

**Assessing the Impact of Current SNAP-Ed Census Tract Targeting Regulations on
the Ability of Nutrition Education Campaigns to reach State SNAP-Eligible Audiences**

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The USDA's Supplemental Nutrition Assistance Program (SNAP) has two goals – to improve nutrition and reduce hunger among low-income Americans, and to support the American economy, specifically the agriculture, food production, and grocery industries. In order to meet both of these goals, SNAP is grounded in a consumer-choice paradigm. Rather than restricting food purchasing options to a limited range of “healthy” foods, the USDA supports SNAP participants in making healthy choices by funding nutrition education activities and social marketing campaigns targeted to SNAP-eligible audiences. This program, SNAP-Ed, is intended to provide SNAP participants and SNAP-eligible individuals with the knowledge and skills they need to make the best use of SNAP resources possible to reduce hunger and improve nutrition.[1]

As stated in the SNAP program's “guiding principles,” SNAP-Ed-funded nutrition education is intended solely for those eligible for SNAP [2]. In order to ensure that these funds remain targeted at individuals in the SNAP program and are not diverted to other audiences, eligibility for nutrition education closely mirrors eligibility for the food stamp program. As a result of these eligibility restrictions for SNAP outreach and activities, historically, most SNAP-Ed programs mirror the EFNEP model of providing direct education to individual program participants reached through qualified locations. These programs focus at the intrapersonal level, using dietitians or extension agents to provide one-on-one outreach or nutrition education classes.[3]

Targeted, one-on-one direct-education interventions are costly, however, and allowable locations for SNAP-Ed activities are tightly restricted to ensure that these resources only reach those who are likely to be eligible for SNAP benefits. SNAP-Ed outreach activities, indirect education activities, and social marketing campaigns operate under the same tightly controlled targeting limitations as these more expensive direct-education programs. The current guidance limits SNAP-Ed outreach and social marketing activities to locations such as SNAP offices, housing projects and food banks, to schools or agencies that can document that more than half of their students or clients are SNAP-eligible, and to census tracts where more than half of the population are below 185% of the federal poverty level. [4]

This site-specific targeting methodology is challenged by legislative and economic trends that encourage state SNAP offices to reduce the amount of direct contact that SNAP participants have with personnel in SNAP offices. These administrative changes are intended to lower both cost and barriers for SNAP participation – all positive developments – but they increasingly reduce the number of individuals who can be reached with SNAP-Ed activities and social marketing campaigns placed in “qualified” sites.

While these highly restrictive targeting regulations are effective in keeping the focus of the SNAP-Ed program on serving individuals receiving food stamps, they may substantially hamper the

effectiveness of SNAP-Ed program in reducing hunger and improving dietary behavior among low-income Americans.

SNAP-Ed programs that attempt to use social marketing to change social norms within low-income communities, rather than conducting one-to-one education with specified individuals, are particularly affected by the census tract targeting guidelines. A number of states have reported that the current targeting limitations hinder the ability to develop social marketing campaigns for SNAP-eligible audiences in those states where most SNAP participants do not reside in high-poverty census tracts. [5-7]

Programs that reach individuals within their social environments have been shown to be effective at motivating long-term dietary change among low-income individuals [8-10]. “Public-health” interventions, which prioritize breadth over depth, reaching a large number of individuals with consistent low-dosage interventions, are more cost-effective, and may be more effective at generating change in a population, than are more costly interventions aimed at individual behavior change[11, 12] However, by treating exposure to social marketing and community-based nutrition campaigns as a “program” that must be tightly limited to documented SNAP-eligible audiences, the current SNAP-Ed targeting protocol appears to renders these community-based approaches unworkable for many state SNAP-Ed programs.

In order to determine to what extent current SNAP-Ed regulations affect the ability of social marketing activities to reach SNAP-eligible individuals across the nation, we used the US Census Bureau’s American Communities Survey to determine the potential reach of social marketing campaigns using the SNAP-Ed program’s current targeting regulations

Methodology

The USDA recently identified the 2009 5-year American Communities Survey data file as the preferred source for defining qualified census tracts for SNAP-Ed activities.[13] We downloaded the US Census’s 2009 5-year American Communities Survey poverty data for every census tract in every state. Using this data, we calculated for each state, and for the nation

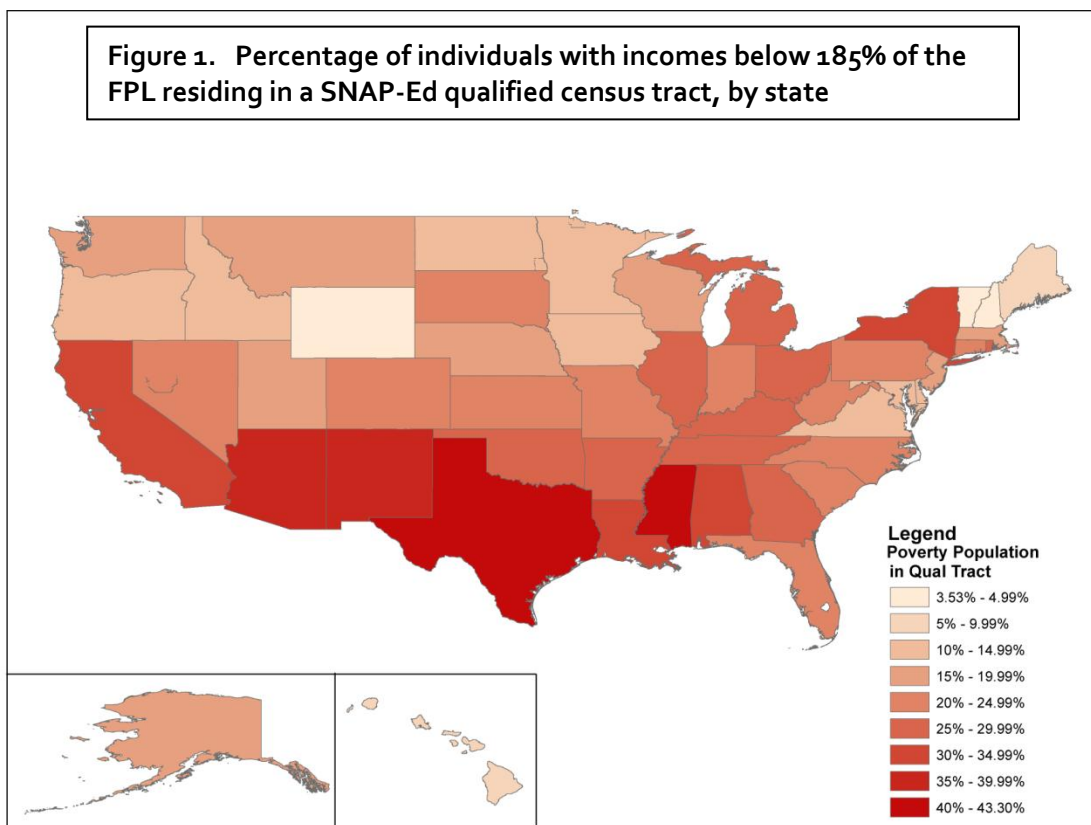
- (1) the number and percentage of individuals “eligible” for SNAP-Ed social marketing (those below 185% of the federal poverty level),
- (2) the number and percentage of census tracts within each state that are “qualified” locations for SNAP-Ed social marketing (e.g., more than 50% of census tract residents are below 185% of the federal poverty level), and
- (3) the number and percentage of SNAP-Ed eligible individuals in the state who could be reached through social marketing campaigns within SNAP-eligible census tracts.

Differences in reach were identified by state and by geographic region. These differences were then explored statistically, to determine which types of states are differentially impacted by the current SNAP-Ed targeting regulations.

Results

Nationally, three-out-of-four (73%) individuals below 185% of the Federal Poverty Level (FPL) do not reside in a SNAP-Ed qualified census tract. This rate varies enormously by region, however, with states in the northern half of the United States disproportionately unable to reach their low-income populations through SNAP-Ed social marketing activities conducted in qualifying tracts.

As can be seen in Figure 1, the proportion of each state's low-income population that resided within a qualifying census tract ranged from only 3.5% in Vermont to 43.3% in Mississippi. Six states are have less than 10% of their overall low-income population residing in qualifying census tracts; and almost half (41%) of all states are able to reach less than 20% of their overall low-income population through qualifying census tracts.



In order to further explore the geographic differences, the ten states with the highest and lowest percentage of SNAP-Ed eligible individuals residing in a SNAP-Ed census tract are shown in Figure 2. The specific data for each state is provided in Table 1. Because urban vs. rural differences has been suggested as a reason for the variation in qualifying census tracts between states, data is also provided in Table 1 on each state's urbanicity level.

Figure 2. States with highest and lowest percentages of low-income individuals residing in a SNAP-Ed qualified census tract

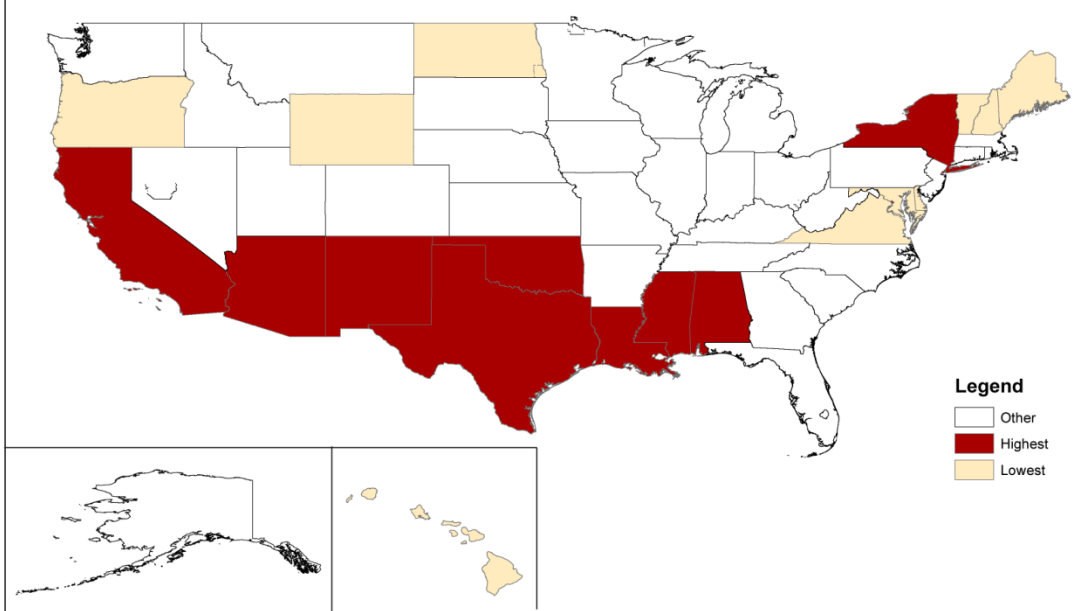


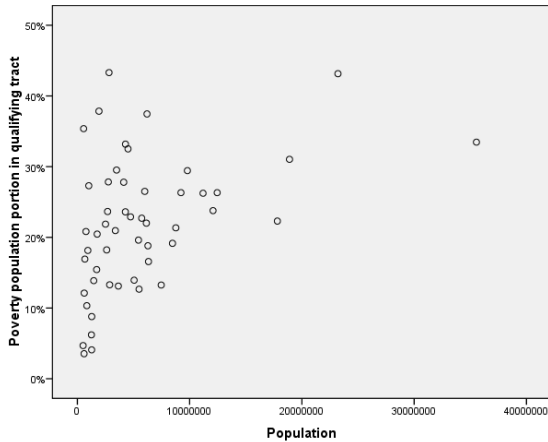
Table 1. Percentage of SNAP-eligible population residing within a SNAP-eligible census tract (listed by state, from lowest to highest)

State	Population	Percent of population below 185% FPL	Percent of low-income population residing in a SNAP-Ed qualified census tract	Poverty level in SNAP-Ed qualified census tracts	State urbanization level
<i>National Data</i>	293,507,923	28.68%	27.24%	61%	79.0%
Vermont	599,059	24.60%	3.53%	63%	38.2%
New Hampshire	1,276,098	17.92%	4.08%	58%	59.3%
Wyoming	509,248	24.38%	4.60%	58%	65.1%
Hawai'i	1,250,787	20.85%	6.20%	59%	91.5%
Maine	1,279,612	28.15%	8.79%	59%	40.2%
Delaware	839,758	22.77%	10.32%	66%	80.1%
North Dakota	613,140	27.28%	12.11%	59%	55.9%
Maryland	5,496,430	18.34%	12.66%	59%	86.1%
Oregon	3,649,549	29.70%	13.11%	58%	78.7%
Virginia	7,467,511	21.95%	13.25%	61%	73.0%
Iowa	2,875,698	26.25%	13.29%	62%	61.1%

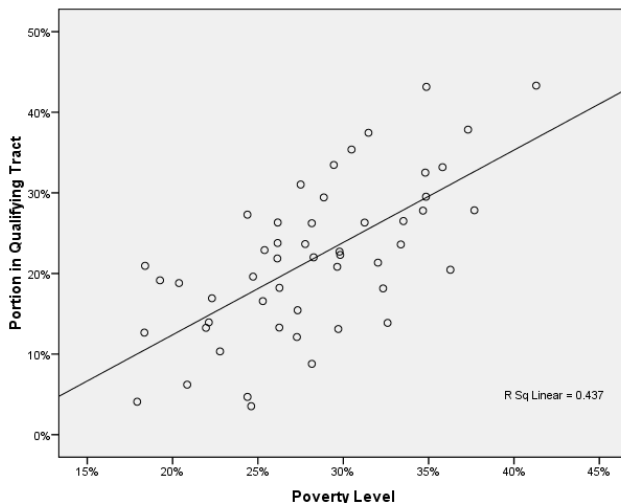
State	Population	Percent of population below 185% FPL	Percent of low-income population residing in a SNAP-Ed qualified census tract	Poverty level in SNAP-Ed qualified census tracts	State urbanization level
Idaho	1,457,590	32.59%	13.86%	60%	66.4%
Minnesota	5,056,956	22.12%	13.93%	63%	70.9%
Nebraska	1,717,135	27.32%	15.43%	61%	69.8%
Washington	6,332,211	25.28%	16.57%	61%	82.0%
Alaska	666,059	22.30%	16.92%	57%	65.6%
Montana	931,923	32.33%	18.14%	57%	54.1%
Utah	2,610,053	26.26%	18.22%	64%	88.2%
Massachusetts	6,283,288	20.37%	18.80%	61%	91.4%
New Jersey	8,471,001	19.26%	19.14%	60%	94.4%
Wisconsin	5,440,780	24.71%	19.60%	64%	68.3%
West Virginia	1,763,346	36.27%	20.45%	58%	46.1%
South Dakota	767,143	29.64%	20.82%	62%	51.9%
Connecticut	3,382,564	18.38%	20.94%	62%	87.7%
North Carolina	8,768,580	32.03%	21.34%	60%	60.2%
Nevada	2,509,251	26.13%	21.86%	58%	91.5%
Indiana	6,144,219	28.26%	22.00%	61%	70.8%
Florida	17,811,892	29.8%	22.30%	60%	89.3%
Missouri	5,732,785	29.77%	22.70%	59%	69.4%
Colorado	4,737,172	25.38%	22.89%	59%	84.5%
South Carolina	4,277,311	33.37%	23.60%	60%	60.5%
Kansas	2,692,061	27.76%	23.65%	61%	71.4%
Pennsylvania	12,081,192	26.15%	23.78%	62%	77.1%
Ohio	11,194,344	28.15%	26.23%	62%	77.4%
Georgia	9,228,265	31.24%	26.31%	60%	71.6%
Illinois	12,451,259	26.15%	26.32%	61%	87.8%
Tennessee	6,001,130	33.52%	26.49%	61%	63.6%
Rhode Island	1,019,380	24.38%	27.30%	59%	90.9%
Kentucky	4,125,581	34.66%	27.79%	59%	55.8%
Arkansas	2,755,680	37.67%	27.83%	59%	52.5%
Michigan	9,800,094	28.85%	29.43%	63%	74.7%
Oklahoma	3,490,387	34.84%	29.52%	60%	65.3%
New York	18,892,662	27.50%	31.03%	62%	87.5%
Alabama	4,512,909	34.80%	32.51%	60%	55.4%
Louisiana	4,285,810	35.81%	33.18%	62%	72.6%
California	35,543,481	29.44%	33.46%	60%	94.4%
DC	558,565	30.48%	35.37%	62%	100%
Arizona	6,204,965	31.47%	37.45%	61%	88.2%
New Mexico	1,922,439	37.30%	37.84%	60%	75.0%
Texas	23,208,156	34.86%	43.15%	63%	82.5%
Mississippi	2,821,414	41.29%	43.30%	61%	48.8%

In order to further explore the reasons for differences between states, correlations were assessed between the percentage of low-income individuals residing in a SNAP-qualified census tract, and the state's overall population size, poverty level and level of urbanicity.

There was a weak correlation ($r=.424$, $p=.002$) between the states' overall population size and the percentage of the state's low-income individuals residing in SNAP-Ed qualifying tracts. Smaller states are less able to target social marketing to low-income individuals by census tract than are larger states.



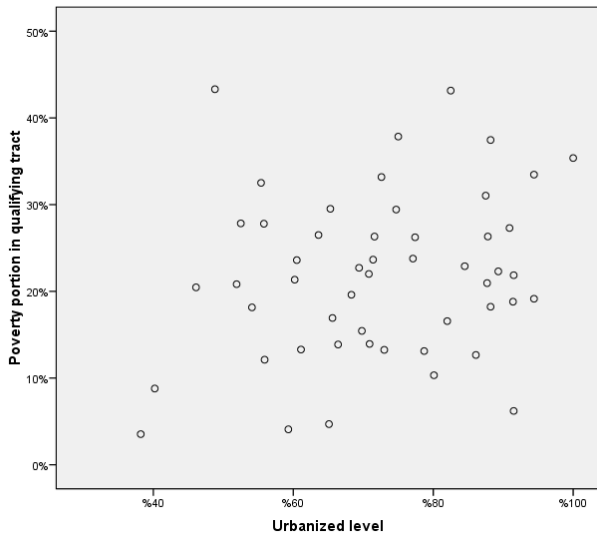
There was a moderately strong correlation ($r=.661$, $p=.000$) between a state's overall poverty level and the percentage of low-income individuals residing in a SNAP-Ed qualified census tract. States with lower poverty levels are less able to reach their low-income population through the current census tract targeting than are states with higher overall poverty levels.



This relationship was most pronounced at the extremes. Among the states that had the 10 lowest percentages of low-income individuals residing in qualifying tracts, all but one had poverty levels

below the national average. With states that had the 10 highest percent of poverty population in qualifying tracts only one state had poverty levels below the national average.

There was a no correlation ($r=0.217$, $p=0.125$) between a state's urbanization level and percent of low-income individuals in the qualifying tracts.



Discussion

These results suggest that there are pronounced differences between the states in their ability to use the current SNAP-Ed census tract targeting guidelines to reach SNAP-eligible individuals in their states. Smaller states, higher-cost-of-living states (where fewer individuals fall below the Federal Poverty Level), and states in the northern half of the United States are disproportionately unable to conduct social marketing activities using the current SNAP-Ed qualifying census tract guidelines.

The current SNAP-Ed targeting guidance appears to be overly restrictive. Using census tract targeting, only 18 states are able to reach more than 25% of their SNAP-eligible population through community-based or social marketing campaigns located in qualifying census tracts. With less than 20% of their population residing in qualifying census tracts, this approach is unworkable for nearly half of all states in the nation. Current policy pushes most state SNAP-Ed programs to concentrate on funding more costly and lower-reach individual-based direct education interventions, and does not provide low-income Americans with the social or environmental support that is needed for long-term dietary change.

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