Food Access in Duluth's Lincoln Park/West End Neighborhood

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Authors:
Adam Pine, Assistant Professor, Department of Geography, University of Minnesota Duluth
John Bennett, Assistant Extension Professor, University of Minnesota Extension Center for Community Vitality

With the assistance of:
Kate Carlson, Instructor, Department of Geography, University of Minnesota Duluth
Josiah Grover, Department of Sociology, Ball State University
Gina Hollinday, Department of Geography, University of Minnesota Duluth

August 2011

Photo credit: Codie Leseman

Acknowledgements
We would like to thank the following people who helped to make this research report possible: Rick Minotte and Volunteers Caring and Patrolling (VCAP) for helping distribute our survey; Stacey Starke and her Sustainable Applications of GIS for making a variety of maps highlighting food access in Duluth; College of Liberal Arts Dean Susan Maher for providing funding for Research Assistants for the project; Linda Klint at the Department of Geography, University of Minnesota Duluth; and Trudy Fredericks from the University of Minnesota Extension for editing and analysis of the qualitative data; Ryan Pesch with University of Minnesota Extension for providing market analysis data to be used for analysis; and Codie Leseman for the cover photograph. We would also like to thank the following individuals and organizations for sharing with us information about food access in the Duluth area: Duluth LISC, Community Action Duluth, Salvation Army, CHUM, 4th Street Market, A.H. Zeppa Family Foundation, Lincoln Park Business Group, Faith Haven Convenience Store, and Whole Foods Co-op General Manager Sharon Murphy.

Executive Summary

- The purpose of this study is to understand more about what the term "food desert" means and to identify the specific problems residents of Lincoln Park/West End face in getting access to healthy food. The goal of this study is to help start a conversation about some possible steps to take to increase the level of food security in the neighborhood.

- The USDA defines a food desert as "a low-income census tract where a substantial number or share of residents has low access to a supermarket or large grocery store" (USDA, 2009). While many "food desert" communities have fast food restaurants and small convenience stores, they often lack full-service grocery stores that stock a range of healthy food options. In addition, many residents of these communities do not have adequate transportation and, therefore, lack the ability to shop at grocery stores in adjacent communities. There is no full-service grocery store in the Lincoln Park/West End neighborhood of Duluth. This is a problem because a lack of access to grocery stores is associated with higher rates of obesity and diabetes as people substitute available food for healthy food.

- Our survey results indicate that Lincoln Park/West End has a complex and innovative food provisioning system. Residents purchase groceries at the West Duluth Super One, but also travel to grocery outlets throughout the Twin Ports area. They order food from food buying clubs and utilize a variety of federal government programs that provide food. Residents also hunt, fish and garden to provide themselves with the types of food they wish to consume.

- A small but significant portion of the Lincoln Park/West End population (10-15%) experience significant barriers to accessing food. They overpay for food at local convenience stores and, generally, have a difficult time finding the food that they and their families need. In addition, a large number of Lincoln Park/West End community members use "emergency" food shelves to supplement their family's food supply.

- Convenience stores in Lincoln Park/West End charge more for groceries and have less of a selection, especially of fresh fruits and vegetables, than grocery stores in greater Duluth. While small convenience-type stores can play a strong, positive role in provisioning the local community, they are not playing this constructive role now in Duluth's Lincoln Park/West End.

- Many survey respondents reported a desire for a local grocery store that could play an important role in how they shop for groceries. For example, a small store could be a place where residents could do all of their grocery shopping or could stand in as a place to make quick, convenient purchases to supplement larger shopping outings at full-service grocery stores.

- Market analysis indicates that because a grocery store does not currently exist in Duluth's Lincoln Park/West End, the community has a "leakage" factor of about $5.3 million, meaning that residents are spending those dollars at stores outside of their community's trade area. It is not likely that a grocery store would be able to capture all of the estimated $5.3 million, but would be able to attract a good portion of those dollars if the store was an appropriate scale.

- A variety of obtainable options could solve the problems faced by people living in food deserts. For example, public and private entities could work in partnership to help either a large grocery store or a smaller convenience store operate profitably in the community. Another option is to increase transit options to stores outside of the neighborhood, either by increasing access to taxicabs or altering existing bus lines. Finally, several existing organizations are currently exploring ways to develop sustainable food hubs that could dramatically improve access to fresh and healthy vegetables.

Table of Contents

Introduction

The United States Department of Agriculture estimates that each year nearly 15% of the United States population experiences "food scarcity," which they define as existing "whenever the availability of nutritionally adequate and safe foods or the ability to acquire acceptable foods in socially acceptable ways is limited or uncertain" (USDA, 2011). This research report examines one part of food scarcity, "food deserts," as experienced by residents of the Lincoln Park/West End neighborhood of Duluth, Minnesota. The USDA defines a food desert as "a low-income census tract where a substantial number or share of residents has low access to a supermarket or large grocery store" (USDA, 2009). While many "food desert" communities have fast food restaurants and small convenience stores, they often lack full-service grocery stores that stock a range of healthy food options. In addition, many residents of these communities lack adequate transportation that would allow them to shop at grocery stores in adjacent communities.

There are many serious consequences related to living in a food desert. For example, studies have linked a lack of access to grocery stores to serious health concerns, such as higher rates of obesity and increased risk of diabetes and cardiovascular disease (Ver Ploeg et al., 2009). In addition, economic costs associated with food deserts, such as high transit costs to grocery stores outside of the community and higher prices at neighborhood convenience stores, are an economic hardship on low-income residents of food deserts. Therefore, analyzing food access in Lincoln Park/West End is important for improving the quality of life of neighborhood residents, aiding economic development of the area, and ameliorating health outcomes within the community.

We understand that people choose to eat a wide variety of food ranging from pre-packaged convenience foods to pre-cooked deli foods; frozen vegetables to local, organic vegetables; and pasties to egg rolls. Our interest in writing this report is not to promote a certain diet (i.e. *only organic* or *only local*), but instead to argue that all Duluthians have the right to sufficient amounts of *healthy, tasty* and *affordable* food (Chilton & Rose, 2009). This requires that all Duluthians have a *reasonably priced* grocery store easily accessible to them.

The goals of this project are to identify how residents of the Lincoln Park/West End neighborhood access groceries, identify the barriers residents experience when trying to access groceries, and to offer recommendations for how to improve food access. We believe that different public, private and civil society organizations can work together to improve food access in Lincoln Park/West End. By identifying *how* Lincoln Park/West End residents access food and by understanding the existing barriers to expanding grocery options in the community, we can create the appropriate solutions.

What Are Food Deserts?

Scholars typically define urban food deserts as low-income neighborhoods that have relatively poor access to healthy and affordable food (Larsen & Gilliland, 2008; USDA, 2009). These neighborhoods may have other shopping venues like convenience stores and liquor stores, but lack a reasonably priced well-stocked grocery store. Some scholars also argue that there is a relationship between food deserts and the "civic-structure" of a neighborhood in that neighborhoods with strong community organizations and a sense of identity are better able to respond to the lack of a grocery store than un-cohesive or poorly organized neighborhoods (Morton, Bitto, Oakland, & Sand, 2005). Therefore, one way to fight food deserts is to support neighborhood organizations that are working to improve residents' access to food. Hilary Shaw identifies three types of barriers, physical, economic and attitudinal (see Figure 1), that people who live in food deserts face when trying to access healthy food (Shaw, 2006).

Figure 1: Elements of Food Deserts
Physical barriers
Economic barriers
Attitudinal barriers
Source: Adapted from Shaw, 2006

Physical barriers are the concrete things that act as barriers to people trying to access a grocery store. Distance from a store, snow or ice-covered streets, lack of curb cuts or sidewalks, and a lack of convenient transit connections to grocery stores are all examples of physical barriers. As grocery stores leave the city centers and big-box retail food outlets emerge in the suburbs, the United States is increasingly creating a food system in which cars are necessary for accessing healthy food because it is not available within walking distance of people's homes (Larsen & Gilliland, 2008). This means that convenience stores and other non-traditional food outlets, which are often located within walking distance of residential neighborhoods, are becoming increasingly important parts of how people access food (Black & Kouba, 2005).

Economic barriers refer to the difficulties people who live in food deserts experience when trying to afford groceries or when affording travel expenses to access more affordable groceries in other neighborhoods. In a neighborhood with only a high-priced grocery store, economic barriers may be more limiting than physical barriers. For example, traveling to and from the grocery store can be expensive, especially when residents must use taxi services. Food delivery services are often either unavailable or too expensive for most consumers to use. The recent economic downturn and the growing income inequality in the United States are increasingly becoming economic barriers to accessing healthy food.

Attitudinal barriers refer to the different tastes and desires of individual consumers. For example, if an individual prefers pre-packaged foods and has only fresh vegetables available in their neighborhood markets, then they are experiencing life in a food desert *even if their neighbors who have other dietary needs are not living in a food desert.* Therefore, it is important to recognize the variety of diets that people eat when considering how food deserts effect people.

Causes of Food Deserts

Several different factors help create circumstances that lead to food deserts. For instance, fragmentation of metropolitan development in the U.S. contributed to the concentration of low-income communities in the inner city and the concentration of wealthier residents in the suburbs (Dreier, Mollenkopf & Swanstrom, 2005). In addition, the act of redlining by banks resulted in a lack of access to credit in urban neighborhoods and forced retailers and investors out of the inner city. Scholars have also noted the decline in the number of smaller neighborhood grocery stores and the increased emergence of larger grocery stores in suburban locations (Larsen & Gilliland, 2008). These forces created car-oriented neighborhoods on the outskirts of cities with good access to healthy food and inner-city communities with limited transit options that effectively cut-off residents' access to healthy food.

How Do People in Food Deserts Provision Themselves?
While grocery shopping in food deserts is difficult, people who live in food deserts do not starve. Instead, they engage in a variety of different coping strategies to obtain the foods they need. For example, they shop at convenience stores; travel to shop at traditional grocery stores outside of their neighborhood; rely on soup kitchens, food shelves, and other distributors of commodity foods; and participate in federal anti-hunger programs such as SNAP (formerly known as food stamps) and WIC (Eikenberry & Smith, 2005). In addition, child-focused programs such as the Federal Free and Reduced Lunch Program and the Afterschool Nutrition Program provide healthy meals to children. It is important to think about food access as one of many challenges this population faces because food deserts disproportionately affect low-income people who experience multiple challenges, such as lack of access to health insurance, poor housing conditions, lack of income, and low educational attainment (Black & Kouba, 2005; USDA, 2009).

What Problems Do Food Deserts Create?
Children, the Elderly, and Those without Cars
Food deserts do not affect all members of local communities equally. Instead, groups that have limited mobility tend to be hurt the most (Ley, 1983). For example, while more mobile community members are able to travel outside of the community to shop, children who cannot travel long distances without parental supervision and those residents who rely on public transit must find ways to access groceries not available in their neighborhood. In addition, elderly residents who do not drive and cannot travel outside the community are often completely dependent on neighborhood stores.

Costs
People living in food deserts who shop for food in convenience stores pay higher prices for food. Large big-box type stores located close to highways and draw in customers from a wide radius, buy food in bulk and are therefore able to sell food at deeply discounted prices (Hendrickson, Smith, & Eikenberry, 2006). In contrast, small stores in inner city neighborhoods must purchase their stock in smaller quantities at higher prices and sell food at highly inflated prices. When residents of food deserts are able to travel outside of their community to shop for discounted groceries, travel costs offset any savings (Blanchard & Lyson, 2005; Hendrickson et al., 2006; Larson, Story, & Nelson, 2009). With rising fuel costs, transit is becoming particularly expensive.

Food Quality
Research shows that convenience stores sell lower-quality food, and not the fresh and healthy food that people need to thrive and nourish their families (Hendrickson et al., 2006). Part of the reason for stocking lesser quality goods is that with low turnover of goods, it is more difficult for smaller stores to keep a fresh stock of fruits and vegetables. Similarly, small retailers pay higher costs for their stock than large retailers, thereby making it difficult, though not impossible, to

make a profit on high quality, healthy food. In addition, stores that are not primarily grocery stores often carry many unhealthy packaged food options because they are easy to stock, but are not nutritious.

Transit Problems
Food is a unique commodity in that households must purchase it on a regular basis, unlike goods such as clothing and electronics that can be purchased much less frequently. Therefore, transportation to and from the grocery store can be a constant and ongoing struggle for consumers living in food deserts. For those without cars, walking to purchase groceries can be difficult. Food is heavy and there is only a very small radius around grocery stores within which consumers could reliably shop without using a car. One study found that large big-box grocery stores have a limited impact on the diets of young people who live just a half-mile from the store, while convenience stores located even closer to their homes had a greater impact on their diets (Hendrickson et al., 2006). Duluth has long winters and large amounts of snow and ice, which makes shopping for food without a car difficult (Larsen & Gilliland, 2008). For those traveling by bus to the grocery store, transportation is still challenging. Buses do not have a place to store groceries, and traveling by bus with small children and groceries is difficult. Add to this the hazards posed by large parking lots surrounding suburban grocery complexes where shoppers must negotiate the distance between their home, the bus, the store and back again. For consumers with cars, shopping is easier. They can travel outside of their immediate neighborhood to shop at the store with the widest selection and the lowest prices. However, this flexibility demands a car that comes with the ever-increasing costs for maintenance and fuel. Therefore, while cars improve access to healthy and diverse groceries, they do so at a higher cost.

Convenience
Neighborhood grocery stores provide more benefits than simply access to convenient food; they also provide a neighborhood meeting place as well as a store to purchase inexpensive items, like newspapers, milk, and flour, which are less expensive than the transit costs it would take to drive to buy them at a larger store (Wrigley, Warm, & Margetts, 2003). Communities that do not have a grocery store lack a place where someone can easily purchase an item that they forgot during a weekly shopping trip, which forces consumers to travel a far distance for a small purchase (*Short, Guthman, & Raskin*, 2007). Similarly, as fewer grocery stores exist, people choose to shop less often and make less frequent, but larger shopping trips (Blanchard & Lyson, 2005).

Higher Rates of Obesity and Lower Health Outcomes
There is a large variety of data linking neighborhoods that lack access to grocery stores with poor health outcomes. For example, residents living in neighborhoods with grocery stores are more likely to have higher fresh fruit and vegetable intake (Wrigley et al., 2003; Michimi & Wimberly, 2010; Larson et al., 2009; Pearson, Russell, Campbell, & Barker, 2005). Similarly, the public health literature identifies significant health problems related to poor diets and hunger by noting that hungry persons suffer from two to four times as many individual health problems, such as unwanted weight loss, fatigue, headaches, inability to concentrate and frequent colds (NIH, 1999). Malnourishment negatively effects the cognitive development of children resulting in loss of knowledge, brainpower and productivity. For example, iron-deficiency anemia in

children can lead to developmental and behavioral disturbances. Studies also found that pregnant women who are undernourished are more likely to have low birth weight babies, and that these babies are more likely to suffer delays in their physical and cognitive development (Food Research Action Center, 2005). In addition, malnutrition aggravates chronic and acute diseases and speeds the onset of degenerative diseases among the elderly. Finally, hunger and food insecurity have an emotional impact on children, parents, and communities. When it is difficult for people to travel to a grocery store, then people choose to eat filling, less healthy foods that lack the nutritional benefits of fresh fruits and vegetables. Therefore, communities that lack grocery stores actually end up having higher rates of obesity because of the prevalence of unhealthy food.

What Solutions Exist to the Problem of Food Deserts?

SHARE[1]/Ruby's Pantry[2]/Angel Food Ministries[3]

Duluth has a variety of services that provide food to people for discounted rates on a monthly basis. SHARE and Angel Food Ministries are both *buying clubs* that are open to all interested Duluthians. To use these services you place an order and a few weeks later on the designated distribution day you receive your food order. These programs offer savings of up to 50% on food costs by cutting out the middlemen, which in this case are the retail outlets. There are still barriers attributed to these services. For instance, Duluth has only a few distributions sites and people living in food deserts still need transportation to reach these sites. In addition, these centers distribute food only once per month, meaning that this service can only supplement a household's grocery needs and not meet them completely.

Ruby's Pantry is slightly different from the above-mentioned buying clubs. The organization is also open to any Duluthian that is willing to purchase a $15 share of food. Each share receives about $100 worth of donated food on a monthly basis. Different from buying clubs, Ruby's Pantry does not allow participants to choose the food they receive, and instead includes in each share the same allotment of food. While Ruby's Pantry offers a deeper discount than SHARE or Angel Food Ministry, it has similar accessibility drawbacks in that distribution occurs only once per month.

Local Regulations

City leaders can use local regulations to improve access to fresh and healthy food. Cities like Los Angeles, Buffalo, New York and Concord, Massachusetts have used zoning regulations to promote the sale of healthy food by limiting the number of fast food outlets within their boundaries (Raja, Born, & Russell, 2008). Similarly, other cities, including Minneapolis, have used local regulations to demand that all small corner stores stock a variety of healthy foods. Still other cities, such as Detroit and Milwaukee, have created local food advisory boards to work

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1 For more information about SHARE, please visit www.sharewi.org

2 For more information about Ruby's Pantry, please visit www.homeandawayministries.org/ruby/home_ruby.htm

3 For more information about Angel Food Ministries, please visit www.angelfoodministries.com

with public and non-profit entities to improve access to healthy food and to create a local food system plan in an effort to provide access to fresh, healthy food to all members of the community.

Public, Private, and Non-Profit Partnerships
In Duluth, the 4th Street Market in the Central Hillside neighborhood operates in a space renovated by the non-profit A. H. Zeppa Family Foundation and is run by a for-profit businessperson. Similarly, the state of Pennsylvania has stepped in to address the issue of food deserts by making state money available for grocery store development in underserved communities. The Pennsylvania Fresh Food Financing Initiative, for example, addresses a local neighborhood issue at the state level by helping to offset the high costs of investing in inner-city communities (The Reinvestment Fund, 2006). This is important because it addresses issues of financing, which is often the biggest obstacle to investment in the inner city. The initiative is also innovative in that it supports a public/private solution to the problem of food deserts focusing on improving the health outcomes of Pennsylvanians, creating jobs in inner-city communities, and training community residents to take these new jobs.

Farmers' Markets
Farmers' markets provide a fixed place in the city for farmers operating outside of the city to sell their goods to urban residents. According to the USDA, the number of these markets has increased dramatically in recent years: up from 1755 in 1994 to 4385 in 2006 (Raja et al., 2008). While these markets focus primarily on selling produce, they also provide space to sell local handicrafts and other foodstuffs, like bread, dairy products and meat. Establishing a strong farmers' market means more than simply making retail space available to farmers in the city. It also requires providing sellers coverage from inclement weather and the ability for merchants to accept alternative forms of payment, such as WIC and SNAP vouchers. While farmers' markets do not operate with the same hours as a traditional convenience store, they have the benefits of helping rural and urban residents form relationships and providing residents access to fresh and healthy foods.

Federal Level Solutions
It is important to note that the largest array of food-support programs are federal level programs (see Figure 2). While not specific to food deserts, these types of programs likely affect those living in food deserts and play an important role in addressing the issue of food scarcity. More specifically directed to the issue of food deserts, a federal version of the successful Fresh Food Finance Initiative is being introduced at the national level.

Figure 2: Main Federal Food Support Programs			
Program	**Target Population**	**Federal Funding (in billions)**	**# of People Served (in millions)**
SNAP	Low-income families	50	34
WIC	Low-income pregnant women, new mothers, infants and children	7	9
School Lunch	Low-income students	10	31
Afterschool Nutrition Program	Low-income students	.3	3
Child and Adult Care Food Program	Daycares & institutionalized populations	2	2
Breakfast	Low-income students	3	11
Commodity Distribution	Low-income Americans	.5	.5
TEFAP	Low-income Americans	.5	n/a
Total		73.3	90.5
Source: Food Research Access Center, State of States, 2010			

Lincoln Park/West End Demographics

Boundaries of Lincoln Park

Lincoln Park, formerly known to many Duluthians as West End, is a neighborhood that lies west of downtown Duluth on the waterfront of the St. Louis River (see Figure 3). It is located just off of Interstate 35 and has good transportation linkages to downtown Duluth and neighborhoods further west in the city. Population has held steady in recent years and the neighborhood has two retail corridors that service both local and citywide residents. Some new businesses have moved into the neighborhood with the recent addition of the Duluth Heritage Sports Center, which attracts visitors from all over the region and the state. Lincoln Park/West End is a place where many first-time homebuyers make their first purchase and serves as a prime rental destination given its proximity and short commute time to both downtown Duluth and local higher education facilities.

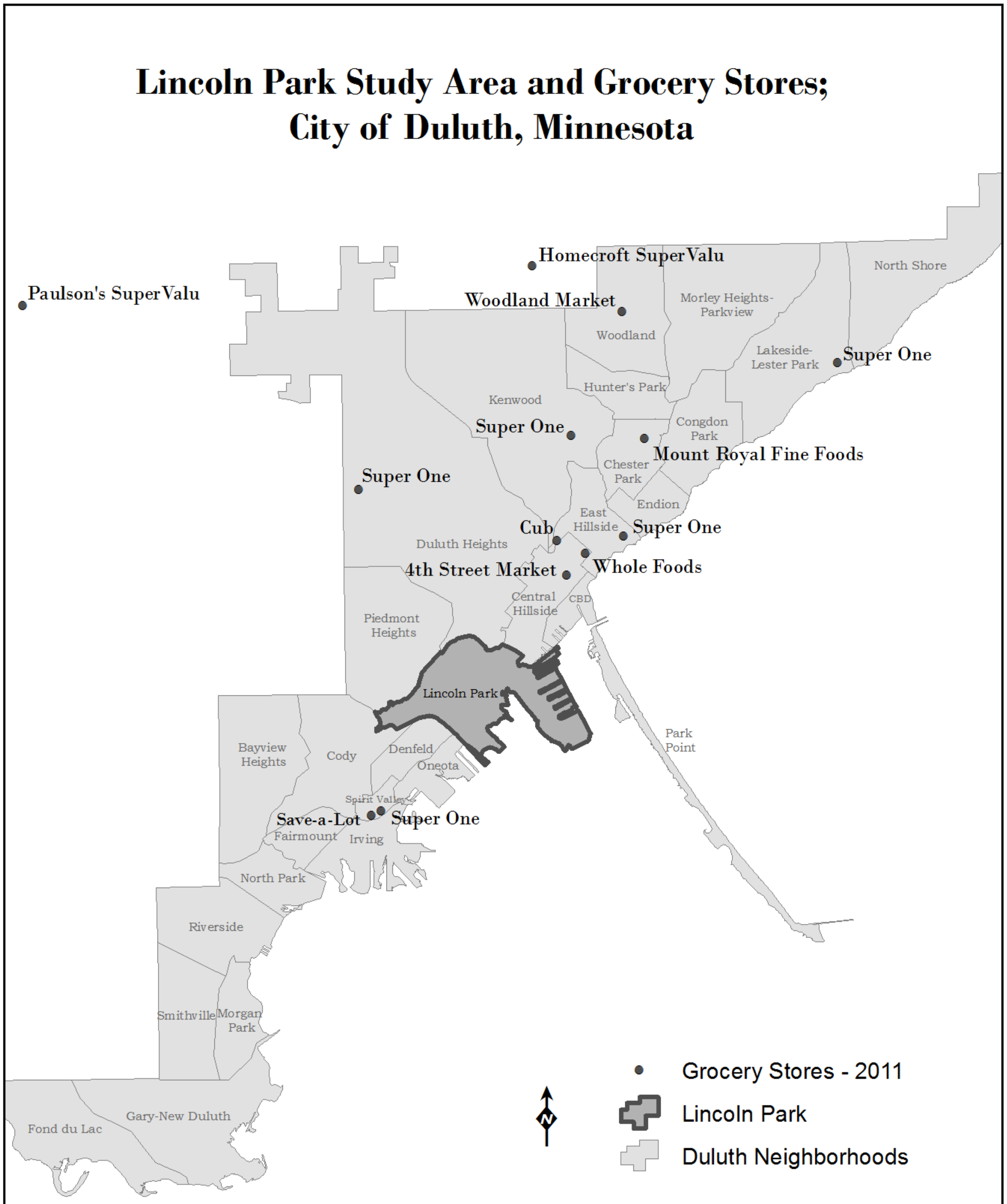


Figure 3: Lincoln Park Study Area, Duluth, Minnesota

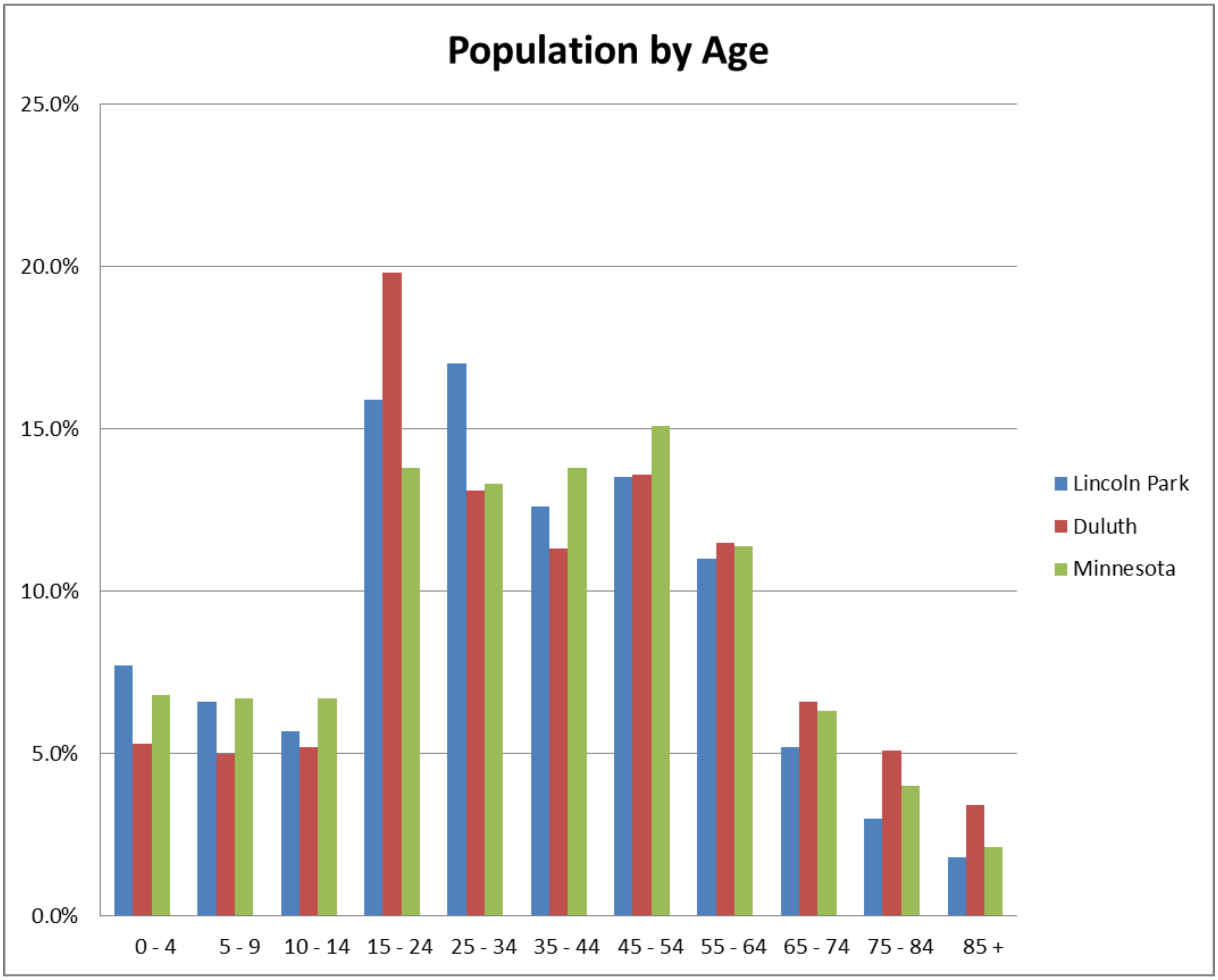


Figure 4: Population by Age

Population

In 2010, the median age of Lincoln Park/West End residents was 33.1 years of age, slightly lower than the 36.5 median age of Duluth as a whole. The "Population by Age" graph below (see Figure 4) illustrates that Lincoln Park/West End has a greater number of younger residents than most other neighborhoods that lie within the city.

With 6145 people in 2010, Lincoln Park/West End is one of the larger and more densely populated neighborhoods in Duluth (see Figure 5). The 2000 census count was 6504 residents, a decline from 1990's census count of 6820. Although the neighborhood population decreased, the total population for the Duluth area remained relatively constant. This fact indicates that while other communities on the outskirts of the greater Duluth area grew slightly in population, Lincoln Park/West End and a few neighborhoods close to the downtown area saw residents leave.

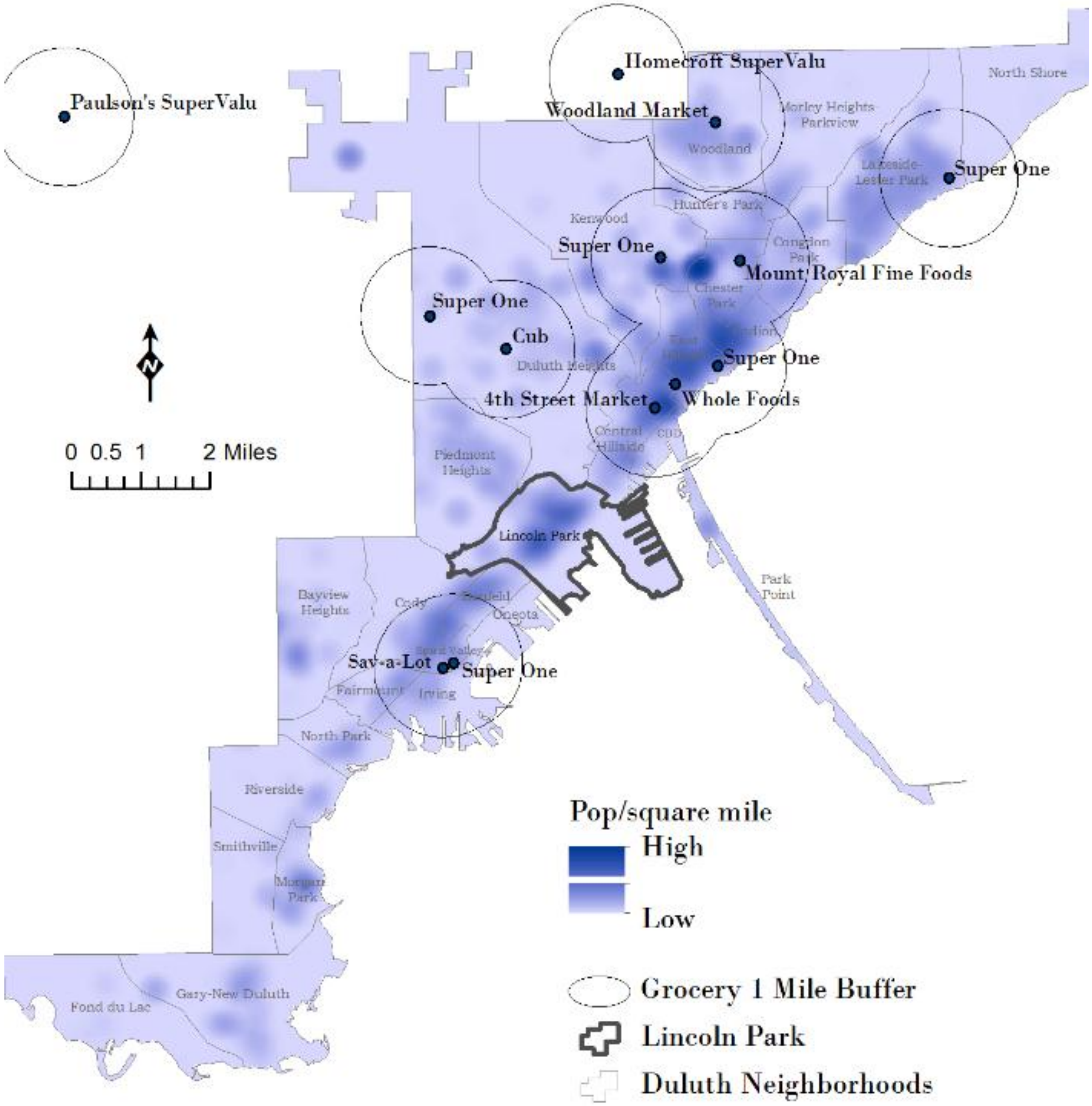


Figure 5: Density per Square Mile, Duluth, MN

Income/Earnings

Economists use Median Household Income (MHI) as a comparative measure of economic health. Duluth's MHI in 2010 was $45,135, which was significantly higher than Lincoln Park/West End's MHI of $34,847. Both Duluth and Lincoln Park/West End have lower MHIs than the state of Minnesota's $62,263, as demonstrated in Figure 6 below.

Lincoln Park/West End also has lower median home values when compared to the city of Duluth and the state of Minnesota. In 2010, the median home value for Lincoln Park/West End was $88,729, while Duluth's median home value was $129,572 and Minnesota's was $308,814.

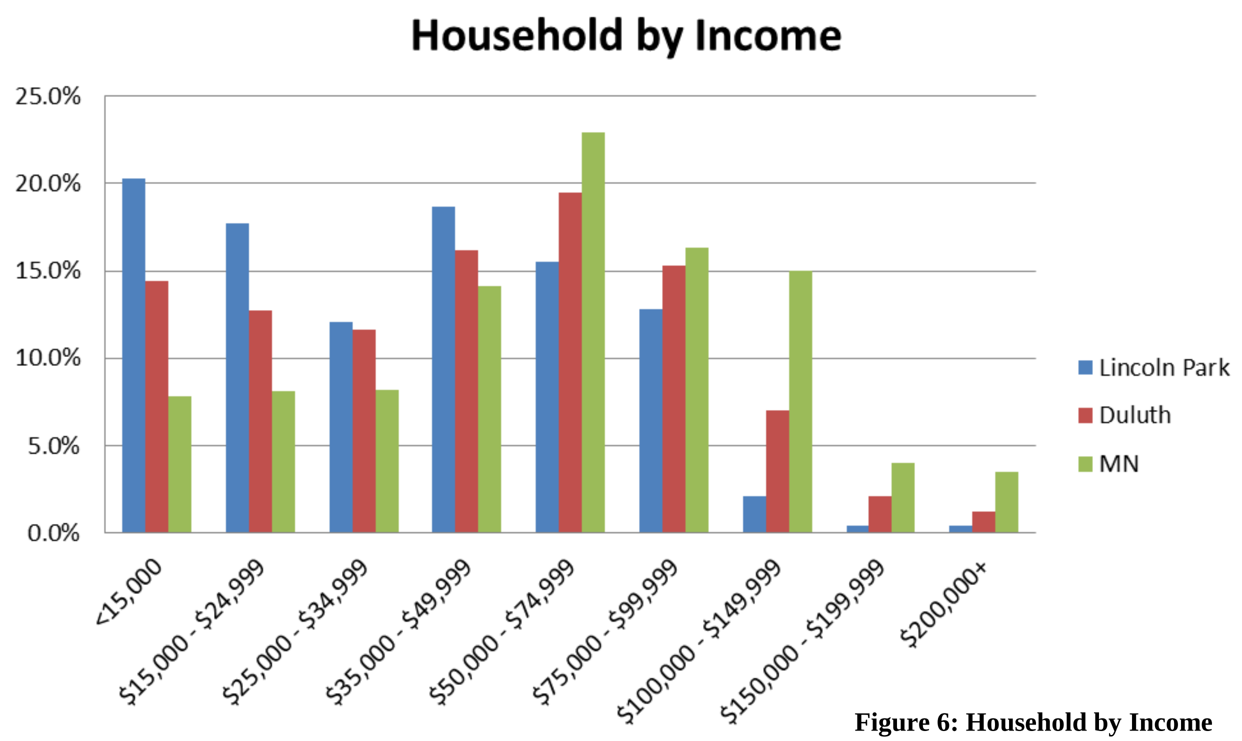


Figure 6: Household by Income

Industry and Residential Employment

In 2010, Lincoln Park/West End had 424 businesses with 5200 employees (LISC, University of Minnesota Extension, 2010). Nine of those businesses had over one-hundred employees and sixteen businesses had between fifty and one-hundred employees. There were 550 employees located in the industrial sector on Garfield Avenue and 2300 employees were in the "business to business" industry, which refers to companies that sell products or services to other businesses. These businesses do not sell directly to consumers and are not typical destinations for consumers when they are doing their shopping. All of the businesses and residents who live and work in the community serve as a valuable part of the neighborhood's character and significantly contribute to the local economy.

The majority of Lincoln Park/West End residents work in the service sector (see Appendix E for a complete listing). Of the 3115 residents presently in the workforce, 57% are in the service industry and 15% work in retail (see Figure 7).

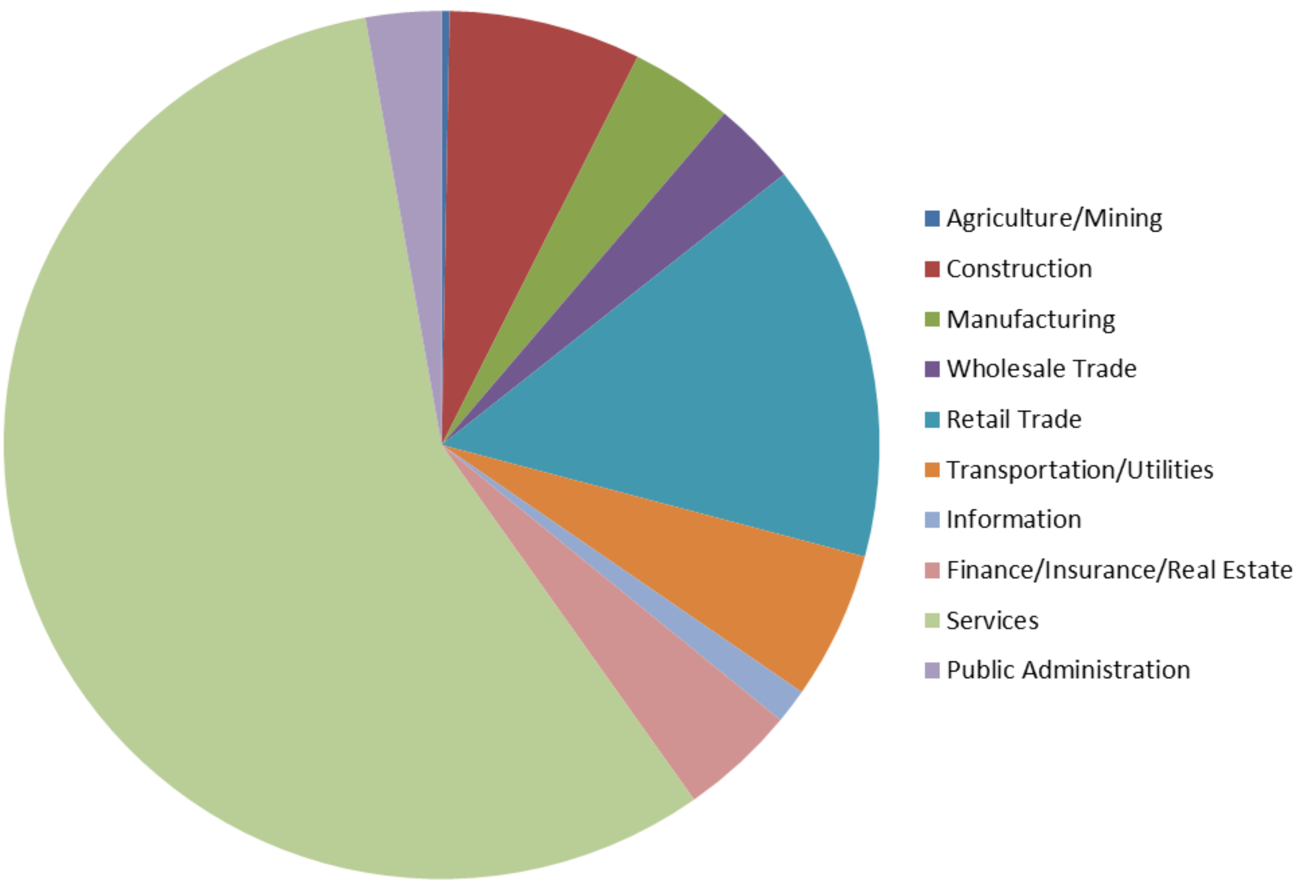
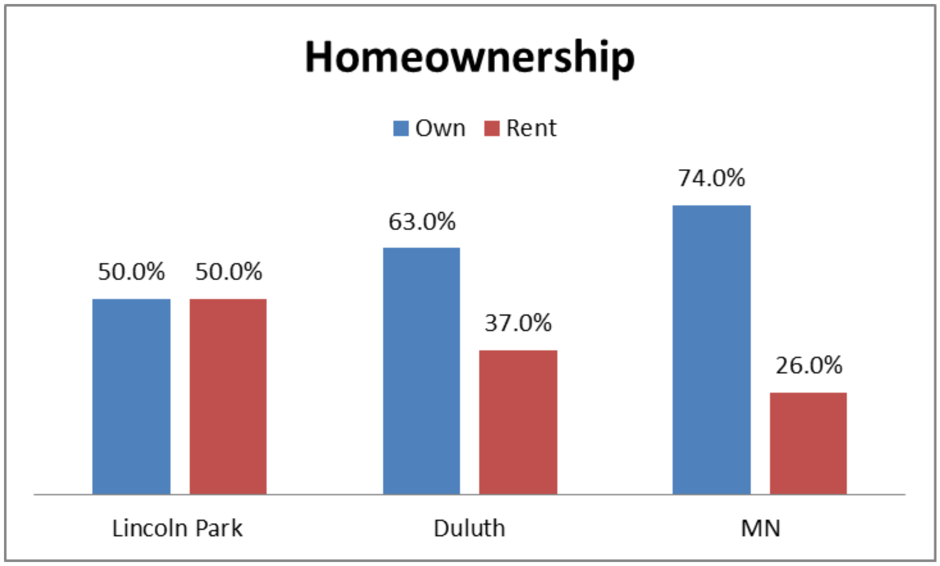


Figure 7: Lincoln Park/West End Residential Employment

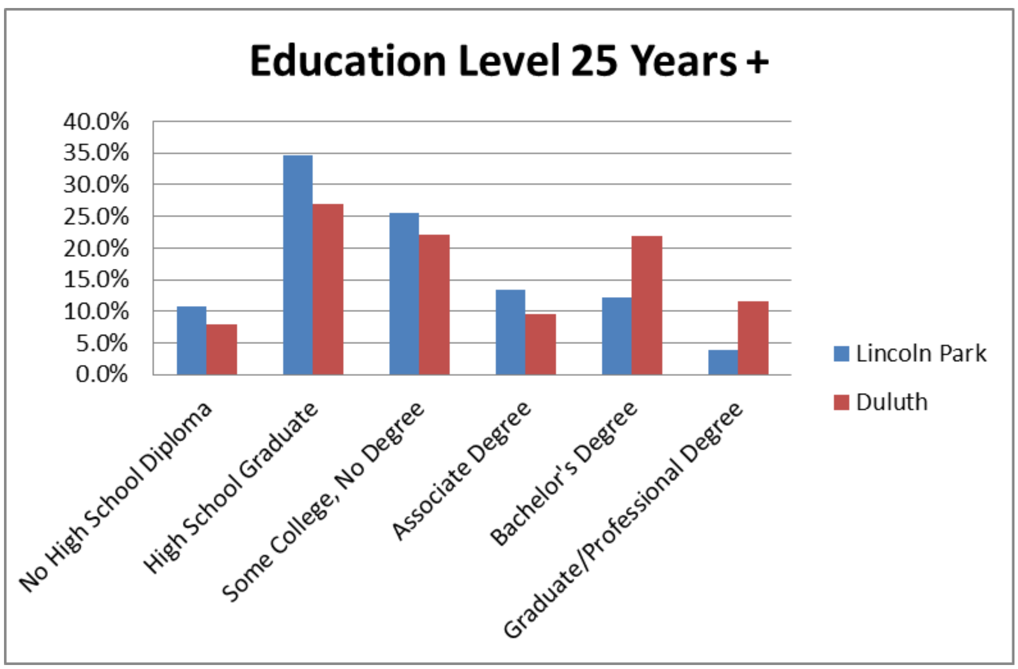
Homeownership
Currently, 50% of the occupied housing units in the Lincoln Park/West End are owner-occupied, while another 50% are rental units (see Figure 8). Just under 10% of the housing units are unoccupied and fall into the "Vacant" category.[4] Rental property rates in Lincoln Park/West End are significantly higher than in Duluth and greater Minnesota, while the homeownership rates fall well below Duluth's homeownership rate of 63%.

Figure 8: Homeownership



Education
Educational levels in Lincoln Park/West End are lower than the rest of Duluth and Minnesota (see Figure 9). For example, approximately 12% of Lincoln Park/West End residents possess a bachelor's degree compared to 22% of greater Duluth's population. In addition, compared to Duluth as a whole, a higher proportion of Lincoln Park/West End residents possess only a high school education. Generally, lower educational levels are a good indicator of lower income levels, and thus lower levels of discretionary spending to support a healthy local retail economy. Education level also can act as a measure of the quality of the resident labor workforce.

Figure 9: Education Level 25 Years +



[4] The vacant category refers to unoccupied housing units that are vacant for a variety of different reasons, including units that are for rent, sale, foreclosed on, unoccupied during specific seasons, and/or unoccupied due to ongoing bank proceedings.

Methodology

We guided our research based on the following question, *"Is the Lincoln Park/West End neighborhood a food desert, and what steps can be taken to increase access to fresh and healthy food in the neighborhood?"* We answered this question through qualitative and quantitative analysis of the local shopping community in Lincoln Park/West End using the following four steps:

1) Store Inventory of the Local Shopping Community

In order to compare availability and cost of typical grocery items, we visited each store in the neighborhood that sells food and completed a checklist identifying the cost of a typical "market basket" of goods (see Appendix B for the complete survey). We surveyed traditional grocery stores, as well as stores that sold only a few food items. At each store, we noted the availability and cost of each grocery item on our list. For purposes of comparison, we also noted the cost of these goods at other area large and small grocery outlets.

2) Shopper Survey

With the assistance of the local community group Volunteers Caring and Patrolling (VCAP), we included a survey in the March issue of the VCAP newsletter "Community Spirit," which was sent to 2800 households in the Lincoln Park/West End neighborhood on March 5 and 6, 2011 (see Appendix A for a complete copy of the survey). Each survey contained a letter introducing the project and a two-page survey consisting of twenty-three questions and space for respondents to write comments. Each survey also included a self-addressed, postage-paid envelope in which to return the survey to us. Over the course of the following month, we received 382 completed surveys (a 14% response rate). We entered these responses into the survey database program UMSurvey and then exported the responses into an Excel spreadsheet and transferred them into SPSS for statistical analysis and ARCInfo for geographic analysis. We also coded respondents' comments (approximately one in three respondents included comments on their survey) and included them in this report.

GIS Methods

We used a Geographical Information System (GIS) to analyze the survey results. Using respondents' answers to our question asking for the closest intersection to their house, we used the 10.0 North American Geocode Service to geocode the addresses as the reference layer. Of the 377 addresses, 330 matched and 40 tied; and the GIS technician hand corrected the tied addresses. After completing the geocoding, we used a join to link the original table to the coded addresses.

3) Community Member Interviews

In order to understand more about the local shopping environment and the relationship between community organizations and food access, we also conducted seven interviews with local community members (see Figure 10 and Appendix C). The purpose of these interviews

Figure 10: Community Member Interviews
4th Street Market
Lincoln Park Business Group
Salvation Army
Faith Haven Convenience Store
CHUM Food Shelf
Community Action Duluth

was to identify local problems and solutions to community food access and to learn what solutions had been attempted previously in order to prepare new responses.

4) Market Analysis

We also conducted a market analysis of the Lincoln Park/West End trade area using Esri data[5] to determine the community's buying power, consumption preferences, and residents' level of mobility. A retail gap analysis is a basic comparison of the demand for retail goods and services in an area and the supply of retail goods and services in the same area. We used this data to approximate the amount of money leaking out of Lincoln Park/West End to grocery stores in other neighborhoods in Duluth.

Store Survey Results and Analysis

There are currently no grocery stores in the Lincoln Park/West End neighborhood. This means that all residents of the community must travel outside of the neighborhood to do their grocery shopping. Figure 11 shows the existing grocery stores in Duluth with a one-mile buffer. No part of the Lincoln Park/West End neighborhood is even a one-mile walk away from a grocery store!

[5] For more information about Esri, please visit www.esri.com

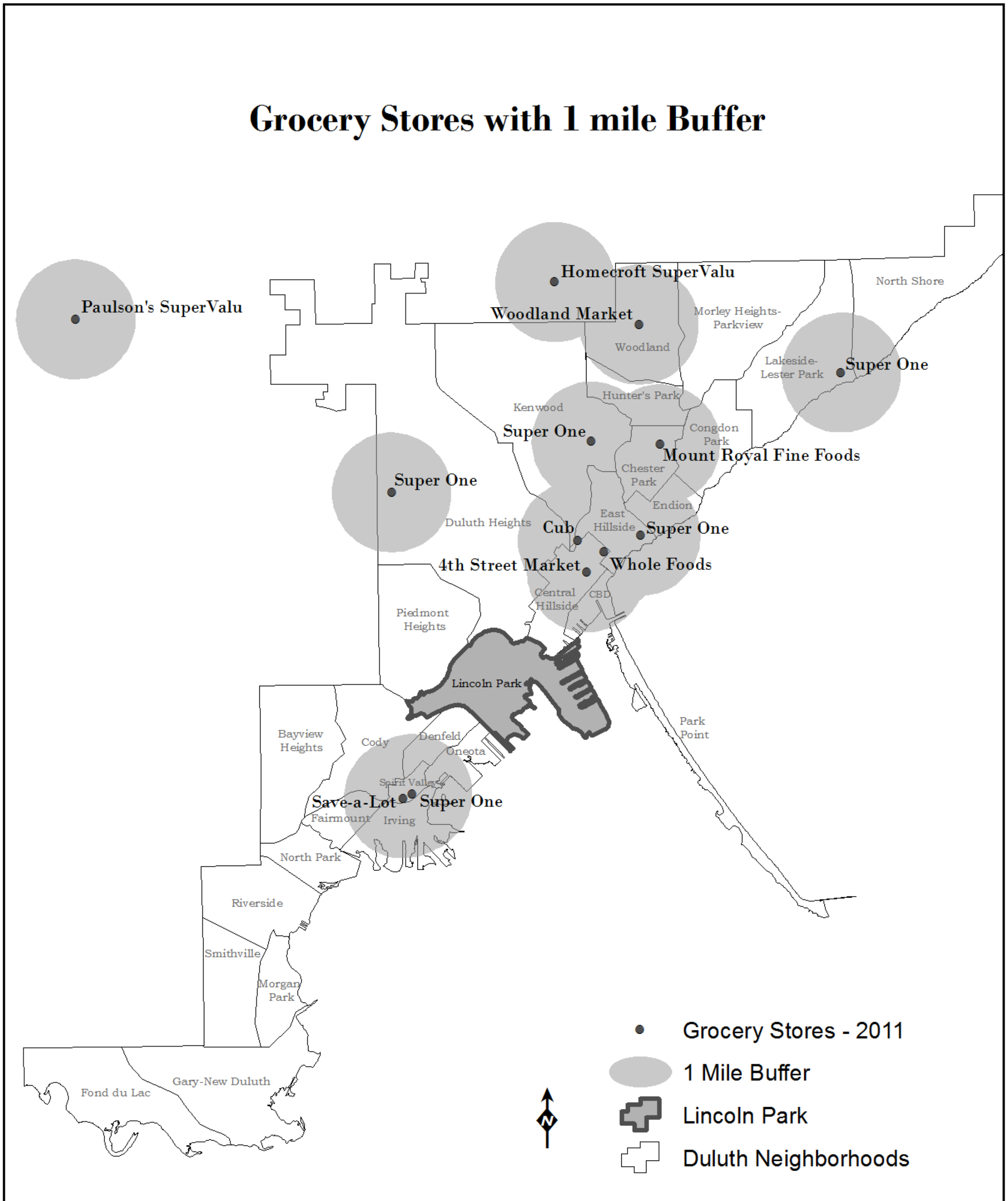


Figure 11: Duluth Grocery Stores with One-Mile Buffer

This has not always been the case, however, as Figure 12 shows that in 1975 food outlets were much more numerous in both the city of Duluth, in general, and the Lincoln Park/West End neighborhood in particular. Many of our survey respondents noted that when they were younger grocery stores were much more plentiful and that grocery shopping in the community has been more difficult as those stores have closed.

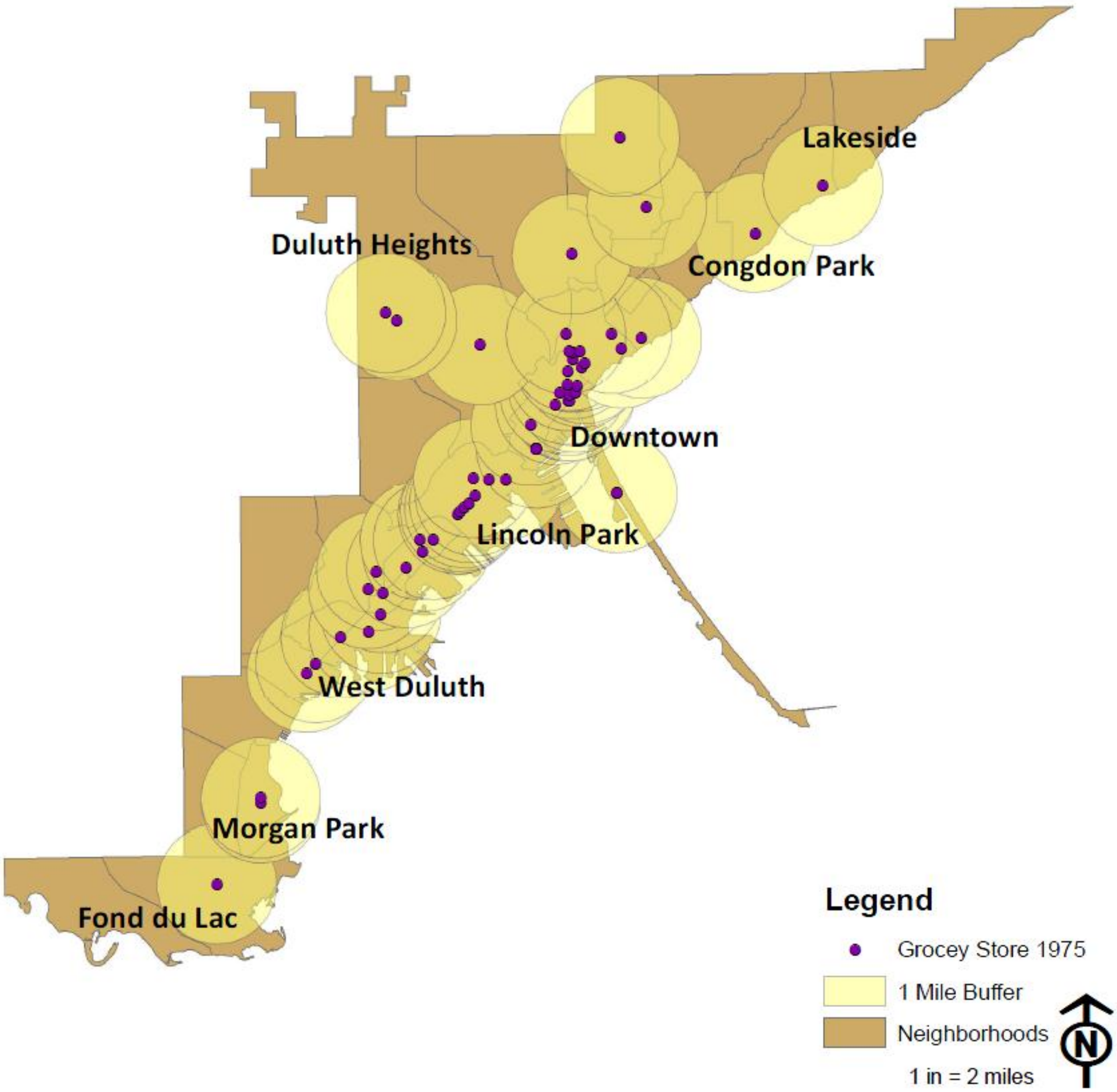


Figure 12: Grocery Stores in Duluth, Minnesota in 1975

Figure 13: Other Food Outlets in Lincoln Park

Even though there are no grocery stores in the community, there are still places to shop for food. Figure 13 shows the population density of the Lincoln Park/West End neighborhood and all of the stores in the community that sell food. Population densities are highest along the 3rd Street corridor where Johnson's Bakery is located; lower along the Superior Street corridor where most of the neighborhood's businesses are; and lowest in the industrial parts of the community nearer Michigan Avenue.

Our analysis of the existing stores in the community fulfilled the general assumption that convenience stores have a smaller grocery selection and higher prices than traditional grocery stores offer. We surveyed the availability and cost of 100 different grocery items at six food-selling stores, which we chose for their diversity in size and style and for their proximity to the Lincoln Park/West End neighborhood.[6] We then compared the cost of a typical market basket of goods from the traditional grocery stores and convenience stores in Lincoln Park/West End. We chose the Woodland Marketplace, Cub Foods (Mall area), and Super One Foods (Plaza) to represent big box type grocery stores; The Little Store and Holiday Stationstore, both located in the Lincoln Park/West End neighborhood, to represent convenience stores; and the 4th Street Market, located in the Central Hillside, to represent a smaller store selling primarily grocery and deli items (see Figure 14).

Figure 14: Stores in the Price Comparison Survey

Stores Outside of Lincoln Park/West End	Woodland Marketplace Foods (Woodland)
	Cub Foods (Mall area)
	4th Street Market (Central Hillside)
	Super One Foods(Plaza)
Convenience Stores in Lincoln Park/West End	The Little Store (Lincoln Park/West End)
	Holiday Stationstore (Lincoln Park/West End)

Figure 15: Fruits and Vegetables Available at Stores Surveyed

	Apple	Banana	Orange	Lettuce	Carrot	Potato
Woodland Marketplace Foods	x	x	x	x	x	x
Cub Foods	x	x	x	x	x	x
Super One Foods	x	x	x	x	x	x
4th Street Market	x	x	x	x	x	x
The Little Store			x	x		x
Holiday Stationstore	x	x	x			

Our comparison of prices and product availability at the different stores revealed that while many traditional grocery items are available at the convenience stores we surveyed in this study, it is clear that these businesses are not adequately equipped to provide affordable, healthy food on a scale that would benefit the people of Lincoln Park/West End (see Figure 15). For example, neither of the convenience stores stocked fresh ground beef and their selections of fresh goods were limited to a small variety of fruits and vegetables. In addition, the convenience stores sell vegetable oil at almost three times the cost of what the more traditional grocery stores charge. In addition, as Figure 16 illustrates, a traditional market basket of shopping goods on average cost $11.45 when purchased at any of the traditional grocery stores in our survey, with Cub Foods

[6] Our survey took place during the second week in December 2010. We understand that prices fluctuate and that our analysis represents a snapshot of prices during the time of our survey.

having the lowest price of $10.51 and the 4th Street Market having the highest price of $13.04. In sharp contrast, this same basket of goods cost $18.08 (an average of 58% more) when purchased from a Lincoln Park/West End convenience store.

Figure 16: Market Basket of Goods* Comparison	
Woodland Marketplace Foods	$11.41
Cub Foods	$10.51
4th Street Market	$13.04
Super One Foods	$10.84
The Little Store	$18.97
Holiday Stationstore	$17.18

*Items included in market basket: 3 apples, 2 oranges, white bread (16 oz.), cereal (12 oz.), canned peaches (15 oz.), canned corn (15.25 oz.), and skim milk (1 gal.).

While most consumers understand that food purchased from a convenience store will be slightly more expensive than food from a larger grocery store due to the added "price of convenience," our survey yielded a shocking 101.7% average price increase when comparing the average prices at convenience stores and grocery stores. As Figure 17 illustrates, price differences ranged from a slightly higher cost for goods such as milk to an astounding 290% increase for vegetable oil.

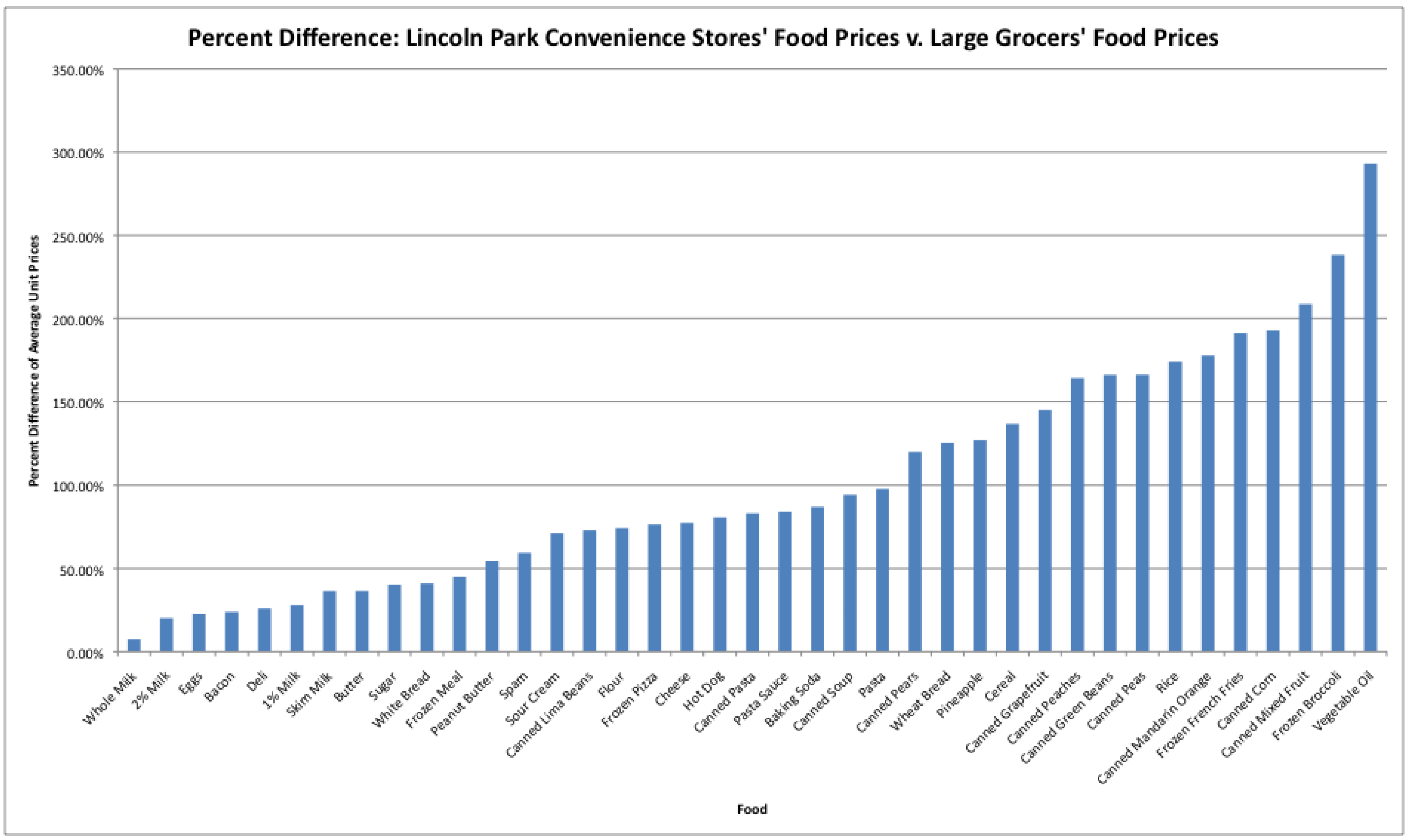


Figure 17: Percent Difference of Food Prices in Lincoln Park Convenience Stores vs. Large Grocers

One reason for this drastic price difference is the fact that convenience stores carried only name-brand products and smaller sized goods, in contrast to grocery stores that carry more store brand products and bulk-sized packaged items.

Survey results showed that the 4th Street Market stood out as a smaller convenience store-sized grocery store that offered name and store-brand items, a full selection of canned and frozen vegetables, a small selection of fresh vegetables, and charged only moderately higher prices than much larger traditional grocery stores. This anomaly shows that while convenience stores will likely continue to charge more for the cost of convenience, they could also better meet neighborhood needs by stocking the right mix of products.

Demographics

Based on the results of the 382 surveys we collected, we were able to determine a certain degree of demographic information about the Lincoln Park/West End neighborhood of Duluth. For example, as Figure 18 shows, most of our respondents live in the most densely populated parts of the neighborhood along the Third Street corridor, and we received no responses from residents inhabiting the industrial area along the St. Louis River. Respondents tended to be older than the average Lincoln Park/West End resident (see Figure 19). In addition, our respondents were overwhelmingly female and had slightly higher income and educational achievement than the average Lincoln Park/West End resident (see Figures 19, 20 and 21). Finally, our sample also indicated that 6.5% of respondents use WIC and 17.5% use EBT

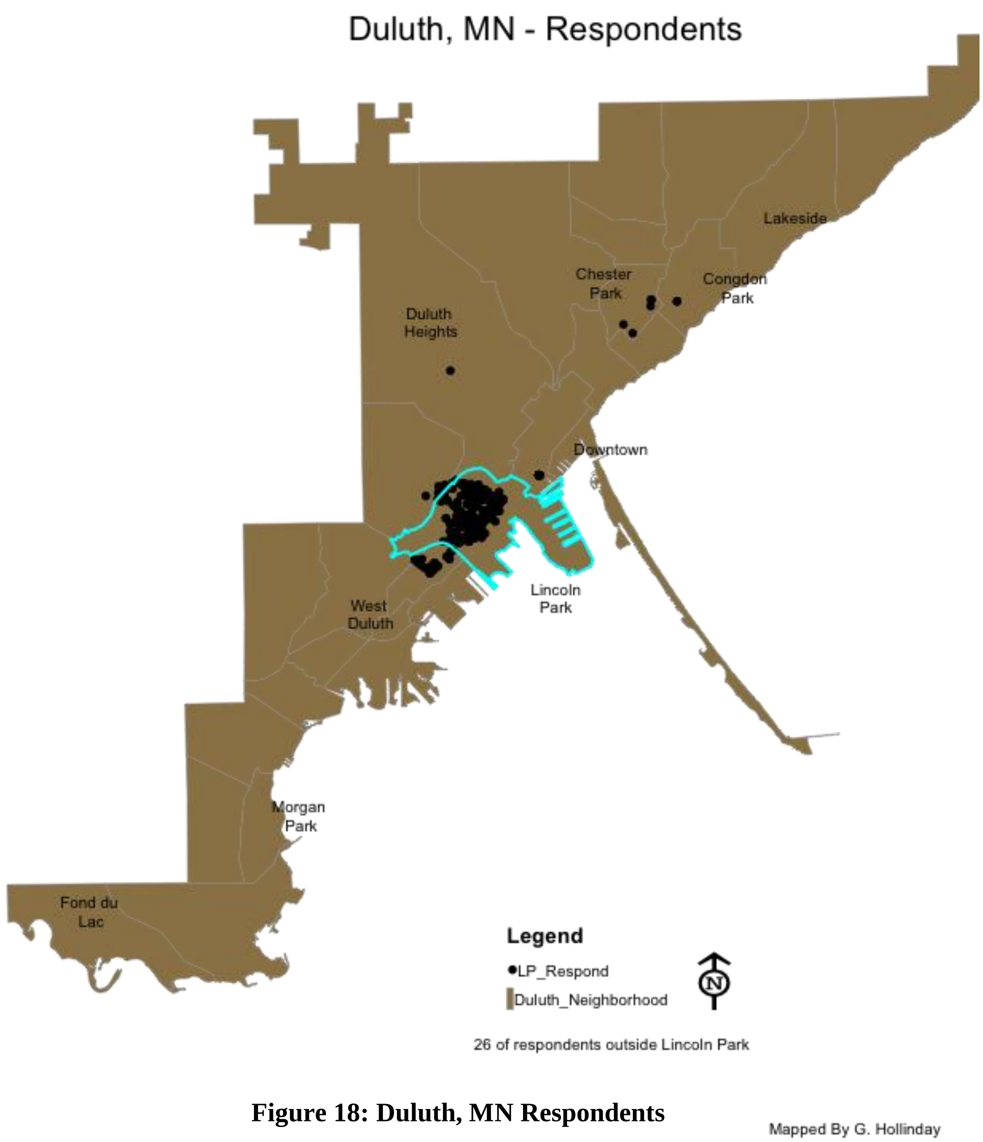


Figure 18: Duluth, MN Respondents

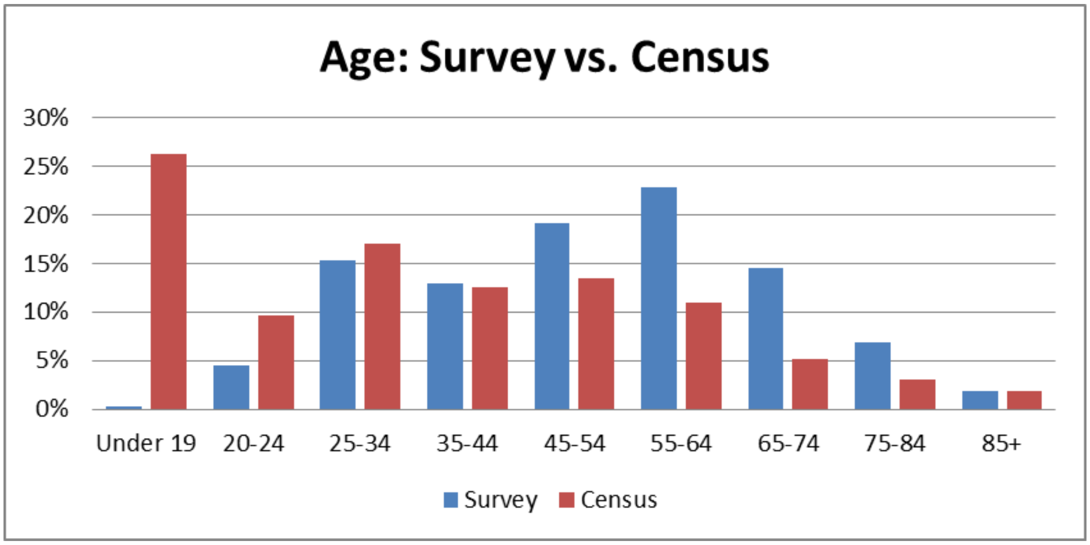


Figure 19: Age: Survey vs. Census

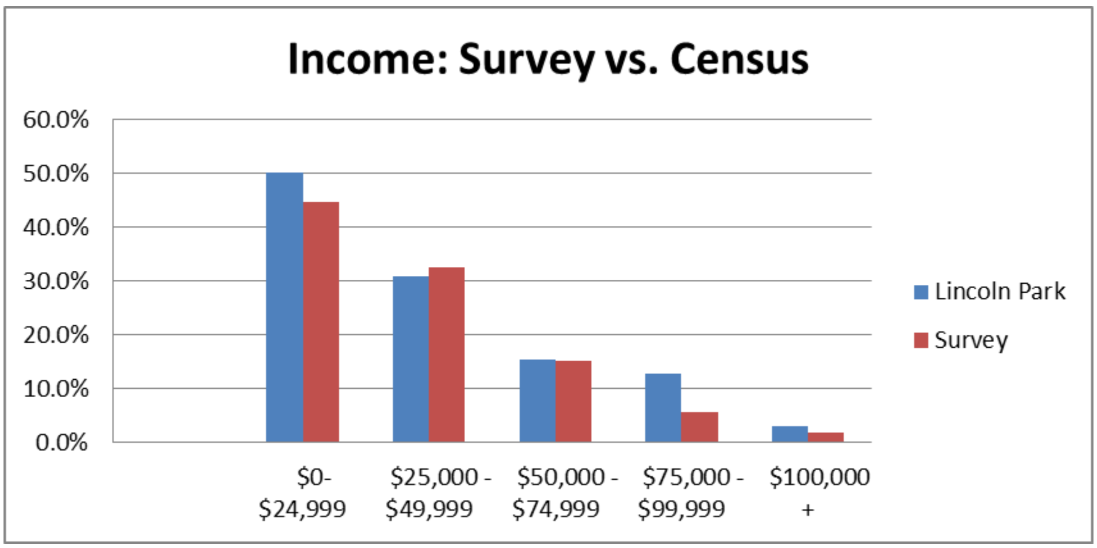


Figure 20: Income: Survey vs. Census

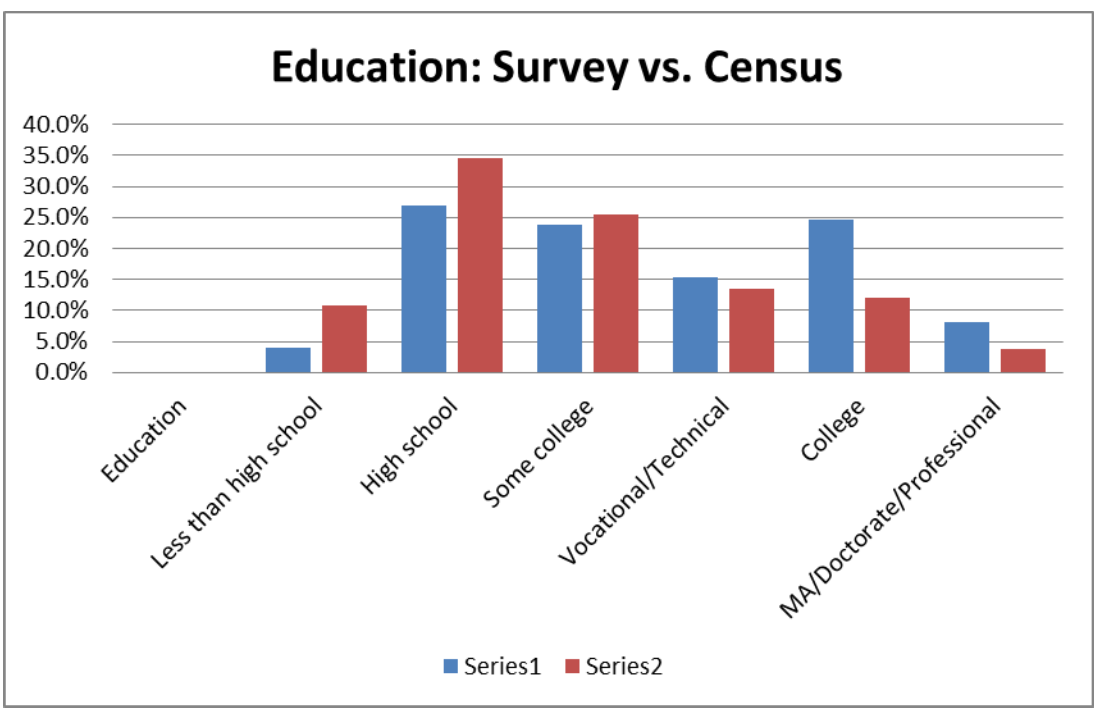


Figure 21: Education: Survey vs. Census

Figure 22: Demographic Information Collected from Survey of Lincoln Park/West End

1. Age

Under 19	0.3%
20-24	4.6%
25-34	15.2%
35-44	13.3%
45-54	19.3%
55-64	23.4%
65-74	14.9%
75-84	7.1%
85+	1.9%

2. Gender

Female	74.0%
Male	24.7%

3. Race

White	88.6%
Black or African American	3.8%
Native American or Alaskan Native	7.3%
Asian	0.3%
Hawaiian or Pacific Islander	0.0%
Other____________________	

4. What is the highest level of education you have completed?

Less than high school	3.7%
High school	25.4%
Some college	23.0%
Vocational/technical	14.7%
College	24.9%
Masters degree	7.2%
Doctorate	1.1%

5. What is the closest intersection to your house?

_________________& ____________________

6. Do you or anyone in your household receive WIC?

Yes	6.5%
No	93.5%

7. Do you or anyone in your household receive EBT?

Yes	17.5%
No	82.5%

8. Marital Status

Married	41.0%
Single	32.5%
Widower	14.6%
In a long term relationship	11.9%

9. Household Income

- $0 - $25,000 44.6%
- $25,000 - $50,000 32.6%
- $50,000 - $75,000 15.1%
- $75,000 - $100,000 5.8%
- $100,000 – up 1.8%

10. How many people do you have in your household (including yourself)?

- (average) 2.4

11. How many children under the age of 18 do you have in your household?

- (average) 0.7

Grocery Shopping in Lincoln Park/West End

Although the Lincoln Park/West End does not have a grocery store, neighborhood residents are still able to shop for groceries. They accomplish this by "out-shopping" in a variety of different neighborhoods. Our survey asked respondents where they shop for groceries and asked them to choose from a list of area grocery outlets. Our survey allowed respondents to choose more than one option, so the final numbers do not add up to 100%. As Figure 23 indicates, half of respondents shop at the West Duluth Super One; about one-fifth of respondents shop at Cub Foods in the Miller Hill Mall area; a little more than eight percent shop at the Super One (Mall area), and a little over five percent shop at Lincoln Park/West End convenience stores. Interestingly, almost every shopping outlet in the Twin Ports area was mentioned in our survey, including Whole Foods Co-op, Save-A-Lot in West Duluth, Walmart in Superior, and Sam's Club in the Mall area. The diversity of different venues that Lincoln Park/West End residents utilize to do their shopping indicates that residents make sophisticated decisions when choosing where to shop for food. They stop for groceries on the way home from work, drive to distant stores for lower prices, and choose to shop at stores that meet specific dietary requirements. Survey results also indicate that there is no "one-size-fits-all" solution to grocery shopping problems in the Lincoln Park/West Duluth neighborhood because people will continue to shop at the stores that best fulfill their grocery-shopping needs.

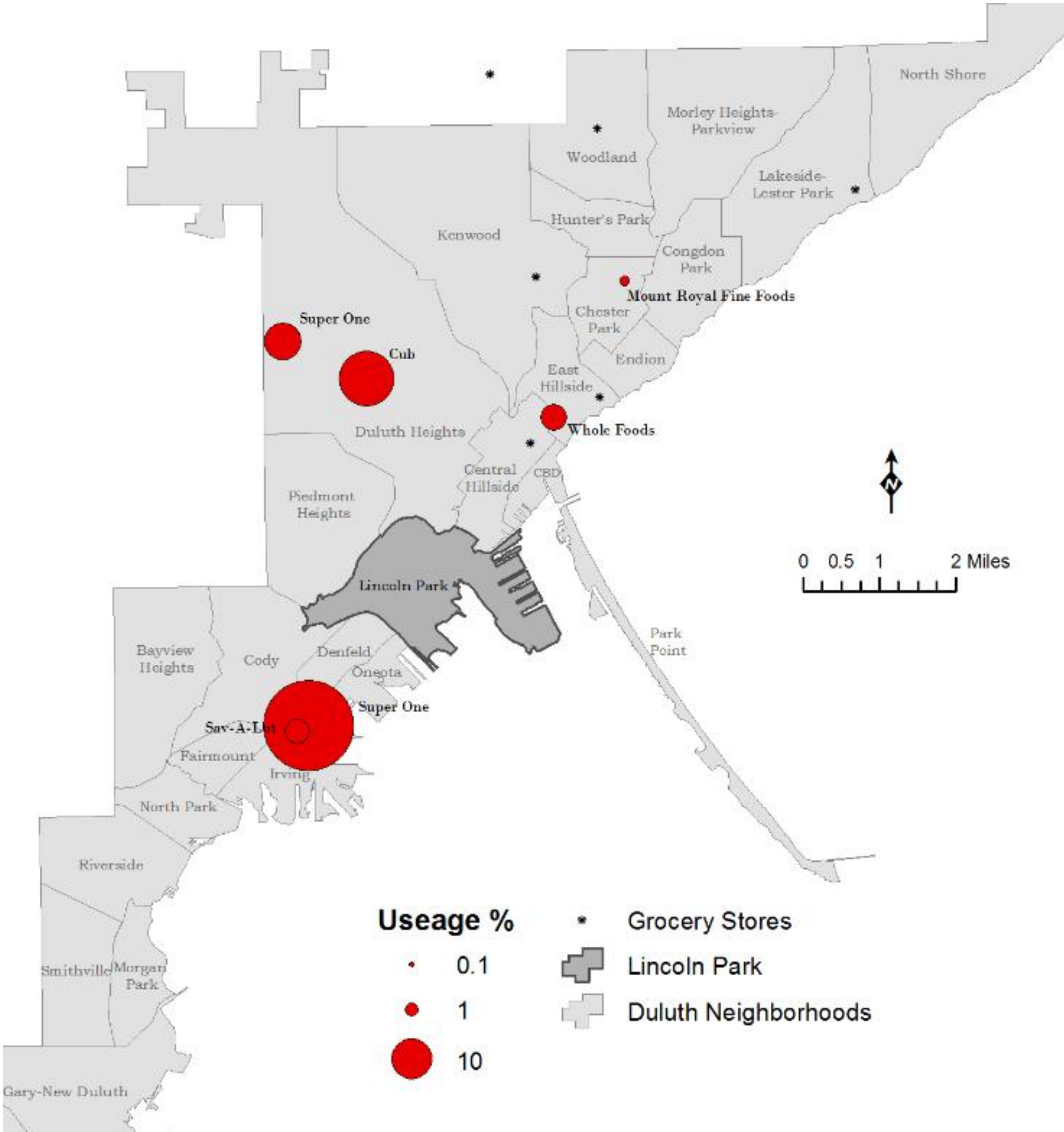


Figure 23: Usage of Grocery Stores by Survey Respondents

Our survey found that the type of grocery stores residents shopped at varied based on income. For example, Figure 24 shows the top six stores that households shop at, sorted by income. Of special note is that while 12.4% of households earning less than $25,000 per year shop at convenience stores in Lincoln Park/West End, none of the households earning more than $75,000 per year shop at those stores. In addition, while 87.6% of households earning less than $25,000 per year shop at the West Duluth Super One, only 50% of households earning more than $100,000 shop at this store. Similarly, while 9% of households earning less than $25,000 per year shopped at the discount grocer Save-A-Lot, no households making over $100,000 per year shopped there. The clearest link between income and shopping is evident with the Whole Foods Co-op numbers, which, according to our survey, draws in a full 33.3% of the richest households in the neighborhood and only 3.4% of the neighborhood's lowest income group.

Figure 24: Household Income and Store Choice

	Super One (West Duluth)	**Cub Foods**	**Convenience stores (Lincoln Park)**	**Whole Foods Co-op**	**Save-A-Lot**
<$25,000	87.6%	14.5%	12.4%	3.4%	9.0%
$25,000 - $50,000	75.0%	32.7%	6.7%	3.8%	1.9%
$50,001 - $75,000	60.4%	52.1%	2.1%	14.6%	4.2%
$75,001 - $100,000	73.7%	52.6%	0.0%	15.8%	5.3%
>$100,000	50.0%	16.7%	0.0%	33.3%	0.0%

Our survey also found that where residents chose to shop closely related to how many cars were in their household. For example, 29% of those households who had no car shopped at neighborhood convenience stores, while only 7% of the households with at least one car shopped at these stores. Traveling outside of the neighborhood for groceries is a hurdle that all neighborhood residents faced. Our survey found that most residents (82%) relied on cars to travel to the grocery store and the remaining percentages arrived at stores by: getting a ride with someone else (11%); taking a taxi (3%); taking the bus (3%); and walking/biking (1%). In terms of getting home from the grocery store, the picture is very similar, with the exception of changes in taxi and bus usage with only 2% of residents reporting that they take the bus home from the store and a slightly larger 5% take a taxi home.

Residents of Lincoln Park/West End tend to shop for groceries often. Survey results indicated that 67% of respondents shop for food once per week, 20% shop twice per week, 9% shop three times per week, and 2% shop for groceries four or more times per week. We also found that those who shop more often tended to be the neighborhood's poorer residents. For example, while only 59% of EBT users shop for groceries once per week, upwards of 9% shop four or more times per week.

As Figure 25 shows, city bus routes serve the Lincoln Park/West End neighborhood well. Existing bus lines take residents to grocery stores located in the western and northern areas of Duluth. Figure 26 plots our survey respondents to city bus routes. Residents living north of 3rd Street and west of bus routes have access to some grocery stores. For example, one bus line takes residents who live near Superior Street or 3rd Street to the West Duluth Super One, and another bus line takes residents who live higher up in the neighborhood over the hill to the Miller Hill Mall area grocery stores.

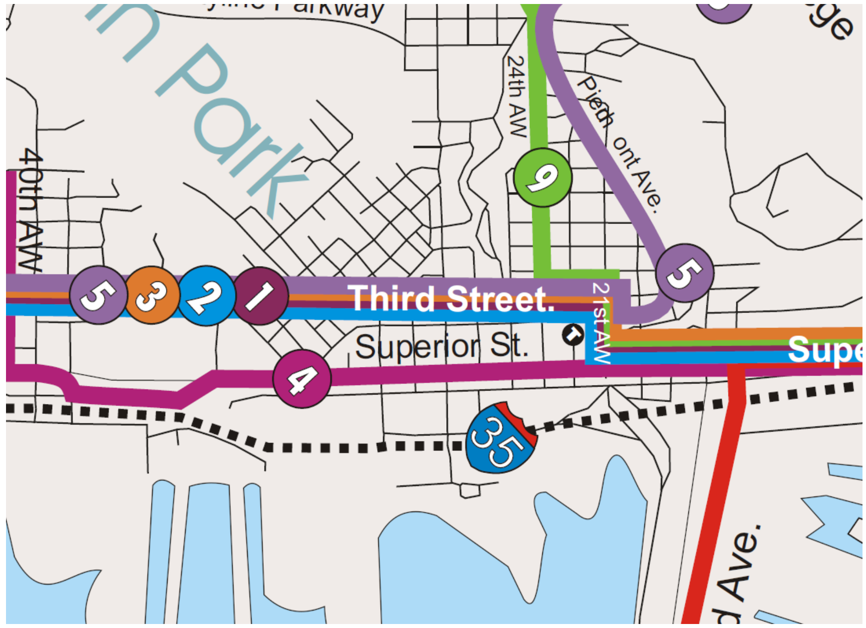


Figure 25: Lincoln Park/West End Bus Routes

There is not a great amount of flexibility for residents living along these lines, however. For example, residents living near 3rd Street will experience difficulties reaching the mall area grocery stores. Only some community members live near both sets of bus lines. As evidenced by the variety of stores at which Lincoln Park/West End residents shop, this lack of flexible transportation options could be a real problem for some residents. In addition, the steep hills in Lincoln Park/West End make walking even a short distance to the bus very difficult, especially with young children in tow.

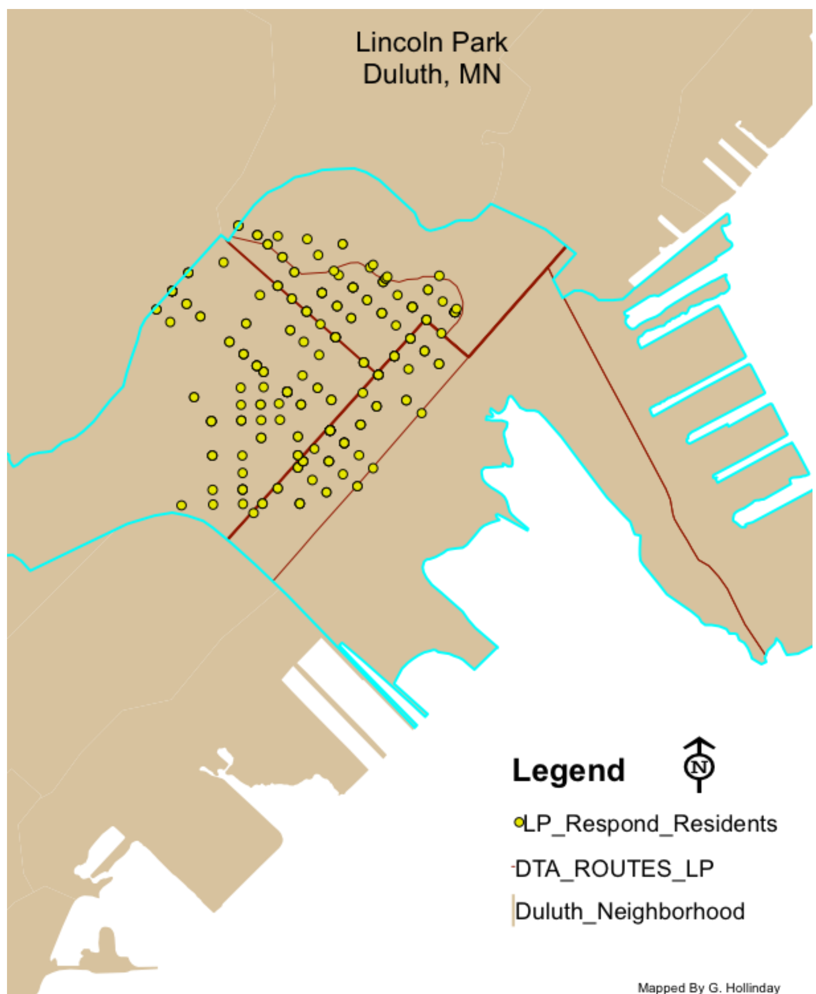


Figure 26: Survey Respondents Plotted Along Pubic Bus Routes in Lincoln Park/West End

Shopping

Figure 27: Survey Responses Related to Shopping

12. Where do you usually buy your groceries? Please check all that apply.

○ Cub	18.2%
○ Super One in West Duluth	50.0%
○ Convenience Stores in Lincoln Park	5.3%
○ Other (please specify):	
○ Midtown Grocery	1.2%
○ Mount Royal	0.5%
○ Sam's Club	1.9%
○ Save-A-Lot	3.4%
○ Super One (Mall area)	8.6%
○ Super One (Plaza)	0.9%
○ Target (mall area)	0.3%
○ Walgreens	0.7%
○ Walmart (Superior)	2.7%
○ Whole Foods Co-op	4.1%

13. How do you usually get to the store to buy groceries?

○ Walk	0.5%
○ Bike	0.3%
○ Bus	3.2%
○ Drive	82.1%
○ By being driven to the store	10.7%
○ Taxi	2.7%
○ Other (please specify)	0.5%

14. How do you usually get home from the store after buying groceries?

○ Walk	0.5%
○ Bike	0.3%
○ Bus	1.6%
○ Drive	82.0%
○ By being driven to the store	10.5%
○ Taxi	4.6%
○ Other (please specify)	0.5%

Fast Food, Dining and Cooking in Lincoln Park/West End

The survey also asked questions about how often respondents cooked food in their homes, ate out, ordered food for delivery, and shopped for groceries. In general, the survey results indicate that residents cook the vast majority of meals in Lincoln Park/West End in their homes with 85% of respondents reporting that they cook at home more than four times per week. A large majority of respondents (79%) do not order food for delivery. Another common way that people have meals in Lincoln Park/West End is by eating out, with 44% of respondents reporting that they have eaten at a sit-down restaurant in the last week, and about half having gone to a fast food restaurant. As Figure 28 indicates, while there are no grocery stores in Lincoln Park/West End there are a lot of other dining options, and about half of area residents across all income groups eat out on a weekly basis.

Figure 28: Survey Responses Regarding Cooking and Dining Out					
	0	**1**	**2**	**3**	**4+**
15. How often per week do you cook food at home for yourself or your family?	0.3%	1.4%	4.1%	8.9%	85.4%
16. How often per week do you order food to be delivered to your home?	79.0%	15.3%	4.1%	0.3%	1.4%
17. How often per week do you eat at sit down restaurants like Pizza Luce or T-Bonz?	56.3%	31.3%	9.4%	1.6%	1.3%
18. How often per week do you eat at fast food restaurants (such as McDonalds or Quiznos)?	48.4%	32.3%	13.3%	4.3%	1.6%
19. How often per week do you buy groceries?	1.9%	67.1%	19.8%	8.7%	2.4%
20. How many vehicles do you have in your household?	13.9%	43.6%	37.2%	3.5%	1.9%

21. What is the biggest problem you have getting groceries in Lincoln Park?

- Financial difficulty 14.1%
- Getting to the grocery store 4.0%
- Getting home from the grocery store 4.6%
- Local stores have inadequate selection 37.6%
- Other (please specify) 39.8%

Non-traditional Food Sources

While the food deserts literature tends to focus mostly on shopping outlets and fast food/restaurant meals, this survey also tried to capture information about the extent to which Lincoln Park/West End residents eat food from non-traditional sources, such as food shelves, hunting, fishing and gardening. Because each of these sources offers discounted foods, either by residents growing their food themselves or by acquiring it through donations, and are tailored to meet the needs of neighborhood residents, we felt they serve an important, though often overlooked, role in provisioning the community.

The survey found that a significant number of area residents use food shelves to provision their households with 27% of respondents rating the food shelf as being at least "somewhat important" and 10.5% describing it as "very important" to provisioning their households. These numbers increase when we examine only those residents who use EBT, with 74% of Lincoln Park/West End EBT users describing the food shelf as "somewhat important" to their diet. Similarly, while about 20% of residents residing in households without children consider the food shelf an important part of their diet, an astounding 39% of households with children ranked the food shelf as being at least "somewhat important" to their diet.

Lincoln Park/West End residents also use food-buying programs, such as SHARE and Ruby's Pantry. About 12% of respondents ranked SHARE and 10% described Ruby's Pantry as being at least "somewhat important" in their efforts to access food. SHARE has one distribution site in West Duluth and Ruby's Pantry, currently located in the Central Hillside neighborhood, opened a new site in the Morgan Park neighborhood.

In addition, residents also defined other self-provisioning systems, like hunting, fishing, and gardening, as being important to their accessing food. For 25% of respondents, meat from hunting was at least "somewhat important," while 24% ranked fishing as being "somewhat important" and 48% described gardening as "somewhat important" for provisioning their households.

The Minnesota Family Investment Program (MFIP) provides discounted food to families with children whose household income falls below a certain income threshold, defined based on size of household and income sources. About 12% of households in Lincoln Park/West End rank MFIP as "somewhat important" for them when accessing food. If we look only at households with children, we can see that a full 28% of these households ranked MFIP as being at least "somewhat important." Thus, MFIP plays a vital role in feeding about a quarter of this neighborhood's households with children.

Figure 29: Survey Responses Regarding Sources of Food

22. Over the course of the last year, how important have the following food sources been to your diet?

	Not Important		Somewhat Important		Very Important
	1	2	3	4	5
Food shelf (like CHUM or Salvation Army)	73.2%	4.1%	6.1%	6.1%	10.5%
SHARE food buying club	88.5%	4.4%	3.6%	3.0%	0.6%
Minnesota Family Investment Program (MFIP)	88.3%	0.9%	0.6%	1.5%	8.7%
Ruby's Food Pantry	90.0%	4.1%	1.8%	2.4%	1.8%

23. Over the course of the last year, how important have the following food sources been to your diet?

	Not Important		Somewhat Important	Very Important	
	1	2	3	4	50
Meat From hunting	74.6%	9.6%	7.3%	4.4%	4.1%
Fish that you caught	76.3%	9.9%	8.2%	3.8%	1.8%
Vegetables from a garden	51.7%	4.8%	16.5%	8.0%	9.1%
Other_______________					

24. What would you like to change about food access in Lincoln Park/West End?
-- Please write on the back of the letter or on any other piece of paper you have. Thank You!

Survey Results – Qualitative

The survey also asked respondents the following question: "What would you like to change about food access in Lincoln Park/West End?" Of the 375 returned surveys, 158 (an astounding 42%) included written comments. This was a very high response rate, especially considering that residents did not know a great deal of information about who was administering the survey, who would read the survey, and if their comments would be taken seriously. Respondents' comments included descriptions of the problems they faced personally with getting groceries as well as the difficulties they saw their neighbors facing. Five themes stood out in the types of comments collected in the surveys (see Figure 30). Residents wanted: 1) a store in the Lincoln Park/West End neighborhood; 2) improved access to affordable food; 3) a small corner store; 4) increased access to high quality foods; and 5) a large store, like a Super One or Cub Foods, located closer to their neighborhood.

Figure 30: What Residents Would Like to Change about Food Access in Lincoln Park	
A closer store/not specific	43%
A closer store/large like Super One or Cub Foods	23%
Improve access to affordable food	20%
A closer store/corner store	19%
Improve access to higher quality and diverse food items	15%

A Closer Grocery Store

The most common comment among respondents was that Lincoln Park/West End needed a closer grocery store. Another frequent comment noted the difficulties people experienced when traveling to a grocery store and the high costs and limited selection available at the local convenience stores. These comments speak to the importance of a shopping venue in the neighborhood and of the real added convenience of a neighborhood store. Four comments below, taken from the surveys, underscore this issue.

> "A small grocery store with staples that are reasonable priced would be great. With Grand Ave so busy whenever the freeway is being worked on it can take 1 1/2 hours just to go to the store for milk and bread."
>
> "I just had to write to tell you about what I have see over the last few years. I watch summer and winter on Grand Ave the increase in people, mothers with children, handicapped men and women walking by my house carrying Super One bags of groceries the many miles back to their homes. I have cried many times watching them struggle in the snow and rain, yet I have been too afraid to offer a ride to them. I pray a grocery store with reasonable prices could be opened for the people of Lincoln Park."
>
> "No grocery stores in Lincoln Park. Need to go to Central Ave or the mall area to get groceries (bona fide grocery shopping, not fill it items at the convenience store) the convenience stores are great but very pricey."
>
> "It would be great to have a grocery store here. There are many low-income families here with limited transportation. Only expensive convenience stores without healthy food choices."

A Closer Store/ Large (like Super One, Cub Foods, Trader Joes, Whole Foods Co-op)
Another comment common to many responses was that people would like a full-service grocery store, like Super One or Cub Foods, so that they could do all of their grocery shopping within the Lincoln Park/West End neighborhood. According to respondents, a large grocery store would solve many of the food access problems residents of Lincoln Park/West End face. A local store would offer choice, affordability and convenience all in one. The five comments below, taken from the surveys, represent these concerns:

> "I would love to have a Whole Foods Co-op in the area, a branch of Super One or Save-A-Lot. More grocery stores and a farmers market in the close area."
>
> "Lincoln Park/West End needs a grocery store like Cub or Super One with coupons and sales – too many people pay inflated prices often at Little Store."
>
> "[It] Would be nice to have a major grocery store in the neighborhood that had comparable prices to the big chain stores. A Ruby's Food Pantry would be nice. People could sign up for orders and volunteers could deliver to those who don't have transportation."
>
> "A major food chain store in West End area-NOW...it's either up over the hill or West Duluth area."
>
> "[I] Would Like a Whole Foods or Super One or Cub in Lincoln Park"

Another frequent comment was that the food currently available in Lincoln Park/West End is unaffordable. These comments support our findings that prices at existing grocery outlets in the community are too high. For low-income people, these prices are especially problematic because people who shop at convenience stores are overpaying for food that is of low nutritional value. Respondents' comments also underscore the fact that there is unmet demand in the community and that people are *already* shopping in the neighborhood and will continue to do so if there are more reasonably priced options. Below are six comments, taken from the surveys, representing these concerns:

"We need an affordable grocery store, $4 for Saltines at gas station is crazy."

"It would be great to have a grocery store here. There are many low-income families here with limited transportation. Only expensive convenience stores without healthy food choices."

"I would LOVE a decent grocery store within walking distance! (Without gas station prices!)"

"There aren't any grocery stores in what I consider the Lincoln Park area. Convenience stores yes that have limited items and are costly."

"A nice store with fair prices would be great (not Save-A-Lot type - poor quality)."

"Would be nice to have a store close to home w/reasonable prices.

Closer Store/ Like a Corner Store

Another response found throughout the surveys was a desire for a small corner store. While we tend to think of food deserts as neighborhoods without large full-service grocery stores, many of our respondents saw the need for a small corner store within convenient walking distance of their homes. This type of store would be accessible to people who do not have cars and would benefit individuals who do not want to travel long distances for basic food items like bread and milk. Many respondents also noted that this type of store would be a "community location" where people would do more than simply buy groceries. It would be a meeting place for the neighborhood and a place where residents could get to know their neighbors. A small neighborhood store could improve residents' quality of life, while at the same time improving their access to groceries. The six comments below, taken from the surveys, represent these concerns.

"Small Market w/good prices with just healthier foods. Fresh fruit, meat, pastas. Just meal making foods. Minimal processed/pre-packaged.

"A small grocery store with possibly a deli, fresh fruits and vegetables. Like the old neighborhood corner store."

"I would like to see a neighborhood state that would carry basic necessities so I would have to drive to the store for 2 items."

"Community grocery store in the area-walking distance and affordable."

"I would take a neighborhood market with fresh produce, meat & dairy."

"Corner grocery store would help."

Improve Access to High Quality and Diverse Food Items

Improved access to high quality food was another common response to our survey. While the stereotype exists that poor people *choose* to eat unhealthy food and are, therefore, satisfied with their existing shopping options, this survey found that some Lincoln Park/West End residents were interested in improving their access to healthy, higher quality, and more diverse food options. An important element of food security is the ability to eat the type of food that you want to eat and not feel forced to eat food that you do not desire. Considering the limited selection of food options currently available in the Lincoln Park/West End community, community members who are unable to travel outside of the community for food do not have the ability to decide their own diet. Instead, circumstances force them to eat only the food that is available to them. Four comments below, taken from the surveys, underscore this problem.

"More fresh herbs and spices"

"A local store that says "community" and is affordable and healthy."

"I would like to see a better variety of foods when I have money fresh and organic are preferred but expensive. It's hard to keep away from the appeal of cheap junk food."

"Food sources in Lincoln Park are aimed almost exclusively for poor people. A glutton of fast food and the limited selection of healthy food at Super One in Spirit Valley supply cheap processed food heavily dependent on sugar, fat, and salt. This along with little exercise only help cause obesity, heart disease, and diabetes. This neighborhood has no alternative for fresh veggies, fruit, or meat. We normally have to go to Cub foods or the Whole Foods Co-op."

Lincoln Park/West End Retail Market Analysis

Communities of all sizes occasionally have a market analysis performed for them to measure how well they are doing in terms of changes in local economy. Generally, the intent of those who produce the report is to encourage existing and potential businesses to compete better in the regional, national and sometimes global marketplace. Community and economic development organizations also use such data to better serve their market and develop retail and main street strategies. University of Minnesota Extension staff created this report through secondary data and analysis compiled chiefly through Business Analyst, a GIS software program from Esri.

The below report is a snapshot of what the retail sector currently looks like in Duluth's Lincoln Park/West End neighborhood. Estimates include the potential number of businesses across different store categories based on the spending of area residents (demand) compared to the number of stores in the trade area (supply). The categories where demand is greater than supply represent opportunities for business development. We calculated the demand estimates from U.S. Economic Census data and supply listings from a national database of businesses, revised by local community members for accuracy. The data in Figure 31 illustrates only the Food, Health and General Merchandise retail categories. A full calculation of all seventy-six retail NAICS categories is also located in Appendix D.

Figure 31: Retail Sector in Lincoln Park/West End

NAICS	Food, Health, and General Merchandise	MN Sales Per Capita	Average Sales per MN Store	Potential Sales in Trade Area	# of Stores (Demand)	# of Stores (Supply)*	Potential Stores (Demand - Supply)
4451	Grocery stores	$1,345	$4,373,159	$5,394,767	1.2	0	1.2
4452	Specialty food stores	$50	$237,854	$201,714	0.8	0	0.8
4453	Beer, wine, & liquor stores	$225	$1,053,080	$901,097	0.9	1	-0.1
44611	Pharmacies & drug stores	$551	$4,236,414	$2,207,929	0.5	3	-2.5
44612	Cosmetics, beauty supplies, perfume stores	$28	$96,585	$113,629	1.2	0	1.2
44613	Optical goods stores	$33	$507,314	$130,654	0.3	0	0.3
44619	Other health care (vitamin, medical equip)	$50	$223,721	$202,002	0.9	0	0.9
4471	Gasoline stations	$1,877	$3,805,352	$7,527,142	2.0	2	0.0
452	General merchandise stores	$2,011	$9,124,699	$8,065,050	0.9	0	0.9

This data demonstrates a basic retail gap analysis and compares the demand for goods and services for a specified single trade area. The categories where demand is greater than supply are potential business opportunities and should be investigated further.

The trade area of the Lincoln Park/West End neighborhood shows particular neighborhood opportunities. Of special note is that stores generally fall into one of two categories for their customers: convenient retail markets and destination retail markets (see Figure 32).[7] Convenient retail markets are those places that consumers and residents are unwilling to travel long distances to in order to shop at these stores. Destination retail markets are places where consumers are willing to travel further in order to make a purchase at these stores. For example, one would not expect to travel as far to fill up their car at a gas station (convenience) as they would when shopping for a new couch at a furniture store (destination).

Based on information that we know about residents of Lincoln Park/West End, such as median income, consumer purchases, demographics and lifestyle choices, we are able to predict how they will likely spend money in a particular category each year. For example, in the chart above (see Figure 31), we estimate that the potential sales at grocery stores in the Lincoln Park/West End neighborhood defined trade area are $5,394,767. If one were to determine that the trade area of the Lincoln Park/West End neighborhood is roughly the same as what a typical Minnesota grocery store would be, based on the knowledge that Minnesota grocery stores average total sales per year of $4,373,159, we could estimate that the Lincoln Park/West End neighborhood could sustain an additional 1.2 grocery stores. We could also read the data to understand that because a grocery store does not currently exist in Lincoln Park, the community has a "leakage" factor of $5.3 million, meaning that residents are spending those dollars at a store outside the community's trade area.

This analysis is a good starting point for the Lincoln Park/West End community to determine a suitably scaled grocery store for their neighborhood. While it is unlikely that a grocery store would capture all of the estimated $5.3 million, an appropriately scaled store might be able to attract a good portion of those dollars. Certainly, anyone interested in pursuing opening a grocery store in the Lincoln Park/West End neighborhood would want to do a deeper market analysis.

[7] Taken from Borchert, 1963.

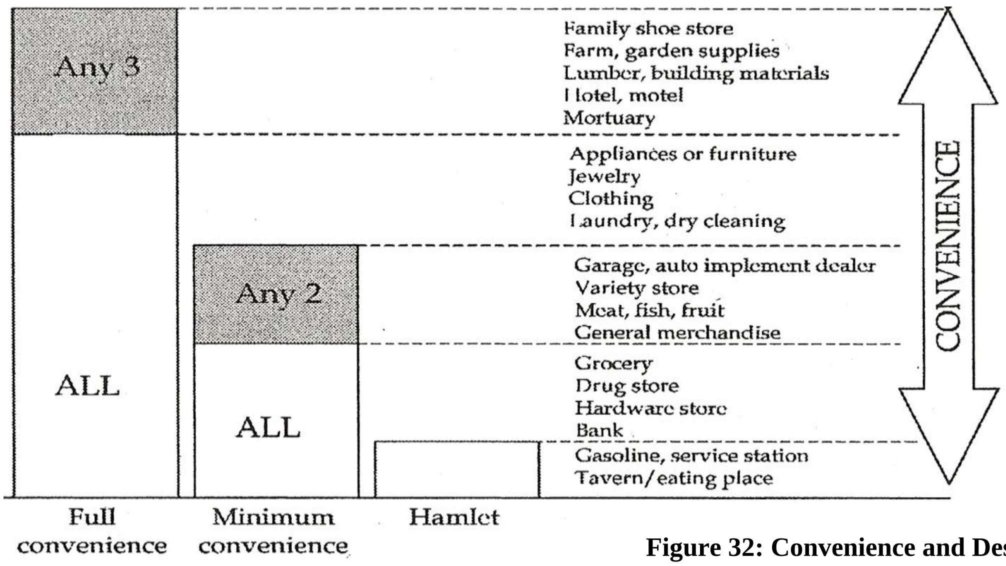


Figure 32: Convenience and Destination Retail Markets

Discussion/Policy Implications

Our survey found that there is a vibrant and diverse food system in the Lincoln Park/West End neighborhood of Duluth, Minnesota. Residents travel significant distances to shop at stores in Superior, Wisconsin, in West Duluth and in Duluth's Central Hillside. Residents consume food they grow in their gardens and acquire from food shelves and buying clubs. In addition, residents eat out at both fast food and sit-down restaurants.

While many in the neighborhood are able to access the food they need, a significant portion of the community faces immense problems accessing safe and healthy food. The fact that almost 40% of the respondent households with children use the food shelf is significant. Similarly, for community members who use EBT, the food shelf has become the "norm" and not just an emergency food outlet.

The community's existing food outlets are insufficient in terms of their selection and have too high of prices. Our store assessment clearly documented very high prices and inadequate selection in neighborhood stores, especially in terms of fresh vegetables. While many neighborhood residents travel outside of the community to shop, those who utilize the neighborhood's stores tend to be without cars, live in households with children, and on public assistance programs – just the types of individuals who do not have the ability to travel outside of the community for cheaper and healthier food.

Of the respondents who contributed written comments, 43% described the need for a neighborhood grocery store. Preferences for store type varied and included full service grocery store, small store, store with low prices, and store that stocked a diverse array of goods. The consensus was clear, however, that respondents want a "brick and mortar" space in the community to improve food access for themselves and for their neighbors.

Although our qualitative responses were overwhelmingly in favor of a neighborhood grocery store, "non-traditional" food delivery outlets were also quite commonly used in the community. Hunting, fishing, gardening, MFIP, Ruby's Pantry and SHARE all provide food at lower costs than most traditional grocery stores. While these delivery networks are seasonal and sporadic, they still form an alternative economy in the community.

Convenience Store

A small neighborhood convenience store that stocks groceries and fresh vegetables makes sense for Lincoln Park/West End for a variety of different reasons. First, a store of this size would easily fit into the most densely populated part of the neighborhood. This convenient location would solve the problem of unreliable transportation. This type of store would stock newspapers, cigarettes, and beverages and would serve as a both a pedestrian friendly neighborhood hub as well as a community center. Important drawbacks of a store of this scale are selection and price. Due to space limitations, smaller stores must limit their stock to a smaller selection of groceries and would likely be unable to satisfy the needs of all neighborhood consumers. On a related note, because of their limited buying power, smaller stores tend to have higher prices than full service grocery stores.

Achieving this type of store could be a question of existing neighborhood stores and/or gas stations expanding their selection to provide fresh produce and more moderately priced groceries. It would also require stores to consider altering their streetscape to better serve existing neighborhood residents who travel to the stores on foot.

A Full-Service Grocery Store

Full service grocery stores demand a significant amount of space. Even discount retailers, like Aldi and Save-A-Lot, require a large footprint as well as a loading dock. The space for this kind of investment does exist in the Lincoln Park/West End neighborhood near the Heritage Park development and along Michigan Avenue. However, this site is still a significant walking distance from the most densely populated parts of the community and any plan for this site would need to consider improving the area's walk-ability and public transit systems. Varieties of different avenues exist to help support the development of this type of grocery store. For example, the HFFI initiative is making available federal funds for grocery store development. Likewise, existing grocery retailers in the state, especially those with an interest in low-income communities, might be interested in opening a new store.

Food Hub

Milwaukee-based food activist and farmer Will Allen[8] has created what he describes as a "Food Hub," which distributes fresh produce weekly to neighborhood institutions that in turn sell the produce to families with limited access to grocery stores. These food hubs work with local farms in and outside of the region to provide residents of Milwaukee with fresh, healthy food in a sustainable way on a weekly basis. This food distribution program requires planning for

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[8] For more information about Will Allen and Growing Power, please visit http://www.growingpower.org/

important details. For instance, this plan requires a space that is up to code for processing fresh vegetables and repackaging them for distribution. In addition, a program like this would also need to have a small grocery store attached to it that could be run and managed in a manner similar to Minneapolis's Midtown Global Market, which rents retail stalls to local entrepreneurs.[9] Duluth-based programs, such as Seeds of Success, Institute for Sustainable Futures, and the Sustainable Agriculture Project at the University of Minnesota Duluth are all interested in pursuing this model.[10]

Increasing Transit Access
A variety of different options meant to help Lincoln Park/West End residents' better utilize existing grocery stores already exist. For example, Duluth's Whole Foods Co-op offers customers a $3 cab voucher and the 4th Street Market currently offers grocery delivery on a somewhat informal basis. In addition, considering breakthroughs in communication and GPS technology, it would be possible to create an efficient grocery delivery system for neighborhoods that do not have grocery stores. Another option for improving grocery store accessibility would be to work with local cab companies and the Duluth Transit Authority to improve access to nearby grocery stores, such as by locating taxi stands and bus stops in more convenient locations.

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9 For more information about Minneapolis's Midtown Global Market, please visit http://www.midtownglobalmarket.org/

10 To learn more about these Duluth-based projects and programs, please visit http://www.communityactionduluth.org/program_seeds.html, http://www.isfusa.org/, and http://www.d.umn.edu/cscd/sap/main/index.php

APPENDIX A: SHOPPER SURVEY

Demographics

1. Age

- Under 19
- 20-24
- 25-34
- 35-44
- 45-54
- 55-64
- 65-74
- 75-84
- 85+

2. Gender

- Male
- Female

3. Race

- White
- Black or African American
- Native American or Alaskan Native
- Asian
- Hawaiian or Pacific Islander
- Other____________________

4. What is the highest level of education you have completed?

- Less than high school
- High school
- Some college
- Vocational/technical
- College
- Masters degree
- Doctorate

5. What is the closest intersection to your house?

________________&____________________

6. Do you or anyone in your household receive WIC?

- **Yes**
- **No**

7. Do you or anyone in your household receive EBT?

- **Yes**
- **No**

8. Marital Status

- Married
- Single
- Widower
- In a long term relationship

9. Household Income

- $0 - $25,000
- $25,000 - $50,000
- $50,000 - $75,000
- $75,000 - $100,000
- $100,000 - up

10. How many people do you have in your household (including yourself)?

- _______

11. How many children under the age of 18 do you have in your household?

- _______

Shopping

12. Where do you usually buy your groceries? Please check all that apply.

- Cub
- Super One in West Duluth
- Convenience Stores in Lincoln Park
- Other (please specify) _____________________________

13. How do you usually get to the store to buy groceries?

- Walk
- Bike
- Bus
- Drive
- By being driven to the stores
- Taxi
- Other (please specify) __________________

14. How do you usually get home from the store after buying groceries?

- Walk
- Bike
- Bus
- Drive
- By being driven to the stores
- Taxi
- Other (please specify) _______________

15. How often per week do you cook food at home for yourself or your family?	**0**	**1**	**2**	**3**	**4 or more**
16. How often per week do you order food to be delivered to your home?	**0**	**1**	**2**	**3**	**4 or more**
17. How often per week do you eat at sit down restaurants like Pizza Luce or T-Bonz?	**0**	**1**	**2**	**3**	**4 or more**
18. How often per week do you eat at fast food restaurants (such as McDonalds or Quiznos)?	**0**	**1**	**2**	**3**	**4 or more**
19. How often per week do you buy groceries?	**0**	**1**	**2**	**3**	**4 or more**
20. How many vehicles do you have in your household?	**0**	**1**	**2**	**3**	**4 or more**

21. What is the biggest problem you have getting groceries in Lincoln Park?

- Financial difficulty
- Getting to the grocery store
- Getting home from the grocery store
- Local stores have inadequate selection
- Other (please specify) ______________________________

22. Over the course of the last year, how important have the following food sources been to your diet?

	Not Important		Somewhat Important		Very Important
Food Shelf (like CHUM or Salvation Army)	1	2	3	4	5
SHARE food buying club	1	2	3	4	5
Minnesota Family Investment Program (MFIP)	1	2	3	4	5
Ruby's Food Pantry	1	2	3	4	5

23. Over the course of the last year, how important have the following food sources been to your diet?

	Not Important		Somewhat Important		Very Important
Meat From Hunting	1	2	3	4	5
Fish that you caught	1	2	3	4	5
Vegetables from a garden	1	2	3	4	5
Other_________________	1	2	3	4	5

24. What would you like to change about food access in Lincoln Park/West End?
-- Please write on the back of the letter or on any other piece of paper you have. Thank You!

APPENDIX B: MARKET BASKET OF GOODS SURVEY

General Information
1. Store Name: ____

2. Address: ____

3. WIC Authorized? **0** Yes **0** No

4. EBT Authorized **0** Yes **0** No

Fruits, Vegetables, and Frozen Foods

Fresh Fruits / Veggies	**Quality** (1 = Poor, 2 = fair, 3 = good)	**Price** (include unit: ex. per pound, each…)	**Comments**
Apple			
Banana			
Orange			
Lettuce			
Carrots			
Potato			
Number of remaining varieties: _________________________			

Are there any canned fruits? **0** Yes **0** No

Type	**Size**	**Price**

Are there any canned vegetables? **0** Yes **0** No

Type	Size	Price	Brand

Are there any frozen vegetables? **0** Yes **0** No

Type	Size	Price	Brand

Are there any frozen prepared foods (frozen dinners, pizza, potato products)? **0** Yes **0** No

Type	Size	Price	Brand

Dairy

Are there any Dairy Products available? **0** Yes **0** No

Type	Size	Price
Skim		
1%		
2%		
Whole		
Soy Milk		
Butter		
Eggs		
Cheese		

Meat

Are there any meat products available? **0** Yes **0** No

Type (deli, frozen, fresh, chicken, hot dogs)	Size	Price	Brand

Grocery Items

Are there any grocery items available? **0** Yes **0** No

Type	Size	Price	Brand
Pasta			
Pasta sauce			
Cereal			
Sugar			
Flour			
White Bread			
Wheat Bread			
Peanut Butter			
Rice			
Number of remaining varieties: _______________________			

Miscellaneous

What other types of foods are available? (ex. Frozen meals, canned meat, etc.)

Type	Size	Price

Estimate number of items / totally grocery floor space:

APPENDIX C: COMMUNITY LEADER SURVEY

1. What is your organization / business and are you currently doing anything to help community members get access to grocery stores and good food?

2. What are some of the barriers that organizations / businesses face trying to increase access to grocery stores and good food in the community?

3. What are some of the barriers that community members face in trying to access grocery stores and good food in the community?

    a. Cost?

    b. Transportation?

4. (Visioning question) Imagine the best case scenario for healthy food in Lincoln Park/West End. . . what do you see?

5. What other advice do you have for United States to consider as we develop and implement a plan to help people in the community get better access to grocery stores?

    a. Who else should we get in contact with in doing this research?

APPENDIX D: LINCOLN PARK/WEST END MARKET AREA PROFILE

Retail Gap Analysis: 2010 Lincoln Park/West End Trade Area

This report estimates the potential number of businesses across store categories based on the spending of the area residents (demand) compared to the number of stores in the trade area (supply). Those categories where demand is greater than supply are opportunities for businesses development. Demand estimates are calculated from UNITED STATES Economic Census States data and supply listings are from a national database of businesses, revised by local community members for accuracy (see Appendix 1 for more details).

NAICS	Name	MN Sales Per Capita	Average Sales per MN Store	Potential Sales in Trade Area	No. of Stores (Demand)	No. of Stores (Supply)*	Potential Stores (Demand - Supply)
	Vehicle, Furniture, and Building Materials						
44111	New car dealers	$ 1,942	$21,797,759	$ 7,789,601	0.4	3	-2.6
44112	Used car dealers	$ 201	$ 593,182	$ 806,783	1.4	3	-1.6
44121	Recreational vehicle dealers	$ 64	$ 1,753,870	$ 257,920	0.7	1	-0.3
44122	Motorcycle, boat, & other motor vehicles	$ 224	$ 1,280,371	$ 896,565	1.2	5	-3.8
4413	Automotive parts, accessories, & tire stores	$ 239	$ 786,193	$ 957,874	0.5	6	-5.5
4421	Furniture stores	$ 205	$ 1,629,971	$ 822,183	0.9	4	-3.1
4422	Home furnishings stores	$ 170	$ 745,495	$ 680,506	0.8	4	-3.2
44311	Appliance, television, & other electronics stores	$ 318	$ 1,662,069	$ 1,276,557	0.3	4	-3.7
44312	Computer & software stores	$ 63	$ 950,793	$ 252,113	0.1	1	-0.9
44313	Camera & photographic supplies stores	$ 14	$ 828,398	$ 55,546	0.1	0	0.1
44411	Home centers	$ 460	$12,891,101	$ 1,846,624	0.1	0	0.1
44412	Paint & wallpaper stores	$ 32	$ 1,024,355	$ 129,565	0.5	1	-0.5
44413	Hardware stores	$ 118	$ 1,013,346	$ 473,313	0.9	0	0.9
44419	Specialized building material dealers	$ 414	$ 1,821,410	$ 1,658,464	0.6	10	-9.4
4442	Lawn & garden equipment & supplies stores	$ 250	$ 1,799,153	$ 1,000,741	1.2	0	1.2
	Food, Health, and General Merchandise						
NAICS	**Name**	**MN Sales Per Capita**	**Sales per Ave. MN Store**	**Potential Sales in Trade Area**	**No. of Stores (Demand)**	**No. of Stores (Supply)***	**Potential Stores (Demand - Supply)**
4451	Grocery stores	$ 1,345	$ 4,373,159	$ 5,394,767	1.2	0	1.2
4452	Specialty food stores	$ 50	$ 237,854	$ 201,714	0.8	0	0.8
4453	Beer, wine, & liquor stores	$ 225	$ 1,053,080	$ 901,097	0.9	1	-0.1
44611	Pharmacies & drug stores	$ 551	$ 4,236,414	$ 2,207,929	0.5	3	-2.5
44612	Cosmetics, beauty supplies, perfume stores	$ 28	$ 96,585	$ 113,629	1.2	0	1.2

NAICS	Name	MN Sales Per Capita	Sales per Ave. MN Store	Potential Sales in Trade Area	No. of Stores (Demand)	No. of Stores (Supply)*	Potential Stores (Demand - Supply)
44613	Optical goods stores	$ 33	$ 507,314	$ 130,654	0.3	0	0.3
44619	Other health care (vitamin, medical equip)	$ 50	$ 223,721	$ 202,002	0.9	0	0.9
4471	Gasoline stations	$ 1,877	$ 3,805,352	$ 7,527,142	2.0	2	0.0
452	General merchandise stores	$ 2,011	$ 9,124,699	$ 8,065,050	0.9	0	0.9
	Clothing						
44811	Men's clothing stores	$ 21	$ 674,391	$ 82,731	0.1	1	-0.9
44812	Women's clothing stores	$ 103	$ 705,752	$ 411,381	0.6	0	0.6
44813	Children's & infants' clothing stores	$ 38	$ 1,081,575	$ 153,285	0.1	0	0.1
44814	Family clothing stores	$ 208	$ 1,898,733	$ 834,777	0.4	0	0.4
44815	Clothing accessories stores	$ 13	$ 190,332	$ 53,224	0.3	0	0.3
44819	Specialized clothing stores (dress, etc)	$ 39	$ 321,506	$ 156,293	0.5	0	0.5
44821	Shoe stores	$ 69	$ 774,015	$ 275,421	0.4	0	0.4
	Leisure Goods						
4483	Jewelry, luggage, & leather goods stores	$ 86	$ 408,225	$ 344,021	0.8	0	0.8
45111	Sporting goods stores	$ 195	$ 937,906	$ 780,391	0.8	5	-4.2
45112	Hobby, toy, & game stores	$ 45	$ 447,948	$ 178,850	0.4	1	-0.6
45113	Sewing, needlework, & piece goods stores	$ 24	$ 214,228	$ 98,103	0.5	1	-0.5
45114	Musical instrument & supplies stores	$ 23	$ 506,975	$ 91,551	0.2	0	0.2
45122	Tape, compact disc, & record stores	$ 7	$ 262,359	$ 26,188	0.1	0	0.1
	Miscellaneous Retail						
NAICS	**Name**	**MN Sales Per Capita**	**Sales per Ave. MN Store**	**Potential Sales in Trade Area**	**No. of Stores (Demand)**	**No. of Stores (Supply)***	**Potential Stores (Demand - Supply)**
4531	Florists	$ 31	$ 208,638	$ 125,430	0.6	0	0.6
45321	Office supplies & stationery stores	$ 58	$ 1,253,050	$ 231,054	0.2	1	-0.8
45322	Gift, novelty, & souvenir stores	$ 60	$ 178,090	$ 240,048	1.3	0	1.3
NAICS	**Name**	**MN Sales Per Capita**	**Sales per Ave. MN Store**	**Potential Sales in Trade Area**	**No. of Stores (Demand)**	**No. of Stores (Supply)***	**Potential Stores (Demand - Supply)**
4533	Used merchandise stores	$ 36	$ 118,273	$ 145,903	1.2	4	-2.8
45391	Pet & pet supplies stores	$ 38	$ 631,763	$ 152,115	0.2	1	-0.8
45392	Art dealers	$ 10	$ 121,938	$ 40,138	0.3	0	0.3
45393	Manufactured (mobile) home dealers	$ 22	$ 1,356,103	$ 89,896	0.1	0	0.1
45399	All other miscellaneous store retailers	$ 62	$ 128,687	$ 248,374	1.9	5	-3.1
51213	Movie Theaters (UNITED STATES estimates)	$ 41	$ 508,869	$ 164,433	0.3	0	0.3

NAICS	Name	MN Sales Per Capita	Sales per Ave. MN Store	Potential Sales in Trade Area	No. of Stores (Demand)	No. of Stores (Supply)*	Potential Stores (Demand - Supply)
	Rental						
5321	Automotive equipment rental & leasing	$ 161	$ 1,666,262	$ 643,698	0.4	1	-0.6
53222	Formal wear & costume rental	$ 4	$ 421,423	$ 16,698	0.0	0	0.0
53223	Video tape & disc rental	$ 24	$ 383,174	$ 97,223	0.3	0	0.3
5323	General rental centers	$ 13	$ 376,722	$ 50,520	0.1	0	0.1
	Amusement						
7131	Amusement parks & arcades	$ 12	$ 499,539	$ 48,720	0.1	0	0.1
7139	Other amusement (bowling, golf, fitness)	$ 236	$ 273,998	$ 945,958	3.5	5	-1.5
7221	Full-service restaurants	$ 612	$ 814,588	$ 2,455,415	3.0	12	-9.0
7222	Limited-service eating places	$ 544	$ 606,011	$ 2,183,637	3.6	0	3.6
7223	Special foods (caterers, mobile food)	$ 162	$ 353,894	$ 651,475	1.8	0	1.8
7224	Drinking places (alcoholic beverages)	$ 85	$ 330,782	$ 341,769	1.0	2	-1.0
	Repair						
8111	Automotive repair & maintenance	$ 383	$ 235,711	$ 1,534,520	6.5	18	-11.5
8112	Electronic equipment repair & maintenance	$ 53	$ 289,608	$ 213,828	0.7	3	-2.3
81141	Home/garden equipment & appliance repair	$ 11	$ 71,921	$ 42,854	0.6	0	0.6
81142	Reupholstery & furniture repair	$ 6	$ 50,262	$ 23,362	0.5	2	-1.5
81143	Footwear & leather goods repair	$ 1	$ 55,113	$ 3,359	0.1	0	0.1
81149	Personal goods repair (watch, boat, garment)	$ 28	$ 31,974	$ 112,336	3.5	0	3.5
NAICS	**Name**	**MN Sales Per Capita**	**Sales per Ave. MN Store**	**Potential Sales in Trade Area**	**No. of Stores (Demand)**	**No. of Stores (Supply)***	**Potential Stores (Demand - Supply)**
	Personal Services						
812111	Barber shops	$ 6	$ 25,581	$ 24,384	1.0	0	1.0
812112	Beauty salons	$ 124	$ 74,629	$ 498,245	6.7	3	3.7
812113	Nail salons	$ 10	$ 40,504	$ 38,794	1.0	0	1.0
81219	Other personal care services	$ 25	$ 50,062	$ 100,245	2.0	4	-2.0
81221	Funeral homes & funeral services	$ 46	$ 493,129	$ 185,993	0.4	1	-0.6
81231	Coin-operated laundries & drycleaners	$ 8	$ 128,336	$ 32,856	0.3	2	-1.7
81232	Drycleaning & laundry (except coin-operated)	$ 20	$ 274,352	$ 80,691	0.3	1	-0.7
81291	Pet care (except vet) services (UNITED STATES estimates)	$ 9	$ 40,375	$ 36,095	0.9	1	-0.1
54192	Photographic services	$ 165	$ 317,454	$ 663,025	2.1	2	0.1

* Existing store records are from a national business database from InfoUSA and compiled from public sources including the Yellow Pages and annual reports. Care should be taken to investigate actual local conditions, including the number of operating businesses in any NAICS category.

Appendix E: Employment Profile of the Lincoln Park/West End Neighborhood

	BUSINESSES		EMPLOYEES	
	Number	Percent	Number	Percent
Agriculture & Mining	6	1.40%	90	1.80%
Construction	54	12.20%	730	14.40%
Manufacturing	18	4.10%	595	11.80%
Transportation	23	5.20%	199	3.90%
Communication	0	0.00%	0	0.00%
Utility	2	0.50%	42	0.80%
Wholesale Trade	42	9.50%	410	8.10%
Retail Trade Summary	90	20.40%	891	17.60%
Home Improvement	10	2.30%	81	1.60%
General Merchandise Stores	0	0.00%	0	0.00%
Food Stores	4	0.90%	39	0.80%
Auto Dealers, Gas Stations, Auto Aftermarket	22	5.00%	265	5.20%
Apparel & Accessory Stores	2	0.50%	6	0.10%
Furniture & Home Furnishings	14	3.20%	103	2.00%
Eating & Drinking Places	16	3.60%	223	4.40%
Miscellaneous United States Retail	22	5.00%	174	3.40%
Finance, Insurance, Real Estate Summary	18	4.10%	119	2.40%
Banks, Savings & Lending Institutions	4	0.90%	18	0.40%
Securities Brokers	2	0.50%	3	0.10%
Insurance Carriers & Agents	9	2.00%	69	1.40%
Real Estate, Holding, Other Investment Offices	3	0.70%	29	0.60%
Services Summary	173	39.10%	1,781	35.20%
Hotels & Lodging	1	0.20%	5	0.10%
Automotive Services	20	4.50%	114	2.30%
Motion Pictures & Amusements	13	2.90%	43	0.80%
Health Services	5	1.10%	86	1.70%
Legal Services	4	0.90%	4	0.10%
Education Institutions & Libraries	3	0.70%	141	2.80%
Other Services	127	28.70%	1,388	27.40%
Government	10	2.30%	204	4.00%
Other	6	1.40%	0	0.00%

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