

Access to Farmer's Markets in Philadelphia



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Background

- ▶ Food-insecure households are concentrated in ***poorer, urban areas***, in communities known as “*food deserts*”
 - About 15% of U.S. households experienced food insecurity during 2012
- ▶ “These are communities without a reasonably close supermarket, leaving many to depend on convenience stores and fast food outlets where fresh fruits and vegetables are not readily available”
 - In the U.S., 2.3 million people, who do not own a car, live more than one mile away from a supermarket.
- ▶ Fresh produce ***harvested locally*** is alleviating some of these food challenges

Scenario

- ▶ **Hypothesis:** In Philadelphia, lower-income regions have *LESS* access to fresh food markets
- ▶ Some Philadelphia neighborhoods have more farmers' markets than others
- ▶ Is the number of markets correlated with average income in the area?
- ▶ **Answer:** Based on our data, there is **NO** correlation between income and the number of fresh food markets



Data

Key Elements:

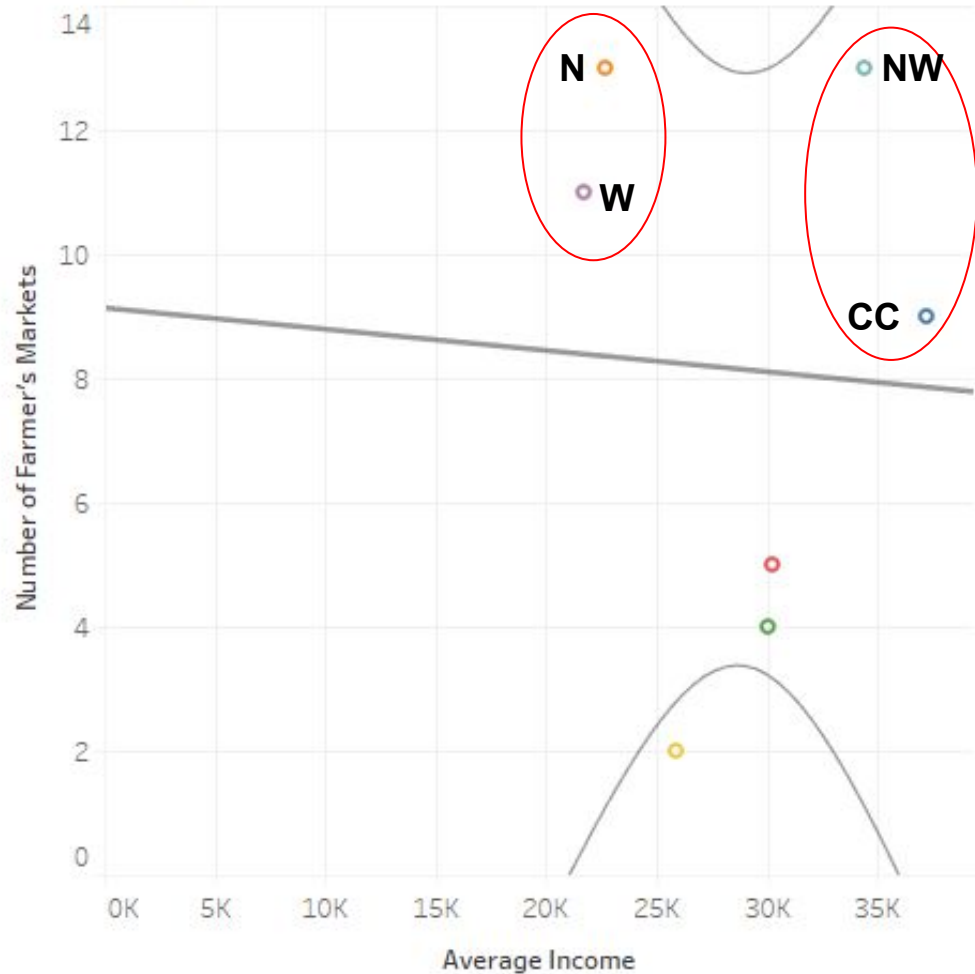
- ▶ **General Regional Locations: 7**
 - E.g. - North, South, West,...
- ▶ **Zip Codes: 49**
- ▶ **Population: Philadelphia's = 1,518,049**
- ▶ **Average Median Income**
- ▶ **Number of Farmers' Markets: 57**



Number of Markets by Income and General Location

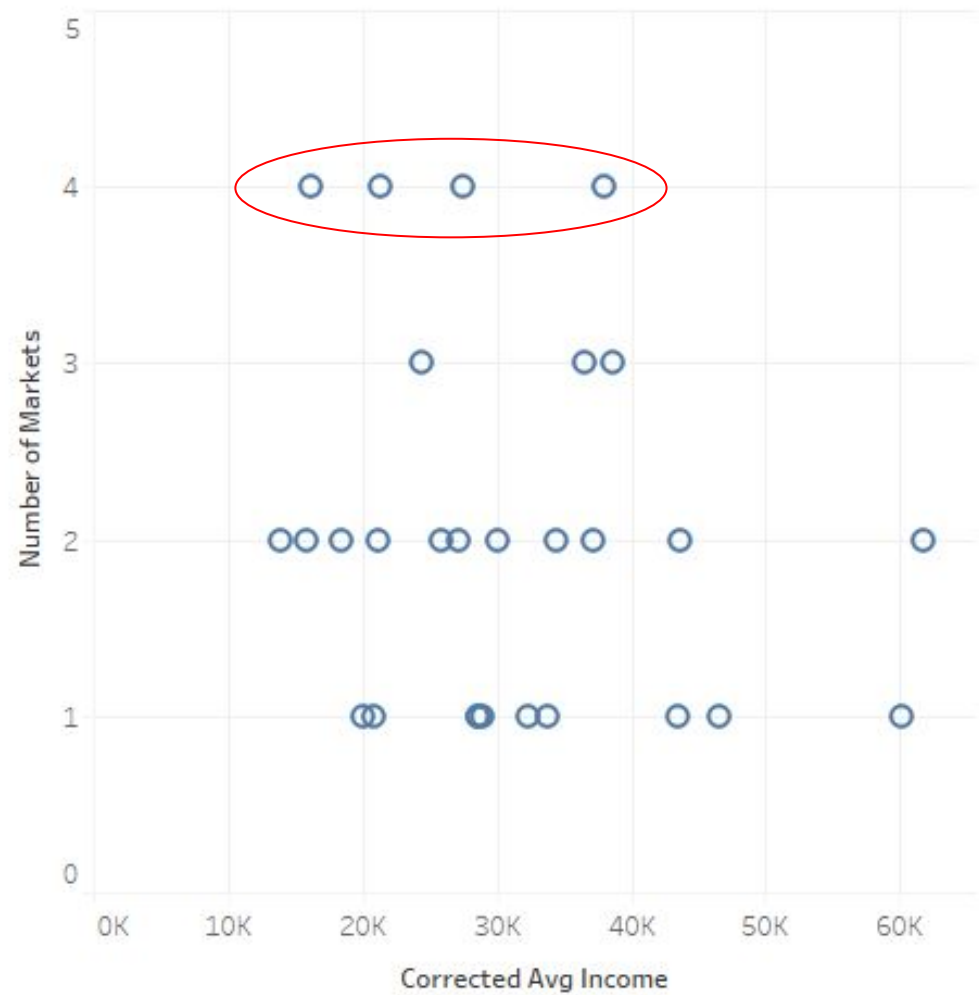
- ▶ No Correlation!
- ▶ The areas with the highest **AND** lowest amount of income have the highest number of markets

Markets by Income, General Location



Number of Markets by Income and Zip Code

Markets by Income, Zip Code



Conclusions

- ▶ **Our Expectation:** Higher-income regions would have the most amount of farmers' markets, lower-income regions would have the least
- ▶ **Our Discovery:** High-income regions and low-income regions had the most amount of farmers' markets
- ▶ **Our hypothesis was *INCORRECT*. Why?**

Conclusions

- ▶ **There could be other potential factors**
 - Demand for farmers' markets in some areas is low
 - In some areas, supermarkets are the main suppliers of fresh foods
 - Supermarkets' prices are more appealing to consumers
 - There are community initiatives to increase fresh food availability in lower-income areas
- ☆ **Limited data points available affected results**
 - A larger dataset could have changed the results

References

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- ▶ Hillengas, A. "Farmers Markets Locations - Opendataphilly". Opendataphilly.org. N.p., 2017. Web. 19 Apr. 2017. Retrieved from <https://www.opendataphilly.org/dataset/farmers-markets-locations>
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Infographic



What is a food Desert?

An urban area in which it is difficult to buy affordable or good-quality fresh food

"These are communities without a reasonably close supermarket, leaving many to depend on convenience stores and fast food outlets where fresh fruits and vegetables are not readily available"



Statistics

About 15 percent of American households experienced food insecurity during some part of 2012

In the U.S., 2.3 million people who do not own a car live more than one mile away from a supermarket

Is Philadelphia a Food Desert?

NO! There are 57 farmers markets providing access to fresh food evenly throughout the city

Fresh fruits and vegetables harvested in our neighborhoods are helping to alleviate some of the food challenges we face

★ *Even though West and North Philly are the poorest areas in the city, they have the most number of farmers markets*

Number of Markets by Zip Code

