

Wandering and Wondering About Food Deserts

Investigating Obstacles to Food Access in a Small Midwestern City

Kyle Bianconi, Kali Kelleher, and Roberta Reed, University of Wisconsin-Superior

Deborah Augsburger, University of Wisconsin-Superior

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This poster presents a research project undertaken in Superior, Wisconsin, a small Midwestern city with distinct neighborhoods lacking grocery stores, and limited public transportation. The study began in the fall of 2012 as a partnership between an anthropology class at the University of Wisconsin-Superior (UWS) and Northwest Wisconsin Community Services Agency (NWCSA).

Our Questions:

What obstacles do low-income residents of Superior face in obtaining healthy, affordable food? How does this relate to the food desert concept?

Superior at a glance:

Location: Northwest Wisconsin, on Lake Superior, across bridge from Duluth, MN.

Population – 27,244

Poverty rate – 13.4%; Poverty rate for children – 31.3% (2013)

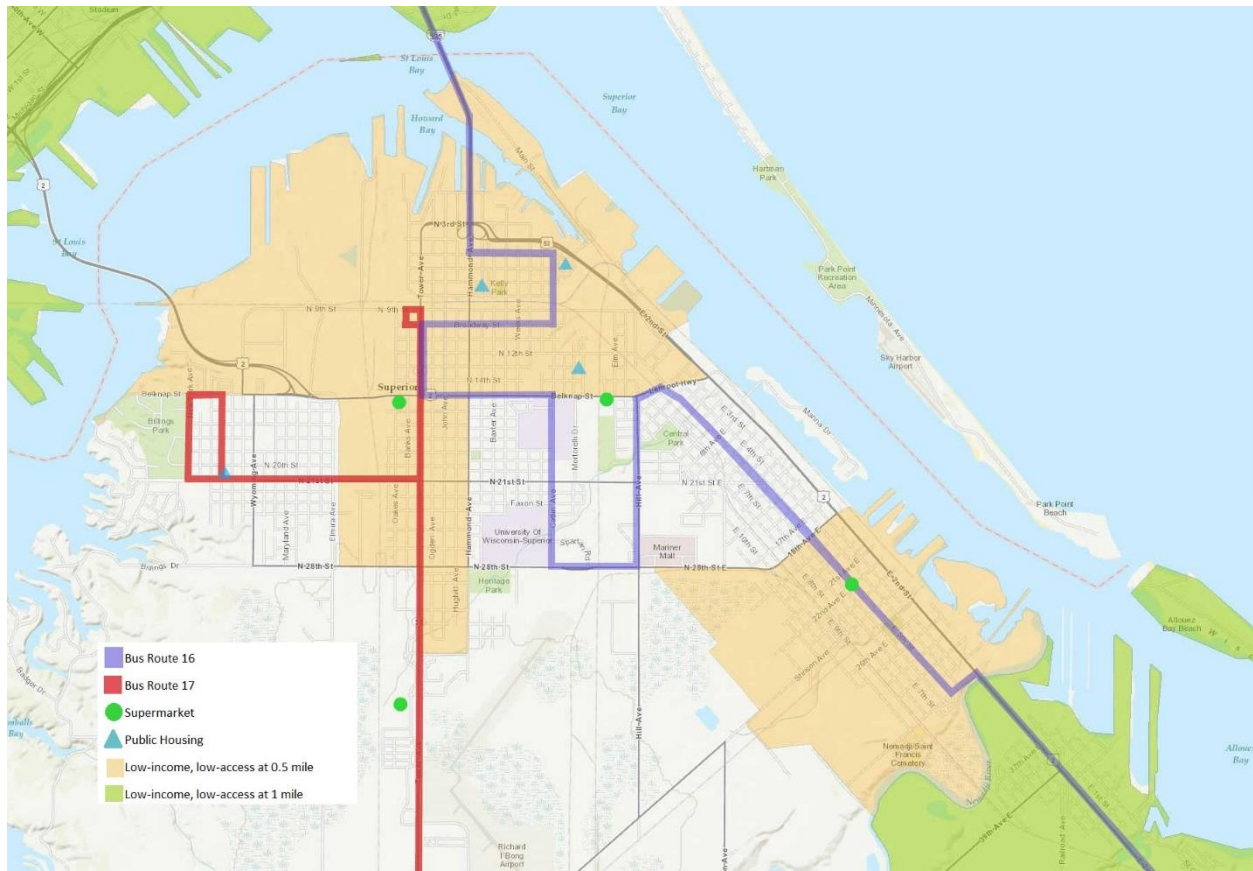
Food deserts:

According to the USDA, a food desert is: “a census tract with a substantial share of residents who live in low-income areas that have low levels of access to a grocery store or healthy, affordable food retail outlet”

<http://apps.ams.usda.gov/fooddeserts/fooddeserts.aspx>

Census tracts qualify as food deserts if they meet low-income and low-access thresholds:

1. They qualify as "**low-income communities**", based on having: a) a poverty rate of 20 percent or greater, OR b) a median family income at or below 80 percent of the area median family income; AND
2. They qualify as "**low-access communities**", based on the determination that at least 500 persons and/or at least 33% of the census tract's population live more than one mile from a supermarket or large grocery store (10 miles, in the case of non-metropolitan census tracts).



Superior, Wisconsin (pop. 27244)

Adapted from U.S.D.A. 2013

In spring of 2013 only one census tract in Superior fit the USDA's 1-mile definition for an urban food desert: Allouez/Itasca on the southeastern edge. Five census tracts were low-income, low-access at 0.5 miles (USDA 2013). Note that with the 2014 closing of the Belknap Plaza SuperOne, the census track east of John St. and immediately north of Belknap is now almost certainly 1-mile food desert (the USDA Atlas has not been updated since 2013).

Methods and Timeline:

Fall of 2012, as part of the course Anthropology 491, Anthropology in the Community, students engaged in:

- Mapping food outlets in different neighborhoods of Superior.
- Locating clusters of low-income housing (subsidized housing, apartment buildings, trailer parks) and calculating time and distance to supermarkets.
- Participant-observation at food pantries and food shelves – as volunteers and as clients, and as passengers in public transit.
- Interviews with Superior residents
- Administering a trial survey to approximately 40 individuals, including clients of NWCSA's food shelf.

Spring of 2013

- A survey was distributed to a pool of low-income residents in the city via service agencies.
- 475 surveys were distributed; by March 25, 2013, 76 surveys had been received (16% return rate). (By April 15, 2013, there were 84 returns, 18%)
- The new USDA Food Access Research Atlas became available in early 2013.

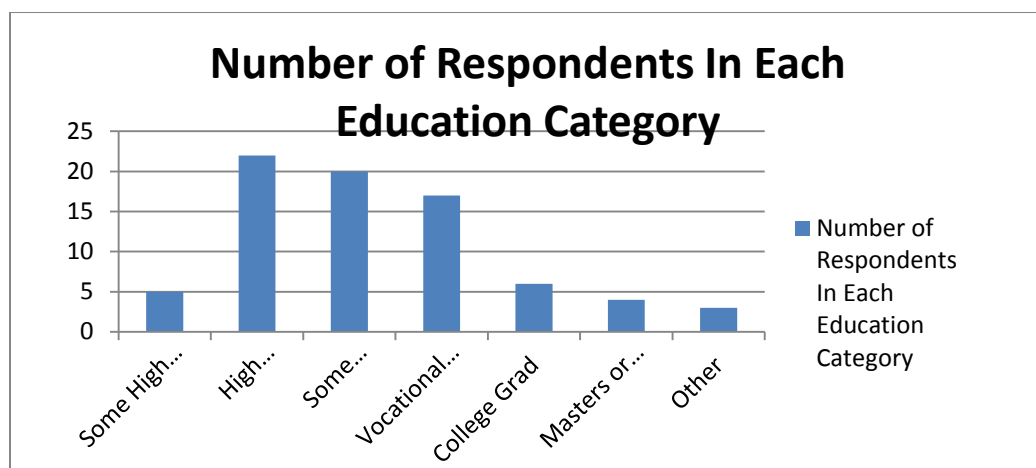
Survey Questions focused on:

- Location, income, mobility, etc. adapted from Pine et al. (2011)
- Food insecurity
- Fruit and vegetable consumption as an index of quality of diet (Hendrickson et al. 2006)

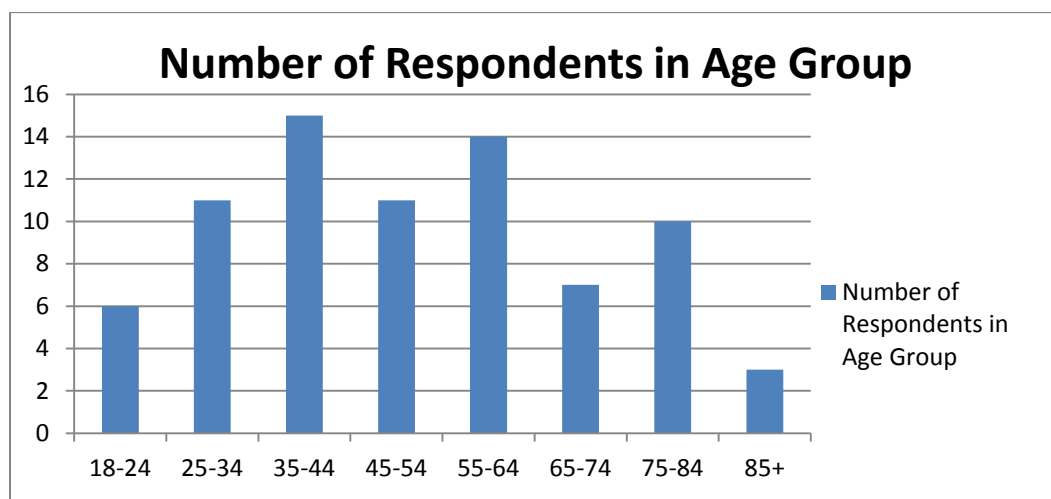
SURVEY RESULTS

Respondents:

- Roughly half of responding households were single adults.
- One-third of households had children (0-18).
- Over 90% reported household incomes of less than \$25,000.



(Categories are: Some high school, high school graduate, some college, vocational school graduate, college graduate, masters or other post-college degree, other.) Based on March 25 data (76 surveys)



Based on March 25 data (76 surveys)

Transportation problems:

- More than a quarter of respondents (27%) did not have a household vehicle. Some of these lived more than half a mile (and in some cases, a mile) from a supermarket, but the average income in their census tract was too high for it to count as a food desert.

- Not surprisingly, more than half the households without a vehicle (58%) reported transportation difficulties as an obstacle to food access. This was not a factor for households with cars.

Financial Problems:

- Close to 50% of respondents – both with and without cars -- listed financial difficulties as a barrier to food access. This was the most frequently listed obstacle.
- Almost three-quarters of respondents reported some degree of food insecurity in the previous twelve months.

Households with Children:

- Households with children were much more likely to have cars (24/27, 89%) than households without children (20/59, 65%).
- Of the 27 households with children under the age of 18, 21 (78%) reported at least one sign of food insecurity in the last 12 months, similar to the rates for all households. Of the 13 households with children under the age of 5, 92% reported at least one sign of food insecurity in the last 12 months. Despite the small sample size, this result was statistically significant ($p < .05$)
- Not surprisingly, roughly one in five households with children (of all ages) reported that lack of time and lack of childcare were obstacles for provisioning. These were not reported problems for households without children.

Fruit and vegetable consumption (as an indicator of diet quality)

- Average reported consumption of fruits and vegetables was low (less than two servings each per day)
- 74% of respondents thought that they did not eat enough fruits and vegetables.
- The leading reported obstacle to consuming more fruits and vegetables: Fruits and vegetables cost too much.

Discussion and Conclusion:

- Cars make a difference. Households without vehicles reported transportation difficulties.
- Physical access problems are compounded by the local climate, poor sidewalks, and limited bus routes.

- However, even with vehicles, low-income households face financial difficulties in obtaining food.
- The most frequently cited obstacle to increased fruit and vegetable consumption was lack of money, not access to a source of produce.

Many of the poorest sections of Superior do count as food deserts by USDA standards (2013). These neighborhoods would benefit from more food choices and more convenient public transportation. But census tracts do not go hungry – people do. The artificial construct of the “food desert” can be used to erase the presence of hungry people as much as call attention to them. The idea of food deserts has been a useful tool for community organizing (Pine and Bennet 2011, Healthy Duluth Area Coalition), and may prove to be one in Superior as well. Yet better physical access to grocery stores, however it is achieved, will not solve all the obstacles that people face in obtaining affordable, nutritious food.

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Contact:

Deborah Augsburger daugsbur@uwsuper.edu

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Respondents talk...

Financial problems:

- At times money can be a little short so I don't always buy the healthiest, I go for convenience.
- I only get a little in food stamps. I work but my money goes for bills, I only make minimum wage.
- Financially my food card is low because of my income, but cost of living is up.
- I only receive enough EBT to carry through 1st 2 weeks per month then spend extra cash from other sources to eat the rest of month.
- There isn't enough money available to those who need help to be able to afford eating healthy.
- Lack of money to have a balanced meal.

Mobility and transportation problems:

- I see many others have the same problem I do – transportation. I see many families take cabs or push shopping carts.
- Car is broke down and it's too hard to carry lots of groceries on a city bus let alone having to brave the elements and end up getting really sick.
- Trouble crossing the street in time allotted by traffic lights

Suggestions for increasing fruit and vegetable consumption:

- A certain amount of dollars on your EBT card could be deducted only for fruits and/or vegetables.
- Having Farmers market vouchers for low income families also (currently they go to senior citizens only).
- Fruit vouchers for the stores, not just farmers markets.
- Extra coupons or discounts on fresh fruits and veggies.
- I would like to find recipes that are quick, and healthy for 12 year old to make.
- Free cooking classes or seminars on how to encourage our children to eat fruits and veggies or healthier food.

Suggestions for improving food access:

- Make food stamps more accessible to moderate income families
- More fresh food at food shelves, they don't offer fruits/veggies or dairy.
- Food shelf in 2012 had a low supply of food quite often
- Local businesses could help purchase food for the food shelf

Resources:

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