Underserved Asian-American Elders

in the Greater Boston Area

Overview

Providing services and resources for the elderly is an increasingly pressing need due to our aging population. An often overlooked subset of this population is minority elders. Elderly members of immigrant groups often face additional linguistic and cultural barriers when trying to access healthcare and other services. In a city such as Boston, which is over 50% minority, caring for minority elders is an increasingly important issue.

The Asian community in the Greater Boston area is an important example of this issue. In Boston's Chinatown, there are a large number of Asian and Chinese health care providers, community organizations, and cultural groups. However, while these resources are extremely concentrated, the Asian-American community is spread out throughout the Greater Boston area.

The goal of this project is to identify areas within the Greater Boston metro area that have a high concentration Asian elders, especially Asian elders who live alone, and also a low density of resources and services. This includes both general resources such as health centers, public libraries, and hospitals, and Asian-specific resources such as cultural centers and service provider organizations.

In this way we can identify areas where Asian-American elders need increased access to resources and services. Finally, I will create a table to compare the towns in the study area that have the highest concentration of vulnerable Asian elders and identify which municipalities may need to focus on services for this population

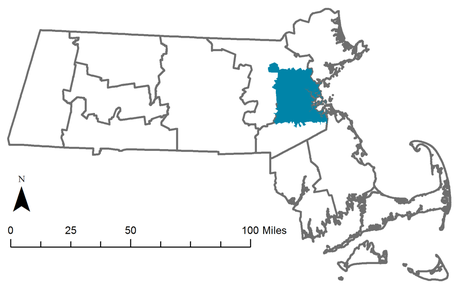
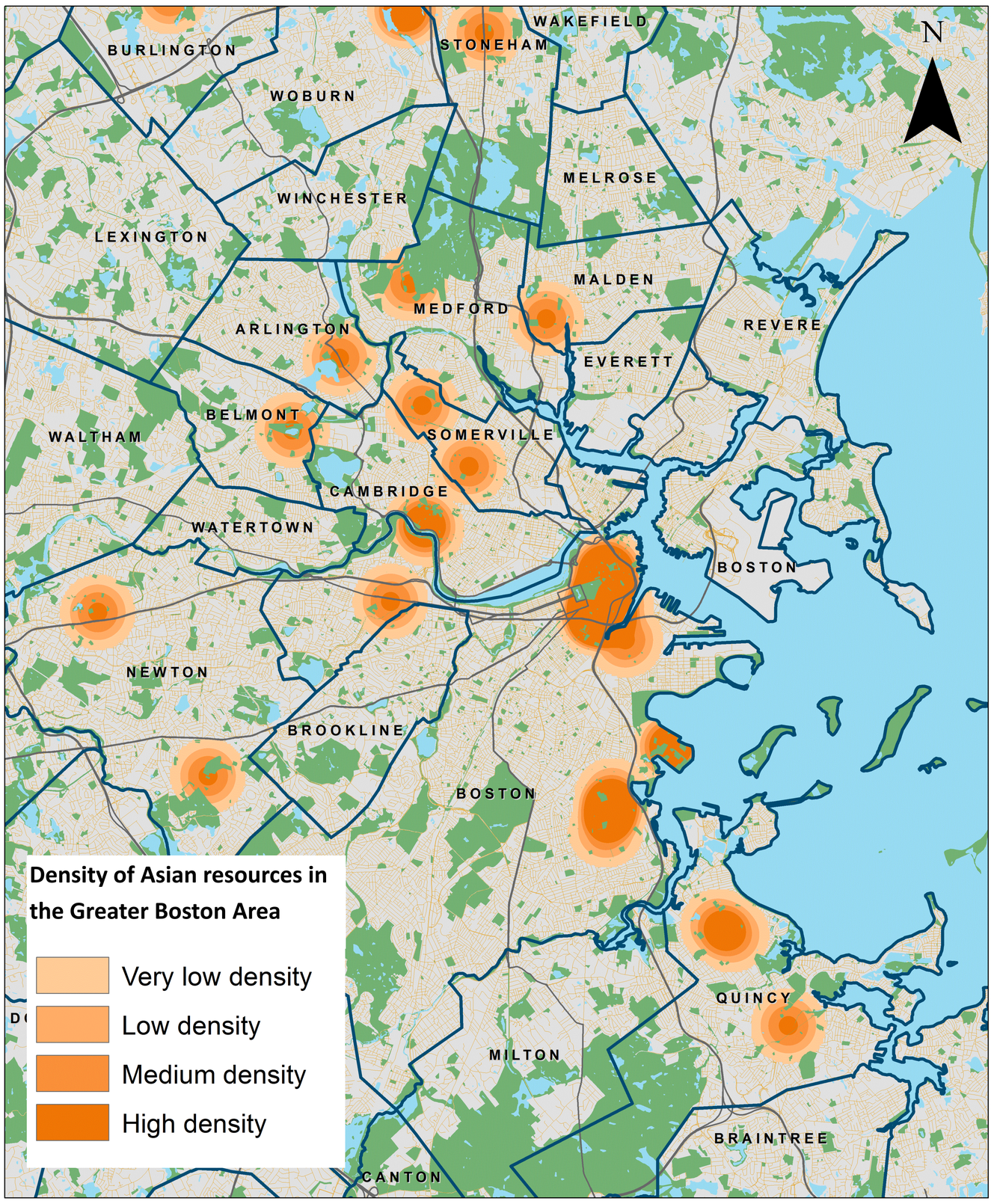


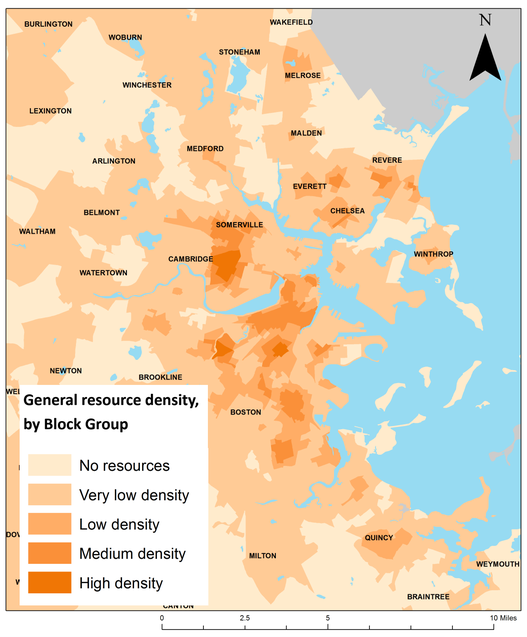
Figure 1: Location of study area with Massachusetts



Methodology

I used 2010 census data at the block group level to create maps that show the percentage of Asian-American residents, the percentage of Asian residents who are 65 and over, and the number of Asian elders who live alone per block group for the Greater Boston Metro area. Next, I used datasets from MassGIS that contained the locations of all the hospitals, community health centers, and public libraries in the study area. From this point data, I created a kernel density raster map to visually show areas with a high and low density of resources. I also created a dataset of Asian-specific resources with information from Asian Women In Business, the Asian American Diabetes Initiative at Joslin Diabetes Center, and Boston University School of Medicine, and then used this to create a kernel density map as well.

Next I used zonal statistics to create a table with the density score of each block group for both types of resources. Then I joined this table back to the block groups, so that resource density can be displayed by block group. For the final steps in the analysis, I used select by attribute to first highlight all the block groups that had over 50 Asian elders who lived alone or in which 50% or more of the Asian population was over 65. From these selected blocks, I removed all those that had a resource density score of greater than 2.5 for either type of resource. These remaining block groups are those that have either a high percentage of Asian elders or a high number of Asian elders living alone, and low density of resources.



Results

From the census data, I found that the areas with the highest concentrations of vulnerable Asian elders—those who lived alone or represented 50% or more of the total Asian population of the census block. These are displayed in the maps to the lower left. I also isolated block groups with both a high concentration of vulnerable Asian elders and little or no density of Asian-specific or general resources, shown in the map to the left.

Town	Asian elders	Percent of Asian population that is elderly	Asian elders living alone	Number of Asian resources	Number of General resources
Boston	5560	10.07%	1604	32	60
Quincy	1760	8.18%	255	3	7
Cambridge	529	3.55%	141	2	15
Malden	823	6.87%	133	1	1
Brookline	692	7.54%	125	0	1
Newton	785	8.02%	89	2	2

Figure 2: Table of cities in the study area with high concentrations of elderly Asian-Americans. Highlighted towns have a low number of resources compared their high concentration of vulnerable Asian-American elders.

From my analysis of towns and resources, I chose six to highlight here that have high numbers of vulnerable Asian elders. While Boston has the highest concentration, it also has the highest number of resources. Three towns stood out as needing more resources for Asian elders: Quincy, Malden, and Brookline.

These areas are recommended for development of culturally appropriate resources and services for the elderly.

Demographics by Census Block Group

Percent of residents who are Asian American, by Census Block Group

Percent of Asian Americans who are age 65 and over, by Census Block Group

Total numbers of Asian Americans who are age 65 and over and who live alone

Vulnerable block groups: High concentration of vulnerable Asian-American elders, and little or no Asian American resource density

Cartographer: Cara Foster-Karim

Data sources: MassGIS 2005, 2007, 2009, 2012 and 2014, US Census Bureau 2010, Asian Women in Business, Asian American Diabetes Initiative at Joslin Diabetes Center 2010, and Boston University School of Medicine 2012

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