Increasing Food Access in Lower-Income Areas: Tools for Planners

by

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Research Issue
The lack of access to healthy food is increasingly recognized as a problem that will not be solved by health departments alone. A number of potentially innovative, cross-disciplinary strategies to combat food deserts – areas with little to no local access to healthy food – have recently been put into action. In New York City, two unique strategies that have been implemented are the Food Retail Expansion to Support Health (FRESH) Program and the NYC Green Carts Program. Each of these programs addresses food access issues through zoning, economic incentives, and community and intergovernmental partnerships. Through an analysis of these strategies, this paper will attempt to partially answer the questions of why planners should care about food and what contributions planners can make to improve access to healthy food.

The analysis finds that planners can use their interdisciplinary skills to add value to each of these programs. In addition to strong community development techniques, planners are able to analyze land use patterns, demographic and economic data, and influence and collaborate with other governmental agencies.

Introduction
Food deserts are physical areas where populations have limited or no access to healthy, fresh food. These areas generally have a high proportion of lower-income residents and a high proportion of food outlets with limited or no healthy food options. Food deserts can be urban or rural.

The definition of a “food desert” varies greatly. Definitions can be based on location, wealth, or lack of competition among grocery stores. Henrickson et al defines food deserts as “urban areas with 10 or fewer stores and no store has more than 10 employees.” Cummis and MacIntyre define a food desert according to spending power: “poor urban areas where residents can’t buy affordable food.” For this paper we will use the definition that the U.S. Farm Bill provides: “an area in the United States with limited access to affordable and nutritious food, particularly such an area composed of predominately lower-income neighborhoods and communities.” (Tester, Stevens, Yen, 2010).

Where do planners fit in?
Planners have long addressed public health problems by manipulating physical environments. The first zoning laws were enacted to separate homes from polluting, unhealthy industries. The successes of planned, pedestrian-friendly neighborhoods depends in part on the health benefits conferred by lower pollution and increased physical activity. Planning for parks and greenways revolves around health and quality-of-life improvements. A transportation planner who advocates for efficient transit networks and bicycle pathways may also end up lowering asthma rates and increasing physical fitness. Nevertheless, planning as a discipline has historically paid scant attention to food systems.
Much of the literature on food systems and food deserts originates from public health and nutrition departments. When papers involve planning, they tend to be centered on transportation, urban gardens, and farmland preservation and their attendant economic and community benefits. Despite widespread acknowledgement that impoverished areas are often food deserts, the planning literature touches only briefly on food security in underserved communities. The APA Policy Guide “Planning for Sustainability” vaguely alludes to food insecurity as a concern: “Minority groups continue to have less access to economic opportunities, adequate food and shelter, and needed services.” (APA, 2000).

Pothukuchi and Kaufman note several important reasons planners should become involved with food systems, most notably the fact that it is vital to human existence. The authors argue that planners advocate for healthy air, water, and shelter through smart urban design, promotion of compact neighborhoods, storm water management, public transportation, affordable housing mandates, and mixed use developments, and ask why planners do not take more of an active role in food production and distribution (Pothukuchi, Kaufman 2000).

Food access is not only an important aspect of a local economy but access to healthy food is a critical part of neighborhood revitalization. In “The Food System: A Stranger to the Planning Field,” Pothukuchi and Kaufman assess planners’ ignorance of food systems through a literature review and interviews with practicing planners. The planners interviewed note several reasons for their lack of involvement: food is not directly associated with planning, food is a rural issue where planners usually focus on farmland preservation, food systems are regarded as private markets that do not lend themselves to intervention, food systems studies lack funding in planning departments, and the food systems are perceived to be stable (Pothukuchi, Kaufman 2000).

Although malfunctioning food systems and food deserts may always be of primary concern to public health professionals, planners have tools that public health departments do not. Two of planning’s primary tools, zoning and land-use regulation, are already applied to achieve health-related goals, and can be creatively extended to affect food availability. Planners’ interdisciplinary education provides an unusually broad understanding of problems facing populations and the design, economic development, transportation, land-use, and community-development strategies that address these problems. Because food systems problems have causes and symptoms that range far beyond the spheres of agriculture and health, planners are well positioned to propose connections and strategies for creating healthy food systems and healthy communities. This paper seeks to legitimize planning strategies as tools for tackling food system malfunctions.

Two strategies to increase access to healthy food:
This paper will look at two strategies to increase access to healthy food. First, it will examine New York City’s new Food Retail Expansion to Support Health (FRESH) program. The FRESH program seeks to encourage small- to medium-sized supermarkets to locate in food deserts through the use of targeted zoning amendments and economic incentives. The program has contributed to the opening of one new supermarket and three expansions since it began in 2009 (http://www.nyc.gov/html/dcp/html/fresh/index.shtml).
Second, it will examine New York City’s Green Carts program. The Green Carts program takes a mobile approach to food access in underserved areas. The program opens these areas to mobile food vendors but restricts the vendors to selling only fruits and vegetables. The New York City Department of Health and Mental Hygiene (DOHMH) identified underserved neighborhoods for both the FRESH and Green Carts program. Over a two-year period, one thousand vending permits will be issued; at the end of the two years the program will be reevaluated (http://www.nyc.gov/html/doh/html/cdp/cdp_pan_green_carts.shtml).

If planners are to successfully contribute to food systems planning, they will need to become familiar with food subsidies such as the Supplemental Nutrition and Assistance Program. SNAP, colloquially known as food stamps, is a program that increases the food-purchasing power of low-income populations. Planners can use SNAP to their advantage by viewing it as an economic development tool. Contrary to commonly held perceptions, low-income areas often generate substantial demand for food because of SNAP subsidies. Department of Health data on local SNAP participation rates can help businesses see the market potential of an area. Planners are already familiar with subsidies for land use, transportation, and economic development. By becoming familiar with subsidies for food, planners will increase their effectiveness: data on SNAP benefits can be deployed to attract investment. Since Electronic Benefit Transfers (EBT) are the way SNAP funds are distributed, planners need to look closely at EBT acceptance as a component of planning to improve access to healthy food.

Planners have mapping tools, land-use expertise, and interdisciplinary analytic abilities to contribute to the fight against food deserts. Planners can also expand the discipline of food systems planning. Links between public health and planning already exist, but creative strategies for work on food systems are only starting to emerge. This paper will attempt to strengthen these links by evaluating cross-disciplinary strategies that rely on planning tools and expertise for implementation and success.

**Methodology**

A literature review was conducted to demonstrate the gaps in the planning literature as well as serve as a reference for planners who are attempting to bridge the gap between planning and food systems. In addition, I interviewed program administrators and community groups to gain multiple perspectives about these two programs. I interviewed representatives from the New York City Department of City Planning, New York City Department of Health and Mental Hygiene, New York Economic Development Corporation, Korean Produce Association, WHEDco, and Karp Resources. (See Appendix for a list of questions asked.) Storeowners who have used FRESH incentives and green cart owners could not be reached.

My analysis of each program looked at its efficacy and assessed where planners were valuable and where increased involvement by planners could have benefited the program. First, I looked at the reasons for the creation of each program. Both programs attempt to bridge gaps between economic development, planning, and public health. Identifying these gaps demonstrates areas where planners can help strengthen food systems. Second,
I looked at the implementation of each program: Does it address the reasons the program was created? What compromises were made? Last, I evaluated each program’s success, including its future potential. I explicitly looked at the presence and contribution of planners in each of the programs.

For the FRESH program I analyzed the opportunities and challenges in its implementation. Since the program is new, I was unable to gather before and after retail leakage data in areas where FRESH incentives were used. Many of the supermarket expansions have not been completed or are too new to have relevant data. For the Green Carts program, I looked at the demand for permits over time to get a sense of the programs popularity with (and hence, profitability for) vendors. This data may also point to trends that can inform an analysis of the program’s sustainability. Interviews with the program coordinator at the Department of Health and Mental Hygiene, Karp Resources, and the Korean Produce Association gave me anecdotal evidence for evaluating the effectiveness of the program. Unfortunately, the Karp Resources administrator was unable to grant me an in-depth phone interview (she cited overwhelming media requests for information). We corresponded by email, but I obtained most of the program specifics from a DOHMH employee directly involved in the Green Carts program. I was unable to identify a green cart owner willing to be interviewed, largely because most are inactive during the winter.

Through data and interviews, I analyzed the long-term feasibility of each program and its strength and weaknesses. In addition, I looked at the purchasing power of neighborhoods with high levels of SNAP participation for the FRESH and Green Carts programs. I also looked at the impact each program has on local economies.

**FRESH: What was the impetus for the program?**

Over the last few years New York City has lost a number of supermarkets. At the time the FRESH program was being conceived, the real estate market was at its peak and drugstores were locating across New York City. These drugstores were able to pay a premium for land and were expanding their market to offer non-perishable and perishable food (Bryon, personal communication, March 4, 2011). Drugstores’ expansion into food sales has infringed on traditional supermarkets’ profits creating an even greater need to incentivize supermarket construction and expansion.

There are several challenges to opening a supermarket in New York City. First, it is often cost-prohibitive for a large-scale store to acquire a large tract of land in a dense city with high land values. In New York City, it is hard to acquire large tracts of land in high-traffic areas and therefore many large tracts of land are located in undesirable retail areas. In addition, there is usually a minimum-parking requirement for supermarkets, which adds extra cost to the project without adding extra retail space. Land use planners are able to offer expertise in assembling parcels of land and adjusting parking requirements to meet the unique demands of urban supermarkets. Second, supermarkets’ have traditionally slim profit margins due to the nature of the products they offer. These thin profit margins make it difficult to justify a heavy initial investment in areas with high land values. Compared to supermarkets, drugstores offer higher value products (with
larger profit margins) and are therefore able to pay a premium for land. Lastly, increased competition from non-traditional food stores (i.e. drugstores which have sometimes expanded their products to food items) make it harder for supermarkets to earn a profit. Supermarkets are not able to compete with drugstores for desirable tracts of land due to their low profit margin.

In recent years prior to the FRESH and Green Carts Program, the Mayor’s Office had become particularly interested in health issues and increasing access to fresh produce. In 2008 a study to assess supermarket need was commissioned which spurred several other reports. Their findings solidified a need to incentive supermarket development.

**Going to Market Study**

In 2008, the Mayor’s Office commissioned the “Going to Market” study to address the growing concerns of lack of supermarket access (Going to Market, 2008). In order to determine what areas of the city were experiencing the greatest disparity, the study authors created a Supermarket Need Index (SNI). A supermarket was defined as a “large corporate “chain” food store, distinguished grocery stores, or smaller non-corporate-owned food stores” as defined by an article in the American Journal for Preventative Medicine: “Supermarkets, Other Food Stores, and Obesity: The Atherosclerosis Risk in Communities.” For the purpose of this paper we will use this articles definition of convenience stores for local convenience stores and bodegas: “food stores that carry a limited selection of foods, mostly snack foods, whether or not attached to a gas station” (Morland, 2006).

The Supermarket Need Index looked at the number of grocery stores relative to the number of neighborhood residents, low access to an automobile at the household level, low household incomes, high rates of diabetes and obesity, low consumption of fruits and vegetables, low share of fresh food retail, and capacity for new stores. In order to determine how many grocery stores were needed, the study started with the national supermarket ratios (typically 50,000 square feet - 100,000 square feet for every 10,000 residents within a 8- to 10-minute drive (Going to Market, 2008) and readjusted them to fit the needs of a dense, urban area. Next, the average citywide supermarket ratio was calculated and compared to the ratio for community districts within each borough. The citywide supermarket ratio is 15,000 square feet for every 10,000 neighborhood residents, but the City Planning Department felt the average was too low; they set a standard of 30,000 square feet per 10,000 neighborhood residents. Each community district within each borough was assessed to see whether the district met, exceeded, or fell short of the city average ratio. Only two community districts within all 5 boroughs exceeded the City Average Ratio; and both of these Community Districts were located in Manhattan (see table 1).

Table 1: New York City Community Districts that meet City Average and City Planning Supermarket Ratios

<table>
<thead>
<tr>
<th>Borough</th>
<th>Total Community Districts (CD)</th>
<th># CD Meet City Average Ratio</th>
<th># Meet City Planning Standard Ratio</th>
</tr>
</thead>
</table>

5
After looking at all of these inputs, the “Going to Market” study authors found that over three million New Yorkers were living in areas with a high need for a grocery store. The study also found that residents in lower-income areas without grocery stores were likelier to be over charged, because of lack of competition in these areas. The inventory within food outlets such as bodegas, convenience stores and pharmacies was usually limited to non-perishables and was more expensive than the same products sold at supermarkets. For this reason, residents of lower income areas were spending more time and money on grocery shopping compared to middle- and higher-income areas. These convenience-type stores rarely, if at all, sold meat or fresh produce. The dearth of fresh fruits and vegetables, whole grains, and fresh dairy in these areas often leads to higher rates of obesity, cardiovascular disease, and diabetes (Morland, 2006).

### FRESH: Who were the partners?

**Mayor’s Office/ Food Policy Coordinator:**
The Mayors office developed a Food Policy Coordinator position in January 2007. The position entails developing food policy in three areas: 1) increasing access to food support programs 2) Making the food served by the city healthier 3) Promoting healthy food access (Office of the Food Policy Coordinator, 2011). Ben Thomas, the Food Policy Coordinator at the programs inception, approached the Department of City Planning to look at different measures of food access (Bryon, March 4, 2011). In conjunction with the Department of Health and Mental Hygiene, the Economic Development Corporation, the Department of City Planning looked at why supermarkets do not open in some areas and why certain areas continue to be plagued with unhealthy food options. An article published in 1993, “Seeds of Change: Strategies for Food Security for the Inner City,” takes an in-depth look at food insecurity in the inner city. Through an interdisciplinary look at food security, the article touches on a wide array of disciplines including nutrition, public health, community economic development, and transportation. The authors’ recommendations include increasing the number of Food Policy and Planning Councils and more effort by transportation planners to integrate routes along food distribution outlets (Ashman, Dohan, De la Vega, et. al., 1993). While Food Policy Councils have taken root in cities across the country, the role of planners in these organizations remains unclear. In NYC planners have a distinct role outside of the Food
Policy Coordinator but are heavily involved in the discussions between the Coordinator and municipal agencies.

With the creation of the Food Policy Coordinator and the Food Policy Task Force, Mayor Michael Bloomberg committed to combating low access to fresh, affordable produce. The FRESH program stems from this commitment and has had the support of the Mayor’s Office and City Council since its inception (Bryon, March 4, 2011). The creation of the Food Policy Coordinator position and Food Policy Task Force, showed support not only to combat food access issues but also encouraged communication for food access issues between city agencies.

**Department of City Planning:**
The FRESH program implementation required collaboration between several city agencies but the springboard for this program came from the Mayor’s Office and Food Policy Coordinator. The leadership by the Food Policy Coordinator and the collaboration of city agencies was instrumental in bringing various perspectives together to create effective policies regarding access to healthy, affordable food. The process was a “coordinated effort” that was “handled very well” according to a city planner. There was significant community outreach; the planning department reached out to grocery store workers unions, community health advocates, and community residents (Bryon, personal communication, 2011). A 2000 study looking at planners’ involvement in food systems planning, finds that planners’ involvement in the food system is most successful when collaboration occurs with other agencies or groups (i.e. a public health department). “Neighborhood planners could conduct food specific needs and resource analysis in low-income neighborhoods.” (Pothukuchi, Kaufman 2000).

The partnership between the Department of City Planning and Department of Health and Mental Hygiene was crucial in helping this program to succeed. A city planner who worked with the DOHMH said that the DOHMH “were a great partner in all of this. We really liked working with them. They’re just really creative, curious, and dedicated people. (They are) a really great partner” (Bryon, personal communication, March 4, 2011).

**Economic Development Corporation:**
Although the zoning incentives originated from the Department of City Planning the economic incentives came from the NYC Industrial Development Agency (NYCIDA), a subset of the EDC Economic Development Corporation’s (EDC). The EDC’s expertise and knowledge of economic incentives in their program and other city agencies was an asset in developing the FRESH incentives. In addition, their existing relationships with developers and ability to connect supermarket owners and developers are an asset.

**FRESH: Program Mechanics**
On December 9, 2009, New York City Council adopted the FRESH Food Stores text amendment. The amendment defines the FRESH program requirements, mechanics, and tax and zoning incentives. The FRESH program is open to existing supermarket owners and operators who would like to renovate or expand their supermarket businesses and to developers who would like to construct or renovate space for a supermarket in a FRESH
area. All stores must be in a FRESH Zone to receive either the zoning or tax incentives. The distinction between FRESH areas and FRESH zoning areas is that supermarkets in FRESH areas are only eligible for economic benefits while supermarkets in FRESH zoning areas can take advantage of tax and zoning incentives. All of the incentives discussed in this paper are only applicable in FRESH zones.

The retail requirements for a FRESH store are:

- Provide a minimum of 6,000 square feet of retail space for general line of food and nonfood grocery products intended for home preparation, consumption, and utilization
- Provide at least 50% of a general line of food products intended for home preparation, consumption and utilization
- Provide at least 30% of retail space for perishable goods that include dairy, fresh produce, fresh meats, poultry, fish and frozen foods
- Provide at least 500 square feet for fresh produce

**FRESH: How can planning tools incentivize community supermarkets?**

In order to be a certified FRESH supermarket, the supermarket has to have taken advantage of the zoning incentives and meet the retail requirements. The incentives came from the Department of City Planning. Eligible zoning incentives are locating as an as-of-right in a light manufacturing district, additional Floor Area Ratio (FAR) benefits, and reduced parking requirements.

As part of the Supermarket Need Index, the city came up with the City Planning Standard Ratio goal of 30,000 square feet of supermarket space per 10,000 residents. One inherent problem with the goal is that zoning in light manufacturing districts (M-1) prohibited stores over 10,000 square feet (except by special permit which requires a public review (Going to Market, 2008). To further incentivize supermarket development, M-1 light manufacturing districts within designated FRESH zones will allow supermarkets to locate as-of-right. Previously, stores in M-1 districts were only allowed up to 10,000 square feet, but now supermarkets in the FRESH areas are allowed up to 30,000 square feet; they may also locate as-of-right (Bryon, personal communication, March 4, 2011). This saves developers from a lengthy permitting process, saving valuable time and money. This incentive may sway developers to locate in a M-1 FRESH areas, to serve an underserved population, compared to locating in a M-1 area with uncertainty about permit approval. Land use policies, regulations, and size restrictions for stores all create additional costs for supermarkets. These additional costs are directly offset by the unique zoning incentives created by the FRESH program.

The protocol required for zoning amendments in these areas was time consuming. Before passing the FRESH zoning amendments, an environmental review, a public approval hearing, approval from the City Council and notification to community districts and the borough presidents were all needed. The zoning amendment process took over seven-months. When asked whether the program would be expanded to other areas of the city,
the city planner noted the long time commitment to gain approvals presents one challenge to FRESH program expansion (Bryon, personal communication, March 4, 2011).

An additional zoning incentive allows an increase in development rights by allowing additional residential Floor Area Ratio (FAR). When a developer is constructing a ground-floor supermarket in a mixed-use building with affordable housing, additional residential FAR is allowed. There is a one-to-one supermarket-to-residential square footage bonus; for every square foot of supermarket retail that is constructed, one additional square foot of residential floor area may be added (up to 20,000 square feet). This is similar to a commonly used density bonus, but density bonuses have never been used for supermarket construction.

Another FRESH incentive reduces the parking requirement. In commercial districts that permit residential buildings with ground floor retail, up to 40,000 sq feet of parking requirements will be exempt. In commercial and light manufacturing districts, up to 15,000 sq feet of parking requirements will be exempt. This allows developers to assemble less parcels and maximize the amount of retail space. This is particularly beneficial due to the high cost of land in New York City and supermarkets slim profit margin.

**Financial Incentives:**
In addition to the FRESH zoning incentives, the EDC offers several economic incentives. The EDC has tried to encouraged investment and private partnerships by offering networking sessions, reaching out to developers, and providing a list of potential funding sources not in the FRESH program. The EDC’s efforts have not only educated the public and private sector about the program but have made it easy for the private sector to locate non-traditional funding sources.

Philadelphia’s Fresh Food Financing Initiative, which has been successful in increasing healthy food access to underserved populations, has inspired many of the economic incentives FRESH offers. The economic incentives originated from the NYC Industrial Development Agency (NYCIDA), a subset of the EDC. All benefits offered through NYCIDA are subject to approval. NYCIDA staff must approve each company and determine eligibility individually. Some of the incentives NYCIDA offers are sales tax exemption, mortgage recording tax deferral, and real estate tax reductions. There is an 8.875% sales tax exemption on materials used to construct, renovation or equip facilities. The mortgage recording tax deferral is equal to 2.05% of the mortgage amount for mortgages of $500,000 or less and 2.80% for mortgages higher then $500,000. Other economically attractive benefits that may be offered are real estate tax abatements and reductions. A twenty-five-year tax abatement may be offered equal to each full time employee at the time of application multiplied by $500. If the property is in an Empire or Empowerment Zone (Federal initiative that uses public funds and tax incentives to spur private investment), then the full value of the land tax is reduced. A twenty-five-year stabilization of building taxes may be offered based on the pre-improvement assessed building value. Currently there is one certified FRESH supermarket awaiting review by the Department of City Planning and two supermarkets that have taken advantage of FRESH area economic incentives.
In addition to these incentives offered through FRESH, there are additional incentives developers and storeowners may be able to take advantage of such as NYSERDA energy incentives and loan assistance through New York Healthy Food and Healthy Communities Fund. These incentives are advertised through the EDC for potential supermarket projects but are not part of the FRESH program. This comprehensive list of eligible incentives educates developers and storeowners about additional funding sources, potentially saving them time and money.

The City Planning Department and EDC have also reached out to developers and the real estate community by hosting networking sessions. Operators and developers are invited to attend education sessions about the program and also allow networking opportunities to facilitate partnerships between attendees. These sessions not only serve as an education tool for the program but also allow attendees to form partnerships they may not have had exposure to previously. The marketing efforts are effective ways to gain private sector interest and facilitate relationships between operators and developers.

**FRESH: How can supermarkets increase public health and spur economic development?**

Food systems affect neighborhoods in large ways and small, but one of their most significant effects is on local economies. Food spending is a large part of household budgets (usually second only to housing costs). Food businesses create spaces for community engagement. Small retail food businesses are an easy entry point for local entrepreneurs. The population served by food markets is generally local, which ensures a steady stream of revenue. Frequently, food markets keep money from flowing out of local economies because they employ and are sometimes owned by locals. If consumers can be persuaded to favor locally produced food, the local community retains even more money.

When supermarkets are located within communities, residents spend less time traveling to food stores outside their neighborhoods, which saves time and transportation costs. Similar to schools, post offices, and religious institutions, supermarkets act as community anchors. The local supermarket is a place neighborhood resident’s visit frequently – it quickly becomes a community staple. Supermarkets strengthen overall public health by providing affordable food and increasing food options to SNAP participants. Communities with few to no supermarkets may be price-gouged because of a lack of competition. In addition, many local convenience stores and smaller stores do not accept SNAP benefits or may not offer a wide variety of SNAP-approved products. Locating a supermarket in a community with high SNAP participation allows low-income residents to purchase healthier food and provides the supermarket with a guaranteed base of customers.

As a result of supermarkets’ stability, their presence has the power to revitalize a community by increasing property values and quality of life. Supermarkets have a unique ability to not only increase community health but also spur economic development. In February 2010, two projects in the Bronx were approved under the FRESH Program: Foodtown in the Norwood neighborhood and Western Beef in the Tremont.
neighborhood. Foodtown is constructing an 11,000 square foot store and is able to take advantage of $3 million in tax incentives. In December 2009, a 7,500 square foot Foodtown burned down on the same site; FRESH incentives are being used to expand and replace the previous supermarket. In the Tremont neighborhood, a new Western Beef is being constructed to expand a smaller supermarket nearby which the company was leasing on a month-to-month basis. While each of these facilities is expanding, allowing increased access to surrounding residents, this is not an expansion into a new market. According to the EDC, these two markets combined will retain 90 jobs and create 65 new jobs.

Although these current supermarket expansions have local benefits, it is hard to evaluate the FRESH program because of its relative nascence. The FRESH program was initiated during the real estate boom, when land values were rapidly increasing, partly as an incentive to help supermarkets compete for land. Since the economic collapse, businesses have had difficulty securing capital; this has contributed to a lack of FRESH supermarket construction in new markets. This difficulty in securing capital is compounded by a combination of additional risks, both actual and perceived. These risks include a lack of steady clientele, lack of spending power in lower socioeconomic neighborhoods, and lack of confidence in recouping initial outlay costs. Although she was unable to disclose details, the EDC program administrator for the FRESH program mentioned that there is new supermarket construction in the pipeline. The present lack of new supermarket construction makes it hard to fully evaluate the benefits of the FRESH program since the program, to date, has not demonstrated an increase in residents’ food access. We will have to wait for both lending and construction to gain momentum before we can fully evaluate the benefits of the FRESH program. After several years, if there are still relatively low numbers of supermarkets in new markets, the program may need to be rethought.

Nevertheless, the construction of a brand new supermarket in a neighborhood can have transformative effects. In 1996, a 50,000 square foot Pathmark supermarket located on 125th Street in Harlem. The area had been lacking a substantial supermarket. With the help of Local Initiatives Support Corporation (LISC) and community partners, the store was able to open in the heart of Harlem. This store is now one of Pathmark’s highest-grossing stores and has created over 275 jobs, 85% of which are held by Harlem residents. Pathmark now anchors an $85 million complex called the Harlem Center and has drawn a significant number of retail stores to the surrounding several blocks, creating a commercial hub in Harlem (Bassford, Galloway-Gilliam, Flynn, 2010). Supermarkets are seen as stable businesses that bring a significant amount of foot traffic, and attracts other businesses as seen in Harlem.

The “Going to Market” study also looked at the economic issues surrounding a scarcity of grocery stores. The EDC estimates that the city loses over $1 billion in lost grocery sales to the suburbs. There is great potential for supermarkets to be used for economic development. Locating new supermarkets in these high-need FRESH areas will increase the city’s tax base and create jobs. The tax-base increases by new supermarkets and the businesses they attract can incentivize municipalities (and planners) to focus on bringing
them into high-need areas. Supermarkets not only serve as anchors for commercial development but also serve as anchors for neighborhoods.

**Green Carts Program**

In December 2007 the Mayor’s Office and the City Council announced sponsorship of the Green Carts legislation. In early 2008 the Green Carts amendment was signed, effective on June 13, 2008. The Green Carts program authorizes 1,000 total mobile vending permits to sell fresh produce in designated areas of the city. Low access to fresh produce, high rates of obesity, diabetes, and heart disease, and low consumption of daily fruits and vegetables (determined by 2004 Community Health Survey data) were used to determine Green Cart areas. After assessing these determinants, five regions were targeted and determined by police precinct - the majority of the Bronx, northern Manhattan (east/central Harlem), north/central Brooklyn, western Queens, and northern Staten Island (see Map 1).

Map 1: Permissible NYC Green Cart Locations

Each borough receives a finite number of permits: 350 for the Bronx, 350 for Brooklyn, 150 for Manhattan, 100 for Queens, and 50 for Staten Island. Only half of the 1,000
permits were available to allocate in the first year (Table 2). Permits expire after two years with an option to renew.

Table 2: Permit information by Borough (FY 2008-09)

<table>
<thead>
<tr>
<th></th>
<th>Bronx</th>
<th>Brooklyn</th>
<th>Manhattan</th>
<th>Queens</th>
<th>Staten Island</th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Permits Available Year 1</td>
<td>175</td>
<td>175</td>
<td>75</td>
<td>50</td>
<td>25</td>
<td>500</td>
</tr>
<tr>
<td>Applications Submitted*</td>
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<td>248</td>
<td>227</td>
<td>146</td>
<td>28</td>
<td>846</td>
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<td>Permits Issued</td>
<td>78</td>
<td>71</td>
<td>58</td>
<td>40</td>
<td>1</td>
<td>248</td>
</tr>
<tr>
<td>People on Wait List at FY end</td>
<td>0</td>
<td>0</td>
<td>348</td>
<td>53</td>
<td>0</td>
<td>N/A**</td>
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</tbody>
</table>

*Based upon experience during Year 1 of implementation related to completion of process by vendors, the Department expanded the number of applications accepted from vendors to exceed the number of permits available.

**Not applicable for Citywide total; a person may be on the wait list for multiple boroughs.

Table 2. Permit information by Borough (FY 2009-10)

<table>
<thead>
<tr>
<th></th>
<th>Bronx</th>
<th>Brooklyn</th>
<th>Manhattan</th>
<th>Queens</th>
<th>Staten Island</th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Permits Available Year 2</td>
<td>350</td>
<td>350</td>
<td>150</td>
<td>100</td>
<td>50</td>
<td>1000</td>
</tr>
<tr>
<td>Applications Submitted*</td>
<td>411</td>
<td>522</td>
<td>277</td>
<td>158</td>
<td>35</td>
<td>1403</td>
</tr>
<tr>
<td>Permits Issued</td>
<td>124</td>
<td>116</td>
<td>106</td>
<td>66</td>
<td>3</td>
<td>415</td>
</tr>
<tr>
<td>People on Wait List at FY end</td>
<td>137</td>
<td>362</td>
<td>2155</td>
<td>1232</td>
<td>67</td>
<td>N/A**</td>
</tr>
</tbody>
</table>

*Based upon experience during Year 2 of implementation related to completion of process by vendors, the Department expanded the number of applications accepted from vendors to exceed the number of permits available.
Several programs around the country are incentivizing mobile vending for healthy food. Chicago offers a reduced permit fee to fruit and vegetable vendors and San Antonio and San Diego allow vendors that sell produce or fresh fish an exemption from purchasing from a commissary (Tester et al, 2010). Currently, the Green Carts program is the only program in the country that specifically links underserved areas, mobile vending, and healthy eating.

**Green Carts: What was the impetus?**

City agencies’ long-standing awareness of limited fresh food access in certain areas of the city was the setting for the Green Carts Program. Obesity and rising rates of diabetes were disconcerting to the Mayor’s Office prior to Green Carts. Mayor Michael Bloomberg had been particularly interested in the obesity epidemic over the last few years; he fought for menu labeling (caloric value labeling) in fast-food restaurants and got it passed by City Council in 2008. The high rate of obesity and diabetes in largely minority neighborhoods also concerned the Department of Health and Mental Hygiene (DOHMH). In 2006, the DOHMH promoted removal of the cap on mobile vendors who were willing to sell fresh fruits and vegetables, but only in food-barren areas (Citizens Committee for Children of New York).

The Citizens Committee for Children of New York (CCC), a non-profit children’s advocacy group, had been working to provide a fact-base platform to support healthy eating for New York City’s children. This included holding focus groups and gathering information about the affordability, quality, and accessibility of food in New York City’s food deserts. These efforts culminated in a fact sheet and report highlighting policy changes needed to combat food deserts, which dovetailed perfectly with the DOHMH’s efforts to increase the number of produce vendors. Beginning in 2006, CCC began focusing their energy on Green Carts by promoting the proposed legislation in meetings with local elected and appointed officials. Prior to and during the amendment approval process, CCC mobilized over one hundred non-profit and community organizations in support of the legislation. CCC was also able to connect community members with local officials through electronic advocacy letters and to attract media attention for the legislation (Citizens Committee for Children of New York, 2010).

Finally, Elliott Marcus, the city’s Deputy Commissioner for Food Safety, heard firsthand from his daughter, who worked at a Brooklyn school, that the students had little to no access to fresh fruits and vegetables. This solidified his commitment to combat food deserts (P. Leggat. Personal Communication. March 1, 2011). Marcus’s awareness and the DOHMH’s dedication, combined with the desire of high-level city administrators and various city agencies to decrease rates of obesity and diabetes (and to combat food deserts) helped get the Green Carts legislation passed.
Green Carts: Who are the key partners?
From its inception, the Green Carts program was supported by a number of private and public partners. While coordination between government agencies is usually difficult, New York’s Food Policy Coordinator helped coordinate city agencies’ efforts to increase healthy food access. The mayor created the position of Food Policy Coordinator in January 2007. In December 2007, the Mayor’s Office and the City Council announced sponsorship of the Green Carts legislation.

The Laurie M. Tisch Illumination Fund, which made a $1.5 million donation to the Green Carts program, is the primary financial supporter of the program. The fund was started in 2007; its first grant was for the Green Carts program. According to a Health Department employee, the success of Green Carts is very important to the fund’s founder, Laurie Tisch, and she is doing everything she can to ensure its success (P. Leggat, personal communication, March 1, 2011). Ms. Tisch’s interest has increased media attention for the Green Carts program, which has in turn contributed to the program’s success. Tisch’s funding, which is designated for marketing, technical assistance, and micro-loans to vendors, is managed by Karp Resources, a private food consultant.

Karp Resources, a private food consultant, was hired at the start of the program. Karp has provided technical assistance for vendors by holding workshops and creating links between vendors and community partners. The free workshops, offered in Spanish, Bengali, and English, are used to teach potential vendors how to apply, secure financing, source produce, and choose a vending location. Workshops are held in all five boroughs, usually with the support of a community partner who is more familiar with local residents.

Karp has been successful in reaching out to community partners for support and sponsorship opportunities. Karp has partnered several hospitals, schools, and private business with vendors; others are on a list that allows vendors to solicit support. Karp acts as a liaison between ACCION, USA, a low-interest micro-loan provider, and organizations looking to sponsor a green cart, either with financial support, or non-financial support, such as cart storage. In addition, the Women’s Housing and Economic Development Company (WHEDCO) has partnered with Karp and the DOHMH to give out “Green Bucks,” incentives that may be spent at green carts.

Karp Resource’s in-depth knowledge of vendors’ capabilities and work schedules helped Karp distribute a small number of Electronic Benefit Transfer (EBT) terminals, which were obtained through a grant. Currently, 15 of the 461 green carts are able to accept EBT sales (made by electronic debit cards as part of the Supplemental Nutritional Assistance Program). Karp is currently writing grants to secure additional terminals.

Green Carts: What are the lessons for planners?
Two lessons planners can learn from the Green Carts program are the economic development opportunities mobile vending can provide and a strong connection between planners and public health professionals is advantageous.
Mobile vending is a fast approach to spur economic development in depressed urban areas. Mobile vending has fewer barriers to entry compared to traditional brick-and-mortar businesses, largely because of lower start-up costs. Start-up costs for a green cart are approximately two thousand dollars (cite). Vendors may apply for low-interest loans from ACCION, USA to purchase a cart and produce. The city contributes by providing a Green Carts-branded umbrella to all vendors who sign up in the first two years of the program. The Green Carts program further defrays start-up costs by lowering the cost of a two-year Green Cart permit to $50 from the $100 for a traditional vending permit.

There is extremely high demand for traditional mobile vending permits in New York City; so high that some permits are sold on the black market. Currently, there are 4,100 outstanding traditional mobile vending permits and a waitlist of 2,500. Of the 4,100 traditionally permitted vendors, the city estimates that only 10% sell fresh produce. Vendors who are currently on the traditional mobile vending permit waitlist are given priority to receive a Green Cart permit (http://www.nyc.gov/html/doh/downloads/pdf/cdp/green_carts_presentation.pdf). Vendors who are eager to vend in the city but do not have the time or resources to wait for a traditional mobile vending permit may decide to become Green Cart vendors. By prioritizing applicants on the waitlist and discounting the permit fee, the city is able to use its existing vendor pool to quickly mobilize potential Green Cart vendors.

Green Carts are only allowed to locate in certain areas of the city. Without these restrictions, all vendors would likely locate in high-traffic, economically desirable areas (mostly in Manhattan). The placement of green carts is intended to assist areas with inadequate access to healthy food and high health disparities. The financial and administrative incentives offered by the program incentivize Green Cart vendors to target areas in the city that do not attract much private investment. This targeted approach will only work in dense, urban areas that have an ability to leverage demand for mobile vending opportunities against a limited supply of permits. The high desirability of mobile vending in New York City allows depressed areas to be commoditized by entrepreneurial vendors.

In “Street Vending: A Survey of Ideas and Lessons for Planners”, vending is seen as part of the formal economy and as an economic development tool. Street vending offers an opportunity for populations that may have low job skill levels or have been shut out of more traditional economies to gain a foothold into society (Ball, 2002). Street vending has a history of being an economic entry point for immigrants due to its low start up costs (Ball, 2002; Tester, Stevens, Yen, Laraia 2010). Mobile vending is common in Latino and Asian cultures. Because of an influx of these immigrant populations, mobile vending has increased in numerous parts of the country. This presents an opportunity to reach out to marginalized groups and offer an entrepreneurial opportunity for immigrants to earn a living (Tester et al, 2010). Indeed, DOHMH has solicited immigrant groups such as Latino bodega owners and Korean grocers to either become vendors themselves or suggest possible vendors. The DOHMH sees the Green Carts as possible “satellite” businesses that can share the cost of produce. This idea has interested several Korean grocers but the bodega owners were not interested due to time and labor costs (P. Leggat, personal communication. March 1, 2011). John Kim, President of the Korean Produce
Association (KPA) noted the interest in owning a cart by the Korean storeowners’ is a means of protecting their brick-and-mortar stores from competition. Currently, the KPA is in talks with the DOHMH to have an expedited permitting process since the storeowners already have their food license and business development skills.

Planners and public health officials often overlap in their goal to improve community health. Planners assess community health by analyzing the built environment whereas public health officials analyze residents’ physical health. Local public health departments can be helpful for planners to target community outreach efforts. The DOHMH has several satellite offices known as District Public Health Office’s (see Map 2).

Map 2: Target Neighborhoods for the District Public Health Offices
The purpose of the District Public Health Office’s (DPHO) “is to reduce health inequalities across New York City by targeting resources, programs, and attention to high-need neighborhoods (http://www.nyc.gov/html/doh/html/dpho/dpho.shtml). Three of the Green Cart areas have DPHOs- Harlem, north and central Brooklyn, and the South Bronx. Neighborhoods with DPHOs have disproportionately higher rates of poverty and illness than other New York City neighborhoods; due to these disparities there is overlap with Green Cart Areas. These DPHOs have a wide array of community partners’ including- faith-based organizations, community groups, residents, government agencies, schools, businesses, and local community boards. The three DPHOs are involved in another program called the Food and Fitness Consortia and Coalitions. Within this program the DPHOs partner with local community groups to promote a healthier lifestyle. (http://www.nyc.gov/html/doh/downloads/pdf/dpho/dpho-brochure.pdf).

The ability for the City and Karp Resources to draw on the DPHOs’ institutional knowledge of the community, wide-reaching contacts, and skilled community outreach has been advantageous for the success of the program. DPHOs are local, trusted community health advocates that are able to attract support and awareness for the Green Carts program. Similarly to DPHOs, community planners are skilled at engaging marginalized communities, navigating between government agencies and community residents, and forming community partners. In the future planners should consider partnering with public health offices as ways to further their outreach efforts.

**Green Carts: What are the overall lessons learned?**

*Where were the planners?*

Although planners are not directly involved in the Green Carts program, their skills set can be valuable. Within the Green Carts program, community development groups have taken many of the roles that can be performed by planners. In smaller cities where planners are more heavily involved with local communities or in cities with few community development organizations, planners could initiate a mobile vending program similar to Green Carts. Although the DOHMH was the initiator for Green Carts, a planning department with an interest in combating food deserts can similarly originate a similar program.

Within the Green Carts program, planners could have offered their technical expertise in analyzing data and creating maps for vendors. By creating a map of high-traffic locations (such as schools, hospitals, community centers, etc.), planners could have helped green cart vendors target desirable places to locate their carts. Kerry McClean, a Community Development Planner/Director for WHEDco, also felt that planners could play a more active role by creating maps to help vendors be more strategic in choosing a location. Although Ms. McClean thought creating vendor maps would be helpful, she was skeptical about adding an additional agency to the program because of the already heavily bureaucratic process (K. McClean, personal communication, 2011).

*Is a top down approach beneficial for this program?*

One criticism of the program has been this bureaucratic process. Since several permits are needed before a vendor is able to purchase a green cart, the bureaucracy has hindered
vendors’ ability to mobilize quickly. Before a vendor is able to apply for a Green Carts permit, he or she needs a food license. The food license requires class time and at least two months to complete. Since the Green Carts permitting period only opens twice a year for one month windows, an interested vendor who applies at the beginning of the permitting process would not be able to acquire a permit before the window closes. The restricted permitting windows have left many vendors and community development partners confused and frustrated. In addition, lack of communication about the food-vending license has caused vendors who were initially interested in the program to lose interest.

The involvement of local community development organizations has helped the Green Carts program by reaching out to community residents and providing vendor workshops. But city agencies cannot rely too heavily on already strapped community organizations. If community development organizations are to administer a program such as Green Carts, they need financial assistance, either through local government or grant money.

The Green Carts program has been fortunate to receive a $1.5 million donation from the Tisch Illumination Fund. This money was intended as seed money, which means the program needs to seek other sources of operational funding. A Karp Resources employee noted that significant efforts have been made to create private partnerships in the Green Cart neighborhoods to ensure the longevity of the program. Several community development groups associated with the Green Carts program received separate grants from Deutsche Bank to help implement the program. These grants have not only allowed the organizations to devote more time to the program but have also allowed the community organizations to create stronger relationships among each other. Monthly conference calls between the organizations are used to discuss what is working in the Green Carts program and to learn about other projects each organization is working on (K. McClean, personal communication, April 4, 2011). The grants provide a strong foundation for the community development organizations as they become technical advisors for the Green Carts program and Karp Resources is eventually phased out.

**How can mobile vendors work with brick and mortar stores?**

One hurdle of mobile vending programs is the inevitable pushback from brick and mortar stores. Knowing brick and mortar stores are unlikely to respond positively to mobile vending proposals gives program managers a chance to anticipate concerns and come up with compromises. The Green Carts program managers had initially proposed to issue 1500 permits, but reduced the number to 1000, largely as a result of the efforts of the Korean Produce Association (KPA). This was seen as a victory by the KPA, since the fewer the number of permits, the less of a threat the KPA perceives to brick and mortar stores. One city regulates mobile vending by requiring surrounding brick and mortar stores to vote on permits for proposed nearby mobile food carts (Ball, 2002). This approach, however, seems equivalent to a ban on mobile vending. While there may be a few brick and mortar stores that see mobile vending as a way to increase foot traffic, many more see them as direct competition or an eyesore. One of the hopes for the Green Carts program is that it will encourage bodegas and convenience stores to start carrying fresh produce. The program is a way to increase access to fresh food by creating competition.
The DOHMH also positioned the Green Carts program as an opportunity for brick and mortar storeowners, such as bodegas and Korean-owned groceries, to create satellite businesses. The DOHMH reached out to both groups to gauge their interest in operating green carts themselves or with family members or friends. The bodega owners were too busy and had little interest, but the Korean grocers were interested as a way to ensure control of their local market. While allowing existing storeowners to operate green carts would increase access to fresh produce, it would limit the opportunities for other entrepreneurs. The Korean grocers’ interest was complicated, however, by their reluctance to go through the lengthy bureaucratic process to get a green cart permit, including acquiring a second food-vending license. The KPA is currently in talks with the DOHMH to see if an expedited permitting process could be created for KPA members who already have food-vending licenses (Kim, J. personal communication, 2011).

Program managers should attempt to position mobile vending as something other than pure competition for brick and mortar stores. Mobile vending can increase foot traffic to areas around brick and mortar stores. In some cities, mobile vending has become extremely trendy, with loyal customers following their favorite vendors. An abundance of food trucks can create a destination unto itself, which has a spillover effect on the surrounding area. Mobile vending can be regulated in ways that make brick and mortar stores more comfortable. Green carts in New York are allowed to remain open 24 hours a day, 365 days a year, but are limited to areas with inadequate access to fresh produce. Other cities may want to restrict mobile vendors by distance from brick and mortar stores or by hours in the day. Program managers may want to argue that green carts are usually not open around the clock, that many close for the winter, and emphasize that the carts only sell produce. Brick and mortar stores nearby may benefit from increased sales of other items as a result of the presence of a green cart. The goal of the Green Cart program has never been to replace stores with carts but to increase access to fresh produce in certain underserved areas. If brick and mortar stores feel competition from green carts, the hope is they will start competing with them on produce availability to the benefit of nearby residents.

Conclusion
The FRESH Program’s unique zoning and financial incentives provide a valuable model for collaboration between city agencies. The Food Policy Coordinator, Mayor’s Office, Economic Development Corporation, Department of Health and Mental Hygiene, and Department of City Planning have all been instrumental in providing expertise to the FRESH program. The FRESH program offers a model in which the often-disparate goals of planners and public health practitioners are brought together to create FRESH zones through their expertise and data analysis. Municipalities that lack substantive collaboration between planning and public health departments ought to draw inspiration from the FRESH program and its use of public health data to enhance planners’ tools.

The FRESH program demonstrates the use of creative techniques to incentivize supermarket development. By lowering minimum parking requirements, offering FAR bonuses for supermarkets in affordable housing developments, and allowing supermarkets to locate as-of-right in light industrial zoned districts, planners alone can...
encourage economic development and increase public health. Planners’ ability to affect the food system should not be taken lightly. Supermarkets anchor neighborhoods, increase residents’ quality of life, and spark surrounding retail development. When planners and local government officials seek to positively affect local economies, programs that incentivize supermarket construction ought not be overlooked as ways to increase neighborhood stability and encourage development.

The Green Carts program enjoys a tremendous amount of support from several community development groups, local public health offices, the Mayor’s Office, a private donor, and a program administrator. Although the City Planning Department might have been able to provide additional support, further institutionalization of the program was probably not needed. New York City is fortunate to have many community development groups that are embedded in the communities they serve; they are best positioned to implement the Green Carts program. In cities and towns that may not have such community-based resources, planners may be able to fill the role of New York’s community development organizations (or be able to initiate a similar program).

As the gap in fresh food availability widens between high- and low-income neighborhoods and the obesity epidemic continues, innovative techniques to increase fresh food access are essential. Both the FRESH and Green Carts programs are unique in their approaches to bring fresh, affordable food to lower-income residents. In addition to increasing food access, each program will potentially boost local economies by increasing job opportunities, foot traffic in program areas, and neighborhood stability. Although a final assessment of the programs is many years away, municipalities ought to consider each of these programs as unique, fairly inexpensive models for increasing food access to marginalized populations. As this paper demonstrates, planners are capable of implementing many of the techniques used in the programs and have a responsibility to address food access.
Reference List:


Bryon, J. City Planner, NY Department of City Planning. Telephone Interview. 4 March 2011.


Kim, J.J. Director, Korean Produce Association. Telephone Interview. April 1, 2011


Leggat, P. Green Carts Outreach Coordinator, Department of Health and Mental Hygiene. Telephone Interview. March 1, 2011.


McClean, K. Director/Planner, WHEDco. Telephone Interview. April 4, 2011.


Appendix

INTERVIEW QUESTIONS FOR PROJECT ADMINISTRATOR:

1. Can you tell me about how the X program got started?
   a. What were some of the early challenges?
2. Who were some of the initial champions of this program?
   a. Can you talk about how they supported the program?
3. How has the Planning Department been involved?
4. What were some of the issues in getting this project started?
   a. What about zoning?
5. What are some of the benefits does this program have for the community? Town? City?
   a. Are there any economic benefits? If so, can you talk more about them?
6. How has the program done so far?
   a. How successful has it been?
7. How has the community reacted?
   Do you think this model can be replicated in other towns/cities? If so, can you talk more about how this might happen? If not, can you talk about why not?

INTERVIEW QUESTIONS FOR KOREAN PRODUCE ASSOCIATION:

1. Has the KPA been supportive of the carts?
2. How did the KPA first learn about the Green Carts program?
3. Has there been any partnerships with the Green Carts program and the Korean grocers?
4. What effect has the program had on local businesses?
5. Do you think the carts are filling a gap in food access?
6. Are the green carts affecting the community positively as an economic/community development tool?
7. What else do you think can be done to make the Green Carts program more successful?

INTERVIEW QUESTIONS FOR WHEDco:

1. Has the community been supportive of the Green Carts program?
2. Do they know they carts exist?
3. Do you think the carts are filling a gap in food access?
4. Do you see owning a green cart as a viable living for women/men?
5. Has there been much backlash from local storeowners?
6. Are the green carts affecting the community positively as an economic/community development tool?
7. What else do you think can be done to make the Green Carts program more successful?