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LOYOLA UNIVERSITY CHICAGO

BEYOND THE REACH OF THE SAFETY NET: THE GEOGRAPHY OF SOCIAL SERVICE PROVISION IN THE CONTEXT OF SUBURBAN POVERTY

A THESIS SUBMITTED TO THE FACULTY OF THE GRADUATE SCHOOL IN CANDIDACY FOR THE DEGREE OF MASTERS OF ARTS

PROGRAM IN SOCIOLOGY

BY

CHRISTINE E. BREIT

CHICAGO, IL

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INTRODUCTION

The American discourse has deeply ingrained connotations of suburbs as stable, white middle class communities ripe with opportunity. As such, poverty has traditionally been associated with urban and rural regions—not suburban. Today, however, the frontline for the expansion of poverty in the United States is the suburbs. While poverty rates have risen across the country since 2000, the fastest growth is occurring in the suburbs (Berube and Kneebone 2013). Suburbs in the country's largest metro areas saw the number of residents living below the poverty line grow by 57 percent between 2000 and 2015 (Kneebone 2017). Although urban areas continue to have a higher proportion of their populations living in poverty than suburban locales, more poor people live in suburbs than cities (Berube and Kneebone 2013; Allard 2017).

Parallel to this increase in suburban poverty has been federal retrenchment in cash-based welfare assistance in exchange for service-based assistance (Anderson, Halter, and Gryzlak 2002; Allard 2004). From its inception in 1935 as a New Deal entitlement program, Aid to Dependent Children (ADC) provided impoverished single mothers direct cash payments for an unlimited time period. In 1962 Aid to Dependent Children was renamed Aid to Families with Dependent Children (AFDC). As late as the mid-1990s, AFDC operated as an entitlement system without time limits on cash receipt. Welfare programs continued on this trajectory until 1996 when President Clinton signed into law the Personal Responsibility and Work Opportunity Reconciliation Act (PRWORA). Colloquially known as Welfare Reform, PRWORA abolished AFDC and replaced it with the Temporary Assistance for Needy Families program (TANF),

whereby cash assistance became temporary and dependent upon a mother pursuing work or actively working. Understanding poverty to be a personal situation best ameliorated through rehabilitative social programs and employment, welfare funding traditionally allocated as cash payments to the poor is now largely administered as social services (Allard 2009; Allard and Roth 2010; Allard 2017).

The philosophy behind TANF-era welfare policies is that local organizations know what is best for their communities. As such, the federal government has devolved the role of social services to local non-governmental agencies who administer programs using federal grant monies (Allard 2009; Berube and Kneebone 2013). While there are potential benefits to this model, nonprofit providers determine where to locate without an overseer ensuring that services are distributed according to need. Thus, people who live far from service centers lack the degree of state support as those residing near service hubs, creating an uneven patchwork of care (Allard 2009; Weir 2011; Allard 2017). Whereas cash assistance can more easily transcend spatial boundaries, brick and mortar providers' spatial fix limits their ability to respond to the rise and relocation of poor communities (Allard 2009). At the same time, suburban governments and nonprofits have expressed that they are struggling to keep pace with the increased demand for assistance that has coincided with the growth of suburban poverty (Allard 2004; Allard 2009; Allard and Roth 2010; Berube and Kneebone 2013). The culmination of these factors raises questions as to the social service safety net's ability to address new geographies of poverty. I ask: Is there a spatial mismatch between the location of social services and poor populations?

To approximate the spatiality of social services, I analyze the proximity of food pantries/soup kitchens and American Job Centers to impoverished populations in the greater

Chicago metropolitan area. In the late 1990s through the mid-2000s, there was a wave of geographically-rooted social service studies that developed largely in response to the institution of TANF (Joassart-Marcelli and Wolch 2003; Allard 2004; Joassart-Marcelli and Giordano 2006; Peck 2008; Allard 2009; Allard and Roth 2010). However, this field of inquiry has stalled over the last decade. Given the increasing suburbanization of poverty and growing income inequality, it is crucial to revisit this research. Today, ten years after the onset of the Great Recession and twenty years since PRWORA, how does the geography of the social service safety net compare to where people in poverty live?

LITERATURE REVIEW

Suburbanization of Poverty

Lucy and Philips (2000) trace the origin of suburban decline to the 1980s when deteriorating inner-ring, post-WWII suburbs began to lag behind the economic growth seen in the greater metropolitan areas. In time, particularly distressed suburbs have come to resemble struggling inner city neighborhoods as de-industrialization and the loss of reliable middle class jobs have impoverished longer-time, often white suburban residents (Berube and Kneebone 2013; Kneebone 2017). From the 1960s to the 1980s, these inner-ring suburbs became less desirable to upper income households and African Americans steadily moved in (Allard 2017). The demolition of public housing projects and the transition to HOPE VI initiated vouchers and scattered site housing further pushed poorer, often racial minority, populations to the suburbs (Weir 2011; Kneebone and Berube 2013). Between the 1980s and 1990s, immigrants started to settle in suburbs in significant numbers, bypassing cities for the more abundant work opportunities and affordable housing in suburbs (Weir 2011; Berube and Kneebone 2013; Allard 2017). Corresponding to the suburbanization of poorer, racially diverse populations has been the demographic movement of affluent whites to urban locations (Berube and Kneebone 2013). Resulting gentrification has often displaced low-income, formerly urban residents who have moved to the suburbs in search of affordable housing (Weir 2011).

Increasing levels of poverty in suburban areas is not merely the result of poor people moving from cities to suburban areas. Rather, suburban poverty reflects the overall growth in

poverty that the nation has experienced since 2008 (Allard 2017). While more affluent suburbs, ripe with job opportunities (but not affordable housing) were largely sheltered from this suburbanization of poverty before 2008, the Great Recession and foreclosure crisis have impacted all geographies (Kneebone 2017). As Allard (2017) reports: "The economic downturn hit suburban areas harder than other recessions and had a more immediate impact on suburban communities than on many urban centers; as a result, popular perceptions about rising suburban poverty were linked to the Great Recession" (39). While the Great Recession played a crucial role in amplifying suburban poverty, especially in higher income suburbs, the suburbanization of poverty truly predates and will outlast the recovery. As stated by Allard (2017), "Although the Great Recession caused several million Americans in suburbs to become poor and many millions more to become vulnerable to falling below the federal poverty threshold, the problem of poverty has long been present in the suburbs" (40). As poverty balloons across the United States, it can no longer be framed as an urban versus suburban problem (Allard 2017). How have social policy and human services historically responded to poverty? How do these approaches fare against suburbanizing poverty?

Welfare Reform and the Rise in Social Services

American interventions at poverty alleviation reflect the notion that poverty is an urban issue. The earliest efforts in post-Civil War cities to address urban poverty took the form of "local relief," i.e., voluntary organizations and Progressive Era campaigns, which provided services to those living in slums and tenements (Allard 2009). Best represented by Jane Addams' Hull House, these enterprises lacked an arm of the state and were sporadically available as access was dependent upon having the good fortune to live in area with progressive reformers.

The state began active involvement in social welfare amelioration following the Great Depression. As local organizations and governments became overwhelmed by the pervasive poverty and need stemming from this economic crisis, the federal government instituted its first widespread cash assistance programs in 1935 via the Social Security Administration (Allard 2009). Aid to Dependent Children (ADC), jointly funded by state and federal governments, provided monthly cash payments to impoverished households with fathers who were deceased, absent, or unable to work (Blank and Blum 1997). The program grew considerably in the 1970s as "millions of Americans (especially African Americans) moved to cities to seek work just as the urban need for unskilled labor began to decline" (Blank and Blum 1997: 30). At the same time that these migrants were getting increasingly connected to federal welfare programs, regulations to receive ADC relaxed, and divorce and out-of-wedlock childbearing increased (Blank and Blum 1997). These factors culminated in the ADC caseload almost doubling between 1960 and 1970 (Blank and Blum 1997). Foreshadowing changes to come, in 1962 ADC was renamed Aid to Families with Dependent Children (AFDC) as the federal government feared the program discouraged marriage and parental responsibility (Blank and Blum 1997). AFDC caseloads reached a "historic peak" in 1993 at which time 5.5 percent of the population received welfare payments (Allard 2009: 21).

This "historic peak" coincided with Clintonian neoliberalism, prompting a significant restructuring in welfare. In 1996 the Personal Responsibility and Work Opportunity Reconciliation Act (PRWORA), commonly referred to as Welfare Reform, was enacted. This legislation ended AFDC, and replaced it with TANF (Temporary Aid to Needy Families). Under TANF, one cannot receive cash assistance for more than five years. In order to receive this

temporary assistance, a mother must be in a job training program, actively pursuing work, or working for at least 30 hours per week. For many families living in or near poverty, the net effect of PROWRA has been increased precarity (Edin and Lein, 1997; Clampet-Lundquist et al., 2004; Berner, Ozer, and Paynter 2008). Most families, including those whose household heads work, generate less income under TANF than they did under AFDC (Allard 2009).

Part and parcel with PRWORA's retrenchment in cash assistance has been investment in rehabilitative social programs and support services. Rooted in the ideology that poverty is a personal, cultural, or situational circumstance that can be remedied through social services and employment, federal welfare funding has increasingly taken the form of grants to nongovernmental social service agencies who provide emergency food assistance, health care, job training and employment programs, continuing education, and substance abuse treatment (Joassart-Marcelli and Wolch, 2003; Allard and Roth 2010). As "the proportion of federal welfare dollars devoted to cash assistance fell from 77 percent in 1997 to 33 percent in 2004" (Allard 2009: 36), government expenditures on social services more than doubled from \$47 billion to \$100 billion (in 2006 dollars) between 1975 and 2002 (Allard 2009: 23). More specifically, PRWORA included a \$3.5 billion increase in childcare funding to help mothers with the transition to employment.¹

While the practice of granting federal funds to local providers was not initiated by PRWORA—localized block grants began in the mid-1960s as part of President Johnson's War on Poverty—PRWORA marks the shift of welfare being primarily service-based instead of cash-based (Allard 2009). This is important because a service-based safety net can fall short of its

¹https://aspe.hhs.gov/report/personal-responsibility-and-work-opportunity-reconciliation-act-1996

united States, policies and interventions have traditionally framed poverty as a specifically urban and rural phenomenon. As the country undergoes profound suburbanization of poverty, how well positioned is the safety net to respond to this geographic reorientation of need?

Recent Scholarship on Geographies of Service Provision

My study is not the first to investigate the intersection of suburbanizing poverty and the devolution of welfare to social services. Over the last fifteen years, a small body of academic research has developed to address the geographic relationship between high need populations and the location and capacity of social service providers. While the cannon overwhelmingly asserts that there are more social service providers in urban areas than suburban areas and the greatest potential need for services (based upon the proportion of the population in poverty) remains in urban areas (Allard 2004), more nuanced and specific findings related to suburban versus urban providership diverge upon methodology. Allard (2004), Joassart-Marcelli and Giordano (2006), and Allard (2017) conclude that suburban areas lack the degree of providership as urban areas. In contrast, Peck (2008) and Allard (2009) deduce that the need in inner city areas is so great that even though there are often more providers in these areas, high poverty urban neighborhoods lag behind other parts of the metropolis in service provision.

Studied have noted the embeddedness of the social safety net in urban areas at the expense of exurbs and older deteriorating suburbs (Allard 2004; Joassart-Marcelli and Giordano 2006; Allard 2017). Allard's (2004) suburban versus urban comparative study of social service providers in the metropolitan areas of Los Angeles, Chicago, and Washington DC determined that at the 1.5 distance range, "Poor populations in urban centers generally have greater spatial

access to social services than poor persons in suburban areas" (1). Looking specifically at Chicagoland, Allard (2004) concluded that in tracts with poverty rates of 20% or greater, on average there are 7.5 urban job training providers and 2.1 suburban job training providers located within 1.5 miles of a residential census tract (8). In terms of food providers, Allard (2004) noted 4.4 urban providers and 1.3 suburban providers within 1.5 miles of a residential census tract (8). Speaking to the emergence of suburban poverty, Allard (2004) concluded that "suburban areas experiencing increases in poverty had less access to service providers than central city areas where poverty had increased or remained high, suggesting that there may be growing spatial mismatches between providers and populations in need" (13).

Joassart-Marcelli and Giordano (2006) assessed if One-Stop Career Centers [the precursor to American Job Centers] can mediate the spatial mismatch between employment and unemployed workers. Focusing on the Southern California region, the authors studied the locations of these centers and unemployed workers' accessibility to them. Joassart-Marcelli and Giordano (2006) map the locations of employment assistance centers against demographic data, create an index of accessibility, and run a distance decay function in GIS. Like Allard (2004), the authors conclude that service centers are generally well positioned to assist the unemployed in historically impoverished inner city communities of color. This positioning of services results in inferior access to services for unemployed persons living in exurban neighborhoods (Joassart-Marcelli and Giordano 2006).

Allard (2017) compares social service providership across urban and suburban areas by analyzing nonprofit spending per poor person. According to data pulled from the National Center for Charitable Statistics and the 2006-2010 American Community Survey, Allard (2017) found

that in 2010 the median annual nonprofit human service expenditures per person at or below 150 percent of the federal poverty line was \$884 for nonprofits in urban counties versus \$106 for nonprofits in suburban counties (137). While this analysis is national in scope and based off a much broader category of social service providers than my study, (thus preventing a direct comparison of my findings to this study's), it suggests that service providership is stronger in urban areas than suburban areas. This study is unique in that instead of mapping social proximity to providers, it purely considers providership as a function of expenditures per population in need. In Allard's (2017) words, "These findings are consistent with expectations that social service infrastructure and capacity should be most robust in the urban counties and central-city areas that have been the target of antipoverty revenue streams for fifty years" (138).

Like the studies cited above (Allard 2004; Joassart-Marcelli and Giordano 2006; Allard 2017), Peck (2008) and Allard (2009) identify a higher density of social service providers in high poverty central city neighborhoods. However, Peck (2008) and Allard (2009) do not conclude that the inner city is necessarily better serviced than outlying areas. Peck (2008) investigates the extent to which nonprofit organizations with an antipoverty function in Phoenix are located in areas with high poverty. Peck (2008) runs descriptive analyses in GIS and an OLS regression to explore relationships between neighborhood characteristics and antipoverty nonprofit organizations (the number of organizations and their expenditures). Peck (2008) finds that "antipoverty serving nonprofit organizations locate in areas with greater poverty, even controlling for other contextual factors" (148). However, this pattern of providership "leaves a notable void of organizations on the west side [of Phoenix] as well as in the south, where there is an Indian reservation that demonstrates high poverty" (144). Moreover, upon running her accessibility

measure (based upon the number of organizations, provider expenditures, and distance between residential locations and service sites), she concludes that "when competition for services is accounted for (in the accessibility measure), organizations that serve the poor appear not to be ideally situated" (Peck 2008: 144). In summation, upon evaluating actual physical access to services and the amount of money expended by providers, the degree of providership in central city areas is not enough to keep pace with the degree of need.

Allard (2009) is unique from the other studies in the literature review in that his analysis solely focuses on intra-city providership. In other words, he does not consider providership across suburban and urban portions of metropolitan areas. Building off his 2004 study of Los Angeles, Chicago, and Washington DC, Allard (2009), like Peck (2008), seeks to understand service accessibility, which he defines as "the availability of assistance in a particular location relative to need" (64). Allard (2009) creates "service accessibility scores that account for supply of assistance (number of low-income clients served by providers within three miles of residential tract) and potential demand for services (number of low-income individuals within three miles of residential tract)" (65). In this model, each tract's score is divided by the metropolitan mean so that a score of 1 is equal to the metropolitan mean. If the locations and expenditures of providers are well-aligned with need for services, then high-poverty areas would have larger accessibility scores than lower poverty areas. Mismatches in service accessibility exist when there is a wide variation in access scores that indicate high-poverty tracts are proximate to fewer service opportunities than the average tract or low-poverty tracts. Using this approach to measuring service accessibility, Allard (2009) found consistent evidence that higher-poverty neighborhoods have far less real access to assistance than low-poverty neighborhoods. Allard (2009) specifically references the census tracts just south and west of the Loop in Chicago (Englewood and Woodlawn) as prime examples of a mismatch between need and supply for services (70-71).

As this review illustrates, conclusions regarding service providership and accessibility vary. Studies that singularly focus on the physical locations of providers across metropolitan regions report that suburban areas lag behind urban areas in providership (Allard 2004 and Joassart-Marcelli 2006). Research that considers accessibility as a function of the locations of low income communities, the locations of providers, and expenditures by providers often deduce that urban areas lag behind suburban areas in service provision (Peck 2008; Allard 2009). Overall, the literature on this subject is far from comprehensive. Studies use very different methodology and geographic definitions for tackling the question of urban versus suburban. For example, Allard (2009) solely considers providership within cities, neglecting an analysis of suburbs and greater metropolitan areas. This is curious as his 2004 paper was one of the first to raise concerns regarding inadequate suburban providership and his 2017 book is specifically focused on suburban poverty in the context of metropolitan wide safety net discrepancies.

My Contribution

While sociological research documenting the suburbanization of poverty and Welfare Reform's devolution of aid from cash assistance to social services exists, there is limited literature connecting the two. Moreover, many of these studies are now dated, failing to fully reflect the impact of the Great Recession of 2008, the ensuing housing market collapse, and the economic recovery. My work is largely inspired by Allard's (2004) analysis of social services in the metropolitan areas of Los Angeles, Chicago, and Washington DC. Not only does my investigation provide a much needed revisiting—Allard (2004) used 2000 Decennial Census data

whereas I use 2012-2016 American Community Survey data—but also, Allard (2004) does not have any analyses that tie together the number of providers with the number of poor people at set distances to determine the relative client load for urban versus suburban providers. As such, my ratio of providers to poor adults/households analyses are a methodological improvement.

Moreover, I extend Allard's (2004) method by looking at the number of service sites within multiple distances of census tracts as opposed to Allard's study's sole 1.5 mile buffer.

RESEARCH QUESTION AND HYPOTHESES

Given the suburbanization of poverty and the devolution of welfare to social services, I ask: *Is there a spatial mismatch between the location of social services and poor populations?*The magnitude of suburban poverty in Chicagoland (Berube and Kneebone 2013; Allard 2017) and the findings of Allard (2004), Joassart-Marcelli and Giordano (2006), and Peck (2008) suggest that the safety net has failed to keep pace with the suburbanization of poverty. I propose the following four hypotheses:

- Urban areas have more food pantries/soup kitchens and American Job Centers than suburban areas.
- The ratio of proximate providers to poor individuals and households is higher in urban areas than suburban areas due to the safety net's historic entrenchment in inner cities (Berube and Kneebone 2013).
- Food pantries/soup kitchens better align with the distribution of impoverished
 populations—are more responsive to the suburbanization of poverty—than American
 Job Centers. This is the case because in comparison to American Job Centers, food
 pantries/soup kitchens require little overhead, expertise, administrative capacity, or
 interface with the federal bureaucracy.
- There is a spatial mismatch between the locations of impoverished communities and the locations of both food pantries/soup kitchens and American Job Centers.

DATA AND MEASUREMENT

Operationalization

I address my research question through a spatial analysis of the city of Chicago and its surrounding suburbs (which I call Chicagoland). I structure my study around the Chicago metropolitan area because Chicago because is the third most populous city in the nation, has been the frontline for HOPE VI-initiated demolition of public housing projects and implementation of housing vouchers, has experienced extensive deindustrialization since the 1970s, and most importantly has undergone significant impoverishment of its suburbs in the last thirty years (Weir 2011; Berube and Kneebone 2013). According to Allard (2017), "Within metropolitan Chicago, the number of suburban poor increased from about 283,000 to 680,000 from 1990 to 2014—an increase of 142 percent—while the number of poor people in the city increased by only 2.1 percent" (51). The national foreclosure crisis, which has sparked a dramatic uptake in the suburbanization of poverty, has affected the Chicago area especially hard (Berube and Kneebone 2013).

I follow the methodological lead of Allard and Roth (2010) and Berube and Kneebone (2013) by using the U.S. Census Bureau's Chicago Metropolitan Statistical Area (MSA) as an approximation of Chicagoland. I define urban as all areas within the city of Chicago boundary. I define suburban as the areas within the Chicago MSA but outside the city of Chicago boundary.

¹The Chicago MSA includes the following 14 counties from Illinois, Indiana, and Wisconsin: Kenosha, WI; McHenry, IL; Lake, IL; DuPage, IL; Cook, IL; Kane, IL; DeKalb, IL; Kendall, IL; Will, IL; Grundy, IL; Lake, IN; Porter, IN; Newton, IN; Jasper, IN (see Appendix: Figure 1).

John F. Kain introduced the spatial mismatch hypothesis in 1968 to explain the geographic discontinuity between the locations of poor communities (low income African Americans in urban ghettos) and the locations of middle class jobs (Joassart-Marcelli and Giordano 2006). By spatial mismatch, I reference situations in which poor households or individuals lack proximate social services. I evaluate proximate in terms of 0.5 miles (reasonable walking distance), 1.5 miles (reasonable public transit distance), and 5 miles (reasonable driving distance). A mismatch exists when the urban ratio of service providers to poor adults/households is at least three times greater or three times smaller than the suburban service provider ratio. Tables 2 and 3 are the basis for this analysis.

While it would be ideal to study all social services aiding impoverished populations that have received considerable funding through Welfare Reform, (for example, substance abuse and mental health treatment, adult education, subsidized child care centers, and job training/workforce development), doing so is beyond the scope of this study. As such, I operationalize social services by evaluating the locations of American Job Centers (AJC) and food pantries/soup kitchens (which I call emergency food assistance) in the Chicago metropolitan area.

American Job Centers

In accordance with Welfare Reform's ideology of employment-based self-sufficiency,
American Job Centers (originally called One-Stop Career Centers²) were established in 1998
through the Workforce Investment Act to centralize a wide range of services to both job seekers
and employers. AJC are intended to ameliorate the spatial mismatch identified by Kain (1968)

²In 2014, the Workforce Innovation and Opportunities Act renamed One-Stop Career Centers as American Job Centers.

through connecting low income urban populations with suburban employers (Joassart-Marcelli and Giordano 2006). As of 2016, there were approximately 3,300 federally-funded American Job Centers in the United States.³ According to Benefits.gov, American Job Centers provide the following services to workers:

assessment of skills, abilities, aptitudes and needs; assistance with Unemployment Insurance; access to employment services such as the states' job board and labor market information; career counseling; job search and job placement assistance; and information on training, education and related supportive services such as day care and transportation.⁴

American Job Centers are an excellent case for approximating social services as they typify the TANF-era emphasis of preparing people for private sector employment.

Food Pantries/Soup Kitchens

In contrast to American Job Centers, food pantries/soup kitchens are usually privately operated by churches and community groups. That said, the vast majority of food kitchens and soup pantries are affiliated with overarching food banks. Food banks acquire food using private donations and the U.S. Department of Agriculture's Emergency Food Assistance Program (TEFAP), and then distribute the provisions to local food pantries/soup kitchens.

Emergency food assistance is an excellent case to analyze as Welfare Reform ushered in significant cuts in federal funding to food stamp programs, cuts which most states have not been able to make up for on their own (Berner and O'Brien 2004). Concordantly, there is tremendous evidence that an increased reliance upon food pantries/soup kitchens has arisen from Welfare Reform (Biggerstaff, McGrath-Morris, and Nichols-Casebolt 2002; Berner and O'Brien 2004;

³https://eligibility.com/unemployment/americas-job-centers

⁴https://www.benefits.gov/benefits/benefit-details/87

Berner, Ozer, and Paynter 2008). Not only do those removed from the welfare rolls utilize food pantries/soup kitchens, but in Berner, Ozer, and Paynter's (2008) study of a food pantry in Iowa, greater than 25 percent of those using the food pantry were employed and about one half of the service utilizers had government assistance. Many of the working poor rely upon food pantries/soup kitchens because there is not enough money to purchase food after child care and transportation expenses. In an era of low wage service work, debilitating medical expenses, rising housing prices, and limited government assistance, utilization of food pantries/soup kitchens is a necessity for many American families (Berner, Ozer, and Paynter 2008).

Whereas some social services are extremely geographically bound due to the nature of the buildings they occupy, (such as public health clinics that require very specific infrastructure), it takes relatively little expertise, overhead, equipment, and infrastructure to establish a food pantry. The logic follows that food pantries/soup kitchens should be better able to adapt to the suburbanization of poverty because of their relative ease in to start-up and comparatively lesser physical and organizational demands than American Job Centers. Following this line of inquiry, I am curious if food assistance centers appear to better align with the suburbanization of poverty than American Job Centers.

Data Sources

My data for poverty comes from the 2012-2016 American Community Survey dataset.

My food assistance analyses look at household poverty. In contrast, my analyses for American

Job Centers only consider individuals in poverty who are eighteen and older as these services

only assist adults. I compiled this data from the National Historical Geographic Information System (NHGIS) website.⁵

While this analysis could be evaluated by income level or degree of poverty (relationship to the poverty line), I base my analyses purely by "in poverty" (below the poverty line) or "not in poverty" (at or above or the US Census Bureau's poverty line). I do so because households must earn less than the federal poverty line to be welfare-eligible. Moreover, the federal poverty line is an easily accessible and commonly used metric for studying the suburbanization of poverty and the populations who use social services (Allard 2004; Peck 2008; Allard 2009; Kneebone and Berube 2013; Allard 2017). My universe for American Job Center locations comes from all of those listed on the program's website that fall within the Chicago MSA. I compiled this data from the website in Fall of 2017. Like Joassart-Marcelli and Giordano (2006), I do not differentiate between affiliate and comprehensive centers.

My data for food pantries/soup kitchens comes from the list of service sites associated with the food banks that serve the Chicago MSA. The food banks whose territory overlaps with the Chicago MSA are the Greater Chicago Food Depository,⁷ Northern Illinois Food Bank,⁸ Food Bank of Northwest Indiana,⁹ Food Finders Food Bank,¹⁰ and Feeding America of Eastern

⁵https://www.nhgis.org/

⁶https://www.careeronestop.org/LocalHelp/AmericanJobCenters/american-job-centers.aspx

⁷https://www.chicagosfoodbank.org/find-food/

⁸https://solvehungertoday.org/get-help/where-to-get-food/

⁹https://foodbanknwi.org/get-help/find-a-pantry/

¹⁰https://www.food-finders.org/

Wisconsin. ¹¹ For the Chicago Food Depository and Northern Illinois Food Bank, I compiled my universe of providers from lists shared with me by a representative from these organizations. The Chicago Food Depository list was acquired in November of 2017; the Northern Illinois Food Bank list was acquired in December of 2017. A staff member at the Food Bank of Northwest Indiana told me that they do not provide lists for requests like mine. As such, I compiled this data from the program's website in December 2017. I did not hear back from anyone at the Food Finders Food Bank or Feeding America of Eastern Wisconsin; these provider lists were pulled from the food banks' websites in December 2017.

Some food pantries/soup kitchens have requirements around who may use their services. I exclude school-based food pantries, closed pantries (those in which one must be in specialized program or meet a unique requisite like having HIV/AIDS to access them), and mobile, seasonal, and temporary pantries/soup kitchens from my study. Many of the food pantries I included have restrictions around residency (clients must live in the same zip code or neighborhood as the pantry to use its services). Given that my analysis is rooted in the logic that people will go to the closest services, I find no issue in including these service sites. While food pantries differ from soup kitchens in the type of aid they provide—one distributes groceries to take home whereas the other provides a meal to be eaten on site—I do not distinguish between the two in my analyses, hence why I use the term food pantries/soup kitchens instead of food pantries and soup kitchens. Many organizations run both a food pantry and soup kitchen at their site. In these instances, providers are only counted once.

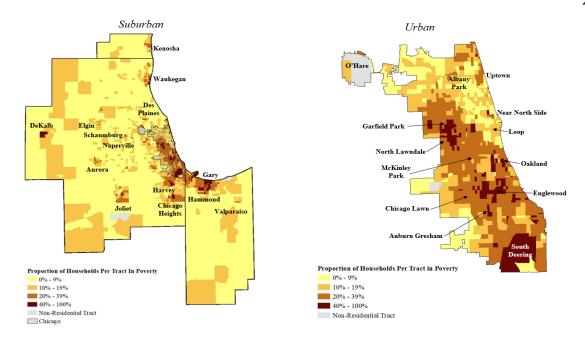
¹¹https://feedingamericawi.org/

Analytic Plan

I answer my research question through a descriptive spatial analysis using Esri's ArcMap Geographic Information Systems software. I use a quantitative approach because I want to be able to study the entire Chicagoland region as a whole. I am interested in a relatively small set of geographic and population relationships applied to a large geographic area rather than an indepth understanding of how particular regions or service centers are faring with the suburbanization of poverty. My research design provides a baseline understanding of the current geography of aid and need, setting the groundwork for further quantitative and qualitative work. The following subsections outline my analytic plan.

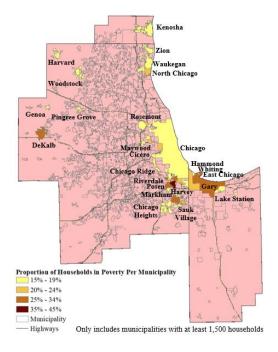
Chicagoland Poverty

To understand the landscape of poverty in Chicagoland, I map household and adult [age 18 and over] poverty data from the 2012-2016 American Community Survey by census tract. Household poverty findings are displayed as Figure 1 and the adult poverty analysis is presented in Figure 2. In this section, I create poverty definitions that I use throughout this study. Tracts with 0-9% poverty rate are low poverty; 10-19% poverty rate are low-moderate poverty; 20-39% poverty rate are moderate-high poverty; and 40% or more poverty rate are concentrated poverty. These definitions apply for both adult poverty and household poverty analyses of census tracts. Next, I map the locations of municipalities in the Chicago MSA that have at least 1,500 households. I pull the household poverty rate for these municipalities from the 2012-2016 American Community Survey to produce Figure 2.



Sources: U.S. Census Bureau 2017 TIGER/Line Shapefiles, American Community Survey (2012-2016)

Figure 1. Chicagoland Household Poverty – 2016

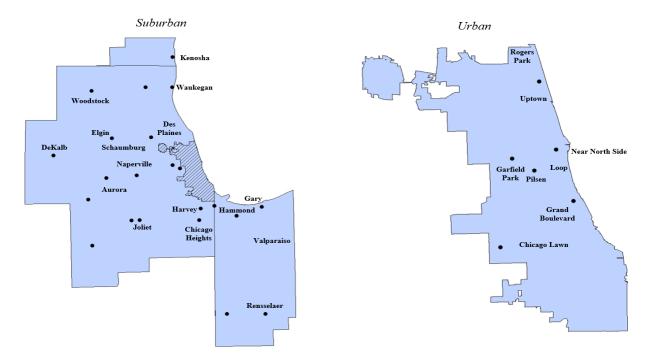


Sources: U.S. Census Bureau 2017 TIGER/Line Shapefiles, American Community Survey (2012-2016)

Figure 2. Municipalities with 15% or More of their Households in Poverty – 2016

Provider Locations

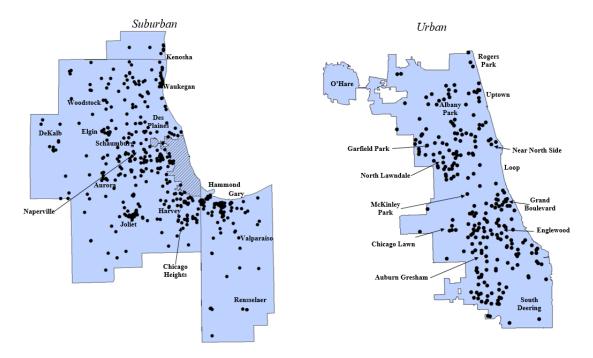
I use Policy Map to geocode the addresses of American Job Centers and food pantries/soup kitchens. ¹² I map the geocoded coordinates using ArcMap. Figure 3 shows the locations of American Job Centers. Figure 4 shows the locations of food pantries/soup kitchens.



Sources: U.S. Census Bureau 2017 TIGER/Line Shapefiles, American Job Centers Website

Figure 3. Locations of American Job Centers

¹²https://www.policymap.com/



Sources: U.S. Census Bureau 2017 TIGER/Line Shapefiles, Chicagoland Food Banks

Figure 4. Location of Food Pantries/Soup Kitchens

Provider Coverage

It would be ideal for all municipalities and neighborhoods with sizable poverty populations to have a social service provider located in their community. However, that is not necessarily realistic, especially for providers like American Job Centers that require skilled staff and greater cooperation with federal bureaucracies. As such, this analysis is one of provider coverage: how much of the Chicagoland area falls within range of a service provider? I consider range from three different distance levels: 0.5 miles (reasonable walking distance), 1.5 miles (reasonable transit distance), and 5 miles (reasonable driving distance). To produce this analysis, on top of the household poverty by census tract data, I map 0.5 mile, 1.5 mile, and 5 mile circular buffers around each provider to show the relative reach of each service center. This analysis identified areas that are relatively well serviced versus areas that are neglected. Provider

Coverage analyses for American Job Centers are presented in Figures 5-7. For emergency food assistance, these analyses are presented in Figures 8-10.

Ratio of Providers to Poor Adults and Households

This analysis reports the ratio of providers to poor adults/households at four distance levels: in tract, 0.5 miles, 1.5 miles, and 5 miles (see Tables 2 and 3). To produce this analysis, I map the geocoded locations of all providers who fall within a five mile buffer zone of the MSA. Next, I complete a spatial join to determine the number of providers within each census tract and within 0.5 miles, 1.5 miles, and 5 miles of the centroid of each Chicagoland census tract. I download these calculations and the number of poor adults and poor households for each Chicagoland census tract from my GIS. Then, I divide the number of providers within these four distance ranges (in tract, 0.5 mile buffer, 1.5 mile buffer, 5 mile buffer) by the number of poor adults (American Job Center analyses) and number of poor households (food pantries/soup kitchens analyses) in each tract to determine the ratio of providers to poor populations at these specified distance ranges for each census tract. After calculating these ratios, I determine the mean provider to population ratio for urban tracts and suburban tracts. I multiply these ratios by 10,000 to make the findings more comprehensible. Lastly, to truly distill the difference between urban and suburban providership, I divide the urban ratio by the suburban ratio.

Because these analyses include providers outside the MSA, this universe of providers is greater than the numbers reported in Figure 3, Figure 4, and Table 1. I use the uniform distance ranges from the centroid of tracts elaborated in the previous paragraph as the backbone of my analysis because census tracts vary significantly by geographic size. Tracts tend to be quite small

in densely populated urban areas and much larger in suburban areas. As such, comparing census tracts by the number of providers located within them is problematic.

Providers by Tract Poverty Rate

I anticipate that tracts with higher rates of poverty will have more providers in proximity than lower poverty tracts. In order to investigate the relationship between tract poverty rate and the number of proximate providers, I take the data that I pulled from my GIS for the Ratio of Providers to Poor Adults and Households and group the census tracts by their proportion of the population beneath the poverty line. Congruent with Allard (2004), I group the tracts along the following delineation: 0-9% (low poverty), 10-19% (low-moderate poverty), 20-39% (moderate-high poverty), 40+% (concentrated poverty). Then, I aggregate the number of providers within the 4 distance ranges (within tract, 0.5 miles. 1.5 miles, and 5 miles) by each poverty threshold. These findings are reported in four tables: Suburban American Job Centers, Urban American Job Centers, Suburban Food Pantries/Soup Kitchens, and Urban Food Pantries/Soup Kitchens (see Tables 4-7).

Sampling

Inevitably, there are food pantries/soup kitchens located Chicagoland that are not affiliated with the aforementioned food banks. My analyses exclude these centers. Likewise, there are other employment resources in Chicagoland not affiliated with American Job Centers that I have not included in this study. That said, the public/private partnership model that food banks embody is such a typical example of the Clintionian neoliberalism upon which Welfare Reform is based that including only the providers associated with these makes sense. Moreover, the American Job Centers program grew directly out of Welfare Reform, whereas I cannot

guarantee that non-AJC Chicagoland workforce development projects did too. The majority of food pantries/soup kitchens should be accounted for in my analysis. In this era of social service cutbacks, smaller organizations often rely upon partnerships with larger, well-endowed entities in order to continue to be able to provide services (Berube and Kneebone 2013). Moreover, well-known providers are likely providing the majority of services because of their stronger public presence.

There is a slight timing disconnect between my demographic data and service provider data. The American Community Survey data I am using is from 2012-2016, whereas my service provider data is from Fall/Winter 2017. I use the 2012-2016 American Community Survey dataset because it is the most recently available data; the 2013-2017 five year estimate is not available. This discrepancy is a validity issue with the design of my study, but does not warrant serious alarm as both data sources reflect the most recent available figures at the time of data collection. Moreover, it is unlikely that the distribution of poverty or social services changed dramatically in the window between 2016 and 2017.

External Validity

Due to issues of capacity, this study only addresses the interplay between the suburbanization of poverty and the location of social services in the Chicago metropolitan area. As such, the results from this study cannot be generalized to the entire United States. While similar associations would likely exist in other American locales, regional differentiation would also impact results. The findings of this study could be further augmented by its replication in other metropolitan areas.

FINDINGS

Chicagoland Poverty

The majority of the land in the Chicago Metropolitan Statistical Area is covered by low poverty census tracts. That said, areas of pronounced poverty exist throughout the Chicago metropolitan region. Kenosha and Waukegan, larger municipalities north of Chicago, have household poverty rates exceeding 15 percent (see Figure 2). DeKalb, west of the city of Chicago, has a household poverty rate of almost 30 percent (see Figure 2). To the east of DeKalb, there are tracts of moderate-high poverty scattered throughout the major western suburbs of Aurora, Elgin, and Schaumburg (see Figure 1). South of Naperville is the city of Joliet, iconized by its now shuttered iron mill. While Joliet has a municipal-wide poverty level of just 12 percent, tracts within the jurisdiction have significant poverty levels ranging from 20 to 45 percent (see Figure 1). To the east of Joliet is the most conspicuous feature in this metropolitan analysis: the high levels of suburban poverty south and southeast of the City of Chicago. The highest poverty rates by municipality in the region are in the south Chicago suburbs, specifically Harvey, Markham, Chicago Heights, Hammond, and Gary. Harvey has the highest poverty rate of any municipality in the MSA at 40 percent. Both the more residential Harvey and Chicago Heights and the more industrialized Hammond and Gary have numerous census tracts with concentrated poverty.

The poverty patterns within the city of Chicago are similar to those of the region (see Figure 1). The overall household poverty rate for the city falls just below 20 percent. The census

tracts with concentrated poverty are located along the western border of the city at the same latitude of the Loop in the community areas of Austin, Garfield Park, and North Lawndale; in the south-central part of the city around Englewood, Washington Park, and Greater Grand Crossing; and in the far southern area of the city in South Deering and Riverdale. The majority of the more affluent tracts exist in the northeastern part of the city close to Lake Michigan, specifically in neighborhoods like Lincoln Park, Lake View, and North Center. That said, there are low-moderate poverty and moderate-high poverty tracts scattered throughout the north side in Uptown, Rogers Park, West Ridge, and Albany Park.

Taking a broader look at Chicagoland, it is clear that poverty is still very much concentrated in and around the city of Chicago. As such, it makes sense that approaches to poverty have traditionally been urban initiatives. That said, when you consider the sizable poverty in areas like Elgin, DeKalb, Joliet, Aurora, Harvey, and Gary, one wonders if the poverty in these areas receives adequate attention.

Provider Locations

The city of Chicago, a 234 mi² area, has six American Job Centers and 247 unique emergency food assistance providers. This equates to 0.026 American Job Centers per square mile and 1.06 food pantries/soup kitchens per square mile (see Table 1). In contrast, suburban Chicagoland covers 7,064 mi² and has 22 American Job Centers and 449 emergency food assistance providers. This amounts to 0.003 American Job Centers per square mile and 0.064 food pantries/soup kitchens per square mile (see Table 1). Without taking into consideration population densities or the locations of poor communities, this analysis suggests that the city has

8.5 times the number of American Job Centers and 16.5 times the number of food pantries/soup kitchens per square mile as suburban Chicagoland.

Table 1. Providers per Square Mile

	American Job Centers	AJC Per SqMi.	Food Pantries/ Soup Kitchens	FPSK Per SqMi.
Urban	6	0.026	247	1.06
Suburban	22	0.003	449	0.064

Sources: Chicagoland Food Banks, American Job Centers Website, U.S. Census Bureau 2017 TIGER/Line Shapefiles

This relationship between urban and suburban providership is echoed in Figures 3 and 4, which show the locations of services across the region. The twenty-two American Job Centers in the suburbs appear to be very well aligned with the locations of poverty referenced in the above section. For example, I noted that Kenosha, Waukegan, DeKalb, Elgin, Aurora, Joliet, Harvey, Chicago Heights, Hammond, and Gary all have sizable poverty; each of these areas has an American Job Center. That said, there are only a handful of American Job Centers located outside these larger municipalities. To me, this suggests that people living outside these population centers must travel far distances to access these services. Otherwise, and perhaps more likely, people living outside these municipalities go without assistance.

While not as ideally matching, the allocation of American Job Centers in the city appear to be decently located. The six American Job Centers are located in the following areas: on the north side between Uptown and Edgewater, in the Loop just south of River North, on the far west side along Highway 290 south of East Garfield Park, in Pilsen, at the intersection of Kenwood, Oakland, and Grand Boulevard, and in between Ashburn and West Lawn. Uptown is an accessible neighborhood for the north side that continues to have significant poverty levels.

Likewise, while few poor households actually live in the Loop, all Chicago Transit Authority train lines connect to the Loop, making it a compelling location for a service provider. Garfield Park is a logical place to have an American Job Center as the neighborhood, and the areas surrounding it, have high concentrations of poverty. While there is one American Job Center at the intersection of Kenwood, Oakland, and Grand Boulevard and another one at the intersection of Ashburn and West Lawn, there are not any job centers south and east of these neighborhoods, even though tracts in these areas have some of the highest poverty levels in the region. Perhaps the American Job Centers in Hammond and South Holland (near Harvey) are intended to serve these communities.

Akin to the locations of American Job Centers, the locations of suburban food pantries/soup kitchens align closely with the locations of higher poverty suburban census tracts. Figure 4 illustrates the 449 suburban emergency food assistance providers. There are pronounced clusters of providers around Kenosha, Waukegan, DeKalb, Elgin, Aurora, Joliet, Maywood, Chicago Heights, Harvey, Hammond, and Gary—areas with higher proportions of their population in poverty. Additionally, there are providers sprinkled throughout the MSA, suggesting that people living outside major municipalities have access to food. The providers located in southwest Illinois and the central and southern area of the Indiana segment are keen examples of this diffusion of services.

The locations of emergency food assistance in Chicago forms two primary provider agglomerations—one north of Interstate 55 and one south of the expressway (see Figure 4).

While the quantity of food assistance providers (247) is striking, this propensity towards clustering renders many areas, and sometimes even entire community areas (of which Chicago

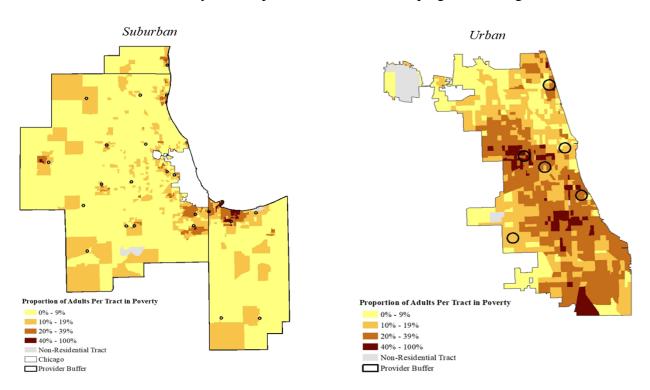
has 77) devoid of service sites. Whereas Austin, Garfield Park, North Lawndale, Englewood, Grand Boulevard, Near North Side, and Uptown have multiple providers, eighteen community areas have only one provider and sixteen community areas do not have any providers. Moreover, these areas that lack providers are not necessarily very low poverty or not needing services. For example, West Ridge, Hermosa, Avondale, and Brighton Park are just a few of the community areas with moderate-high poverty tracts that lack a food pantry or soup kitchen.

Provider Coverage

Reviewing the American Job Center provider coverage maps (see Figures 5-7), one appreciates the sheer landmass that suburban Chicagoland covers. It is 114 miles from the northeast corner of the MSA in Wisconsin to the very southwest corner of the MSA and 60 miles from the western border of the MSA to the western boundary of the city of Chicago. Thus, while there appears to be a strong alignment between the location of American Job Centers and suburban areas of high poverty, by no means do all tracts fall within at least five miles of an AJC (see Figure 7). That said, all tracts with concentrated adult poverty fall within the five mile buffer of an AJC except for a tract in Evanston and a portion of a tract in the very eastern part of East Chicago that abuts Lake Michigan¹ (see Figure 7). Similarly, while the majority of suburban tracts with moderate-high adult poverty are within five miles of an AJC, a handful of tract portions do not fall within a buffer. These portions are located in parts of Valparaiso, Gary, Alsip, Bolingbrook, Bridgeview, Oak Lawn, Richton Park, University Park, Lynwood, Des Plaines, Arlington Heights, Evanston, and Zion. Figures 5 and 6, which illustrate the more conservative buffers of 1.5 mile and 0.5 mile distances from providers, are nearly

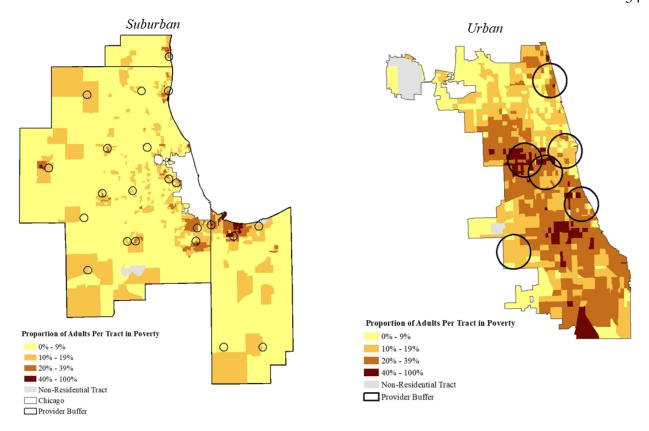
¹This referenced tract in East Chicago is located in an industrial, non-residential area.

indistinguishable from each other. Both maps show that the majority of high population centers with pronounced poverty have a provider in reach, yet there are some areas of high poverty that stand out as lacking a provider, specifically parts of Gary, East Chicago, DeKalb, and North Chicago. Moreover, there are extensive swaths of land with low-moderate adult poverty rates that do not have a provider in sight at any buffer level, but especially at the 0.5 mile and 1.5 mile range. These areas include the large rectangles of moderate poverty in the central and southern portion of Indiana, the large tracts in western, southwestern, and northwestern border areas of Illinois, and the numerous low-moderate poverty tracts sprinkled throughout the western suburbs near Aurora and Carol Stream. The abundance of low-moderate poverty tracts throughout the metro area out of reach of any service provider stands out as a poignant finding.



Sources: U.S. Census Bureau 2017 TIGER/Line Shapefiles, American Community Survey (2012-2016), American Job Centers Website.

Figure 5. Half Mile Buffers – American Job Centers

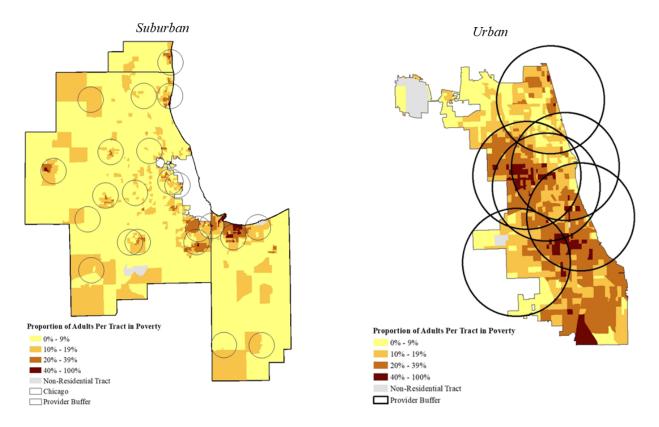


Sources: U.S. Census Bureau 2017 TIGER/Line Shapefiles, American Community Survey (2012-2016), American Job Centers Website.

Figure 6. One and a Half Mile Buffers – American Job Centers

Almost all of the city of Chicago falls within five miles of an American Job Center (see Figure 7). The exception to this is low to low-moderate poverty tracts in the northeast corner of the city that extend from Montclare and Portage Park to O'Hare, and the low-moderate to moderate-high poverty tracts south and southeast of South Shore, Auburn Gresham, and Beverly. The very southeastern tip of the city that does not fall within a 5 mile buffer of an urban provider is covered by the 5 mile buffer surrounding the suburban American Job Centers located in Hammond and South Holland. In terms of the 1.5 mile buffer, many areas of high poverty are not within reach of an American Job Center. Notably, there is an agglomeration of high poverty tracts around Englewood and Washington Park that are not covered by a 1.5 mile buffer.

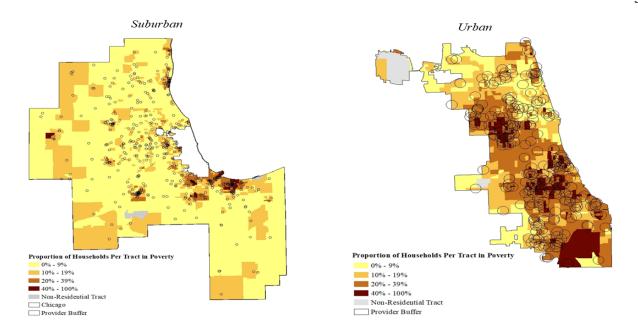
Additionally, there are sporadic high poverty tracts lacking coverage (in this distance range) in Auburn Gresham, South Shore, Riverdale, Austin, and Rogers Park. Looking at the half mile buffer, one sees the overall picture that American Job Centers are not necessarily located in areas of highest poverty or equitably spaced throughout the city. The majority of the centers seem weighted towards the central area of the city in community areas along major CTA train lines. While these job centers are not necessarily located in areas of highest poverty, they do appear to be located in areas that have at least moderate-high poverty (excluding the southwestern most center).



Sources: U.S. Census Bureau 2017 TIGER/Line Shapefiles, American Community Survey (2012-2016), American Job Centers Website

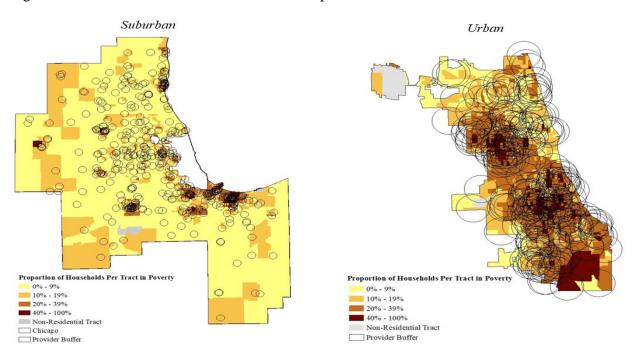
Figure 7. Five Mile Buffers – American Job Centers

Figures 8-10 depict the provider coverage buffers for food pantries/soup kitchens. While the five mile buffer for suburban emergency food assistance shows that not all suburban territory falls within the buffer of a provider, close to all of the land does (especially when compared to the American Job Centers coverage maps). Moreover, the figures show that there tends to be a greater density of providers in areas with higher poverty levels. This pattern is illustrated in the provider coverage around the concentrated poverty tracts near Gary, Harvey, and Chicago Heights, and moderate-high poverty tracts near Joliet, Elgin, and Waukegan (see Figures 8 and 9). Impressively, at the 5 mile and 1.5 mile ranges, all suburban tracts with concentrated poverty are within the buffer of a food pantry or soup kitchen. At the half mile buffer level, almost all moderate-high and concentrated poverty areas fall within a buffer. For those few tracts for which this is not the case, more often than not, there is a provider within close proximity (generally in a neighboring tract). At all buffer levels for suburban food providers, there remains areas of lowmoderate poverty that are not within range of a provider. That said, the proportion of land not within range of an emergency food assistance provider is far less than the portion left uncovered by American Job Centers.



Sources: U.S. Census Bureau 2017 TIGER/Line Shapefiles, American Community Survey (2012-2016), Chicagoland Food Banks

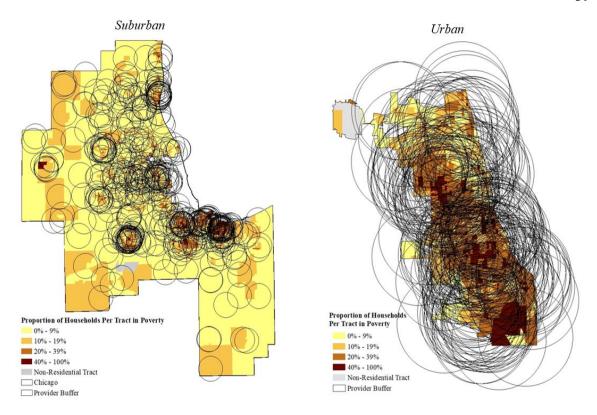
Figure 8. Half Mile Buffers – Food Pantries/Soup Kitchens



Sources: U.S. Census Bureau 2017 TIGER/Line Shapefiles, American Community Survey (2012-2016), Chicagoland Food Banks

Figure 9. One and Half Mile Buffers – Food Pantries/Soup Kitchens

As presented by the ratio of providers to square mile from Table 1, there are far more food pantries/soup kitchens in urban Chicago per land area than for any of the other provider types (suburban FPSK, urban AJC, suburban AJC). Figures 8-10 illustrate this finding in detail. The five mile buffer analysis shows that all areas of the city are within reach of more than one provider. The exception to this is the O'Hare community area, which generally is not covered by any provider. That said, the airport dominates O'Hare, so this finding is neither surprising nor concerning. At 1.5 mile buffer level, all concentrated poverty tracts are covered by at least one provider except for areas of South Deering. This portion of South Deering is largely nonresidential, so this finding is not surprising. Additionally, there are areas along Interstate 55 that are not within 1.5 miles of a provider. Again, this is neither surprising nor concerning as these areas tend to be non-residential. There are additional areas of low to low-moderate poverty not covered by a 1.5 mile provider buffer throughout the north, northwest, and southwest sides of the city. Some of these areas fall within the 1.5 mile buffer of suburban providers (as is the case for the seemingly uncovered section of Garfield Ridge and Clearing), others are quite affluent and likely do not need services (Forest Glenn on the north side), and still others are largely nonresidential (the Loop and far south side). The half mile buffer analysis suggests that areas of deepest poverty tend to be well covered by providers, but that many areas of moderate-high poverty are not within half a mile of a food pantry/soup kitchen. Such areas include portions of South Shore, Greater Grand Crossing, Chatham, Chicago Lawn, South Lawndale, Logan Square, Hermosa, and West Ridge.



Sources: U.S. Census Bureau 2017 TIGER/Line Shapefiles, American Community Survey (2012-2016), Chicagoland Food Banks

Figure 10. Five Mile Buffers – Food Pantries/Soup Kitchens

Ratio of Providers to Poor Adults and Households

American Job Centers

Table 2 distils these visual representations of poverty and providership into numbers. At the distance ranges of within tract and within half a mile of the tract center, on average there are a negligible number of American Job Centers for suburban or urban tracts. This reflects the overall paucity of American Job Centers. At the 1.5 mile tract buffer range, a distinction in the mean number of providers for urban versus suburban tracts emerges. At this distance, urban tracts on average have 0.2 providers; suburban have 0.1. At the five mile distance buffer, the mean number of providers per urban tract is two, whereas it is only 0.6 for suburban tracts.

Table 2. Ratio of Providers to Poor Households- American Job Centers

	Mean # Poor	. Mean # Providers		Ratio of Providers to Poor Adults x 10,000			Urban Ratio / Suburban Ratio						
Adults Per Tract	In Tract	.5 miles	1.5 miles	5 miles	In Tract	.5 miles	1.5 miles	5 miles	In Tract	.5 miles	1.5 miles	5 miles	
Urban	488	0.0	0.0	0.2	2.0	0.2	0.6	4.5	41.4	0.4	2.2	1 7	2.2
Suburban	320	0.0	0.0	0.1	0.6	0.5	0.3	2.7	18.6	0.4	2.3	1.7	2.2

Sources: American Job Centers Website, U.S. Census Bureau 2017 TIGER/Line Shapefiles, American Community Survey (2012-2016).

Except for the in-tract comparison, the mean ratio of providers to poor adults is higher in every distance range for urban tracts than suburban tracts. This discrepancy along the in-tract comparison likely arises because there are 168 fewer poor adults on average per suburban tract than urban tract. Given the lack of providers at this distance, the ratio purely reflects the comparative number of poor individuals. Looking at more substantial distance ranges, the pattern of urban providership surpassing suburban becomes clearer. At the 0.5 mile buffer range, there are 0.6 providers for every 10,000 urban adults in poverty and 0.3 providers for every 10,000 suburban adults in poverty. At the 1.5 mile level, there are 4.5 providers to every 10,000 urban adults in poverty, whereas there are only 2.7 providers to every 10,000 suburban adults in poverty. Lastly, at the five mile distance range, there are 41.4 providers to every 10,000 urban adults in poverty and 18.6 providers to every 10,000 suburban adults in poverty. This contrast in coverage becomes increasingly clear upon dividing the urban provider ratio by the suburban provider ratio. Excluding the in-tract comparison, for the 0.5, 1.5, and 5 mile distance ranges, there are approximately two times more America Job Centers per poor urban adult than poor suburban adult.

Food Pantries/Soup Kitchens

The patterns of providership for emergency food assistance align closely with that of American Job Centers discussed above. Table 3 shows that at the within tract comparison level, there are 0.3 providers on average for both urban and suburban tracts. At the 0.5, 1.5, and 5 mile distance ranges, urban areas have a clear advantage in the mean number of providers. For example, at the 0.5 mile range, urban tracts have 1.2 providers on average to suburban tracts' 0.2 providers. Similarly, at the 1.5 mile buffer distance, the mean number of providers for urban tracts is about nine and about two for suburban tracts. Within five miles of tracts' centers, there are an average of 74 food pantries/soup kitchens in urban areas, but only 15 providers in suburban areas.

Table 3. Ratio of Providers to Poor Households- Food Pantries/Soup Kitchens

	Mean # Poor HH	# Poor Mean # Providers			Ratio of Providers to Poor Households x 10,000			Urban Ratio / Suburban Ratio					
Per Tract	In Tract	.5 miles	1.5 miles	5 miles	In Tract	.5 miles	1.5 miles	5 miles	In Tract	.5 miles	1.5 miles	5 miles	
Urban	258	0.3	1.2	9.1	73.9	1.3	4.5	35.2	286. 1	0.7	3.2	3.4	3.3
Suburban	171	0.3	0.2	1.8	14.7	1.9	1.4	10.4	85.7	0.7	3.2	3.4	ى.ى

Sources: Chicagoland Food Pantries, U.S. Census Bureau 2017 TIGER/Line Shapefiles, American Community Survey (2012-2016)

While the findings presented above are illustrative and clearly indicate that there are more urban food pantries/soup kitchens than suburban, they lack an analysis of the relative need for services. As such, I extend these comparisons to consider relative need, which I operationalize as the ratio of providers to poor households. As was the case with American Job Centers, with the exception of the in tract comparison, there are more providers to poor

households for urban tracts than suburban tracts. Within tract, on average there are 1.3 food pantries/soup kitchens to every 10,000 urban households in poverty; at the same distance, there are 1.9 food pantries/soup kitchens to every 10,000 suburban households in poverty. This relationship flips at the 0.5 mile buffer level; there are 4.5 providers to every 10,000 poor urban households and 1.4 providers to every 10,000 poor suburban households. Within 1.5 miles of urban tracts, there are 35 food pantries/soup kitchens on average for every 10,000 poor households. At that same distance for suburban tracts, there are just over 10 providers on average for every 10,000 poor households. Lastly, at the five mile level, there are just over 286 providers within range for every 10,000 poor households and just under 86 providers for every 10,000 poor households. Just as there were approximately two times the number of AJC for urban than suburban tracts at all distance levels (excluding the within tract comparison), there are approximately three times more food pantries/soup kitchens in urban than suburban tracts at the 0.5 mile, 1.5 mile and 5 mile comparison levels.

In summation, these ratio analyses reveal that on average there are more poor adults and poor households in urban tracts than suburban tracts. Most poignantly, there tends to be more providers—both American Job Centers and food pantries/soup kitchens—within reach of urban census tracts (at the 0.5 mile buffer level and beyond) than in suburban tracts. When put in ratio form, at all distances other than in tract comparisons, there are more providers to poor households/adults for urban tracts than suburban tracts.

Providership by Tract Poverty Rate

Lastly, I analyzed the mean number of providers by tract poverty levels. While there are nuances by provider type that I will address in each sub-section, on the whole, the greater the level of poverty per tract, the more providers in proximity.

Suburban American Job Centers

There are 1,404 suburban census tracts in Chicagoland: 64 percent low poverty, 25 percent low-moderate poverty, 9 percent moderate-high poverty, and 1 percent concentrated poverty (see Table 4). The number of providers per tract poverty level is not entirely linear. Firstly, many suburban tracts have radii exceeding 0.5 miles. As such, in some of the columns in Table 4, there are more providers within a tract than within 0.5 miles of a tracts' centroid. At the within tract and 0.5 mile ranges, the mean number of providers proximate to tracts increases as the degree of poverty intensifies. For example, at the 0.5 mile distance, there are 0.0 providers within range of low poverty tracts, 0.1 providers within range of low-moderate tracts, 0.03 providers for moderate-high and 0.06 providers for concentrated poverty tracts. Curiously, this pattern holds true for the 1.5 mile and 5 mile distances until the step from moderate-high poverty to concentrated poverty. At both distance ranges, the number of providers proximate to concentrated poverty tracts is less than the number in moderate-high tracts. For the 1.5 mile range, number of providers drops from 0.22 to 0.17. For the 5 mile range, the drop is from 1.08 to 0.89.

Table 4. Suburban Providership by Tract Poverty Rate – American Job Centers

		Number of Tracts in This	Percentage of Total Tracts in	Mean # of Providers				
		Category	Category	In Tract	.5 miles	1.5 miles	5 miles	
Adult Poverty Rate per Tract	0% - 9%	904	64%	0.00	0.00	0.04	0.41	
	10% - 19%	355	25%	0.03	0.01	0.15	0.89	
	20% - 39%	127	9%	0.05	0.03	0.22	1.08	
	40% +	18	1%	0.11	0.06	0.17	0.89	
	All Tracts	1,404	100%	0.0	0.0	0.1	0.8	

Sources: American Job Centers Website, U.S. Census Bureau 2017 TIGER/Line Shapefiles, American Community Survey (2012-2016)

I have theories to explain this break from the overall pattern but not an impenetrable explanation. I think this decrease in providership could be explained by the size of the sample—only 18 tracts (or 1 percent of all tracts) are defined as concentrated. Additionally, many of the concentrated suburban tracts are located along Lake Michigan in areas that are highly industrial. Perhaps this landscape—being surrounded by the Lake and manufacturing centers—impacts the available land for siting a provider. Said another way, the buffer analysis includes all area surrounding tracts, including area like water or industrial sites on which one could not build a provider. As such, these buffer analyses are not completely comparable when some buffers include only land and others a land/water mix. Lastly, while the concentrated poverty tracts northeast of East Chicago that extend into Lake Michigan have very high poverty levels, this analysis offers no sense of the number of people who actually live there. In fact, much of that land is casino and industry.

Urban American Job Centers

Chicago is composed of 798 census tracts. Of those, 20 percent are low poverty, 33 percent are low-moderate poverty, 39 percent are moderate-high poverty, and 8 percent have concentrated poverty. With the exception of the in tract range, the mean number of AJC within 0.5 miles, 1.5 miles, and 5 miles of urban census tracts increases as the poverty level of tracts increase (see Table 5). For example, Table 5 shows that low poverty tracts on average have 0.15 American Job Centers within 1.5 miles of a tract's centroid, whereas low-moderate tracts have 0.19 providers in this range. The number of providers increase to 0.24 for moderate-high poverty and 0.48 for concentrated poverty tracts. This pattern is mirrored at the 0.5 mile and 5 mile buffer ranges. At five miles, there are 1.68 AJC in range for low poverty tracts and 2.74 AJC for concentrated poverty tracts. The within tract figures show the following averages: 0.0 providers for low poverty tracts, 0.02 for low-moderate poverty tracts, 0.01 for moderate-high tracts, and 0.0 for concentrated poverty tracts. Due to very low number of American Job Centers – 6 for 798 census tracts—the inconsistent pattern found for the within tract field is likely due to issues of sample size, not meaningful derivation in patterns.

Not only do suburban and urban American Job Centers follow the same pattern of increasing in number as the proportion of tract poverty escalates, but also, the average number of AJCs per poverty threshold are extremely similar across the urban and suburban analyses. Excluding the 5 mile range, the mean number of providers for urban and suburban tracts is nearly identical. This could speak to AJCs being similarly spatially matched to poverty in both suburban and urban areas. It could also speak to the relative paucity of AJCs—a small sample size. The greatest difference between the urban and suburban analyses is the proportion of tracts

in each poverty threshold. Whereas 89 percent of the suburban tracts are low or low-moderate poverty, only 53 percent of the urban tracts meet this definition.

Table 5. Urban Providership by Tract Poverty Rate – American Job Centers

		Number of Percentage of Tracts in This Total Tracts in		Mean # of Providers				
		Category	Category	In Tract	.5 miles	1.5 miles	5 miles	
	0% - 9%	158	20%	0.00	0.01	0.15	1.68	
Adult	10% - 19%	265	33%	0.02	0.02	0.19	1.93	
Poverty Rate per	20% - 39%	310	39%	0.01	0.04	0.24	2.16	
Tract	40%+	65	8%	0.00	0.06	0.48	2.74	
	All Tracts	798	100%	0.0	0.0	0.3	2.1	

Sources: American Job Centers Website, U.S. Census Bureau 2017 TIGER/Line Shapefiles, American Community Survey (2012-2016)

Suburban Food Pantries/Soup Kitchens

Allocating the 1,404 suburban census tracts by household poverty levels, the following divisions present: 61 percent of tracts are low poverty, 27 percent low-moderate poverty, 10 percent moderate-high poverty, and 2 percent concentrated poverty (see Table 6). At all levels except the five mile range, the number of providers increase as tract poverty levels increase (see Table 6). Within tracts, on average, there are 0.2 providers for low poverty tracts, 0.4 providers for low-moderate poverty, 0.8 providers for moderate-high poverty, and 1.1 providers for concentrated poverty tracts. For the 1.5 mile range, the number of providers advances from 0.9 for low poverty to 2.5 to 5.5 to 6.9 for concentrated poverty. The five mile range varies in that the number of providers increases with the degree of tract poverty except for the moderate-high to concentrated poverty tracts. Moderate-high tracts have almost 28 providers, whereas concentrated poverty tracts have about 26 providers. As specified in the subsection Suburban

American Job Centers, I think this derivation from the norm is a manifestation of many of these concentrated poverty tracts being situated in heavily industrial sites along Lake Michigan.

Table 6. Suburban Providership by Tract Poverty Rate – Food Pantries/Soup Kitchens

		Number of Tracts in This	Percentage of Total Tracts in Category	Mean # of Providers				
		Category		In Tract	.5 miles	1.5 miles	5 miles	
	0% - 9%	851	61%	0.2	0.1	0.9	10.6	
Household Poverty Rate per Tract	10% - 19%	377	27%	0.4	0.3	2.0	18.3	
	20% - 39%	144	10%	0.8	0.9	5.5	27.7	
	40% +	32	2%	1.1	1.3	6.9	26.3	
	All Tracts	1,404	100%	0.6	0.6	3.8	20.7	

Sources: Chicagoland Food Banks, U.S. Census Bureau 2017 TIGER/Line Shapefiles, American Community Survey (2012-2016)

Urban Food Pantries/Soup Kitchens

Urban census tracts are stratified by household poverty level as follows: 19 percent low poverty, 29 percent low-moderate poverty, 41 percent moderate-high poverty, and 10 percent concentrated poverty. With a slight exception for the in tract analysis, the number of providers increases with the level of household poverty. At the in tract level, there are on average 0.2 providers for low poverty tracts, 0.2 providers for low-moderate tracts, 0.4 providers for moderate-high tracts, and 0.6 providers for concentrated poverty tracts. I do not have a theory to account for low poverty and low-moderate poverty tracts having the same mean number of food pantries/soup kitchens. Looking to the 0.5 mile analysis level, the number of providers increased from 0.6 at low poverty, 0.8 at low-moderate, 1.5 at moderate-high, to 2.3 for concentrated poverty tracts. For the 1.5 mile distance, the number of providers ascends along the following schema: 6.3, 6.8, 10.6, 15.7. For the five mile range, there are 58 providers on average for low

poverty tracts and 89 for concentrated poverty tracts. This analysis reaffirms the sheer number of food pantries/soup kitchens in urban areas and alludes to urban tracts routinely falling within the provider catchment areas of multiple emergency food assistance organizations.

Table 7. Urban Providership by Tract Poverty Rate – Food Pantries/Soup Kitchens

		Number of Percentage Tracts in This Total Tracts		THE WALL IN OIL TO THE OIL				
		Category	Category	In Tract	.5 miles	1.5 miles	5 miles	
	0% - 9%	154	19%	0.2	0.6	6.3	58.1	
Household Poverty Rate per Tract	10% - 19%	235	29%	0.2	0.8	6.8	65.3	
	20% - 39%	330	41%	0.4	1.5	10.6	84.4	
	40% +	79	10%	0.6	2.3	15.7	89.1	
	All Tracts	798	100%	0.4	1.3	9.8	74.2	

Sources: Chicagoland Food Banks, U.S. Census Bureau 2017 TIGER/Line Shapefiles, American Community Survey (2012-2016).

Akin to the analyses of providership by tract poverty rate for American Job Centers, in both suburban and urban tracts the number of food pantries/soup kitchens increases as the tract poverty rate increases. In contrast to the AJC analysis, at the 0.5 mile range and beyond, there are noticeably more providers in urban areas than suburban areas. In other words, whereas the pattern of providership increasing alongside deepening poverty levels holds true for both urban and suburban FPSK, there is a disparity in the mean number of providers in urban versus suburban areas. For example, on average there are 5.5 FPSK within 1.5 miles of suburban tracts in moderate-high poverty versus 10.6 FPSK at that distance and poverty threshold for urban tracts.

DISCUSSION AND CONCLUSION

Key Findings

Through my analyses outlined in the previous section, I have developed six key findings. They are: 1) Significantly more census tracts with moderate-high poverty or concentrated poverty exist in Chicago than in the suburbs, but the suburbs have poverty too; 2) Chicago has more providers per land area than the suburbs; 3) Chicago has a higher ratio of providership to poor population than the suburbs; 4) For both suburban and urban areas, as poverty rates increase, so do the number of proximate providers; 5) Specific areas of the metropolitan region lack emergency food assistance and/or American Job Centers; and 6) In the suburbs, there is a mismatch between the need for emergency food assistance and the number of actual providers. I conclude that there is a moderate spatial mismatch between the locations of providers and the locations of poverty.

Significantly more census tracts with moderately high poverty or concentrated poverty exist in Chicago than in the suburbs, but the suburbs have poverty too. Figure 1 provides a visual representation of household poverty rates by census tract. From this map, one can see that the proportion of tracts considered low poverty or low-moderate poverty is greater in the suburbs than in the city. In fact, 61 percent of suburban tracts are low poverty compared to 19 percent of urban tracts (see Tables 6 and 7). Additionally, whereas only 12 percent of suburban tracts are moderate-high or concentrated poverty, 51 percent of Chicago tracts meet this definition (see Tables 6 and 7). This finding is in accordance with the results of Allard (2004).

Chicago has more providers per land area than the suburbs. I hypothesized that urban areas have more food pantries/soup kitchens and American Job Centers than suburban areas. Suburban Chicagoland spans a far greater area than the city of Chicago; the suburban land area is thirty times the size of Chicago. Thus, while the suburban portion of Chicagoland has more American Job Centers and food pantries/soup kitchens in total than the city, Chicago has far more American Job Centers and food pantries/soup kitchens than the suburbs per square mile. In fact, per square mile, Chicago has 8.5 times the number of American Job Centers and 16.5 times the number of food pantries/soup kitchens as suburban Chicagoland (see Table 1). The provider coverage maps that constitute Figures 5-10 further support this conclusion. For example, Figures 7 and 9 show the proportion of land covered by provider buffers. In both cases, the proportion of the land within reach of a provider is visibly greater in the urban analysis than in the suburban analysis. This finding is mirrors Allard (2004) and Allard (2017). Given these findings, I confirm this hypothesis. While this conclusion is important, Chicago also has higher density levels than the suburbs. Thus, an analysis involving population data is critical for assessing patterns of providership.

Chicago has a higher ratio of providership to poor population than the suburbs. I hypothesized that the ratio of proximate providers to poor individuals and households is higher in urban areas than suburban areas. Tables 2 and 3 show that for every distance range, except the within tract range, the ratio of providers to poor adults/households is greater for urban areas than suburban areas. For American Job Centers, there are approximately two times more providers to

¹I attribute the discrepancy at the within tract distance to suburban tracts covering much larger land areas than urban tracts on average.

poor adults in urban tracts than suburban tracts. For food pantries/soup kitchens, there are approximately three times more providers to poor households in urban tracts that suburban tracts. This finding contrasts with the conclusion of Peck (2008). My results appear at odds with Allard (2009), however given the different geographic methodologies of our studies, it is not appropriate to make a direct comparison.

For both suburban and urban areas, as poverty rates increase, so do the number of **proximate providers.** I did not form a hypothesis directly related to the relationship between tract poverty levels and the number of proximate providers, but I felt that this analysis was important as it could shed light on the existence of a spatial mismatch. Instead, this finding, derived from Tables 4-7, was profoundly patterned in a very spatially matching. With the exception of a few deviations from this pattern in the case of in-tract analyses (which I attribute to small sample size for number of providers and inconsistently sized census tracts) and in the case of some suburban census tracts with concentrated poverty (which I attribute to a large portion of these tracts being located in industrial areas next to Lake Michigan, limiting the potential space where providers could feasibly be located), as poverty rates increase, so do the number of proximate providers. While Tables 4-7 provide the most obvious evidence of this finding, Figures 7 and 8 provide a visible illustration of this theme. This finding is encouraging as it suggests that both food pantries/soup kitchens and American Job Centers are located in places that account for concentrations of poverty. Allard (2004) and Peck (2008) cited this same finding between tract poverty rate and number of providers within 1.5 miles.

Specific areas of the metropolitan region that lack emergency food assistance and/or American Job Centers. I did not form a hypothesis addressing specific areas of the region

where I anticipated services would be absent. That said, my series of maps (Figures 5-10) clearly indicate pockets that are lacking services. Whereas the placement of suburban American Job Centers appear to align well with the location of high poverty communities, the allocation of AJC in Chicago does not intuitively align with the allocation of poverty. The community areas of Englewood and Washington Park, composed primarily of moderate-high to concentrated poverty census tracts, do not fall within 1.5 miles of an AJC. This finding aligns with Allard (2009) who noted these neighborhoods as high need and insufficiently serviced (70-71). Additionally, there are sporadic moderate-high and concentrated poverty tracts lacking providers in Auburn Gresham, South Shore, Riverdale, Austin, and Rogers Park. More acutely, the southeast side of the city is critically without an American Job Center. In summation, in Chicago, American Job Centers seem to prioritize being located in the central part of the city and along El train lines, rather than being located in the communities of greatest need.

Suburban food pantries/soup kitchens have a high tendency to be located in areas of greatest need. Every concentrated poverty census tract is within one and a half mile of a provider; only a handful of concentrated poverty suburban tracts are not within half a mile of a provider. The takeaway for the suburban analysis is the large swaths of low poverty and low-moderate poverty census tracts located farthest from the city that do not have any providers in site. While the relative need in areas like Crystal Lake, Illinois; Rensselaer, Indiana; and Valparaiso, Indiana is low, for families struggling with poverty in these communities, help is far away.

While there are disproportionally far more food pantries/soup kitchens in Chicago than in the suburbs, there are multiple community areas in the city that do not have a food pantry/soup

kitchen. The following urban neighborhoods lack such a provider: Jefferson Park, Forest Glen, Montclare, West Ridge, Hermosa, Avondale, Near South Side, and Armour Square. With the exception of Forest Glen and to a lesser extent Jefferson Park, these community areas are by no means affluent. Additionally, there are many moderate-high poverty census tracts that do not fall within half a mile of a FPSK. Such areas include portions of South Shore, Greater Grand Crossing, Chatham, Chicago Lawn, South Lawndale, and Logan Square. So as to not sound too alarmist, I should note that these areas all fall within 1.5 miles of a provider. However, 1.5 miles can be a very arduous distance for seniors and those with disabilities, especially in winter.

In the suburbs there is a mismatch between the need for emergency food assistance and the number of actual providers. I hypothesized that food pantries/soup kitchens are better aligned with the distribution of impoverished populations than American Job Centers. Reviewing Figures 5-10, I can find no obvious evidence of food pantries/soup kitchens better aligning with the locations of poverty than American Job Centers. Moreover, for service provision to be spatially matched to poverty levels in suburban and urban areas, I would expect the ratio of urban providership to suburban providership in Tables 2 and 3 to be 1:1. However, as previously referenced, there are greater than three times as many food pantries/soup kitchens to poor households in urban tracts than suburban tracts (see Table 3). Given my definition of mismatch, I conclude that there is a spatial mismatch between the locations of poverty and the distribution of FPSK. In order to rectify the mismatch, some of the food pantries/soup kitchens in urban areas would need to be relocated to suburban communities experiencing poverty. Allard (2004) and Allard (2017) likewise conclude that there is a spatial mismatch in service provision between urban and suburban areas.

Moderate Spatial Mismatch

I hypothesized that that there is a spatial mismatch between the locations of poor populations and American Job Centers and food pantries/soup kitchens. My series of maps illustrate that proportionally more land falls in provider catchment zones in urban areas than suburban areas. The analyses in my tables indicate that there are more providers per square mile in urban areas than suburban areas and that there is a higher ratio of providers to poor populations in urban areas than suburban areas. Table 2 shows that there are approximately twice as many American Job Centers to poor adults in urban areas than suburban areas. Table 3 reveals that there are over three times as many food pantries/soup kitchens per poor household in urban tracts as in suburban tracts. Whereas the difference in AJC providership between urban and suburban locations is not large enough to be deemed a spatial mismatch, the differential for FPSK signals a spatial mismatch in providership between urban and suburban Chicagoland. Given the culmination of these findings, I conclude that there is a moderate spatial mismatch between urban and suburban providership.²

That said, I think it is more accurate to characterize this discrepancy between urban and suburban providership as a generalized lack of services rather than a mismatch. To me, mismatch suggests that there is an over-allocation of services in one area at the expense of another. In other words, there would be many service sites in an area of little need while an area of great need has little to no providers. This description of a mismatch is not what I see in my analyses, especially upon consideration of the visual data. I see urban areas with fairly proportionate service

²I anticipated that the discrepancy in providership between urban areas and suburban areas would be much greater. I wonder if part of this is attributable to the social service sites that have closed or reduced services due to Illinois' two year budget impasse. https://chicagotonight.wttw.com/2017/04/17/data-shows-impact-budget-impasse-social-services.

providership to poverty distributions and suburban areas that incrementally lag behind urban providership. Moreover, Allard never described mismatches as areas with an incredible abundance of services. Rather, he spoke as some areas being more fortunate than others in providership rates. I believe that the appropriate remedy is not to move existent providers from urban areas to suburban areas, but to keep the current urban providers in place and to incorporate new providers in suburban areas.

Study Limitations and Areas for Future Research

While this study provides a digestible entry point into the scale of service provision in relationship to poverty across Chicagoland, it has definite shortcomings. My analysis does not take into consideration provider capacity, the number of clients providers serve, and the amount of money providers spend. It is one thing for a social service organization to exist in close proximity to an area with a sizable population in poverty, it is another thing for the service center to have the staffing, funding, and programmatic resources to be able to adequately serve geographically proximate populations in need. My analysis does not consider whether service centers are accepting new clients, working off of waiting lists, or closed to new clients.

Moreover, my tables do not consider provider saturation, i.e. the spatial proximity of providers to one another per geographic area. Allard's (2009) analysis—one of the few to account for actual provider capacity/client loads—shows how important this variable is in determining findings. His study found that despite typically having the greatest number of providers per area, the need for services in high-poverty urban neighborhoods is so deep and funding so insufficient that providership per proximate poor person pales in comparison to other areas of cities.

A common theme I ran into while analyzing my data was uncertainty as to how my providership findings compare to actual need for services. For example, there are far more food pantries/soup kitchens than American Job Centers. Does this current ratio of emergency food assistance to American Job Centers align with the actual need for services? Should this ratio be so disproportionate? Moreover, my study does not take into account very low income populations who live above the poverty line, but still need and utilize social services. I feel strongly that a future study must include a robust needs analysis before delving into providership patterns. Otherwise, it is hard to draw strong conclusions regarding how well providership aligns with need.

Crucially, my analysis schema lacks a robust strategy for incorporating transit-oriented accessibility into my analysis. While the varying buffer distances are an attempt at this, they do not approximate true accessibility. Moreover, comparing five miles in the suburbs to five miles in the city is akin to comparing apples and oranges. With a car, five miles in the suburbs is generally an accessible distance. Without a car, five miles in the suburbs is nearly an impossible distance to traverse. In contrast, even with public transportation or a car, five miles in the city is a real slog. Having completed this study, I do not believe that five miles is a reasonable distance for analysis as it covers too much land mass. Ideally, this analysis would be based upon commute times rather than distance.

Similarly, if I were to do this again, I would change my definition of suburban Chicagoland. The MSA is a huge distance, and much of the land that I have considered suburban is truly exurban or rural and often non-inhabited industrial or agricultural land. Instead, I would only consider actual municipalities exceeding a particular population size. I need to do further

research to determine a more fine-tuned definition of what constitutes a suburb. I am surprised that other scholars use the non-urban portion of the MSA as their definition for suburban. Additionally, I would exclude from my analysis census blocks that do not have any population. To do this, I would take census tracts, cut the uninhabited blocks from them, and then aerially weight the tracts to better approximate population locations. At the very least, when creating my maps, I would map parks and industry on them to better approximate areas that are non-residential.

Additionally, my maps and tables provide no sense of population density. Often, I found myself wondering if the "low poverty" tracts in Indiana were in fact inhabited tracts with low poverty or if they were actually uninhabited farmland. As such, I would add density to future analyses to enable stronger, more accurate findings.

Furthermore, whereas the literature cites divisions in access to services by race, my study is devoid of an analysis of race. Peck's (2008) study of the Phoenix metro area identified that the correlation between the ethnicity of a tract's residents and the number of proximate providers is stronger than the relationship between tract poverty and providership (145). Hispanic population, more than poverty, predicted the number of providers in reach (Peck 2008: 146). Drawing from his accessibility score analysis, Allard (2009) contended that "neighborhoods with high percentages of black and Hispanic residents have far less access to social service providers than neighborhoods that are predominately white" (77). Allard's (2009) analysis of Chicago found a significant service gap by race with whites having better access than Hispanics who have better access than African Americans. On the whole, scholarship on service providership has largely considered racial disparities in access only as an afterthought, and findings have tended to be

incongruent across studies. Given the deep interaction between race, space, and poverty in the United States, non-whites' higher utilization of government relief programs than whites', and inconsistent findings across previous studies, I would have a deeper analysis of race in future studies.

Lastly, this study would be bolstered not only by an accessibility measure akin to Allard's (2009), but by greater quantitative robustness. ArcGIS has incredible computing powers. Further studies could pull from Peck's (2008) methodology and use distance decay functions or spatial regressions. I have not established a statistical test by which to declare an area as spatially matched or spatially mismatched; such an analysis would be more doable if using spatial regression.

Follow-up studies to mine are absolutely needed. It will be crucial to survey and to interview social service providers and clientele to better understand who utilizes these services, where they live, how they access services, what they consider to be a reasonable distance to a site, what their needs are, and how well their needs are being met. Similarly, it would be fascinating to flip my quantitative question into a qualitative one that addresses the mechanism by which social service agencies decide where to locate and to maintain their service sites.

The Devolution to Social Services in the Context of Suburbanizing Poverty

My study was developed in response to the enactment of Welfare Reform and the devolution of social services to local providers. The justification for PRWORA's transition in the allocation of aid is that services help people to overcome the personal barriers that prevent them from achieving and sustaining stable employment and self-sufficiency. By increasing gainful employment levels and thereby reducing the need for assistance (the number of people in

poverty), the number of people reliant upon welfare and social services was expected to decline. Instead, the proportion of the population currently in poverty is relatively the same as the proportion in poverty when PRWORA was adopted (Chaudry et al., 2016).

Given this continual need for services and the development of suburbanizing poverty, it is crucial to study how well the service safety net aligns with the locations of impoverished populations. My evaluation has concluded not only that providership is uneven across urban and suburban locations, but more poignantly that there are not anywhere near enough providers to match the degree of need. For example, within a 1.5 mile radius of census tract centers, on average there are only 2.7 American Job Centers to every 10,000 poor adults. The urban ratio, 4.5 American Job Centers to every 10,000 poor adults, is hardly any better. Within a half mile radius of urban census tracts, on average there are only 4.5 food pantries/soup kitchens to every 10,000 poor households. For suburban households at that distance range, there are one third as many food pantries/soup kitchens as urban areas for the same number of poor people. Imagine 2,000 household heads in line at a food pantry! That is the current ratio of poor urban households to providers within a half mile. These levels of providership are incredibly burdensome and in no way sustainable. Not only has Welfare Reform failed to live up to its vision of fostering widespread economic self-sufficiency, but also the social service safety net created in its wake is woefully inadequate to address the need for assistance—degree of poverty—that exists today. This conclusion mirrors the findings of Allard and Roth (2010), Berube and Kneebone (2013), and Allard (2017).

POLICY RECOMMENDATIONS

The best policy model to address the mismatch between the need for services and current providership levels would be one that prevents such large proportions of the populace from reaching impoverishment in the first place. Implementation of universal living wages and the stabilization of housing, medical, and educational costs would go a long way in rectifying disparities between the need for aid and the availability of assistance (be it monetary or service-based). That said, given the current geo-political environment, such bold, widespread policy initiatives are likely unfeasible. As such, my recommendations fall into two categories: Short Term Action and Larger Goals.

Short-Term Action

My study enabled me to highlight specific areas of Chicagoland that lack American Job Centers and/or food pantries/soup kitchens. As such, I recommend that an American Job Center be opened near the border of the Englewood and Washington Park neighborhoods. If additional funding and capacity exists, I another American Job Center should be instituted in South Deering. In terms of food pantries/soup kitchens, an emergency food assistance provider should be opened in the following community areas: Jefferson Park, Montclare, West Ridge, Hermosa, Avondale, Near South Side, and Armour Square. Additional FPSK would ideally be developed in the moderate-high census tracts of South Shore, Greater Grand Crossing, Chatham, Chicago Lawn, South Lawndale, and Logan Square that do not currently fall in the half mile catchment area of a provider. The biggest area of concern in suburban Chicagoland is the sizable swaths of

low and low-moderate census tracts located along the central and far reaches of the MSA that do not have any FPSK in sight. Given the large geographic distances in these areas and the relatively low need, mobile food pantries that circulate throughout these areas on a weekly basis would be a fabulous program to adopt.

Larger Goals

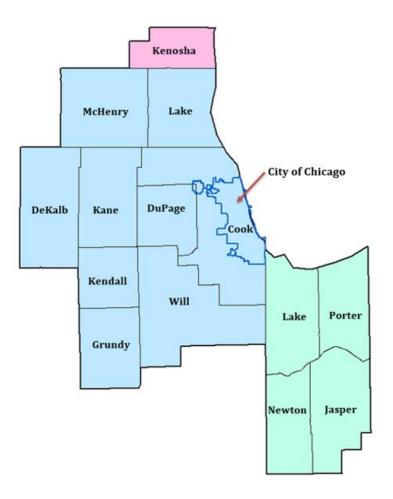
The data shows that the PRWORA model of outsourcing poverty alleviation to a devolved safety net is inefficient and insufficient in light of current geographies and degrees of need. That said, there are no indications that policymakers or the executive branch have any interest in changing the way the safety net operates. So long as this PRWORA model of privatized service provision continues to reign, more oversight and centralized management of services is crucial. I recommend designating a state-based agency whose sole purpose is to robustly measure need for services and then to take action to address mismatches between need and service provision. Such an agency would act as an intermediary between federal/state funding agencies and local communities to ensure that services are brought to locations that need them the most. For example, such an agency could facilitate opening an American Job Center in the south/southeast side of Chicago, an area curiously lacking such a center. Moreover, this agency would work with churches and local community organizations to set up food pantries in neighborhoods that lack services. This agency could facilitate relationships between wealthier and poorer organizations, ideally encouraging wealthier churches and civic organizations to sponsor cousin organizations who struggle to meet their area's need for services.

Secondly, I recommend increasing the amount of direct aid available to populations in need. This study clearly shows that the devolved safety net is precarious, fails to ensure equal

access to services across geographies, and is inadequate in light of current need. An ideal avenue for increasing direct aid is to significantly bolster the amount of money in the food stamp program. Food stamps improve poor people's access to food as food stamps are generally accepted at any grocery or convenience store. It is more efficient to fund food stamps—direct aid to poor people—than to fund heavily bureaucratic food banks and disparate local providers.

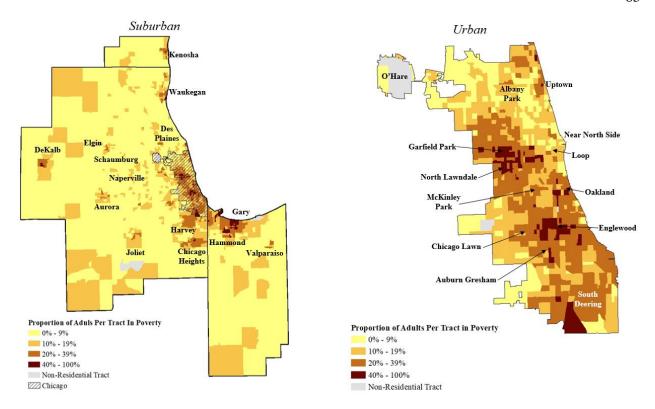
Moreover, because food stamps can only be used for food, investing in this program aligns with the anti-handout ideology of Welfare Reform. Additionally, because food stamps are used on the private marketplace, they fortify the public-private partnership ideal characteristic of PRWORA.

APPENDIX A ADDITIONAL FIGURES



Source: U.S. Census Bureau 2017 TIGER/Line Shapefiles

Figure 1. Counties in the Chicago Metropolitan Statistical Areas



Sources: U.S. Census Bureau 2017 TIGER/Line Shapefiles, American Community Survey (2012-2016)

Figure 2. Chicagoland Individual (Adults 18 and Over) Poverty – 2016

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VITA

Christine Breit was raised in the foothills west of Denver, Colorado. She graduated with a B.A. in Urban Studies and a minor in Sociology from Trinity University in San Antonio, Texas. At Trinity, Ms. Breit participated in numerous collaborative community-based research projects; her favorite endeavors included a city-wide needs assessment for the LGBTQ community and an ethnography of the social networks of residents of a central city neighborhood. During college, Ms. Breit was employed by Southwest Workers Union, where she worked on accountable governance and just redistricting campaigns. After college, she held data analysis jobs, first for a private consulting firm specializing in collegiate enrollment management and thereafter with a county social service department. Ms. Breit received her M.A. in Sociology from Loyola University Chicago in 2018. Throughout graduate school, Ms. Breit was an active member of ONE Northside's affordable housing team. Continuing her commitment to the preservation and development of affordable housing and the strengthening of grassroots neighborhood power, Ms. Breit intends to work at the intersection of policy, planning, and organizing.