THE BOSTON BOUNTY BUCKS PROGRAM: AN ACCESSIBILITY ANALYSIS

PROJECT CONTEXT

Boston Bounty Bucks (BBB), administered through the Boston Collaborative for Food and Fitness (BCFF), is a dollar-for-dollar matching program that enables farmers’ market customers using Supplemental Nutrition Assistance Program (SNAP) benefits to expand their purchasing power. Program participants receive double the amount spent in SNAP benefits at farmers’ markets (up to $10.00). To participate, SNAP recipients simply approach the BBB tent at participating markets, fill out a form, and present their EBT card at the market. BBB tokens that can be used as money with each purchase are ranked to reflect the location’s access. Areas with high numbers of non-English speaking households have a very low rank (score from 1 to 9: worst accessibility), while areas with low numbers of non-English speaking households have a very high rank (score from 1 to 9: best accessibility).

RESEARCH GOALS

This project seeks to create a framework through which to evaluate the outreach effectiveness of the BBB program. The intent of this research is to identify Boston-area neighborhoods with potentially limited access to the program due to insufficient transportation and/or language accessibility. With this information, BBB program administrators might be better equipped to identify areas for targeted outreach and reduce participation barriers.

The goals of this analysis are: (1) to identify factors that limit individuals’ ability to use the BBB program; (2) to create and implement an analysis model; and (3) to provide recommendations for future research, with the hope that BBB program administrators will expand targeted outreach in areas experiencing a lower degree of accessibility to improve program participation.

METHODOLOGICAL APPROACH

Potential access barriers were determined based on a 2012 report published by BCFF and on personal communication with a representative of BCFF. These potential limiting factors were analyzed using an ‘accessibility assessment’ framework. Using Census Tract data for Suffolk County, a proximity analysis was conducted in order to evaluate public transportation accessibility. First, the Raster Euclidean Distance tool was used to calculate the distances between farmers’ markets and MBTA train stations. The output was then reclassified into three categories to represent access farmers’ markets.

Next, US Census Bureau data on non-English speaking households (including increased fruit and vegetable consumption among participants) were analyzed to identify Boston-area neighborhoods with potentially limited access to the program due to insufficient transportation and/or language accessibility. With this information, BBB program administrators might be better equipped to identify areas for targeted outreach and reduce participation barriers.

To form the additive model used to conceptualize accessibility, these rasters were combined using the Raster Calculator tool and assigned a composite score ranging from 3-9.

PRELIMINARY FINDINGS

It must be emphasized that the preliminary findings of this research are by no means comprehensive. However, the results of the initial analysis can provide a cursory overview of what Boston-area neighborhoods might benefit from increased outreach regarding the BBB program. The least accessible areas tend to be located around the perimeter of Suffolk County. East Boston is a neighborhood that appears to have significant areas experiencing low levels of accessibility, small and scattered portions of West Roxbury, North Dorchester, Jamaica Plain, and Roxbury appear to experience limited accessibility and could benefit from targeted outreach.

LIMITATIONS AND RECOMMENDATIONS FOR FUTURE RESEARCH

While the preliminary findings may provide some degree of utility for targeted outreach, this analysis was only meant to provide an initial framework for expanded study. A more comprehensive analysis might include additional factors. For example, the presence of full-service supermarkets in close proximity to farmers’ markets might play a role in determining an individual’s likelihood of shopping at farmers’ markets and utilizing the BBB program. The close proximity of a supermarket could either (a) make an individual more likely to use BBB and shop at the farmers’ market because they are already shopping in the area, or (b) could serve as a disincentive, as individuals might fulfill all shopping needs there. Determining the impacts of proximal supermarkets was beyond the scope of this project.

Once a more comprehensive model is developed, it is recommended that the resulting information be used by BBB program administrators as a guide for increasing program awareness. Targeted outreach in communities experiencing low levels of accessibility might range from administration of language-appropriate materials to the establishment of new farmers’ markets in underserved areas. The intent of this analysis is ultimately to increase BBB program participation and enable more individuals to reap the associated benefits.

Table 1: METHODOLOGY

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<thead>
<tr>
<th>FACTOR</th>
<th>RATIONALE</th>
<th>ACCESSIBILITY RANK SCALE</th>
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<tbody>
<tr>
<td>TRANSPORTATION PROXIMITY: MBTA T-Station</td>
<td>Many SNAP recipients cited “inconvenience” as a major barrier for shopping at farmers’ markets. The proximity of a T-Station to a farmers’ market is a factor indicative of access; individuals can utilize connecting MBTA train lines to access farmers’ markets.</td>
<td>1: ACCESSIBLE (MBTA Station located within 400 meters (~0.25 miles) of a farmers’ market) 2: MODERATE ACCESSIBILITY (MBTA Station located within 800 meters (~0.50 miles) of a farmers’ market) 3: POOR ACCESSIBILITY (MBTA Station located more than 800 meters from a farmers’ market)</td>
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<tr>
<td>TRANSPORTATION PROXIMITY: Bus Line</td>
<td>Again, proximity to transportation can improve accessibility. Many Boston residents utilize the MBTA bus system; therefore, it is important to evaluate the proximity of farmers’ markets to various bus lines.</td>
<td>1: ACCESSIBLE (Bus line located within 400 meters (~0.25 miles) of a farmers’ market) 2: MODERATE ACCESSIBILITY (Bus line located within 800 meters (~0.50 miles) of a farmers’ market) 3: POOR ACCESSIBILITY (Bus line located more than 800 meters from a farmers’ market)</td>
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<td>LANGUAGE ACCESSIBILITY: Non-English Speaking Households</td>
<td>Because BBB does not print informational materials in non-English languages, non-English speakers may experience a poorer program accessibility. Areas with high numbers of households in which no one over the age of 14 speaks English only or speaks English “very well” are ranked to reflect the potential for increased language-appropriate outreach.</td>
<td>1: ACCESSIBLE (10% of non-English speaking households.) 2: MODERATE ACCESSIBILITY (20% of non-English speaking households.) 3: POOR ACCESSIBILITY (High numbers of non-English speaking households.)</td>
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Data Sources: MassGIS, US Census Bureau American FactFinder (ACS 2013 5-Year Estimates)