

SNAP at the Community Scale: How Neighborhood Characteristics Affect Participation and Food Access

Cities are spatially diverse, with enclaves of particular demographic groups, clusters of businesses, and pockets of low-income individuals living amid affluence.

This essay presents data from New York City to illustrate the importance of measuring and addressing neighborhood characteristics that affect Supplemental Nutrition Assistance Program (SNAP) participation and the purchasing power of SNAP benefits: pockets of “eligible-but-not-enrolled” individuals, proximity between SNAP participants and jobs, and variations in food prices across neighborhoods.

It concludes with 5 examples of how addressing these community-scale issues can increase SNAP participation and food access. (*Am J Public Health*. 2019;109:1646–1651. doi:10.2105/AJPH.2019.305363)

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See also the *AJPH Supplemental Nutrition Assistance Program* section, pp. 1631–1677.

The 2008 Great Recession and subsequent policies to increase Supplemental Nutrition Assistance Program (SNAP) benefits to stimulate the economy led to a sharp rise in participation in SNAP, from 26.3 million individuals in 2007 to 47.6 million in 2013.¹ Between 2013 and 2018, economic recovery, combined with the expiration of some post-recession benefits, led to a drop in participants to 40.4 million.¹ The Congressional Budget Office projects that if the economy remains robust, the SNAP rolls will fall to a 20-year low of 31.8 million by 2029.²

From a birds-eye view, the declining reliance on SNAP appears positive, but the experience of SNAP is much more complex within cities. Some demographic groups, often clustered in particular communities, have low levels of SNAP participation despite eligibility and need for nutrition assistance. Federal policies requiring some SNAP participants to work do not account for the physical distances between participants and entry-level jobs. Disparities in food costs across cities disadvantage SNAP participants who live in affluent, and expensive, neighborhoods. Data from New York City illustrate how these neighborhood characteristics affect SNAP participation and food access.

MEASURING SNAP AT THE COMMUNITY SCALE

The city’s Human Resources Administration estimates that 72.4% of all New Yorkers eligible for SNAP participate in the program, with comparable figures derived by Columbia University (75%) and consulting firm Civis Analytics (76%).^{3–6} This means that more than 631 000 people are eligible for SNAP but are not enrolled. The foregone monthly benefits of a statewide average of \$136 per SNAP participant total more than \$1 billion per year.⁷ Because SNAP expenditures have a multiplier effect of 1.5, the loss to the local economy is approximately \$1.5 billion per year.^{8,9}

Another indicator of SNAP participation is the Program Access Index (PAI), calculated by dividing the number of SNAP participants by the population below 125% of the federal poverty level (FPL) as a proxy for eligible individuals.¹⁰ New York City uses the PAI to track SNAP access over time and compared with the rest of the United States.³ In 2017, the New York City PAI was 84.8%, compared

with 73.2% nationwide, as Table 1 shows. The PAI is higher than the estimated participation rate because the denominator (the number of people below 125% of the FPL) is a conservative estimate of the number of eligible people in some states. For example, New York State residents qualify for SNAP at more than 125% of the poverty level if their household has earned income, dependent care expenses, older members, or members on disability.

Pockets of Eligible-but-Not-Enrolled Individuals

To identify neighborhoods in New York City with large concentrations of those eligible but not enrolled in SNAP, I calculated PAIs for each Public Use Microdata Area (PUMA) in New York City by dividing SNAP participation per PUMA by the population below 125% of the poverty level, using American Community Survey 2013–2017 5-year population estimates. PUMAs are geographic areas that have at least 100 000 residents, and in New York City they

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TABLE 1—SNAP Program Access Index, 2012–2017: New York City (NYC) and United States

| Year | NYC, % | United States, % |
|------|--------|------------------|
| 2012 | 83.70 | 74.20 |
| 2013 | 85.90 | 75.20 |
| 2014 | 80.00 | 74.10 |
| 2015 | 79.40 | 75.60 |
| 2016 | 83.60 | 75.00 |
| 2017 | 84.80 | 73.20 |

Source. Mullen and Dinan.³

approximate the boundaries of community districts or neighborhoods.

Figure 1 shows the PAIs for each PUMA divided into high, medium, and low levels of participation. Point estimates, especially those for small areas like neighborhoods, should be interpreted with caution, but they illustrate variability in SNAP participation among likely eligible individuals across New York City. In particular, they can highlight neighborhoods with large numbers of eligible but unenrolled individuals to help explain why so many individuals in need of nutrition assistance in those neighborhoods are not participating in SNAP.

The decision to participate in SNAP depends primarily on financial need. Not surprisingly, households below 51% of the poverty level participate at more than twice the rate of those above poverty, whereas only 17% of eligible individuals with incomes higher than 130% of the poverty level participate.¹⁰ Financial need is only 1 factor, however. Even if people have a financial need for SNAP, their participation can be hampered by various obstacles: the time and effort required to apply and recertify, language and literacy limitations, poor customer service at SNAP centers, inadequate information about eligibility or

benefits, fear of interacting with government agencies, or the perceived stigma of using public benefits.^{10–13} The degree to which these factors inhibit SNAP participation depends on individual and group capabilities and the expectations and accepted practices of particular communities.

National data show that the propensity to participate in SNAP varies significantly by age and national origin.⁹ Older adults are less likely to participate than younger people, especially if they have someone else in their household: 45% of those aged 60 years and older participate, but the rate drops to 25% for people aged 60 and older living with others, even if they qualify for benefits.⁹ Eligible noncitizens participate at a 63% rate, although this estimate was based on 2016 data and is likely to have declined as a result of post-2016 federal immigration policies.⁹ Data from the Human Resources Administration and a longitudinal survey of approximately 1000 low-income residents confirm that New York City data are consistent with these national trends: older adults, noncitizens, and households with an employed member (and thus a source of income) are least likely to participate in SNAP.^{5,13}

Groups that have a low propensity to participate in SNAP despite their eligibility, such as foreign-born individuals and older adults, are unevenly distributed across the city, as people with similar characteristics often live in geographically defined neighborhoods, small ethnic enclaves, dense public housing developments, naturally occurring retirement communities, or in other distinct places. As the following 3 examples illustrate, communities with large pockets of immigrants and older adults have low PAIs:

- Over the past few decades, the Brooklyn neighborhoods of

Sunset Park and Windsor Terrace (PUMA 4012) experienced a large influx of immigrants from China, Mexico, and the Middle East, and foreign-born residents account for nearly half (47.8%) of the population, with 48.2% (compared with 23% for the city as a whole) self-identifying as having limited English proficiency, an additional hurdle for SNAP participation.^{14,15}

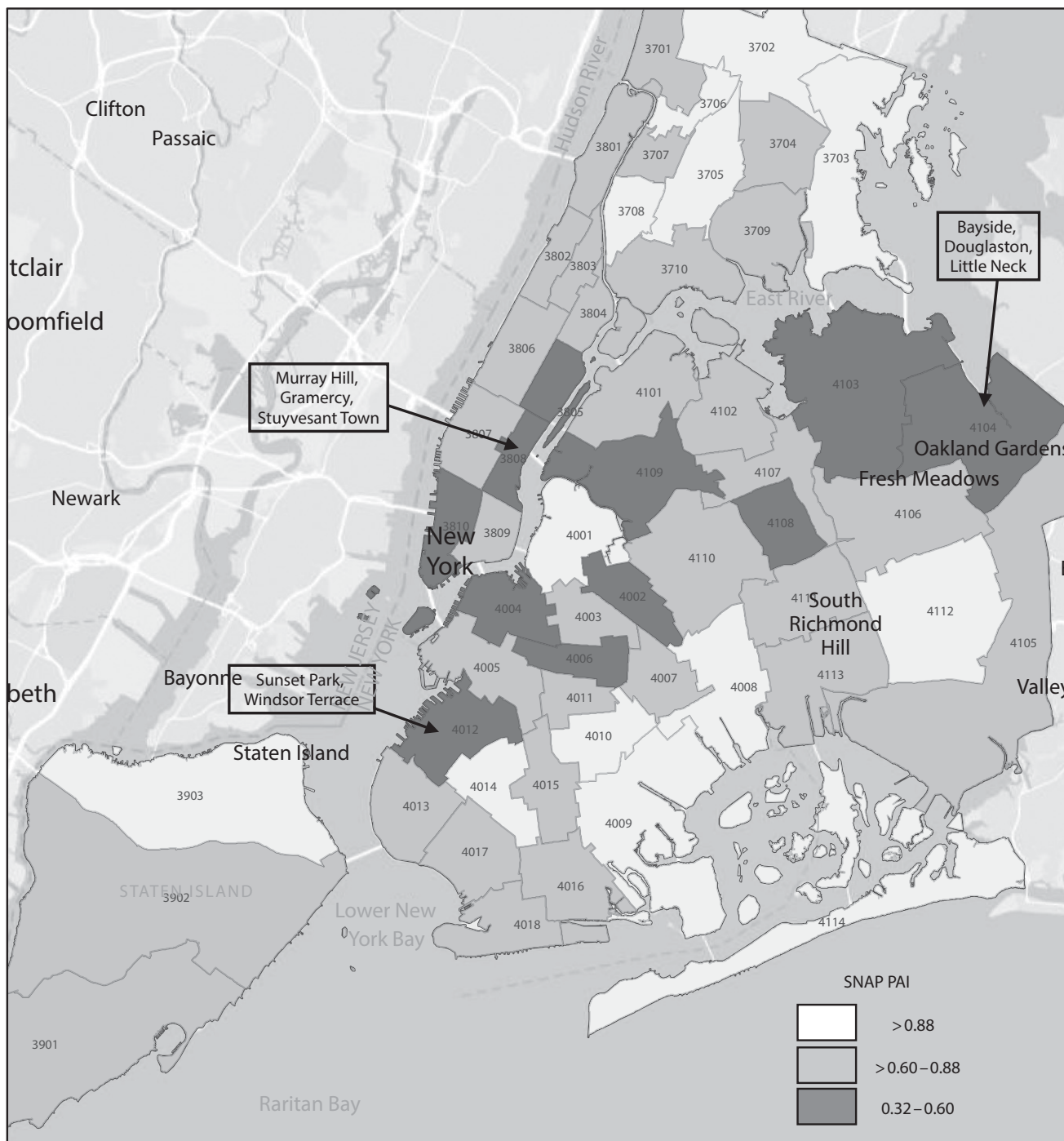
- The neighborhoods of Bay-side, Douglaston, and Little Neck, Queens (PUMA 4104) have a high median household income of \$70 155, but they also have large concentrations of older adults, with 18% of residents aged 65 and older compared with 13% citywide. The PUMA also has a large Asian population—a group less likely to enroll in SNAP than are other ethnic groups—that constitutes 42.7% of the population.^{14,15}
- The median household income of the Manhattan neighborhoods Murray Hill, Gramercy, and Stuyvesant Town (PUMA 3808) is \$112 383, yet the community has significant populations of older adults and pockets of low-income residents. Older adults constitute 17.2% of the population, nearly half of whom are aged 75 years or older.^{14,15} The PUMA also has the city's largest homeless shelter, with 850 beds.¹⁵ The transience and emotional challenges of homeless individuals inhibit applying and recertifying for SNAP, and single residents of this shelter face time limits on SNAP participation.

Federal immigration policies are likely to further reduce SNAP participation among eligible foreign-born residents, resulting in disproportionate economic

and health impacts to immigrant neighborhoods. A survey of community-based organizations that serve food-insecure people in New York City's immigrant neighborhoods found that intensified fears of deportation since the 2016 election have inhibited their clients from applying for SNAP and other federal programs, and even from using food pantries run by non-profit organizations.¹⁶ A recently promulgated rule that expands the definition of a “public charge”—people deemed to be dependent on government benefits—to include those receiving noncash benefits such as SNAP, will further deter eligible immigrants from applying for SNAP because a public charge designation can be used to deny legal permanent residence or a green card.^{17–19} The mere proposal of this change to the public charge rule caused nearly 14% of adults in immigrant families to choose not to participate in SNAP and other benefit programs.²⁰

Distances Between SNAP Participants and Jobs

Jobs are often located far from where unemployed people live, making it challenging for the unemployed to find and secure work, a concept in urban planning known as “spatial mismatch.”²¹ The unequal distribution of jobs and people seeking employment can contribute to uneven SNAP participation for able-bodied adults without dependents (ABAWDs), who constitute about 7.8% of SNAP participants nationwide. Current SNAP regulations limit these adults (aged 18–49 years) to 3 months of SNAP benefits in a 3-year period unless they work at least 80 hours per month or participate in a workfare program, so their continued



Note. PAI = number of SNAP participants divided by number of individuals below 125% of the federal poverty level.

FIGURE 1—Supplemental Nutrition Assistance Program (SNAP) Program Access Indices (PAIs) by Public Use Microdata Area: New York City, 2017

participation in SNAP depends on having access to a job.²²

Under current SNAP policy, states can obtain waivers to the ABAWD time limits if the

following factors demonstrate insufficient jobs in the local labor market: an annual, 3-month, and seasonal unemployment rate of more than 10%; designation as a

Labor Surplus Area (places with unemployment at least 20% above the national average); qualification for a federal extension of unemployment benefits; a

low and decreasing employment-to-population ratio; jobs in declining occupations; an academic study showing insufficient jobs; or a 24-month

unemployment rate 20% above the national average.^{22,23}

Waivers to the time limits have been granted at the neighborhood scale, recognizing that labor markets vary within metropolitan areas and that the physical distance between low-income individuals and jobs can be an insurmountable obstacle to employment. In 2019, for example, New York City obtained waivers from the ABAWD time limits for the Bronx, Brooklyn, 4 Manhattan neighborhoods, and 2 neighborhoods in Queens—areas of higher unemployment than the city and region that include approximately half of all New York City adults without dependents participating in SNAP.^{23,24} Those not covered by these waivers live in neighborhoods with lower unemployment rates, although the jobs that are available in those neighborhoods may not necessarily be accessible to people with limited skills who are reentering the labor market. Appropriate employment may be located in other parts of the city or region, but the distances can be barriers, especially if the jobs are not easily accessible by transit. The mismatch between people and jobs can result in a significant number of ABAWDs losing SNAP benefits.

A Trump Administration proposal would exacerbate this by ending most ABAWD waivers except in places with very high unemployment (e.g., 7% for a recent 24-month period).^{22–24} The rule change would also reduce the flexibility of states to define the areas to be waived, and would eliminate waivers to jurisdictions smaller than counties or metropolitan areas, affecting communities with high unemployment that happen to be surrounded by more affluent areas. By 1 estimate,

approximately 75 000 New York City residents currently participating in SNAP would risk losing SNAP as a result of these changes to the ABAWD rules.^{23,25}

Disparate Grocery Costs

The FPL was established in 1963 based on an average family spending one third of its annual income on food, and is calculated as 3 times the cost of the US Department of Agriculture’s (USDA) thrifty meal plan.²⁶ Although indexed for inflation, the FPL has not been updated to reflect the substantial changes in household costs over the past half century, and is not adjusted for geographic differences in living costs. The FPL therefore significantly underestimates the income needed to live in expensive cities like New York and the number of people who need SNAP.^{27,28} By 1 estimate, about 40% of all New York City households—twice as many as those below the FPL—lack sufficient income to be economically self-sufficient.²⁷

SNAP benefits are not adjusted for higher costs of living, except in Alaska and Hawaii, making buying healthy food more challenging in expensive cities like New York than in less costly places.²⁷ Compared with a national average cost for groceries of \$3.00 per meal, the cost in Manhattan is \$5.70.²⁸ As Table 2 shows, food prices (based on items in the USDA’s Low-Cost Food Plan) also vary significantly by neighborhood, ranging from \$463 per month for a household with 1 adult and 1 school-aged child in the Bronx to \$768 in Manhattan.²⁹

For SNAP participants living in high-income neighborhoods with expensive grocers, such as public housing residents in communities that have gentrified, purchasing healthy food

TABLE 2—Monthly Food Costs for 1 Adult With 1 School-Age Child, Assuming Low-Cost Food Plan Items: New York City, 2018

| Borough | Monthly Food Cost, \$ |
|---------------|-----------------------|
| The Bronx | 463 |
| Brooklyn | 495 |
| Manhattan | 768 |
| Queens | 504 |
| Staten Island | 522 |

Source: Pearce.²⁹

requires either spending more for the same items than SNAP participants living in less expensive neighborhoods or expending time and travel costs to shop in less expensive stores in other communities.³⁰ Those who lack access to a vehicle or who are mobility impaired are the most vulnerable if they are limited to the grocers near their homes.

INCREASING PARTICIPATION AND ACCESS

The examples in the 3 previous sections are not unique to New York City, but rather illustrate the need for public health professionals to account for community differences in population demographics, employment, and food costs to increase SNAP participation and food access. The following 5 strategies suggest the kinds of local interventions that can reduce obstacles to participation faced by specific groups living in particular places.

1. Targeting Community Outreach

Targeted outreach to neighborhoods populated with groups

less likely to enroll in SNAP, such as older adults and immigrants, can increase participation. Since 2014, New York City and nonprofits have provided SNAP application assistance to eligible older adults who are not SNAP participants, increasing the 65-and-older participation rate to an estimated 70.9% in 2016.³¹ The city also funds SNAP outreach by organizations that serve immigrants; lesbian, gay, bisexual, transgender, and questioning populations; and persons with disabilities.³¹

2. Tracking SNAP Demographics

Tracking the demographic composition of SNAP participants by community enables researchers, advocacy groups, and city officials to analyze the causes of differential participation in SNAP, anticipate the effects of future federal policies, and identify strategies to increase participation among vulnerable groups. For example, metrics tracking the experiences of immigrants applying for and participating in SNAP would provide evidence for policy advocacy and facilitate effective intervention design.

3. Assisting Those at Risk of Unemployment

Supporting populations vulnerable to job loss with assistance in enrolling in SNAP can boost participation.³² Federal law and some states require advance notification of plant closings, data that can be used to identify communities likely to lose jobs and that therefore need SNAP.³³ In New York State, for example, businesses with 50 or more full-time workers must give early warnings of closings and layoffs. This data, along with tax, real estate, and other sources, can help

identify businesses likely to move or close and thus be used to target outreach to encourage enrollment in SNAP and other public benefit programs by those at risk for unemployment or who have recently lost their jobs.

4. Moving SNAP Services Online

Information technology can overcome the obstacles associated with traveling to and from SNAP centers for applications, screening interviews, and recertification paperwork. New York City has moved these functions to telephone and online platforms, including to a mobile app that allows participants to submit photos of documents by phone. This shift has increased the applications submitted online from 23% in 2013 to 87% in 2018 and interviews by phone from 29% in 2013 to 93% in 2018. Automated reminder texts and voice messages to SNAP participants have increased on-time submissions of recertification documents by 12.9%.³⁴ As a result, since 2014, in-person visits to SNAP centers have dropped by 30% and application timeliness increased to more than 90%.¹³

5. Diminishing Barriers to Affordable Groceries

Geographic variation in food prices can be reduced through increased use of online grocers. In 2019, the USDA launched a pilot in New York State allowing SNAP participants to buy food online.³⁵ The aim is to give SNAP participants access to more grocery options at competitive prices, reducing their need to travel to lower-priced retailers in other neighborhoods and potentially reducing differences in food costs across neighborhoods over time. The pilot will expand to other cities in the next 2 years and, if it is successful, the USDA

plans to allow all grocers to accept SNAP payments for online orders. This, together with existing programs to provide SNAP participants with discount coupons for healthy food purchases in local grocers and farmers markets, may diminish barriers to affordable food, including for those SNAP participants living in neighborhoods with higher-cost retailers.

Ensuring that SNAP is accessible to all eligible individuals so that people have the financial resources to buy adequate amounts of healthy food is an important strategy to reduce malnourishment and diet-related noncommunicable diseases. Doing so requires advocacy at the federal scale to prevent budget cuts to SNAP,^{36,37} to reverse recent changes to the Public Charge Rule, and to oppose pending ABAWD rule changes that will reduce participation in SNAP by single adults. But cities are composed of neighborhoods with unevenly distributed populations, jobs, and retailers, and this spatial heterogeneity results in disparities in SNAP participation and access to affordable food that need to be addressed by public health professionals at the community scale. Targeted outreach to pockets of eligible but not enrolled individuals, steps to connect the unemployed to jobs, and efforts to ensure affordable food in all neighborhoods are critical to maximizing SNAP participation, and SNAP benefits, among those who need nutrition assistance. **AJPH**

CONFLICTS OF INTEREST

The author has no conflicts of interest to report.

HUMAN PARTICIPANT PROTECTION

The research did not involve human subjects and is exempt from institutional review board review.

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