Exploring Food Accessibility in Morris County Interfaith Food Pantry Utilization and the Changing Needs of Elderly and Working Poor Populations

Prepared by Lisa Jordan, Jael Estrada(Class '19), Raza Hasanovic (Class '18), Tony Albano (Class '19) and students in Advanced Geographic Information Systems (Spring 2018)

6 May 2019

Summary

The goal for our analysis was to explore the demographic characteristics of elderly and working poor populations in Morris County, New Jersey, for the purpose of comparing current Interfaith Food Pantry use with the estimated needs across towns and municipalities in the county. We identify areas with both *high rates* of poverty and economic insecurity for working families and seniors and areas with *high total numbers* of economic insecurity. Then, we compare those values with the current client use, by age and place, with recommendations for future directions for food pantry activity.

Background

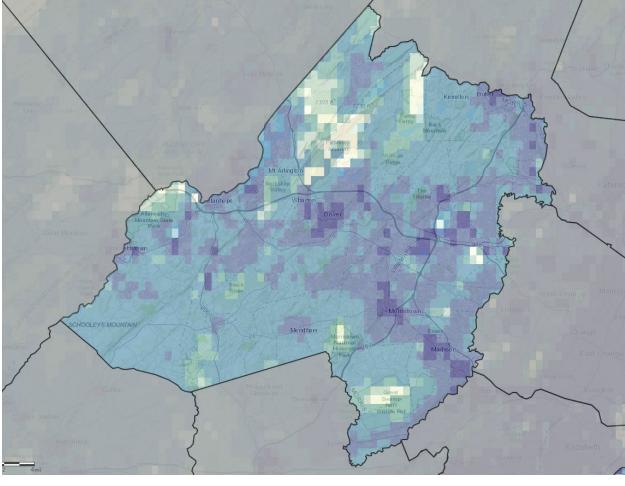
Though Morris County boasts some of the highest income levels and positive health outcomes in the country, the very high costs of living mean that making ends meet is very challenging for working families and older households who plan to age-in-place. Nearly 0.5 million people live in Morris County. Population has reached almost zero growth (0.4 percent in 2018), which means that the distribution of age groups is trending toward fewer young people and more seniors.¹ 16.6 percent of Morris County is above 65 years, compared with 15.6 for the United States.² The median gross rent in Morris County of \$1,420 is among the highest in the state, compared with \$1,249 for New Jersey and \$982 for the United States.³

There are more people living along our highways, Route 24, US 287 and I-80 than in other parts of the county (see Figure 1 for a visual distribution). However, when aggregated to county sub-divisions, or towns and municipalities, the large northwestern municipalities of Rockaway and Jefferson townships have high numbers of total households (Figure 2). Figure 3 illustrates the number of Interfaith Food Pantry clients by municipalities. The most part, the number of clients is a relatively well distributed relative to the population of towns and municipalities. The southern portion of Morris County has little participation, but also has the lowest population density. Areas farther from the pantry are less well represented than towns closer to the pantry.

¹ U.S. Census. 2019. QuickFacts: United States; New Jersey; Morris County, New Jersey (V2018). Downloaded 6 May 2019. Available online: <u>https://www.census.gov/quickfacts/fact/table/US,nj,morriscountynewjersey/PST045218</u>

² ibid

³ ibid



< 1
1-5
5 - 25
25 - 250
250 - 1,000
> 1,000 (persons)

Figure 1. Population Distribution of Morris County, New Jersey, Gridded Population of the World, Version 5, 2015.⁴ Available <u>online</u>. (The population over 65 can be explored <u>here</u>.)

⁴ Center for International Earth Science Information Network – CIESIN – Columbia University. 2018. Gridded Population of the World, Version 4 (GPWv4): Population Count, Revision 11. Palisades, NY: NASA Socioeconomic Data and Applications Center (SEDAC). <u>https://doi.org/10/7927/H4JW8BX5</u>. Accessed 6 May 2019.



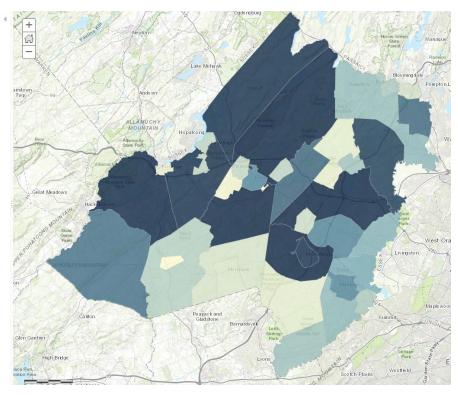


Figure 2. Total Households by Municipality, American Community Survey (2013-2017) 5-Year Average, Available online.

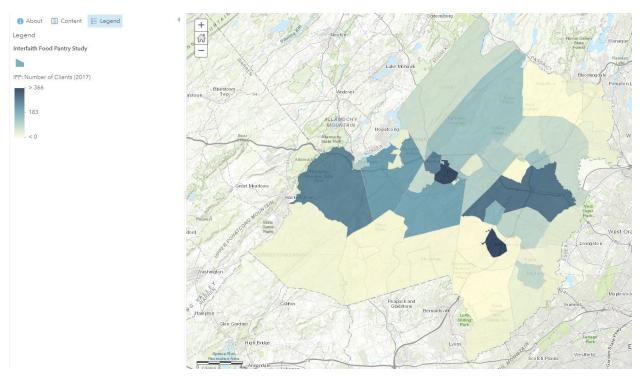
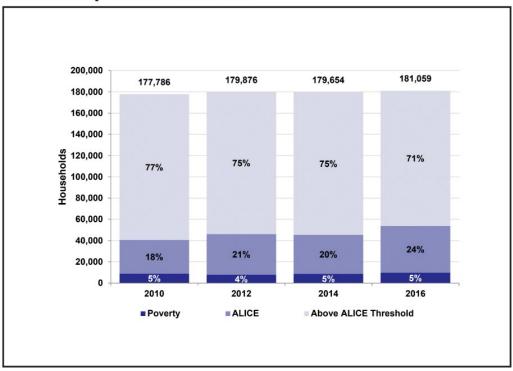


Figure 3. Morris County Interfaith Food Pantry Clients (2017) by Municipality

Where are the working poor in Morris County, and How Well Are They Served?

The United Way has developed a measure to help expand the idea of economic insecurity from beyond measures of poverty to include families that are working, but struggling to make ends meet. The acronym for their index is ALICE:

Asset Limited, Income Constrained, Employed.⁵ New Jersey was a pilot of the ALICE project, and data for county subdivisions is available for 2010, 2012, 2014 and 2016. According to the most recent United Way County Factsheets, 24 percent of households in Morris County can be described as ALICE.⁶ ALICE has increased during each iteration of the project from 18 to 24 percent, even while poverty has remained fairly constant (see Figure 4). Figure 5 highlights the number of ALICE households in Morris County by municipality.



Households by Income, 2010 to 2016

Figure 4. Household Summaries for Morris County, Reproduced from the ALICE New Jersey County Report, p. 27.⁷ Compared with the population distribution map, the distribution of ALICE households is more uneven.

⁵ United Way. 2018. ALICE: A Study of Financial Hardship in New Jersey. October 19. Downloaded 6 May 2019. Available online: https://www.dropbox.com/s/h3huycfbak512t2/18 UW ALICE Report NJ Update 10.19.18 Lowres.pdf?dl=0

⁶ United Way. 2018. ALICE: County Pages. August 13. Downloaded 6 May 2019. Available online:

https://www.dropbox.com/s/tvoyrbq737q9fm9/18UW%20ALICE%20Report_COUNTY_NJ_8.13.18_FINAL.pdf?dl=0 (Morris County, p. 27-28).

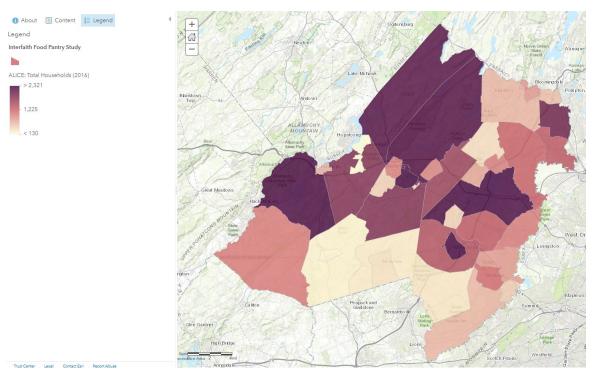


Figure 5. ALICE Households (2016) in Morris County, Data from United Way⁸. Available online.

It is also important to note that the concentration of ALICE populations differs from the locations of total number of ALICE households. Figure 6 shows the number of ALICE households divided by the total number of households. When compared with Figure 5, it is useful to note that some areas with small numbers, such as Victory Gardens, Netcong, Mountain Lakes Borough, and Mine Hill Township, have high concentrations of working poor.

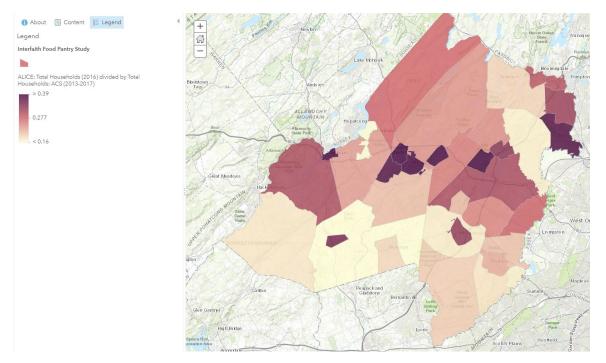


Figure 6. ALICE Households (2016) as a Proportion of Total Households (2013-2017), Available online.

⁸ United Way. 2018. New Jersey State Level Details: Data File. Sheet: Sub-County. Downloaded 6 May 2019. Available online: https://www.dropbox.com/s/c8rjxuffmgk8ddr/18UW ALICE Report NJ Data%20Sheet.xlsx?dl=0

The question is: how well is IFP work distributed among the working poor? To answer this question Figures 7 and 8 illustrate bivariate charts and a bivariate map to visualize the relationship between ALICE households and IFP clients.

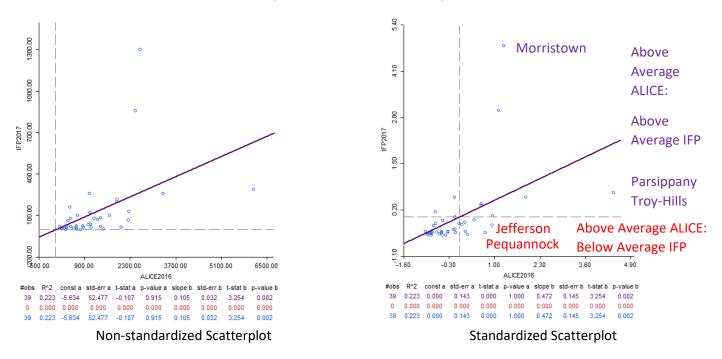


Figure 7. Scatterplots of the Relationship between ALICE Households and IFP Clients

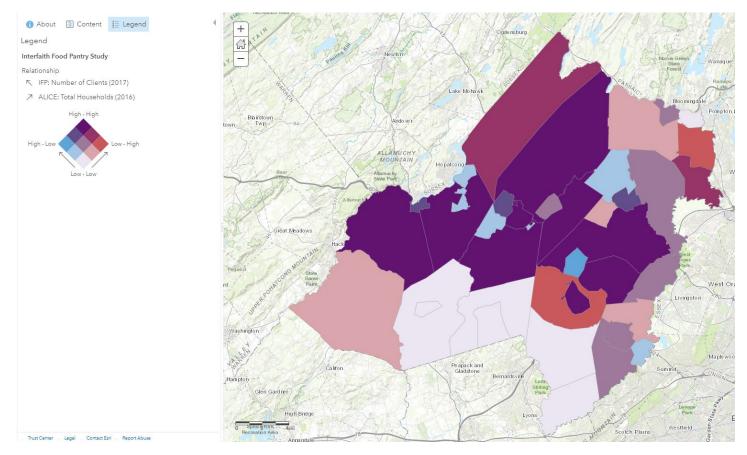


Figure 8. Thematic Map of the Relationship between ALICE Households and IFP Clients, available online.

The message from Figures 7 and Figure 8 is that the number of working poor households are over-represented in Pequannock, Jefferson and Morris Townships, but under-represented in the number of IFP clients served in those communities. Under-representation in Morris Township could simply be an artifact of data collection, since it may be possible the clients from Morris Township are mistakenly placed in the Morristown total. Further study of this would be needed.

Where are Economically Insecure Seniors and How Well Are They Served?

The Elder Index was developed by the University of Massachusetts Boston Gerontology Institute (GI) to measure the costs of living for older adults and to estimate adequate income necessary to "age in place."^{9,10} Not surprisingly, housing situation significantly influences the capacity of elders to meet their needs and to adapt to significant life changes. House ownership status, with or without a mortgage, and marital status were identified as the most significant factors in determining the elder index. Northern New Jersey, including Morris County, was found to have the highest costs of living and the highest costs of long-term care. According to the New Jersey Department of Health and latest report on the Elder Index, "In every county in the state, elders who live at the federal poverty level, or are totally dependent on the average Social Security benefit in 2016, need housing and health care supports to make ends meet."¹¹

Using GI methodology, the New Jersey Foundation for Aging produced county fact sheets for the state, finding that in the five years between 2009 and 2015, the elder index increased between five and twelve percent, depending on the housing and marital status of elders.¹² All seniors at or below the federal poverty line were below the Elder Index, and an additional 27 percent of seniors (9,725 households) were identified as falling below the Elder Index in Morris County. The minimum income needed to meet housing, food, transportation, health care (in times of good health) and miscellaneous expenses was calculated as \$27,228 for single households over 65, and \$38,712 for elder couples. The minimum values are found for households that are home owners without a mortgage. The maximum elder index values, for individuals with a mortgage, was \$39,480 for individuals and \$50,964 for couples.

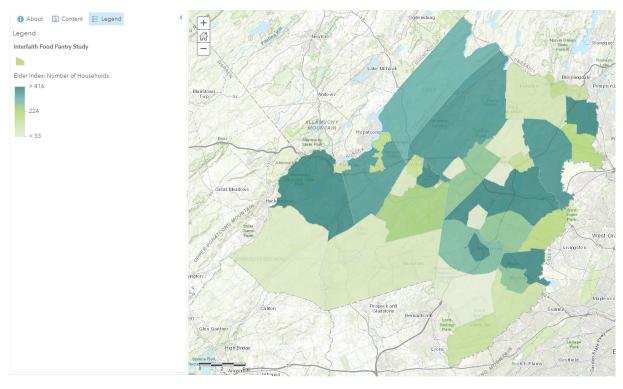
The Interfaith Food Pantry has expressed an interest in meeting the needs of elders falling in the gap. Elder needs within our county is limited by household home ownership by age, income and marital status at the county-sub-division. Using income and age tables from the US Census American Community Survey estimates, 2013-2017, we can identify a baseline number of households in the Elder Index. Figure 9 highlights the geographic distribution of economically insecure senior households in Morris County, identifying senior households with incomes less than \$25,000 per year. Figure 10 illustrates the proportion of Elder Index Households in municipalities, ranging from 2.5-7.7 percent. Figure 11 shows the number of IFP clients who are seniors by township.

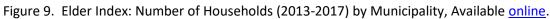
http://scholarworks.umb.edu/gerontologyinstitute_pubs/75?utm_source=scholarworks.umb.edu%2Fgerontologyinstitute_pubs%2F 75&utm_medium=PDF&utm_campaign=PDFCoverPages

⁹ Gerontology Institute, University of Massachusetts Boston. 2012. "The National Elder Economic Security Standard Index." Gerontology Institute Publications. Paper 75.

 ¹⁰ New Jersey Department of Human Services (NJ DHS). 2018. The 2016 New Jersey Elder Economic Security Standard Index. January. Available at: <u>https://www.state.nj.us/humanservices/news/reports/NJ%20EESSI%202016%20-%200118.pdf</u>
¹¹ Ibid, p. 32.

¹² New Jersey Foundation for Aging. 2014 Elder Economic Security Standard Index, County Fact Sheets. p. 20-21. Available at: <u>https://www.njfoundationforaging.org/storage/2013/12/County-Fact-Sheets1.pdf</u>.





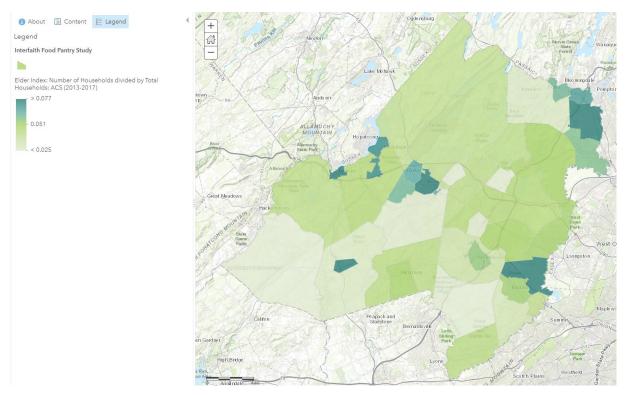


Figure 10. Elder Index Households as a Proportion of Total Households (2013-2017) by Municipality, Available online.

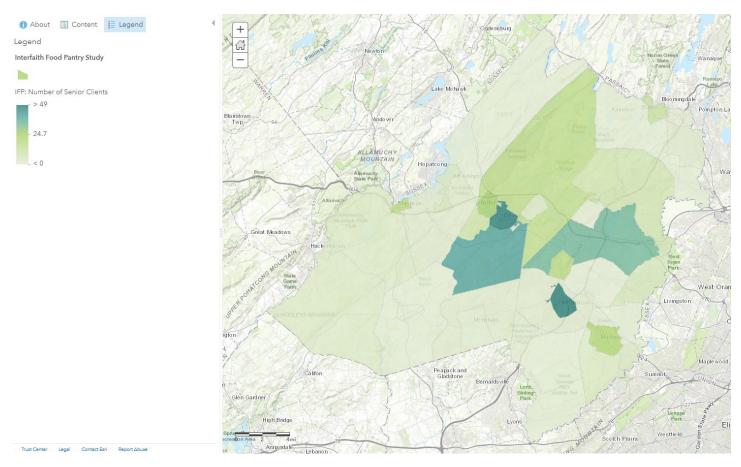
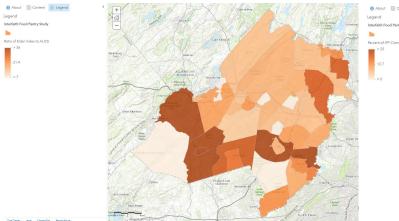
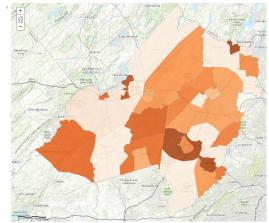


Figure 11. Morris County – Interfaith Food Pantry Senior Clients (2017), available online.

To further explore the ratio of elder to working poor in Morris County, Figure 12 compares the Elder Index to ALICE, and the percent of IFP clients who are seniors.

E Legend





Ratio of Elder Index to ALICE, as Percent (online map)

Percent of IFP Clients That Are Seniors (online map)

Figure 12. Comparison of Elder to ALICE Ratios across Morris County Towns, and Percent of IFP Clients Who Are Seniors

How well is IFP work distributed among the elderly populations who are economically insecure? To answer this question Figures 13 and 14 illustrate bivariate charts and a bivariate map to visualize the relationship between elder index households and IFP clients.

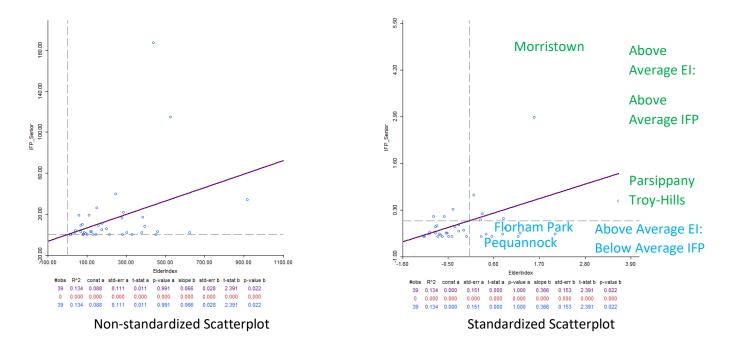


Figure 13. Scatterplots of the Relationship between the Elder Index Households and IFP Clients

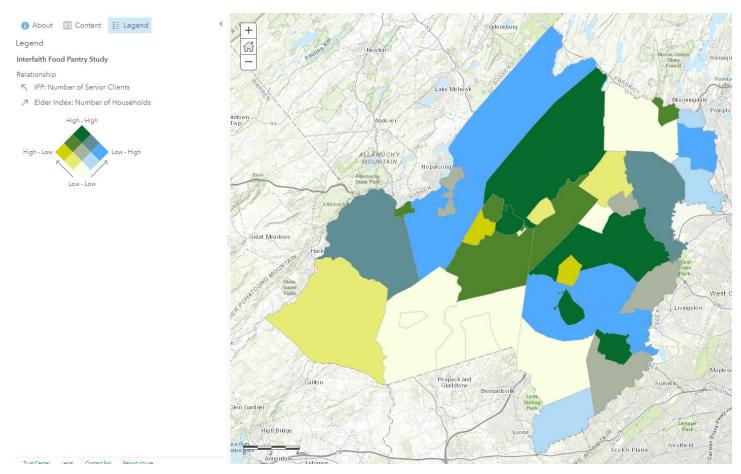


Figure 14. Thematic Map of the Relationship between ALICE Households and IFP Clients, available online.

As found with ALICE populations, elder population with high need and high IFP visibility are in Morristown and Parsippany. Elderly populations with high need and below average IFP visibility include Pequannock and Florham Park.

The data prepared for this report can be found both in the maps, with embedded tables, and from the spreadsheet available <u>here</u>.

We had hoped to create and provide a forecast of aging populations in Morris County. This provided to be too uncertain with available data. Forecasting the Elder Index into the future will depend on two trends: our aging populations and changes in the cost of living.