GIS and Cluster Analytic Approaches for CalFresh Outreach

Riverside County Department of Public Social Services
Research, Analysis, and Decision Support
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Riverside County Facts (2012)

- Population Estimate: 2,268,783
- Racial/ethnic breakdown:
  - Hispanic/Latino: 47%
  - White: 39%
  - African American: 7%
  - Asian: 7%
- Education (25 years or older):
  - High school graduates: 79%
  - Bachelor’s Degree or higher: 21%

Source: U.S. Department of Commerce, United States Census Bureau
Objectives – Study 1

- To assess the level of poverty at the county as compared to the level of CalFresh participation
  - By county and county regions
- To use information gathered to identify outreach zones where CalFresh participation was low in relation to poverty levels.
Census data: Number of individuals living in poverty by census tract
Public assistance data: Number of individuals who received CalFresh during 2011
A total of 444 distinct census tracts and 115 cities were identified
Individuals living in poverty: 272,676
Individuals who received CalFresh: 258,048
Those who received CalFresh were not necessarily part of the poverty sample based on independent inclusion criteria for each group
The overall poverty to CalFresh County ratio was 1.06 (i.e., for every 1.06 individuals in poverty, there was one person receiving CalFresh).

Alternatively, the average poverty to CalFresh ratio across the county (the average of census tract averages) was 2.48 (i.e., for every 2.48 individuals in poverty there was one CalFresh recipient).

There was large variability in poverty to CalFresh participation ratios by census tract.

The highest and lowest ratios are as follows:
- In one census tract, there were 463 individuals reported as living in poverty versus one CalFresh recipient.
- In another census tract, there were no individuals reported as living in poverty versus 47 individuals receiving CalFresh.
Deeper shaded red areas indicate greater CalFresh Participation per square half-mile. Green areas mean that there are at least 2 persons in poverty for every one person on CalFresh.
Poverty rates don’t always coincide with CalFresh participation rates

Possible reasons:
- Do higher levels of poverty and lower levels of CalFresh participation reported reflect CalFresh under-utilization or poverty over-estimation?
- Do lower levels of poverty and higher levels of CalFresh participation reported reflect CalFresh over-utilization or poverty under-estimation?

Possible factors impacting Census completion and/or CalFresh participation:
- Literacy rates
- Distance between county offices and eligible individuals
- Undocumented populations
- How poverty is determined
Objectives – Study 2

- To identify distinctive profiles within CalFresh for seniors ages 65 and older
- Results were to be used for targeted outreach
- Study conducted based on perceived mismatch between number of eligible seniors versus those receiving CalFresh
Data Collected (2012)

Data for three different cohorts was gathered because these cohorts account for the largest proportion of CalFresh customers:

- Active non-assistance CalFresh recipients
- Discontinued CalFresh recipients
- Seniors who applied to CalFresh but were denied
Findings

- Three different senior customer profiles were found using cluster analysis, a statistical procedure that combines individuals based on similarities on a given set of characteristics.
  - U.S. born English-speaking females
  - Mexican born Spanish speaking customers
  - English-speaking males
### Customer Profiles by Senior Cohorts

<table>
<thead>
<tr>
<th>Customer Profiles</th>
<th>Senior Cohorts</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Active CalFresh Seniors</td>
</tr>
<tr>
<td>U.S. Born English-Speaking Females</td>
<td>38%</td>
</tr>
<tr>
<td>Mexican Born Spanish-Speaking Customers</td>
<td>36%</td>
</tr>
<tr>
<td>English-Speaking Males</td>
<td>26%</td>
</tr>
</tbody>
</table>

- A higher percent of English-speaking males were denied in comparison to those who were active or discontinued.
- The same ratio of U.S. born English speaking females were discontinued and denied.
- A higher percent of U.S. born English-speaking females were represented in the three senior cohorts.
- A major challenge for seniors has been to provide and complete all verifications and processes associated with obtaining/retaining eligibility.
## Demographic Information by Cohort

<table>
<thead>
<tr>
<th>Demographic Information</th>
<th>Active CalFresh Seniors</th>
<th>Discontinued CalFresh Seniors</th>
<th>Denied CalFresh Seniors</th>
</tr>
</thead>
<tbody>
<tr>
<td>Marital Status (Married)</td>
<td>39%</td>
<td>42%</td>
<td>51%</td>
</tr>
<tr>
<td>Receiving Social Security Funds</td>
<td>94%</td>
<td>95%</td>
<td>97%</td>
</tr>
<tr>
<td>Average Age</td>
<td>73</td>
<td>74</td>
<td>73</td>
</tr>
<tr>
<td>Average Income</td>
<td>$296.04</td>
<td>$323.96</td>
<td>$348.19</td>
</tr>
<tr>
<td>Veteran Status</td>
<td>3.7%</td>
<td>2.3%</td>
<td>3.3%</td>
</tr>
<tr>
<td>Homelessness</td>
<td>4.8%</td>
<td>8.5%</td>
<td>N/A</td>
</tr>
<tr>
<td>Average Distance from Office (in miles)</td>
<td>7.01</td>
<td>9.74</td>
<td>7.45</td>
</tr>
</tbody>
</table>

- Denied seniors were more likely to be married and to have a higher income than active or discontinued seniors.
- Compared to active and denied seniors, discontinued seniors were more likely to live farther away from their respective Public Social Services office.
- While homelessness information was not available for denied seniors, a higher percent of discontinued customers were homeless as compared to active customers.
Final conclusions

- Data gathered and reported on was used by the County to:
  - Work with Public Health and Community Based Organizations (CBOs) to target remote areas with larger populations of CalFresh recipients for Nutrition education services
  - Partner with CBOs to use C4Yourself on-line applications to do outreach in green areas of the Heat Map
  - The County plans to provide staff with specialty training designed to assist senior customers in providing all necessary verifications and completing all the necessary steps for obtaining/retaining eligibility