

Food Innovation Opportunity Areas in Boston

Overview

Boston's most prominent food access model, the farmers' market, may not be here to stay in low-income communities. Selling at these markets is not profitable for the majority of farmers due to low attendance, resulting in farmer turnover and continual recruitment of new farmers each season by market managers.¹ The two most cited reasons by low-income individuals for not shopping at markets is that the

location is inconvenient or that they do not know where the market is located.² There is ample opportunity for new innovative food models to resolve this customer service barrier in low-income neighborhoods. This project analyses location suitability for these "food innovation opportunity areas" within the census tracts of Suffolk County.

Methodology

Overlay analysis methods were used to conduct a suitability assessment of optimal site selection. Four parameters were utilized to indicate the location suitability, household income, household receipt of Supplemental Nutrition Assistance Program (SNAP) benefits, public transit and the current food access landscape of Boston. This "foodscape" includes farmers' markets, healthy corner stores, urban farms and grocery stores, designating where food

innovations should not be located to avoid saturating the food retail market. By reclassifying each set of parameter values from 1-5, a composite score reveals areas of highest and lowest opportunity for food innovation. The datasets were then overlaid to form a food opportunity index of Boston, where a score of 5 indicates the greatest opportunity.

Conclusions

Low-income populations and households receiving SNAP tend to be located in the same census tracts, with some variation. This variation is important because it demonstrates that not all low-income households elect to receive federal food assistance. Only examining SNAP households would otherwise exclude these other low-income families. Bus stops in Suffolk County are most prolific towards its four corners, while subway stops are concentrated in central Boston. The Boston foodscape is widely scattered, yet more concen-

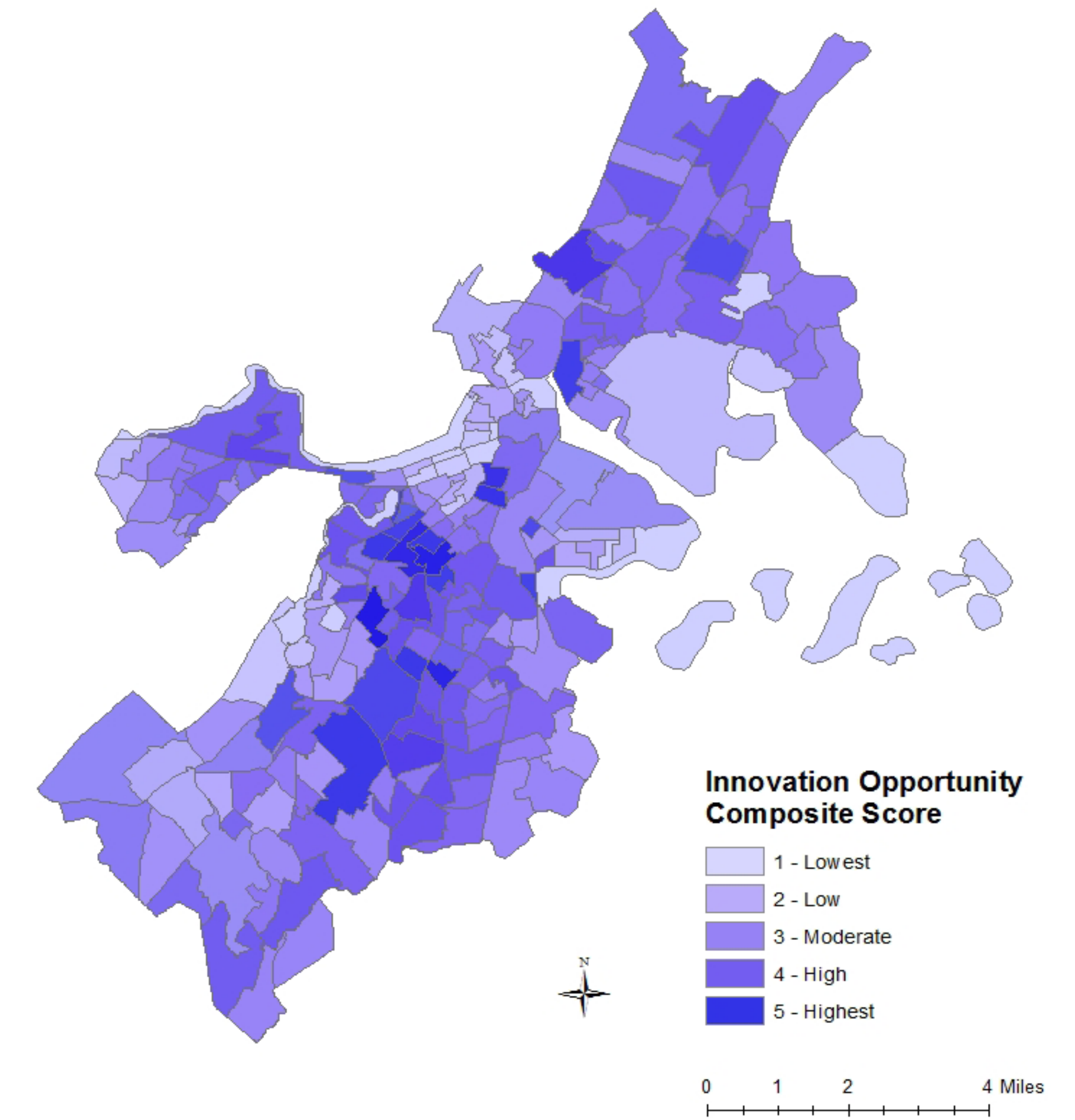
trated robust South End and parts of East Boston. The Food Opportunity Index displays varying levels of opportunity throughout most of Suffolk County, with the highest levels clustered in the center of Roslindale, Mattapan and Roxbury neighborhoods. Other innovation opportunity areas include the northern edge of Jamaica Plain, the western half of South Dorchester, part of southern Fenway, and sections of East Boston.

Limitations

Low-income status was determined using data on total household incomes. This data is limited in scope; it does not account for household size, which can impact how the totals are distributed. In Boston, a family of 3 is considered low-income if the household earns \$57,950 per year or less, according to the U.S. Department of

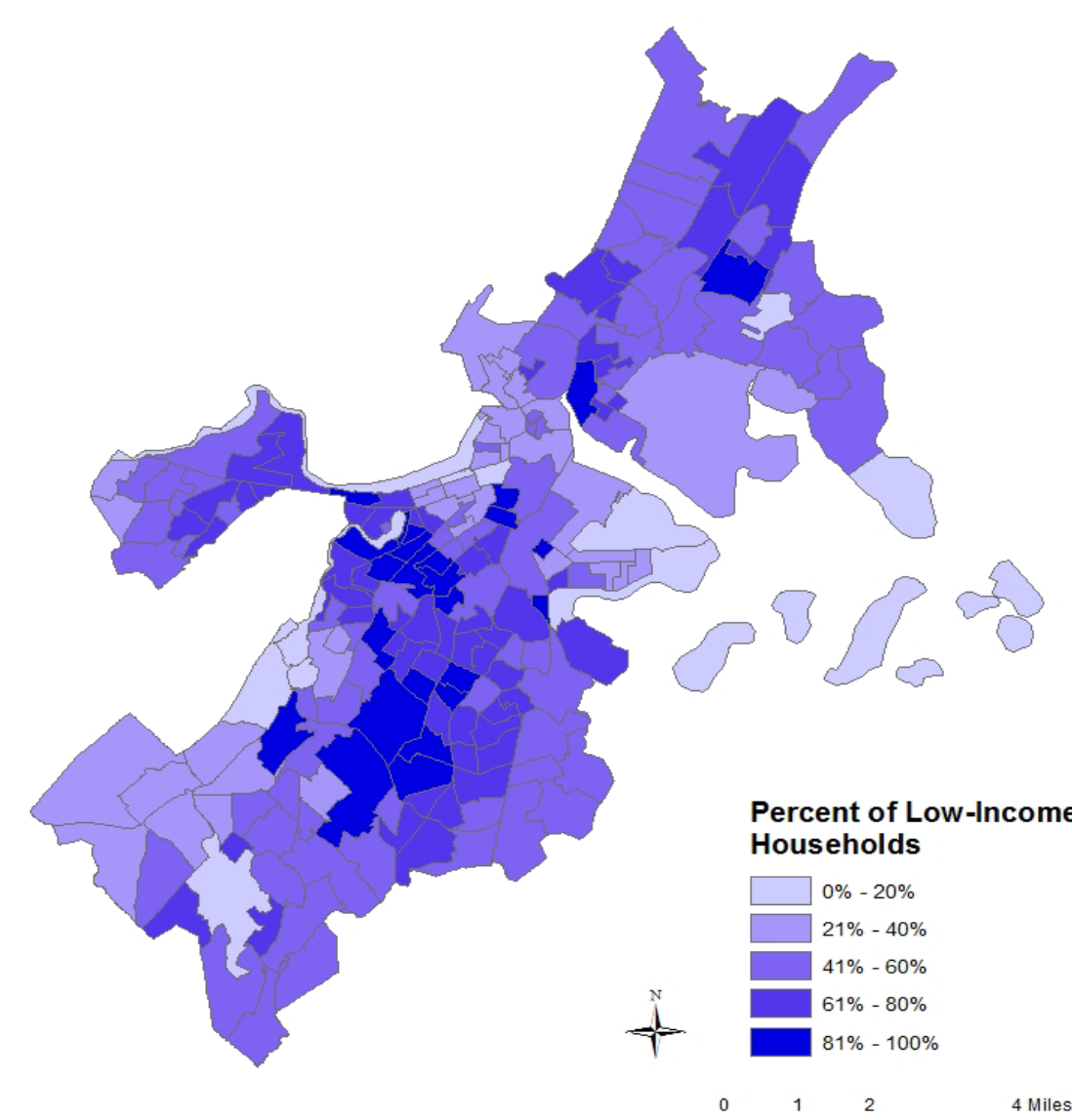
Housing and Urban Development.³ A household of 1 or 2 would not be considered low-income at this income level. Also, the Boston foodscape is not exhaustive, only including food access points more likely to promote healthy choices to ensure that food innovations do not compete with these existing efforts.

Food Innovation Opportunity Index

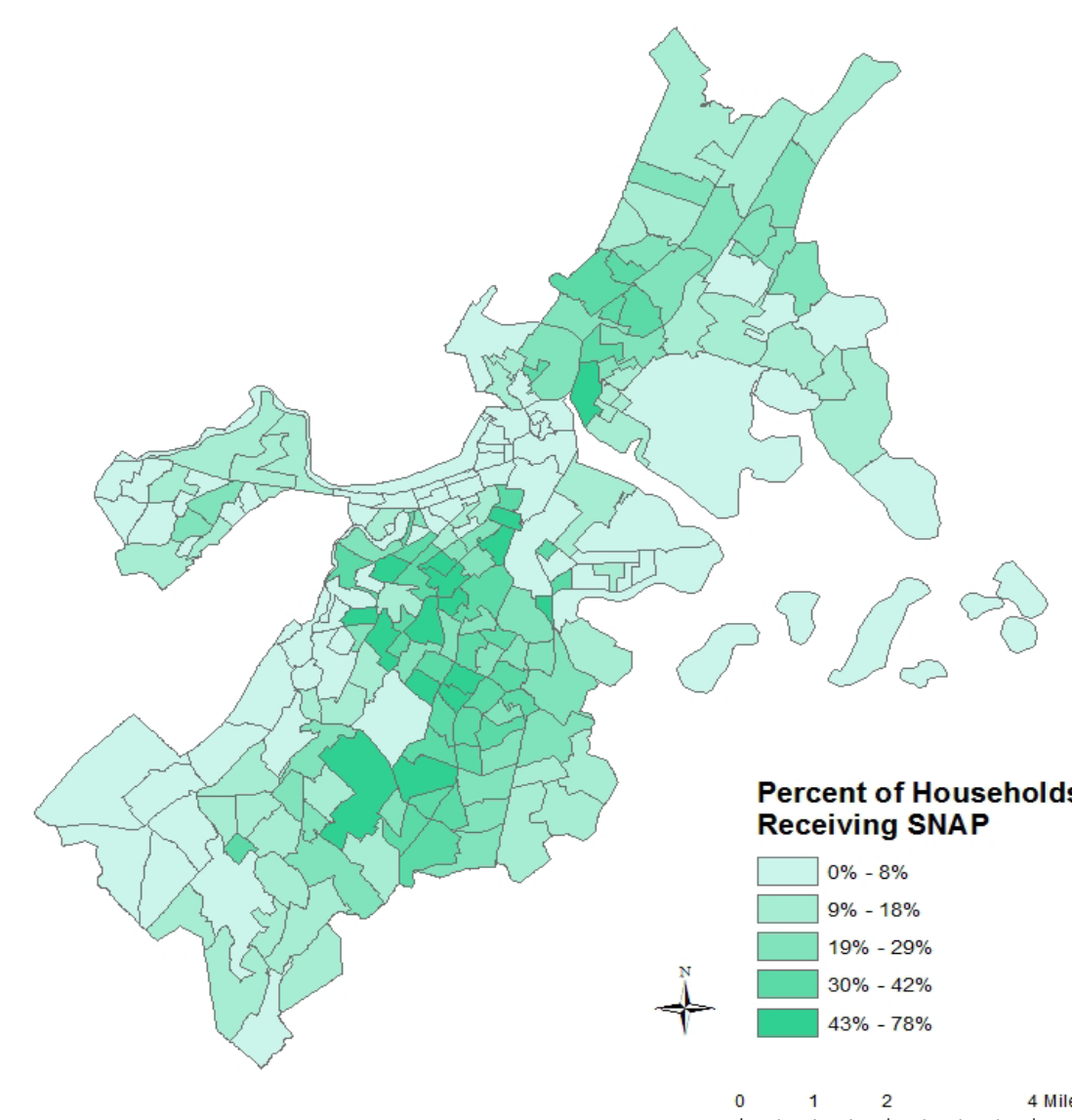


Cartographer: Samantha Kelly
 Date: May 1, 2014
 Geographic Coordinate System: GCS North American 1983
 Data Sources: The United States Census American Community Survey (ACS) 5-Year Estimates 2007-2011 and 2008-2012, Commonwealth of Massachusetts Office of Geographic Information (MassGIS) 2008, The City of Boston Open Data 2013, ReferenceUSA NAICS Data 2013
 1. Lightner, R. (2011). *Healthy Food Accessibility in Underserved Boston Neighborhoods: The Affordability and Viability of Farmers' Markets*
 2. Obadia, J. & Porter, J. (2012). Boston Collaborative for Food and Fitness. *Farmers Markets: Impact on Fruit and Vegetable Consumption of Supplemental Nutrition Assistance Program Clients*
 3. U.S. Department of Housing and Urban Development Income Limits Estimates by State 2013

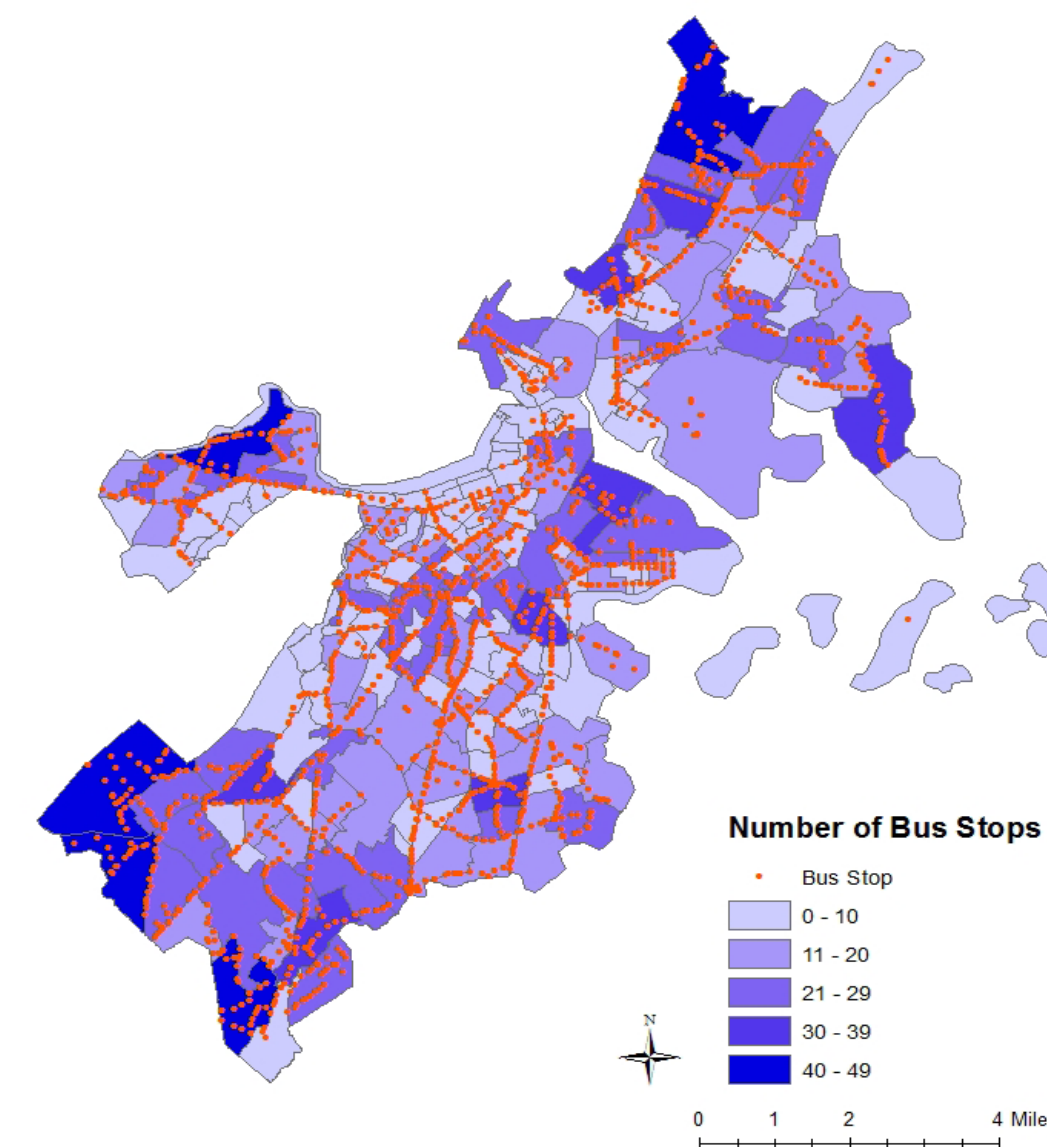
Low-Income Population



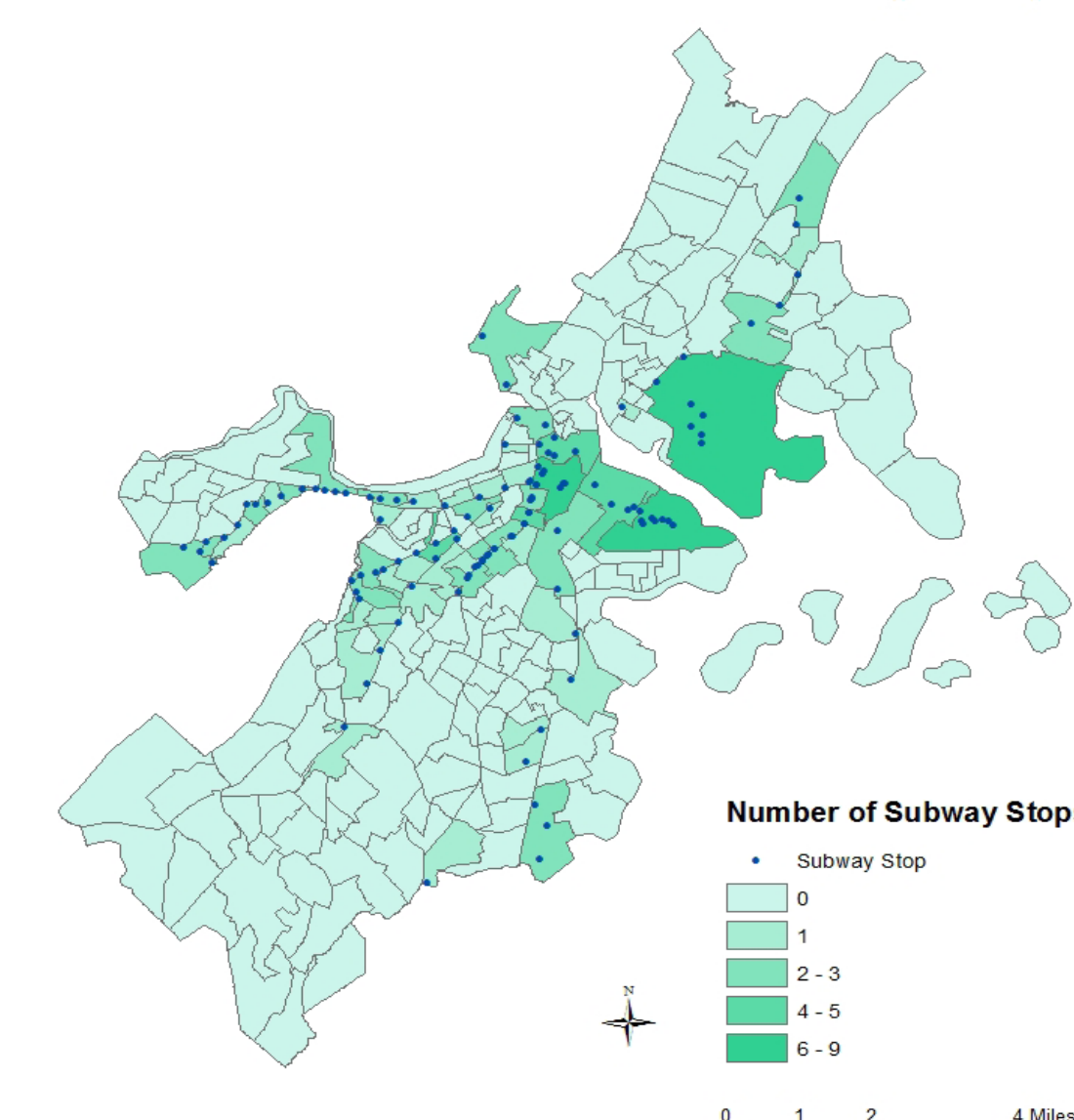
Population Receiving SNAP Benefits



Number and Location of Bus Stops



Number and Location of Subway Stops



Food Access Landscape

