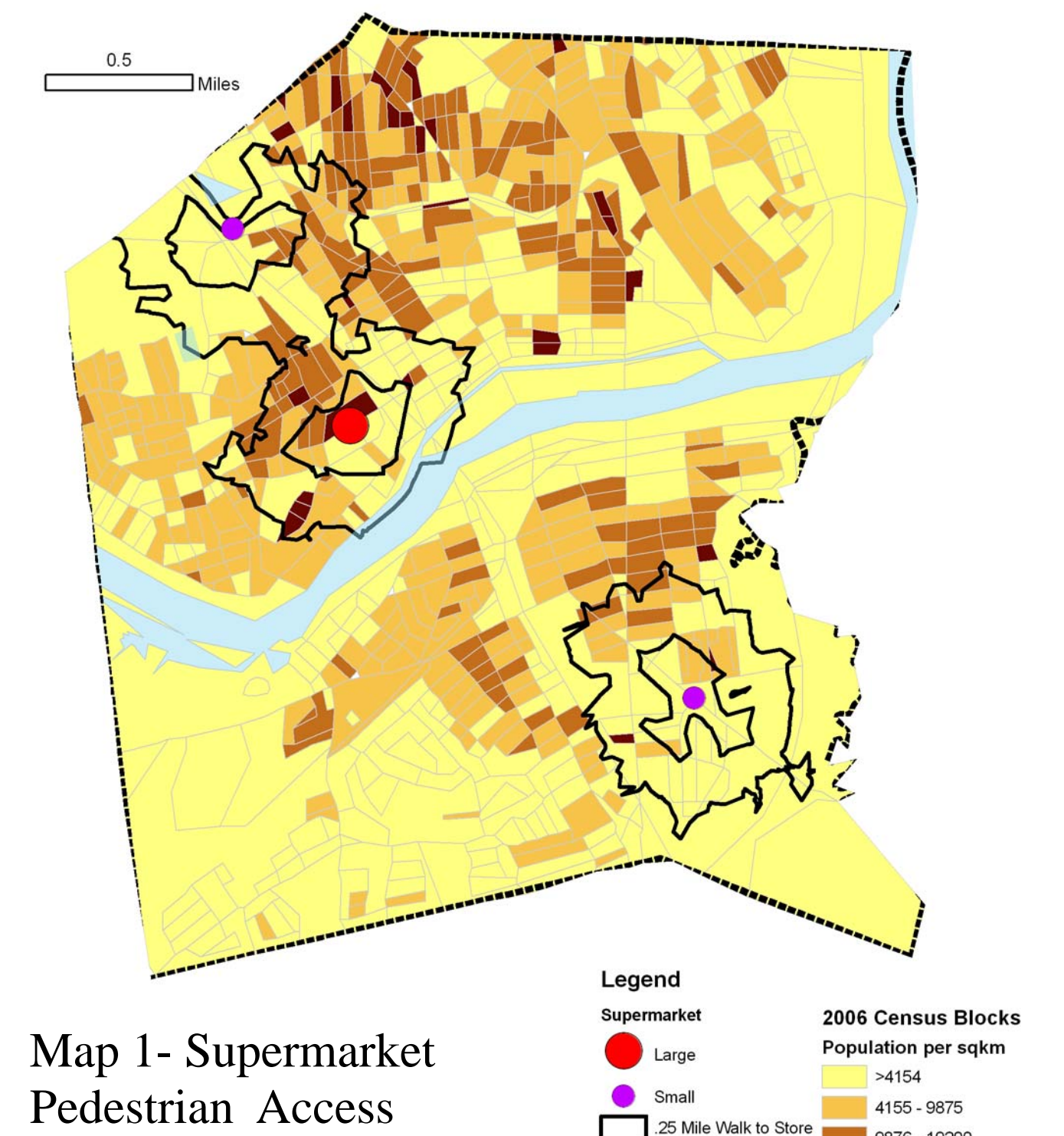
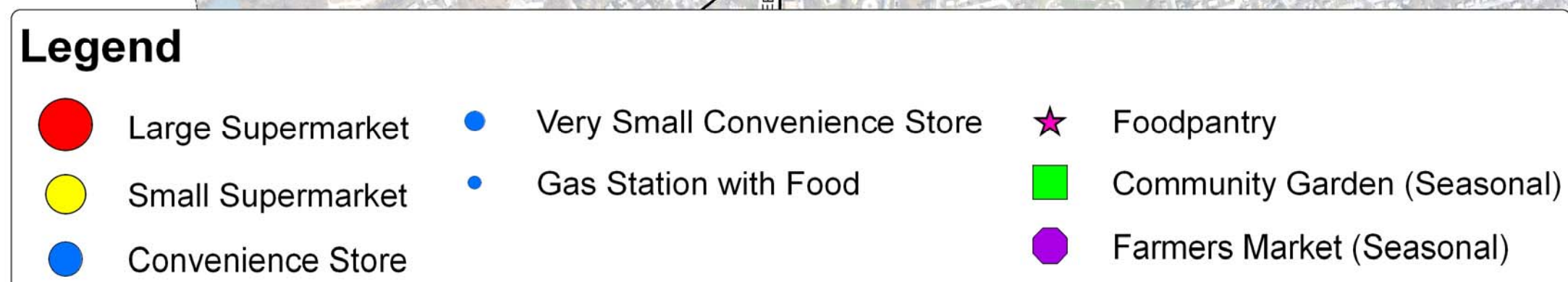
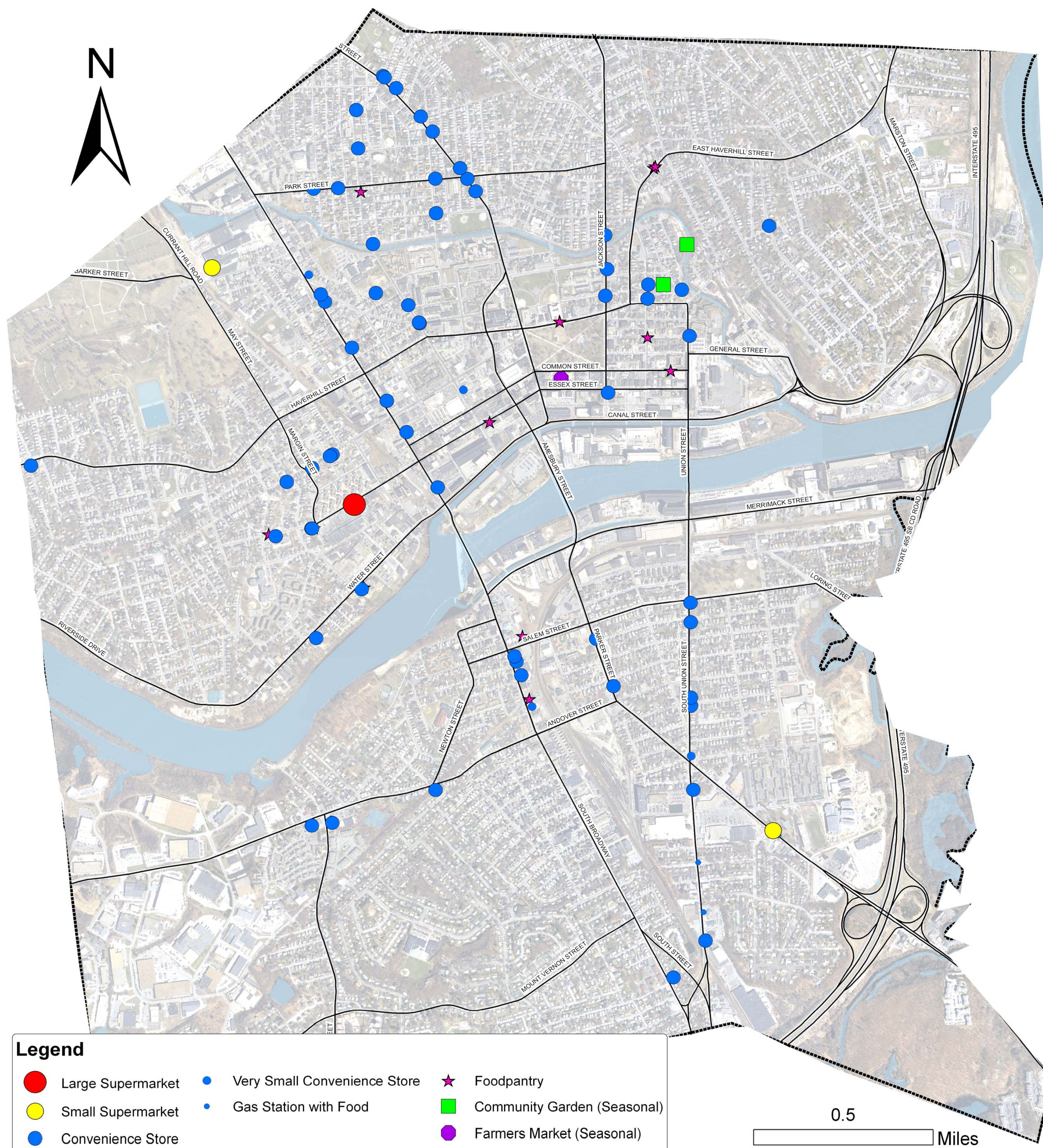
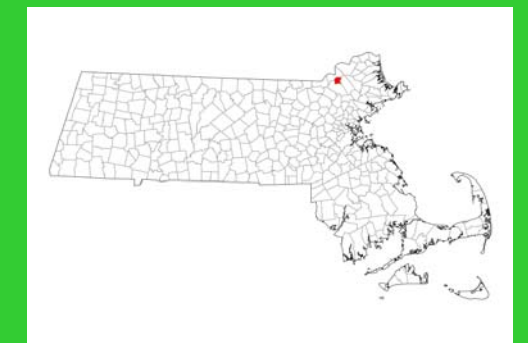
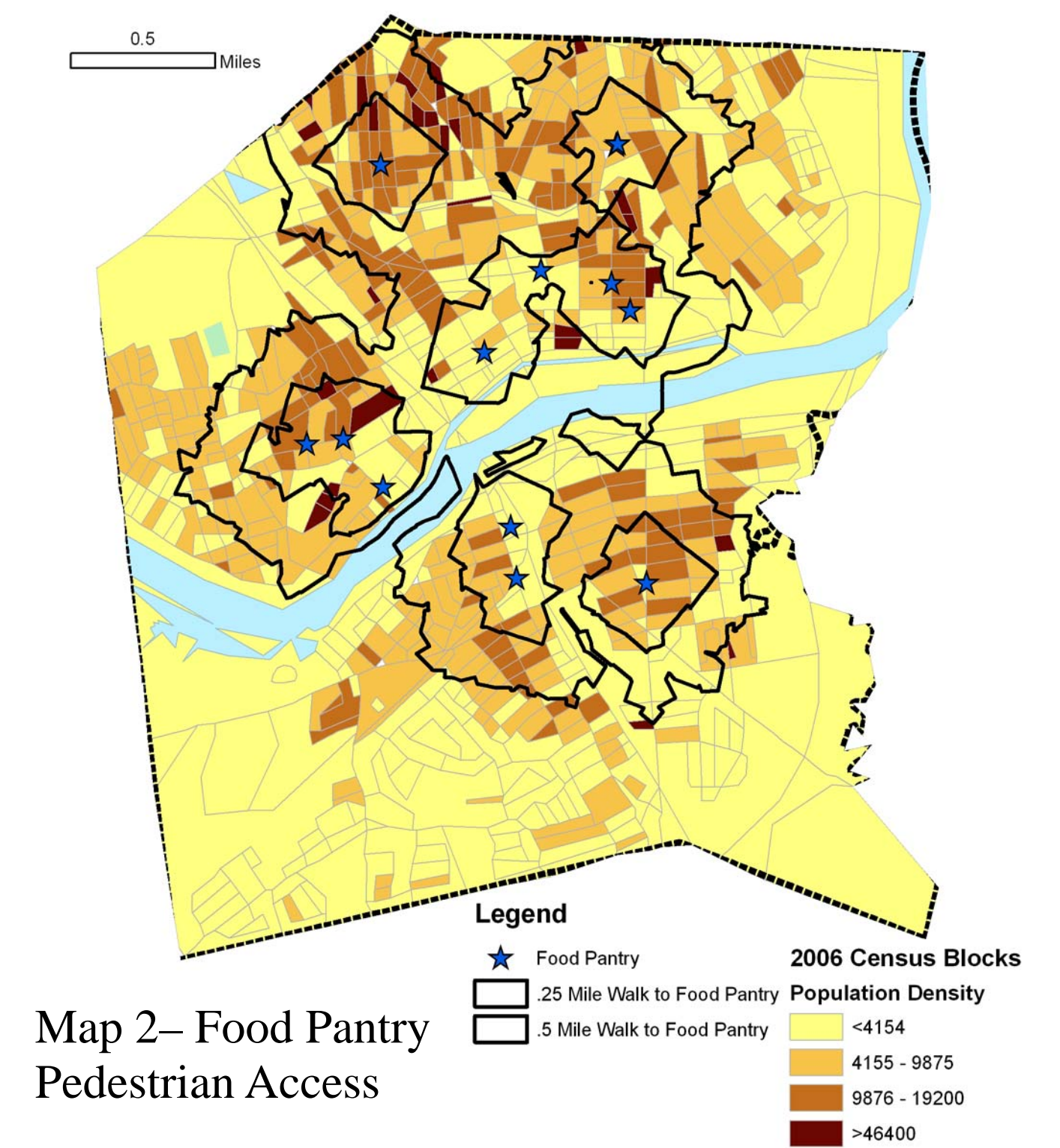


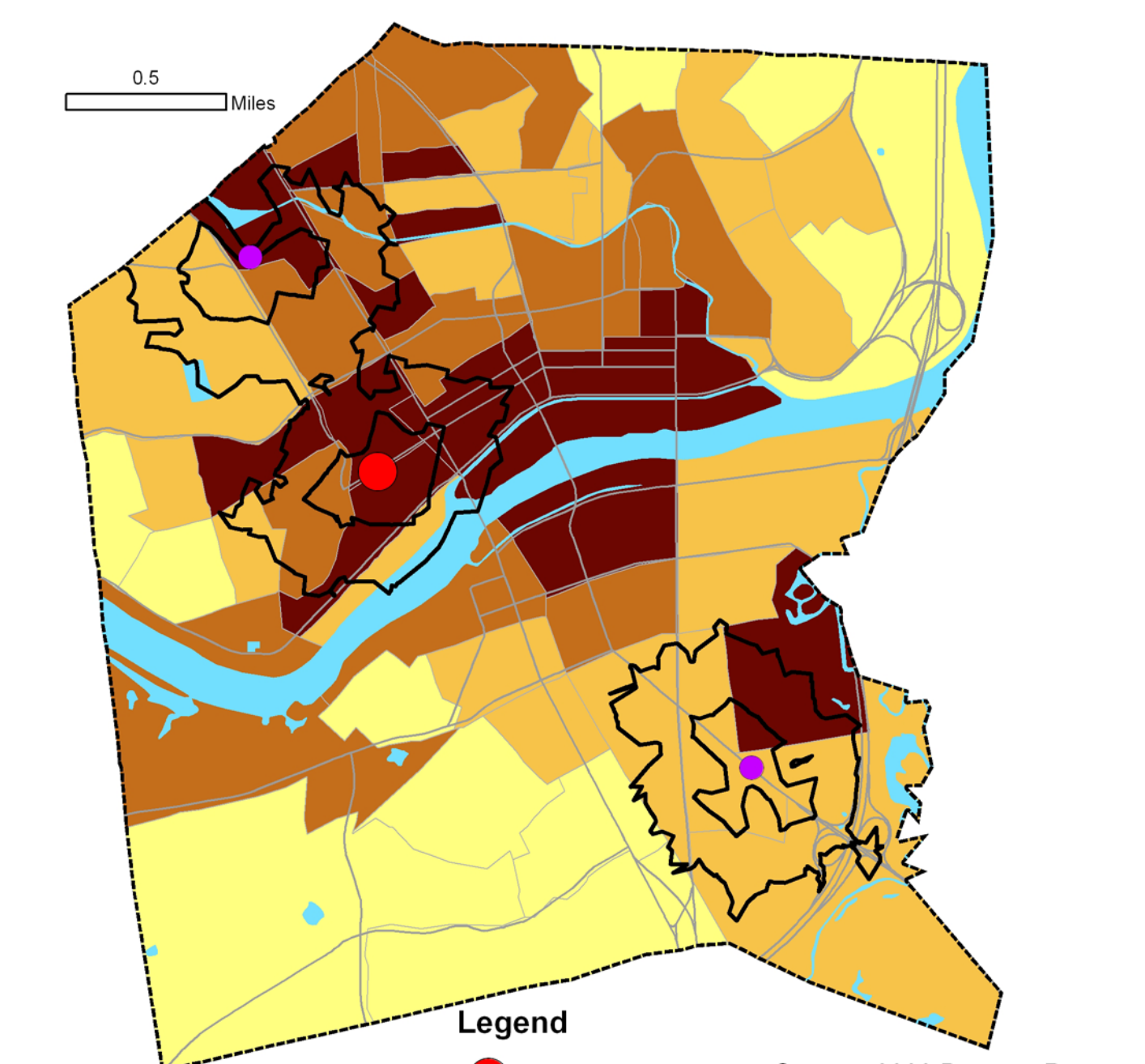
Community Inventory of Food Resources Lawrence, MA



Map 1- Supermarket Pedestrian Access



Map 2- Food Pantry Pedestrian Access



Map 3- Poverty Rate and Pedestrian Access to Supermarket

Project Description:

The community inventory of food resources aims to accurately map fresh food resources in Lawrence as a pilot project. The inventory takes the first step to create a database to map local food resources such as: supermarkets, convenience stores, farmers' market, community gardens, and food pantries. This database is an initial attempt to study the scope of food security in Lawrence. The inventory can be used by advocacy organizations and government agencies to locate and develop programs and policy to address fresh food access barriers faced by city residents.

Examples of GIS Food Security Analysis:

GIS analysis allows researchers to see the relationship between different data sets. The analysis of demographic data shows the location of densely populated areas in relation to fresh food access, as shown in Map 1. Population density maps show areas that with no access to fresh food, an example of this are the areas outside the ped-shed in map 1. In a city with a population of over 70,000 people with only one large supermarket access to fresh and nutritional food may be a problem for vulnerable populations.

Other examples of how to interpret GIS food access analysis:

- The large areas outside the ped-shed in map 1 may qualify as food deserts (areas where there is no access to fresh food).
- Map 2 shows the relation between population density and a 0.25-0.5 mile walk to food pantries.
- Map 3 shows poverty rates in relation to walking distance to supermarkets. Here a large number of residents live under poverty levels and may also be at risk of not having walking access to quality fresh food.

This pilot inventory shows that the city of Lawrence can benefit from a complete food security analysis.

Cartographer: Tamara Trejo-Perez 2008
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Data source: MASS GIS, U.S Census 2000.