizes that food access (as compared to the assessment’s identified high priority issues, such as infant mortality), “definitely impacts more people...the long-term effects of obesity and diabetes, and those sorts of things, are going be a bigger drain on our system” (Personal communication 2014). Some community leaders offer similarly dire assessments. A nutrition program manager laments that “soda is killing a lot of people on the south side,” and another describes her anxiety about “the health epidemic that we’re facing as a result of our terrible and industrial, highly processed, over-caloric, lack of nutrient-dense, food” (Personal communications).

These discourses construct the apparent lack of healthy food access and overconsumption of harmful foods as serious problems producing a chronically unhealthy population. This supports strategies of intervention that prioritize environmental modifications and behavioral solutions, because it implies that an optimally healthy environment will induce optimal behaviors. Environmentally-focused strategies, despite their resonance with notions of environmental justice, can also function as forms of neoliberal paternalism that work to create self-regulating individuals, who behave according to particular health ideals (in this case, centered on idealized consumption habits), through environmental change (Guthman & DuPuis 2006; Kirkland 2011; Carter 2015; Shannon 2014a).

These discourses also narrowly define health (and its relationship to the food environment) in a particular way that does not always represent how all community groups (who are the target of these interventions) understand health. Some actors emphasize the importance of structural factors that shape dietary health (beyond the quality of the food environment), as well as health concerns that do not center on nutrition (e.g., chronic stress, trauma, lead exposure, and lack of healthcare access). Fondy Food Center's director argues that "so many things other than food" shape an individual's health:

If you have clinical depression, because of trauma, for example, it makes it hard just to get your kids clothed and to school on time... There's physical inactivity... with a lot of the shootings that have been happening, you're probably not going to feel safe sending your kids outside to play (Personal communication, 2015).

Similarly, an organizer on the southside notes that many Latino residents experience depression and stress as a consequence of challenges that accompany being an immigrant (documented or not), including economic precarity and fear of deportation. She emphasizes that the existence of health promoting resources is not enough to ensure wellbeing, explaining, “we don't live just on fruits and vegetables...there are parks, but the level of violence—are you using it? Is the city taking care of that park? If there's a crime, how often does the police come?” (Personal communication 2014). The dominant focus on food access and diet obscures such concerns.

Further, most Milwaukee food projects construct limited food access and diet-related health problems as primarily affecting populations of color, by targeting interventions to address them within the “inner city” or on the “northside” (defined colloquially by neighborhoods, located north of interstate freeway 94, identified as predominantly Black areas); or, to a lesser extent, the “southside” (neighborhoods south of the freeway associated with high concentrations of Latino residents; see Figure 10). This spatial focus is justified by the understanding of these areas as disinvested (and, therefore, lacking resources and inhabited by low-income residents), and beset by disproportionate rates of diet-related illness. However, it is also implicitly rooted in the identification of these areas as non-white. While the concern for limited healthy food access in non-white neighborhoods is usually connected to stated concerns about social injustice, it also spatializes the problem of poor dietary health within those communities, implicitly constituting residents of these neighborhoods as “unhealthy” populations needing to be normalized (see Guthman 2014; Shannon 2014a). The racialization of food environments also underscores the discursive construction of people of color as inherently lacking knowledge needed to eat healthfully. Because it is often white

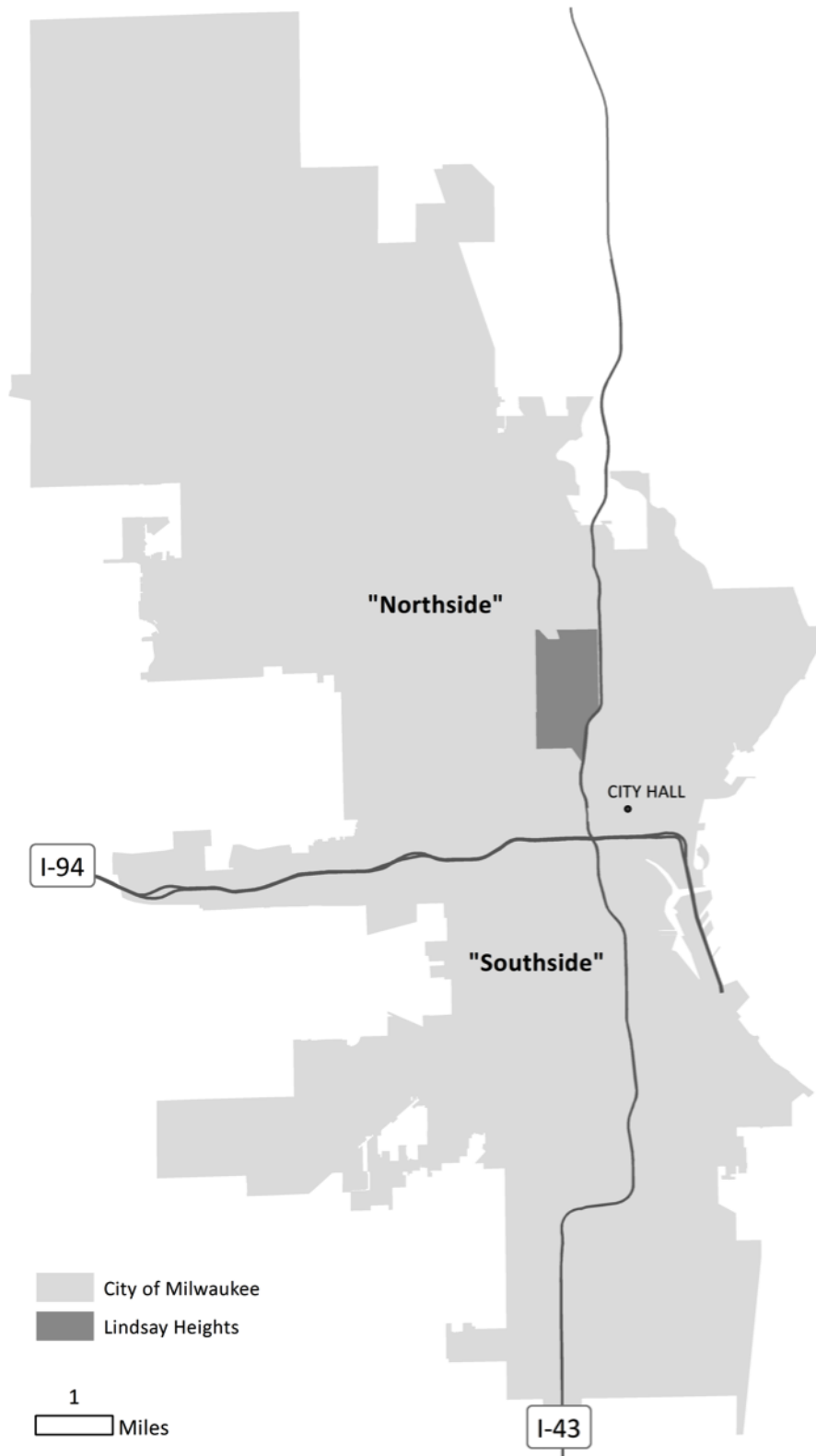


Figure 10. Milwaukee's northside and southside.

organizations attempting to intervene, efforts to educate or otherwise normalize residents of these places tend to equate to reproducing whiteness, through promoting developments that do not necessarily reflect (or take into consideration) the interests of neighborhood residents (Slocum 2011).

Indeed, despite concern for the quality of food to which urban residents are exposed, many projects simultaneously emphasize the necessity of education to successful dietary health (within ‘targeted’ populations). The perception that access or exposure to unhealthy foods contributes to unhealthy dietary behaviors, even when healthy foods are available, implies that individuals in these contexts lack the knowledge, preferences, or values (foodways) to make appropriate choices (Alkon et al 2013). Many food projects engage in efforts aimed at providing knowledge and skills deemed necessary for healthy dietary behavior, including how (and what) to procure, prepare, and eat. Some actors emphasize that people intuitively desire to eat healthily, but lack the skills or knowledge to do so. As a Fondy Food Center staff member explains, “people really do want to eat healthy...but *they have trouble navigating the food environment in its current state*” (emphasis added). Accordingly, these actors aim to provide information to enable individuals to make healthy choices, often within the context of financial or other constraints.

Yet, many project leaders (including local government representatives), construct those who purportedly consume unhealthy diets (low-income people of color) as lacking interest in or awareness of the importance of dietary health, and thus requiring education in or cultural ‘exposure’ to healthy foodways. As a member of the Milwaukee Food Council (MFC) explains, in discussing strategies for improving healthy food access in low-income neighborhoods, “we can’t just put veggies there [in the store] and expect people to eat them” (Personal communication 2014). According to an

organizer working on the southside, this area of the city has some existing healthy food options, but successfully changing residents' dietary health will require a shift in cultural values surrounding food, “‘cause, it's like, it is *here*; you just have to come get it” (Personal communication 2014, emphasis original).

Broadly, actors tend to construct the built environment and cultural systems as interlinked contexts that shape individual behavior. As one organizer explains, individuals make “bad decisions,” not out of apathy, but because, “they are in an environment—in a culture, in a system—that pushes them to make the wrong decisions” (Personal communication 2014). A Milwaukee Health Department staff member attributes unhealthy eating habits on the northside, where he is involved in developing healthy corner stores, to

lack of knowledge or just not being exposed to it...kids are not used to getting an apple handed to them to eat...people don't know how to cook, so we tried to have some cooking demonstrations...it was marginally successful...it's a systematic thing (Personal communication 2014).

This comment again reflects a prevalent tendency among food projects to frame dietary health as a matter of consumer choice, despite recognizing that there are structural barriers. Thus, describing the problem as systemic in this case appears to refer primarily to *cultural* systems, rather than political economic systems that structure resource access. Constructing unhealthy dietary behaviors in this manner contributes to racializing the subjects of this intervention according to long-standing tropes that pathologize Black cultural systems, often without explicitly mentioning race (Guthman 2008b; Slocum 2011).¹⁴

The pathologizing of non-white cultures is also an effect of discourses that frame dietary health problems as a result of the disintegration of traditional social systems that has occurred with industrialization in the US. According to a community organizer on the northside,

individualism and the loss of community and culture make us sick...traditional food traditions are healthy...they're integrated with an entire way of life...this is Sicily, one of the few places where food traditions are relatively intact. And, of course they have relatively low rates of dietary diseases...These are examples that we can look to (emphasis added).

There are several important points to draw from this statement. Firstly, this organizer emphasizes the importance to dietary health of an “intact” eating culture, in which values are embedded within broader norms and systems of practice. This serves as a contrast to diets within industrialized food systems, which represent, by implication, the disintegration of cultural systems. Despite noting that all cultural practices are healthy, she presents as exemplary the traditions of Sicily, which is then implicitly contrasted to Black communities in Milwaukee (where her organization operates). This reproduces a distinction between healthy, intact white cultural systems and unhealthy, disintegrated non-white (Black) cultural systems. UA and other development centering local food systems, then, are presented as the logical way to rebuild these social systems. Accordingly, this organization holds cooking demonstrations designed to “revive cultural food traditions” by promoting, for example, “healthy soul food.”

¹⁴ This is not unlike “culture of poverty” discourses that seem to shift blame from individuals, but still amount to constructing particular racialized groups as abnormal or inherently destructive (Goode & Maskovsky 2001).

The implication that there is an ideally healthy way of living and that ill health results from the erosion of socio-cultural systems contributes to reinforcing the construction of the inner city as “broken,” particularly when combined with the narrative that there is a lack of demand for locally produced food in this part of the city. The discursive construction of UA and local food system development as holistic or systematic in many cases draws on and reproduces pathologizing spatial imaginaries of Milwaukee’s inner city (and south side, to a lesser extent) as “abandoned,” “underdeveloped,” or socially “deficient,” and thus needing systemic intervention. These kinds of imaginaries can contribute to naturalizing Black dispossession and urbicide, or the annihilation of place, as a feature of Black neighborhoods (McKittrick 2011; Woods 2002). Aspects of this discourse are found in the narratives by which Black-led organizations describe institutionalized violence, structural racism, and economic marginalization. However, the use of pathologizing language, or language that suggests a problematic Black culture, serves to reinforce racialized difference.

The construction of Black and Latino residents as inadequately knowledgeable about dietary health and food, which implicitly upholds whiteness as the ideal, often provides justification for intervention by ostensibly more knowledgeable (white) outsiders. In one particularly overt instance, the white director of a nonprofit organization explained that building community gardens on vacant lots in the “inner city,” whether or not residents directly consent or provide input, is necessary because, “the situation is just too dire”—these residents are “enslaved by” and blind to the industrial food system that produces unhealthy food environments, and are thus unable to understand or advocate for a better food system (Personal communication 2014). The implication that the inability of a population to act in its own best interests justifies making decisions about the space in which it

resides, purportedly to benefit that population, evokes imagery of a colonial relationship, in which the organization claims and inhabits land for its own benefit. This also reflects a fundamentally paternalistic approach that, while ostensibly well-meaning, reduces the effects of white supremacy and neoliberal capitalism to distributional inequities that can be solved simply by developing community gardens in disinvested neighborhoods (Carter 2015; Ramirez 2015; Shannon 2014a).

Thus, the intertwined discourses of environment and culture work together in propelling efforts to implement environmental modifications, as these are seen to both facilitate and encourage healthy eating behaviors. It is within this context that UA and related local food system development are pursued as strategies for promoting dietary health, as I discuss in the following sections.

4.3. Urban agriculture as neoliberal health nudge

One of the most common ways that groups have sought to improve healthy food access is through urban agriculture (UA) and related local food system development. These practices are held up as ideal because they entail localized fresh fruit and vegetable production, and circumvent (theoretically, at least) conventional industrial food systems. This coincides with and reinforces the valuing of fresh produce (and other whole, “natural,” or “non-conventional” foods) as emblematic of healthy food. As one organizer notes, “obviously, something that’s growing local, in most cases or probably all cases, is going to be healthier, and getting access to that for all people is really important” (Personal communication 2014). UA, however, is also framed as an ideal environmental modification that will nudge individuals into practicing healthy food behaviors.

With the establishment of HG in 2013, the City of Milwaukee codified the connection between UA and dietary health by specifying UA development as the city’s primary approach to improving healthy food access. HG has centered on developing local food production through coordinating and funding the conversion of vacant public lots into UA spaces—in the form of parks (containing some perennial food plants) and orchards—supporting local small-scale commercial UA ventures, and changing municipal building and land use policies as necessary to enable community groups to engage in UA (see Table 10). Community organizations have also promoted UA and local food system development by engaging in efforts to create and maintain food production spaces (e.g., community gardens) or retail spaces that purvey locally grown produce (e.g., farmers markets or convenience stores). Other projects offer programs to encourage local food entrepreneurship and business development (e.g., youth-run farmers market booths or farmer training), which often intersect with UA and farmers market development.

City leaders, along with many community organizations, characterize UA as an effective environmental nudge, because it provides opportunities for residents to learn how grow their own food, appreciate local produce, or understand food systems (e.g., where food originates), through more subtle, social influence. In explaining their approach to nutrition education, the director of a nutrition and gardening program emphasizes, “we have never—and still don’t—have, like, a registered dietician on staff...we’re not that rigid, scientific, you know, ‘30 percent carbohydrate’...all of it is about holistic wellness” (Personal communication 2014). The director of FFC describes the benefit of Fondy Farmers Market in a related manner:

a farmers market is not a grocery store...at the farmers market, it's a slow, strolling experience. The marketing is less sophisticated and less coercive. That social fabric is huge...it's more than just nutrition (Personal communication 2015).

The farmers market, in a sense, serves to draw people in to a cultural context that promotes locally grown foods (and thus nutritional health) as well as a distinct kind of interaction with food (and the process of procuring food).

UA is framed, in other words, as promoting not only healthy eating, but also healthy cultural values. The director of another urban gardening organization describes why this organization focuses on enabling and encouraging people to grow their own food: “I think it’s a way of life that’s coming...I don’t want anyone to be left behind, in not having those skills that they need to do that for themselves and their family” (Personal communication 2014). This statement reflects what other scholars have described as the tendency for food activists to promote white values as the norm, and to assume that these values are universal (Guthman 2008b; Ramirez 2015; Slocum 2007). This is not to suggest that residents do not value urban gardening, but rather to emphasize that by making assumptions about what Black residents need or want and taking it upon themselves to develop projects in Black neighborhoods accordingly, white organizers assert (if only implicitly) the dominance of their own knowledge. When white spaces are created in Black neighborhoods, this also reinforces processes of racialized dispossession (Ramirez 2015).

UA thus appears to be valued for its particular capacity to encourage behavioral shifts by integrating idealized foodways into the urban landscape, in ways that other forms of nutritional education do not. HG, for example, aims to increase “demand” for healthy foods, but does not

clearly outline how it will achieve this goal, suggesting only that increased availability of these foods, via the development of UA, will increase demand. A community organizer explains that having a community garden provides an important way to “connect people with food on that [tangible] level...so that it’s not *just* about reading nutritional labels” (Personal communication 2014). Similarly, a staff member with UWEX-MC argues that UA is important because it provides “areas within the city where people can observe what [food] is...and be reminded of where their food comes from” (Personal communication 2014). These statements suggest that by physically engaging in or observing gardening, individuals are more likely to be drawn into healthy foodways than they would through conventional nutrition education alone.

Many organizations promote UA and food system localization as ideal means to address food inequities because these activities encourage individuals to pursue self-sufficiency, rather than relying on direct resource assistance. While this implies a critique of existing social systems (including industrial agro-food and conventional social welfare systems), and is framed as contributing to systemic change that addresses causal factors rather than symptoms, the proposed alternatives still focus on individual behavioral solutions.¹⁵ In this way, UA development encourages a particular form of neoliberal citizen subjectivity.

¹⁵ This dissatisfaction seems to reflect in part the neoliberal context in which nonprofits and community organizations are increasingly constrained (and compelled to depoliticize). Even the emergency food organizations I considered framed their efforts as improving upon or reimagining traditional food assistance models. As part of its food policy planning process, for example, RWFP board and staff members avidly engaged in critiquing the system of emergency food provision (guided in part by their reading of Poppendieck’s (1998) treatment of the subject in *Sweet Charity*) and identifying how they could move the pantry beyond such limitations. One of the main ways that they sought to do so was through shifting pantry policies to serve more healthy food and to provide clients with education to enable them to make better choices.

UA and local food systems development, thus, support and are supported by discourses surrounding dietary health and food access. However, the prevalence of these activities in Milwaukee also owes to the ways that they are tied to broader economic development and revitalization agendas, as I next discuss.

4.4. Urban agriculture, racialized economic development, and the remaking of Milwaukee

Within the last 5 to 10 years, Milwaukee food projects have increasingly tied UA and local food system development to economic development agendas, particularly surrounding inner city redevelopment and revitalization. Local government leaders, philanthropic organizations, and some community groups, have directed resources towards development of local food projects, primarily those involving UA, promoting them as means to stimulate economic activity and make productive use of vacant urban land. The City of Milwaukee has expressed increasing concern about an abundance of vacant land concentrated on the north side of the city since 2012, when the “foreclosure crisis” first became apparent (although many date the origins of the crisis to 2006 and the subprime mortgage crisis; Wisla, n.d). While the city has permitted community gardens on vacant public residential lots since 2000, it was only in 2012, with the initial conception of HG (and its submission to the Bloomberg Mayor’s Challenge for funding), that the city began actively pursuing development of UA and community gardens. HG’s official launch in 2014 coincided with the launch of the Mayor’s Strong Neighborhoods Plan, and both were heralded as efforts to revitalize inner city neighborhoods through the redevelopment of vacant, “blighted” spaces (Personal communication 2014). As the Strong Neighborhoods Plan has focused on addressing home

foreclosure, HG has sought to reduce the quantity of vacant lots through repurposing them for UA and related forms of green space development.

In describing HG, staff indicate that creating healthy food access is not the initiative's primary or most important goal. Although official descriptions of HG in the city's sustainability plan and on its website present reducing dietary health inequities as a principal objective, discussions about it elsewhere indicate that public health and food access are tangential to the basic motivation for development of HG. In public presentations, local media reports, and personal interviews, HG is framed as being first and foremost about rejuvenating vacant lots into green spaces (whether that includes food or not). According to a staff person with the city's health department,

They started writing the [HG] proposal...they were about 80 percent done, and they realized, 'oh, we don't have anything about the health of these communities'...so we've really, in the last year, tried to really incorporate more of this as a health issue.

In discussing the need for food access, the director of HG reveals the extent to which economic goals are a priority of the program, noting, "it's an academic question, 'does that person live in a food desert?'...I don't care, *I'd still want to create the jobs*, if I can" (Personal communication 2014, emphasis added). Thus, the director indicates that job creation is a more fundamental priority than improving food access. Further, he explains,

not everyone's going to want to grow food, you know...maybe folks on this particular block don't have the time or energy to have a community garden, what they really want is a place where they can grill out, or the nearest park is 2 miles away (Personal communication 2014).



Figure 11. Ezekiel Gillespie Park following its opening in 2015. Source: City of Milwaukee HOME GR/OWN website.

HG's first pilot project, a "pocket park" in the Lindsay Heights neighborhood, completed in 2015, contains fruit trees and perennial fruits, but also contains areas of lawn and other features intended to enable its use as a park (Figure 11). Other HG developments have included fruit orchards and community garden spaces, as well as more traditional parks.

Thus, although framed in significant part through the discourse of UA as a means to improve healthy food access, HG appears to be driven by broader economic development interests. According to HG's director, through the initiative, the city is

really just trying to solve the multitude of problems that we have, in the central city, of urban blight, neighborhood destabilization, poor access to healthy food, and joblessness...You know, if you impact one vacant lot...you may create income for someone working on the site...you help solve urban blight, you increase public health...you lower city operating costs...crime tends to drop in greener neighborhoods, and it was a way to kind of handle neighborhood instability...We touch this piece of land, we're going to get 7 to 9 benefits out of it...that's a pretty darn good return on investment" (Personal communication 2014, emphasis added).

Description of HG in the city's sustainability plan reveal the fundamental neoliberal logic driving the initiative, which aims to be supported in the long-term by voluntary organizations: the city claims to have selected HG as one of two catalytic projects in part because it is "sustainable in the long term without complete dependency on public and/or philanthropic support" (City of Milwaukee 2013: 69).¹⁶

In utilizing UA to redevelop vacant urban spaces, HG contends that it is not only reducing city operating costs (by shifting costs of maintaining public lots to community or private entities), but also creating assets (in the form of green space and healthy food access) and employment opportunities (through construction and maintenance), and contributing to neighborhood development. The actual productive value of UA on residential lots in Milwaukee, in terms of revenue generation, remains to be seen (although revenue generation would mostly be indirect, via

¹⁶ HG's establishment in the sustainability plan specifically is significant to understanding its framing and why it has emerged as it has. HG and food systems appear to have entered into the sustainability plan because of connections between key OES staff and local food activist groups, along with the timing of Mayor Barrett's participation in the Bloomberg competition (see Chapter 4).

increasing surrounding property values, as the city retains ownership of most lots, or plans to sell them for modest fees). The value to the city seems to be understood in terms of revitalization, neighborhood stabilization (reducing tenant turnover) and potential crime reduction.

UA also offers value to the city more broadly, by contributing to efforts to ‘remake’ the image of the central city and the city overall via redeveloping “blighted” or “abandoned” parts of the city. The city, in this sense, is producing value by positioning the inner city as a site of innovative, sustainable, and relatively inexpensive development that will revitalize the city’s most economically devalued neighborhoods. This continues Milwaukee’s tradition of urban revitalization efforts in the post-industrial period (Zimmerman 2008), but draws on the production of green space and sustainable infrastructure (via features such as cisterns and porous paving stones used for stormwater management) to generate value in places where traditional capital development is deemed unfeasible. As such, it provides a sustainability fix (Walker 2015).

In describing his support (which included a commitment to helping secure finances for it) for the HG initiative, Mayor Barrett frames HG as a way to shift the image of Milwaukee, from “rust belt” to “fresh coast.” UA is thus positioned as a way to make Milwaukee attractive to funders investment in the broader context of inter-urban neoliberal competition. So we see a strong discursive emphasis on UA as technologically innovative, contributing to sustainability (via, for example, stormwater management) and as a form of design. HG has encouraged community groups to explore aesthetically polished designs for garden features (including features such as cisterns and porous paving stones). Recently, HG staff traveled to a design conference, where they received an award for design of the program’s first pilot project, Ezekiel Gillespie Park (see Figure 11).

In seeking to remake the image of Milwaukee (and its “inner city”), the city emphasizes the existing discourse of Milwaukee as a city with a history and reputation for UA development, describing Milwaukee as an urban agriculture center, built upon a history of community gardening and urban agriculture organizing within the city (iconized by Growing Power’s Will Allen). Thus the city appropriates what has been a largely community-drive UA movement (led by many Black organizations) to advance its neoliberal economic development interests.

The Bloomberg competition, where HG first emerged as an idea, is important, it seems, because it drew attention to Milwaukee and served to demonstrate the appeal of the HG idea to funders (even though HG was ultimately not selected to receive an award) and to the general public. According to a city staff member

HG was able to develop; one, because 300 cities applied [to the Bloomberg competition], HG made the top 20—that opened up a lot of people’s eyes. We started to get a lot of press...it certainly opened the Mayor’s eyes to see 50,000 people voting on HG...it got people thinking about urban agriculture, seeing its success. Will Allen had just been named one of the 100 most influential people. Food was starting to get hot, and we decided...let’s ride this wave...And, as long as it wasn’t costing the taxpayers anything, which it really wasn’t at that point, [they said] ‘let’s give it a shot’ (Personal communication 2014, emphasis added).

This statement also points to the strategic appeal of UA as a means of economic development in the context of neoliberalization. That HG is understood as being able to address multiple issues simultaneously also appears to help explain its strategic appeal to the city, in that this enables HG to be adaptable to constraints. As HG’s director states,

we're really working on multiple issues simultaneously, and that helps, because...sometimes things are tough to do in city government and you hit a roadblock, and we've got the ability to veer off in a different direction (Personal communication 2014).

The extent of popular support (whether perceived or real) for UA has also been central to the city's view of UA as a viable economic development tool, as it has enabled the city to see UA as a low cost effort, with the bulk of the work carried out by voluntary or private organizations. HG and other leaders have continually emphasized HG as something that is merely supporting existing community efforts, and thus as something that already has legitimacy and is best left to the responsibility of civil society. So, for example, the director of HG consistently frames the initiative as responding to and emerging *from* the community, and thus as inherently collaborative:

this [HG] is really happening on a lark, almost...just by being out there and meeting with community groups and listening to what folks in the neighborhood and on the affected blocks really want (Personal communication 2014, emphasis added).

While the city has provided financial support for UA—in the form of a funded staff position responsible for coordinating HG projects, labor donated from agencies like DPW, and financing construction costs through a Greater Milwaukee Fund grant—the focus of HG work since its inception has been coordinating projects carried out by non-state entities (even while retaining ownership of the land). As the director of HG explains, in the case of a pocket park developed as part of the program, the space will continue to be city property maintained by the partnering community organization in the immediate future, but the city is “hoping that engaged residents will take over

the management of the property, which actually helps us lower our city operating costs” (emphasis added).

Such a model of public-private partnerships is common, reflecting a neoliberal approach to governance (Ghose & Pettygrove 2014b; Perkins 2010), in that promoting community organizing relieves financial pressures on the city (making UA cost-effective for the city) and serves to legitimize its efforts. The other component of HG’s work—changing local policy to support UA, has primarily centered on easing restrictions on UA development by non-state actors, particularly for commercial or production agriculture, while streamlining permitting procedures (to ensure that the city has record of all UA developments). These policy changes are positive, and reflect what some community activists have long demanded. However, those who have most actively lobbied for such changes are white nonprofits, some of whom were motivated principally by desires to legally protect activities (such as the building of cisterns at community gardens) in which they already tacitly engaged.

This discourse—that UA promotes economic development—is echoed by non-governmental economic and community development organizations, including philanthropic foundations. The Zilber Family Foundation, for example, frames its decision to give \$500,000 for Walnut Way’s Innovation and Wellness Commons as an economic investment that will draw more investment. The prominence of the narrative equating locally grown food with health in Milwaukee may be at least partially due to the popularity of this narrative with funders who have a history of funding community development activities locally. Medical College of Wisconsin’s Healthier Wisconsin Partnership Program (HWPP), for example, has funded collaborative urban agriculture projects among seven of the organizations considered here.

Many community food projects also support the discourse of UA as economic development, albeit with an emphasis on the economic opportunities local food systems provide. In part, this appears to reflect the idea that linking UA and local food to economic processes will enable its long-term sustainability and viability. Beyond this, however, there are groups that construct UA as a means to economic survival and autonomy for groups that tend to be excluded from or marginalized within broader economic processes (on the basis of race and class).

The production of green space for UA, or other local food spaces (e.g., farmers markets), often dovetails with practices centered on food and farming business and labor development, particularly efforts to train and support individuals (often youth) in farming or other food-related entrepreneurial skills, provide gainful employment, and develop markets for those entrepreneurs. For many organizations, these practices utilize farming or local food business management as a means to employment and skills development for youth or adults who face structural barriers to formal, living-wage employment. In Milwaukee, this primarily means African-American youth and adults (given the disproportionately high unemployment rate for African-Americans in the city), formerly incarcerated individuals (who also tend to be disproportionately African-American), and Latino residents (who may be first- or second-generation immigrants). Several organizations offer youth development programs centered on UA as a commercial venture. Growing Power, for example, started as an effort to provide employment to teens while also developing a local food system. In Walnut Way's "Gardens to Market" program (which works in collaboration with Alice's Garden), teenagers gain experience working in gardens and selling produce at farmers markets. Groundwork's Young Farmer Project (YFP) works with teens (primarily African-Americans) to develop urban

community supported agriculture (CSA) businesses, by providing guidance, support, and physical space to farm in the city. YFP's founder emphasizes he is more interested in creating economic and social opportunities for low-income Black youth than in achieving specific food-based goals. The program uses urban farming to provide youth paid employment and to facilitate youth skills development. YFP chose UA as the core activity largely because they identified it as likely to attract funding, easily marketable (with an existing demand for locally grown produce), and meeting a need for more investment in UA to go directly to economically underserved residents (Personal communication 2014).

Other organizations, such as Fondy Food Center (FFC) and UWEX Urban Discovery Farm, focus on providing support to small-scale commercial growers and reducing barriers to entry for these farmers. FFC's farm program provides support in the form of land for farmers (at a production farm in Port Washington, north of Milwaukee) and a physical market space in Lindsay Heights for them to sell their produce. UWEX operates a farmer training and support program at the Urban Discovery Farm (located at one of UWEX's community garden rental plot sites), provides affordable arable land, and also helps to connect growers to localized markets through "restaurant supported agriculture" (RSA, wherein restaurants can buy produce aggregated from all farmers in the UWEX program). UWEX also works with a men's shelter in Milwaukee to offer an agricultural jobs training program, focusing on commercial aspects of farming. The program focuses on making UA a source of income for more people. Accordingly, UA is supporting agricultural production that more directly benefits growers and the communities in which they reside. FFC director, Young Kim, frames FFC as helping to funnel money spent at the farmers market into the local community, where many of

the farmers live, rather than “going to big corporations with headquarters elsewhere, even overseas, like Walmart” (Personal communication 2015).

While the development of UA here certainly aligns with (and possibly reinforces) elements of the city’s economic development agenda (and many of these projects have directly benefited from partnering with HG to obtain land or other resources), these projects emphasize economic development via UA as a direct benefit to marginalized groups. To the extent that the dearth of adequate economic opportunities in African-American neighborhoods is a function of structural racism expressed through historical land use processes (including redlining, home mortgage lending policies, urban renewal projects, white flight, and disinvestment from central cities), efforts to develop community-based economies (via food systems) are anti-racist because they enable communities on the receiving end of racial discrimination to promote their own sustenance and survival (see Ramirez 2015).

UA and local food system development are, thus, also positioned as part of efforts by marginalized groups to assert political control by making food systems directly meet local needs and controlling the production of space. In this context, community ownership of space is central to food system localization and UA development in particular. FFC’s director notes that the farmers market is important in part because it “fills niches...that big agriculture can’t, like, sweet potato greens—those are popular especially among African immigrants” (Personal communication 2015). An organizer with the Healthy Corner Store project in Lindsay Heights explains that adding healthy foods to existing stores proved to be inadequate because they could not control all of what went into the store. This organizer emphasizes that the fundamental problem with corner stores in Lindsay

Heights and elsewhere on the north side is the lack of local ownership and control of these spaces. Consequently, these stores effectively drain wealth from those communities, and reproduce anti-Black violence.

UA is framed as an essential way to assert agency and resist racism specifically through land reclamation, ownership, and control. Many community-based efforts that focus on the production of UA or community garden space frame this practice as being a means of reclaiming, repurposing, or rejuvenating urban land into beautiful, green, productive, community-serving social spaces, while also producing (healthy) food and myriad other benefits. Alice's Garden, for example, is framed in part as reclamation of African-American land lost to urban renewal in the 1960s with the Park East Freeway development project. Walnut Way also emphasizes that it has worked from the beginning to focus its energy on restoring vacant lots that it could gain ownership over (from the city), with one of the fundamental goals being beautification and control over space. For these organizations, urban agriculture provides a way to mitigate harms associated with injustice and marginalization. For example, the director of a prominent UA organization describes certain gardens in Black neighborhoods as sites of healing in the wake of violent deaths of residents. UA development, in this context, can serve as a means of challenging racialized dispossession as manifested through urban land use practices (Barraclough 2009; McKittrick & Woods 2008; Ramirez 2015).

UA and food work further push back against dominant forms of marginalization by producing, cultivating, and celebrating forms of knowledge and cultural practice that tend to be racialized and constructed as contributing to dietary health problems (e.g., soul food). Food thus appears as a locus of resistance and alternative representation (Biltekoff 2013; Vaughn 2014). For

example, Alice's Garden's "Fieldhands and Foodways" program provides education about traditional food cultures of Africans enslaved in the Americas. The director of Alice's Garden explains that one of the main goals of the project is to utilize the garden space to make visible various ways that Black communities have historically procured and prepared food and to facilitate sharing of those forms of knowledge among residents.

This is also evident in the rejection of the "food desert" concept for its negative and inaccurate representation of racially or ethnically marginalized people and places. Venice Williams, director of Alice's Garden, explains,

In our ignorance, we are using the term 'desert,' because a desert is a space that has so much life...Alice's Garden and the Fondy Food Center and that section of Milwaukee is an incredible food desert...of nourishing and nurturing that you will never be able to recognize because the lens that you're looking through is the wrong lens...(emphasis original).

This idea that inner city or other non-white places are perceived inaccurately by white outsiders was repeated by others, and suggests concerns about projection of white norms onto non-white spaces.

The rejection of the "food desert" discourse underscores efforts to resist or counter the notion that people of color are inherently 'unhealthy' or 'uneducated' about food. Actors contest the framing of dietary inequities as stemming from a lack of knowledge or resources in marginalized communities, and emphasize the vibrancy of existing local efforts to produce, distribute, and prepare food in ways that draw on extensive cultural knowledge and reflect the innate capabilities of Black and brown people. As FFC's director notes, "soul food has gotten a bad rap, but unhealthy foods in

soul food were really only eaten sometimes...and a lot of it was what people could save and make do with” (Personal communication 2015). In a similar vein, Williams explains,

please don't say that the African-American community is cooking again. We have never, ever, ever, stopped cooking; but what did happen is those generations, some of them, who moved from the south during the Great Migration, moved because of that bondage, because of that sharecropping, because of that history...lost generations of knowing... not because they didn't understand good food...but because of the bondage that went along with growing that food. But just as many came to cities such as this and said, 'the first thing I want is a piece of land'

(emphasis original).

These statements emphasize the capabilities of communities that are otherwise constructed as in need of education and assistance to learn how to eat in ways deemed healthy (which may not reflect the interests or needs of those communities).

Thus, UA and food activism can act as a kind of code for white, middle-class (neoliberal) imaginaries and spaces. At the same time, because there is now strong support for UA projects from the city in particular, community organizations are more likely to be able to gain access to land and resources for UA. Thus, while groups may participate directly in HG, or otherwise work with the city to develop UA in predominantly Black neighborhoods, doing so also appears as a form of practice that contests the reproduction of white spaces and anti-Black discourses.

5. Conclusion

In this case, different conceptions of food and health (with distinct rationales and goals) have coalesced to support UA development and related practices. One dominant discourse advances the notion that unhealthy dietary behaviors are a function of a lack of knowledge and lack of cultural exposure to healthy foods. Alternative discourses link dietary health to broader structural issues. Both sets of discourses support food system localization (particularly UA development). The tendency of groups to link UA and dietary health, and the prominent role of UA across Milwaukee food projects, appears to a significant degree to reflect the resonance of the discourse of UA as a comprehensive form of economic or community development that can address numerous concerns.

UA is also a tangible, low cost, politically feasible form of organizing and economic development. It is thus a means of neighborhood revitalization (framed as sustainable development and public health promotion) that appeals to the local state and community groups. Perhaps most significantly, UA has been framed and leveraged by the city as a means of creating value from vacant lots and thus “remaking” the “inner city.” The foreclosure and land vacancy crisis has created an economic incentive for the city to promote UA development on vacant lots, while the existence of strong, thriving UA and food movements within Milwaukee has facilitated this strategy of economic development. In this way, environmental sustainability, revitalization, and dietary health seem to function as mutually reinforcing discourses.

The local state’s promotion of dietary health in this manner aligns with its broader neoliberal interest in ensuring productive uses of land and promoting public-private partnerships. The state uses UA to leverage value from disinvested neighborhoods and remake the image of Milwaukee according to sustainability narratives. Yet state policy changes to promote healthy food access have

also facilitated the work of community organizations engaged in UA development. There is thus tension surrounding these activities, as they simultaneously contest and reinforce white supremacist capitalist economic development agendas.

The discursive spatialization of poor dietary health in areas of the city with Black populations (the “northside”) and Latino populations (the “southside”) racializes these populations as inherently unhealthy, while also disconnecting the problem from broader urban socio-spatial dynamics, particularly when the focus of dietary health improvement efforts is limited to physical access and nutrition education. Discourses that emphasize creating environmental incentives and cultural shifts to support dietary health, conceived as the consumption of fresh produce (ideally locally-grown) closely reflect the obesogenic environment thesis. Such a conception of dietary health, seems to reinforce the division of healthy bodies in terms of racialized space. Biltekoff (2013: 144) argues that, “since the mid-1970s, middle class identity has been particularly invested in the boundary-maintaining work of delineating the healthy self from the sick or at-risk other.” This could logically be extended to include middle class *white* identity. In the case of Milwaukee, part of how this delineation occurs is through the discursive production of certain places (the northside) and their inhabitants as unhealthy.

The overwhelming whiteness of many of these organizations (including city agencies) targeting non-white populations may serve to reinforce power inequities in terms of race and to exclude or overlook particular food-health interests of communities of color. The focus on food itself as ‘good’ or ‘bad’, connected to the quality of the built environment, often seems to reflect a presumption of the universality and supremacy of white ideals about ways of eating and ways of

configuring urban landscapes (living in neighborhoods with gardens and farmers markets and certain types of retail establishments).

CHAPTER 4: THE NETWORKED CONSTRUCTION OF FOOD POLITICS

1. Introduction

The proliferation of community organizing around issues of food in Milwaukee over the last 20 years, along with the more recent establishment of HOME GR/OWN, a local government food initiative, has led to what many local actors describe as the coalescing of a Milwaukee food movement. This paper is part of broader research examining the range of Milwaukee food projects engaged in efforts to improve food access and dietary health, in order to understand the contextual factors (including multiscalar political economic structures and internal organizational contexts) and discourses that animate them, as well as the effects of these discourses on processes of neoliberalization and racialization. In this paper, I examine how social movement geographies, particularly networks, shape the range of discourses and practices associated with food and dietary health in Milwaukee, or the ‘space’ of food-related politics.

There are important theoretical and methodological reasons to focus on networks in the context of social movements. Networks provide a framework for theorizing the formation of political identities and spaces of contestation (Cox 1998; Featherstone 2005). While social movements have been conceptualized in terms of place and scale, network perspectives more effectively encompass the relational dynamics of these spatialities, by theorizing places as inherently networked, and recognizing that scales are socially constructed, fluid, and overlapping (Leitner, Pavlik & Sheppard 2002; Marston, Jones & Woodward 2005; Silvey 2003). Empirically, in the case of Milwaukee, networks are a crucial component of the landscape of food politics, as Milwaukee food projects are generally quite interlinked (albeit in uneven ways). This is partially pragmatic, as relationships

provide strategic benefits to organizations. However, the way that these relationships are configured and negotiated is also part of the construction of identity and power. Relationships between actors (whether individuals or organizations) play a role in the conduct of individual actors and are thus important for understanding the practices and motivations of food projects.

The objectives of this paper, therefore, are to examine the characteristics of networks of food project actors (in terms of how networks are organized and the functions they serve) and to explore the ways in which these networks constitute political spaces.

2. Conceptualizing Networked Political Geographies

To frame my analysis of organizational networks, I draw on social movement theory. Within this body of scholarship, social networks are broadly conceptualized as collections of actors bound together through material or ideological relations (Featherstone 2005). Networks are thus theorized as mechanisms that structure or constitute collective action and the ‘space’ of social movements (Leitner, Sheppard & Sziarto 2008). According to Nicholls (2009: 84),

places where activist nodes form are strung together to constitute a loosely constituted ‘social movement space’...the process of aggregating activist places into a social movement space introduces a new set of relational dynamics that are very different from those found in the individual places constituting it.

From this perspective, networks knit together places (formed around activist identities) to create distinct spatialities. Such a conception can be generalized by noting that it may be individual actors, as much as places, that forge connections. Further, recent theorizations of networked geographies

have complicated this definition of place versus networks by emphasizing the relational, dynamic, co-mingled nature of both place and networks (Featherstone 2005; Marston et al 2005).

While conceptualizations of place (as it relates to networks) vary, theorists have generally emphasized relational (rather than territorial) conceptions of place, wherein places are sites where actors interact in “fleeting and unstructured ways” (Nicholls 2009: 80). Cox (1998:2), for instance, theorizes social network formation in relation to conflicts surrounding “spaces of dependence,” defined by “more-or-less localized social relations upon which we depend for the realization of essential interests.” Where struggles occur to protect these spaces of dependence, actors construct spaces of engagement by forming networks of association linking local interest groups with powerful actors at various scales. In this conception, networks are spatially uneven and tend to cross territorial boundaries and scales (Cox 1998). Thus it is important to consider how networks of relations between actors and organizations interact with issues of scale (Brenner 2001; Leitner et al 2002). Further, Nicholls (2009: 81) cautions against non-relational conceptions of place, which

fix the interests and identities of actors to distinct places, and consequently lead to representations of actors as essentially different from one another and engaged in zero-sum negotiations with adversaries...the cleavages that mark movements do not simply reflect a local (internally homogenous) and non-local (externally different) divide.

Theorizations of social movements also draw attention to the ways in which networks are dynamically produced and reproduced in the process of political formation, rather than existing prior to such formations (Featherstone 2005). Social network studies tend to focus on the role of networks in social movement trajectories (e.g., successes or failures), how interactions among actors

emerge, or how network interactions shape the practices of individual actors (Levkoe & Wakefield 2014; Nicholls 2009; Wekerle 2004). Actor network theory (ANT), for example, generally conceptualizes networks as dynamic and heterogeneous constellations of linkages, among human and nonhuman actors, that form and dissolve around distinct events (Holifield 2009; Latour 1987; Law 1992; Murdoch 1998; Rodriguez-Giralt 2011). According to ANT, power and agency are constituted through the formation and stabilization of networks in particular contexts. One of the mechanisms through which actor-networks stabilize is “translation,” wherein actors’ interests are brought into alignment (Horowitz 2012).

Network formation is often framed in terms of network embeddedness, which conceptualizes how actors engage with multiple dynamic networks in different social contexts and utilize network connections strategically to promote their own interests (Granovetter 1995). Such networks can be constituted by strong or weak ties, depending on whether actors are connected through relations of trust that build social capital or through informal acquaintance (Granovetter 1983). Weak ties primarily allow for exchange of information and low-risk resources; strong ties encourage higher-risk resource exchange (Nicholls 2009).

This work highlights the various political functions that social movement networks may serve, including alliance building, facilitating diffusion of information and ideas, and enabling long-term movement sustainability. Networks may serve as an important strategic resource, especially in contexts of resource scarcity, as under neoliberalization, where nonprofit or community-based organizations are constrained to operate with limited financing, and may thus engage in resource sharing with other organizations, or rely on network relationships to gain access to grant funding

(Ghose 2007; Ghose & Pettygrove 2014a). In the context of food activism, scholars note that networks can be important support mechanisms by which food activist organizations obtain financial resources, disperse information, or leverage greater influence and flexibility in political processes (Baker 2004; Smith & Kurtz 2003). According to Wekerle (2004: 384), a “key feature” of the Toronto food justice movement is “the fluid, amorphous networked characteristic of this movement that comes together for a particular purpose...disbands, or reconfigures under another name.” Construction and negotiation of social networks are thus critical strategies that enable actors to construct spaces within which to defend their interests (Cox 1998).

Networks can also be conceptualized as part of organizational context. Organizational context includes multiple, often interconnected, external and internal factors: organizational knowledge and experience; networks of collaborative relationships; organizational stability (financial and otherwise); and organizational priorities, strategies, and status (Elwood & Ghose 2001). Networks include formal and informal relationships between organizations and other actors (individuals and groups). I conceptualize “collaborative” broadly, recognizing that actors’ shares in a collective activity (for example, in terms of material contributions, risks assumed, participation in decision-making, and outcomes, real or perceived) are unlikely to be precisely equal, fixed over time, easily quantifiable, or entirely within the control of all actors. In other words, while collaborative networks can serve as resources, enhancing organizational capacities, they may also serve to constrain network actors (Ghose & Pettygrove 2014a). Networks may form or grow through mechanisms such as public meetings and events, the abilities of central actors to actively form relationships, or

proximity among actors (Routledge 2003). Nicholls (2009: 91) argues, “geography and mobility play central roles in generating the particular network structures of social movements.”

Networks may also be hierarchical or uneven, or more or less centralized around particular nodes (see Levkoe & Wakefield 2014). Network theories identify factors that may contribute to power inequities within networks, in terms of who is able to participate and how priorities among actors are determined. For example, affluent leaders often decide the main activities of actors engaged in a collective effort (Nicholls 2009). Such power relations are important because they may create incentives for certain actors to conform to the priorities of more powerful network actors (Ghose 2007; Ghose & Pettygrove 2014a). Networks may contain multiple “antagonisms,” and these may correspond with power imbalances within networks, as noted above (Featherstone 2005).

According to Ghose (2007: 1966), “networks reflect structural inequities along class, gender, and racial lines, and contain hierarchical power structures” that shape who is included. Network formation depends on actors’ abilities to navigate power relations, which are likely to vary on the basis of resource access, mobility, or perceived social status (Routledge 2003). Engagement in a particular network may require knowledge about procedures for participation or behavior according to terms set by more powerful actors within the network. Individuals or organizations may serve as “key brokers,” within a network because of their relative social status (Nicholls 2009: 87).

Accordingly, conflict may occur in the establishment of networks as actors negotiate disparate interests and power relations (Cox 1998).

This conflict within networks may also itself constitute part or the whole of the domain of political struggles (Featherstone 2005). Politics and networks are co-constituted. Featherstone (2003: 408) thus argues for utilizing networks to

consider the political as the site of multiple conflicts and antagonisms. For actors craft their political identities through the ways they engage with geographies of power relations. They do not have fixed interests constituted in relation to already existing spatial configurations of power.

This is not to say that existing social hierarchies do not influence the contours of networked spaces. Indeed, race-class differences may produce and be reproduced through particular network structures (Ghose & Pettygrove 2014a). However, constellations of power within networks are not predetermined, and contestation or resistance can take various forms with varying degrees of confrontation and compromise among actors (Featherstone 2005).

Ultimately, networks also function as spaces through which actors construct political identities and forms of resistance or contestation (Featherstone 2005). According to Levkoe and Wakefield (2014: 304), social movement networks are “locations where ideas, identities, and frames are shared and exchanged, contributing to the development of a broader discourse and practice.” The configuring and ordering of networks may in fact be the space at stake in political struggles, or around which political agency (i.e., power) is negotiated. The construction of alternative networks (i.e. outside of, and in parallel with, existing networks) is one way that actors might utilize networks to engage in political contestation (Featherstone 2005).

This paper, then, seeks to identify how network relationships enable certain activities and shape—intentionally or otherwise—the discourses and practices of actors involved in food projects

(e.g., by influencing how an organization chooses to frame a message in order to gain network-based resources). It begins by examining the networked spatialities of food projects in Milwaukee, in terms of the general characteristics and contours of networks formed among food project actors. It then considers the roles and functions that networks serve in food organizing and policymaking efforts. Finally, it investigates how political activities and identities constitute and flow from these networks. Specifically, it explores how political struggles and forms of contestation are enacted through the negotiation and configuring of networks, in part through the assertion of difference (antagonism) via networks.

3. Food Project Networks in Milwaukee, Wisconsin

I explore these questions through a case study of Milwaukee, Wisconsin, where concerns about food and dietary health inequities have become driving issues for numerous organizations, including, most recently, city government. In 2013, the City of Milwaukee Office of the Mayor announced, with the publication of its first comprehensive sustainability plan, the launch of the HOME GR/OWN (HG) initiative, which aims to improve healthy food access in predominantly Black, “inner city” neighborhoods via the redevelopment of vacant public lots into urban agricultural sites. These sites, which are to be maintained and utilized by community groups, are framed as a direct response to inadequate access to fresh produce, high obesity rates, and economic decline in the central city (City of Milwaukee 2013).¹⁷ The city’s concerns echoes those raised by many

¹⁷ Milwaukee's Center for Urban Population Health, from which the city derived its health statistics, reports that in 2013 68% of all Milwaukee residents consumed less than 5 servings of fruits or vegetables daily, 37%

community-based organizations in Milwaukee since at least the mid-1990s, and increasingly within the last ten years (see Chapter 3). These community-based organizations, which include formal nonprofits, churches, citizen groups, and multi-organization coalitions, have engaged in (and continue to develop) various projects aimed at improving access to healthy foods, with a common emphasis on urban agriculture (UA) and local food systems development. I use the term “food project” to refer to efforts, involving community or state actors, to address perceived food inequities or other food-related concerns.

My discussion here considers—based on open-ended interviews, document analysis, and participant observation—the narratives and practices of 23 Milwaukee organizations (3 municipal agencies, 3 university-community partnerships, 2 coalitions, and 17 nonprofits), all of which explicitly devote significant portions of their efforts to food-related inequities (either as their principal mission or through a dedicated program), and many of which self-identify as participants in a local “food movement” (Table 8). These organizations typically distinguish their efforts from traditional anti-hunger or emergency food work by their focus on issues of food quality (beyond basic clinical nutrition), health, and food systems, paralleling broad concepts of food justice or alternative food movements (Agyeman & McEntee 2014; Guthman 2014).

However, as will become clear through my analysis, the appearance of a broadly common discourse and set of practices that define a coherent Milwaukee “food movement” belies the great variety of interests and tensions among actors working around similar issues. While there is no

were clinically obese (based on body mass index), and that these percentages increase for lower socioeconomic groups (Greer, Baumgardner, Bridgewater, et al 2013).

straightforward conflict around which food organizing occurs in Milwaukee,¹⁸ there are significant political issues surrounding food and land use for UA that materialize predominantly within networks of food organizations. Until 2014, there was more explicit conflict surrounding community garden development on city-owned lots, but this has been formally resolved with changes to municipal land use ordinances that enable community garden development. In fact, the lack of a clear antagonist serves to underscore the importance of considering this social movement ‘space’ in a relational, networked way, in which there are multiple antagonisms and political identities at play (Featherstone 2005).

I begin by describing the general forms of networks among food organizations, and then move on to discuss how political agency and spaces are constituted through networks.

4. Characteristics of Milwaukee Food Project Networks

Overall, actors involved in food activism and organizing in Milwaukee are highly interconnected among themselves (Figure 12). Most of these actors are informally acquainted or participants in some form of collaborative project (past or current). Projects consisting of multiple formal organizational partners, such as the Milwaukee Food Council (MFC) and Milwaukee Childhood Obesity Prevention Project (MCOPP), are quite common. Actors are also connected via formal relationships created by larger organizational structures (e.g., different departments within a single, multi-campus institution). This is not particularly surprising, given the nature of community organizing, the prevalent use of neoliberal collaborative approaches to municipal governance (Ghose

¹⁸ As there might be in, for example, the case of a specific conflict over land use rights (Barracough 2009) or surrounding the legality of producing raw milk (Kurtz, Trauger & Passidomo 2013).

& Pettygrove 2014b; Perkins 2010), and by virtue of my method of identifying and selecting actors for the study (purposive sampling). However, the specific ways in which actors connect and the roles that these connections play in the development of food projects are significant to the construction of associated political identities and spaces.

Networks among food projects in Milwaukee are generally organized around place-based (or territorial) identities and issues—for example, efforts to develop healthy grocery stores within a specific neighborhood or to promote “northside” food businesses—or around themes that are less place-specific (such as projects to provide support to new urban farmers). Milwaukee food actors tend to understand “north” and “south” as distinct “sides” of the city (divided by interstate freeway 94) that also signify race and ethnicity (i.e., the northside is constructed as predominantly Black and the southside as Latino; see Figure 10). In describing factors that shape organizing activities, some actors characterize this geographic separation as a very real physical and cultural barrier to collaboration. This coincides with existing scholarship on social movement networks (Nicholls 2009). However, Milwaukee food project networks typically consolidate around elements of both place-based and thematic concerns, and the delineation between these elements is not straightforward. Further, networks not explicitly rooted in areas within Milwaukee tend to have overt interests in Milwaukee overall as a place. In other words, the differing scales at which ‘local’ interests and identities are defined trouble any straightforward classification of networks as either place-based or thematic (Featherstone 2005; Nicholls 2009).

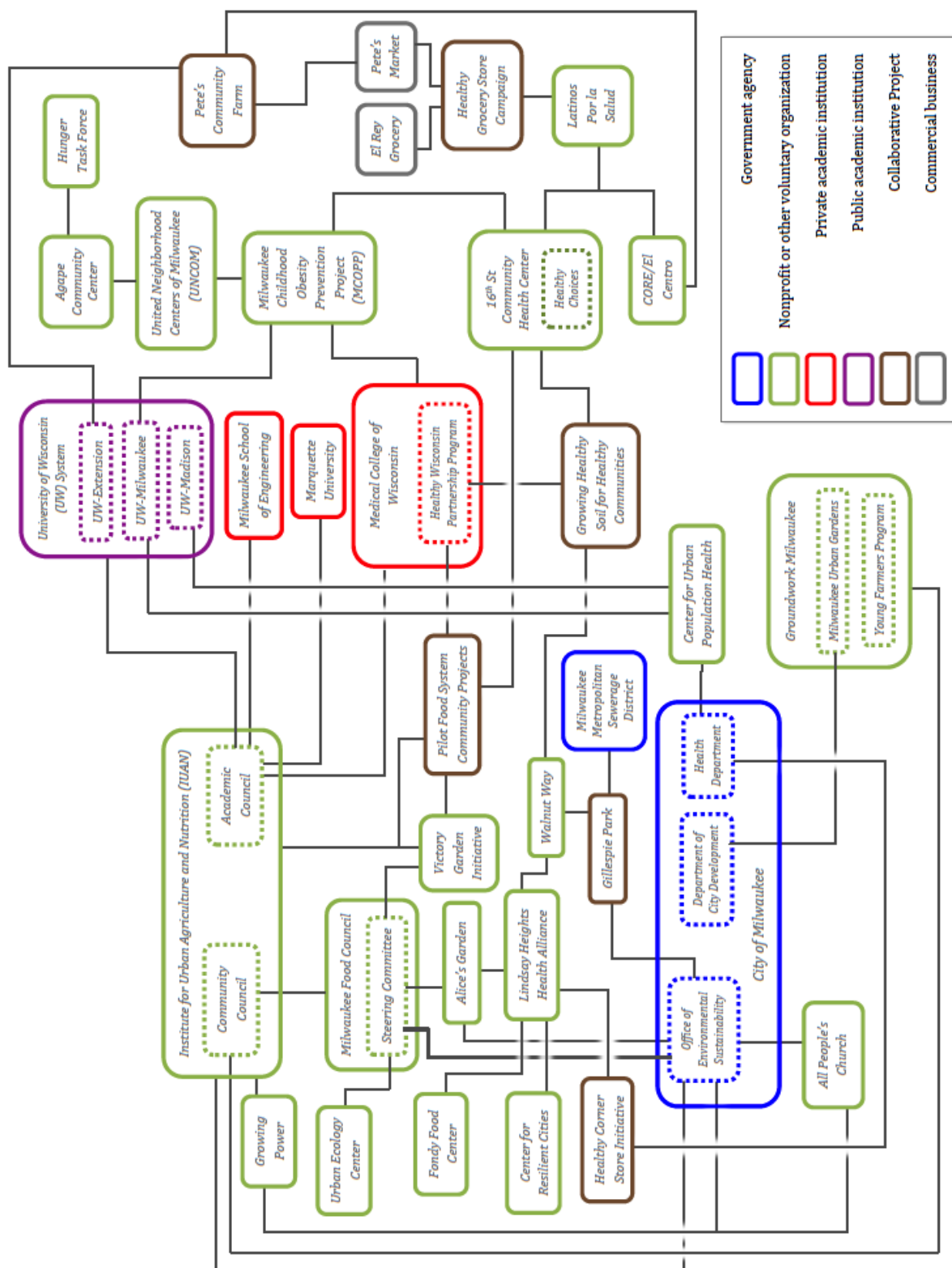


Figure 12. Actors and networks involved in Milwaukee food projects. Lines indicate linkages of varying degrees of formality and duration.

That these networks are multiple and often overlapping further complicates such classifications, as the boundaries around any given network (to the extent that distinct networks can be identified) are fluid and often amorphous. MFC, for example, is constituted by a relatively porous network of actors (in part, by design, as I will later argue), in that its membership is largely comprised of individuals and organizations with no formal affiliation who chose how and when to engage. The strength of actors' engagement and adherence to MFC agendas may wax and wane over time and across issues, and these actors may, at any point, bring in new participants, resources, or ideas. Yet, the entity "MFC" maintains a relatively consistent and solid identity in relation to other organizations, as reflected in the frequency with which local government leaders and other community-based organizations describe MFC as the nucleus of Milwaukee's food movement (Personal communications). In its 2013 sustainability plan, the City Office of Environmental Sustainability (OES) characterizes MFC as its primary community liaison for food system improvement efforts, and thus constructs MFC as a coherent entity and central node in local food organizing networks (City of Milwaukee 2013: 32). The fluid and indeterminate nature of social movement networks has been noted elsewhere, and may relate to changes in network configurations over time, in response to changing political interests and needs (Wekerle 2004). The ways in which an organization, like MFC, may function simultaneously as a loose network of actors and as a single actor, increase the complexity entailed in describing social movement networks. Conceptualizing networks dynamically and relationally, then, greatly facilitates this task (Featherstone 2005; Nicholls 2009).

Milwaukee food project networks are generally configured around and gain meaning from

(and in turn influence) various aspects of each actor's social position. Where actors represent organizations, these qualities can be conceptualized as part of their organizational contexts, which include resource access (material constraints), knowledge and experience, organizational priorities, stability, reputation, and legitimacy (Elwood & Ghose 2001). The participation of an organization in a particular networked political space or activity depends to a degree on the organization's identification of that network as aligning in some way with its organizational values and priorities. An organization's reputation and involvement in particular activities may also contribute to the expansion of its network of relationships. For example, when Pete's Market (a grocery store in Milwaukee Aldermanic District 12, on the southside) sought to develop a vacant lot in its property into a community farm, it first contacted the director of the nutrition and garden program at CORE/El Centro (CORE), with whom they had an established relationship due to CORE's involvement in the *Latinos por la Salud* healthy grocery store project (in which they convinced Pete's to add selected healthy food items to its inventory). The director introduced them to a contact at University of Wisconsin-Extension (UWEX) Dane County (who had assisted CORE on a previous grant project), who then connected them with the UWEX Milwaukee County Urban Agriculture Department, which became a primary partner on the farm project (along with CORE). In this case, existing relationships among actors, Pete's desire for a particular kind of expertise, and CORE and UWEX's identification of community urban farming as an activity that would further their own organizational interests, shaped the configuration of partners who became part of the project.

The case of the Pete's Market community farm project also indicates the important strategic function of organizational networks for Milwaukee food projects. Pete's Market's existing relationship

to CORE was a crucial resource enabling it to more easily identify UWEX as a potential partner and to pursue a relationship with the organization. In general, for actors involved in Milwaukee food projects, network relationships provide access to information (particularly about grant funding opportunities and potential partners), material resources and political influence and legitimacy. Certain individuals (and organizations) may function as central nodes facilitating connections (i.e., introducing and vetting actors to each other), disseminating information, or providing material resources. For example, in 2008, when the Zilber Family Foundation (a local philanthropic organization that funds economic and community development) sought a community-based organization to receive 200,000 dollars and lead the Zilber Neighborhood Initiative (ZNI) in Lindsay Heights, they chose Walnut Way Conservation Corps (WWCC; a local UA and community development nonprofit) on the basis of this organization's reputation among other established organizations as an effective and skilled community collaborator. According to a Zilber project manager, the selection of candidate organizations for the ZNI in Lindsay Heights began with a process of identifying organizations with records of success, based on examining,

which names and organizations come up in all of the circles of organizations that we're [Zilber] talking to. So, you know, going to the big trusted, kind of, vetted organizations, all the way down to grassroots organizations—certain names always come up, and so Walnut Way and [WWCC founders] Sharon and Larry Adams were 2 of the names or institutions that just kept coming up, in terms of organizations that are really connected to the communities in which they work. So, a lot of it was reputation at the start, and then through those introductions, meeting and kind of interviewing and learning about what they do that they were invited to apply ... So, it wasn't an

open process; it was: organizations were identified internally, and then asked if they wanted to participate (Personal Communication 2015; emphasis original).

In this case, being well known and recommended by trusted local community development organizations granted WWCC organizational legitimacy, which in turn facilitated access to financial resources.

Because they are central to the flow and exchange of organizational resources, and a source of political legitimacy, partnerships are a more or less normal part of how both community-based and government food projects in Milwaukee function. The City of Milwaukee HOME GR/OWN (HG) program's first UA development project, Ezekiel Gillespie Park (opened in 2014), received financial and in-kind support from a variety of city agencies and private entities, including University of Wisconsin-Milwaukee's Community Design Solutions (CDS), which provided design labor. The construction labor for the park was contracted to Walnut Way's Blue Sky Landscaping, an employment training program run by the organization (who is also the lead community group on the project). This public-private partnership approach to economic and community development has become increasingly common in the context of neoliberalization (and has been a vehicle furthering neoliberalization), as local governments have sought to shift social service management to voluntary and private sector actors, and as community organizations have been compelled to cope with precarious funding (Ghose & Pettygrove 2014b; Newman & Lake 2006; Perkins 2010). City of Milwaukee administrators have been particularly explicit about the strategic advantage to the city of collaborating with non-governmental actors in their efforts to develop UA and improve healthy food access (Personal communication 2014).

Network connections are also important as a means to information access, often in the context of navigating complex or obtuse government structures. For example, the Milwaukee Urban Agriculture and Water Policy Task Force (MUAWP), a group of individuals from nonprofit organizations (principally Milwaukee Urban Gardens (MUG), Groundwork Milwaukee, and Victory Garden Initiative (VGI)) that sought to protect the rights of community garden groups to obtain water from public fire hydrants (between 2011 and 2013), drew on connections to University of Wisconsin-Milwaukee faculty and research assistants to obtain information about UA-supporting policies in other cities (e.g., Minneapolis), which they used to bolster their campaign to city officials. MUAWP's efforts were also facilitated by their successful inclusion of city staff members (from OES and the Department of Public Works) in the development of the campaign, at least one of who became an avid supporter of the group (and the future HG director). With the input of city staff, the group gained insight into city leaders' perspectives and priorities and an understanding of how to strategically approach city government policymaking processes in order to increase the odds of achieving their goals. Although they were never successful in convincing the city to establish legal protection for hydrant use (in part due to complexities in the regulatory structures for public water utilities in Milwaukee County), OES did ultimately utilize MUAWP's collected research as a template to write its UA policies in 2014 under the HG initiative, and the group's efforts provided further incentive for the city to shift towards a more explicitly supportive UA policy (see Table 10).

MUAWP's connection to city staff during their campaign seems to have also had the effect of encouraging the group to be more conciliatory towards the city—for example, by softening their original request (that the city guarantee water access for community gardens) with an assurance that

garden groups would actively work to implement rainwater harvesting and other sustainable water management practices, and reserve water utilities for periods of drought—in part because group members were satisfied that the city was attempting to cooperate and consider their requests, and came to sympathize with the constraints under which city leaders operate. This is significant, as I will discuss in depth later, because it points to the ways in which the networks through which political activity and identity are constructed contribute to shaping the contours of broader discourse and practice, which may involve altering particular agendas to align more closely with those of relatively powerful actors within networks.

Advocacy, like that in which MUAWP engaged, aimed at changing local government policy (or otherwise promoting particular causes), is a mechanism many Milwaukee food projects utilize to promote food justice and local food system development agendas. Networks connecting food project actors with other actors in organizing and governance roles (whether food-related or otherwise) serve an important strategic function in this regard, as they enable the dissemination of information (and discourses) that may help generate support for particular agendas. Food project actors engage in advocacy, and information production or dissemination, via public meetings, conferences, political demonstrations, and published reports (e.g., ZNI's quality of life plan for Lindsay Heights).

Organizations such as the Cooperative Institute for Urban Agriculture and Nutrition (CIUAN) and MFC have been particularly focused on advocating for the importance of improving healthy food access (via local food system development), through the development of citywide networks of actors



Lindsay Heights

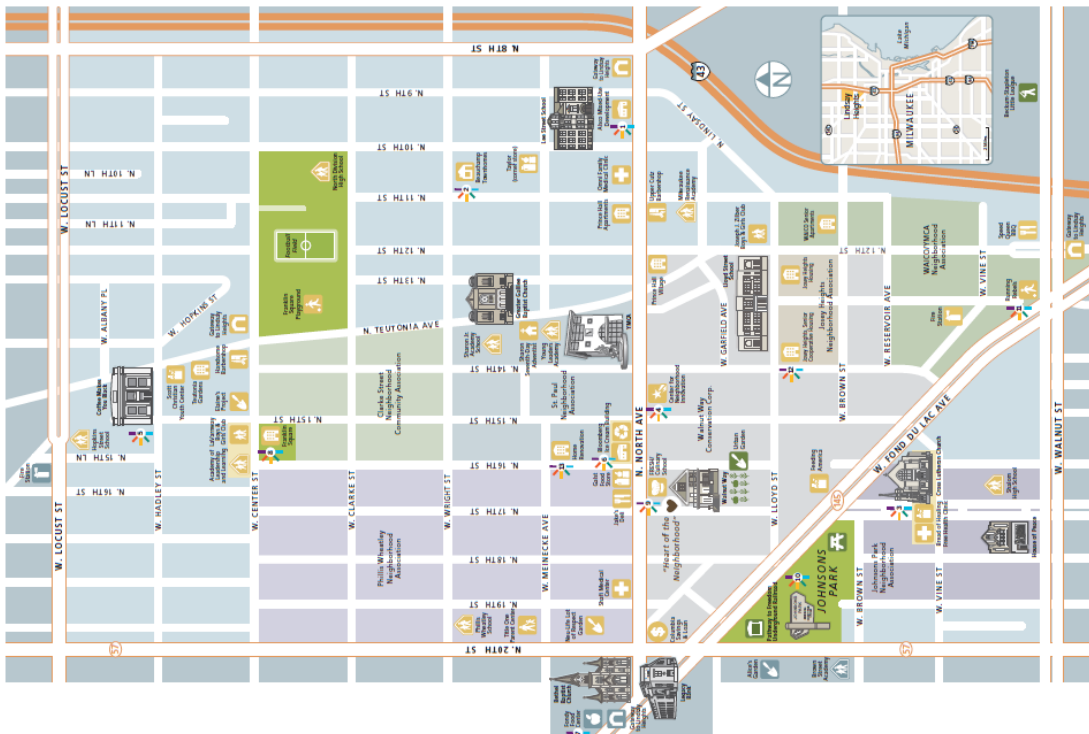


Figure 13. Excerpts from Lindsay Heights Quality of Life Plan (cover page and asset map). Created in 2008 by Zilber Family Foundation as part of the Zilber Neighborhood Initiative.

engaged in producing knowledge (via academic research or projects designed to identify best practices) that supports this goal. By bringing these actors into relation with each other and encouraging them to share knowledge, they aim to support individual food projects while simultaneously developing a common agenda. Both MFC and CIUAN frame the development of common agendas as a means to strengthen the collective impact of Milwaukee food projects by bringing their efforts into alignment.¹⁹

The development of HG (which reflects the city's growing support for local food systems) provides further illustration of the ways that connections to other (influential or powerful) actors can function to facilitate the agendas and activities of a given food project actor. The HG program director's involvement in MFC and MUAWP in years preceding the 2013 establishment of HG played a significant role in the development of the program. The director, who began as OES staff in 2010, became involved in MFC as a steering committee member in 2012, citing an interest in promoting UA that developed with his involvement in MUAWP in 2011. During this time, he began an effort to map community gardens for the City of Milwaukee's public geographic information system (GIS), and encouraged the city to regard UA as an environmental sustainability asset. Thus, when another MFC steering committee member (the director of VGI) proposed the city institute a UA development program as part of the city's application to the 2012 Bloomberg Mayor's Challenge (a national grant competition), their proposal (which came to form the basis for HG) had an established champion within the city. The participation of OES staff in MFC and MUAWP was,

¹⁹ MFC explicitly draws on a "collective impact" framework, presented by Kania and Kramer (2011:38) in the *Stanford Social Review* as a strategy for achieving "large-scale social change" through "better cross-sector coordination."

thus, significant in that it established a link between community-based food projects and city government agencies. The OES staff person effectively came to serve as a strategic liaison or “broker” (Nicholls 2009) that facilitated interactions between community groups and the city, and contributed to shaping narratives about UA in ways that simultaneously aligned with the city’s and MFC’s interests.

5. Knowledge Production and Dissemination Through Networks

While Milwaukee food project actors may utilize networked information dissemination as an intentional strategy towards particular ends, network relationships can also be understood as part of how ideas and information (discourses) are transmitted and gain broader legitimacy or force, regardless of the intentions of actors involved (Levkoe & Wakefield 2014). As in the case of the relationship between the City of Milwaukee and MFC, a single actor (such as the OES staff member) may serve as the conduit between two actors, allowing discourses to be transmitted from one to the other, in part through granting legitimacy or validating the originating organization. The conducting actor also facilitates transmission of discourses by translating ideas into mutually relevant narratives (Nicholls 2009; Horowitz 2012).

Accordingly, the production of broadly meaningful discourses, via circulation and exchange of information within networks, is one of the key ways that political identities (and spaces of political action) are constituted through network formation (Featherstone 2005; Levkoe & Wakefield 2014). The space of Milwaukee food projects, or the parameters within which political

contestation occurs, do not pre-exist political action, but rather are constituted by it, and thus are imbued with whatever forms of exclusion or inclusion these actions entail.

MFC's effort to develop a collective agenda that aims to encourage similar groups to align their practices, provides an example of using networks to promote a broader set of discourses, and in doing so, constructing (often inadvertently) a political space that delineates the appropriate scope of action, the actors that are included, and the appropriate arrangement of actor relationships.²⁰ By promoting particular discourses, they define boundaries around what constitutes the political in relation to food. In this case, these discourses construct local food systems development, centered on UA, as a solution to healthy food access inequities, and condemn industrial food systems in various ways (see Chapter 3). They also emphasize creating an explicit, unified set of priorities, goals, and values to guide food activism. This discursively configures the networked space of food activism around the ideal of consensus and cooperation. Multiple actors involved in MFC emphasize that while capacity exists and substantial work is already being done (in the realm of food and UA), there is a significant need to link organizations and projects to more effectively expand, or "scale up," the impact of this work citywide. One leader describes MFC's central objective as "bridging silos" that exist among different food projects whose activities are mutually supportive. She explains, when the council first formed, "what we had in existence was very isolated in those silos...they didn't really know each other, it was very peripheral, did not come to any common table at all" (Personal communication 2014). This scalar expansion generally refers to connecting small projects centered

²⁰ This is also evident with MCOPP, which seeks to have impact across multiple community centers via networked information sharing, constituted by the member organizations, who will then shape their practices accordingly.

on specific local places (e.g., neighborhoods) to other similar projects with the aim of developing a dense network of activity that extends throughout the city. Meanwhile, there is minimal interest in broader scales of activism, such as the US federal Farm Bill (which directly impacts agricultural subsidies and food assistance allocations).

While framed as broadly inclusive, the emphasis on unification of goals across all food projects (which some MFC participants contend is necessary for these projects to create any kind of meaningful change) has an exclusionary and sometimes homogenizing effect. MFC leaders and active members emphasize that in developing a common agenda, they have sought to encompass a majority of existing forms of food activism, but maintain the strategic importance of having clearly defined parameters around this agenda. In MFC meetings (most of which are open to anyone who wishes to attend), discussions that touch on the organization's mission or practical strategies occasionally include suggestions or questions (from individual attendees) that are met with casual dismissal, redirection, or outright disagreement from leaders in the group. This creates a sense that these ideas are incongruous with the organization's values. In multiple instances, suggestions that the group consider engaging in more politically confrontational activities (such as direct action) were discouraged in this manner.

In another case, when an organizer representing Milwaukee's African American Breastfeeding Network attended a meeting (at the invitation of a MFC leader) and made a case for including breastfeeding as a crucial food justice issue within MFC's organizing work, the group continued on to other agenda items with minimal discussion of the issue, and did not raise the issue in successive meetings. Ironically, MFC leaders have regularly discussed the need for greater "diversity" within the

organization and have included the pursuit of diversity as a priority within their strategic plan. Diversity here is conceptualized primarily in terms of race, although class is also implicitly acknowledged (often as a function of the significantly racialized economic inequities in Milwaukee). Consistent with the multicultural connotations of the language of “diversity,” MFC leaders and members typically reproduce a conception of racial equality as primarily a matter of participation and inclusion (see Bonilla-Silva 2010; Melamed 2006; Ramirez 2015). That is, by including or “making room at the table” for more “diverse” (meaning, non-white) actors, the space of food activism will become more racially just (Personal communication 2014). Despite being well intentioned (in aiming to include the perspectives of people of color), this discourse obscures the various ways in which people of color are already actively engaged in food organizing and activism in Milwaukee. It also centers whiteness, by suggesting that people of color be included on the terms of the organization’s predominantly white leadership (see Slocum 2007).

This narrative of diversity also connects to an implicit discourse that preferences supposedly “apolitical” approaches to food system change (such as those centered on individuals growing food in the city for their own consumption) and discourages direct engagement with instances of racism and racial difference (Personal communication 2014). For example, a white organizer of a community garden in the predominantly Black Harambee neighborhood explicitly instructed volunteers and employees to avoid discussing a recent incident of lethal gun violence that occurred in front of the garden, as she did not wish to reinforce unpleasant narratives about the neighborhood. While concerns about negative, racializing perceptions of this neighborhood are well founded, the denial of lived realities reflects a white privileged position. During a meeting for a different organization, a

Black community garden organizer noted that he cannot avoid engaging with difficult issues because they regularly affect his life and activist efforts (and those of his community). Simultaneously, he called on white organizers to utilize their relative political privilege to be more confrontational.

Further, the interest in promoting a purportedly inclusive agenda appears to be founded, to a significant extent, in the idea that an adequately general agenda will draw greater attention and participation from actors who are not currently involved, who can then be encouraged to adopt more specific elements of the agenda. MFC has, for example, explicitly and intentionally avoided calling itself a food *policy* council, because it wishes not to narrow its work to only policymaking. However, most of its projects to date have involved policy advocacy (e.g., promoting ordinances that legalize bee- and hen-keeping in Milwaukee and establishing a food policy task force to serve as an advisory board within the city government). From its inception, MFC has sought to frame its local food system development goals in ways that would appeal to city government leaders and bring these goals within the scope of city priorities (primarily by framing UA as a form of sustainable land use and urban revitalization; see Chapter 3). A founder of MFC explains that when the organization first began to develop, in 2007, the City of Milwaukee

had a new director of sustainability...so I went to her and said, 'what do you think about this idea [for a food council]?' Her charge had been more environmental sustainability, and so I had to make the case why food would be a part of this, because again—there was just no light coming on when you explain this to people...but she said, 'that seems like a good idea; yeah, give it a go'" (Personal communication 2014, emphasis added).

This is another instance of discursive translation deployed to enable the city to regard MFC as serving city interests in environmental sustainability. By framing their work in terms of UA development (rather than, for example, food justice) and UA as a form of green space that improves land values in disinvested neighborhoods, MFC succeeded in establishing a positive relationship to the city and, thus, expanded its networked political space to include city actors, without altering its central agenda. In essence, broadening the scope of food practice to encompass many issues within a single framework appears to act as a strategy to facilitate network formation by enabling discursive flexibility while maintaining the goal of unity. This parallels, in many respects, Martin's (2003) conception of "place-framing," as the way that activists frame their concerns around a particular place in order to develop broad place-based support for their efforts. However, incorporating a relational theorization of place suggests that these place-frames may also operate by defining a political agenda in such a way as to expand the place of concern by bringing more actors into connection with an established network.

Networked spaces of political activity are also constructed through and utilized for the production of spatial knowledge. Direct support from networks of organizations, typically forged through existing personal relationships or based on the reputation of particular organizations, has enabled several food projects to create, represent, and analyze spatial information that is used to acquire resources or promote project agendas. Spatial information in this case generally concerns location and distribution of project activities, resources the project wishes to promote, or potential sites for future project development. VGI, for example, worked with graduate student volunteers from UW-Milwaukee to map the locations of fruit and nut trees citywide (with a web-based

geographic information system (GIS)) in order to both enable residents to harvest fruit and identify neighborhoods lacking these trees (Personal Communication 2014).

MCOPP, a coalition of community organizations and academic institutions seeking to reduce childhood obesity in Milwaukee, produced a map of “healthy” assets (e.g., parks, community gardens, grocery stores) in an effort to encourage their use by residents of neighborhoods surrounding a selected community center (Figure 14). This map was produced over a 2-year period by a team of staff and volunteers representing multiple organizations with membership in MCOPP. These organizations included MCOPP lead organizations—Medical College of Wisconsin (MCW) and United Neighborhood Centers of Milwaukee (UNCOM)—and multiple independently run community centers that intended to provide the resulting map to their clients. Healthy asset data were collected primarily through field surveys conducted by team members, with some additional data provided by the Nonprofit Center of Milwaukee, MUG, UWEX Milwaukee County, and the City of Milwaukee. Initially, the team sought technical assistance from the Nonprofit Center to compile and digitally map these data. However, when staff turnover at the Nonprofit Center delayed this mapping work, the MCOPP team connected with Community Design Solutions (CDS) in the School of Architecture and Urban Planning at UW-Milwaukee to complete the project. MCOPP utilized the completed map to lead a “listening session” at one of the community centers for the purpose of obtaining insight into how residents use (or do not use) healthy assets and whether any assets had been overlooked.

MUG engaged in a similar process of mapping, in collaboration with a UW-Milwaukee graduate student, for the purpose of visualizing and analyzing the distribution of their approximately

100 community garden sites across the city. MUG sought assistance from UW-Milwaukee because it did not have adequate staff resources and expertise to develop a GIS or produce maps with its data (Personal Communication 2014). Through this collaboration, MUG was able to visualize its own activities in ways it had not previously been able, which will facilitate future program evaluation and strategic planning. For example, by visualizing the locations of community gardens, MUG is now able to prioritize resource allocation for new garden development based on gaps in current garden access (Welcenbach 2015). MUG may also utilize this spatial knowledge to advocate for more favorable urban land use policies or to apply for grant funding. Further, through spatial analysis of its data, MUG has identified “clusters” of community gardens (based on physical proximity), around which it will organize localized networks of gardeners. By connecting gardens within identified clusters, MUG aims to strengthen gardens’ capacities to acquire resources, share information, and consolidate political leverage. In this way, spatial knowledge production (constructing relationships among gardens based on physical proximity) serves as a means by which MUG constitutes a political space and identity.

Considered together, these examples demonstrate the ways in which the networked spaces of food projects simultaneously emerge through and contribute to developing particular discourses (see Levkoe & Wakefield 2014). This occurs as actors delineate boundaries around what constitutes political activity (including problem definition and strategy). Where organizations (e.g., MFC) work to unite multiple food projects under specific common agendas—thus connecting these projects into a networked social movement space—it is likely that these networks shape the discourse (and conduct) of actors within them. Discursive consensus, in other words, depends on some degree of

compromise or adaptation among actors. As I will discuss later, this is significant in part because actors with relative clout are likely to control decision-making processes and direct priorities within a given network (Nicholls 2009). While the pursuit of alignment among food projects within a network functions strategically to strengthen collective action, to the extent that it forecloses certain issues and forms of practice, it may compel actors to compromise their interests in order to avoid exclusion.

6. The Networked Construction of Political Space

Networks are also spaces through which actors engage in material forms of political contestation. One of the predominant ways that Milwaukee food projects engage in networked practices of resistance is through attempts to reconfigure food production and distribution chains such that food moves to a greater extent between local or regional actors rather than moving between local and non-local actors. This is a central goal of developing a local food system, according to many Milwaukee food projects, and is premised on the idea that shortening connections between food system actors (and altering the composition of participants in this system) will produce a system that better serves the interests of all involved (whether in terms of food quality, affordability, or availability). Such a system also promises greater control by community groups (in contrast to industrial food systems that are understood to be governed by multinational corporations) and thus encompasses structures that are more finely tailored to place-based interests (i.e., neighborhoods or community groups).

Numerous scholars have examined local food systems as a form of alternative food network (AFN), with particular attention to whether and how AFNs effectively challenge industrial agro-food systems (see, e.g., Alkon & Norgaard 2009; Allen et al 2003; Harris 2009; Wekerle 2004). Given the depth and breadth of this body of research, I do not intend to belabor questions about the political efficacy of local food system development, but rather to highlight this as an example of collective action that can be more explicitly theorized in terms of the networked construction of political space. Much of the discussion of AFNs has treated networks in a relatively simplified manner (and has not substantively addressed networks among food projects that do not specifically aim to develop AFNs). Regardless of their broader impacts, Milwaukee organizations engaged in local food system development alter (or attempt to alter) material networks of food production and distribution wherever they create an urban farm or farmers market. However thin the network of Milwaukee food projects relative to industrial food networks, it constitutes a political space formed in an attempt to circumvent these networks at a local scale. Through circumventing and creating alternative networks, Milwaukee food projects attempt to bring spatial relations into contestation (Featherstone 2005).

In the case of Milwaukee, the nature of local food networks relative to that which they are typically counterposed—national and global industrial food networks—hints at the *relationality* of these networks. Local food networks in Milwaukee are partial, in the sense that they do not wholly replace, or exist separately from, other food networks. That these ‘local’ and ‘non-local’ networks co-exist in one place and often intersect (as when organizers work to convince convenience store owners to stock vegetables grown at a nearby urban garden alongside standard fare) supports theorists’

assertions that social movement networks do not conform to easy spatial binaries (e.g., between ‘global’ and ‘local’ or ‘within’ and ‘outside’; Featherstone 2005; Nicholls 2009).

A relational conception of networks also emphasizes that contestation and the construction of political identity are likely to occur through negotiation *within* networks (Featherstone 2005). Network configurations are dynamic; contestation does not occur solely through opting out of or deconstructing networks, but includes efforts to negotiate while remaining connected. Accordingly, an actor’s strategic use of relationships with other actors (as described earlier, e.g., as a means of access to financial resources) can be understood as an act of constructing power or agency. In exerting pressure on city government actors to change UA policies, MUAWP negotiated within established connections without forfeiting those connections. The policy changes that emerged from this process (albeit indirectly) have altered how community groups interact with city agencies in relation to UA development, primarily by allowing land uses that formerly required special approval.

Participation in (or alignment with) particular networks may in itself constitute a political act, in that “actors craft their political identities through the ways they engage with geographies of power relations” (Featherstone 2005: 408). In the case of Milwaukee food projects, this is evident in the ways that various actors view the role of cooperation among food projects in Milwaukee. Many actors support MFC’s emphasis on a unified movement, and use this as a metric by which to judge organizational efficacy. For example, an organizer criticizes Will Allen, Growing Power founder and CEO (who many actors regard as insufficiently engaged in local food organizing) for “exaggerating” Growing Power’s accomplishments during a televised interview, on the grounds that this diminishes

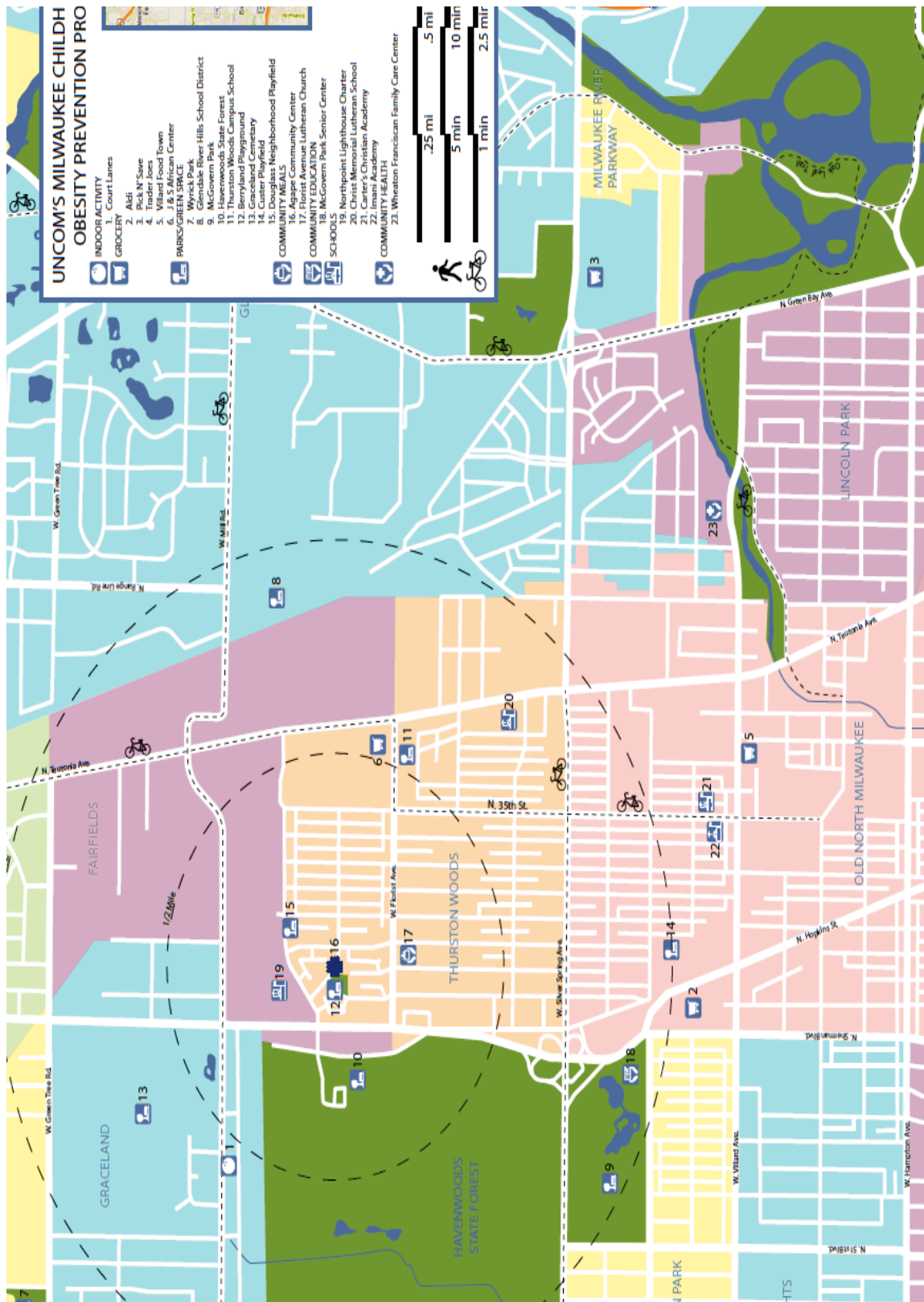


Figure 14. Milwaukee Childhood Obesity Prevention Project (MCOPP) Healthy Asset Map. 2013.

the achievements of other organizations and might encourage a sense of competitiveness among them (Personal communication 2014). If part of the general discursive construction of a Milwaukee “food movement” centers on defining it as unified or collective, then the criticism (often implicit) of those who do not participate, or participate in the wrong ways (as in the critique of Will Allen above, or when MFC implies that those who have not participated in their organization are not engaged in food activism) serves to enforce this boundary around what constitutes ‘political’. The emphasis on unity also tends to coincide with discourses that encourage cooperation, rather than confrontation, with state and commercial actors.

Conversely, there are several food projects that challenge the discourse of cooperation and construct distinct networked political spaces, while still engaging with a broad array of actors. These spaces tend to center on specific neighborhoods or communities (primarily Black communities on the northside) that identify as excluded or marginalized within the broader context of Milwaukee. Leaders of these projects tend to emphasize the importance of many localized food systems and activities based in particular places (at a sub-municipal scale) and “tailored to a neighborhood’s history,” in that they are driven by residents of the neighborhood (rather than the city or large nonprofits) and are creating their own political identity within the networked space of what might otherwise be called the singular “Milwaukee food movement.” This points to the existence of multiple antagonisms within the networked space of Milwaukee food projects (Featherstone 2005).

At a conference in Milwaukee devoted to the intersections of food justice and the Black Lives Matter movement, Venice Williams, director of Alice’s Garden, encouraged Black attendees to be selective about who they consider to be allies, and to be willing to distance themselves from those

who do not truly support their dignity and right to life (even if they are close acquaintances). To illustrate this, she pointed to convenience stores in northside Black neighborhoods, which are not owned by local residents, and where Black customers are routinely racially profiled. Because these stores are spaces hostile to Black bodies, she emphasized, when residents patronize them, they are tacitly reinforcing racialized violence and white supremacy. The goal, accordingly, should be to increase Black ownership and control of space (including, but extending beyond, food retailers). Simultaneously, she called on leaders of nonprofit organizations (which are mostly white, she emphasized) to be “be willing to put themselves out of business,” by supporting Black communities’ autonomy and self-sufficiency, rather than centering their own livelihoods and political agendas. Finally, she explained that the ongoing economic marginalization of and violence against Black communities in Milwaukee necessitated a less “polite” stance from these communities, and a more conservative approach to cooperation with white organizations. She reinforced this narrative at another local conference of food and nutrition organizations by chastising actors who enter Black neighborhoods, attempt to make health-promoting environmental modifications, and assume that they must teach residents how to appropriately eat and prepare food (see Chapter 3). She explained that Milwaukee’s northside is *not* a food desert, but a place “full of life” and active efforts to produce and procure food. Thus, by rejecting the discursive construction of Black neighborhoods as food deserts, she argues for a different framing of food politics, and questions the supposed cohesiveness of current food project networks.

Further, Williams, along with other Black food activists, suggest the importance of defending spaces, produced by and for Black people, against such intrusions, in part by including white actors

only on the terms set by those within these spaces. WWCC, MUG, and Alice's Garden, among others, have been at the forefront of redeveloping vacant city lots into Black led urban farms and community gardens, as spaces of food production, economic activity (e.g., selling produce at farmers markets), and other practices (e.g., public art installations and green spaces for healing from violent trauma). However, these efforts also include development of community-owned retail spaces and community centers, such as the Body and Soul Healing Arts Center in Sherman Park, developed by Williams in 2013, where food-related gatherings are now regularly held (including the Black Lives Matter Food Justice conference described above). Many of these Black-led food projects explicitly frame their work as rooted in the place that is the northside, This 'northside' is in part constituted by the connections that food projects located in this part of the city draw among each other and, conversely, how they position themselves as disconnected from other places (especially the southside). Recently, for example, multiple community-based organizations and food businesses joined together in creating the Milwaukee Northside Food Network. Announcements for the network's meetings emphasize that the group is open to actors located on the northside.

That contestation in this case involves reclaiming ownership and control over urban space, and making these spaces productive in ways that directly serve Black residents, is significant in the context of urban renewal efforts, disinvestment, and other related spatial practices (e.g., redlining) that have disproportionately impacted Black neighborhoods over the last several decades. These historical and ongoing processes have led to the physical destruction of historically Black places (e.g., through razing for freeway construction, as in the case of Milwaukee's Park East project, which dismantled swaths of land that now includes Alice's Garden and WWCC) and to economic decline,

which now manifests in part as the relatively high rate of home foreclosures and land vacancy in Black neighborhoods as compared to the rest of the metropolitan area.²¹ Thus, land redevelopment in this context can be understood as a form of contestation of white supremacy (see Harris 1995; McKittrick 2011; Ramirez 2015).

While these contestations could be described as place-based activism, I argue, following Featherstone (2005) and Nicholls (2009) that they also represent specifically *networked* constructions of political identity and agency, in that they involve actors reconfiguring or negotiating their positions within certain networks of power. Specifically, when Black-led organizations navigate property and land use structures and gain control over land, they produce agency and constitute a particular space within which political activity unfolds. For example, in Walnut Way's development of UA on vacant lots in the Lindsay Heights neighborhood, they have intentionally sought out only those lots that they could possibly purchase from the city or otherwise obtain ownership over. Featherstone (2005: 397) notes that the construction of agency through networks may include relationships between human and non-human materials. So, by gaining ownership and reproducing urban space according to their own interests, groups that have historically been excluded from such forms of spatial control engage with land as a material actor in networks (between citizens and the local state) to construct agency and power. Further, by strategically framing their work in connection to broader discourses (of food system localization and healthy food access) where it provides access to financial or other resources (especially land), these groups leverage broader networks to support their specific goals and interests.

²¹ High rates of land vacancy are linked to declining property values, as well as unemployment, and other economic factors (Wislá n.d.).

The different interests and identities co-existing within the networked space of Milwaukee food projects may contribute to ideological tensions as well as other kinds of logistical problems. Collaboration between organizations can be challenging, as a city staff member (who requested to remain anonymous) explains:

when it comes time to action, everybody protects their turf... so, if somebody has to share grant money, or share staff time, or collaborate on something, it turns into a...you know, this group always gets left out, so when you do need them, they don't want to come play and be a part of the partnership. Or, you know, the city comes in and the health department wants to get involved, and all of a sudden they take everything over, and they, you know, they suck all the air out of the room...the UCC on the Southside does a fantastic job... They've been around for 45 years. But nobody from the Northside will go there...Northside is African American, near Southside is Hispanic, far Southside is low-income white...again, Milwaukee's the most segregated city in the country...Milwaukee is this city of...invisible walls (Personal communication 2014, emphasis added).

This statement highlights various tensions that arise when organizations attempt to work collectively, particularly as a result of the perceived division of Milwaukee into north and south. A southside community organizer reiterates the significance of this geography, noting,

The issue is connecting North and South sides...and it's an issue that has to do with ethnicity, too...where I don't see a connection happening—and it's so needed—is between Blacks and Latinos, and...it's not just crossing the bridge, although that is something; I think it's more than that. There is the language barrier, a cultural barrier (Personal communication 2014).

This statement indicates that although the configuration of networked political space is not simply a function of territorially based identity, sense of place (and place-based identities) still influences direct collaboration, even when actors share common thematic interests. This organizer and her respective organization, for example, *are* expressly engaged in networked organizing that is not solely constructed around this north-south division of space. However, this perceived spatial separation is a persistent concern that seems to have a tangible affect on how actors construct networks in the context of Milwaukee food projects. Notably, there is generally minimal (if any) recognition or consideration of the role of white residents or white-led nonprofits (who are curiously absent from the north-south characterization of space) in the particular geometries of food project networks.

These examples of contestation and differentiation within social movement networks underscore the ways in which these networks (as political spaces) may be constituted by multiple political identities and agendas (Featherstone 2005). To the extent that Milwaukee food projects constitute a coherent social movement, this movement contains multiple points of opposition and ways that actors construct the space of food politics (antagonisms). We can further see this in the way that actors variously construct the ‘local’ in local food systems development. The conception of local in this case is dynamic, depending on the networks involved. For example, “northside,” “Lindsay Heights neighborhood,” and “Milwaukee” are all discursively constructed as the spatial extent of “local” by different actors (Personal communications). Even where the territorial focus is the same across multiple organizations, how these places are given meaning is not necessarily identical. Where one group defines its focus on the “inner city” around disease prevalence, another may define it in terms of shared experiences of racism. Finally, political activity and identity are not

bound to territorial place at the local scale (however defined), but may emerge through connections between Milwaukee and 'non-local places and scales. The Hunger Task Force, for example, is one of few organizations to regularly engage in advocacy surrounding US federal nutrition and food assistance policy, with the aim of supporting low-income Milwaukee residents by maintaining adequate food stamp benefits and avoiding complex regulatory processes that make obtaining benefits difficult.

Conceptualizing social movements in terms of networks thus also challenges straightforward distinctions between 'local' and 'non-local', or between 'activists' and 'opponents'. Featherstone (2005: 398) illustrates this by way of a case concerning coal laborers negotiations around regulations dictating the measurement of coal for purposes of wage determination. He argues that it

was not a simply delineated struggle between owners and middlemen who enforced a set of stable 'already constituted' capitalist property relations and coal heavers who demanded or 'clung to' customary rights to the coal.

Rather, opposing groups' identities were formed through the negotiation of networks. In the case of Milwaukee, negotiations over (for example) ownership and development of city space for UA are not a simple conflict between the city (and commercial interests) and community groups, but between different groups with distinct interests in configuring relationships between city government and citizens. The city exists simultaneously as an ally and an antagonist in its governance of space.

7. Conclusion

Examining social movements or forms of contestation through the lens of networks brings into view the dynamic and heterogeneous identities, interests, and agendas that constitute what might otherwise appear to be a singular, internally homogeneous movement (Featherstone 2005). In the case of Milwaukee, while the discursive goals of food projects reflect various interests and concerns, the ways in which actors seek to pursue these goals, and the prioritization of particular goals over others, in part reflects the organizational context, of which network relationships are a key component.

However, various examples described here demonstrate the ways in which the construction and configuration of organizational networks involves creating both connections and separations that define the identity and space of the political. The dissemination of information within organizational networks can be conceptualized as constituting political activity and a particular space for collective action. This, in some instances, leads to a kind of homogenizing of identities through the production of a common identity or a unified movement. Conversely, in keeping with Featherstone (2005), networks function as a site of contestation and resistance, as some actors within food project networks challenge the ways that the space of food politics has been discursively constructed. In particular, these different antagonisms within the space of Milwaukee food organizing appear around issues of race and racism.

CHAPTER 5: CONCLUSION

1. Introduction

This dissertation begins and ends with questions of representation and knowledge production; of how dominant ways of understanding human bodies, consumption practices, and urban spaces, emerge through and produce specific political economic relations, and of how these might be complemented or challenged by alternative representations. It draws on perspectives from political economy and ecology, critical geographic information science (GIS), critical race scholarship, and social movement theory. In developing alternative representations of food access inequities, and examining the effects of popular dietary health interventions (on racialization and class difference), this work is propelled by the idea that discourses are as much a part of the material geographies of health as are resource distribution and exposure to pathogens (Jackson & Neely 2015). It also attempts to recognize the nuanced and fluid nature of power, contestation, and cooptation, which manifests in the various complex ways that citizens interact with the state and with capital in pursuit of livelihood (Barnett 2005; Roy 2011).

The significance of this research, in terms of contributions to geographic research and implications for public policy, follows from its provision of evidence to challenge conventional discourses about urban food environments and procurement behaviors. Much of the critical work in contesting the “food desert” narrative has been theoretically focused, and there is a place for empirical studies to provide counter-narratives (Galt 2011). In the realm of policy initiatives and community organizing around urban food inequities, this research provides important insight into the role of local state actors, where the predominant focus has been on community activism. It also

traces the complex ways that racialization occurs through various interacting spatial processes (e.g., economic development), suggesting that the reproduction of whiteness is often (if not always) closely intermingled with efforts to resist white privilege and supremacy (as, for example, Black organizations may strategically engage with and support city development initiatives).

This research also emphasizes the diversity in food project goals, practices, and ideologies. As Allen, FitzSimmons, Goodman and Warner (2003: 63) note, broad concepts common to food activism “can have multiple and conflicting meanings,” and tension may exist among food organizations between oppositional and conciliatory stances, as some organizations intentionally avoid confrontation in the interest of (for example) improving local conditions or ensuring organizational survival. The exploration, in this dissertation, of numerous Milwaukee food projects, addresses their call for research on food activism to pay greater attention to the differences between forms and meanings of resistance within places.

2. Summary of Findings

The research presented employs a combination of quantitative and qualitative methodologies, and centers on an empirical case study of metropolitan Milwaukee, Wisconsin. It investigates actual food procurement patterns alongside measures of potential food access and local political activities that intervene in food environments in particular ways. This case study demonstrates the complex layers that comprise urban food inequities and efforts to address these inequities.

In chapter 2, modeling low-income food procurement via Supplemental Nutrition Assistance Program (SNAP) benefit distribution and redemption reveals significant areas of benefit outflow in Milwaukee, primarily in the north-central region of the city, coinciding with areas of relatively high SNAP benefit receipt. These areas generally have greater potential food accessibility, in terms of density and physical proximity to multiple types of food sources. However, there appears to be no statistically significant correlation between potential food accessibility and actual food procurement patterns, suggesting that even where residents live in close proximity to many food stores, they purchase food outside of their immediate neighborhood. This further suggests that food procurement may be influenced by factors other than the physical environment.

Analysis of food store survey data indicates that the average nutritional quality among convenience stores in Milwaukee County is lower than the average for grocery stores. It also indicates that store nutritional quality tends to increase with increasing SNAP benefit disbursement to an area and with increasing SNAP benefit spending. This suggests that areas with larger low-income populations may actually, on average, have greater availability of quality nutritious foods (as measured by the survey), as compared with higher-income areas. It also suggests that SNAP recipients tend to redeem their benefits in areas where stores have higher nutritional quality. Both findings, although reflecting a relatively small case study (and excluding low-income food procurement that occurs outside of SNAP benefit use), challenge previous research contending that lower-income populations lack physical access to high quality nutrition and are more likely to purchase nutrient-poor foods. However, affordability tends to decrease with increasing SNAP benefit disbursement to an area, which poses a likely limitation to food accessibility. It is important to note

that areas with the high SNAP benefit disbursement generally also have net outflows of benefits, which these findings.

Chapter 3 examines how forms of knowledge about food-health relationships support particular practices of environmental production by local government and community actors, highlighting the ways that dominant discourses reinforce racialized narratives and promote neoliberal paternalistic interventions. Emphasis on the need to promote cultural (i.e., behavioral) change lends support to urban agricultural development, which in turn has been embraced by the City of Milwaukee as a means of neoliberal economic development and revitalization of disinvested (predominantly Black) spaces. Thus the local state deploys urban agriculture and local food systems development as a sustainability fix to produce value from neighborhoods otherwise cast as ‘unproductive’ (Walker 2015). This development strategy, while certainly beneficial in various respects, has so far mostly amounted to beautification, without clear evidence as to how it will improve food security (or broader economic security). Parks and fruit orchards, in other words, are unlikely to address deep structural inequities, particularly when they are developed through spatial practices that bolster and expand whiteness. That various organizers emphasize health concerns beyond diet (e.g., health care access, mental health, safety, and so forth) underscores the extent to which focusing only on food accessibility may ignore other important concerns. Nevertheless, healthy food access is a concern for many Milwaukee communities, and the city’s urban agriculture development initiative has enabled organizations of color working on the northside to acquire control over pieces of land and engage in projects of direct local benefit.

Finally, Chapter 4 examines how the formation and negotiation of networks among food organizations contribute to (and reflect) the practices and identities of food-related politics in Milwaukee. Networks are a key space through which actors construct agency and engage in forms of contestation. Networked spaces, for example, are constructed through and utilized for producing spatial knowledge. This analysis also indicates that political identities and spaces cannot be easily delineated in terms of territoriality (i.e., ‘local’ and ‘non-local’) or between ally and antagonist, as relationships between actors are dynamic and multifaceted. Accordingly, although actors may identify as part of a unified Milwaukee food movement, the coherence of this movement is highly variable, as actors within this networked movement may move in and out of alignment and attempt to reconfigure relations to assert agency in particular moments.

3. Directions for Future Research

This dissertation indicates the various complexities that characterize urban food access and attendant efforts to improve the quality of such access. My analysis of food procurement patterns, based on SNAP data, reveals that food purchasing among low-income individuals is not limited to the immediate residential environment. This contradicts a common premise underlying much of the current research on food access and dietary health, as well as popular narratives about low-income urban areas and their inhabitants. This may in fact lend support (albeit indirectly) to Gilbert’s (1998) contention that spatial constraints do not map directly to economic or political marginalization. However, teasing apart relationships between food procurement practices, qualities of the urban

environment, and political economic structures, requires direct engagement with individual experiences and practices.

Accordingly, complementary future research would explore how urban residents procure food (attending not only to SNAP usage, but to other procurement and provisioning practices, particularly in the context of urban agricultural development), along with experiences and perceptions of food environments. One potential approach to doing so would involve the use of qualitative GIS techniques, such as narrative geovisualization and participatory photomapping, which provide means to integrate the rich narrative elements of qualitative data with the visualization and analysis capabilities of GIS technologies (Elwood & Cope 2009, Kwan & Ding 2008, Jung & Elwood 2010; Watts 2010).

As this research suggests that the residential neighborhood is not always the context in which low-income residents purchase food, there is apparent value in considering alternative ways of conceptualizing and studying the ‘environment’ that is most relevant to dietary health. This could entail the use of mobility to define context, as geographers have done more broadly with the concept of the activity space (Hillier et al 2013; Kwan 2004; Kwan & Lee 2004). Another possibility would be to examine employment and transit geographies to determine the extent to which food procurement happens surrounding places of work.

It is also a limitation of this study that the analysis of SNAP usage considered only a single year period, given the importance of temporal dimensions to accessibility (Filomena et al 2013; Walker et al 2011; Widener & Shannon 2014).

Finally, to the extent that urban agriculture is increasing in prevalence and is now widely upheld as a strategy to address dietary health problems within the US, there is more work to be done to investigate the impacts of urban agriculture on food security and on local political economic processes. For example, given that urban agriculture may be viewed as an effective economic development strategy, it stands to reason that it may raise local property values (Quastel 2009). It may accordingly be useful to identify various possible public policy and planning frameworks through which to pursue urban agriculture development, in order to determine strategies most likely to serve local interests (Lang 2009).

REFERENCES

- Alkon, A. H., Block, D., Moore, K., Gillis, C., DiNuccio, N., and Chavez, N. (2013). Foodways of the urban poor. *Geoforum* 48, 126–135.
- Agyeman, J., and McEntee, J. (2014). Moving the Field of Food Justice Forward Through the Lens of Urban Political Ecology. *Geography Compass*, 8(3), 211–220.
- Alkon, A. H., and Agyeman, J. (Eds.). (2011). *Cultivating food justice: race, class, and sustainability*. Cambridge, Mass: MIT Press.
- Alkon, A. H., and McCullen, C. G. (2011). Whiteness and Farmers Markets: Performances, Perpetuations ... Contestations? *Antipode*, 43(4), 937–959.
- Alkon, A., and Norgaard, K. (2009). Breaking the Food Chains: An Investigation of Food Justice Activism. *Sociological Inquiry* 79(3), 289–305.
- Allen, P., FitzSimmons, M., Goodman, M. and Warner, K. (2003). Shifting Plates in the Agrifood Landscape: the Tectonics of Alternative Agrifood Initiatives in California. *Journal of Rural Studies* 19, 61–75.
- Alviola, P. A., Nayga, R. M., and Thomsen, M. (2013). Food Deserts and Childhood Obesity. *Applied Economic Perspectives and Policy* 35(1), 106–124.
- Armstrong, D. (2000). A survey of community gardens in upstate New York: Implications for health promotion and community development. *Health & Place* 6 (4), 319–327.
- Baker, L. E. (2004). Tending Cultural Landscapes and Food Citizenship in Toronto's Community Gardens. *Geographical Review* 94(3), 305–325.
- Barnett, C. (2005). The consolations of “neoliberalism.” *Geoforum*, 36(1), 7–12.
- Barracough, L.R. (2009). South Central Farmers and Shadow Hills Homeowners: Land Use Policy and Relational Racialization in Los Angeles. *The Professional Geographer* 61 (2), 164–186.
- Bedore, M. (2013). Geographies of capital formation and rescaling: A historical-geographical approach to the food desert problem. *The Canadian Geographer*, 57(2), 133–153.
- Biltekoff, C. (2013). *Eating right in America—the cultural politics of food and health*. Duke University Press, Durham, NC
- Black, J. L., and Macinko, J. (2008). Neighborhoods and obesity. *Nutrition Reviews*, 66(1), 2–20.
- Block, D. R., Chávez, N., Allen, E., and Ramirez, D. (2011). Food sovereignty, urban food access, and food activism: contemplating the connections through examples from Chicago.

- Block, D., Chavez, N., Birgen, J., (2008). Finding Food in Chicago and the Suburbs: The Report of the Northeastern Illinois Community Food Security Assessment Report to the Public. Retrieved from: <http://www.csu.edu/nac/documents/FindingFoodinChicagoandtheSuburbsReporttothePublic2008.pdf>.
- Bondi, L., and Christie, H. (2000). The best of times for some and the worst of times for others? Gender and class divisions in urban Britain today. *Geoforum*, 31, 329–343.
- Bonds, A. (2013a). Economic development, racialization, and privilege: “Yes in my backyard” Prison politics and the reinvention of Madras, Oregon. *Annals of the Association of American Geographers*, 103 (6), 1-17.
- Bonds, A. (2013b). Racing Economic Geography: The Place of Race in Economic Geography. *Geography Compass*. 7 (6), pp 398 -411.
- Bonds, A. and Inwood, J. (2015). Beyond white privilege: Geographies of white supremacy and settler colonialism. *Progress in Human Geography*, 1–19.
- Bonilla-Silva, E. and S. Mayorga. (2011). On (Not) Belonging: Why Citizenship does not Remedy Racial Inequality, in MK Jung, JH Costa Vargas, and E Bonilla-Silva (Eds.), *State of White Supremacy: Racism, Governance, and the United States*
- Brenner, N. (2001). The limits to scale? Methodological reflections on scalar structuration. *Progress in Human Geography* 25(4), 591–614.
- Brenner, N., and Theodore, N. (2002). Cities and the Geographies of “Actually Existing Neoliberalism.” *Antipode*, 34(3), 349–379.
- Brown, M. (2009). (2008 Urban Geography Plenary Lecture—Public Health as Urban Politics, Urban Geography: Venereal Biopower in Seattle, 1943-1983. *Urban Geography*, 30(1), 1–29.
- Carter, E. (2015). Making the Blue Zones: Neoliberalism and nudges in public health promotion. *Social Science & Medicine*.
- Caspi, C. E., Sorensen, G., Subramanian, S. V., and Kawachi, I. (2012). The local food environment and diet: A systematic review. *Health & Place*, 18(5), 1172–1187.
- Castree, Noel. (2008). Neoliberalising nature: Processes, effects, and evaluations. *Environment and Planning A*, 40(1), 153–173.
- Charmaz, K. (2000). Grounded Theory: Objectivist and Constructivist Methods. In N. K. Denzin & Y. S. Lincoln (Eds.), *Handbook of Qualitative Research, 2nd Edition* (pp. 509–536).

Thousand Oaks, CA: Sage Publications.

Charreire, H., Casey, R., Salze, P., Simon, C., Chaix, B., Banos, A., Badriotti, D., Weber, C., and Oppert, J.M. (2010). Measuring the food environment using geographical information systems: a methodological review. *Public Health Nutrition*, 13(11), 1773–1785.

Chung, C. and Myers, S.L. (1999). Do the poor pay more for food? An analysis of grocery store availability and food price disparities. *The Journal of Consumer Affairs* 33 (2): 276-296.

City of Milwaukee. (2013). *ReFresh Milwaukee: City of Milwaukee Sustainability Plan*. Retrieved from http://city.milwaukee.gov/ImageLibrary/Groups/cityGreenTeam/documents/2013/ReFreshMKE_PlanFinal_Web.pdf.

City of Milwaukee. (2015). *STRONG Neighborhoods Plan Q4 2014 Report*. Retrieved from <http://city.milwaukee.gov/Strong/Resources>.

Clifton, K. J. (2004). Mobility Strategies and Food Shopping for Low-Income Families: A Case Study. *Journal of Planning Education and Research*, 23(4), 402–413.

Coleman, M., and Kevin, G. (2009). Biopolitics, biopower, and the return of sovereignty. *Environment & Planning D: Society & Space*, 27(3), 489-507.

Conradson, D. (2005). Landscape, care and the relational self: Therapeutic encounters in rural England. *Health & Place*, 11(4), 337–348.

Cook, K. (2012). Neoliberalism, welfare policy and health: A qualitative meta-synthesis of single parents' experience of the transition from welfare to work. *Health: An Interdisciplinary Journal for the Social Study of Health, Illness & Medicine*, 16(5), 507–530.

Coveney, J., and O'Dwyer, L. A. (2009). Effects of mobility and location on food access. *Health & Place*, 15(1), 45–55.

Cox, K., 1998. Spaces of dependence, spaces of engagement and the politics of scale, or: looking for local politics. *Political Geography* 17 (1), 1-23. Eick, V., 2007. Space Patrols—the New Peace-Keeping Functions of Nonprofits: Contesting Neoliberalization or the Urban Poor? In: Leitner, H., Peck, J., Sheppard, E. (Eds.) *Contesting Neoliberalism: Urban Frontiers*. Guilford Press, New York, pp. 266-287.

Crampton, J., and Krygier, J. (2005). An Introduction to Critical Cartography. *ACME: An International E-Journal for Critical Geographies*, 4(1), 11–33.

Cummins, S., and Macintyre, S. (2006). Food environments and obesity—neighbourhood or nation? *International Journal of Epidemiology*, 35(1), 100–104.

- Cummins, S., Curtis, S., Diez-Roux, A. V., and Macintyre, S. (2007). Understanding and representing “place” in health research: A relational approach. *Social Science & Medicine*, 65(9), 1825–1838.
- Curtis, K. A., and McClellan, S. (1995). Falling Through The Safety Net: Poverty, Food Assistance And Shopping Constraints In An American City. *Urban Anthropology and Studies of Cultural Systems and World Economic Development*, 24(1/2), 93–135.
- Cutter, S. L., Boruff, B. J. and Shirley, W. L. (2003), Social Vulnerability to Environmental Hazards. *Social Science Quarterly*, 84: 242–261.
- Delaney, D. (2002). The space that race makes. *The Professional Geographer*, 54(1), 6-14.
- Derus, M. (2007, May 6). Faces of Foreclosure 53206. *Milwaukee Journal Sentinel*. Retrieved from <http://www.jsonline.com/business/29273484.html>
- Dittmer, J. (2010). Textual and Discourse Analysis. In D. DeLyser, S. Herbert, S. Aitken, M. Crang, and L. McDowell (Eds.), *The SAGE Handbook of Qualitative Geography* (pp. 274-286). London: Sage.
- Domene, E, and Saurí, D. (2007). Urbanization and class-produced natures: Vegetable gardens in the Barcelona Metropolitan Region. *Geoforum* 38:287–298
- Donald, B. (2013). Food retail and access after the crash: rethinking the food desert problem. *Journal of Economic Geography*, 13(2), 231–237.
- Draus, P. J., Roddy, J., and McDuffie, A. (2014). “We don”t have no neighbourhood’: Advanced marginality and urban agriculture in Detroit. *Urban Studies*, 51(12), 2523–2538.
- Ducatel, K., and Blomley, N. (1990). Rethinking retail capital. *International Journal of Urban and Regional Research*, 14(2), 207–227.
- Dunn, K. (2010). Interviewing. In I. Hay (Ed), *Qualitative Research Methods in Human Geography*, Third Edition (pp. 101-138). Oxford, Oxford University Press.
- Dwyer, O.J. and Jones, J.P. (2000). White Socio-spatial Epistemology. *Social & Cultural Geography*, 1(2), 209-222.
- Eisenhauer, E. (2001). In poor health: Supermarket redlining and urban nutrition. *GeoJournal*, 53(2), 125–133.
- Elwood, S. and Ghose, R. (2001). PPGIS in Community Development Planning: Framing the Organizational Context. In M. Dodge (ed.), *Classics in Cartography: Reflections on Influential Articles from Cartographica*. Chichester, UK: John Wiley and Sons, pp. 107–118.

- Elwood, S., and Cope, M. (2009). Introduction: Qualitative GIS: Forging mixed methods through representations, analytical innovations, and conceptual engagements. In M. Cope and S. Elwood (Eds.), *Qualitative GIS: a mixed methods approach* (pp. 1–12). Thousand Oaks, CA: Sage.
- Evans, A. E., Jennings, R., Smiley, A. W., Medina, J. L., Sharma, S. V., Rutledge, R., ... Hoelscher, D. M. (2012). Introduction of farm stands in low-income communities increases fruit and vegetable among community residents. *Health & Place*, 18(5), 1137–1143.
- Featherstone, D. (2005). Atlantic networks, antagonisms and the formation of subaltern political identities. *Social & Cultural Geography*, 6(3), 387–404.
- Filomena, S., Scanlin, K., and Morland, K. B. (2013). Brooklyn, New York foodscape 2007–2011: a five-year analysis of stability in food retail environments. *International Journal of Behavioral Nutrition and Physical Activity*, 10(1), 46.
- Foucault, M. (1985). *The History of Sexuality*. New York: Vintage Books.
- Foucault, Michel. (1991). Governmentality. In *The Foucault effect: Studies in governmentality*, ed. G. Burchell, C. Gordon, and P. Miller, 87–104. Chicago: University of Chicago Press.
- Freedman, D. A., Choi, S. K., Hurley, T., Anadu, E., and Hébert, J. R. (2013). A farmers' market at a federally qualified health center improves fruit and vegetable intake among low-income diabetics. *Preventive Medicine*, 56(5), 288–292.
- Galt, R. E. (2011). Agriculture (CSA) in the United States and California: Contributions from Critical Cartography/GIS. *ACME: An International E-Journal for Critical Geographies*, 10(2), 131–162.
- Ghose, R and Pettygrove, M. (2014b). Urban Community Gardens as Spaces of Citizenship. *Antipode*. Advance online publication. doi: 10.1111/anti.12077
- Ghose, R. (2005). The complexities of citizen participation through collaborative governance. *Space and Polity*, 9(1), 61–75.
- Ghose, R. (2007). Politics of scale and networks of association in public participation GIS. *Environment and Planning A*, 39(8), 1961–1980.
- Ghose, R. and Pettygrove, M. (2014a). Actors and networks in urban community garden development. *Geoforum* 53, 93–103.
- Gibbs-Plessl, T. [Hunger Task Force]. (2012). Twinkies, Tomatoes, and Tomatillos: A Quantitative Assesment of Healthy Food Accessibility in Milwaukee County. Retrieved from http://www.hungertaskforce.org/fileadmin/htf/learn_about_hunger/publications/Hunge

- Gilbert, M. R. (1998). "Race," Space, and Power: The Survival Strategies of Working Poor Women. *Annals of the Association of American Geographers*, 88(4), 595–621.
- Gilmore, R.W. (2006). *Golden Gulag: Prisons, Surplus, Crisis, and Opposition in Globalizing California*. Berkeley: University of California Press.
- Glanz, K., Sallis, J.F., Saelens, B.E., and Frank, L.D. (2007). Nutrition environment measures survey in stores (NEMS-S). *American Journal of Preventive Medicine* 32(4), 282-289.
- Goldberg, D.T. (2009). *The Threat of Race: Reflections on Racial Neoliberalism*. New York: John Wiley & Sons.
- Goode, J., and Maskovsky, J. (Eds.). (2001). *New poverty studies: the ethnography of power, politics, and impoverished people in the United States*. New York: New York University Press.
- Gottlieb, R. and Fisher, A. (1996). 'First Feed the Face': Environmental Justice and Community food Security. *Antipode* 28(2), 193-203.
- Gottlieb, R., Joshi, A. (2010). *Food Justice*. MIT Press, Cambridge MA.
- Granovetter, M. (1983). The strength of weak ties: a network theory revisited. *Sociological Theory* 1, 201-233.
- Granovetter, M. (1995). *Getting a job: A study of contacts and careers*, 2nd edition. University of Chicago Press, Chicago.
- Greer, D.M., Baumgardner, D.J., Bridgewater, F.D., Frazer, D.A., Kessler, C.L., et al (2013). Milwaukee Health Report 2013: Health Disparities in Milwaukee by Socioeconomic Status. *Center for Urban Population Health*. Retrieved from <http://www.cuph.org/2013-milwaukee-health-report.html>.
- Gregory, C., Smith, T., and Wendt, M. [USDA Economic Research Service]. (2011). How Americans Rate Their Diet Quality: An Increasingly Realistic Perspective [Economic Information Bulletin 83]. Retrieved from <http://www.ers.usda.gov/publications/eib-economic-information-bulletin/eib83.aspx#.UinVGGRgb88>
- Guthman, J (2008b). "If They Only Knew": Color Blindness and Universalism in California Alternative Food Institutions. *The Professional Geographer* 60(3), 387-397.
- Guthman, J. (2008a). Bringing good food to others: investigating the subjects of alternative food practice. *Cultural Geographies*, 15(4), 431–447.
- Guthman, J. (2011). *Weighing in: obesity, food justice, and the limits of capitalism*. Berkeley: University of California Press.

- Guthman, J. (2012). Opening Up the Black Box of the Body in Geographical Obesity Research: Toward a Critical Political Ecology of Fat. *Annals of the Association of American Geographers*, 102(5), 951–957.
- Guthman, J. (2013b). Too much food and too little sidewalk? Problematizing the obesogenic environment thesis. *Environment and Planning A*, 45(1), 142 – 158.
- Guthman, J. (2014). Doing Justice to Bodies? Reflections on Food Justice, Race, and Biology. *Antipode*, 46(5), 1153–1171.
- Guthman, J. and DuPuis, M. (2006). Embodying neoliberalism: economy, culture, and the politics of fat. *Environment and Planning D: Society and Space*, 24(3), 427 – 448.
- Guthman, J., and Mansfield, B. (2012). The implications of environmental epigenetics: A new direction for geographic inquiry on health, space, and nature-society relations. *Progress in Human Geography*, 37(4), 486–504.
- Harper, A.B. (2011). Vegans of Color, Racialized Embodiment, and Problematics of the “Exotic.” In A.H. Alkon and J. Agyeman (eds) *Cultivating Food Justice: Race, Class, and Sustainability*(pp. 221-238). MIT Press.
- Harris, C. T. (1995). “Whiteness as property.” In Crenshaw, K., N. Gotanda, G. Peller, and K. Thomas (Eds.), *Critical race theory: Key writings that formed the movement*. New York: The New Press.
- Harris, E. (2009). Neoliberal subjectivities or a politics of the possible? Reading for difference in alternative food networks. *Area* 41(1), 55-63.
- Hassanein, N. (2003). Practicing food democracy: a pragmatic politics of transformation. *Journal of Rural Studies* 19(1), 77-86.
- Heynen, N. (2006). Justice of eating in the city: The political ecology of urban hunger. In N. Heynen, M. Kaika, and E. Swyngedouw (eds.), *In the Nature of Cities: Urban political ecology and the politics of urban metabolism*. New York: Routledge, pp. 124–136.
- Heynen, N. (2009). Bending the Bars of Empire from Every Ghetto for Survival: The Black Panther Party’s Radical Antihunger Politics of Social Reproduction and Scale. *Annals of the Association of American Geographers*, 99(2), 406–422.
- Heynen, N., Kaika, M., and Swyngedouw, E. (2006). Urban political ecology: Politicizing the production of urban natures. In N. Heynen, M. Kaika, and E. Swyngedouw (eds.), *In the Nature of Cities: Urban political ecology and the politics of urban metabolism*. New York: Routledge, pp. 1–19.
- Heynen, N., Kurtz, H. E., and Trauger, A. (2012). Food Justice, Hunger and the City. *Geography*

Compass, 6(5), 304–311.

Hillier, A., Cannuscio, C. C., Karpyn, A., McLaughlin, J., Chilton, M., and Glanz, K. (2011). How Far Do Low-Income Parents Travel to Shop for Food? Empirical Evidence from Two Urban Neighborhoods. *Urban Geography*, 32(5), 712–729.

Himmelgreen, D. A., and Romero-Daza, N. (2010). Eliminating “Hunger” in the U.S.: Changes in Policy Regarding the Measurement of Food Security. *Food and Foodways: History and Culture of Human Nourishment*, 18(1/2), 96–113.

Hirsch, J., and Hillier, A. (2013). Exploring the Role of the Food Environment on Food Shopping Patterns in Philadelphia, PA, USA: A Semiquantitative Comparison of Two Matched Neighborhood Groups. *International Journal of Environmental Research and Public Health*, 10(1), 295–313.

Holifield, R. (2009). Actor-Network Theory as a Critical Approach to Environmental Justice: A Case against Synthesis with Urban Political Ecology. *Antipode* 41(4), 637–658.

Hooks, b. (1989). *Talking Back: Thinking Feminist, Thinking Black*. Boston, MA: South End Press.

Horowitz, L.S. (2012). Translation alignment: Actor-Network Theory, resistance, and the power dynamics of alliance in New Caledonia. *Antipode* 44(3), 806–827.

Howard, P. H., Fitzpatrick, M., and Fulfroost, B. (2011). Proximity of food retailers to schools and rates of overweight ninth grade students: an ecological study in California. *BMC Public Health*, 11(1), 68.

Hunger Task Force (2016). *Foodshare Employment and Training*. Retrieved from <http://www.hungertaskforce.org/learn-about-hunger/hot-topics/foodshare-employment-training/>

Jackson, P., and Neely, A. H. (2015). Triangulating health Toward a practice of a political ecology of health. *Progress in Human Geography*, 39(1), 47–64.

Jeffery, R. W., Baxter, J., McGuire, M., and Linde, J. (2006). Are fast food restaurants an environmental risk factor for obesity? *International Journal of Behavioral Nutrition and Physical Activity*, 3(1), 2.

Jessop B (2002) Liberalism, neoliberalism, and urban governance: A state-theoretical perspective. *Antipode* 34(3):452–472

Jessop, B. (2002). Liberalism, Neoliberalism, and Urban Governance: A State–Theoretical Perspective. *Antipode*, 34(3), 452–472.

Jessop, B. (2007). From micro-powers to governmentality: Foucault's work on statehood, state

- formation, statecraft and state power. *Political Geography*, 26(1), 34-40.
- Johnston, J., and L. Baker. (2005). Eating Outside the Box: FoodShare's Good Food Box and the Challenge of Scale. *Agriculture and Human Values* 22(3), 1-13.
- Johnston, J., Biro, A., and MacKendrick, N. (2009). Lost in the Supermarket: The Corporate-Organic Foodscape and the Struggle for Food Democracy. *Antipode* 41(3), 509-532.
- Jung, J.-K., and Elwood, S. (2010). Extending the Qualitative Capabilities of GIS: Computer-Aided Qualitative GIS. *Transactions in GIS* 14(1), 63-87.
- Kania, J. and Kramer, M. (2011). Collective Impact. *Stanford Social Innovation Review* Winter, 36-41. Retrieved from http://ssir.org/images/articles/2011_WI_Feature_Kania.pdf
- Kearns A (1995) Active citizenship and local governance: Political and geographical dimensions. *Political Geography* 14(2):155-175
- Keil, R. (2009). Urban Politics and Public Health: What's Urban, What's Politics? *Urban Geography*, 30(1), 36-39.
- Kelly, B., Flood, V. M., and Yeatman, H. (2011). Measuring local food environments: An overview of available methods and measures. *Health & Place*, 17(6), 1284-1293.
- King, B. (2010). Political ecologies of health. *Progress in Human Geography*, 34(1), 38-55.
- Kirk SFL, Penney TL, and McHugh T-LF (2010) Characterizing the obesogenic environment: The state of the evidence with directions for future research. *Obesity Reviews* 11(2): 109-117.
- Kirkland, A. (2011). The Environmental Account of Obesity: A Case for Feminist Skepticism. *Signs*, 36(2), 463-485.
- Kurtz, H., Trauger, A., and Passidomo, C. (2013). The contested terrain of biological citizenship in the seizure of raw milk in Athens, Georgia. *Geoforum*, 48, 136-144.
- Kwan, M.-P. (2004). GIS Methods in Time-Geographic Research: Geocomputation and Geovisualization of Human Activity Patterns. *Geografiska Annaler: Series B, Human Geography*, 86(4), 267-280.
- Kwan, M.-P. and Ding, G. (2008). Geo-Narrative: Extending geographic information systems for narrative analysis in qualitative and mixed-method research. *The Professional Geographer*. 60(4), 443-465.
- Kwan, M.-P. and Lee. (2004). Geovisualization of human activity patterns using 3D GIS: A time-geographic approach. In M.F. Goodchild and D.G. Janelle (Eds), *Spatially Integrated Social*

- Science* (pp. 48-66). New York: Oxford University Press.
- Kyureghian, G., Nayga, R. M., and Bhattacharya, S. (2013). The Effect of Food Store Access and Income on Household Purchases of Fruits and Vegetables: A Mixed Effects Analysis. *Applied Economic Perspectives and Policy*, 35(1), 69–88.
- Lai, C. (2012). The racial triangulation of space: The case of urban renewal in San Francisco's Fillmore District. *Annals of the Association of American Geographers*, 102(1), 151-170.
- Lang, U. (2014). Cultivating the sustainable city: urban agriculture policies and gardening projects in Minneapolis, Minnesota. *Urban Geography*, 35(4), 477–485.
- Larsen, K., and Gilliland, J. (2008). Mapping the evolution of “food deserts” in a Canadian city: Supermarket accessibility in London, Ontario, 1961–2005. *International Journal of Health Geographics*, 7(1), 16.
- Larsen, K., and Gilliland, J. (2009). A farmers' market in a food desert: Evaluating impacts on the price and availability of healthy food. *Health & Place*, 15(4), 1158–1162.
- Larson, J., and Moseley, W. G. (2010). Reaching the limits: a geographic approach for understanding food insecurity and household hunger mitigation strategies in Minneapolis-Saint Paul, USA. *GeoJournal*, 77(1), 1–12.
- Larson, N.I., Story, M.T., Nelson, M.C., (2009). Neighborhood environments: disparities in access to healthy foods in the U.S. *American Journal of Preventive Medicine* 36(1), 74-81.
- Latour, B., 1987. *Science in action*. Cambridge, MA: Harvard University Press.
- Law, J., 1992. Notes on the theory of the actor-network: Ordering, strategy, and heterogeneity. *Systems Practice* 5, 379-393.
- Lawson, V., Jarosz, L., and Bonds, A. (2010). Articulations of Place, Poverty, and Race: Dumping Grounds and Unseen Grounds in the Rural American Northwest. *Annals of the Association of American Geographers*, 100(3), 655–677.
- LeDoux, T. F., and Vojnovic, I. (2013). Going outside the neighborhood: The shopping patterns and adaptations of disadvantaged consumers living in the lower eastside neighborhoods of Detroit, Michigan. *Health & Place*, 19, 1–14.
- Leftin, J., (2008). Trends in Supplemental Nutrition Assistance Program Participation Rates: 2001 to 2008. United States Department of Agriculture. Retrieved from: <http://www.fns.usda.gov/ora/menu/Published/snap/FILES/Participation/Trends2001-2008.pdf>.
- Leitner, H., Pavlik, C., Sheppard, E. (2002). Networks, governance, and the politics of scale: Inter-

- urban networks and the European Union. In: Herod, A., Wright, M.W. (Eds.) *Geographies of Power: Placing Scale*. Blackwell, Malden MA, pp. 274-303.
- Leitner, H., Sheppard, E., Sziarto, K. (2008). The spatialities of contentious politics. *Transactions of the Institute of British Geographers* 33 (2), 157-172.
- Leonardo, Z. (2004). The color of supremacy: Beyond the discourse of 'white privilege'. *Educational Philosophy and Theory* 36, 137-152.
- Levkoe, C. Z., and Wakefield, S. (2014). Understanding contemporary networks of environmental and social change: complex assemblages within Canada's "food movement." *Environmental Politics*, 23(2), 302-320.
- Lightman, E. S., Mitchell, A., and Herd, D. (2008). Globalization, Precarious Work, and the Food Bank. *Journal of Sociology & Social Welfare*, 35(2), 9-28.
- Lytle, L. A. (2009). Measuring the Food Environment. *American Journal of Preventive Medicine*, 36(4), S134-S144.
- Mansfield, B. (2008). Health as a nature – society question. *Environment and Planning A*, 40(5), 1015-1019.
- Mares, T. M. (2013). "Here We Have the Food Bank": Latino/a Immigration and the Contradictions of Emergency Food. *Food and Foodways: History and Culture of Human Nourishment*, 21(1), 1-21.
- Marston, S. A., Jones, J. P. and Woodward, K. (2005), Human geography without scale. *Transactions of the Institute of British Geographers*, 30: 416-432.
- Martin, Deborah G. (2003). Place-Framing" as Place-Making: Constituting a Neighborhood for Organizing and Activism. *Annals of the Association of American Geographers* 93: 730-750.
- Marvin, S., and Medd, W. (2006). Metabolisms of obe-city: Flows of fat through bodies, cities and sewers. In N. Heynen, M. Kaika, and E. Swyngedouw (eds.), *In the Nature of Cities: Urban political ecology and the politics of urban metabolism*. London: Routledge, pp. 137-149.
- Mayer, J.D. (1996). The political ecology of disease as one new focus for medical geography. *Progress in Human Geography*, 20(4), 441-456.
- McClintock, N. (2011). From industrial garden to food desert: demarcated devaluation in the flatlands of Oakland, California. In A. H. Alkon and J. Agyeman (eds.), *Cultivating food justice: race, class, and sustainability*. Cambridge, Mass: MIT Press.
- McCormack, L. A., Laska, M. N., Larson, N. I., and Story, M. (2010). Review of the Nutritional Implications of Farmers' Markets and Community Gardens: A Call for Evaluation and

- Research Efforts. *Journal of the American Dietetic Association*, 110(3), 399–408.
- McEntee, J. (2009). Highlighting food inadequacies: does the food desert metaphor help this cause? *British Food Journal*, 111(4), 349–363.
- McKittrick, K. (2011). On plantations, prisons, and a black sense of place. *Social & Cultural Geography*, 12(8), 947–963.
- McKittrick, K. and C. Woods (2008). *Black Geographies and the Politics of Place*, Cambridge, MA: South End Press.
- Melamed, J. (2006). The spirit of neoliberalism from racial liberalism to neoliberal multiculturalism, *Social Text*, 89 (4), pp 1-24
- Mennis J (2003) Generating surface models of population using dasymetric mapping. *Professional Geographer* 55(1), 31-42.
- Miller, C. K., and Branscum, P. (2012). The Effect of a Recessionary Economy on Food Choice: Implications for Nutrition Education. *Journal of Nutrition Education and Behavior*, 44(2), 100–106.
- Mohan, J. (2002). Geographies of welfare and social exclusion: dimensions, consequences and methods. *Progress in Human Geography*, 26(1), 65–75.
- Morland, K., and Filomena, S. (2007). Disparities in the availability of fruits and vegetables between racially segregated urban neighbourhoods. *Public health nutrition*, 10(12), 1481–1489.
- Murdoch, J., 1998. The Spaces of Actor-Network Theory. *Geoforum* 29 (4), 357-374
- Newman, K., and Lake, R. W. (2006). Democracy, bureaucracy and difference in US community development politics since 1968. *Progress in Human Geography*, 30(1), 44–61.
- Nicholls, W. (2009). Place, networks, space: theorising the geographies of social movements. *Transactions of the Institute of British Geographers*, 34(1), 78–93.
- Painter J and Philo C (1995) Spaces of citizenship: An introduction. *Political Geography* 14(2): 107–120.
- Peck, J. (2001). Workfare Versus the Cities. *Urban Geography*, 22(5), 493–498.
- Peck, J., and Tickell, A. (2002). Neoliberalizing Space. *Antipode*, 34(3), 380–404.
- Perkins, H. A. (2009b). Turning feral spaces into trendy places: a coffee house in every park? *Environment and Planning A*, 41(11), 2615–2632.

- Perkins, H.A. (2009a). Out from the (Green) shadow? Neoliberal hegemony through the market logic of shared urban environmental governance. *Political Geography* 28, 395–405.
- Perkins, H.A. (2010). Green Spaces of Self-Interest within Shared Urban Governance. *Geography Compass* 4(3), 255–268.
- Pine, A. and Bennett, J. (2014). Food access and food deserts: the diverse methods that residents of a neighborhood in Duluth, Minnesota use to provision themselves. *Community Development*, 45(4), 317–336.
- Piven, F. F. (2001). The fallacy of “reform”: Welfare reform and the economic and cultural reconstruction of low wage labor markets. In J. Goode and J. Maskovsky (Eds.), *New poverty studies: the ethnography of power, politics, and impoverished people in the United States* (pp. 135–151). New York: New York University Press.
- Poppendieck, J. (1998). *Sweet charity? Emergency food and the end of entitlement*. New York: Viking.
- Pudup, M.B. (2008). It takes a garden: Cultivating citizen-subjects in organized garden projects. *Geoforum* 39(3), 1228–1240.
- Pulido, L. (2000). Rethinking environmental racism: white privilege and urban development in Southern California, *Annals of the Association of American Geographers*, 90(1): 12–40.
- Pulido, L. (2015). Geographies of race and ethnicity 1: White supremacy vs white privilege in environmental racism research. *Progress in Human Geography* 39(6), 809–817.
- Quastel, N. (2009). Political Ecologies of Gentrification. *Urban Geography*, 30(7), 694–725.
- Quinn, L.M. and Pawasarat, J. (2007). Milwaukee's Housing Crisis: Subprime Mortgages, Foreclosures, Evictions and Affordability. Retrieved from <http://www4.uwm.edu/eti/2007/Housing.htm>
- Quinn, L.M. and Pawasarat, J. (2013). Wisconsin's Mass Incarceration of African American Males: Workforce Challenges for 2013. Employment and Training Institute, University of Wisconsin-Milwaukee. Retrieved from <http://www4.uwm.edu/eti/2013/BlackImprisonment.pdf>.
- Quinn, L.M. and Pawasarat, J. (2014). 12 to 1 Income Inequality among Working Families in Milwaukee County: Workforce Challenges for 2014. Employment and Training Institute, University of Wisconsin-Milwaukee. Retrieved from <http://www4.uwm.edu/eti/2014/IncomeInequality.pdf>
- Ramírez, M. M. (2015), The Elusive Inclusive: Black Food Geographies and Racialized Food Spaces. *Antipode*, 47, 748–769.

- Rast, J. (2015). Public Transit and Access to Jobs in the Milwaukee Metropolitan Area, 2001-2014. Center for Economic Development, University of Wisconsin-Milwaukee. Retrieved from https://www4.uwm.edu/ced/publications/Transit2015_FINAL-1.pdf
- Richardson, A. S., Boone-Heinonen, J., Popkin, B. M., and Gordon-Larsen, P. (2012). Are neighbourhood food resources distributed inequitably by income and race in the USA? Epidemiological findings across the urban spectrum. *BMJ Open*, 2(2), e000698–e000698.
- Robbins, P. (2012). *Political Ecology: A Critical Introduction*, 2nd edition. Malden, MA: Wiley-Blackwell.
- Roberts, D. J., and Mahtani, M. (2010). Neoliberalizing Race, Racing Neoliberalism: Placing “Race” in Neoliberal Discourses. *Antipode*, 42(2), 248–257.
- Rodriguez-Giralt, I. (2011). Social Movements as Actor-Networks: Prospects for a Symmetrical Approach to Doñana’s Environmentalist Protests. *Convergencia, Revista de Ciencias Sociales*, 56, 13–35.
- Rogalsky, J. (2010). Bartering for Basics: Using Ethnography and Travel Diaries to Understand Transportation Constraints and Social Networks Among Working-Poor Women. *Urban Geography*, 31(8), 1018–1038.
- Routledge, P. (2003). Convergence space: process geographies of grassroots globalization networks. *Transactions of the Institute of British Geographers* 28 (3), 333-349.
- Roy, P. (2011). Non-profit and Community-based Green Space Production in Milwaukee: Maintaining a Counter-weight within Neo-liberal Urban Environmental Governance. *Space and Polity*, 15(2), 87–105.
- Roy, P. (2010). Analyzing empowerment: An ongoing process of building state–civil society relations – The case of Walnut Way in Milwaukee. *Geoforum* 41(2), 337-348.
- Shannon, J. (2014a). Food deserts Governing obesity in the neoliberal city. *Progress in Human Geography*.
- Shannon, J. (2014b). What does SNAP benefit usage tell us about food access in low-income neighborhoods? *Social Science & Medicine* 107, 89-99.
- Shannon, J. (2016). Beyond the Supermarket Solution: Linking Food Deserts, Neighborhood Context, and Everyday Mobility. *Annals of the Association of American Geographers* 106(1), 186-202.
- Shannon, J., and Harvey, F. (2013). Modifying Areal Interpolation Techniques for Analysis of Data on Food Assistance Benefits. In S. Timpf and P. Laube (eds.), *Advances in Spatial Data Handling: Geospatial Dynamics, Geosimulation and Exploratory Visualization*. Heidelberg:

- Springer, pp. 125–141.
- Shaw, H. J. (2006). Food Deserts: Towards the Development of a Classification. *Geografiska Annaler: Series B, Human Geography* 88(2), 231–247.
- Short, A., Guthman, J., and Raskin, S. (2005). Food Deserts, Oases, or Mirages? Small Markets and Community Food Security in the San Francisco Bay Area. *Journal of Planning Education and Research* 26, 352–364.
- Silvey, R., (2003). Spaces of protest: gendered migration, social networks, and labor activism in West Java, Indonesia. *Political Geography* 22 (22), 129–155.
- Slocum, R. (2007). Whiteness, Space, and Alternative Food Practice. *Geoforum*, 38(3), 520–533.
- Slocum, R. (2011). Race in the study of food. *Progress in Human Geography*, 35(3), 303–327.
- Smith (2002). New Globalism, New Urbanism. In N Brenner and N Theodore (eds) *Spaces of Neoliberalism: Urban Restructuring in North America and Western Europe* (pp 80–103). Malden, MA: Blackwell.
- Smith, C. and Kurtz, H., (2003). Community gardens and politics of scale in New York City. *The Geographical Review* 93 (2), 193–212.
- Townshend, T., and Lake, A. A. (2009). Obesogenic urban form: Theory, policy and practice. *Health & Place*, 15(4), 909–916.
- Vaughn, R. A. (2014). Food, Diet Reform, and Obesity Politics in the American Imagination. *American Studies* (00263079), 53(3), 53–64.
- Ver Ploeg, M., Breneman, V., Farrigan, T., Hamrick, K., Hopkins, D., Kaufamn P, Lin, B., Nord, M., Smith, T.A., Williams, R., Kinnison, K., Olander, C., Singh, A., and Tuckermanty, E. (2009). Access to Affordable and Nutritious Food—Measuring and Understanding Food Deserts and Their Consequences: Report to Congress. USDA-ERS Administrative, Publication No. (AP-036).
- Wakefield, S., Fleming, J., Klassen, C., and Skinner, A. (2013). Sweet Charity, revisited: Organizational responses to food insecurity in Hamilton and Toronto, Canada. *Critical Social Policy*, 33(3), 427–450.
- Walker, R. E., Fryer, C. S., Butler, J., Keane, C. R., Kriska, A., & Burke, J. G. (2011). Factors Influencing Food Buying Practices in Residents of a Low-Income Food Desert and a Low-Income Food Oasis. *Journal of Mixed Methods Research*, 5(3), 247–267.

- Walker, R.E., Keane, C. R., and Burke, J. G. (2010). Disparities and access to healthy food in the United States: A review of food deserts literature. *Health & place*, 16(5), 876–884.
- Walker, S. (2015). Urban agriculture and the sustainability fix in Vancouver and Detroit. *Urban Geography*
- Watts, P. R. (2010). Mapping narratives: the 1992 Los Angeles riots as a case study for narrative-based geovisualization. *Journal of Cultural Geography*, 27(2), 203–227.
- Weber, R. (2002). Extracting Value from the City: Neoliberalism and Urban Redevelopment. In N Brenner and N Theodore (eds) *Spaces of Neoliberalism: Urban Restructuring in North America and Western Europe* (pp 173–193). Malden, MA: Blackwell.
- Wekerle, G. R. (2004). Food Justice Movements Policy, Planning, and Networks. *Journal of Planning Education and Research*, 23(4), 378–386.
- Welcenbach, T. (2015). *Creating a Free and Open Source Community Information System to Facilitate Food Justice and the Urban Agricultural Movement in Milwaukee, Wisconsin* (Unpublished masters thesis). University of Wisconsin-Milwaukee.
- Whelan, A., Wrigley, N., Warm, D., and Cannings, E. (2002). Life in a “Food Desert.” *Urban Studies*, 39(11), 2083–2100.
- While, A., Jonas, A.E.G., and Gibbs, D. (2004). The environment and the entrepreneurial city: Searching for the urban ‘sustainability; fix’ in Manchester and Leeds. *International Journal of Urban and Regional Research*, 28(3), 549–569
- Widener, M. J., Metcalf, S. S., and Bar-Yam, Y. (2011). Dynamic Urban Food Environments. *American Journal of Preventive Medicine*, 41(4), 439–441.
- Widener, M.J. and Shannon, J. (2014). When are food deserts? Integrating time into research on food accessibility. *Health & Place* 30, 1-3.
- Wilson, D. (2004). Toward A Contingent Urban Neoliberalism. *Urban Geography*, 25(8), 771–783.
- Wilson, D. (2009). Introduction: Toward a refined racial economy perspective. *The Professional Geographer* 61(2), 139-149.
- Wisla, M. (n.d.). Special Report: Foreclosures, block by block. *Milwaukee Neighborhood News Service*. Retrieved from <http://milwaukeeenns.org/milwaukee-foreclosures/>.
- Witt, A. (2005). “Picking up the hammer”: *The community programs and services of the Black Panther Party with emphasis on the Milwaukee branch, 1966—1977* (Doctoral dissertation). Retrieved from ProQuest Dissertations Publishing. (UMI 3180965)

- Woods, C. (2002). Life After Death. *The Professional Geographer*, 54 (1), 62-66.
- Wrigley, N. (2000). Strategic market behaviour in the internationalization of food retailing. *European Journal of Marketing*, 34(8), 891–918.
- Yin, R.K. (2009). *Case Study Research: Design and Methods*, 3rd edition. Thousand Oaks/London/New Delhi: Sage Publications.
- Zenk, S. N., Schulz, A. J., Israel, B. A., James, S. A., Bao, S., and Wilson, M. L. (2005). Neighborhood Racial Composition, Neighborhood Poverty, and the Spatial Accessibility of Supermarkets in Metropolitan Detroit. *American Journal of Public Health*, 95(4), 660–667.
- Zimmerman, J., (2008). From brew town to cool town: Neoliberalism and the creative city development strategy in Milwaukee. *Cities* 25, 230-242.