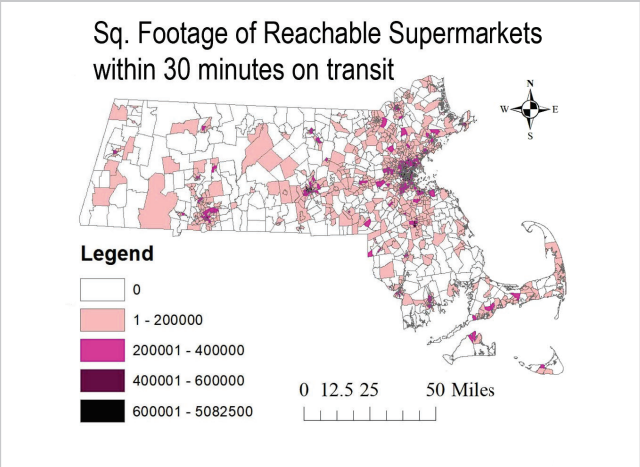
Research Summary

Measuring Food Access to Improve Public Health Phase I

Research Need

Transportation is an important determinant of public health. Inequitable access to healthy and affordable food has been shown to be a significant contributor to health disparities. Data from a variety of sources can be used to identify gaps in accessibility, but there remains a need to systematically identify these gaps and the actions that can be taken by public officials to address them.



Goals/Objectives

The objectives of this research are twofold:

1. Link metrics of food access with demographic and socio-economic data to identify the most critical accessibility gaps.

2. Recommended targeted actions that can be made by public officials to address inequities will be recommended.

There are two products of this research: (1) the documentation of gaps in access to food, evaluated across time, demographic groups, and locations across Massachusetts, and (2) recommendations for how stakeholders can address the specific types of identified accessibility gaps to reduce inequities. These recommendations are focused especially on transportation policies and investments that allow people to reach locations that sell or distribute healthy foods.

Methodology

The research approach used data-based geographic analysis and discussions with stakeholders to comprehensively analyze food access.

1. Review of existing accessibility metrics and methods, the relationship of accessibility gaps with health inequities, and available accessibility-related data.

2. Identification of accessibility gaps in Massachusetts.

3. Stakeholder focus groups for communities with low accessibility to gather additional insights.

4. Development of recommendations for best practices to address accessibility gaps.

Key Findings

1. Square footage of supermarkets that can be reached within a travel time threshold better represents food access than number of stores.

2. Food access gaps exist in urban, suburban, and rural parts of Massachusetts.

3. Food access is significantly lower and less equitably distributed across the Commonwealth for people who do not have access to a car (i.e., using walk, bike, or transit)

Use of Findings

The data analysis and focus group discussions culminated in 11 recommendations:

Measuring Statewide Food Access
1. Measure food access in a census tract by travel time constraint
2. Measure statewide average food access
3. Use a Gini Coefficient as an indicator of food access equity
4. Coordinate with other efforst to measure and analyze food access

Moving Food to People
5. Coordinate with municipalities and regional planning agencies to identify locations for new markets, and identify stores or households that should receive food deliveries

Moving People to Food
6. Expand transit services by extending hours, extending routes, or expanding microtransit
7. Include food access as a criteria for the MassDOT Community Transit Grant Program
8. Improve integration between agencies
9. Improve pedestrian/bike connectivity

Changes in Policies/Regulations
10. Increase carry-on limit for transit
11. Allow "incidental use" of passenger vehicles for food distribution

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Project Information

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