Foodshed Identification, and Boston’s Fruit and Vegetable Demand, Output and Potential

Background -
In an effort to inspire local food system empowerment, I look to conceptualize Boston’s Foodshed potential. A foodshed is a geographic region that produces food for a particular population. This term is gaining popularity as a way to define the bounds of local food systems. This poster describes the results of a four step foodshed analysis. First, I quantify the northeast foodshed boundary. Then I look at the demands of this area, based on its population and the USDA Daily Recommended Intake of certain food groups. Third, I focus on how much fruit and vegetables are being grown in the Boston Foodshed, and compare the difference between demand and production. Lastly, areas available for expanding food production are assessed.

Methodology -
Foodshed boundaries are determined by associating counties with a particular foodshed. By using cropscape data to view developed areas, rough dividing lines were drawn between major metropolitan areas. Next, populations of these metro areas were defined. Then, the rough dividing lines were adjusted based on population density data. In the case of the rough foodshed border between New York City and Boston, counties in which the border ran through were assigned to the New York City Foodshed. Counties north and south of New York City were assigned to the Boston Foodshed. The scope then narrows onto the Boston Foodshed, which is defined as population within a 30 mile radius of Boston. The Foodshed analysis is used to conceptualize Boston’s Foodshed potential. A foodshed is a geographic region that produces food for a particular population. This term is gaining popularity as a way to define the bounds of local food systems. This poster describes the results of a four step foodshed analysis. First, I quantify the northeast foodshed boundary. Then I look at the demands of this area, based on its population and the USDA Daily Recommended Intake of certain food groups. Third, I focus on how much fruit and vegetables are being grown in the Boston Foodshed, and compare the difference between demand and production. Lastly, areas available for expanding food production are assessed.

Findings -
The Boston Foodshed was determined to consist of 43 counties in parts of Connecticut, Vermont and Maine, and all of Rhode Island, Massachusetts and New Hampshire. The charts below show the total demand, production, and potential for production of fruits and vegetables in each county within the foodshed, as well as for the foodshed as a whole. This data offers two key suggestions. First, the Boston Foodshed has a much higher demand for fruits and vegetables than a supply. Second, there exists enough available open space in Boston’s Foodshed for agriculture expansion to come within 10% of meeting its demand for fruits and vegetables.