

STATE UNIVERSITY OF NEW YORK AT NEW PALTZ



A Community Food Assessment

Discussion Brief #11 - Winter 2014

Leonard Nevarez, Susan Grove, KT Tobin and Joshua Simons



Food insecurity? In the language of the federal government, this is what we call it when a person or a family has "limited or uncertain availability of nutritionally adequate and safe foods or limited or uncertain ability to acquire acceptable foods in socially acceptable ways."

More simply stated:
food insecurity
exists when people
don't have or can't
get enough decent
food to eat. However
put, food insecurity—
we show here—is a
troubling problem
in the City of
Poughkeepsie.

Poughkeepsie Plenty is the community collaboration formed to do something to solve this problem. It seeks to transform the City of Poughkeepsie into a place where everyone can secure, prepare, enjoy, and benefit from healthy food. This brief presents findings of research done in 2012 to define the dimensions of problems we face in trying to assure food for the food insecure, and offers locally-focused policy proposals to address it.

We found:

- Over one in four (26 percent) City of Poughkeepsie households experienced food insecurity including eleven percent that are food insecure with hunger.
- Poverty is a key contributor to food insecurity. A majority (60 percent) of all City of Poughkeepsie households earning \$15,000 or less annually were food insecure.
- Food insecure households rely on a number of social programs to help them afford food. In 2012, about one quarter (24 percent) of city households had received food stamp benefits and 15 percent got emergency food supplies from a church, food pantry, or food bank in the previous year. Low income households were much more likely to need these services: 75 percent of households with an annual income of less than \$15,000 received Supplemental Nutrition Assistance Program (SNAP) benefits, formerly known as food stamps, and 44 percent needed emergency food supplies.
- The location of food stores is a leading contributor to food insecurity. The
 city has only two grocery stores, both located near the eastern edge of the
 city limits. About one in ten (12 percent) of city households did not make
 most of their food purchases at supermarkets or grocery stores. Indeed,
 two of the city's ten census tracts qualify as food deserts.
- In this environment, access to transportation is a critical factor. Nearly eight
 in ten (79 percent) of city households that usually drive a car to a grocery
 store are food secure. In contrast, food insecurity characterizes 44 percent
 of the city households that rely on some other means of transportation to
 go food shopping.



The community food assessment research, conducted in 2010-2012, focused upon the situation of residents' food security and was guided by three research questions:

- 1. How do residents access healthy food in the City of Poughkeepsie?
- 2. How do City of Poughkeepsie residents make decisions about what to eat?
- 3. What constrains City of Poughkeepsie residents' food choices?

- Smaller food retailers represent significant sources of food for the
 city's population. About one in twenty (4 percent) of all city households
 reported buying most of their food from smaller establishments like
 corner stores, bodegas, and delis. A similar number (6 percent) reported
 purchasing most of their food from restaurants, fast-food, and
 take-out establishments.
- Corner stores and other small food retailers are particularly prevalent
 in the city's downtown and western areas. These establishments are
 important foundations for ethnic entrepreneurialism and neighborhood
 safety, and the food they sell isn't always more expensive when
 compared with supermarkets. However, the product variety, availability
 of fresh produce, and the quality and freshness of the food they sell is
 often problematic.
- When choosing where to buy food, residents say it's very important that
 a store: be easy to get to (69 percent), have better prices (65 percent),
 have healthy food (64 percent), and is close to home or work (64
 percent). One third (33 percent) said the store's acceptance of food
 stamps is very important in their consideration of where to shop.
- Chief reasons cited for buying certain foods, other than low cost, were the ease of food preparation and storage. For about half of households, food purchases were guided by priorities for particular kinds of foods: food from your family's background (50 percent), brand name (48 percent) and organic (45 percent).
- Residents care about what they eat: 84 percent read food labels sometimes or more frequently and 93 percent think that it is important for their stores to have healthy foods. Significantly, the likelihood that a household would prioritize choosing nutritious or organic food didn't vary by income level, indicating that food security seems more connected to lack of material resources and geographic mobility than to different food values or nutrition knowledge.

Established in 2010, the members of the teams guiding the Poughkeepsie Plenty research included the Poughkeepsie Farm Project, Cornell Cooperative Extension of Dutchess County, the Dutchess County Department of Health, Dutchess Outreach, Vassar College, and many other agencies, individuals, and local businesses. The initial goals of the Poughkeepsie Plenty initiative were: to create a research-based community food assessment (CFA); to draw upon community participation and input to create a plan (for improving the city's food system) using neighborhood and citywide action planning forums; and, to establish a community food coalition to facilitate and oversee the implementation of the action plan through coordinating projects, and monitoring and advocating for policy.

A door-to-door survey was administered in the City of Poughkeepsie, generating citywide measures for food security, food access, and food preferences. In order to contextualize this baseline data for the city as a whole, seven focus groups were conducted with defined segments of the city's food insecure at-risk population. Fieldwork, archival research, further interviews, and secondary data analysis were conducted to assess those broader features of the city's food system that shape households' food access and food preferences.

In addition to the idea of food insecurity, a structured picture of the food system guided the CFA's methodology. A food system is the organized chain of activities beginning with food production and ending with the disposal of food waste.

It has seven dimensions that impact or result from the character, quality, marketing, and availability of food.

Production

Exemplified by agriculture and farming, production refers to where food originates. Issues involve the ways in which food production is organized, such as industrialized methods and alternatives, organic farming, and local sourcing.

2 Processing

Much of our food is processed, altering it from its raw form to the form that people actually obtain. Issues entail food products' pre-preparation (with consequences for consumer convenience and nutrition), packaging, and marketing.

○| Transportation

As suggested by the idea of "food miles," food usually travels long distances before consumers access it. Issues include the geographical scale of consumer markets that farmers and food businesses may reach—international, national, regional or local—and the impact of transportation infrastructure on prices and environmental sustainability.

✓ I Distribution

There are different settings in which consumers can access food products. Most often this is through retail markets, but may also be through schools and institutions, emergency providers, and even backyard or community gardens.

Consumption

Consumption highlights how households prepare and eat food. Various household characteristics are relevant, such as money for food purchases, transportation to stores and other food providers, cooking skills, nutritional awareness, and dietary and cultural preferences for certain foods.

C | Waste

Uneaten food and product packaging end up in the waste stream. Issues include landfill capacity, composting, recycling infrastructure for packaging and food by-products (like cooking oil), and other destinations for unused food (such as food made informally available for "dumpster diving").

7 | Policy

This is a cross-cutting domain. Whereas the prior dimensions comprise a linear chain of food transformation, policy may intervene at various points within and between links of this chain. Policymakers can promote a variety of social goods or harms through subsidy, penalization, support, or inaction on issues such as corporate profit, wage and social safety net policies, hunger prevention, small-farm viability, and environmental sustainability.

In an era of agribusiness and global food production, food systems necessarily cross city limits. By emphasizing the City of Poughkeepsie's urban food system, the Poughkeepsie Plenty community food assessment calls specific attention to the local aspects of three domains in the food system: distribution, consumption, and policy. These provide the foundation for answering one of our primary points of focus, namely, how do people experience Poughkeepsie's food system?

Food security is defined by the United States Department of Agriculture (USDA) as access by all people at all times to enough food for an active, healthy life. At a minimum, food security requires the ready availability of nutritionally adequate and safe foods and assured ability to acquire acceptable foods in socially acceptable ways (that is, without resorting to emergency food supplies, scavenging, stealing, or other coping strategies). Conversely, the USDA defines food insecurity as "limited or uncertain availability of nutritionally adequate and safe foods or limited or uncertain ability to acquire acceptable foods in socially acceptable

ways" (USDA, 2006). The three categories of conditions are relative to a continuum of increased health risks: food secure, food insecure without hunger, and food insecure with hunger.

Figure 1. Three Conditions of Household Food Security and Continuum of Health Consequences

Food Secure

No food access problems or limitations, or so few as to not affect diets or food inake.

Food Insecure

...without hunger: reduced quality, variety, or desirability of diet; little indication of reduced food intake.

...with hunger: multiple indications of disrupted eating patterns and reduced food intake.

Least severe health/nutrition risks

Most severe health/nutrition risks

The City of Poughkeepsie

Research for the Poughkeepsie Plenty community food assessment was undertaken in the midst of a national economic downturn that, for many, resulted in lost jobs and prolonged economic stress. In 2009, 42.9 million Americans were receiving federal food stamp benefits (FRAC, 2010). In the City of Poughkeepsie, as in other communities with heavy concentrations of poverty, the recession only exacerbated long-standing economic distress and socioeconomic inequalities.

Poughkeepsie, the county seat of Dutchess County, had a population of 32,736 in 2010. Like many other smaller northeastern cities in the half-century after World War II, the City of Poughkeepsie experienced declining population, white flight, and increased concentrations of non-white, lower-income, and less-educated residents. The 2010 U.S. Census

estimated an unemployment rate of 12 percent in the city, 3 percent higher than the national rate (9 percent) and a median household income of \$39,061, which is over 25 percent less than the U.S. figure (\$52,762). Twentyfive percent of city residents and 37 percent of children under age eighteen reside in households reliant on incomes below the poverty level. These figures exceed the national statistics (of 14 percent and 20 percent, respectively). Four in ten femaleheaded single parent households and three in twenty seniors (age 65 or older) live in poverty. In the city's public schools, 80 percent of students in the 2011-12 school vear qualified to receive free lunches and another 11 percent were eligible for reduced-price lunches (NYS SED, 2012).

People in poverty are more likely to live in the city's northern neighborhoods, though households facing economic insecurity are found across all ten census tracts of the city. Neighborhood inequality also manifests in commercial underdevelopment in the city. Most importantly for the community food assessment, the City of Poughkeepsie lacked a large grocery store within its limits from 1992-2011. The recent opening of the Associated Supermarket in April 2011, across the street from what was previously the city's biggest grocer (a medium-sized Latin foods market), marked an important milestone. However, because these two grocery stores are located on the city's eastern edge, they only reduce the distance for many of the city's less affluent residents to a supermarket by less than a mile. The next closest supermarkets are in the neighboring Town of Poughkeepsie. Consequently, the two census tracts closest to the city center qualify as food deserts according to USDA criteria.



"Census tracts qualify as food deserts if they meet low-income and low-access thresholds:

- 1. They qualify as low-income communities, based on:
 - a) a poverty rate of 20 percent or greater,
 OR
 - b) a median family income at or below 80 percent of the area median family income;

AND

 They qualify as "low-access communities," based on the determination that at least 500 persons and/or at least 33% of the census tract's population live more than one mile from a supermarket or large grocery store (10 miles, in the case of non-metropolitan census tracts)." (USDA, 2014)



In a 2008 countywide telephone survey of residents conducted by the Dutchess County Department of Health, one in four (26 percent) City of Poughkeepsie residents reported difficulty accessing healthy food, a rate well in excess of that reported by residents of other municipalities in the county (CGR, 2009). Additionally, more than half of those who reported difficulty in buying healthy foods also said that such foods were too expensive. About a fifth of Hispanic and non-Hispanic black respondents in the 2008 survey of Dutchess County reported difficulty buying healthy food. By comparison, 10 percent of non-Hispanic white respondents experienced such difficulty (CGR, 2009).

Table 1. Demography and Food Security in the City of Poughkeepsie and the United States

	City of Poughkeepsie	United States
Race/ethnicity		
White	48%	72%
Black	36%	13%
Hispanic	20%	16%
Unemployment	12%	9%
Median Income	\$39,061	\$52,762
Poverty Rate		
All residents	25%	14%
Households with children	37%	20%
Female-headed single parent	40%	29%
Seniors (age 65 or older)	15%	9%
Food Security		
Food Secure	74%	86%
Food Insecure without hunger	15%	9%
Food Insecure with hunger	11%	5%

Source: USDA 2011, U.S. Census 2012

The Poughkeepsie Plenty Survey

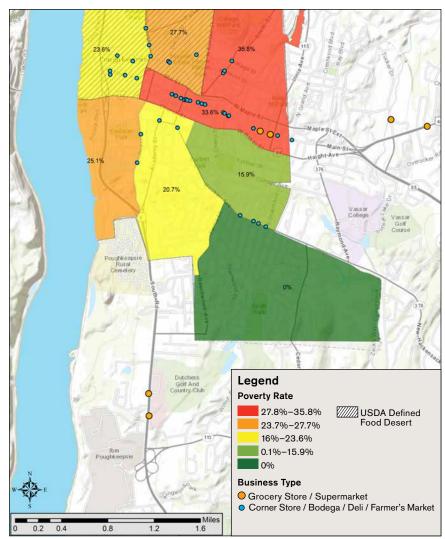
Against the backdrop of these indicators of local food insecurity, Poughkeepsie Plenty surveyed a random sample of City of Poughkeepsie households between October 2010 and April 2012 in order to gauge:

- 1. the extent of food security across the city;
- 2. the levels of access households have to grocery stores, other food retail, and food assistance; and.
- the criteria households use when choosing food retailers and food products to buy.

Since probability sampling was utilized to select households, these results may be used to represent not just the views and experiences of the surveyed respondents but the views of all City of Poughkeepsie households within a ± 5.5 percent margin of error. For example, we found that 40 percent of City of Poughkeepsie residents said it is very important to them that, aside from cost considerations, they be able to buy food that is easy to prepare. As a result of our sampling methodology, we can say with 95 percent confidence, that in 2012, between 34.5 and 45.5 percent of the total city population had this preference.

In order to gauge food in/security, and to facilitate possible comparisons, the survey incorporated the USDA's Household Food Security Scale. This scale includes six questions about households' financial ability to meet nutritional basic needs. These questions don't directly address household members' physical well-being, although

Map 1. City of Poughkeepsie Food Stores and Poverty Rate by Census Tract



Source: U.S. Census Bureau, 2008-10 American Community Survey 3-year estimates. Store locations are as of September 2012.

extensive research documents a strong relationship between magnitudes of food insecurity and nutritional ill health, with hunger and malnutrition being the most severe consequences. Following a protocol developed by researchers at the Centers for Disease Control, the six brief questions comprise a six-item scale to measure household food security. Based on the number of affirmative answers, the scale classifies households as either food secure (answering 0-1 questions affirmatively), food insecure without hunger (2-4 affirmatives), and food insecure with hunger (5-6 affirmatives).

St Peters Cemetep Saint Francis Hospital Underhill Rd 00000000 Vassar College Vassar Golf Course 114 m Poughkeepsie Rural Cemetery Mccann Memorial Golf Course Dutchess Golf And Country Club Legend City of Poughkeepsie USDA Defined Food Desert lbm Poughkeepsie **Business Type** Grocery Store / Supermarket Miles Corner Store / Bodega / Deli / Farmer's Market 0.2 0.4 0.8 1.2 1.6 Source: USDA. Note: Store locations are as of September 2012.

Map 2. City of Poughkeepsie Food Stores and Food Deserts

Figure 2: USDA Household Food Security Scale Survey Questions

- 1. In the last 12 months, did you or others in your household ever cut the size of your meals or skip meals because there wasn't enough money for food? [If "yes," ask question #2]
- 2. How often did this happen? [Affirmative answers: "almost every month" and "some months but not every month"]
- 3. In the last 12 months, did you or others in your household ever eat less than you felt you should because there wasn't enough money for food?
- 4. In the last 12 months, were you or others ever hungry but didn't eat because there wasn't enough money for food?
- 5. Please tell me whether this statement was often, sometimes, or never true for you or other members of the household in the past 12 months: "The food that we bought just didn't last, and we didn't have money to get more." [Affirmative answers: "often true" and "sometimes true"]
- Please tell me whether this statement was often, sometimes, or never true for you or other members of the household in the past 12 months: "We couldn't afford to eat balanced meals."

Source: Blumberg et al. (1999)

Nationwide, in 2010, 14 percent of households were food insecure, 9 percent without hunger and 5 percent with hunger. In metropolitan principal cities, these percentages were 11 and 6, respectively (USDA 2011). As Table 1 indicates, in 2012, City of Poughkeepsie residents were experiencing food insecurity at higher than national rates: 26 percent of households were food insecure. About two-fifths (42 percent) of these food insecure households were food insecure with hunger. That is, about one in ten (11 percent) City of Poughkeepsie households qualified as hungry by USDA standards.

Three critical factors are significantly correlated with household food security in the City of Poughkeepsie: income, race/ethnicity, and access. A majority of households (60 percent) with incomes less than \$15,000

annually were food insecure, including 32 percent food insecure with hunger. Over two-thirds (37 percent) of Hispanic households were food insecure, as were 36 percent of black and about one in five (19 percent) white households. Households that did not usually drive a car to go food shopping and those that got most of their food at places other than supermarkets or grocery stores were more likely to experience food insecurity.

Group characteristics that did *not* significantly correlate with food security in the City of Poughkeepsie deserve mention. These include household size and the presence of children in the household. These findings suggest that food insecurity is experienced among a range of households, from large families with many mouths to feed to those with individuals living alone.





Poughkeepsie Plenty Community Food Assessment (CFA) Household Survey

The survey was conducted via face-to-face structured interviews at residences in the City of Poughkeepsie. Social researchers recognize that sending people out to "pound the pavements" yields some of the worst survey response rates possible, particularly in urban environments where concerns about answering the door to strangers can run high. However, we employed this design because it best corresponded to our target population—all households in the City of Poughkeepsie, and not simply households with phones or people conveniently located at Poughkeepsie Plenty events. This made possible representative and generalizable baseline measures of food security and other characteristics for the entire city.

Households were selected using probability sampling methods. An random sample of 1500 addresses from all City of Poughkeepsie households was selected, as recorded by the Dutchess County Division of Planning and Development. Survey administration began in October 2010 and ended in April 2012. An advance courtesy letter informing residents of the nature of the project and of the possibility of an upcoming survey visit was mailed to all 1500 addresses.

Both the survey and the letter of introduction were prepared in English and Spanish. Surveys were conducted during daytime hours (10 am to 5 pm), on both weekdays and weekends. Vassar College students comprised the majority of survey administrators. Others included interns from the Dutchess County Department of Health, the Poughkeepsie Farm Project, Marist College students, Cornell Cooperative Extension employees, and other Poughkeepsie Plenty volunteers. A few bilingual surveys were administrated at Spanish-speaking households. More often, English-speaking interviewers provided a cover letter in Spanish, a printed Spanish-language survey, and a stamped addressed envelope to be mailed in upon completion.

Prior to going into the field, all administrators were trained about the nature of the project, the survey instrument, and standard protocols. Administrators visited the sampled addresses in pairs and asked to speak with "the person who does most of the planning or preparing of meals in this household." One administrator asked the questions and the other recorded responses. Each survey took an average of ten minutes to complete.

A total of 355 surveys were completed, a final response rate of 24 percent: 188 addresses were unusable (i.e., vacant properties, assisted living facilities, commercial), 644 were non-respondents, and 313 refused. The final dataset was weighted to reflect the race, Hispanic ethnicity, and income distribution of the City of Poughkeepsie according to U.S. Census 2010.

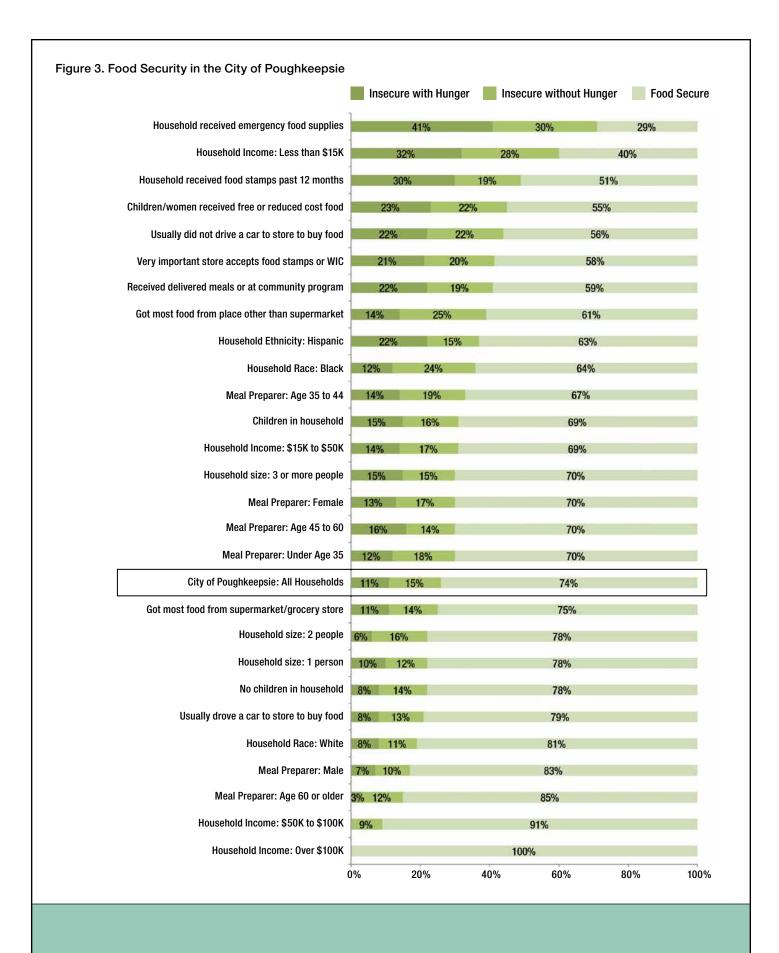
Focus Groups

In the spring of 2011, qualitative focus groups were conducted with two goals in mind. First, we wanted to gather commentary and elaboration on the closedended questions administered in the household survey. Second, since Spanish-speaking respondents were underrepresented in the household survey, focus groups provided an additional venue for these voices to be heard. From March 27 to May 16, 2011, we convened seven focus groups comprised of approximately 56 total participants. Sponsoring organizations included churches, emergency food providers, senior centers, community gardens, and health care providers. Interviews were not recorded, which means the focus group quotations in this report represent our note takers' paraphrasing and summary of participants' remarks unless quotation marks are shown (when note takers were confident they captured the exact statement).

Secondary Research

To assess the availability of fresh food, affordability of staple foods, and acceptance of EBT and WIC food benefits in the city's food retailers, we visited 22 small food stores in the city's downtown area twice, in October 2010 and in December 2011 (at least three small food stores had closed between these two dates). We also visited four supermarkets: Associated located in the City of Poughkeepsie (which opened in April 2011) and three others located in the surrounding Town of Poughkeepsie.

To estimate business failure and turnover among the city's food retailers, the business directory of telephone books from 1989-2009 (with the exception of 2007, which was missing) archived at the Adriance Memorial Library were examined. From these sources, names of commercial food retailers located on Main Street under the categories of "Grocery-Retail," "Delicatessens," "Convenience Stores," "Market," "Supermarket," and "Meat-Retail" or "Dairy-Retail" were recorded.

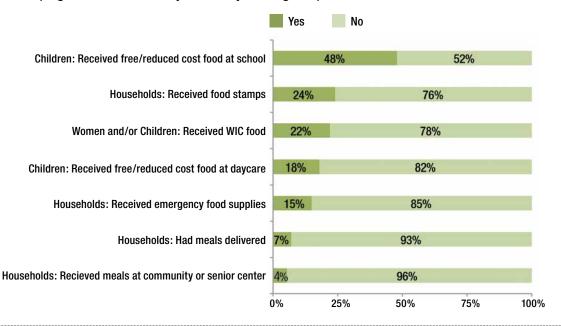


Social Programs and Public Benefits

A variety of social programs and public benefits exist to help people at risk gain access to the food they need. Although potential beneficiaries often don't know about such opportunities or even realize that they are eligible (according to the U.S. Census only about half [51 percent] of households in poverty received food stamps in the past twelve months), a substantial number of city residents reported participating in some type of food program. As Figure 4

shows, in 2012 about one quarter (24 percent) of City of Poughkeepsie households had received food stamp benefits and 15 percent got emergency food supplies from a church, food pantry, or food bank in the previous year. Low income households were much more likely to need these services: 75 percent of households with an annual income of less than \$15,000 received food stamps and 44 percent needed emergency food supplies.

Figure 4: Coping with Food Insecurity in the City of Poughkeepsie





Seventeen percent of food secure households received food stamps, compared with 31 percent of those that were food secure without hunger, and 66 percent of those who were food insecure with hunger.

Question wording:

In the past 12 months, did you or others in your household:

- a) get food stamp benefits that is, either food stamps or a food-stamp benefit card?
- b) receive any meals delivered to the home from community programs like "Meals on Wheels," or any other programs?
- c) go to a community program or senior center to eat prepared meals?
- d) get emergency food supplies from a church, food pantry, or food bank?

In the past 12 months, did any children in the household

- a) receive free or reduced-cost food at a day-care center or Head Start program?
- b) receive free or reduced-cost meals at school?
- c) (or women) get food through the WIC program?

Some food assistance programs are designated for children and mothers, two groups especially vulnerable to the effects of food insecurity. Among households with children, about a half (48 percent) had students in public grade schools that received free or reduced-cost meals in the preceding 12 months. (Note that in 2011-12, the Poughkeepsie City School District reported that nine in ten students were eligible for either free or reduced price lunches. Many households have more than one child in school.) Additionally, almost a fifth (18 percent) of city households with preschool-aged children received free or reduced-cost food at a day-care center or Head Start program. Finally, among households with women or children, 22 percent included someone who had received food via WIC over the past 12 months.

Where and How the City of Poughkeepsie Shops for Food

In 2012, over one-third (39 percent) of City of Poughkeepsie households who did not buy most of their food at a supermarket or grocery store were food insecure: 14 percent without and 25 percent with hunger. About four in ten (44 percent) of city households who did not usually drive a car to go grocery shopping were food insecure: 22 percent without and 22 percent with hunger.

Supermarkets or grocery stores are the source of the widest range and variety of food products, but about one in ten (12 percent) of city households reported that they got most of their food at other places like corner stores or restaurants. People age 35 or less (21 percent) and people who did not drive by car to do food



shopping (21 percent) were more likely to get most of their food in places other than supermarkets or grocery stores.

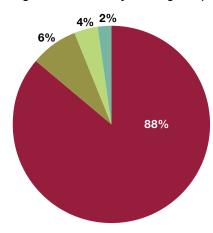
The 2010 U.S. Census reported that 27 percent of the City of Poughkeepsie's occupied housing units had no available vehicles. Survey results confirm that lack of easily available transportation is linked to food insecurity.

Over three quarters of households (78 percent) usually drove themselves by car to grocery shop, 3 percent took a taxi, 3 percent walked, and 3 percent had food delivered. Low income households were much less likely to have a car for food shopping: 50 percent of households with

an annual income of less than \$15,000 usually went food shopping some other way than by car. People who primarily shopped at supermarkets were more likely to drive a car to go grocery shopping: 81 percent of supermarket shoppers compared with 61 percent of those who grocery shopped at other places got to their destination by driving a car.

Only 4 percent of city households said they usually ride public transportation to do food shopping. In focus groups conducted for the Poughkeepsie Plenty community food assessment, participants who had no cars gave a number of reasons why the city's public buses aren't convenient for grocery shopping.

Figure 5: Where City of Poughkeepsie Residents Get Most of Their Food



Question wording:

Of these three kinds of places, where do you get most of the food that (you/people in your household) eat? (By this, I do not mean the store you go to most often, but the store you get the majority of your food.)

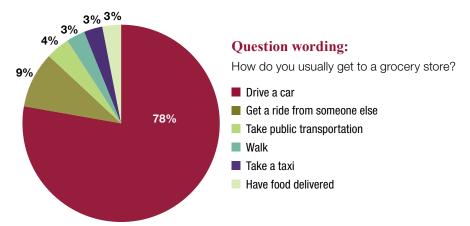
- Supermarket and grocery stores
- Restaurants, fast food places, take-out food
- Corner stores, delis, bodegas, warehouse clubs, produce stands, bakeries
- Some other way

Note: Previous questions identified supermarkets and grocery stores in the Poughkeepsie area as Associated Supermarket, Stop & Shop, Super Stop & Shop, Price Chopper, Adams Fairacre Farms, Casa Latina, and Mother Earth's Storehouse.



One in ten food secure households bought most of their food at places other than supermarkets or grocery stores. This compares with 18 percent of food insecure households.

Figure 6: How City of Poughkeepsie Residents Travel to Go Food Shopping





Over eight in ten (83 percent) food secure households usually drove a car to go grocery shopping; compared to 62 percent of food insecure households.

'Listen, you need transport, I'll charge you five dollars to go to Stop and Shop.' That's what we do here in Poughkeepsie.

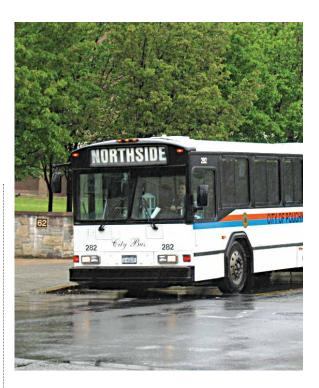
Although residents who primarily speak Spanish have language barriers to deal with when navigating the bus system, both Spanish and English speakers frequently cited logistical issues such as:

- · Getting on the bus with bags is difficult.
- There's a four bag limit on the bus.
- ...the north side bus doesn't run on Saturday; that's what it says on the schedule.
- The public transport system is terrible. It's not on time, or it just doesn't come.
- Sometimes people take the bus to the store and take a taxi back [because of the limit on shopping bags in buses].

A 2009 ridership survey conducted by the Poughkeepsie-Dutchess County Transportation Council underscored riders' dissatisfaction with the frequency and span of service on the city's two bus systems. Riders reported that accessibility was the public transportation systems' biggest problem. When asked to rate service features, "how often buses run (frequency of service), schedule availability, and when buses operate (span of service)" received the lowest favorable ratings.

Our survey results showed that about one in ten city residents (9 percent) relied on getting a ride from someone else when doing their shopping. Focus groups revealed these shoppers' resourcefulness: family, extended kin, and neighbors were frequently mentioned as sources of rides. Additionally, Spanish-speaking informants shared information about the informal raite system of community taxis:

- "Raite" are people in the community who give rides; they say, 'Listen, you need transport, I'll charge you five dollars to go to Stop and Shop.' That's what we do here in Poughkeepsie.
- It's better than taxis because there is no language barrier and it's cheaper.



- Sometimes it's more expensive because taxis have a limit on their meter.
- Yeah, but at least sometimes it's people you already know.

Although a household's income certainly affects transportation options, not having access to a car is a less important barrier to food security when large, full-service grocery stores are located within walking distance for all.

At the start of the Poughkeepsie Plenty community food assessment research, Poughkeepsie area large grocery stores and supermarkets included Stop & Shop, Super Stop & Shop, Price Chopper, Adams Fairacre Farms, Casa Latina, and Mother Earth's Storehouse. When the Poughkeepsie Plenty research commenced, the City of Poughkeepsie had no such large store within city limits. As previously mentioned, in April 2011, an Associated Supermarket opened across the street from Casa Latina, a mediumsized Latin goods retailer that previously counted as the city's only grocery store. Both of these stores are located at the city's eastern end —a mile away from the central business district, and even farther from many residential neighborhoods.

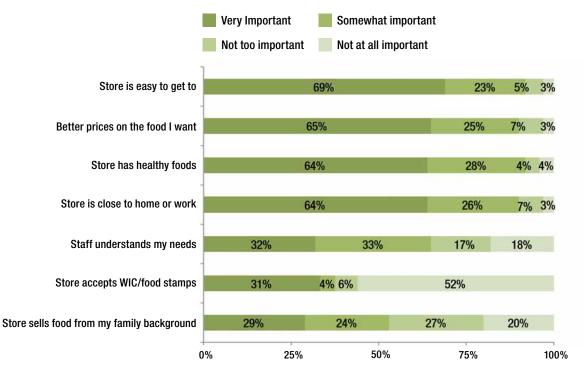
Household Consumer Preferences

City of Poughkeepsie residents take various factors into account when choosing the store where they usually buy most of their food. First and perhaps most important, they care about what they eat: 84 percent read food labels at least sometimes and 92 percent thought that it is important for their stores to have healthy foods. Other important considerations include: easy to get to (92 percent), better prices (90 percent), and close to home or work (90 percent). Majorities of residents cited the importance of shopping where there is a staff that understands their needs (65 percent) or where they can buy food connected to their family background (53 percent). Over one third (35 percent) said the store's acceptance of food stamps is important in their consideration of where to shop for food.



One third of households said it's very important that a store accepts WIC or food stamps: among these households, 20 percent are food insecure without hunger and 21 percent are food insecure with hunger.





Question wording:

These next questions ask about the store where you usually buy most of the food that people in your household eat. This may or may not be a grocery store. I'm going to list some reasons why you may choose a store for most of the food you eat. In choosing a store for most of the food you eat, how would you rate:

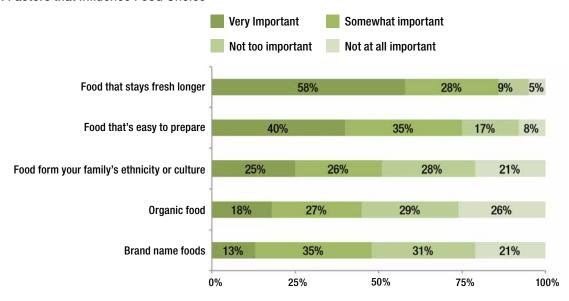
Focus group participants often stated that no single store in or close to the City of Poughkeepsie satisfies all these criteria. Additionally, they reported that some area supermarkets and grocery stores are preferred for their fresh produce but don't sell many non-food household sundries. Not all stores accept WIC/food stamps. Big box stores are attractive destinations for shoppers seeking to buy in bulk but these are located well beyond the city limits. The fact that shoppers must visit multiple stores in and out of the city in order to buy food and household goods cost effectively further underscores the crucial impact of transportation access and convenience on Poughkeepsie households' food in\security.

Members of our Spanish-speaking focus group reported shopping at bodegas and other corner stores frequently, since many of these in downtown Poughkeepsie specialize in Latin foods and goods. Still, Latino shoppers acknowledged the value of shopping at bigger supermarkets that targeted the "Anglo" shopper. They reported that:

- Fruit is fresher and goods are less expensive at larger supermarkets. The quality of the product makes up for the fact that supermarkets are located farther away.
- It's not in supermarket's interest to sell products that are close to expiring. If you buy a product that has already expired, you will have a hard time returning it to the bodega, since they sometimes don't even give you a receipt.
- There's better customer service at large supermarkets.

City of Poughkeepsie residents were asked, apart from cost, why they buy certain foods. Two factors related to maximizing utility were ranked highest: 86 percent and 75 percent of respondents rated staying fresh and easy to prepare, respectively, as very or somewhat important.







Seventy percent of food insecure households said it is very important they buy food that stays fresh longer; 47 percent said it needs to be easy to prepare

Question wording:

Now I would like to ask you about types of food you choose to buy. I'm going to list some possible reasons why people buy certain foods other than low prices. When you choose types of food to buy, how would you rate:



It's important that food be organic for 40 percent of households with annual incomes less than \$35,000.

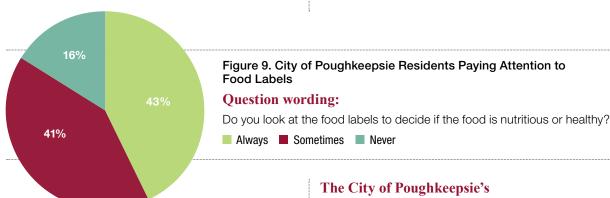
For about half of households, food purchases were guided by priorities for particular kinds of foods: food from family's ethnic background (51 percent), brand name (48 percent) and organic (45 percent). These patterns suggest that while city households may seek out different food types or have different dietary preferences, freshness and convenience is important for most.

Some food activists associate inclination toward consumption of organic foods with health and/or quality. Because organic foods can be more expensive than non-organic items, it's often thought that buying organic foods is correlated with income. However, our statistical tests revealed no significant relationship between household income and the predisposition toward organic foods. Households in higher income brackets are, for all intents and purposes, no more or less likely to rank organic

foods as important compared with households in lower income brackets.

The most direct survey measure of concern about nutritional value was a question about attention to food labels. Eighty-four percent of City of Poughkeepsie consumers take a look at food labels at least sometimes to determine if food is nutritious or healthy; 42 percent say that they always do it.

This is important. It is often assumed that the inclination to read food labels is influenced not just by nutritional education but by overall socioeconomic levels in general. As with buying organic food, no statistically significant relationship between reading food labels and income was found. Households in any income bracket are, for all intents and purposes, no more or less likely to look at the food labels to decide if the food is nutritious or healthy.





Nearly half (48 percent) of food insecure households always look at food labels to decide if food is nutritious or healthy.

About four in ten (41 percent) households with annual incomes of less than \$35,000 always look, as do 42 percent of households with annual incomes of \$35,000 or more.

The City of Poughkeepsie's Food Retail Landscape

Distribution within the Poughkeepsie urban food system—the nature and economic viability of the City's food retail sector—provides important context for understanding local patterns of food insecurity. With so few supermarkets located within or close to Poughkeepsie city limits, smaller retailers like corner stores, bodegas, dollar stores, and delicatessens dominate the city's food retail sector, particularly in the downtown and western areas. Smaller food stores significantly contribute to many residents' diets, as indicated by the finding in Figure 5. About one of every 20 households (4 percent) in the City of Poughkeepsie reported getting most of their food from these kinds of establishments.

Nearly half (45 percent) of the small food stores we observed sold produce or meat of some kind. Others sold ethnic foods or other specialty items that supermarkets carry less frequently. As a rule, however, smaller stores generally offered reduced variety in food items compared to supermarkets. Yet the effect of this on food affordability isn't clear, as is suggested by the comparison of average prices among the smaller food retailers in the City of Poughkeepsie and Town of Poughkeepsie supermarkets. While a gallon of milk or a box of cereal cost more on average in the city's smaller stores than in town's supermarkets, the average loaf of bread costs less (not taking into account the reduced variety of bread products sold in smaller food stores). Furthermore, about four in ten (40 percent) of the city's smaller food stores accept EBT and/or WIC benefits, another way that food is made accessible to low-income residents.

Perhaps a more important factor is the quality and nutritional value of food sold in the city's smaller food stores, which typically emphasize snacks, soda and processed foods. In smaller stores, fresh food items, when available for purchase, are often limited in amount. For instance, while 38 percent of the small food stores we observed sold produce of some kind, only two stores sold heads of lettuce. And, focus group participants reported that produce in these stores sometimes remained on shelves past peak freshness.

Despite these concerns about this aspect of the urban food system, it's important to recognize the positive role that smaller food stores play in the city's social well-being. These retailers often

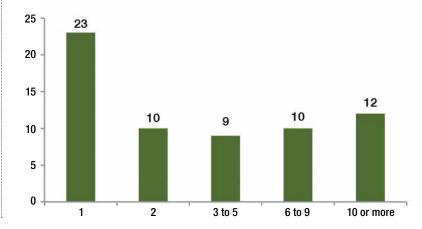
Figure 10. Average Prices for Staples



have a strong community basis, particularly in relation to the city's Latino, West Indian, and Middle Eastern immigrants. Ethnic entrepreneurs from these groups have contributed significantly to the city's economic development, inhabiting once vacant storefronts along Main Street and offering "eyes on the street" with an interest in maintaining street-side order. They are potential sources of local leadership and social capital where outreach to ethnic groups and coordination with city policymakers is concerned. The city's smaller food retailers face a relatively high rate of business failure and turnover

(see Figure 11). For example, the Spicy Peppers produce store on Main Street, a downtown source for fresh foods, went out of business during our research period. More generally, in the 1989-2009 period, of 64 such stores operating at any time within the city's limits, 23 (36 percent) were in business less than one year; only 22 (24 percent) had been open for longer than five years. In fact, of these 22, only seven remained by 2009: four delicatessens, two convenience stores, and one grocery store. Frequent business failure undermines food access among the many households who shop regularly at these establishments.

Figure 11. Years of Operation for Main Street Food Retailers





Food insecurity in Poughkeepsie is a local manifestation of national social problems: poverty, unemployment, underemployment, wage levels, and the fragility of the safety net. Local constituents can make their voices heard on these issues, but they will not be resolved locally. What follows are changes that can be made locally and regionally to address food security in the City of Poughkeepsie.

These local changes must focus on access to healthy and nutritious foods. Reliance on fast food outlets, bodegas, and other neighborhood stores that lack sufficient nutritious foods by those who experience food insecurity suggests that there is a market failure that can be mitigated by local policy intervention.

A caveat: it is important to remember that assuring access to healthy and nutritious foods is not the same as the distribution of free foods. There are already many charitable organizations that have been operating food pantries and soup kitchens for many years. While the work of these organizations is important, the scope of the food insecurity issues in the City of Poughkeepsie is too large and systemic to be remedied through so-called "emergency" charitable efforts. Rather, the remedy requires a food system approach.

The inconvenient location of full-service food stores and a lack of ways to get to them are major contributing factors to food insecurity in the City of Poughkeepsie. Access must be the focus. Fortunately, this is an area where local intervention can have a meaningful impact. There are two components of this issue: getting people to healthy and nutritious food and getting the food to people.

In the short term, something as simple as lifting the bag limit on City of Poughkeepsie buses to allow for families to grocery shop at supermarkets could have an impact. Currently, City of Poughkeepsie buses limit riders to four bags per passenger. This limit makes it difficult for families to use public transportation to shop for groceries.

In the longer term, the City of Poughkeepsie and Dutchess County could utilize the Loop Bus and City of Poughkeepsie Transit System to create a "Food Loop." This would be a bus route that runs with a focus on transporting local residents to and from food stores on a convenient schedule that coincides with the days and times when people are most likely to need public transportation to go food shopping. The Food Loop might also include farmers markets and other sources of healthy foods and could even incorporate support of regional agriculture by offering seasonal "pick your own" events at participating farms.

This is bringing people to food. Healthy food can also be more efficiently brought to people. One way to do this is by partially subsidizing a program that would coordinate the delivery, sale, and distribution of affordable healthy food in city neighborhoods. A mobile farmers' market, wholesale buying cooperative and/or food recovery initiative might be started. The Food Security Coordinator in Orange County and the nascent Ulster County Food Policy Council are models for this. They provide opportunities for collaboration and guidance on how to leverage private funding and establish a sustainable program that ensures that local and regional food resources, including agricultural surpluses, reach food insecure households in City of Poughkeepsie neighborhoods.

Another possibility is to develop a system of incentives to encourage sale of healthy foods in existing small stores within the city. There are many possible approaches: economic development initiatives; tax incentives; grant programs; or partnerships among local businesses to purchase nutritious foods collectively, thereby achieving economies of scale to reduce costs. One innovative pilot program that might be replicated in the City of Poughkeepsie as a public-private partnership is the Michigan "Double Up Food Bucks" program. Through funding from private and community foundations, this program offers SNAP recipients the opportunity to stretch their benefits if they purchase fresh fruits and vegetables. Through this program SNAP recipients who shop at a participating location have up to \$20 matched with "Food Bucks." The "Food Bucks" can then be redeemed for Michigan grown fruits and vegetables. If implemented in the City of Poughkeepsie, the program would benefit SNAP recipients (by providing more nutritious and healthy foods) as well as local farmers. Ideally, the "Double Up Food Bucks" locations would include farmers markets as well as the recommended mobile farmes' market for Poughkeepsie



thereby encouraging food shopping at locations where more healthy choices are available and affordable.

The city's commercial underdevelopment exacerbates the problems of food access and food security for many residents, particularly in the downtown vicinity. This is why it important for city leaders and business groups (like the Chamber of Commerce) to support Main Street's smaller food retailers, particularly those run by ethnic entrepreneurs. Ethnic entrepreneurs are likely to respond to consumer demands for culturally appropriate foods, they provide employment and useful information/contacts for many downtown residents, and their businesses help maintain an increasingly vital downtown core. These ethnic entrepreneurs are at high risk. They are focused on staying in business day-to-day and, in general, have little familiarity or contacts with city government and elite civic groups. Initiatives must therefore be inclusive of these businesses jointly with business, government, and not-for-profit city leadership.

Finally it is important that interested advocates remain organized, focused, and directed. In order to affect long-term change to the food insecurity issues that the City of Poughkeepsie faces, civil society and affected populations need to be central to crafting solutions. The Poughkeepsie Plenty Food Coalition is a vital partner in these efforts, as an energized network of individuals and organizations committed to a vision of change in the City of Poughkeepsie. The coalition works in an ongoing manner to identify opportunities to launch and coordinate programs, monitor and advocate for a supportive policy environment, and build capacity to create change.

The issue of healthy food access resonates for residents of the City of Poughkeepsie. City leadership and those who aspire to lead in the City of Poughkeepsie must commit to sustained efforts to become a model city that dramatically reduces—and ultimately eliminates—food insecurity.



Author Bios

Leonard Nevarez is the chair of the Sociology Department and a professor of Urban Studies at Vassar College. He is the author of *New Money, Nice Town* (Routledge, 2003) and *Pursuing Quality of Life* (Routledge, 2011). Since 2003 he has been organizing classroom research for Poughkeepsie community development organizations such as Poughkeepsie Plenty, Hudson River Housing, and Center in the Square.

Susan Grove, in her past role as Executive Director of the Poughkeepsie Farm Project, was the Principal Investigator of the Poughkeepsie Plenty initiative—funded by a USDA Food and Nutrition Service Hunger-Free Communities Assessment and Planning Grant—to conduct a community food assessment, mobilize community participation in food system change action planning and launch a coalition. She now serves as the Coordinator of Poughkeepsie Plenty Food Coalition that works to ensure the right for all in the City of Poughkeepsie to access sufficient and nutritious food. In addition, she provides services to mission-based organizations to define and achieve outcomes by facilitating engaging processes for stakeholders to generate ideas and arrive at shared agreements and actions.

KT Tobin is the Associate Director for CRREO at SUNY New Paltz, where she is also an adjunct lecturer in Sociology. At CRREO, she is responsible for designing, conducting, managing, and producing studies on regional issues and concerns. Recent publications include: with Brian Obach (Sociology), Managing Empirical Sustainability Research in Social Science Classes and Agriculture Supporting Communities in the Mid-Hudson Region; and with Maureen Morrow (Biology), Communicating Student Research at SUNY New Paltz to State and Local Elected Officials. KT is the former Vice President of the New Paltz School Board, and has served on several community committees including New Paltz GreenWorks and New Paltz Flood Aid.

Joshua Simons is a Senior Research Associate for CRREO at SUNY New Paltz. He holds a Bachelor's Degree in Political Science, magna cum laude (2008), from SUNY New Paltz. He specializes in geographic information systems, redistricting, and shared service analysis. Some of his recent projects include the creation of an online interactive map and web site to display information on properties of historic significance in the Town and Village of New Paltz, and serving as the redistricting consultant to the Redistricting Commission of the City of Oneonta to create a viable redistricting plan for the city, and document the process. He also serves as the co-chair of the Policy Working Group of the Poughkeepsie Plenty Food Coalition.

Sources

For a complete list of works cited for this paper please reference the electronic version on the State University of New York at New Paltz CRREO website: www.newpaltz.edu/crreo

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The Poughkeepsie Plenty Food Coalition is a group of individuals and organizations that have envisioned Poughkeepsie as a food city where everyone can secure, prepare, enjoy and benefit from healthy food.

We are working to organize our community and build a diverse movement for change to ensure the right for all residents of the City of Poughkeepsie to secure sufficient and nutritious food.



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