Food Mirages, Purity & The Other Bodies:

Exclusion in "Accessible" Alternative Food Networks in Portland, Oregon

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Abstract

In this thesis, I explore the unintentional environmental exclusion of certain bodies in alternative food distribution networks in Portland, Oregon. I look specifically at two nonprofits – Portland Fruit Tree Project and Zenger Farm - that attempt to make fresh, local, and organic produce more accessible to low income and minority communities. Through interviews with staff, surveys of participant demographics, and Geocoding participant addresses on ArcGIS, I discovered what the funding sources are of these non-profits, what their outreach goals are, and how expansive their distribution network is. Additionally, using spatial analysis tools on ArcGIS, I delineated two regions in Portland that are most likely to experience food insecurity, and collected data on how aware these communities are of the services of these nonprofits, their level of interest in these nonprofits, and their perceptions of accessible food sources. I found that these nonprofits have a fairly wide distribution network, but primarily appeal to white community, albeit low-income, members that are apart of the dominant cultural discourse in Portland. Communities of color in Portland are more likely to lack amenities and would, in theory, benefit most from these services. However, with the acknowledgement of recent targeted outreach goals on the part of these nonprofits, these services are essentially unknown to the targeted communities. With theoretical backing, I argue that my finds show that the discourses surrounding these nonprofits echo notions of "purity" associated with an environmentalism that has historically been inaccessible. These notions of "purity" are opposed to agro-industrial consumptive lifestyles, and have the potential to stigmatize those who participate in those lifestyles. Furthermore, these nonprofits are able to function based off of uneven capital distribution in their favor, yet their mission statements would be irrelevant without this uneven capital distribution. I suggest Community Mapping as a multiclass, participatory approach that these nonprofits can be apart of to move towards working with, rather than for, these targeted communities.

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Purity & Justice in Social Movements

"When we see nature, we read out culture. When we justify culture, we ground it in nature."- Richard White, The Problem with Purity

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Picture this: a middle-class Caucasian intern at the Portland Fruit Tree Project, a nonprofit dedicated to the care and harvest of fruit trees throughout Portland that would otherwise be neglected, standing in front of a large group of volunteers. This intern was I, and the volunteer group was gathered to learn about winter fruit tree pruning. As I explained how the Portland Fruit Tree Project donates half of the fruit they collect to food banks, and the other half to participants, of which half of are of low income status, I saw many head nods and grunts of approval. The volunteer group was diverse in age, gender, and income status, but they had one undeniable characteristic in common – they were all Caucasian. Although this could be a reflection of the general demographic of the city – 73% white (Curry-Stevens et al., 2010), it could also be emblematic of a larger trend of environmental exclusion based on notions of purity in environmentalism and uneven geo-historical allocations of capital.

The Portland Fruit Tree Project is an "alternative to the alternative" food supply as coined by Julie Guthman (2011, 263-281) to describe sustainable agriculture projects led by elite members of society that attempt to make volunteerism and food distribution networks more accessible to those who are often excluded from environmental movements. Yet, these "alternatives to the alternatives" in Portland are only able to supply a niche product that fails to address the place-based personal and cultural perceptions of accessible foods, and echos discourse of disgust around industrial-food consuming bodies.

On a broad scale, this paper will explore how certain "non-pure" bodies are excluded from environmental movements. I will explore this exclusion within two "alternative to the alternative" nonprofits in Portland – Portland Fruit Tree Project and Zenger Farm. I will argue that while the distribution networks of Portland Fruit Tree Project (PFTP) and Zenger Farms are geographically wide spread, their services appeal to a primarily Caucasian, albeit not necessarily upper class, self-selected volunteer group that identifies with the values of these organizations. Those that do not participate yet are in the "target population" of outreach rely on the agro-industrial food system that these nonprofits explicitly object to. These communities have different perceptions of accessible food sources for their own reasons. However, there is an

inherent tension between these non-profits' desire to be more inclusive of these communities and their stigmatization of the consumptive patterns of these communities. They, thus, stigmatize the communities themselves. Furthermore, these nonprofits, as professionalized social movements, benefit from the same uneven capital distribution that has created geographies void of amenities in the first place. Unlike other urban American cities, there has been no urban farm-based food justice movement from within marginalized communities because there lacks a collective identity.

I will argue these points by first exploring purity and exclusion in the environmental movement, and then, more specifically, in the sustainable agriculture movement. I will then address social movements and academic theories – such as environmental justice, food justice, urban political ecology, and urban farming – that object to the socioeconomic inequalities inherent in purity and exclusion. Portland Fruit Tree Project and Zenger Farm have values that fall somewhere in between these "pure" and "just" movements. By mapping the distribution networks of the aforementioned "alternative to the alternatives," surveying demographics of participants, interviewing staff on outreach programs, and survey perceptions of food accessibility in the general public, I discovered that the services are not necessarily reaching those they intend to reach, and those they attend to reach are not necessarily interested.

Environmental Exclusion

Environmental exclusion comes in many different forms, but is manifested strongly in the history and current practices of the Wilderness Movement. The values in the wilderness movement serve as an example and a loose guide for talking about exclusions based on notions of purity.

The twentieth century has left us, as civil society members, in the wake of social and environmental "horrors" such as two World Wars, the Holocaust, the expansion of the automobile, the rise of the agro-industrial complex, and sexism and racism, to name a few. Richard White, in his famous essay "The Problem with Purity", argues that in order to deal with these horrors, we, as well intended civil society members, create values based upon something that is pure and distinct from us, such as Nature. While Bill McKibben (1989) in his book *The End of Nature* argues that nature has been destroyed - that our industrious culture has touched every part of nature - people still cling to the idea of a pure nature when "preserving wild lands,

planting gardens, hiking in the mountains, worrying about floods, wildfires, and earthquakes" (White, 1999). In other words, people look towards nature to escape from culture, yet try to forget that culture spills into nature, making not as pure as was expected. The Sierra Club home webpage is homage to this paradoxical thinking: while it boasts about wilderness preservation areas, it acknowledges the prevalence of cultural threats to nature such as coal power plants (Sierra Club, 2014).

When the history of wilderness preservation is explored, it becomes apparent that the normative vision of a pristine and pure wilderness devoid of humans is socially constructed, and that the concept of purity is linked with exclusion. In *The Trouble with Wilderness and/or Getting Back to the Wrong Nature* Bill Cronon (1996) argues that the American perception of "nature" is as much apart of American culture as, say, Disneyland, because the American perception of nature changes according to culture. For instance, 250 years ago the wilderness we now glorify with adjectives such as "beautiful" or "awe-inspiring" was demonized with words such as "savage," "deserted," or "barren." Yet, the expansion of the frontier during the 1800s under a larger cultural context of transcendentalism married American identity with a newly romanticized wilderness. In 1890, Fredrick Jackson Turner presented his *Frontier Thesis* that argued how the rugged individualism of creating a new democracy in the midst of primal land that was encountered through western expansion was the first uniquely American identity (Turner 1898). Cronon referenced Turner's Frontier Thesis to argue that the first wilderness areas such as Yosemite National park (1865), and Yellowstone (1872) and were erected more so to "protect the nation's most scared origin," or this new American identity that was quickly vanishing due to settlement (Cronon, 1995), rather than preserve biodiversity or natural resources. In her book, *The Ecological Other*, Sarah Ray (2013) builds upon Cronon's argument by saying that erection of wilderness areas acted as a "social safety valve" "to protect and sustain American character and national identity" (p38). More so, she references Bruce Braun who calls wilderness areas a " 'purification machine' that produced ideal Anglo-American men" (p9). Thus, the current American conception of "nature" was created through the pioneers' association with the frontier. "Nature" can never be void of human influence because its conception was entirely dependent on human influence.

Prior to this preservation of American identity through the social construction of wilderness and movement of the frontier, wilderness areas had been cultivated by indigenous

populations whom were ultimately displaced. For instance, before Yosemite National Park was Yosemite National Park, the people of the Ahwahnechee tribe had been cultivators and stewards of the land for purposes of subsistence for centuries (Dowie, 2009). Yet, when John Muir founded the Sierra Club in 1892, he "began almost immediately pressuring the federal government to make Yosemite Valley and its environs into a national Park, devoid of all human settlement." His intent was to drive out these "hooved locusts" as he called them (Dowie, 2009; p7). Displacement was successful. This model of displacement was replicated throughout the world, and tribes such as the Maasai of East Africa, the Karen of Thailand, the Pygmies of Uganda and Central Africa, and countless others fell victim to National Parks (Dowie, 2009). The wilderness areas that we view as void of humans have, in fact, been intentionally constructed by humans in attempts to racially purify, and, prior to purification, had had human influence for centuries beforehand.

The contemporary adventure culture that values exploration of these wilderness areas echoes this historical exclusion. Sarah Ray uses an analysis of the corporeal to explain how participation in adventure culture presupposes a certain kind of body, with a certain kind of origin. More specifically, it presupposes a fit, non-disabled body that is gendered male. For instance, as Ray argues, experiencing wilderness areas are about "exploration" and "exploitation" of land by "enduring pain" through the masculine body. Although all genders participate in contemporary adventure culture, the rugged individualism of exploring an unknown landscape was originally associated with male characteristics. This is not to say that a feminine body is incapable of enduring pain, but rather, as Krista Comer phrases nicely, "wilderness becomes a space capable of reinvigorating masculine virility" (Ray, 2013, p41). This desire to explore open spaces also excluded, and continues to exclude any disabled bodies. As Nancy Mairs, a disabled women argues, "the conventional West…demand[s] a physical vigor I've never enjoyed" (Ray, 2013, p35). The creation of spaces for masculine virility had racial exclusions as well. Sarah Ray coins these "less than ideal" bodies, include the native bodies that were displaced, as "ecological others."

However, ecological others are not just bodies that are excluded from the wilderness movement and associated practices. The following summarizes the term "ecological other" quiet nicely:

> "[Ecological others] can also be poor whites, rural people, inner-city dwellers, border crossers, climate refugees, the Chinese, American mothers, or any individual group that is perceived by dominant environmental thought as a threat to the environment but whose tenuous relationship vis-á-vis nature is blamed for environmental crisis, even as it is more a symptom of broader power relations" (Ray, 2013, p180).

In other words, ecological others, for whatever reasons, are either unable to participate in environmentalism, or do not associate with the values of environmentalism, and, in turn, environmentalists regard them as the problem makers.

The creation of wilderness areas as areas of masculine refuge and purification of the American identity also coincided with other progressive era notions of public health concerns about urbanization and environmental destruction. For instance, in her definition of Human Ecology in 1907, Ellen Richard Swallows mentions the "physical deterioration [of the body] so evident under modern conditions" and calls for finding means to "acquire a body physically fit, capable of securing the greatest capacity for work and for play – for life" (Merchant 2012, p443). The synthetic and chemical outputs inherent in modernization such as pollution threatened non-human nature and physically fit, ecological bodies. For instance, in her revolutionizing book *Silent Spring*, Rachel Carson explains how "the rapidity of change and the speed with which new situations are created follow the impetuous and heedless pace of man rather than the deliberate pace of nature" (Carson, 1962, p3) of which synthetic agricultural chemicals are an example. These "sinister" chemicals can "accumulate in the tissues of plants and animals" and "have the potential to destroy us along with the insects." Worries about urban public hygiene domesticated and feminized cities as places to be cleaned up, while wilderness areas became refuge for masculine and fit bodies that were able to escape the dirty interiors of city life (Ray, 2013). Worries about public hygiene and environmental health also contributed to the stigmatization of bodies that were exposed to such conditions – an instance of ecological other bodies.

The Ethical Eater and the "Ecological Other"

The sustainable agriculture movement coincides with notions of purity, in that it opposes the wasteful production systems of the agro-industrial complex, demonizes the food that comes out of this complex, and views sustainable agriculture as beneficial to, if not synonymous with, nature. There is a moral elitism on the consumer end of this movement, and a stigmatization of those who, for whatever reason, chose not to participate.

While motivations for an alternative food movement that grew in the 1960s and 1970s were diverse, ranging from environmental concerns about eutrophication due to agricultural run-off and soil erosion (McClintock, 2013) to social incentives to create community (Turner, 2011) and jobs (McClintock, 2013), the movement was unified by the underlining objective to subvert and change the agro-industrial system, and revert back to systems of lower input (Guthman 2004; Reynolds, 2010; McClintock, 2013). The Sustainable Agriculture Research and Education Project (SAREP) at University of California, Davis defines the goals of sustainable agriculture quite broadly as "environmental health, economic profitability, and social and economic equity" (Alkon 2008, p2). In his book *Fast Food Nation*, Eric Schlosser's (2001) description of fast and processed food as "inextricable from the de-skilling, racializing, and youthenizing of restaurant and food-processing work" (Guthman, 2003 p2) falls far short of these goals. Thus, fast and processed foods are framed as the antithesis of the sustainable food movement. This "renewed sense of importance about healthy diets"(Guthman, 2003, p24) created distinctions between "purity and pollution" (Ray 2013 p1) in regards to food.

In a similar way that Nature is framed as pure, the production practices of sustainable agriculture are also framed as pure because of its' association with nature.
For instance, as Ray explains, locavores – a term that is now an official part of the American lexicon that means one who primarily eats locally grown food - "seek a pure connection to the land that has not been corrupted by industrial food production" (p 3). This uncorrupted land is presumably land that is farmed organically. Despite the physical labor and human ingenuity that goes into sustainable agriculture, farmer's market attenders still taste fresh apples or pears with the assumption that they are taking "a bite of nature" (Alkon, 2008, p272). As Alkon states quite eloquently, "the site of sustainable environmental praxis has moved from the wilderness to lands inhabited by humans"(Alkon, 2008, p272). Sustainable agriculture is conceived of as a natural

area void of human labor and influence despite our "ecological engineering" (Shellenberger and Nordhaus, 2011) of the land.

The conceptual purification of alternative production and consumption networks distances some of the social inequalities still embedded in sustainable agriculture. Conventional agriculture operations are often the most exploitative of their workers, paying undocumented workers well below a living wage, while subjecting them to dehumanizing body checks and exposure to harmful chemicals (Guthman, 2004). At the same time, the consumer end of the industrial agriculture coin is one that presents low-cost, calorie intensive products to the most vulnerable populations (Kumanyika and Grier, 2006). Cheap labor begets cheap products. Yet, as conventional agriculture industries in California have switched over to organic because of consumer demand, these social inequalities are still pertinent in the organic industry today (Guthman, 2004). Organic farm labor, at least in California, is just as exploitative as industrial farm labor, with the exception of exposure to pesticides. These inequalities have been masked by an organic or local label gives the product an ethical seal of approval.

Similar to the conservation movement, the history of and rhetoric that surrounds alternative food movements and conscious eating assumes a Caucasian, middle-class demographic, often excluding "ecological others," albeit different ecological others than the conversation movement excludes (Guthman, 2011; Alkon and Agyeman, 2011 - intro); Ray, 2013). While the conservation movement excludes Native Americans, the sustainable agriculture movement is more likely to exclude Hispanic bodies that are the agricultural laborers, and African American bodies that have discriminatory histories associated with farming. For instance, when Michael Pollan, who is regarded as a hero in many food activist circles, tells readers "not to eat anything your great-grandmother wouldn't recognize as food," he is assuming a Caucasian audience that embodies the histories of homesteaders that settled after the conquering and domination of the wild frontier (Pollan, 2006; Cronon, 1995; Alkon and Agyeman, 2011 - intro). He doesn't recognize that certain people's ancestors have food histories that involve laboring in a field all day only to watch their masters consume and sell the fruits of their labor, or having their land, and thus their ability to sustain themselves in traditional ways, stolen, divided, and colonized (Dowie, 2009; Norgaard et al., 2011; Alkon and Agyman, 2011 - into).

Those who do not participate as consumers in alternative food systems, regardless of ethnicity, due to a variety of different but equally valid barriers - economic, geographical, personal, or cultural (Freeman et al., 2008) - are also stigmatized. Sarah Ray, borrowing from Stanescu, exemplifies this very well by stating, "to stigmatize a food…runs the extreme risk of serving as a proxy to stigmatize the people who eat it" (p3). The locavore and other alternative food customer's inclination is to "be disgusted by the fast-food habits of America's (increasingly obese) poor" and to render "fat people" as ecologically other because "they have not been enlightened to the ecological consequences of their eating habits; neither do they choose active, outdoor lifestyles that might make them care about the environment" (Ray, 2013 p3). Although it is commonly known that alternative food is more expensive (Guthamn, 2013), many alternative consumers believe it is the responsibility of the individual to spend more money on good food, regardless of income (Alkon, 2008). As Julie Guthman (2003) argues, the flip side of this is that conscious eaters, those that consume organic, fair trade, and/ or local products, are assumed to have higher moral standards, and, in turn, healthier, fitter bodies than these "mindless consumers." Often times, organic consumers and producers believe that if they simply educate the poor, they will be enlightened to purchase organic foods (Alkon, 2008). As we shall see, there are many barriers to the attainment of organic foods beyond a lack of knowledge. Many times, however, barriers are irrelevant because people choose not to purchase alternative foods based on personal preference.

From Environmental Justice to Food Justice

When talking about the exclusion of ecological bodies in the environmental and sustainable agriculture movements, it is important to also discuss the social movements that have arisen from within these marginalized communities – specifically how communities have opposed institutionalized racism in the context of alternative productions of food.

Rather than categorizing "nature" as a pure, non-human entity as mainstream environmentalists do, environmental justice activists, born from civil rights movements, define the environment as the physical built (often urban) space where people live, work, play, eat, and relax (Alkon, 2008). Environmental justice activists view social issues as inextricably linked to environmental issues (Alkon, 2008). More specifically, environmental justice is motivated by

the notion that the bodies of low income communities and communities of color receive a disproportionate burden of environmental risks (Alkon and Agyeman, 2011 - intro). Many studies have tried to quantify these uneven allocations, and connect them to issues of public health (Gray et al., 2013; Lersch and Hart, 2014; Kitchen, 2013). However, other authors argue that it is easier to find a correlation between the geographical location of environmental burdens and marginalized communities, but it can be harder to prove causation between the location of environmental toxins and health disparities (Auyero et al., 2009). The latter argument has the potential to attribute the disproportionate health burdens that low income and minority communities face, such as asthma, diabetes, and obesity, to life style choices rather than uncontrollable structural inequalities. This is consistent with the victim blaming and the "if only they knew" mentality that is often exhibited by environmentalists and, more specifically, participants of alternative food networks. Determining why low income communities and communities of color live in areas characterized by lower environmental quality becomes a chicken and eggs debate.

However, contrary to Auyero's argument, I agree with much of the recent literature on urban political ecology, as will be discussed below, that structural inequalities and limited environmental amenities often shape what an individual chooses and is able to consume. I will argue now, as I will continue to argue throughout the rest of the paper, that choices in regards to food consumption should be respected, even when the choice is to participate in the agro-industrial food complex.

Although environmental justice activism and literature has mainly revolved around environmental burdens such as proximity to toxins, affordable and nutritious food has been acknowledged as a basic amenity to which many low income and minority communities have limited access to. Such communities may live in what is referred to as "food deserts," or areas with little or no provision of fresh produce and other healthy food" (Bader et al., 2010). The lack of access to fresh produce among the urban poor may cause some individuals to identify as food insecure. According to Freeman et al. (2013), the percentage of U.S. Households that were identified as food insecure (15%) is weighted more heavily towards African American (25%), Hispanic (26%) and low income households (35%).

Economic disparities can often cause food insecurity, and ethnic minorities are more likely to experience poverty. Economic barriers can be measured by personal household income, income

level by census track, or price disparities within supermarkets. It has been shown that those who experience poverty are more likely to be food insecure (Freeman et al., 2013; Bader et al., 2010; Donald; 2010) and minority communities are more likely to experience poverty. For instance, nationally "27% of African Americans and Hispanics live at or below the poverty line" while only "1.3% of urban whites live in high poverty tracts" (Eisenhauer, 2001).

In addition to economic barriers food accessibility can be limited by geographical distance to a supermarket (Sage et al., 2013; Sparks et al., 2009; Donald, 2013). Supermarkets have become the standard food source for assessing the location of food insecure areas because of their abundance (McClintock, 2011), and their greater variety and quality of healthy foods than food sources such as corner stores (Bader et al., 2010). Yet, access to mobile vehicles or public transportation can serve to extend or decrease physical distance from a supermarket (Bader et al. 2010), making physical geographical distance less relevant, and vehicle accessibility more relevant. In the most recent food desert literature, food deserts were defined as census tracts that incorporated both economic, geographical factors, and vehicle availability factors (Breyer et al., 2013; Sparks et al., 2009). The USDA created a Food Access Research Atlas that also measures food deserts by different combinations of these three factors and more.

Limited access to supermarkets can cause health disparities associated with inexpensive fast and processed foods and a lack of such as diabetes and obesity (Reynolds, 2010). These are felt most strongly in low income and minority communities. Although the U.S. has the highest obesity rates of any country (Schlosser, 2001), and childhood obesity is especially high, a study that summarized various findings on childhood obesity found that "in some cases, obesity rates for ethnic minority children exceeded rates for white children by 10 to 12 percentage points" (Kumanyika et al., 2006). For instance, obesity rates between 1999-2002 were higher for African American girls (24%) and boys (19%), Hispanic girls (20%) and boys (25%), and Native American girls (18%) and boys (22%) as compared to Caucasian girls (13%) and boys (13%). While I have argued that bodies should not be stigmatized, obesity leads to an overall lower quality of life and these statistics should not be ignored. According to this study, obesity can be caused by a variety of factors including, but not limited, obstacles to physical activity such as "unsafe streets, and dilapidated parks," aspects of the home environment, such as television viewing, and, most pertinent to this study, access to healthy food options.

This uneven distribution of food amenities has spurred a food justice movement that is a marriage of environmental justice and the alternative food movement. According to Mares (2011), while food issues were not always the forefront of the environmental justice movement, some activists saw this as an issue of concern as early as the 1980s. However, the movement exploded in September of 2008, as an umbrella network of food justice organizations emerged known as the Growing Food and Justice For All Initiative (GFJI). These organizations try to serve "the interests of communities and organizations whose leaders have felt marginalized by white-dominated organizations and communities " (Morales, 2011 p157). Erika Allen, one of the founders of this organization, stated at the first conference that, "food is the next frontier of the civil rights movement," (Morales, 2011 p157). Food insecurity issues are framed as "manifestations of racism and poverty," and can be addressed "through the creation of a local food system" (Alkon, 2008 p281).

As will be discussed later, but I will mention it now, a large part of food justice pertains to the production and consumption networks of urban agriculture. Food justice activism seeks to empower low income communities and communities of color to create their own local food systems by exercising the right to "grow, sell, eat [food that is] fresh, nutritious, affordable, culturally appropriate, and grown locally with the care for the well-being of the land, workers, and animals" (Alkon and Agyeman, 2011). Perhaps food justice is the more comprehensive version of the sustainable agriculture movement in that it acknowledges both the social and non-human environmental implications of the industrial-agriculture system.

Urban Political Ecology: Untangling the Creation of Food Deserts

As mentioned previously, food justice is largely a reaction to the uneven distribution of accessible food places (i.e. supermarkets). In order to fully understand food deserts and the current state of urban poverty in many American cities, it necessary to unravel the historical and geographical events that led to the creation of food deserts using theories of urban political ecology. In short, it has been argued that declines in urban health are related to urban history, which in turn are connected to issues of race, class, and gender.

Urban political ecology can be thought of as the academic sister to environmental justice. According to urban political ecology, the current characteristics of an urban environment are the

result of certain "socio-natural" historical processes that are not independent from race, class, and gender. These transformations of the physical environment are "socio-natural" with the theoretical grounding that environmental change is inextricably linked to social change. Using a Marxist perspective, these changes are often dictated by an allocation of capital, which produces an uneven geography at the expense of marginalized communities (Heymen et al., 2010 – intro).

Using this theoretical framework, urban food insecurity can and should be explored across many spatial and temporal scales. The smallest scale of food insecurity starts with the physiological need for food intake – humans simply cannot function without the proper intake of food. However, as mentioned previously, one's bodily conditions are, to some degree, a function of structural histories. In his discussion of urban hunger in Milwaukee, Nicholas Heymen discussed how the city acts as a "metabolism" of capital flow, which, in turn, influences the metabolism of the body (Heyman, 2010). This (usually uneven) metabolic flow of capital becomes embedded into the physical landscape of a city creating "permanent reserve(s) of stagnant places" (McClintock, 2011, from Richard Walker), of which food deserts are an example. Thus, the current characteristics of an urban landscape can give clues as to the historical investments or disinvestments that have occurred in a particular region.

In a similar vein, I hope to reveal that the capital metabolism of a city environment is unevenly distributed against bodies that are perceived to be "ecologically other." In a sense, capital disinvestment, such as real estate and supermarket redlining that are discussed below, are self-fulfilling prophecies in the creation of an "ecological other." Urban hunger cannot be isolated to bodily functions or lifestyle choices because it is embedded in larger social power relations.

Temporally, the creation of food deserts in America results from 50-60 years of institutionalized urban racism – just a small snapshot of larger institutions of racism as mentioned at the beginning of this paper. Prior to WWII, most people obtained the majority of their food from small-scale independent food stores (Patel, 2012). However, during the war, many of independent store owners went out of business as a result of a smaller consumer based, and rationed food items. After WWII, the industry consolidated in the form of self-service grocery stores. Post WWII, supermarket sales as a percentage of total food sales in American rose from 35% to 75%. This coincided with a "white flight" from the cities to the suburbs from 1950 to 1960. Redlining, or the intentional capital disinvestment in racially integrated

communities, incentivized middle class Caucasians to move to the suburbs (Gibson 2009). By 1998, 58% of African Americans and 52% of Hispanics lived in central cities. Additionally, over half of the low-income population lived in urban spaces, with 32% living in moderate poverty tracts and 17% living in high poverty census tracts (Eisenhauer, 2001).

Because the majority of the individuals leaving urban areas at this time were higher income households, supermarkets followed. During the 1970s, this effect was intensified by stagflation, or inflation without economic growth, causing "supermarket retail to founder" in urban areas (McClintock, 2011). For instance, between 1978 and 1984, Safeway closed 600 stores in inner city neighborhoods across the county while they reopened in suburban areas (Eisenhauer, 2001). The fleet of supermarkets from inner cities areas increased geographical barriers. It has also been argued that the remaining small-scale corner stores have less healthy options than their supermarket counter parts charge more for the nutritious foods that they do have (Chung, 2012). However, as Eisenhauer explains, the implications of supermarkets divesting from a neighborhood has repercussions beyond food accessibility, in that it can "discourage further investment" (p129) in those areas. There are undeniable parallels between the disinvestment in real estate, and the creation of food deserts; both of which are racially charged.

The geo-political history of Oakland, California exemplifies these processes. In Oakland during World War I, workers, mostly African American and immigrant, flooded in by the thousands in search of jobs in the shipyards and other military based industries. To accommodate their living needs, Lewis Mumford designed "industrial gardens" – idealized co-housing units, each with its own garden, from which factory workers could commute. However, as these properties began to develop, the housing managers were racially exclusive. By the time WWII came around, factory workers were primarily confined to West Oakland – now the flatlands of Oakland, known to be a food desert. Due to increasing capital devaluation in West Oakland, retail stores left the region in favor of more profitable markets. For instance, 20 years after the Eastmount Mall had its grand opening in 1970, "both department stores and the mall's Safeway supermarket" closed, dropping business occupancy to 30%. In total, between 1935 and 1987, Oakland's flatlands went from having 1,000 supermarkets to just under 200 (McClintock, 2011).

During WWII, Portland also experienced an influx of African American and immigrant workers. Similar to Oakland, these workers were primarily confined to a low-value, shantytown-like settlement of 40,000 factory workers called Vanport. Through unrelated but unfortunate events, the city of Vanport was flooded and destroyed in 1948 when the Columbia River broke through a dike. This was the first of a series of displacements experienced by the black community in Portland. Following the flooding, developments such as Interstate-5, the Lloyd Center, and Emanuel Hospital over the next 30 years repeatedly pushed the black community further northward and eastward. Community disinvestment was followed by urban renewal projects to bring capital back into areas these same areas of the city. As this happened, an artisan and sustainable food district made of small coffee shops and sustainability based supermarkets, such as Whole Foods, New Seasons, and Trader Joes, emerged in these minority communities. While some black residents were dislocated once again, other remained to watch their neighborhood transform around them (Gibson, 2007).

A study on food deserts by Breyer et al., (2013), demonstrates that in Portland, there are not so much food deserts as there are food mirages. For instance, "conventional approaches have not found more than a few census tracts in Portland that satisfy the criteria for food deserts." There may have once existed food deserts in North and Northeast Portland during the redlining and disinvestment in the late 20th century, yet these areas are gentrifying and are largely well served by grocery stores. The supermarkets are plentiful but the food prices are often unaffordable for low-income houses, giving the illusion of food security. Shorts et al. (2013) first termed this illusion as a food mirage. According to the findings of Breyer et al., (2013) 81% of Portland's low income household live in food mirages and have to travel an average of 1.9 miles to reach the nearest low-cost grocery store. If people live without vehicles or have a lack of access to public transportation, these 1.9 miles falls short of the Portland Plan of "20 minutes neighborhoods," (Portland Development Commission, 2014) which is the idea to have all amenities within a 20 minute walking distance from any household location. However, as my findings will show, vehicle accessibility in Portland is high, making the effects of food mirages less pertinent. Figure 1 spatially demonstrates the accessible amenities that are in Portland based on geographic distance and topography. Although the legend is hard to see, the warmer colors indicate areas of high amenities. However many of the warm "hotspots," particularly in north and northeast Portland, are, in fact, food mirages, as will be discussed in detail later.

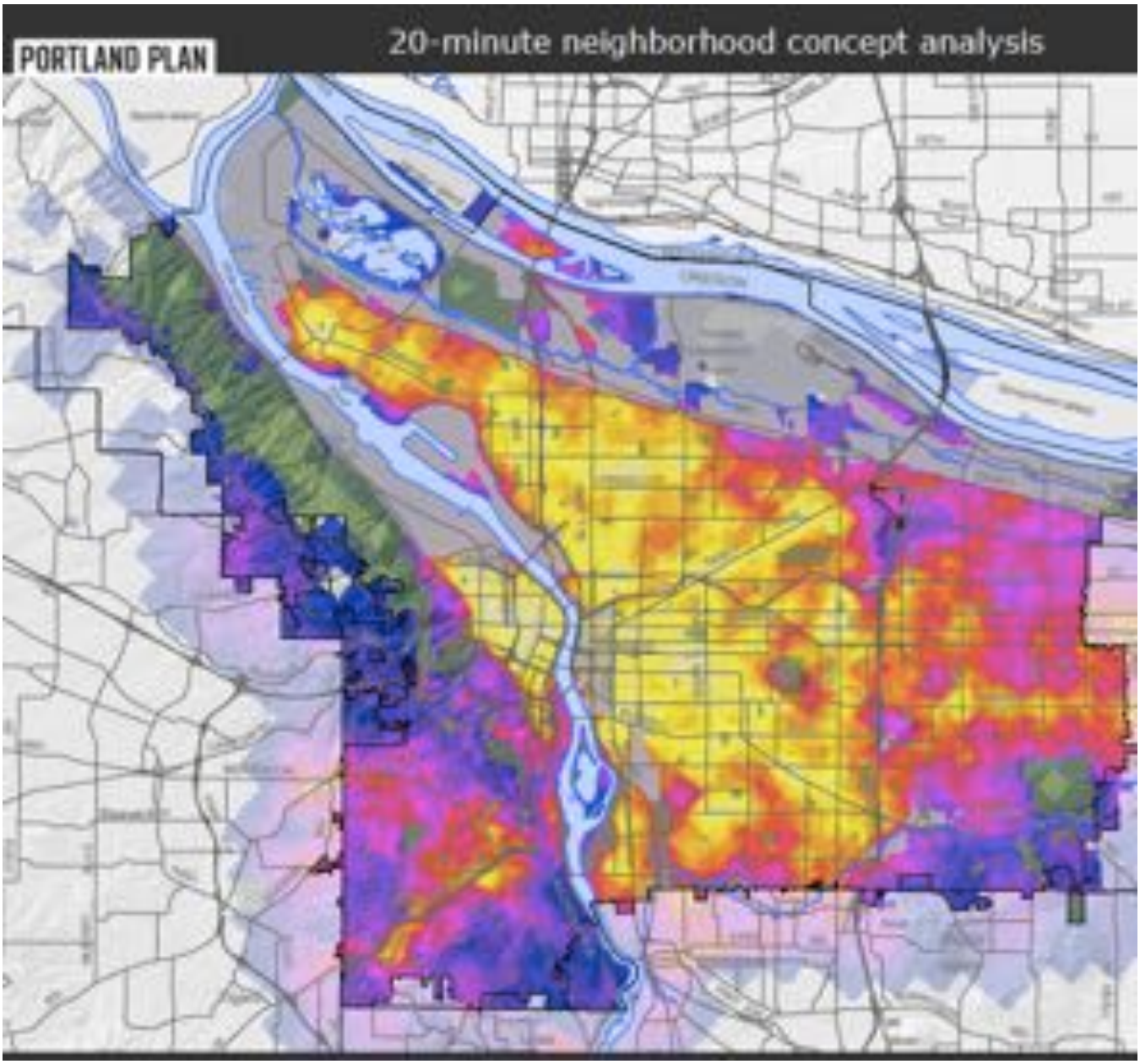

Figure 1: A "hotspot" map that shows the gradients of access to "commercial services and amenities" in Portland, Oregon, and accounts for pedestrian access such as "sidewalks, street connectivity, and topography"(www.portlandonline.com/portlandplan). Warmer colors indicate higher degrees of accessibility.

The Many Means of Urban Agriculture

Urban agriculture has historically been a temporary, state-initiated practice to temporarily combat times of economic crises. Now, however, urban agriculture can be seen as a social movement. Both food justice movements and "alternatives to the "alternatives" use various types of urban agriculture as the production base of food distribution networks.

Areas that are devoid of supermarkets and other healthy food amenities can lead to food justice movements based on community gardening and urban agriculture. For instance, Detroit, Michigan experienced a surge of urban agriculture after the metropolis of 1.8 million people fell victim to economic downturn, leaving plenty of vacant lots dispersed amongst the 700,000 people that remained. Urban agriculture in Detroit provided the African American population with job opportunities and greater geographical access to fresh produce (Colassanti et al., 2013). In the flatlands of Oakland, where there had been previous supermarket redlining, several food justice organizations such as City Slicker Farms, People's Grocery, Phat Beets Produce, and Planting Justice have emerged, eliminating both economic and geographical barriers to food by offering sliding scale farmer stands, farmer's markets, and community supported agriculture (CSAs). The sliding scale model asks those who can afford to pay more to do so in order to provide less expensive, or even free, produce to others. The West Oakland Farmer's Market takes a more holistic approach to food justice and attempts to eliminate injustices on both the product and consumption ends by connecting struggling African American farmers to food insecure residents in West Oakland. Most of these organizations were created from within the marginalized communities (McClintock, 2013). In New York City, the Latino community uses gardens as "participatory landscapes" which not only provide greater access to "conventional and ethic herbs and vegetables," but also "host numerous social, educational, and cultural events, including neighborhood church gatherings, holiday parties, children's activities, school tours, concerts, health fairs, and voter registration drives" (Saldivar-tanaka et al., 2004, p1).

Using urban agriculture as a response to food shortages is not a new phenomenon. Before the environmental movement of the 1970s, urban agriculture was a state sponsored activity that arose in response to either economic crises or times of war. For instance, during the recession of 1890 and the Great Depression, the government sponsored commercial scale urban gardens for the unemployed, and during the World Wars, civil society members were encouraged

to create Victory Gardens in both public and private spaces (Reynolds, 2010). These gardens temporarily occupied vacant spaces and functioned as a means to an end. (Drake et al., 2013) In other words, once the economy recovered or the war ended, state support for urban agriculture dwindled.

Within the past 40 years, however, state actors, consistent with other neoliberal political economic policies of the 1980s – the same policies that have helped to the agro-industrial complex to flourish (e.g. tax roll backs, falling real wages) have neglected urban agriculture (McClintock, 2013; Reynolds, 2010; Guthman, 2003). For instance, urban planners working in conjunction with municipalities often fail to incorporate urban agriculture in to their designs, either because planners believe it is out of their purview, or because urban agriculture fails to fit neatly into traditional zoning categories such as residential, commercial, recreational, park, rural, or urban. Often, urban agriculture, as a land-use activity, blurs the boundaries of these traditional zoning categories, or may exist completely outside of these definitions (Lovell, 2010). Thus, as I have demonstrated, urban agriculture has emerged partially in response to neoliberal economic agenda of free markets, and the "rolling back" of the social safety net (McClintock 2013). Although the Michelle Obama has attempted to address issues of food insecurity by financing a $330 million National Healthy Food financing initiative to help eliminate food deserts nation wide by 2017, it primarily focuses on the expansion of Wal-Mart and Walgreens, rather than acknowledging urban agriculture as a legitimate source of food (Donald, 2011). Yet, Michelle Obama, in her book "American Grown," documents the process of turning over White House lawn to make room for a vegetable garden to raise awareness about nutritional eating. Obama recognizes the issues that many low-income, working class families "lack the kind of accessibility that many more fortunate communities have" (Donald, 2011).

Even with increased political attention, urban agriculture and fresh produce stands still have limitations. Going back to Ray's concept of an "ecological other," urban farms, with their "hands-on, experimental, and participatory approach" (McClintock, 2013 p113), is limiting to those with disabilities. As the research of Turner (2011) suggests, participants of community agriculture organizations often have an embodied connection to their food via physical excursion of their bodies. Often times, urban farm organizations have work trade options in which one exchanges labor for produce. However, people with disabilities are often excluded from this option. Even if urban agriculture were accessible to all bodies, it functions at only the smallest

of scales. For instance, the produce from all the food justice movements in Oakland combined is "unlikely to meet than 5% of the vegetable demands of a city such as Oakland" (McClintock, 2011 p113). Similarly, the Urban Farm Collective, a volunteer-based organization located in Portland, Oregon, is "unable to meet the daily needs of vegetable consumption for the amount of volunteers that are active during the growing season" (McClintock, 2011 p12).

In Portland, urban agriculture is dominated not so much by food justice organizations operating independently from institutional support, but rather is a city that has acknowledged urban agriculture as a planning priority. Portland's Multnomah County Diggs Program, created in 2004, was created to conduct land-use inventory assessments for potential urban agriculture and community garden sites. This program makes foreclosed properties and surplus county space available to potential urban agriculture projects through local governments, communities, and nonprofit organizations (Mendes, 2008). Yet "low-income people are often excluded from decision making processes due to language barriers and literacy issues" (Sopkins, 2013 p1).

Portland is dominated by urban agriculture organizations that Julie Guthman (2011) terms as "alternatives to the alternatives," manifested in the form of nonprofits. Alternatives to the alternatives fall in a mid-point between typical sustainable agriculture movements led by elite, and food justice movements from within communities. Although they tend to be professionalized movements employed by the relative elite, they attempt to make local and organic food systems more accessible to low income and minority communities. While food justice movements tend to initiated by marginalized communities and sustainable agriculture movements tend be guided by notions of ethical eating and purity, "alternatives to the alternatives" are guided by principles of both justice and purity while benefitting from capital allocation, making for a paradoxical social movement. For instance, in a synthesis of the thesis work of her students, Guthman discovers that low-income and minority communities in the Bay Area often seemed unmotivated to participate in certain urban gardening projects, especially when the leaders are Caucasian. Reluctance fell into the categories of not knowing how to cook or identify certain vegetables, not wanting their hands to get dirty, not wanting to work as free laborers given certain racist agricultural histories, and viewing vegetables as "white people food." In one interview, a black woman, in response to an inquiry about why she didn't buy from an organization that brought a truck full of fruits and vegetables to her neighborhood, exclaimed, "because they don't sell no food! All they got is birdseed…I need to feed my family"

(Guthman, 2011 from Tattenham, 2006). Perhaps community perceptions of urban agriculture vary according to whether or not it viewed as an outside movement. Examples of "alternatives to the alternative" in Portland include Growing Gardens, Portland Fruit Tree Project, Urban Gleaners, Urban Farm Collective, Village Gardens, and Zenger Farm.

My Study: Alternatives to the Alternatives & Food Mirages

While the discourses within these nonprofits circulate around issues of food insecurity, what has yet to be studied is the degree to which these nonprofits are reaching their targeted participant population, and how effectively the goals of these nonprofits reflect the real issues of food insecurity in Portland. While there are many "alternatives to the alternatives" in Portland, due to research feasibility and scale, this study focuses on: Portland Fruit Tree Project (PFTP) and Zenger Farms.

In order to accurately address issues of food insecurity, we have to understand the priorities and value sets of those who may identify as food insecure, rather than assume that they share the same values as those expressed in the sustainable agriculture movement. If the opinions of those experiencing food insecurity need to be made auditory, these individuals must first be located. After Portland Fruit Tree Project was nominated for Edible Portland's "Local Hero Awards," Katy Kolker, the Executive Director of Portland Fruit Tree Project, stated in an interview the difficulties of locating food-insecure households. "Many don't have computers or internet access. Many don't speak English. Many lead very transient lifestyles or don't have strong ties to their immediate community" (Edible Portland, 2014). The location of food mirages in Portland, as determined by Breyer et al., (2013), an appropriate place to start - albeit not the only determent of food insecurity.

Because this study explores issues of socio-economic inequality and race, I must reiterate my demographic. I am not a person of color, nor have I personally experienced food insecurity or nutrition deficiency. I would not fall into Ray's category of an "ecological other." Just as how social justice-based movements lead by elite civil society members may overlook subtle cultural nuisances, this study, conducted by a privileged college student, may unintentionally omit the details of a lived experience. The language barriers that I encountered in my study, for

instance, were prevalent, and prevented me from interacting with segments of the population that may be feeling the greatest effects of food insecurity. I am not attempting to trump anyone's voice with my own voice, but rather I am attempting to describe a foodscape based on the opinions of those who I did interact with.

Methodology:

My methodology was multifaceted allowing me to explore the foodscape from multiple angles. I explored the participant demographics, outreach goals, funding sources, and distribution networks of these two non-profits by interviewing staff members, surveying of participants and utilizing existing data. I also determined the food insecure areas of Portland to discover if the distribution networks of these non-profits overlap with food insecure areas. Once I located these food insecure areas, I used an existing report and original surveys to determine perceptions of food accessibility amongst low-income households in Portland. My methodology will be broken down into greater detail in what follows.

Portland Fruit Tree Project and Zenger Farm

In order to understand the mission, sources of funding, and outreach principles of PFTP and Zenger farms, I conducted two interviews at each site. At PTFP, I interviewed Bob Hatton, the program director of PTFP, and Anna Foreman, the outreach intern. At Zenger Farm, I interviewed Sara Cogan, the Farmer's Market manager and Prairie Hale, the Community Outreach Coordinator. The following overview of each organization is a result of these interviews. Before explaining the methodology and results of the rest of my study, it is important to have a conceptual grasp of these organizations.

Overview of Portland Fruit Tree Project:

According to Bob Hatton, the Program Director of the Portland Fruit Tree Project, the non-profit's mission statement is "to increase equitable access to healthful food and strengthen communities by empowering neighbors to share in the harvest and care of city grown food resources." It started in 2006 with a goal of redistributing fruit that would have otherwise gone to waste by organizing "harvesting parties where a group of volunteers come to someone who has a fruit tree and said they had wanted help harvesting." In these harvest parties, "half of the

fruit that is harvested in donated to local food pantries, and the other half is spilt amongst those that come out the harvest, and 50% of the volunteer slots are reserved for folks living on low income." In 2013, their most recent harvesting year, "[they] did 96 harvesting events, wherein [they] harvested 32,700 pounds of fruit that would have otherwise gone to waste." The Community Harvesting Program is expected to grow to 100 harvesting parties in 2014. According to a 2011 NPR report, the average American eats 237.2 pounds of fruit per year (Aubrey 2011).

Thus, the Portland Fruit Tree Project harvests enough to fruit for 140 people for an entire year.

In regards to the local food pantries, PFTP tries to eliminate barriers of geographic distance by serving all quadrants of the city and keeping the resources of each quadrant within the region. According to Bob, "[PFTP] tends to have a primary partner at each quadrant of the city that is most often the recipient of the harvested fruit in those areas, and [they] try to donate the fruit to a food pantry in the same area of town or the same quadrant as where the harvest is happening." In this way, they are trying to eliminate barriers based off of geographical distance and keep food resources of the city located close to where they are obtained. The primary food pantry recipients of the harvest are the NE Emergency Food Program, the St. Andrew's Episcopal Food Pantry in North Portland, Fish Emergency Services in SE, Neighborhood House in SW, and NW Urban Gleaners. The Oregon Food Bank "is also another project of [their] larger orchard events." Thus, the Portland Fruit Tree Project tries to make their services more accessible to those that would be unavailable or unwilling to participate.

The Portland Fruit Tree Project also attempts to alleviate food insecurity through its' Community Orchards Program. PFTP's Fruits of Diversity Community Orchard in North Portland is located on the site of Tamarack Apartments, a low-income housing development. PFTP has also initiated an East Portland Action Plan in order to develop another low-income Community Orchard.

Outreach:

According to Anna, "of harvest participants surveyed in 2012, 4% self-identified as Hispanic/Latino, 83% Caucasian, 2% African-American, 6% Asian/Pacific Islander, 3% American-Indian, and 2% "Other." (I will discuss in greater detail statistics from 2013). Portland Fruit Tree Project aims to "increase diversity through outreach specifically targeting underserved

groups, expanding [their] partnerships, and offering outreach materials and harvest leadership in Spanish." This increased outreach is made possible by an East Portland Action Plan (EPAP) grant that PFTP has received, which will allow PFTP to "connect with 5 other organizations serving East Portland residents, including current and new partners, to collaborate in spreading the word to East Portlanders about our services and help lay the strong PFTP presence in East Portland based on the needs and identity of those neighborhoods." Additionally, PFTP has recently hired (as of May 2014) a Community Outreach Coordinator, fluent in Spanish, whose main role is to diversity the participant base.

Anna acknowledges certain barriers such as "the outsider effect." According to Anna, "we have yet to have a deep or far reaching impact in East Portland partially because the area has yet to embrace our organization with open arms like other areas in Portland." PFTP's distribution network (Figure 4) as will be discussed later in detail reflects how PFTP has make a significant presence in Outer SE Portland.

Overview of Zenger Farms:

Zenger Farms, located in the Lents Neighborhood in outer SE, tries to make its' services more accessible to the local neighborhood through it's CSA, or Community Supported Agriculture, share and Lents International Farmer's Market Program. Similar to PFTP, the CSA reserves half of the participant slots to those receiving SNAP benefits. Unlike most CSA which require an upfront cost of $600 for the season – a request that is impossible for an individual who is dependent on a monthly food stipend of $200 or less – the CSA share at Zenger farms allows SNAP paying individuals to pay on a weekly basis. Unfortunately, I was unable to acquire data for the CSA, so my research focuses on the distribution network and characteristics of Lents International Farmer's Market. According to Sara, the market manager of Zenger Farm, "in 2004 there was a community food survey done in Lents, in and around Lents, in conjunction with Zenger Farm that found that 25% of Lent's residents identified as food insecure, meaning they didn't know where their next meal would come from." Thus, the Farmer's Market that is operated by Zenger Farm has two goals: "to provide more direct sales opportunities for immigrant and emerging farmers and small business owners" and "to provide food access in an otherwise underserved scenery." This particular farmer's market offers a $10 SNAP benefit match program, and hosts immigrant farmers including two Mexican immigrant vendors,

Russian vendors, Mein women, and has a community table in where anyone who has an abundance of home grown food in the area can come and sell. LIFM is the "first market in the Portland Metro area to do a SNAP match and we started in 2007" and is "the only farmer's market in the metro area that has a $10 weekly snap match – most markets do $5. In 2013, the most recent market year, there were 409 independent customers that took advantage of their SNAP program, contributing a full $15,620 in SNAP sales.

In addition to the market and the CSA, the Healthy Food on a Budget program initiates "community-based workshops and demonstrations bring together neighborhood families to connect with resources, learn skills and build relationships that strengthen their ability to nourish themselves with healthy food. [Zenger Farm] celebrate[s] the community's diverse food traditions and work with participants to shape [their] program" (Zenger Farm, 2014).

Outreach:

Zenger Farm's outreach philosophy is educational-based, in that they want to make people aware of opportunities in order to make information decisions. This educational approach to outreach will be further in tandem with community perceptions of accessible foods in the Lents Neighborhood.

Funding:

As non-profits, these two organizations have to rely on external grants and donations in order to function. At PFTP "50-65% of the budget comes from grants from private foundations" and the rest comes from fund raising events, monthly sustainers, and partnerships with local businesses. Lents international Farmer's Market is also dependent on private donations, getting grant money from the PGE Foundation, and food service suppliers such as Bob's Red Mill, and New Seasons. According to Sara, LIFM "is a model that has been replicated around the Portland Metro region, but funding is struggle especially as more and more markets are offering SNAP matches, which is great, but the trouble is that we are all scrambling for the same pot of money to provide that service to customers." Zenger Farms, however, is trying to diversify their funding to become less grant dependent.

Participant Surveys

In order to determine the demographics and household locations of customers of LIFM and the harvest party participants of PFTP, I compiled existing data and original survey results.

Portland Fruit Tree Project:

During every harvest party, Portland Fruit Tree Project gives out a demographic survey to each participant, and records the individual's address, which then becomes public data. Through the connections I made through my internship, I was able to obtain both the survey results and addresses for all 648 Community Harvest Party participants in 2013. While PFTP has 3 significant programs that involve volunteers outside of its' Community Harvesting Program (for more information go to www.portlandfruit.org), the Community Harvesting Program deals most directly with food insecurity. For the purposes of this research, I focused solely on participants of the Community Harvesting Program. This survey data is useful for discerning the types of people who are benefitting from the services of Portland Fruit Tree Project, and, by proxy, those who are not benefitting.

Zenger Farm:

As discussed previously, Zenger Farm has two distribution networks, the Lent's International Farmer's Market, and the CSA. I was able to obtain distribution data for Lent's International Farmer's Market, but not for the CSA due to time constraints on the staff's part. The demographic data I have obtained for Lents International Farmer's Market is only a sample of the total customer population. On the last day of the market season of 2013, October 27th, I surveyed 40 different customers, asking them demographical questions and household location. Zenger Farms does a similar annual survey every year, except they measure the distribution network by zip code. I included this data as well, except I converted zip codes into census tracts because that is my basis for geographical analysis.

After calculating demographic statistics for the participants, I used the Geocode tool on ArcGIS to digitally map out the distribution network of these two organizations. The Geocoding tool allows an ArcGIS user to visually display an address on a map using a point shapefile to put a dot on it. The Geocoding tool is able to function if it has three pieces of information: the street address, the city, and the zip code and/or state. Every survey participant was asked to provide

this information, and did so voluntarily with informed consent. Though their household is represented by a dot, their identities remain anonymous.

Determining Food Insecure Areas:

In order to determine whether or not the distribution networks of these organizations are effectively reaching food insecure areas of Portland, I utilized spatial analysis tools of ArcGIS 10.0, with 2010 Census Tracts as geographical indicators.

Borrowing the aforementioned food mirage data from Breyer et al. (2013), and data on poverty levels from Coalition of a Livable Future, I delineated residential 2010 census tracts that are more likely to host food-insecure households. Tracts were defined as food insecure if they were (1) located in a food mirage as defined by Breyer et al., and were (2) located in a 2010 census tract in which at least 5.8% of the population was below the poverty line. This 5.8% threshold was used by Coalition for a Livable Future to describe a census tract with at least medium-low levels of poverty.[1] Although vehicle availability has been found to be a significant factor in determining food insecure areas (Bader et al., 2010), when I mapped vehicle availability data in Portland from the Food Access Research Atlas – which delineated census tracts where 100 individuals are without vehicles – I found there are no residential tracts that have both low vehicle accessibility, and low poverty levels. Thus, I omitted vehicle accessibility in my spatial analysis of food insecurity. This is consistent with the fact that vehicle availability was not one of the confounding factors in determining food accessibility, as will be discussed in detail later.

As mentioned before, Breyer et al. (2013) used the term food mirage to explain the phenomena in Portland where although there is a fairly even geographical distribution of food resources, many of those food resources are expensive. This study "identified a grocery store as any food retailer with a minimum of 10 fresh produce items available" (p133), which included

[1] Data Source: American Community Survey (ACS 2006 to 2010 estimates); S1701 (Poverty Status in the Past 12 Months). This study used four classes in natural breaks,
with low poverty (0% - %5.7), medium-low poverty (5.8% - 12.7%), medium rates of poverty (12.8% - 22.9%), and high rates of poverty (23% - 50.6%). For more information about data limitations and how the census determines poverty levels, go to https://clfuture.org/programs/regional-equity-atlas/about-indicators/indicator-metadata-data-links-documentation#Demo4c

small and independent grocery stores that are often omitted from inclusion in food desert surveys, and "can serve as key food access points in areas not served by chain stores" (p133). Figure 2 (a) illustrates the fairly even geographical distribution of supermarkets in the central Portland region.

Once the food sources were identified, Breyer et al. (2013), created benchmark prices in order to compare food costs across different sources. This helped differentiate between low cost and high cost grocers. The benchmark prices were "the average price for each survey item at Fred Meyer and Win-Co." These two retailors were chosen because (1) they had all the survey food items available, (2) the average price levels would allow for food budget that comprised 30% of income for someone living at the poverty line.

Figure 2 (b) illustrates the distance to supermarkets that meet the benchmark price. Finally, Figure 2 (c) shows the discrepancy between the perceived distance to food sources and the actual distance when factoring in food prices, or the difference between Fig. 2 (a) and Fig. 2 (b). Short et al. (2007) coined this difference a "food mirage." As one can easily see, the majority of Portland is considered a potential food mirage by this definition. Yet, this fails to account for poverty levels. After I accounted for personal income barriers by omitting census tracts in which less than 5.8% percent of households in a Census Tract are at or below the poverty levels as determined by the U.S. Census, I was able to identify a large section of North and Northeast Portland as a food insecure region, in addition to two smaller sections of the city in Southeast and Southwest. To make sure I was obtaining the most accurate depiction of household poverty, I only included spatial data located in residential zoning areas of Portland.[2] Figure 3 shows the residential census tracts located within potential food mirage areas that have at least medium-low levels of poverty (5.8%).

[2] Data Source: Zoning (Polygons), Portland Metro Bureau of Planning and Sustainability, contact person Kevin Martin

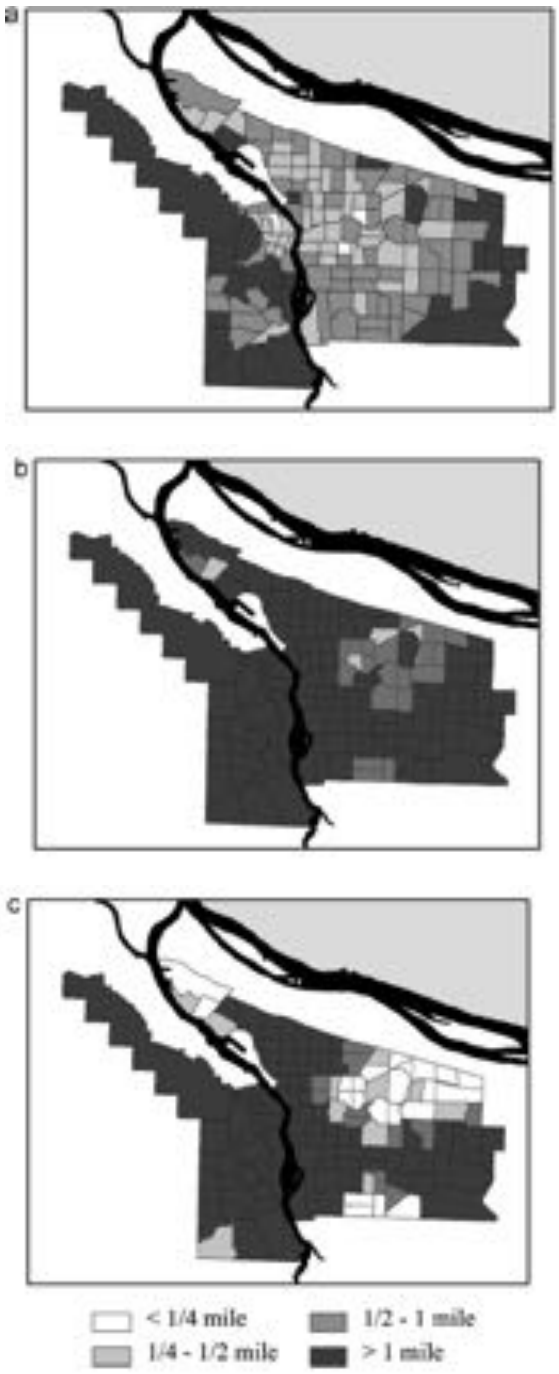

Fig. 2: 2010 Census Tracts as Geographical Measurements (n=140). (a) Distance to nearest food source. (b) Distance to nearest low-cost food source according to benmark prices. (c) Food Mirage Distance, as calculated as the difference between (a) and (b).

For simplicities sake, I decided to focus my attention on the North / Northeast delineation. According to the webpage of Organizing People, Activating Leaders - Environmental Justice Oregon (OPAL), North / Northeast Portland, the same region experiencing gentrification as discussed by Gibson (2007), has "the highest concentration of people of color and the lowest income levels in both Portland and the state of Oregon." The average poverty rates for Caucasians in this area (20.7%), while high, is much lower than for other ethnic groups: Latinos (44%), African Americans (32.4%), and Native Americans (53.5%). The unemployment rate (12.4%) and rates of asthma (14%) are much higher in this area than Portland as a whole – 6.1% and 7%, respectively. Furthermore, I decide to focus on North / Northeast Portland because the office of Portland Fruit Tree Project is located in the heart of the gentrifying area of NE Portland. This region serves as Study Site A.

Is Lents Neighborhood a Food Insecure Area?

Zenger Farm is located in the heart of the Lents Neighborhood in Outer East Portland. According to the website of OPAL Environmental Justice, Outer East Portland, known historically as "Felony Flats" due to high crime rates, is racially and ethnically diverse. 37% of people do not identify as Caucasian, and 10% of Caucasian folk are of Eastern European descendent. According to Prairie Hale there are "over 60 languages represented" in the Lents Neighborhood alone. Furthermore, in 1999, the mean household income in Lents was $34,321, compared to $40,061 in Portland as a whole.

Yet, When the Lents Neighborhood is situated within the aforementioned spatial data, apparent contradictions emerge. Figure 3 also shows the location of the Lent's Neighborhood in relation to poverty levels and food mirages. Although 25% of Lent's residents identify as food insecure (Interview with Sara Cogan) the Lent's neighborhood is neither located in a food mirage nor a medium-low to high poverty area. There seems to be a discrepancy between what the spatial data indicates, and other found statistics. Rather than immediately conclude faulty methodological outcomes on the part of both Breyer et al. (2013), and myself, Lent's Neighborhood serves as my second study site (Study Site B) in which to conduct in-person surveys on perceptions of accessible foods in hopes to weed through this contradiction.

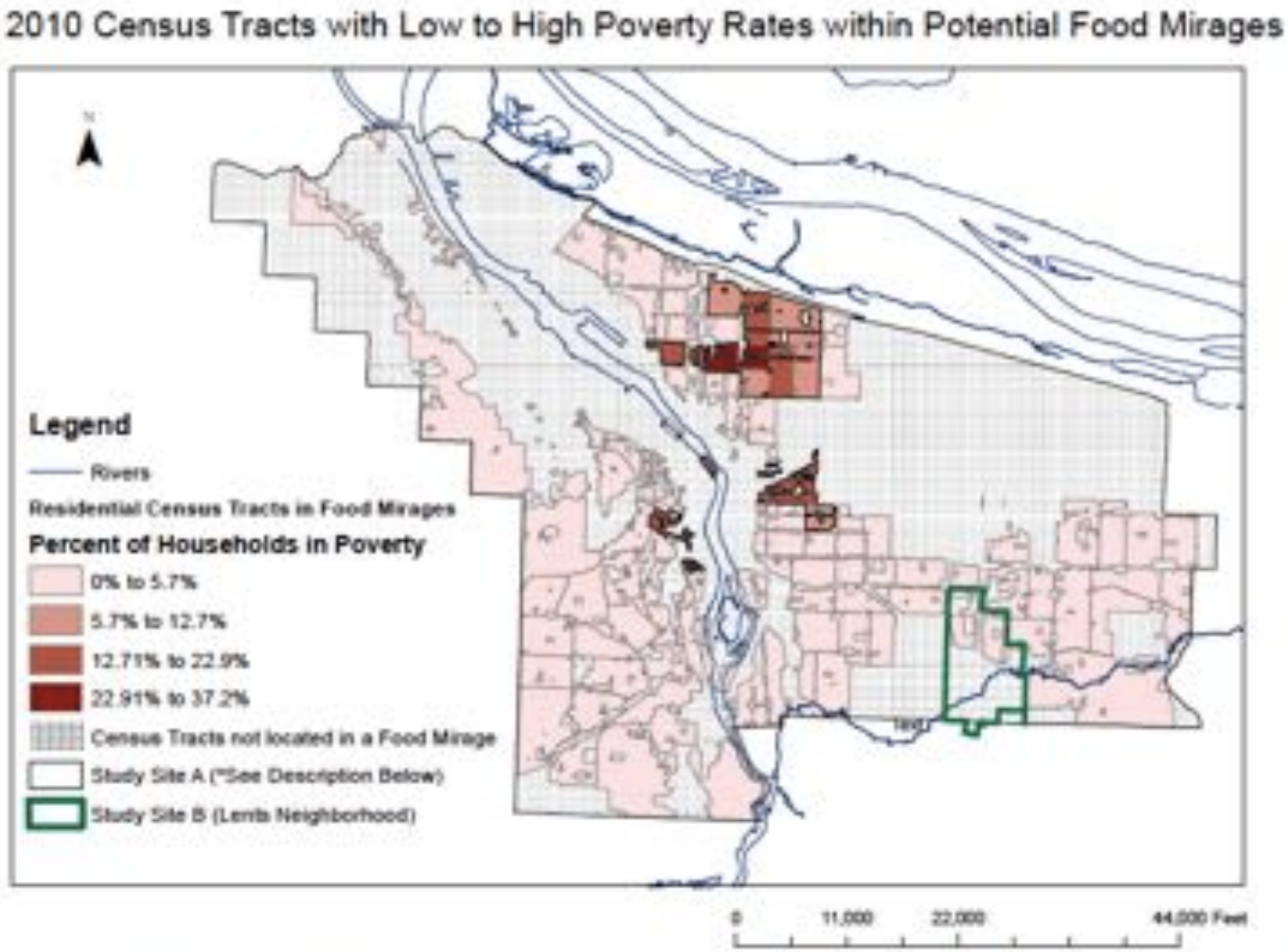

Fig. 3: This figure shows the poverty status of residential food mirage Census Tracts, and delineates Study Site A (*residential food mirage tracts that have at least 5.8% of households in poverty) and Study Site B (Lents Neighborhood).

Food Accessibility Surveys

Once I determined the location of potential food insecure areas of Portland – North/Northeast Portland and Lents Neighborhood - I gathered data on perceptions of food accessibility in these regions.

North / Northeast Portland:

Instead of conducting my own survey in this region, I used existing data from a study done by Coalition for a Livable Future to avoid redundancy. The Neighborhood Food Network Report, or, more specifically, the North/Northeast Portland Community Food Security Project, targeted the following neighborhoods: Arbor Lodge, Boise, Elliot, Humboldt, King, Piedmont, Sabin, Vernon, and Woodlawn, many of which overlap with the delineated food insecure areas shown in Figure 3. Thus, the results from this survey will serve as the data on perceptions of food accessibility of Study Site A. This community food assessment was led by community members rather than scientists in an attempt to build leadership, and targeted food insecure individuals living in these neighborhoods. The surveys distributed were free of food security jargon and instead were comprised of visual indicators such as imagines and maps to discover barriers to food access.

Lents Neighborhood:

Although Zenger Farm had conducted a Community Food Survey in 2006 in which they discovered that 25% of the residents in Lents identify as food insecure (Sara Cogan Interview) those results have since been lost. Thus, I decided to create my own survey by building off of the methodology of the Neighborhood Food Network Report and Freeman et al. Freeman et al. recognizes that while structural, and spatial temporal barriers are indeed relevant to food access, most studies omit other cultural, personal, and social network factors that shape an individual's perception of accessible food locations.

Freeman et al. (2013) attempted to fill in this theoretical gap by creating a new research model for nutritious food access. Through interviews and focus groups from a large and varied sample of people living in the American South, Freedman et al. created 5 interrelated conceptualizations of food access: (1) economic barriers, (2) service delivery, (3) spatial-temporal access, (4) social access, and (5) personal domain. (1) Economic barriers include

household limitations, such as income levels and SNAP assistance necessities, and economic characteristics within the stores such as food costs and perceived value. (2) Service delivery refers to the quality and variety of foods sold, staff & service and the presentation of the food. (3) The spatial temporal access, as discussed previously, refers to the geographical boundaries of local food environments and travel burdens. (4) Social access refers to cultural barriers such as racial or gendered discrimination, where friends and family shop, and the reluctance to participate in a certain food environment due to the lack of culturally appropriate foods. Finally, (5) personal domain refers to an individual's education, health status, and identity to food, such as whether or not they prefer organic. The degree to which these factors play a role in determining an individual's choice is contingent upon their setting in different scales of historical geographies, as well as their lived personal preferences and routines. Additionally, distilling these factors into separate categories is not entirely accurate because of their interdependency. For instance, "spatial temporal access is influenced, in part, by social access such as patterns of discrimination that result in certain neighborhoods having more (or less) balanced nutritious food access" (p.25). Nevertheless, it is the most comprehensive food accessibility model to date. My study has built upon this model to determine which factors have the most influence in determining an individual's choice of were to shop.

I obtained permission from the owner of Cartlandia to collect accessibility surveys. Cartlandia, the only food cart location in the Lents Neighborhood, located on SE 82nd Ave, served as my food accessibility survey collection site for Study Site B. With its' low cost options, much of which is influenced by the local Hispanic Population, Cartlandia attracts demographics that are representative of the larger demographics of Lents Neighborhood. Thus, it was an appropriate place to conduct surveys. I conducted this survey to discover (a) the main sources people obtained food from, (b) what the strongest factors were in the decision-making processes (c) how aware people are of Portland Fruit Tree Project and Zenger Farm.

I also asked whether or not participants had heard of or had participated in Zenger Farms and Portland Fruit Tree Project. The sample survey and informed consent page can be found in Appendix A and B. I also gave a handout to the participants to help speed the surveying process, which can be found in Appendix C.

Ecological Others

To incorporate a racial analysis, I mapped out both Hispanic and Black population densities by 2010 Census Tract in relation to the location of food insecure areas. Ethnicities such as Native American and Eastern European are less prevalent, and the resulting maps would be less informative. Other types of ecological other bodies (obese, otherwise disabled), have less geographical relevance than ethnicity and income, and thus are not recorded by the Census.

I will not be exploring the presence of other disabled bodies in Portland directly. However, given the correlation between poor health disparities, poverty, and communities in color in Multnomah County ethnic data can serve as a proxy for other types of disabilities. For instance, in addition to the aforementioned income inequalities between ethnic groups, low-weight births are 37% worse for communities of color in Portland than whites (Stevens et al., 2010).

Results

Demographics of Participants:

Portland Fruit Tree Project

As Table 1 shows, Portland Fruit Tree Project is successful at reducing economic barriers to fresh produce by successfully reserving half (48%) of the volunteer harvesting slots for individuals who identify as low income and developing partnerships between local food pantries. Portland Fruit Tree Project is also successful at attract a wide age demographic, with 60% of the volunteers between the ages of 18 – 44. Because 14% of the participants were under 18, it is clear that these events are inviting to families as well, and the harvested fruit is reaching children.

As Bob Hatton suggested in his interview, the ethnic breakdown of participants is fairly representative of the general Portland population. In Portland, 73% of the population is Caucasian (Stevens et al., 2010). This statistic is mirrored by the demographics of harvest party participants, with Caucasian (80%) being the largest majority, followed by Hispanic (6%), Multiracial (4%), Asian (3%), Black / African American (2%), and Other (3%).

Table 1: Results from the 2013 Community Harvest Party Surveys (n=648)

Household Income Level	**Percentage of Harvest Party Participants**
No	6%
Low	**48%**
Moderate	**43%**
High	3%
Ethnicity	**Percentage of Harvest Party Participants**
Hispanic	6%
White	**80%**
Black/African	2%
Native American	3%
Asian/Pacific Islander	1%
Native American	4%
Multiracial/Multiethnic	3%
Other	
Age	**Percentage of Harvest Party Participants**
Under 18	14%
18-29	24%
30-44	36%
45-59	17%
60-74	8%
75+	1%
Harvest Again?	**Percentage of Harvest Party Participants**
Yes	**77%**
No	4%
Maybe	1%

Participants also indicated their favorite things about the event. Almost half of the participants indicated that the community and people (49%) was their favorite thing about the event, with the second highest factor being the free fruit (41%).

Lents International Farmers Market Demographics & SNAP Results

The results from the survey conducted at Lents International Farmers Market on October 31, 2013 indicates that the market attracts a similar demographic to Portland Fruit Tree Project (Table 2). For instance, about half (52.50%) of the respondents indicated making less than $30,000, with a significant percentage (20%) making less than $15,000. A significant 35% of participants indicated that they relied on food stamps, which is greater than the Oregon state average of 18% (Hannah-Jones, 2011). This high presence of SNAP dependent participants demonstrates how the $10 SNAP match program is successful at attracting low-income individuals to the market. During my interview with Sara Cogan, I was able to obtain year-end totals for the SNAP sales. Out of the $40,065 of token sales (including match)[3], there was a total of $15,620 in SNAP sales, with the market matching an additional $11,536 (Table 3). There were a total of 409 independent SNAP users. The USDA recommends that an American family of four should pursue a low-cost diet of $175 a week on groceries, and allocate 40% of that budget, or $70, to fruits and vegetables (Hoffman, 2013). Using these guidelines, the SNAP Program and its' associated $26,769 would be able to supply these 409 independent users with almost a week's worth of produce for 409 individual families of four.

Despite this success, economic factors were less of a motivational reason for attending the market than factors associated with community. For instance, a significant 47% of respondents specified that supporting local farmers was their greatest motivation to attend the market, followed by the convenient location of market (30%), well-priced food (22.5%) and to purchase foods that would otherwise be unavailable (22.5%). The top two motivational factors echo the locavore rhetoric place-based production and distribution networks.

The ethnic demographic of this sample population also mirrors the demographic of Portland Fruit Tree Project almost exactly. The majority of respondents were Caucasian (80%) with Hispanic (10%) being the next ethnic bracket. However, this survey is a small basket sample, and is therefore less representative than the comprehensive Portland Fruit Tree Project survey.

[3] Most purchases are hard to tract due to the informal fluidity of market sales, but customers have the option to purchase market tokens via credit, debit, or SNAP benefits, which is much easier to track.

Table 2: Survey Results from Lents International Farmers Market (n=40)

Income	**Percent of Respondents**
Less than $15,000	**20%**
$15,000 - $30,000	**32.50%**
$30,000 - $45,000	20%
$45,000 - $60,000	15%
More than $60,000	12.50%
Ethnicity	**Percent of Respondents**
Hispanic	10%
Caucasian	**80%**
African American	0%
Native American	2.50%
Asian / Pacific Islander	5%
Multiracial	5%
Other	0%
Food Stamp Benefits	**Percent of Respondents**
Yes	**35%**
No	65%
Reasons for Coming	**Percent of Respondents**
Well Priced Food	22.50%
To Support Local Farmers	**47.50%**
Convenient Location	30%
For Community / Friends	7.50%
To Purchase Otherwise Unavailable Food	22.50%

Additionally, when conducting the survey, there were individuals I was unable to speak to due to language barriers. For future research, I would recommend translating surveys into multiple languages and bringing a translator.

Table 3: Total SNAP token sales in 2013

SNAP Sales Total	**$15,620**
Weekly SNAP Average	**$822**
Healthy Rewards Match Distributed	**$11,536**
Weekly HR Match Average	**$607**
Total # Unique SNAP customers 16 used their EBT card between 10-19 times 185 used their EBT card between 2-0 times 208 used their EBT card once	**409**

Food Insecure Areas & Surveys

The participant demographics of the Neighborhood Food Network Report (NFNR) were fairly representative of the low-income communities and communities of color that exist in North/Northeast Portland. According to the NFNR, the participants they surveyed "were between the ages of 26 and 55, almost half were African American" and "income levels ranged from well under Federal poverty guidelines to moderate" (p11). As Table 4 shows, 46% of respondents make less than $15,000 annually, and 49% of respondents are African American. This demographic is representative of those who have faced displacement in North and NE Portland over the past 60 years.

Table 5 shows the demographics from the Cartlandia survey in Lents. Because the customers of Cartlandia are fairly representative of the general Lents Neighborhood, attracting people of all incomes and ethnicities, this survey was not as targeted towards food insecure populations as NFNR was. The age range of participants I surveyed was 18-70, and a quarter of those I surveyed (23.4%) identified as Hispanic. About half of my respondents were Caucasian (56.8%), and the rest was comprised of Asian (10%), Black (6.7%), and Other (3%). I also had a range of income demographics, with about a quarter (26.67%) of respondents making less than $30,000 annually, and about 85% of participants making less than $75,000.

Table 4: Demographics from Neighborhood Food Network Report

Age	**Percent of Participants**
15-18	1%
19-25	19%
26-55	60%
55+	19%
No Answer	1%
Household Income	**Percent of Participants**
Less than $15,000	**46%**
$15,000 - $25,000	13%
Greater than $25,000	22%
Ethnicity	**Percent of Participants**
African American	**49%**
Asian	0%
Caucasian	**35%**
Hispanic	11%
Russian	1%
Native American	2%
Other	1%
No/ 2 or more	1%

Important Food Factors:

Spatial and economic barriers were also of relative importance to people living in the Lent's Community, with 66.7% indicating that food cost was a limiting factor, and 43.33% indicating that distance from the supermarket was a significant factor (Table 6). In Lents, service delivery factors such as Quality and Variety (73.33%) and Staff and Service (33.33%) were found to be very important. The personal domain factor that people were most conscious of was organic and local. Additionally, if the respondents in Lents had $10 to spend at a grocery store, 43.7% would spend it on fruits and vegetables, 18.7% would spend it on bread, and the rest would spend it on meat and eggs.

Similarly, the Neighborhood Food Network Report also indicated transportation as a significant barrier (see report for greater detail). Table 7 shows that those experiencing economic disparities are more likely to shop at a full service grocery store than anywhere else. No participants

indicated using gardens as a means of obtaining fresh produce, and only 2.9% of participants take advantage of harvest shares / community baskets.

Table 5: Demographics of Cartlandia Survey

Age	**Percent of Participants**
18-25	26.67%
26-35	26.67%
36-45	23.33%
46-55	10%
56-65	3.33%
Greater than 65	6.67%
Household Income	**Percent of Participants**
Less than $15,000	6.67%
$15,000 - $30,000	2%
$30,000 - $45,000	16.67%
$45,000 - $60,000	13.33%
$60,000 - $75,000	13.33%
Greater than $75,000	16.67%
Ethnicity	**Percent of Participants**
Hispanic	**23.33%**
Caucasian	**56.67%**
Black/African American	3%
Asian / Pacific Islander	10%
Native American	0
Other	3%

Table 6: Perceptions of Food Accessibility

Food Sources	**Percent of Participants**
Fred Meyer	**66.67%**
Safeway	**53.33%**
Win-Co	36.67%
Wal-Mart	36.67%
Trader Joe's	13.33%
New Seasons	13.33%
Means of Transportation	**Percent of Participants**
Car	**100%**
Walk	23.33%
Bike	10%
Travel Time	**Percent of Participants**
Less than 5 minutes	3%
5-10 minutes	**60%**
10-15 minutes	20%
15-20 minutes	6.67%
What would you spend $10 on?	**Percent of Participants**
Fruits & Veggies	**47%**
Meat & Eggs	18%
Other Dairy	12%
Bread	18%
Frozen / Canned / Premade	18%
Fast Food	**.06%**

Table 7: Food Preferences for North/Ne Portland

Food Source	**Percent of Participants**
Full Service Market	**60%**
Restaurant	1.8%
Corner Store	1.2%
Emergency Food Bank (Church)	5.3%
Gardens	0%
Harvest Share / Community Basket	2.9%
Elsewhere	**28.8%**

Distribution of Alternative Food Networks"

Portland Fruit Tree Project:

As can be seen in Figure 4, the distribution network of PFTP is spread out fairly evenly on the West side of the river, and, on the East side of the river, is concentrated the in inner SE and North / NE regions. The distribution network becomes more space as one continues eastward. For instance, only 3 participants came from the Lents Community last year. Additionally, although PFTP is attracting individuals from the delineated food insecure region in North / Northeast Portland, we know from the demographic of participants verses the demographics of food insecure households that PFTP is not attracting the communities of color in this area that have experienced institutionalized racism and displacement.

Zenger Farms:

The distribution network of Lents International Farmers Market is more concentrated in SE than is the PFTP distribution network (Figure 5). This is probably due to the fact that LIFM has only one location and keeps its' outreach efforts primarily within the Lents. Portland Fruit Tree Project conducts outreach to all parts of Portland, and hasn't conducted much outreach in Outer East Portland until recently.

Ecological "Othered" Bodies:

Although the demographics of those who involve themselves in the services of PFTP and LIFM are representative of the larger demographics of Portland, they seem void of communities of color in Portland that are more likely to experience some kind of food. Figure 6 shows the location of the study sites in relation to Black population density by 2010 census tracts. In NE Portland, the highest concentration of Black Population Density is associated with a high concentration of poverty within a food mirage area. As Breyer et al. points out, the same areas of North and NE Portland are associated with a higher percentage of white population change – a proxy for gentrification. Similarly, Figure 7 shows a decently high Hispanic Population Densities within both the NE study sight and the Lents Neighborhood study sight.

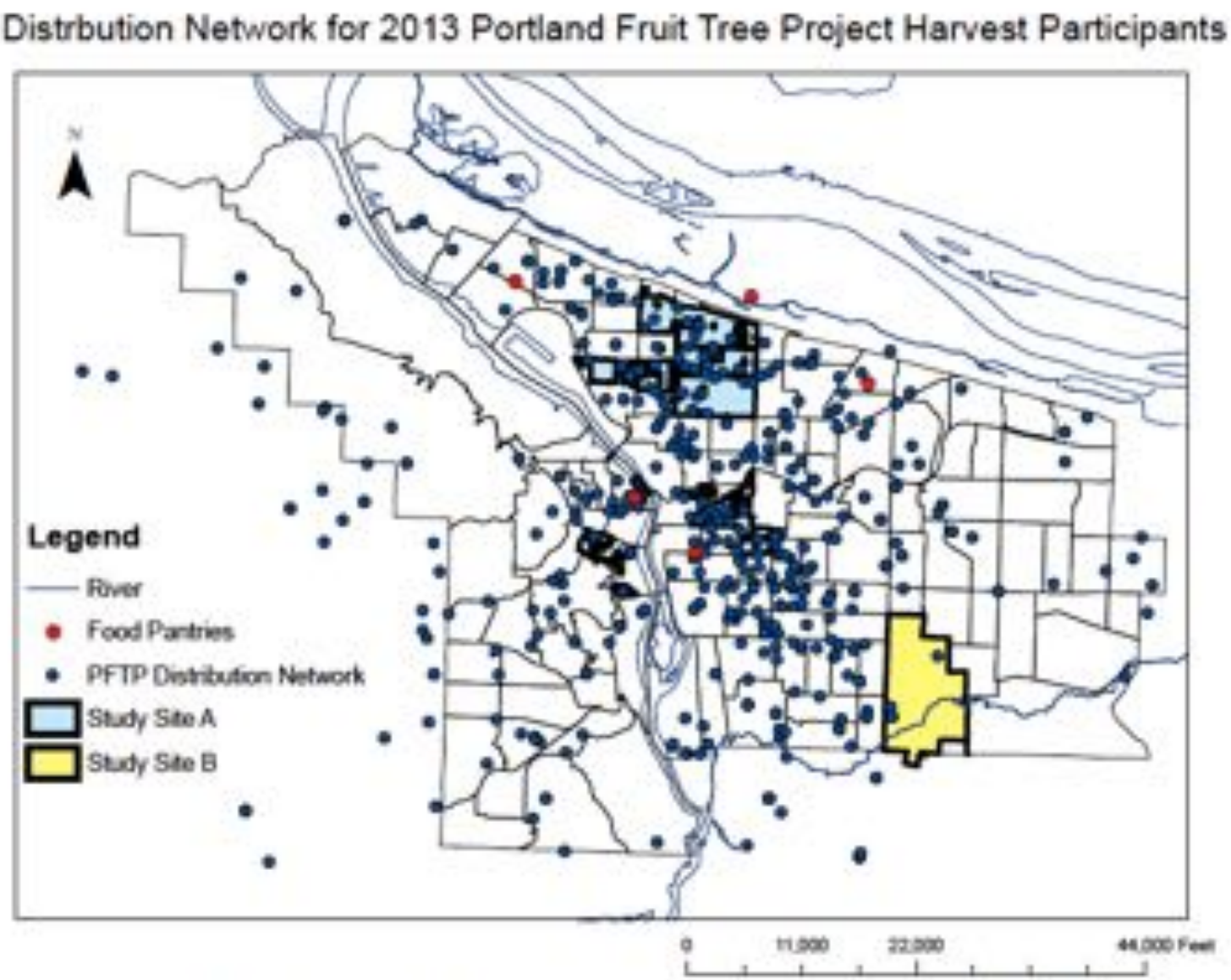

Fig. 4: This figure shows the distribution network of Harvest Party resources via the location of participant households (n=648) and partner food pantry locations (n=5).

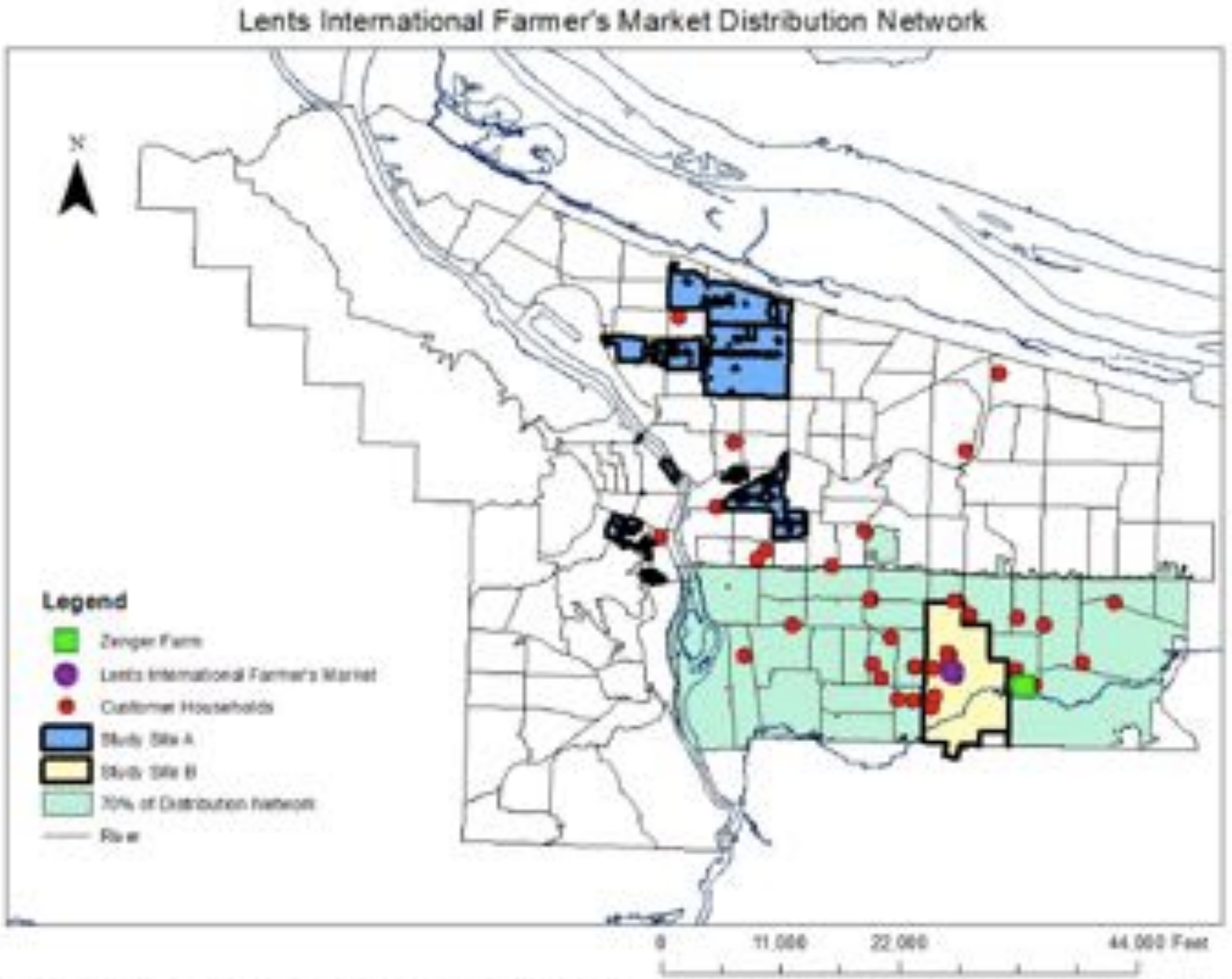

Fig. 5: This figure shows the distribution network of Lent's International Farmer's Market by (a) survey sample of participants conducted on October 31, 2013 (n=40) and (b) 70% of the distribution network by Census Tract according to an annual survey conducted by Zenger Farms. The data for this annual survey was obtained through an interview with Sarah Cogan, the Market Manager.

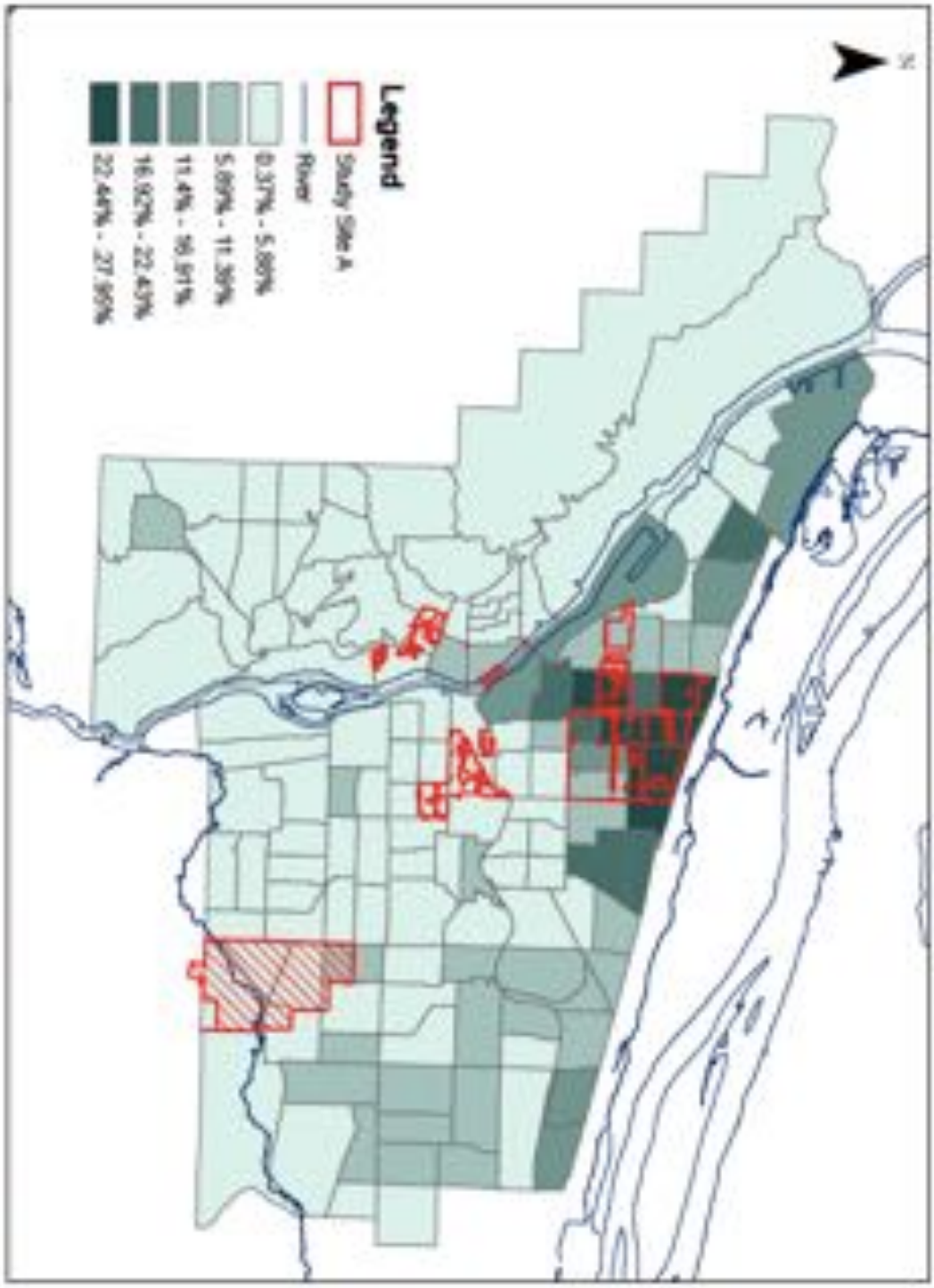

Fig. 6: This figure shows Black Population Density (%) per 2010 Census Tract in relation to Study Sites.

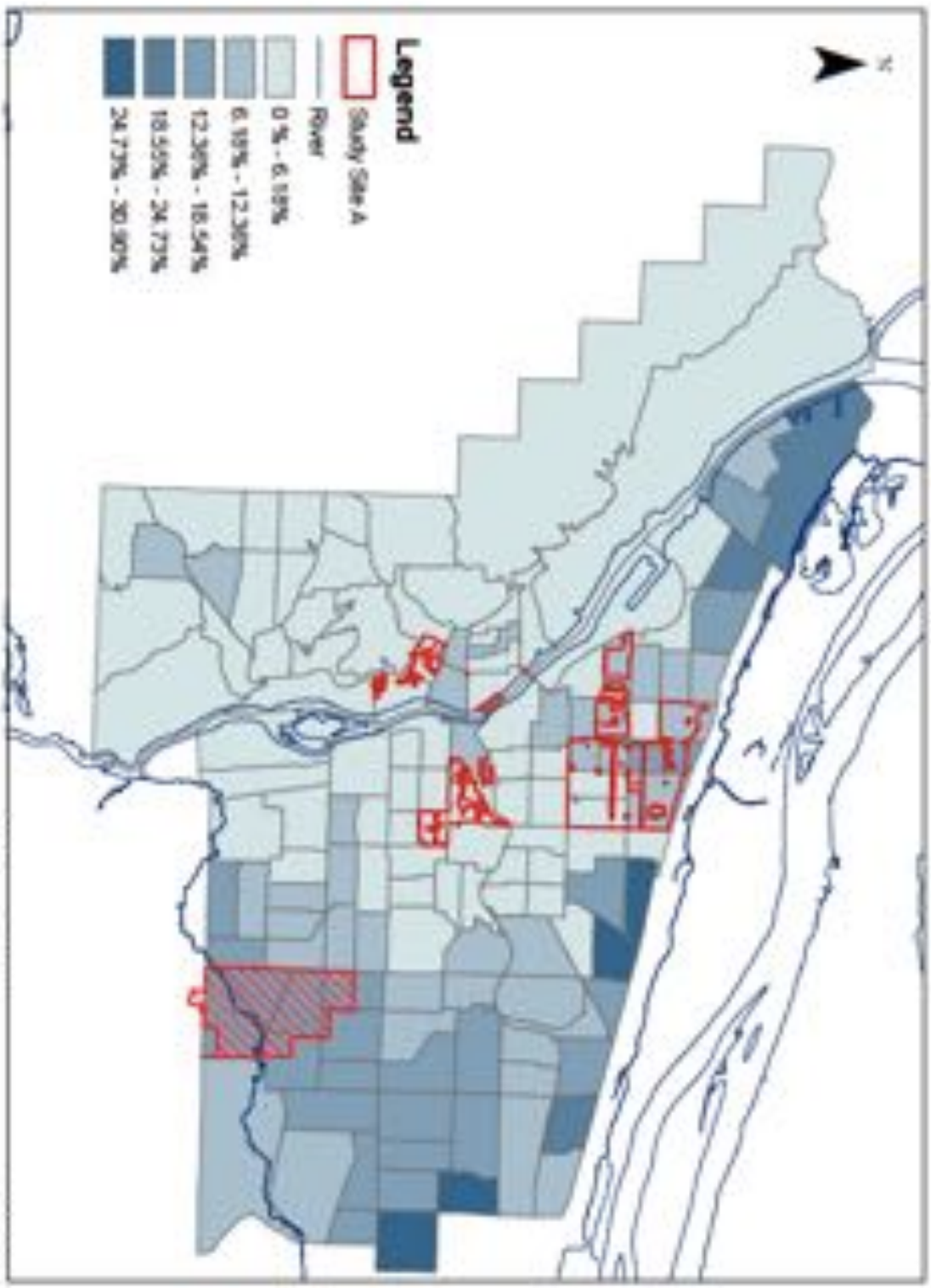

Fig. 7: This figure shows Hispanic Population Density (%) per 2010 Census Tract in relation to Study Sites.

From Exclusion to Collaboration

Food Preferences and Accessibility

It was found that both the respondents of the Neighborhood Food Network Report of NE / North Portland and the Cartlandia Survey of Lents Neighborhood preference to participate in status quo consumptive patterns of shopping at large-scale supermarkets, and that the high vehicle availability among respondents rendered geographical distance to food sources less relevant. Because vehicles shorten the travel time, then lessen the issues of food accessibility within food mirages.

Consistent with other food desert studies, food costs and distance to supermarkets were some of the most important food accessibility factors for residents of both North / NE Portland and Lents Neighborhood. In Lents, the importance of the distance-traveled factor was reinforced by the fact that the majority of participants travel less than 10 minutes to obtain their groceries. However, because the large majority of respondents use only a car to obtain their groceries, this 5-10 minute travel time implies a geographical travel distance of more than a mile. A car traveling at 30 mph would drive between 2-5 miles within the 5-10 minute time frame, which is well over the mile threshold that often delineates a food desert or food mirage. The availability of a car, and preference to drive it, also expands the Portland Development Commission's definition of a 20 minute Neighborhood. Yet, Breyer et al., (Figure 1, A) represents Lents and neighboring zip codes as having low-cost grocery stores within a mile of any given Census Tract, implying that residents can stay within their walk-able, 20-minute neighborhood if they so desired. Why does there seem to be a discrepancy between how far people travel, and how far people need to travel?

Perhaps the answer lies in the fact that the majority of respondents reported shopping at the same kinds of all-purpose stores: Fred Meyers, Safeway, Win-Co, and Wal-Mart. As I was biking along 82nd Ave, a busy and car dominated, strip-like stretch of road that Cartlandia is located on, I noticed that all of the grocery stores mentioned were located on this road. Thus, it seems people travel to these grocery stores to obtain the majority of their food, regardless of where they live. The actual geographical distance is not as important as the time it takes to travel to these food sources, and traveling by vehicle shortens this time, and allows for a larger amount

of groceries to be bought at once. Other important factors, such as food cost, may also help to incentivize traveling a geographical distance of more than a mile.

Safeway and Wal-Mart are well known to be low-cost sources of food, and Fred Meyers and Win-Co were used as the relative base price for the Breyer et al. (2013) study because of their low costs. This preference for lower-cost grocery stores is consistent with the findings from Neighborhood Food Network Report. The study found that 60% of respondents usually access food from full-service grocery stores. Similar to Lents, money and transportation were also some of the largest factors that go into the decision making process.

One of the largest results from my study that is often neglected by the food desert literature is the importance that respondents placed on service delivery factors, such as quality and variety and staff and service. Although the well-documented economic and spatial-temporal factors were significant, it seems as though people care just as much about the value and variety of the food, as well as the general atmosphere created by the store setting and staff. With their large economies of scale and large space, supermarkets have the capacity to supply a wide variety of different kinds of food to meet many different preferences and needs. Considering that people had a wide range of food type preferences, with 47% of respondents saying they would purchase produce if they had $10, 18% bread, 12% diary, 12% meat & eggs, 18% frozen and canned foods, and .06% fast foods, variety is needed in order to attract a large audience. Also, people have a limited amount of structural time; so the more they are able to obtain in one particular location, the better.

Given these results, it seems that food availability is contingent on car availability. If low-income individuals have access to a car, they are able to reduce travel time to a low-cost grocery store. Since most respondents in Portland have good vehicle availability and none of the residential tracts with low vehicle availability overlapped with food insecure regions, the possession of a vehicle seems to be a high priority for low-income populations. Perhaps the ability to purchase food at their ideal location is a significant factor in the decision to own a car.

Awareness of Non-Profits

Despite the current outreach efforts of Portland Fruit Tree Project and Zenger Farm that are targeted at Outer Southeast Portland the Lents Neighborhood in particular, few respondents had heard of either of these organizations, and none had participated. This may be

due to the fact that there is a disconnection between the food preferences within these communities, and the services that these nonprofits are offering. Although these nonprofits eliminate some economic and geographical barriers, not all barriers as identified by Freeman et al. (2013) were eliminated.

When asked about the Portland Fruit Tree Project, 90% of Cartlandia respondents indicated that they had not heard of them. The 3 participants who had heard of PFTP had never participated. Yet, PFTP's recent outreach efforts and reflectivity prove that they are actively trying to extend their efforts beyond their Caucasian volunteer base to better align themselves with their mission statement which, to remind the reader, is "to increase equitable access to healthful food and strengthen communities by empowering neighbors to share in the harvest and care of city grown food resources."

It is important to note that the PFTP's actual distribution network is much larger than what is shown in Figure 4. As mentioned before, half of their gleans are donated to local food banks. However, Bob Hatton mentioned in his interview that there is no transparency in the distribution networks once food is donated to the food pantries. The fruit is stored in large warehouses and gets mixed in with other donated produce, which is then distributed to individual households. The households receiving the fruit are unaware that the fruit is coming from PFTP and PFTP is unaware of the specific households they are reaching. Thus, it is possible that PFTP's distribution network extends further into Lents and Outer SE Portland.

Despite the fairly localized distribution network of Lents International Farmer's Market (Figure 7) only 2 out of the 30 participants surveyed at Cartlandia had heard of either Zenger Farms or Lent's International Farmer's Market and no one had participated. One respondent had remembered seeing the farmer's market several times in passing, but had assumed it was a private function. He showed a heightened level of interest when I explained the market program and the different SNAP incentives of the program.

When I asked Prairie Hale what her perception is on the levels of awareness in the Lents Neighborhood of the programs of Zenger Farm, she said "I think maybe half or so have only heard of it, but I think there is still a lot of people to connect to...it is hard to know if we were to just go out on the street and start asking people who would be aware because we haven't done that recently." When I interviewed Prairie, I had already collected my Cartlandia data, and

relayed that information to her: "I had 30 respondents at Cartlandia, and only 2 of them had heard of Zenger Farm." Her response was enthusiastic and positive: "Maybe we should do some outreach there! It sounds like a spot we have not reached yet, which is interesting."

It is hard to determine how much of general Lents Community has heard of Zenger Farm because a staff's perspective may be too internal, and a researchers perspective may be too external. However, my interview with Prairie suggested that the participants are a self-selected group, and it may be difficult to conduct outreach additional participants who did not have the inclination to seek out the services from either of the nonprofits for themselves.

Although these non-profits attempt to reduce barriers of food costs and distance, they are fairly limited in the types of services they provide. PFTP is highly specialized in fruit, and Zenger Farm is specialized in vegetable production. Although respondents indicated that fruits and vegetables were fairly important to them, with one respondent saying he shopped at one location specifically for their fruits and vegetables, they may not want to put forth additional energy to obtain the same type of services they can get at a grocery store. Additionally, only 20% of the participants indicated that organic and local produce is a priority for them when shopping for food. Respondents may not have a vested interest in PFTP or Zenger Farms programs because they are not actively seeking out the type of service they provide. However, I did see a lot of head nods from respondents as I described the programs of PFTP and Zenger Farms, which indicates that people may be interested in theory, but do not have the time.

There was one moment in my interview with Prairie that was very representative of the tension between outreach efforts and personal preferences. I asked Prairie if she personally encounter skepticism of the programs of Zenger Farm. She responded by saying that in one recent informational workshop, "One Mom was like "I have a problem with you telling people about the farmer's market." I don't know if she meant it to come out that way, but that's really what she said, and I was like "oh really, how come?" and she was like "It's the expenses." Prairie continued by explaining to the Mom that:

> "We just want to share the resources that are available so that people can make their own choice, I don't want people to not know about things that are out there, I want people to know everything that is available to them so they can choose how to spend their money, and we also recognize that yes farmers markets can be more

> expensive especially compared to Win-Co which is where families normally shop which has very inexpensive produce, and so one of the reasons why we have the SNAP match, but I talked to that Mom a little more and she was like "Well I don't qualify for SNAP, I am a single Mom but I do have a job." I wanted to talk to her even more about that because sometimes they think they don't qualify for SNAP when they actually do."

Thus, there is recognition on the part of these nonprofits that the services they are providing are somewhat elitist, and may be accessible to all customers, just as how general discourses of environmentalism do not necessarily resonate with "ecological others." However, in the interaction above, Prairie hints at her perception that if the Mom *did* have SNAP benefits, there would be no reason not to shop at the farmer's market.

Purity and Ecological Others in Alternatives to the Alternatives

I believe this tension between outreach efforts and personal preferences goes deeper than simply educating the community about all available options, and connects back to notions of purity within the sustainable agriculture movement, and, on a larger scale, mainstream environmentalism as a whole.

As indicated by Prairie's interview, these nonprofits are very conscious that their services represent hyper-local, organic distribution networks that were, until recently, not accessible to the majority of the population. This type of production originally appealed to "yuppies" as coined by Alice Kahn "to connote the emerging group of young urban professionals who 'combined fierce upward mobility and strong consumerism with some remarkable progressive cultural and political interventions'" (Guthman, 2003). As organic agriculture became increasingly industrialized, the product itself became less elite (Guthman, 2003). However, the products that Zenger Farm and Portland Fruit Tree Project offer, food that is grown within city boundaries, are rare commodities, considering the limitations that urban agriculture has in terms of yield potential, as mentioned previously.

While the redistribution of elite resources is honorable, these nonprofits must believe that organic, hyper local products are inherently better, or more "pure" than what you can find at a

supermarket – for a variety of different environmental, social, and health reasons. Why else would they put so much effort into outreach and redistribution – especially when other food services such as Fred Meyer, Safeway, Win-Co and Wal-Mart are perceived to be so accessible. Though it is never explicitly stated, these nonprofits' partnerships with other "sustainable" supermarkets, combined with their outreach programs, indicates that they are attempting to change agro-industrial patterns of consumption, rather than focusing primarily on urban hunger (which is addressed via partnerships with local food pantries). Although Prairie acknowledges that she respects whatever food choice people make (and I am sure the staff of PFTP feel the same way) the "ecological others" in these alternative to the alternative food distribution networks are those that *choose* to participate in the agro-industrial complex even after they have been exposed to the missions of these organizations. Yet, it is this exact population that these organizations are focusing their outreach efforts towards. As Anna, the PFTP intern, mentioned in her interview, Portland Fruit Tree Project, indeed, experiences an "outsider effect."

The fact that the participant base is mostly Caucasian alludes to how these services appeal mostly to a demographic that may associate more with an environmentalism based off of pure notions of connecting with nature rather than socioeconomic justice. As mentioned previously, the idea of connecting to nature resonates most with those whose histories have not been compromised by the creation of natural areas (i.e. white folk). Environmental justice movements, on the other hand, focus on the immediate environment. While I do not believe that individuals must fall within one framework or another, as exemplified by these alternative to the alternatives, social movements that are led by privilege white folk have a subconscious tendency to lean their cause more towards environmentalist notions, even when social equity is their stated goal.

Allocation of Capital in Portland

While these nonprofits attempt to provide alternatives for the agro-industrial complex that emerged out of the neoliberal policies, these organizations paradoxically are dependent on uneven capital distribution, both in terms of their funding, and their reason for existence. The fact that there is a funding bias towards them reinforces how their message resonates with the larger white, middle class concerns that dominate discourses in Portland, such as environmentalism, more so than their targeted population.

To refresh the reader, according to theories of urban political ecology, within urban built environments there is an uneven distribution of capital in which elite members of society benefit from certain amenities at the expense of marginalized communities. This uneven distribution is reinforced by geographical and historical processes such as redlining, supermarket redlining, and, more recently, gentrification. This uneven distribution becomes manifested into the built environment as spaces such as food deserts. Access to funding is not outside of this discrepancy. In Portland, this is evidenced by the fact that "less than one-tenth of 1% of the City of Portland's contracting dollars goes to minority-owned businesses," when protected contacting practices at the City were "designed to improve the challenges facing communities of color" (Curry-Stevens et al., 2010, p10).

The funding allocated to these non-profits that allows them to function with such great capacity comes from private grants and donations from institutions, local businesses, and individuals, which reinforces the neoliberal framework of uneven capital distribution. This allocation of capital is also tied to the redistribution of market excess, as exemplified by non-profit partnerships with prestigious grocery stores such as Whole Foods and New Seasons. For instance, the Lents International Farmer's Market's SNAP match program is partially funded by a grant from New Seasons, while the Whole Foods and NE 15th and Fremont St. donated 5% of their profit to PFTP for an entire day (Bob Hatton Interview). The stores that sell expensive food that is often unobtainable to the very communities that these non-profits are trying to provide service to are helping these non-profits function.

Social movements need access to a variety of different resources in order to be successful, and, thus, movements that are led by relatively privileged social groups and appeal to the discourses and concerns of a middle class audience have predominated in the past 30 years (Edwards and McCarthy, 2004). Common central concerns of these organizations include "environmental protection, women, gays and lesbians" and the various concerns of college and university students. Values such as not wanting fruit to go to waste and wanting to participate in local food distribution networks surrounding discourses of nature are examples of theses "discourses and concerns." Marginalized groups, or "groups from whom the dominant symbols [rhetoric of a social movement] are not apart of "their" culture" must "step outside of their "home languages in order to communicate properly" (Williams, 2004). The "home languages"

could be literal language barriers, or more figurative differences in cultural ideologies. The differences between the preferences of respondents and the serves being provided by Zenger Farm and PFTP highlight this cultural disconnect.

As the social movements of the elite gain more resources and become professionalized, with PFTP and Zenger Farm being notable examples, they more often than not recruit for professional qualifications rather than for those who have a lived experience with an issue and can culturally relate to beneficiaries of a movement. Thus, recruiting strategies can reinforce social stratifications. A strange paradox emerges where "movements of disadvantaged groups should be more and more likely to be comprised of conscience constituents rather than beneficiary constituents, those for whom the movement speaks" (p138). This paradox is reflected in the demographics of leadership within PFTP and Zenger Farm. However, these two nonprofits are conscious of the demographics of their leadership. In her interview, Prairie Hale acknowledged the need for a diversified staff, especially in such a diverse community as Lents:

> "We definitely don't have a lot of languages represented on our staff or a lot of culture represented on our staff, that I think is a challenge for people becoming involved. We have taken steps to work to overcome that, I honestly think it would be super beneficial for us to diversify our staff, have more languages and cultures represented, it would make a huge difference in our ability to be relevant to and engage those populations"

The fact that PFTP has already hired a staff member who is fluent in Spanish is, I believe, a step in the right direction.

McClintock (2013) attempts to address this contradiction by stating that urban farms and other related alternative food organizations manifest themselves as reformist rather than revolutionary. For instance, instead of incentivizing prestigious grocery stores to reduce the cost of their food and in turn reduce the quantity of Food Mirages in Portland, these nonprofits are intermediary actors; nodes of connection between capital surplus and socio-economic deprivation. They function within the neoliberal framework while attempting to tweak it however slightly.

More radical attempts at combating food insecurity, such as food justice movements, however, receive less financial support (Edwards et al., 2004) If resource mobilization is a huge limiting factor, how is it that food justice movements in Detroit, Michigan, NYC, and Oakland California are able to emerge? Why are there no similar movements in Portland, Oregon? Perhaps this goes back to the same reasons why the civil rights movement was so successful: collective identity and mass numbers. Edward et al, explains how the "labor potential of movement constituents" is more equitably distributed than financial resources. In other words, finding people to donate time for a cause that resonates with them is easier than finding people to donate money. Thus, "groups poor in financial resources may be able to compensate by mobilizing in greater numbers" (p 140). While communities of color in Portland, Oregon do face a disproportionate amount of socioeconomic disparities, the population of these minorities, both as a percent of total population and the aggregate, is far less than the population of the minorities in other cities. For instance, according to the 2010 Census Bureau, Oakland has a large African American population of 28% and a large Hispanic population of 25%, Detroit has a large African American population of 82.7%, and New York City has an African American population of 25.5%, and a Hispanic population of 28.6%. Portland, Oregon, on the other hand, only has an African American population of 6.3%, and a Hispanic population of 9.4%. Additionally, the fact that the Lents Community is so diverse may, in fact, make it difficult for a collective identity to emerge between different ethic groups. Although there is cultural exchange in Zenger Farm's Healthy Eating on a Budget program, whether or not this cultural exchange would emerge autonomously is unknown. The lack of a marginalized community led food justice movement in Portland is a phenomenon that I direct future research towards.

Failure of Reforming Lents:

Recently, there was an attempt at reallocating public money to the Lents Community in an attempt to revitalize that particular built environment. However, this attempt did not receive support from neither private developers nor residents of the Lents Neighborhood. This shift away from neoliberal thinking on the part of the state was met with objects from both stakeholders is neoliberal thought, and the Lents community itself.

The Lents Neighborhood is an anomaly of attempted reallocation of capital without commitment on the part of private developers. According to a recent article in the Willamette Week (Mesh, 2014), the Portland Development Commission has spent $96 million on purchasing 12 vacant lots in hopes of creating a vibrant "town center," in Lents consisting of "a grocer, a community center, a bike rental shop and a bookstore" with "streets lined by banners and flower pots and the shop windows traded by trees and awnings." Right now, this "town center," located at the intersection of SE 92nd Avenue and Foster Road, "includes a fountain, a smoothie shop, a gas station, and…a nightclub and off-track parlor called New Copper Penny." They have fallen short of their dreams of vibrancy, mostly because private developers have little incentive to move in, given the low median income of Lents residents. What this article doesn't mention, however, is that this intersection is the exact location of the Lents International Farmer's Market. This is a concrete example of how nonprofits try to fill in the void of unsuccessful services.

This process of allocating public capital towards Lents is representative of a larger citywide, and nation-wide process called urban renewal. According to the same article on Willamette Week, urban renewal starts with the city drawing a boundary around a region it wants to see change. This can be conceptualized as the opposite of redlining – another city practice during the 1950s and 1960s that created disinvested areas in the first place. As these areas start to develop, all increment tax revenue goes towards paying down the debt of the city investment, rather than to public schools. As former city Commissioner Erik Sten mentioned, "Urban renewal can't solve poverty problems. You had no consensus on 'What are we trying to do?' If the answer is, 'Help Lents,' that's not an answer." When city owned lots remained vacant, superficial attempts at inclusion of public opinion emerged, including the startup called "What Would You Like to See?" The "What Would You Like to See?" start up posted signs that simply asked residents what they would like to see. However, this attempt begot equally superficial responses such as "inexpensive [office] space made from old cargo shipping container" and "a tunnel to the center of the earth" (Mesh, 2014).

Despite the Lents Community's general reject of attempts at reformation, either through the foodscape or the built environment, is unsafe to assume that these food insecure areas are completely satisfied with the amenities that are available to them. These non-profits and the city alike are unconsciously superimposing their own environmentalist value sets based on notions of purity as a framework for addressing socio-economic issues such as food insecurity and

economic development. Instead of assuming that the "ecological othered" bodies that live in Lents and North / Ne Portland share environmentalist attitudes towards development and alternative food networks, decision makers in collaboration with researchers should employ participatory approaches to understand the wants, needs, and desires of those who are most often exclude from the decision making process. The Neighborhood Food Network Report that was done in North / NE Portland employed many participatory methodologies by using maps and illustrations rather than economic jargon, and by employing community members to conduct logistical coordination for the research. However, the results of this study were more descriptive than prescriptive.

Community Mapping:

One way to collaborate with community members while incorporating multiple perspectives, classes, and scales of decision-making is through a participatory series of workshops called community mapping.

However useful ArcGIS is at delineating areas that may experience food insecurity or a wide variety of other disparities, it abstracts the lived experience of community members (Giddens, 1990). Maps are an inherent abstraction of reality; indeed a map is only as useful as what it omits (Wood, 2010). Perhaps this is why the food mirage data did not necessarily correlate with other perceptions & statistics of Lents Neighborhood as a food insecure region, and thus, a target for outreach. Although mapping is useful for making analyses over a variety of regional and temporal scales, bureaucratic decisions should not be made solely based on information derived from a map.

A publication put out by *Sustain: The alliance for better food and farming* called "Community Mapping: Working together to tackle social exclusion and food poverty," attempts to make maps, and the decision making process at large, more placed based by incorporating community participation into the creation of their maps (Johnson and Webster, 200). Conducted in the United Kingdom in the Foleshill Coventry, the researchers used a methodological strategy called Participatory Appraisal (PA), which tries to incorporate a diverse population into policy making; specifically focusing on populations that tend to be most excluded from decision-making by "working in streets, parks, shopping areas, schools and anywhere people routinely

go." PA emphasizes participation, action and ownership, as outlined below:

"Participation: Different groups should be involved from the beginning to the end – in planning what will happen in the project, analyzing local problems and solutions, verifying results, and evaluating what happens and taking action.

Action: Everyone involved – community members and policy makers – should be aware of who is responsible for what, and be committed to taking some action as result of engaging in the project.

Ownership: This is what makes it more likely that action will be taken. It flows from people participating on equal footing. If people own, and feel that they own the process – rather than seeing it as something that other people are doing to them – then they are more likely to stay involved (Johnson et al. 2000, p5). "

A concrete example of how community mapping can be employed is shown in Figure 10, below. Although more of a conceptual map, this tree map allowed individuals to come up with their own solutions for food issues. Other participants placed dots next to solutions that they would like to see employed. This approach allows community members to use any languages and terms they see fit, and allows a conglomeration of different opinions. This approach to research would help to give voice to low income communities and communities of color within Multnomah County, but would also be effective anywhere employed. It is also consistent with the most recent call for food justice scholars to "aim to encourage the food movement to begin to see the low-income communities and communities of color most deeply harmed by industrial agriculture as potential allies" in order to create "a broad, multiracial, multiclass movement that can challenge the dominance of industrial agriculture and help create something more sustainable and just" (Alkon and Agyeman, 2011, p332). I could see nonprofits, such as Portland Fruit Tree Project and Zenger Farms, and even some of their business partners such as Wholefoods and New Season, being a stakeholder in this broad, multiclass movement.

Figure 10: A Participatory Food Solutions Tree; an outcome of Participatory Appraisal

Conclusion

Food Justice movements in Portland are led by "conscious constituents" – or relatively privileged Caucasian folk. The inherently purist environmental ideologies that often extend from these demographics are superimposed onto food insecure communities and "ecological other" bodies. These "ecological other" bodies are unintentional stigmatized by environmentalist efforts, and do not necessarily see a need to change their food intake because inexpensive sources such as Win-Co and Wal-Mart suffice. Thus, the people who "need" these services the most do not necessarily want them, and the Food Mirage methodology, though I utilized it myself, abstracts lived experiences of food accessibility. While food-based justice movements are unlikely to emerge within communities of color in Portland, we cannot assume that these communities do not have desires for change. I believe that nonprofits can play a better role in

community development by employing a more inclusive staff, by partnering with community members by asking them what change they want to see, and by finding ways to share the fiscal resources they are able to accumulate. Community Mapping is a great platform for these kinds of practices.

While I have argued that ecological other bodies should not be socially stigmatized for not consuming local and organic produce and instead turning to Wal-Mart, many would argue that these ecological other bodies are more prone to obesity and diabetes, and that vegetable consumption, as opposed to the consumption of meat, eggs, and cheese, can help reduce this medical issue (Kumanyika and Grier, 2006). Furthermore, some may argue that it is unfortunate that these communities must turn to inexpensive food sources, for the production networks of these foods are often tied to socioeconomic inequalities (Schlosser, 2001; Guthman, 2003; McClintock, 2013). This is a huge dilemma that I alone do not have a solution to. I will say, however, that because of these dilemmas, we as scholars, students, civil society members, participatory researchers, and activists must take more of a holistic approach when deal with issues of food resource distribution. Because commodity chains, and their associated production practices, are driven by factors relating to supply, demand and profit and are not embedded in social relations of all scale, we, as students, scholars, activists, participatory researchers, decision makers, and civil society members, cannot attempt to change people's consumptive patterns without addressing larger systemic issues of the socioeconomic inequalities inherent in a neoliberal framework.

Appendix A: Informed Consent

Thank you for participating in this survey! I appreciate your time.

This survey should take no more than 5 minutes. The purpose of this survey is to discover the various factors that one considers when deciding where to obtain food. The data collected will go into an academic thesis paper.

I do not anticipate this survey distressing you in anyway, and your decision to participate in the survey is completely voluntary. You may withdraw your participation at any point.

All information collected will be used only for my research and will be kept confidential. There will be no connection to you in the results. Once the survey is completed, I would be happy to share the results with you if you desire. In the meantime, if you have any questions, feel free to contact me at michellem@lclark.edu

Appendix B: Food Accessibility Survey

What are the top 5 places you obtain food from?

1.
2.
3.
4.
5.

How long does it take you to get to each place?

1.
2.
3.
4.
5.

What are your means of transportation when shopping for food?

What are the 3 most important factors when deciding where to obtain your food?

Economic access,
__ Personal Income
__ Food Costs
__ Store Incentive Programs (whether or not stores accept EBT cards)
__Perceived Value of Food in Stores

Service Delivery
__ Quality and Variety of Foods Sold
__ Staff & Service
__ Food Presentation

Spatial-Temporal Access
__ Distance to Supermarkets
__ Distance to Variety
__ Travel time
__ Time costs

Social Access
__ Culturally Appropriate Foods
__ Where your friends / family shop

Personal Domain
__ Specific Health Needs

__ Knowledge about nutritious foods
__ Preference related diets (are you a picky eater or a vegetarian?)

The Portland Fruit Tree Project, and Zenger Farms attempts to make fresh produce more available to all people in Portland. Have you heard of these organizations?

__ yes
__ no

If yes, have you participated?
__ yes
__ no

Would you be interested in participating with or learning more about these organizations? If so, please leave your email address.

Email: _____

1. What is your age?

a. 18 – 25
b. 26-35
c. 36-45
d. 46-55
e. 56-65
f. Greater than 65

What is your ethnicity?
a. Caucasian / White
b. African American / Black
c. Pacific Islander / Asian
d. Hispanic / Latino
e. Other

What is your income level?
a. Less than $15,000
b. $15,000 - $30,000
c. $30,000 - $45,000
d. $60,000 - $75,000
e. Greater than $75,000

Appendix C: Handout

Thank you for participating in this survey!

Below is a list of factors that one might consider when deciding where to obtain food? Please list the top 3 factors that go into your decision:

a. Personal Income
b. Food Costs
c. Whether or not a store accepts SNAP Benefits
d. Quality and Variety of Foods
e. Staff & Service
f. The presentation of the food
g. The distance a food source is from your household
h. The amount of time it takes to travel to the food source
i. Whether or not a food source has culturally appropriate food
j. Where your friends and family shop
k. Your personal knowledge about healthy foods
l. Whether or not a food source can meet your particular health needs
m. If a food source sells local and organic produce

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