

# Expanding Food Assistance for Low-Income Seniors Near New Haven, Connecticut

## BACKGROUND

In 2015, Connecticut received initial funding to implement the Commodity Supplemental Food Program (CSFP), a federal program that provides food assistance to low-income seniors. In order to qualify, participants must be at least 60 years old, and fall at or below 130% of the Federal Poverty Guidelines.<sup>1</sup> The number of older Americans is growing faster than ever, making programs like CSFP increasingly important.<sup>2</sup> Low-income seniors are particularly vulnerable to food insecurity, as high disability rates constrain access and poverty is a risk-factor for malnutrition, which in turn contributes to poor health outcomes.<sup>2</sup> Currently, 18 locations distribute the monthly CSFP boxes, which contain \$50 worth of food.<sup>1</sup>



This project aims to estimate the need for CSFP around New Haven, Connecticut, and to identify underserved areas. A geospatial understanding of low-income seniors allows for more informed decision-making regarding where to expand distribution centers for greatest impact.

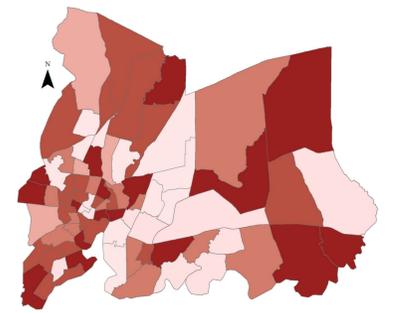


Figure 1. Individuals, 60 and older, with at least one disability, by census tract

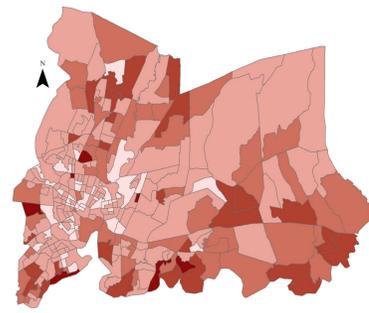


Figure 2. Percent of total population 60 or older, by block group

## ESTIMATING ELIGIBILITY

Eligibility was estimated using the American Community Survey. Block group data were preferred, however sensitive data, like SNAP participation and disability rate, were only available at tract level. Due to data limitations, this model uses seniors 60 or older living at or below 100% of the poverty line as criteria for eligibility. To estimate this, population below the poverty line was aggregated for all age groups 60 and older.

The addresses of current CSFP sites were geocoded using ArcGIS's World Geocode Service. To estimate seniors served by CSFP sites, the buffer tool was used to create 4.5 kilometer buffer zones. The intersect tool was used with the buffer zones and the block groups containing low-income seniors. The number of eligible seniors within the buffer zones was calculated by multiplying the proportion of block group area within the buffer zone by the population of the block group. The same procedure was used for the proposed distribution sites.

SNAP participation rate was estimated by dividing the number of SNAP households containing a 60+ member by the total number of low-income households, regardless of poverty status, containing a senior.

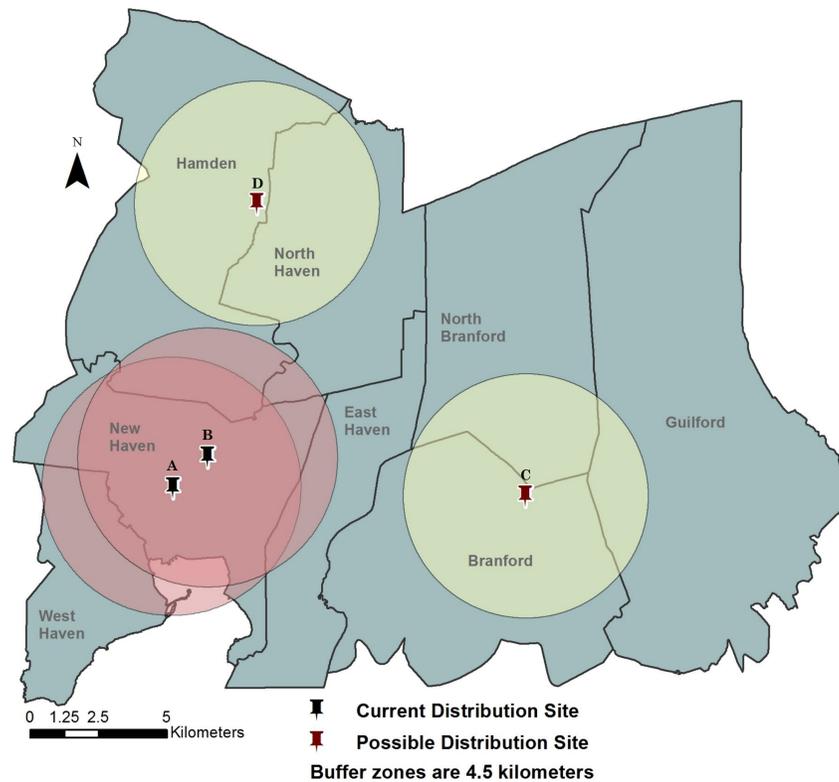


Figure 3. Existing and current CSFP distribution sites within the study area. Shaded circles represent 4.5 kilometer buffer zones.

## RESULTS

According to the model, there are many seniors in Connecticut that could benefit from the expansion of CSFP. An estimated 6,038 seniors living at or below the poverty line are within the study area. The model also shows low participation in SNAP, which suggests seniors are not taking advantage of available services. An average of only 11% of households with a 60+ member reported using the program within the last 12 months.

Estimates are provided for the number of seniors living in the buffer zones of the existing distribution sites. According to the model, the two sites do not meet current need. Not only could these centers provide more boxes within the buffer zones, but additional distribution sites should be established in order to provide even greater benefit.

Data from ACS showed that seniors living in poverty have high rates of disability. Therefore, the two proposed sites were placed near areas with higher disability rates. More extensive research into this topic should better quantify the SNAP participation gap and explore the specific types of disabilities this community face, so CSFP can better meet their needs.

Distribution Site	Seniors in Poverty (In Buffer Zones)	Boxes Currently Distributed, Monthly
A (Current)	1270	133
B (Current)	998	43
C (Possible)	925	-
D (Possible)	687	-
	<b>3880</b>	<b>64% Coverage*</b>

\*Out of 6038 (region total of seniors in poverty)

## LIMITATIONS

Using ACS data for this project had some disadvantages. First of all, spatial granularity was lost in being forced to use tract data. Also, the five year estimates are averages over time, and do not truly represent a single point in time. Finally, it was not possible to find population under 130% of the poverty line, thus a section of the population is completely excluded from the model.

The results of this project point to a considerable population of low-income seniors. However, due to data limitations, the model is not an entirely accurate representation of eligible seniors. It fails to quantify participation in SNAP. SNAP data were reported by household, while population data were individuals. There was a tradeoff here; although senior household data was available, it did not have proper age bracket cut-offs. In reality, participation in SNAP would disqualify an elderly person from taking part in CSFP. Also, buffer zones of 4.5 kilometers are a rough estimate of coverage. Although driving ranges could be further, walking ranges would be much smaller.

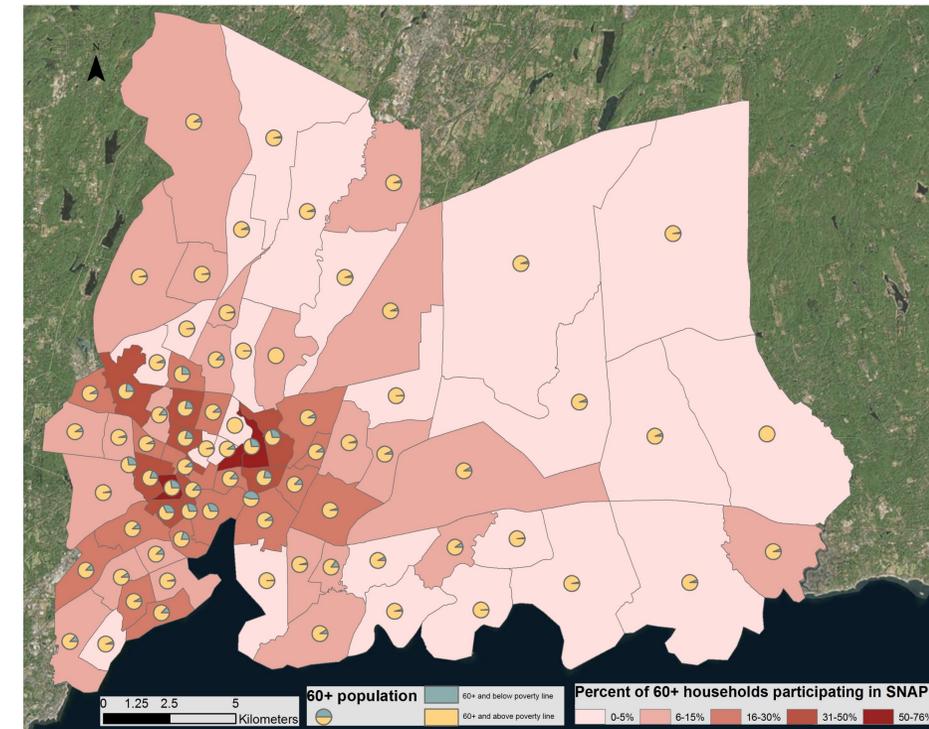


Figure 4. Charts represent number of individuals 60 or older, both below and above the Federal Poverty Guidelines. Background is percent of households, containing at least one member over 60 years of age, that participated in SNAP within the past 12 months. Represented by census tract.

## SOURCES

• 2010-2014 American Community Survey 5-Year Estimates, 2015, US Census Bureau, published by the Connecticut Department of Economic and Community Development, accessed December 17, 2015.

1. The US Department of Agriculture, Food and Nutrition Service. About CSFP Homepage. 2015.
2. Chen, C. C.-H., Schilling, L. S. and Lyder, C. H. (2001), A concept analysis of malnutrition in the elderly. *Journal of Advanced Nursing*, 36: 131-142.

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