

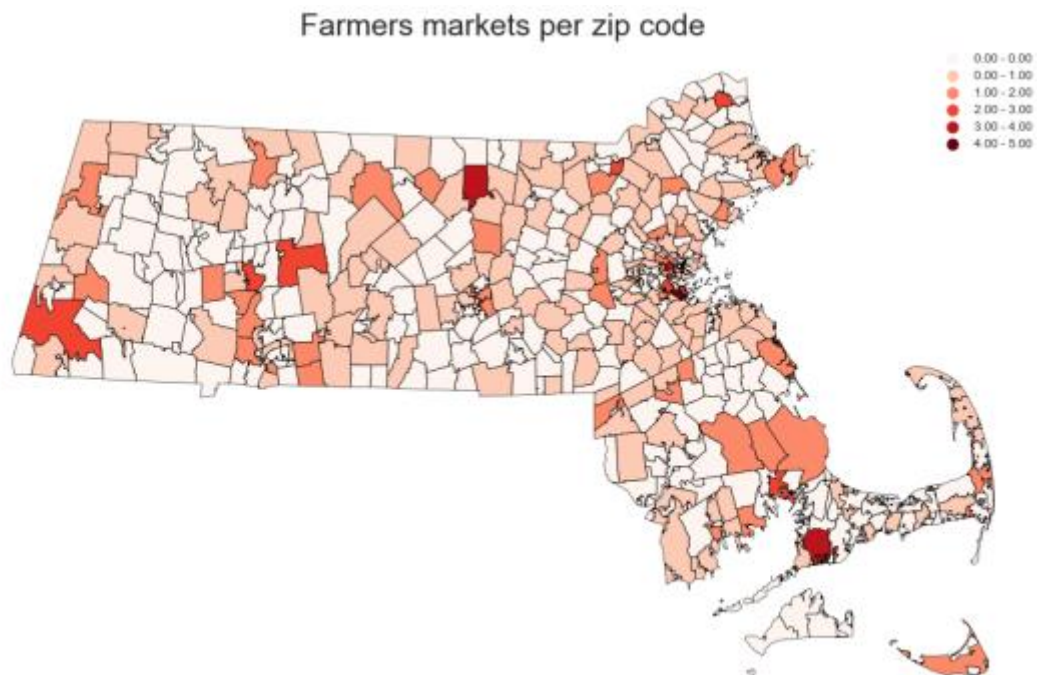
# Farmers Markets in Massachusetts: Fresh local produce for whom?

Victor M. Vilchis Tella  
University of Chicago

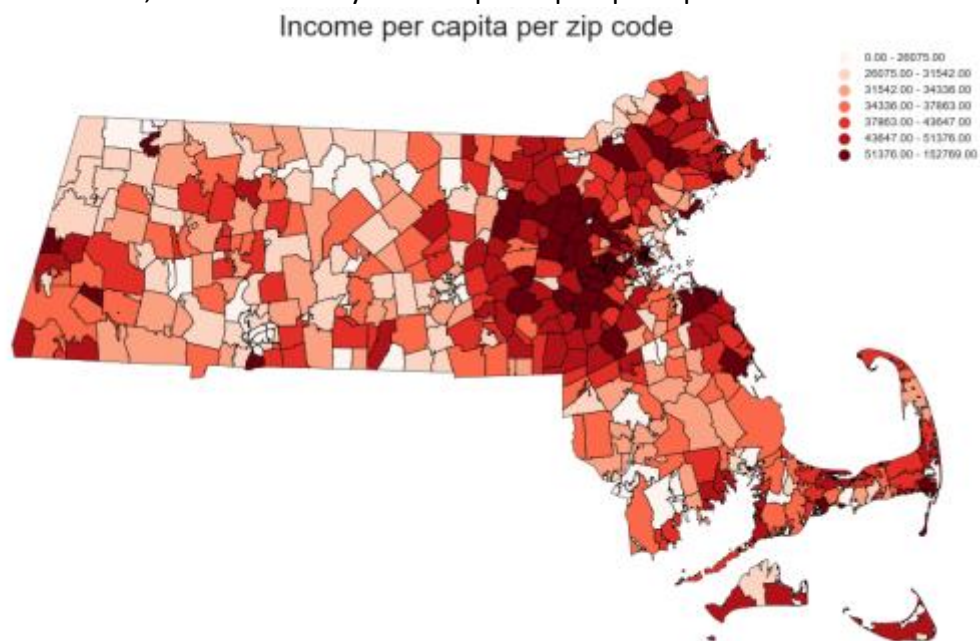
While the oldest farmers market in Massachusetts has been serving its customers since 1934, the vast majority of them have opened since the turn of the century. Farmers markets connect and benefit local farmers and consumers while promoting local production, but who do they serve?

Using farmers market availability information from MASSDATA, the open data portal for the state of Massachusetts and information from the American Community Survey 5-year estimates, the question of who is being served by these markets can be explored.

First, it's worth exploring whether these markets are physically concentrated in an area of the state. 57% of zip code areas do not have a farmers market, and one zip code area has five of them. Geographically, however, they are spread across the state,

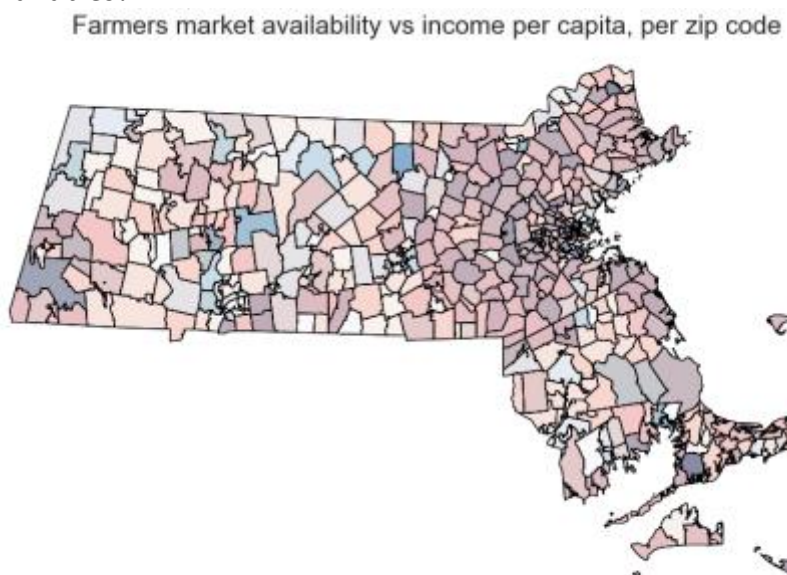


Let's now look at wealth, as measured by income per capita per zip code.



There are clearer clusters of wealth in the state.

How about both variables?

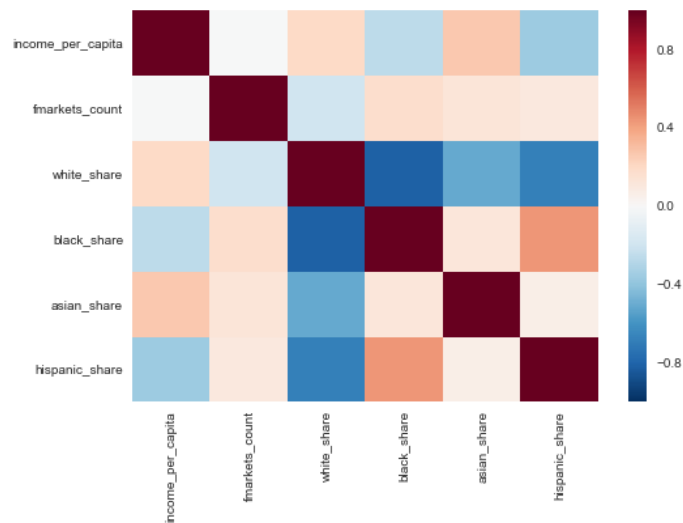


In this map, purple represents a zip code with both high income and farmers market availability versus just high income or high farmers market availability represented by red and blue respectively. There doesn't seem to be a high confluence of zip code areas with both versus

being blank. Hence, it's not apparent that the highest the per capita income, the more likely it is for a farmers market to exist in a given zip code.

We can look at the correlation between these variables to determine whether they're associated.

Furthermore, I correlate to other demographic variables looking for what could be related to the location of farmers markets.



The correlation between income per capita and farmers market availability is -0.000901. Our results indicate a weak negative correlation between farmers market availability and the share of the population who are white.

Farmers markets, in conclusion, do not exclusively serve the more affluent zip code areas.

## Limitations and future work

Earlier in the project I decided to use zip code areas as my physical units, in order not to have a space that was too small to capture the population served. This decision proved less than ideal given that zip code areas and zip code tabulation areas, which are used by the census, do not necessarily match. For this experiment, this meant I did not take into consideration 3 markets. Due to time constraints, I did not geocode these markets to their appropriate zip code tabulation area.

Due to time constraints, a machine-learning approach looking to predict whether a farmers market was likely to exist in a given area was not pursued.