Baltimore City

Food Policy Task Force

Final Report and Recommendations
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Executive Summary

Access to healthy food has become a major concern for Baltimore City due to a combination of economic development and public health factors that have contributed to many residents in the City living in food-insecure environments.

Food insecurity – defined as lack of access to enough food for an active and healthy lifestyle – afflicts nearly 14% of low-income Baltimore families. 1 At the same time, more than two thirds of adults and nearly 40% of high school students surveyed in Baltimore City were overweight or obese as of 2007. 2 Poor diet and obesity are associated with numerous chronic health problems, including cardiovascular disease and stroke, two of the leading causes of mortality in Baltimore City. Access to healthy food options has become more difficult due to several decades of ‘supermarket flight’ from the City. Recent studies by the Johns Hopkins Bloomberg School of Public Health have found that many Baltimore residents living in neighborhoods without a major supermarket rely on neighborhood corner stores as a major food source, and that these stores often do not offer healthful basics such as whole wheat bread or skim milk.3 4 5 According to the 2008 Social Compact Drilldown6, the City has 1.78 sq. ft. of food retail space per person, which is below the industry standard for well-served areas of 3 sq. ft. per person. Increasing the accessibility of healthy foods is a necessary part of confronting malnutrition and the chronic diseases associated with obesity.

Many other cities in the US have experienced similar outcomes due to food insecurity and have realized that because many disparate stakeholders are involved in the production, distribution and consumption of food, no one entity can solely ensure food security. Business, governments, non-profits, advocates, community groups and universities can play a role in confronting these problems by reshaping the local food environment.

In light of these considerations, Mayor Sheila Dixon convened a Food Policy Task Force to develop recommendations to increase access to and consumption of healthy foods citywide. The Task Force was led by the Baltimore City Department of Planning and the Baltimore City Health Department, and it was comprised of the following members:

Seema Iyer, Department of Planning (Co-chair)
Joshua Sharfstein, Department of Health (Co-chair through March 2009)
Olivia Farrow, Department of Health (Co-chair after March 2009)
Will Beckford, Baltimore Development Corporation
Viola Bell, Park Heights Community Health Alliance
Maureen Black, University of Maryland School of Medicine
Wanda Durden, Baltimore Department of Recreation and Parks
Deborah Flateman, Maryland Food Bank
Anthony Geraci, Baltimore City Public School System
Joel Gittelsohn, Johns Hopkins Bloomberg School of Public Health
Jin Kang, Korean American Grocer’s Association
Anne Palmer, Center for a Livable Future at the Johns Hopkins Bloomberg School of Public Health
Larysa Salamacha, Baltimore Development Corporation
Rob Santoni, Santoni’s Supermarket and the Maryland Retail Association
Joyce Smith, Operation ReachOut Southwest
Gregory Ten Eyck, Safeway Inc. / Eastern Division
Stephen Teret, Johns Hopkins Bloomberg School of Public Health
Paulette Thompson, Giant of Maryland
Elected officials were also invited to participate including Congressman Elijah Cummings, Delegate Shawn Tarrant, Councilwoman Agnes Welch. The Task Force held three open meetings between February and October 2009, and discussed several options for coordinated action related to healthy eating. The group adopted the following mission statement:

**Mission Statement**

The Baltimore City Food Policy Task Force brings together stakeholders in Baltimore’s food production, distribution, and consumption system to identify means to create demand for healthy food through awareness and education and to ensure opportunities for all Baltimoreans to access affordable healthy food options in order to achieve and sustain better health outcomes and a higher quality of life.

The group recommended the following strategies, which will be described in detail in this report:

1. Promote and Expand Farmers’ Markets
2. Promote and Expand Community Supported Agriculture
4. Support a Central Kitchen Model for the Baltimore City Public School System
5. Support Community Gardens and Urban Agriculture
6. Expand Supermarket Home Delivery Program
7. Improve the Food Environment around Schools and Recreation Centers
8. Support Street Vending of Healthy Foods
9. Create Healthy Food Zoning Requirements or Incentives
10. Develop a targeted marketing campaign to encourage Healthy Eating among all Baltimoreans

This list does not represent an exhaustive set of strategies that could be pursued to increase the consumption of healthy foods in Baltimore City. Rather, it shows ten specific actions that the Task Force members considered to be especially promising with respect to both timing and impact, and that, as a result, were designated as top priorities.

In addition to the Food Policy Task Force report, the City of Baltimore recently approved a Sustainability Plan that recognizes access to food as a critical foundation for a more sustainable city. Linkages between these two efforts are highlighted within the report.

The co-chairs would like to thank the members of the Task Force and other visitors to the group’s open meetings for contributing their time and expertise to the preparation of this report. Staff in the Departments of Health and Planning also contributed to this report: Maggie Dietrich, Kate Edwards, and Brett Buikema. The task force would like to acknowledge the contributions of JHSPH Center for Livable Future staff and students who researched and wrote the report: Anne Palmer, Patti Truant, and Pooja Singal.
Introduction: The Story of the Baltimore Food Policy Task Force

Food is something most of us take for granted - its availability, cost, variety and nutritional value. While the US boasts one of the most abundant food supplies in the world, disparities in access, affordability and quality have garnered attention by a wide variety of stakeholders in the food system. In many communities in Baltimore, residents have witnessed their access to food decline over the past several decades as supermarkets close or deteriorate in their neighborhoods and new markets steer away from urban areas. Food systems have been increasingly viewed as purview for public domain. The unprecedented increases in obesity and diet-related disease have triggered concern by policymakers because the increase correlates with quality of life issues, health care costs, and loss of productivity. Baltimore joins a growing list of jurisdictions seeking to create a healthier local food system by attending to food issues in the public sector.

Over the past decade, food insecurity has become important to the city’s economic development agency, planners, and public health officials. Former Mayor Martin O’Malley launched a Grocery Store Initiative to attract and site more supermarkets within the City of Baltimore and since 2000 more than 17 new stores have returned to the City as a part of concerted efforts. In 2006, during the process of creating the City’s Comprehensive Master Plan, LIVE EARN PLAY LEARN, ensuring that all residents live in close proximity of food retailers was an important vision in order to remain a livable city in the 21st century. In 2006 childhood obesity in the City reached an all-time high, prompting City Councilwoman Agnes Welch to create a task force on childhood obesity.

Research being conducted by Johns Hopkins doctoral student Dr. Manuel Franco found that there are marked disparities of healthy food availability, beyond the food store type, in neighborhoods according to racial composition. Forty-three percent of African-American neighborhoods were found to have the lowest (worst) category of healthy food availability while only 4% of white neighborhoods had that feature. His research also found that the proximity of one’s residence relative to stores with healthy food options plays a larger role in diet patterns than previously thought. In light of these findings, the Health Department requested the Center for a Livable Future to convene a meeting with the Planning Department, researchers within the University and community organizations to discuss what could be done.

In December 2007, it was clear there were many areas of overlap and the timing was right to bring together the many stakeholders involved in food access in Baltimore. Mark Winne, a food systems expert who works as the Community Food Security Coalition’s food policy coordinator, facilitated a half-day workshop in Baltimore in February 2008. Participants from various sectors of the food world were invited to participate including Maryland Hunger Solutions, Maryland Hospitals for Healthy Environment, Maryland Cooperative Extension, Slow Food, Associated Black Charities, Baltimore Community Development and others. During the workshop, we learned about food policy organizations around the country and where they were focusing their efforts to improve the community’s food system.

In November 2008, Mayor Sheila Dixon announced the formation of the Baltimore Food Policy Task Force. Top leadership in the Departments of Health and Planning convened the Task Force and it is their vision that guides our work. The formation of the Task Force evolved organically as the leaders and participants simultaneously learned the value of collaborating to solve some of the community’s
problems associated with food. We believe the spirit of this partnership will bode well as we continue our work together to implement the recommendations in this report and create affordable, healthy food options for all citizens. The formation of the task force came about because of wide support across sectors and interest in creating new opportunities to improve the current food situation. The composition of the task force did not, by definition, follow “a systems approach” because these nascent efforts were really a gathering of stakeholders. Recognizing this, any subsequent council or advisory group that results from this report should consider the food system paradigm to help strategize efforts and next steps.

**Background and Scope of the Problem**

**Food Sector in Baltimore**

Regions around the country are grappling with how to improve community food security, support local farms, create healthy food environments and engage citizens in a meaningful manner that attends to their local needs and conditions. The creation of the Baltimore Food Policy Task Force reflects recognition that systemic food issues need to be addressed at a government level.

While the food sector has traditionally been driven by private sector interests, communities are facing unprecedented health problems; many of these are linked to diet. These problems warrant a root cause analysis of sorts which examines the proximate and distal factors influencing diet. Hence, more and more communities are seeking opportunities to create demand for and to access affordable, healthy food for their citizens.

Research shows that the vast majority of food choices made today is about fulfilling a need for easy, affordable, convenient meals and not about health or nutritional concerns. The result of these food choices is reflected in the state of the public’s health.

**Food-related Health Issues**

Many Baltimore City residents are affected by health problems associated with a poor diet.

In August 2008, researchers at the University of Maryland released a report indicating that 13.5% of low-income Baltimore families suffer from food insecurity – lack of access to enough food for an active and healthy lifestyle due to financial constraints.⁸

In October 2008, the Baltimore City Health Department published a Health Status Report stating that more than a third of adults surveyed in Baltimore in 2007 were obese based on self-reported height and weight.⁹ Another third of adults were overweight. On average from 2002-2007, obesity prevalence among Baltimore City adults was 26% higher than among adults statewide during the same time period.¹⁰

One fifth of high school students surveyed in Baltimore City in 2007 were overweight and another fifth were obese – making Baltimore high school students 40% more likely to be obese than their counterparts statewide.¹¹ Even among the very young, the statistics are sobering – in 2007, 13% of children aged 2-5 years enrolled in the WIC program in Baltimore were obese.¹²
Children who are obese are at greater risk for bone and joint problems, sleep apnea, and social and psychological problems such as stigmatization and poor self-esteem. Obese young people are more likely than children of normal weight to become overweight or obese adults – who in turn are at risk for hypertension, heart disease, stroke, type 2 diabetes, osteoarthritis, and many other poor health outcomes.\textsuperscript{13}

Cardiovascular disease has long been the leading cause of death in Baltimore City. According to the Baltimore City Health Department’s 2008 Health Status Report, Baltimore City’s age-adjusted heart disease mortality rate has been on average 30% greater than the rate among Maryland residents over the past seven years.\textsuperscript{14}

Cerebrovascular disease, including stroke, is the third highest cause of mortality in Baltimore City. It is particularly hard-hitting among African Americans. Compared to African Americans statewide, Baltimore City African Americans were almost 2 times as likely to die from cerebrovascular disease in 2006.\textsuperscript{15}

**Food Availability**

Recent studies by the Johns Hopkins Bloomberg School of Public Health have found that only 10% of Baltimore’s food stores are supermarkets. As a result, many Baltimore residents make major food purchases at neighborhood corner stores – where healthful basics, such as whole wheat bread, low-fat milk, or fruits and vegetables, are often unavailable. Even where they are offered, these items are as much as 20% more expensive than they are at the nearest supermarket.\textsuperscript{16, 17, 18}

In a 2006 survey of 187 food stores in Baltimore City, managers were asked what items they sold the most of. Cigarettes were consistently at the top of the list.\textsuperscript{19}

A 2009 CLF report on food stores in Baltimore states:

“The types of food stores and their locations in Baltimore City closely follow the racial composition of neighborhoods. Predominantly white neighborhoods have a higher percentage of supermarkets and convenience stores compared to predominantly African-American neighborhoods. African-American neighborhoods, on the other hand, have a higher percentage of corner stores, and they have the vast majority of Baltimore’s “behind-glass” stores which severely limit consumers’ access to merchandise. Additionally, there are marked disparities of healthy food availability, beyond the food store type, in neighborhoods according to racial composition: 43% of African-American neighborhoods were found to have the lowest (worst) category of healthy food availability while only 4% of white neighborhoods had that distinction. Our research also demonstrated that the proximity of one’s residence relative to stores with healthy food options plays a larger role in diet patterns than previously thought.”

Results from a community food assessment in southwest Baltimore found that residents routinely travel outside their neighborhood - sometimes great distances - to find the food they want. The Baltimore situation is not unique. Food deserts are a documented US phenomenon that impacts the ease in which people can eat healthy food.
Task Force Mission and Goals

In response to the challenges described in the previous section, the Baltimore City Food Policy Task Force developed the following mission statement and goals to guide its work.

Mission Statement

*The Baltimore City Food Policy Task Force brings together stakeholders in Baltimore’s food production, distribution, and consumption system to identify means to create demand for healthy food through awareness and education and to ensure opportunities for all Baltimoreans to access affordable healthy food options in order to achieve and sustain better health outcomes and a higher quality of life.*
Goals

1. Increase food security and accessibility for all Baltimoreans.
2. Create policies and regulations that foster and do not impede access to healthy and affordable food.
3. Create opportunities for the sale, purchase, and distribution of healthy and affordable foods.
4. Develop programs that promote the sale and consumption of healthy foods.
5. Communicate a strategic and clear message about the benefits of and opportunities for eating healthy foods.
6. Ensure that food services provided by governmental programs offer and promote healthy food choices.
7. Reduce poor public health outcomes associated with low consumption of healthy food such as childhood obesity, heart disease, etc.

Links to Baltimore’s Sustainability Plan

In March 2009, Baltimore City council approved the sustainability plan for the city. As stated in the plan, "Food systems have become important topics for public sector consideration and sustainability because of their bearing on public health, quality of life, environmental stewardship, and greenhouse gas emissions." Greening Goal 2 seeks to establish Baltimore as a leader in sustainable, local food systems. All of the identified strategies for achieving that goal have links to the Food Policy Task Force strategies. In order to streamline our work, we have identified these links throughout the report.

<table>
<thead>
<tr>
<th>Strategy A: Increase the percentage of land under cultivation for agricultural purposes</th>
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<tr>
<td>Strategy B: Improve the quantity and quality of food available at food outlets</td>
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<tr>
<td>Strategy C: Increase demand for locally-produced, healthy foods by schools, institutions, supermarkets, and citizens</td>
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<tr>
<td>Strategy D: Develop an urban agriculture plan</td>
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<td>Strategy E: Implement Baltimore Food Policy Task Force recommendations related to sustainability and food</td>
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<td>Strategy F: Compile local and regional data on various components of the food system</td>
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The Role of Policy on the Food Policy Task Force

Often noted ironically, food policy is not the only activity or even the primary activity of many food policy councils.20 In fact, policies, program and partnerships guide most task forces and councils in their efforts to improve their food systems.
Projects: the programs, activities, businesses, and initiatives that make up local food systems
Partnerships: the process, collaborations, coalitions, and multi-stakeholder efforts that are formed to accomplish something that no single entity can accomplish alone
Policy: the actions and in-actions of government at all levels (local, state, federal) that influence the supply, quality, price, production, distribution, and consumption of food

While many of the recommendations cited in this report are not governed by policy, we recognize that each recommendation needs advocates within and outside of government who are often informed by policy briefs, presentations, demonstrations and impassioned citizens. Any changes in regulations that improve citizens’ access to food can be considered a local policy victory.

Links to built environment initiatives and physical activity

Most city governments working on food system issues have not included organizations working on increasing physical activity into their strategic framework. We think it’s because often the task of getting support from food system stakeholders is so overwhelming that the thought of including another content area would mean a slowing down of progress. We recognize there needs to be an overt link in order for both programs to be effective. The Baltimore Task Force had leadership from Baltimore’s Parks and Recreation Department. We recognize the need to keep building these connections with our counterparts working on increased opportunities to exercise and to change the built environment to make sure we are working in concert with one another. In the event an advisory council is formed to move the recommendations forward, we recommend representation from these constituents to help frame the discussion.

Food Policy Task Force Strategies and Recommendations

The following strategies are ten top priority actions recommended by the members of the Food Policy Task Force:

1. Expand and Promote Farmers’ Markets
2. Expand and Promote Community Supported Agriculture
4. Support a Central Kitchen Model for the Baltimore City Public School System
5. Support for Community Gardens and Urban Agriculture
6. Expand Supermarket Home Delivery Program
7. Improve the Food Environment around Schools and Recreation Centers
8. Support Street Vending of Healthy Foods
9. Create Healthy Food Zoning Requirements or Incentives
10. Develop a targeted marketing campaign to encourage Healthy Eating among all Baltimoreans

The list shows ten specific actions that the Task Force members considered to be especially promising, and that, as a result, were designated as top priorities. This list is not hierarchical and does not represent an exhaustive set of strategies that could be pursued to increase the consumption of healthy foods in Baltimore City. These priorities were gleaned from the list below which captures all the strategies that resulted from the first meeting of the Task Force.
**Short-term**

- Expanding home delivery of groceries through community partnerships with existing supermarkets
- Bussing of seniors and other residents to existing supermarkets, possibly through partnership with faith-based or community organizations.
- Nutrition education at retail locations, in the form of healthy shelf labeling, store tours, cooking demonstrations, etc.
- Developing community partnerships to provide low-cost or no-cost cooking supplies
- Creating a highly publicized award for corner stores that offer healthy foods, to be displayed on-site
- Expanding existing nutrition education programs in schools, such as Food for Life and No Thank You Bites
- Expanding existing healthy food programs through Golden Age clubs and other community organizations
- Encouraging the sale of fresh produce through street vending by making the permitting process easier for vendors who want to operate in high-need areas
- Expanding community supported agriculture programs, by facilitating partnership between farms and community organizations

**Medium-term**

- Developing community gardens or urban farm plots in vacant lots, possibly as community-managed open space
- Extending farmers’ market operating hours
- Offering healthy eating classes at the Food Stamp Office
- Developing a Central Kitchen Model
- Developing a healthy eating campaign focused on a specific food product each month
- Expanding the Maryland Food Bank’s school pantry program

**Long-term**

- Donating retail space to community co-ops to provide low-cost food items
- Creating a tax break for local businesses selling healthy foods
- Identifying food deserts and coordinating city agencies to target specific food deserts
- Targeting school areas and offering better food choices around schools
- Creating healthy food zoning requirements, such as setting a standard for corner stores, requiring them to stock a certain amount of healthy foods
- Creating a non-profit Food Depot that is a blend of food pantry and retail sales, to operate in low-income neighborhoods
- Conducting research that documents demand for healthy foods
- Creating licensing requirements for wholesale food distributors in the city, setting particular nutritional guidelines for foods provided
- Creating a differentiated price structure, charging more for unhealthy options and less for healthy options
1. Expand and Promote Farmers’ Markets

_Ac tion_

A stated goal of the Food Policy Task Force is to increase access to fresh, nutritious food in Baltimore City. Farmers’ markets often offer fresh produce and quality meat at lower or comparable prices than typical grocery stores. Baltimore City is home to at least seven farmers’ markets and three hospital-based farmers’ markets, however most are open only one day a week during the growing season. Opportunities exist to expand the markets’ customer base and if sufficient demand exists, longer hours extended selling seasons and/or new locations are warranted.

Federal food assistance programs can be utilized at farmers’ markets through the WIC Farmers’ Market Nutrition Program (FMNP), WIC Fruit and Vegetable Voucher (new in October) and/or regular WIC redemption. All of these are redeemed through paper vouchers. Similar to WIC’s program, seniors are also eligible for vouchers through the Seniors Farmers’ Market Nutrition Program.

Since the transition from paper food stamps to electronic benefit transaction cards (EBT), recipients of food stamps [now called SNAP since October 2008 - (Supplemental Nutrition Assistance program21)] have been unable to use their benefits at farmers’ markets. Locating EBT machines at farmers’ markets will increase participation in consumption of fresh foods by SNAP recipients and to support local farmers. Funding is being sought to initiate an EBT program at farmers’ markets in Baltimore.

_Background/Evidence_

Farmers’ markets are often cited as a means of increasing access to healthy foods in underserved areas (Flournoy 2005, Levy 2007). They can provide healthy food in areas that do not have full service supermarkets, help rebuild the local food economy and serve as a gathering site for community events, food and nutrition education programs, and other activities that benefit the neighborhood. Start up costs can be high and high risk, depending upon the ability of the neighborhood to support a market. Little data is available that actually tracks the presence and use of farmers markets located in low-income neighborhoods, making it difficult to measure their impact on a given population. The number of markets, however, has grown from 1,755 in 1,994 to 4685 in 2008, making it one of the fastest growing alternative venues for selling food in the US.

As of June 2004, the federal government phased out the paper food stamp program, providing everyone with an electronic benefits (EBT) card for redemption. Because few farmers markets were equipped with EBT machines, the phasing out of paper food stamps made it difficult for recipients to patronize farmers markets. Three farmers’ markets in Maryland that have EBT machines available – all in the D.C. Metro area. The Food Trust’s farmers markets in Philadelphia also have EBT machines available. If promoted correctly, making EBT machines affordable in low-income neighborhoods could have a significant impact on the number of SNAP recipients who patronize the market.
**Farmers’ Market Case Studies**

*Fresh Farm Markets’ “Double Dollars” program in Silver Spring and Washington DC*

- Extended hours and/or locations will only be possible if it is desirable and profitable for the farmers. Farmers are stretched for time and money, and farmers' markets sometimes struggle to find farmers to populate the markets as is.
- A better approach would be to focus on bringing new customers into existing markets, providing access for people receiving SNAP benefits, and securing funding for a "double dollars" program that doubles the purchasing power of SNAP recipients.
- Fresh Farms Market debuted their "Double Dollars" program at their Silver Spring and H St. NE markets in July 2009, with funding from Wholesome Wave. In the first two weeks of the program, about $500 in matching funds was redeemed.
- Wireless EBT machines cost about $1,500 each. Machines can be leased for about $30/month.
- In its first year of operation, the program expenses for the "Double Dollars" program are expected to cost $30,000 for outreach materials, supplies, signage, EBT processing fees, and the matching itself ($22,500).
- Successes in the “Double Dollars” programs should be interpreted as evidence that demand is present for improved access to Farmers Market goods. If efforts are made to provide incentives for low-income individuals to buy farmers’ market goods, those individuals will take advantage of such incentives.

*The Food Trust’s farmers’ markets in Philadelphia*

Most farmers' markets accept SNAP, due to the work of the Food Trust. Participating farmers' markets have seen a 40 percent increase in food stamp sales each year. Farmers may be willing to contribute to cost of machine (either for themselves or to share at the market) if food stamps become a larger percentage of their sales.

*Farmers’ Markets in Low-income areas: Tips from the Community Food Security Coalition*

- Farmers’ markets in low-income areas typically need to be subsidized, either by farmers’ market nutrition programs, the patronage of middle-income customers, or with proceeds from more profitable markets.
- Ensuring that the community feels a sense of ownership over the market is very important to its success.
- Products at the market should provide basic foods at affordable prices.
- Markets should hire local sales staff in areas where there is a language barrier between farmers and customers.
- If transportation to the market is an issue, organizers should consider transit programs to increase the market’s reach.
- Markets should consider distributing recipes, offering coupons, cooking demonstrations and/or nutrition education to strengthen ties between the market and the community.
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- If transportation to the market is an issue, organizers should consider transit programs to increase the market’s reach.
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### Action Plan for Expand and Promote Farmers’ Markets

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<thead>
<tr>
<th>Recommendation</th>
<th>1. Expand and Promote Farmers’ Markets</th>
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<tbody>
<tr>
<td><strong>FPTF Goals Addressed</strong></td>
<td>1, 3, 4, 7</td>
</tr>
<tr>
<td><strong>Objective(s) of Recommendation</strong></td>
<td>Increase access to farm fresh produce for low income residents and support groups that are working on farmland preservation and farm viability.</td>
</tr>
<tr>
<td><strong>Audience/Reach</strong></td>
<td>Current farmers’ market customers and potential new customers drawn by increased availability, convenience, and value of farmers’ markets, as well as EBT payment options.</td>
</tr>
<tr>
<td><strong>Expected Cost</strong></td>
<td>Staff/coordination time and EBT machines ($1,000-1,500 per machine; $30/month to lease machines), Marketing to consumers. New markets average ~$40,000 year 1 start up</td>
</tr>
<tr>
<td><strong>Funding Source</strong></td>
<td>USDA, foundations, In kind contributions, Private Health Organizations (Kaiser Permanente–Farmer's Market Road Map), City of Baltimore, Pimlico Race Track (donated space), State of Maryland</td>
</tr>
<tr>
<td><strong>Lead Partners</strong></td>
<td>Baltimore City Department of Health, Maryland Hunger Solutions, Farmers’ Market Coalition, Healthcare Conversion Foundations, Blue Cross Blue Shield, MD Department of Agriculture; Health Care/Hospitals</td>
</tr>
<tr>
<td><strong>Barriers/Limitations</strong></td>
<td>$1000-1500 for each wireless EBT machine, costs/pay for machine operators, marketing to customers and suppliers</td>
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<tr>
<td><strong>Implementation Steps and Timeline</strong></td>
<td>Talk to current market managers to assess the interest in expanding hours and days and providing EBT machines; Review Social Compact data to determine favorable sites for locating new farmers' markets;</td>
</tr>
<tr>
<td><strong>Indicators/Evaluation</strong></td>
<td>Number of EBT machines at farmers' markets in Baltimore City; increased EBT/WIC purchases at farmers’ markets.</td>
</tr>
<tr>
<td><strong>Co-Benefits from other strategies</strong></td>
<td>Develop a targeted marketing campaign to encourage healthy eating among all Baltimoreans</td>
</tr>
<tr>
<td><strong>Links to sustainability strategies</strong></td>
<td>Strategy A: Increase the percentage of land under cultivation for agricultural purposes; Strategy C: Increase demand for locally-produced, healthy foods by schools, institutions, supermarkets, and citizens</td>
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2. Promote and Expand Community Supported Agriculture

**Action**

The task force would like to cultivate partnerships between farms and community organizations and increase Community Supported Agriculture (CSA) programs in Baltimore City. The CSA model provides an opportunity for consumers to buy fresh produce from a local farm during a given growing season. Typically, CSA members purchase a share at the beginning of the season and receive a weekly installment of fruits and vegetables. This is mutually beneficial to the farmer, who has assured income and can focus on marketing before the busy growing season as well as to the consumers, who receive fresh produce weekly, according to the USDA. According to Local Harvest, a website dedicated to promoting local and organic food, CSAs also help build community involvement and allow consumers to learn about where their food comes from and develop a relationship with their farmer. Local Harvest keeps a database of about 2,500 U.S. CSA farms, and notes areas of the country where demand is outpacing supply for CSA shares. Although Maryland has several CSAs, there is a need to evaluate farmer interest and availability as well as community interest in additional programs.

**Background/Evidence**

Empirical evidence on CSAs and their impact is limited to capturing a point in time rather than a multi-year study, which may better reflect the nature of a CSA. An evaluation (n=221) conducted by the Center for Agroecology & Sustainable Food Systems (CASFS) found that most participants reported satisfaction with the quality and quantity of the produce. Reasons for participating ranged from to be able to access organic produce (62%) to supporting local businesses (40%). 79% reported eating more vegetables or a greater variety as a result of participating. The primary reasons for deciding not to participate the following year were related to product mix and quantity (too much). Farmers reported that about 65% of participants return the following year. A study conducted in 1997 found the financial benefits to consumers were considerable. Produce was tracked at three CSA farms over a season and compared with the retail value of organic produce. Pound for pound shareholders saved $683, $548 and $149 from the three farms.

**CSA Case Studies**

*South Bronx City Harvest CSA*

This modified "CSA-plus" program included supplemental fruit (not necessarily local or organic) subsidized by the program, which was funded through a USDA grant. The program included a weekly cooking demonstration and nutrition education course, which was very popular, even among people not participating in the CSA. Participants could pay weekly, and food stamps were accepted for the $17 weekly charge. City Harvest collected the funds and paid the farmer in one check. Among some of the lessons learned: Organizers found it difficult to maintain a core group of dedicated participants (only about 40 members, organizers were hoping for hundreds). A more mixed-income model would be more sustainable by using wealthier participants to subsidize the program and encouraging the community to take ownership of the program.

*NYC Coalition Against Hunger CSA*

NYCCAH established three mixed-income CSAs, funded by Robert Wood Johnson Foundation. CSA pricing was divided into three levels: higher income, middle income and low income. All participants
were required to volunteer at least four hours. Members of the low-income group could lower their price by volunteering for 10 extra hours and by paying with food stamps. NYCCAH staff recommended that a non-profit run a mixed-income CSA, with the goal of the members to eventually take over ownership.

*Good Food Boxes, Toronto*

Another option for getting more fresh produce from local farms into the community is through a "good food box" model, similar to a program that Toronto implemented. In this model, buying and distributing of food is coordinated by community organizers, who take orders twice per month from residents of a given neighborhood. Boxes cost $12 to $32, depending on which version is ordered. Each box has the same mixture of food, but varies week to week depending on what's in season. Boxes are delivered anywhere there are at least eight to ten orders. Customers pay for the food, and the cost of distribution is subsidized. According to the Food Share's website, "Professional evaluation of The Good Food Box shows that participating in the program helps people access a more nutritious diet...The Good Food Box makes top-quality, fresh food available in a way that does not stigmatize people, fosters community development and promotes healthy eating.

**Action Plan for Expand and Promote Community Supported Agriculture (CSA)**

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<th>Recommendation</th>
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</tr>
<tr>
<td>Objective(s) of Recommendation</td>
<td>Increase access to farm fresh produce for residents who live in underserved food retail areas through the expansion of CSA drop off sites.</td>
</tr>
<tr>
<td>Audience/Reach</td>
<td>Mixed-income; Need to create demand for it—especially targeting areas w/ low access to fresh produce</td>
</tr>
<tr>
<td>Expected Cost</td>
<td>Publicity and subsidizing, organizational costs</td>
</tr>
<tr>
<td>Funding Source</td>
<td>Baltimore Community Foundation, GLEANing Network</td>
</tr>
<tr>
<td>Lead Partners</td>
<td>Community- and Faith-Based Organizations, Local farms, Health Care/Hospitals</td>
</tr>
<tr>
<td>Barriers/Limitations</td>
<td>Consumer demand and farmer supply; cost (payment up front); produce mix may not suit residents; most produce requires cooking.</td>
</tr>
<tr>
<td>Implementation Steps and Timeline</td>
<td>Outreach to CSA farms to determine willingness and ability to serve Baltimore City residents; explore alternative models for implementing such as the Good Food box, using EBT cards for payment, etc.</td>
</tr>
<tr>
<td>Indicators/Evaluation</td>
<td>Increased availability and participation in CSA program</td>
</tr>
<tr>
<td>Co-Benefits from other strategies</td>
<td>Develop a targeted marketing campaign to encourage healthy eating among all Baltimoreans</td>
</tr>
<tr>
<td>Links to sustainability strategies</td>
<td>Strategy A: Increase the percentage of land under cultivation for agricultural purposes; Strategy C: Increase demand for locally-produced, healthy foods by schools, institutions, supermarkets, and citizens</td>
</tr>
</tbody>
</table>

**Action**

Although there is a national effort for greater research on defining food deserts, researchers affiliated with the Center for a Livable Future and Johns Hopkins Bloomberg School of Public Health already have a great deal of research and statistics on the state of food security in Baltimore. The Center for a Livable Future is also working on a food system map of Maryland with a concentrated amount of data for Baltimore City that will be valuable in future planning efforts. This information is valuable for public health, social justice, economic development, and even homeland security reasons. Further evidence on the status of Baltimore’s food environment will help advocates engage policymakers and inform decision-making aimed at eliminating food deserts in the city. Ongoing research on cost, access to and availability of healthy foods throughout the city will inform the implementation of other strategies listed. The Johns Hopkins Center for a Livable Future (CLF) has already begun this work, and could assist city government with ongoing evaluation. City government also recently collaborated with the non-profit Social Compact to produce a Neighborhood Market Drilldown Report, which assesses grocery store availability and leakage in a specific set of neighborhoods. In addition to food desert and food system research, other academic institutions can be tapped to provide research on the health disparities, public policy, nutrition; consumer food preferences will enhance understanding of the food desert data and provide a much needed perspective of consumer barriers.

**Background/Evidence**

In their literature review on community food security, Haering and Syed review the four dimensions of food security: “Consumption level pertains to the number of meals eaten per day, the amount being eaten, and the degree of regularity of meals; quality refers to both the nutritional aspects of food and personal, subjective preferences; sources indicates both the foundations from which foods are supplied and the personal and cultural acceptance of the sources; and cost dimension is central to fully considering components that compose food security / insecurity”

Therefore, according to Haering and Syed, signs of food insecurity may go unnoticed. There may be access to adequate calories in a community, but that available food might lack in necessary nutrients, cultural acceptability, financial accessibility, or otherwise unsuitable or hazardous. These reasons help to explain health disparities among socioeconomic and ethnic groups.

According to a report from the Community Food Security Coalition, food travels an average of 1,500 to 2,500 miles to reach city residents, and can be in transit for up to two weeks. This means that up to 50 percent of food is lost to spoilage, and crops are bred for their hardiness and ability to travel well, not taste or nutritional quality.

“One of the worst paradoxes in human history and one of the consequences of the economic structure of the current food system is hunger in the midst of plenty,” the CFSC report states. "An unacceptable number of Americans, including many children, do not get enough to eat on a daily basis. The percentage of people in poverty rose to 12.4 percent in 2002, up from 12.1 percent in 2001. Thirty-three million people - including 13 million children - live in households that experience hunger or the risk of
hunger. Food insecurity in the U.S. is represented by people who frequently skip meals or eat too little, sometimes going without food for a whole day. They tend to have lower quality diets or must resort to seeking emergency food because they cannot afford the food they need.\textsuperscript{26}

Research funded by the Center for a Livable Future (CLF) found that racial and economic disparities may be partially caused by inequitable distribution of healthy foods favoring predominantly white and higher-income neighborhoods.\textsuperscript{24} Also, a cross-sectional study of Baltimoreans in the Multi-Ethnic Study of Atherosclerosis found, not surprisingly, that lower availability of healthy foods translated into a lower quality diet.\textsuperscript{25} This obviously has significant public health implications considering the high rates of diet-related chronic disease in the United States, namely cardiovascular disease, diabetes and obesity. The CLF is producing a report on food stores and public health that combines several research efforts into one document. This report will be published by November 2009.

Other local universities are also conducting relevant research. The University of Baltimore Public Policy Institute has conducted studies on consumer beliefs about produce and found that locally-grown foods are valuable to consumers. A 2009 survey found that consumers are 77 percent more likely to purchase an item identified as Maryland-grown.

### Action Plan for Support Continued Research on Food Deserts and Collaboration with Policymakers

<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>FPTF Goals Addressed</strong></td>
<td>Provides data to support all the FPTF goals</td>
</tr>
<tr>
<td><strong>Objective(s) of Recommendation</strong></td>
<td>Develop measures to determine how the activities are impacting food policy, food security and food access. Conduct original research and secondary analyses to fill gaps in knowledge of the local/regional food system</td>
</tr>
<tr>
<td><strong>Audience/Reach</strong></td>
<td>Policy makers, funders, elected officials</td>
</tr>
<tr>
<td><strong>Expected Cost</strong></td>
<td>Dependent upon research</td>
</tr>
<tr>
<td><strong>Funding Source</strong></td>
<td>Foundations, research grants, universities (ex: Robert Wood Johnson Foundation for JHSPH Baltimore Healthy Eating Zones work)</td>
</tr>
<tr>
<td><strong>Lead Partners</strong></td>
<td>Johns Hopkins Center for a Livable Future, Center for Human Nutrition (JHSPH), University of Maryland, Baltimore City Planning Department</td>
</tr>
<tr>
<td><strong>Barriers/Limitations</strong></td>
<td>Available expertise and timing of studies</td>
</tr>
<tr>
<td><strong>Implementation Steps and Timeline</strong></td>
<td>Assessment of food availability within stores and carry outs, GIS mapping of local food resources, develop materials for advocacy using the results of the studies; review possibility of a food shed study for Maryland</td>
</tr>
<tr>
<td><strong>Indicators/Evaluation</strong></td>
<td>Policy actions based on food desert and other food system research; increased knowledge of food system issues among policymakers</td>
</tr>
<tr>
<td><strong>Co-Benefits from other strategies</strong></td>
<td>Provides background for other strategies</td>
</tr>
<tr>
<td><strong>Links to sustainability strategies</strong></td>
<td>Strategy F: Compile local and regional data on various components of the food system</td>
</tr>
</tbody>
</table>
4. Support a Central Kitchen Model for the Baltimore City Public School System (BCPSS)

Action

The Department of Food and Nutrition at BCPSS is seeking support to build a central kitchen that will provide exclusive meal service to a minimum of 50 schools\(^2\) with breakfast and lunch 5 days a week, and will provide supplemental meal service to the remaining 140 schools.

An existing warehouse has been identified for the central kitchen site and plans are underway to renovate within the existing structure. Having a central kitchen will allow the staff to improve the quality of food being served; increase the amount of local produce used in cooking; create a training site for staff training; and create a site for culinary students to receive job training. It is estimated to reduce operating cost by 20-30% range over current costs.

In addition, the central kitchen will be marketed to customers outside of the school system, such as Meals-on-Wheels, to generate additional revenue for the farm-to-school program and change the quality of institutional foodservice for the community at large.

Background/Evidence

The high prevalence of overweight and at-risk-for-overweight in Baltimore inner-city children highlights a need for improving school food. According to the Center for Disease Control (CDC)'s 2007 Youth Risk Behavioral Surveillance System (YRBSS), 18.5% of Baltimore City’s high school students have been identified as obese compared to 13% of their counterparts in Maryland and nationwide. Of equal concern is the identification of 19.9% of Baltimore City high school students as overweight compared to 15% of their counterparts statewide and nationally. At noted earlier, researchers at the University of Maryland released a report indicating that 13.5% of low-income Baltimore families suffer from food insecurity – lack of access to enough food for an active and healthy lifestyle due to financial constraints.

Providing higher quality meals with local produce from a central location ensures that all students, regardless of income, have greater access to local, healthy food choices in their cafeteria. BCPSS has 82,000 students enrolled in 190 schools throughout the City. Of those 82,000 students approximately half participate in the USDA school meal program; and of those participating, 73% qualify for free or reduced lunch. Some students live in food insecure homes and rely on school meals to fill critical nutrition gaps in their lives. Food Services has the capacity to serve many more students than it currently does and increasing participation in the school meals program is a key goal.

School District Central Kitchen Case Studies

Fresno Unified School District

In 2007, the school district in Fresno, California began servicing its 77,000 students with a $25 million central kitchen. The district serves 72,000 meals per day, and 80 percent of students in the district qualify for free or reduced price lunch. In a press release from KNN Public Finance, which worked with the school district to finance the central kitchen, Paul Idsvoog, the director of food services, said the following: "By standardizing production in the central kitchen, we can minimize the
need for pre-packaged foods that are often high in preservatives and sodium. We are thrilled to see what a difference the new central kitchen will make for our students' health and academic success..." The district saved money from the national school lunch program to fund the central kitchen, but encountered some complications on what were considered eligible uses.

### Action Plan for Support a Central Kitchen Model for the Baltimore City Public School System (BCPSS)

<table>
<thead>
<tr>
<th>Recommendation</th>
<th>4. Support a Central Kitchen Model for the Baltimore City Public School System (BCPSS)</th>
</tr>
</thead>
<tbody>
<tr>
<td>FPTF Goals Addressed</td>
<td>1, 3, 4, 6, 7</td>
</tr>
<tr>
<td>Objective(s) of Recommendation</td>
<td>Improve the quality of school food by creating a central kitchen for cooking school meals.</td>
</tr>
<tr>
<td>Audience/Reach</td>
<td>School aged children</td>
</tr>
<tr>
<td>Expected Cost</td>
<td>$3 million over a 3-year period</td>
</tr>
<tr>
<td>Funding Source</td>
<td>BCPSS, private foundations</td>
</tr>
<tr>
<td>Lead Partners</td>
<td>Food and Nutrition services (BCPSS), Department of Health</td>
</tr>
<tr>
<td>Barriers/Limitations</td>
<td>Once funding is secured, renovations will take 4-6 months</td>
</tr>
<tr>
<td>Implementation Steps and Timeline</td>
<td>Improving Food Environment around Schools and Recreation Centers</td>
</tr>
<tr>
<td>Indicators/Evaluation</td>
<td>Increase in the number of students who participate in school lunch</td>
</tr>
<tr>
<td>Co-Benefits from other strategies</td>
<td></td>
</tr>
<tr>
<td>Links to sustainability strategies</td>
<td>Strategy B: Improve the quantity and quality of food available at food outlets; Strategy C: Increase demand for locally-produced, healthy foods by schools, institutions, supermarkets, and citizens</td>
</tr>
</tbody>
</table>

### 5. Support community gardening and urban farm plots

**Action**

The City of Baltimore currently has 30,000 abandoned properties and lots in the city. It is estimated that there are more than 200 community-managed open-spaces (CMOS) in the City, of which 49 are on record as food producing. In addition, Baltimore City Parks & Recreation manages seven city gardens, including one in Patterson Park. The City is proposing the creation of Land Bank that would more clearly identify land that should be maintained as CMOS for the long term so that community groups have confidence to invest “sweat equity” into their urban gardens.

Baltimore Green Space is a newly formed Land Trust for Community Managed Open Space which will help support and preserve community gardens. Other resources for community gardens include Parks and People Foundation which has Community Greening Resource Network. CGRN has provided support to 74 gardens, including seed give-aways and training sessions.
**Background/Evidence**

Community gardening is defined as a plot of land tended by a group of people. Community gardens provide access to fresh produce and plants and contribute to neighborhood improvement and community building. Typically, community gardens are used and managed by the people, and owned in trust by local governments or nonprofits. In contrast, urban farming is typically more involved in growing and distributing food in and around a city for a profit and/or food production purposes. Urban farming puts vacant land back into productive use, increases the fresh food available to urban consumers, and promotes sustainable practices.

**Benefits of Community Gardens and Urban Farming**

Kaufmann and Bailkey (2000) describe a three legged stool that builds on a set of assumptions about a city and gives support for urban agriculture projects: available vacant land, entrepreneurial urban agriculture, and local institutional climate. Urban agriculture has the potential to flourish in areas where these three legs exist. Kaufmann and Bailkey explain that while there is enormous potential for urban agriculture to expand in many cities and metropolitan areas several challenges remain including: land tenure, start-up costs, access to markets, knowledge and skills, seasonal limits, health, urban planning, and crime/safety. Food policy councils and similar entities can support and sustain community gardens through policy change.  

In 2003, the Community Food Security Coalition (CFSC)’s urban agriculture committee conducted an extensive literature review of the health benefits of urban agriculture with the goal of connecting urban agriculture and public health advocates so they can benefit from their respective expertise. Relevant to this paper, they found “the experience of growing food is correlated with its consumption; the more experience people have growing food, the more likely they are to eat it.” They discovered other studies that found fruit and vegetable consumption (by servings) is higher among gardeners than non-gardeners, or the average U.S. consumer. Additional evidence from international studies reinforces U.S. data that if someone is growing their own food, it increases consumption and diversification of fruits and vegetables.

A large study conducted in 560 gardening sites in Philadelphia included urban poor, several ethnic groups and the elderly. Comparing gardeners to non-gardeners, they found that gardeners consumed significantly more of specific vegetables categories and consumed vegetables more frequently overall. They also consumed fewer sweets and sweet drinks.

According to resources from the American Community Gardening Association, community gardens increase property values in a statistically significant way that increases over time. Over 20 years, the tax benefit of this to a city was $1 million per garden in New York City. Additionally, there may be a reduction in crime associated with community gardens, according to a study conducted in Saint Louis.

According to the Community Food Security Coalition, small-scale urban agriculture and gardening is valuable for nutritional health, wellness, and urban greening. Gardening and urban farming have become more popular in recent years, but the potential to expand is huge. In a temperate growing season, a 10’ x 10’ plot can provide most of a four-person households’ total yearly vegetable needs (and most vitamin A, C, B complex and iron). It is also economical. For each $1 invested in a community
garden plot, the plot can produce $6 in vegetables. CFSC also cites mental health, physical activity, food security and environmental benefits, and notes the need to test soil for toxins before growing food in urban areas.

**Community Gardens Case Studies**

**Portland Community Gardens Program**

Portland's municipal gardens program was established by the Department of Parks and Recreation in 1975, and a nonprofit was established 10 years later to help fundraise for the gardens. This is advantageous because the nonprofit is able to raise and distribute money with fewer restrictions than the City. About half the gardeners are considered low-income by the city's annual survey. The program has 1000 people on its waiting list. Portland's community gardens include 33 sites, 1,200 plots, 3,000 gardeners and 16 acres in total. The city charges $75 per 400 square foot plots, plus a $10 deposit for new gardeners. 200 square foot plots are $38 and there are a limited number of 4’ x 8’ garden beds that are $20 per year. Portland's community gardens collect between 11,000 to 12,000 pounds of food per year for donation.

**Chicago Growing Home Program**

Growing Home is a nonprofit organization that provides agricultural training opportunities to people who are homeless and grows organic produce sold in city farmer’s markets. It was established as an offshoot of the Chicago Coalition for the Homeless. A program such as this could achieve several of the task force’s goals—transforming vacant lots into urban gardens and increasing the supply of local produce in the city—as well as be a valuable service to the community in the form of the job training program.

The program, funded mostly by foundations and grants, established two farms—one larger farm 75 miles outside Chicago, and one 2/3 acre urban plot in the Inglewood area of the South Side of Chicago. Environmental testing showed some problems with this land, and so the organization built up the soil over concrete and remediated the land where necessary, which was a less expensive and faster method than tearing up the concrete and remediating the entire plot.

Last year, the 2/3 acre plot grew 5,000 lbs. of produce, and is on track for 12,000 lbs. this year. Growing Home sells its produce a few ways: through a CSA, at an upscale sustainable Chicago farmer’s market, and at the Inglewood farmer’s market, near the farm itself. The upscale market, Green City Market, promotes sustainable agricultural practices Growing Home worked with local high school students to establish the Inglewood farmer’s market. Also, there is a farm stand at the farm, where some produce is sold. Prices are lower at the farm stand and at the Inglewood market, partially due to the real price difference in transporting the produce and partially because Growing Home subsidizes the prices at the farm stand and Inglewood market.

The six-month training program combines training and a temporary job on the farm, and is six hours per day, four days per week. The program is long enough to encompass a growing season and includes hands-on farm training and job readiness preparation. Currently, Growing Home is covering about 16 percent of its costs with earned income from produce sales, and the rest is covered by grants from foundations and the city. The number one cost is the stipends provided to participants of the program.
**Growing Power**

Growing Power, a Milwaukee, WI based nonprofit organization, works to provide high-quality, safe and affordable food to all in their community. The organization engages in training, outreach, demonstration and technical assistance. Their goal is to grow food, grow minds and grow community. Growing Power helps develop community gardens, influences food policy, trains youth in urban farming, supplies farmers' markets with sustainably-grown food.

**Action Plan for Support development of community gardening and urban farm plots in vacant lots**

<table>
<thead>
<tr>
<th>Recommendation</th>
<th>5. Support development of community gardening and urban farm plots in vacant lots</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>FPTF Goals Addressed</strong></td>
<td>1, 2, 3, 4, 7</td>
</tr>
<tr>
<td><strong>Objective(s) of Recommendation</strong></td>
<td>Increase the amount of locally grown food available in Baltimore through the creation of urban agriculture activities.</td>
</tr>
<tr>
<td><strong>Audience/Reach</strong></td>
<td>Community land trusts, community-based organizations</td>
</tr>
<tr>
<td><strong>Expected Cost</strong></td>
<td>Capital costs for water access to each site (~$50,000 per year), $XX to operate a 1 acre garden plot per year, seeds and tools, opportunity costs, insurance</td>
</tr>
<tr>
<td><strong>Funding Source</strong></td>
<td>Baltimore City, Baltimore Community Foundation--BUGS Program, Donations by CGRN</td>
</tr>
<tr>
<td><strong>Lead Partners</strong></td>
<td>Dept. of Parks and Recreation; Department of Public Works, private developers; Maryland Extension, Parks and People Foundation CGRN Network, Baltimore Green Space, Civic Works, and Community Associations Planning and Housing; private developers; Health Care/Hospitals</td>
</tr>
<tr>
<td><strong>Barriers/Limitations</strong></td>
<td>Sustainability of gardens, access to water, uncertainty of continued access to gardens, particularly in the case of farms developed on vacant lots, concerns of contaminated soil, knowledge limitations about how to grow, harvest, and prepare fresh foods</td>
</tr>
<tr>
<td><strong>Implementation Steps and Timeline</strong></td>
<td>Community Land Trust, Identify plots suitable for community gardening, Implementation of Area Master Plans</td>
</tr>
<tr>
<td><strong>Indicators/Evaluation</strong></td>
<td>Increase in local food consumption, neighborhood improvement</td>
</tr>
<tr>
<td><strong>Co-Benefits from other strategies</strong></td>
<td>Develop a targeted marketing campaign to encourage healthy eating among all Baltimoreans</td>
</tr>
<tr>
<td><strong>Links to sustainability strategies</strong></td>
<td>Strategy A: Increase the percentage of land under cultivation for agricultural purposes; Strategy C: Increase demand for locally-produced, healthy foods by schools, institutions, supermarkets, and citizens; Strategy D: Develop an urban agriculture plan</td>
</tr>
</tbody>
</table>
6. Expand Supermarket Home Delivery Program

*Action*

Increased home delivery of groceries is desirable in areas underserved by supermarkets and for homebound and elderly, or those with young children or lack viable transportation. Pooling grocery deliveries aggregates the community demand and provides an opportunity for Baltimore residents with limited mobility or access to full-service grocery stores to access a wider variety of foods. The Baltimore City Health Department is working with Santoni’s supermarket to pool online grocery orders for its pilot Virtual Supermarket Project (VSP). Currently, the city is working to expand the pilot program and has identified four additional sites at community centers (such as churches and recreation centers) for drop-off sites.

*Background/Evidence*

The Baltimore City Health Department is administering a pilot program to coordinate online supermarket orders from Santoni’s supermarket, which had established an online ordering program, and deliver them to organized drop-off locations in the city. The VSP covers Santoni’s delivery fees, so customers are not responsible for any delivery charges. Currently, there are two drop-off sites, one in East Baltimore and one in Southwest Baltimore. The City hopes to increase participation at these sites, and establish a fully operational program. Four additional sites are under consideration, and the city is anticipating additional funding for expanding food access to the order of $60,000 from the 2009 federal stimulus package.

In the pilot stages, the minimum purchase for every drop-off site is $200 which averages to five customers per drop-off. More funding for marketing to emphasize the convenience and cost savings could help recruit potential customers.

The VSP model is based on aggregating the unmet demand in underserved neighborhoods. Organizers also plan to collect data on participants, their range of food choices, changes over time and net receipts at the Virtual Supermarket in underserved neighborhoods.

Once the program is fully operational, the program may add an education component to encourage healthier food choices. Ideally, the VSP will provide data that will support the building of new supermarkets in underserved neighborhoods, once the demand is more apparent to retailers.
### Action Plan for Expand Supermarket Home Delivery Program

<table>
<thead>
<tr>
<th>Recommendation</th>
<th>6. Expand Supermarket Home Delivery Program</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>FPTF Goals Addressed</strong></td>
<td>1, 3, 4, 7</td>
</tr>
<tr>
<td><strong>Objective(s) of Recommendation</strong></td>
<td>Increase access to full service supermarkets for residents who have difficulty traveling to a supermarket.</td>
</tr>
<tr>
<td><strong>Audience/Reach</strong></td>
<td>More food retailers, communities and individuals in underserved neighborhoods</td>
</tr>
<tr>
<td><strong>Expected Cost</strong></td>
<td>$11.95 delivery fee per aggregated order less than 300, advertising ($5000), staff time</td>
</tr>
<tr>
<td><strong>Funding Source</strong></td>
<td>Grants, Baltimore City, private sources</td>
</tr>
<tr>
<td><strong>Lead Partners</strong></td>
<td>Health Department, Rec &amp; Parks, Food retailers, Faith Centers</td>
</tr>
<tr>
<td><strong>Barriers/Limitations</strong></td>
<td>Currently Funded with Stimulus Funding, raising awareness for resident participation</td>
</tr>
<tr>
<td><strong>Implementation Steps and Timeline</strong></td>
<td>Currently in pilot phase</td>
</tr>
<tr>
<td><strong>Indicators/Evaluation</strong></td>
<td>Sustainability of several drop-off sites around the city and increased participation at those sites</td>
</tr>
<tr>
<td><strong>Co-Benefits from other strategies</strong></td>
<td>Continued Research on Food Deserts; Develop a targeted marketing campaign to encourage healthy eating among all Baltimoreans</td>
</tr>
<tr>
<td><strong>Links to sustainability strategies</strong></td>
<td>Strategy C: Increase demand for locally-produced, healthy foods by schools, institutions, supermarkets and citizens</td>
</tr>
</tbody>
</table>

### 7. Improving the Food Environment around Schools and Recreation Centers

**Action**

Recent research has found that students with fast-food restaurants within one half-mile of their schools consumed fewer servings of fruits and vegetables, consumed more servings of soda and were more likely to be overweight and obese than students in schools that were not near fast-food restaurants.\(^{35}\) Prior successful restrictions of alcohol and tobacco sales or advertising near schools demonstrate that it is easier to create health-oriented zoning regulations for children than for the general population.\(^{36}\) Restricting unhealthy food near schools is part of the land use regulations in such cities as Detroit and Los Angeles. Increasing availability and stimulating demand for healthy food is another opportunity to improve the food environment around schools. Several programs, outlined below, have implemented such plans.

**Background/Evidence**

Prior efforts has shown that banning or restricting fast-food restaurants around schools will almost certainly be easier than attempting to do so for the general public. While taking such action has legal precedent, there are several consequences that must first be carefully considered.
The public health advantages of such zoning regulations are numerous: studies have shown that restricting such establishments around schools is associated with a decrease in obesity and overweight rates, has the potential to decrease motor vehicle accidents (especially in areas of dense pedestrian traffic), and increase air quality and reduce asthma rates. Experts also cite the decrease in truancy and delinquency around schools as a societal benefit of fast-food restriction. Decreases in traffic and congestion around busy intersections could be additional benefits resulting from such legislation.

However, restricting people’s food choices calls in to question issues of social justice; under such regulations, only those wealthy enough to afford sit-down restaurants may be able to dine out. Some make the argument that fast-food establishments do not necessitate unhealthy eating, given the availability of healthier options such as salads, low-fat side dishes, and diet drinks. Some also caution of the economic ramifications of such regulation which would decrease the number of low-skilled jobs available within the community.

A potential alternative might be to ban or restrict formula-restaurants (often called chain restaurants) but not local eateries. This would help maintain a greater variety of food choices and sources of employment. While local eateries may not provide healthier food than formula-restaurants, given a greater degree of autonomy than many managers of chain restaurants have, local managers could likely be more easily persuaded to adopt and publicize components of healthy eating campaigns. They would also likely be more invested in the welfare of their local communities and may be willing to incorporate some healthy eating choices into their menus.

**Case studies**

**Detroit, Michigan**

In March 1978, Detroit’s City Council passed official zoning ordinance establishing a minimum distance of 500 feet between certain carry-out, fast-food, and drive-in restaurants and the nearest point of an elementary, junior high, or senior high school. They cited community concerns about truancy and school delinquency, litter, noise, and air pollution, as well as concern about youth exposure to marketing of unhealthy foods as reasons for the zoning. Health concerns included exposure to “highly processed, minimally nutritious foods associated with unhealthy diets and air pollution from cars associated with asthma.”

**Philadelphia’s Food Trust: Snackin’ Fresh and Healthy Corner Initiative**

Because of the political difficulty of restricting people’s food choices, incentivizing healthy food availability around schools presents another means by which to achieve the goal of creating healthier food environments for children. Many of the other healthy food recommendations throughout this document could be used to create healthier food zones around schools. Because of their mobility, green carts present a potentially strategic means of bringing fresh, nutritious produce to school areas. Creative approaches could be undertaken to draw students’ interest to such foods, including the subsidization of fresh fruit cups, veggie sticks, dried fruits, fruit juices, low fat snacks, etc.

Organizations such as Philadelphia’s Food Trust have already taken such initiative to create healthier food environments for young people. Social marketing campaigns such as their “Snackin’ Fresh” provide opportunities for youth to become involved in promoting healthy food to their peers and to adults through films, summits, and advocacy work.
Baltimore Healthy Eating Zones

Baltimore Healthy Eating Zones (BHEZ) is a community-based program whose mission it is to improve diet and reduce obesity in low-income African American children in Baltimore City by increasing access to healthy food. The program assists local small-food sources that residents rely heavily on to stock healthier options to some of the high-sugar, high-fat foods and beverages they sell. The program simultaneously uses recreation centers to draw youth and caregivers, educate them about nutrition, and encourage them to buy these healthier items. Youth are involved in educating their peers and parents, designing and developing intervention material, and approaching store owners and carryout restaurants to stock healthier eating options than have traditionally been available. BHEZ is conducting its Phase 1 intervention in seven recreation centers from September to May of 2009 and will be able to provide valuable information to the Task Force about the results of their intervention.

Action Plan for Improve the Food Environment around Schools & Recreation Centers

<table>
<thead>
<tr>
<th>Recommendation</th>
<th>7. Improve the Food Environment around Schools &amp; Recreation Centers</th>
</tr>
</thead>
<tbody>
<tr>
<td>FPTF Goals Addressed</td>
<td>1, 3, 4, 5</td>
</tr>
<tr>
<td>Objective(s) of Recommendation</td>
<td>Reduce access to unhealthy food choices for students walking to and from school and at recreation centers</td>
</tr>
<tr>
<td>Audience/Reach</td>
<td>Youth and neighborhood (including food stores and restaurants within a 1 km radius) around schools and recreation centers</td>
</tr>
<tr>
<td>Expected Cost</td>
<td>$5000 per store (this is mainly the cost of an interventionist), Stores 5-10: $4000 per store, Stores 11-25: $3000 per store, Stores 26+: $2000 per store; this includes costs of training, BHS materials, intervention, process-type evaluation, etc but not pre and post evaluation measurement at the consumer level.</td>
</tr>
<tr>
<td>Funding Source</td>
<td>Robert Wood Johnson Foundation (funding Baltimore Healthy Eating Zones pilot study with 12 recreation centers); need additional funding for city-wide expansion; Kaiser Mid Atlantic</td>
</tr>
<tr>
<td>Lead Partners</td>
<td>Baltimore City Planning Department, Baltimore Healthy Eating Zones (Center for Human Nutrition, JHSPH), Department of Rec &amp; Parks</td>
</tr>
<tr>
<td>Barriers/Limitations</td>
<td>Public resistance to restricted food choices, decrease in local employment opportunities, food source owner resistance, cost of sustainability</td>
</tr>
<tr>
<td>Implementation Steps and Timeline</td>
<td>Research Phase (Yr. 1; Completed): Surveys of eating habits and BMI (long term), surveys of food resources around and within recreation centers, quantitative measurements of specific food sales before/after intervention. Intervention Phase (Yr. 2; Current): Peer mentor and center staff education, marketing, youth/parent-targeted nutrition education</td>
</tr>
<tr>
<td>Indicators/Evaluation</td>
<td>Increased availability of affordable healthy food options in neighborhood food sources. Sales of these foods.</td>
</tr>
<tr>
<td>Co-Benefits from other strategies</td>
<td>Support Street Vending of Healthy Foods, Create Healthy Food Zoning Requirements or Incentives, Develop a targeted marketing campaign to encourage healthy eating among all Baltimoreans, Partnering with Home Delivery Program or Farmers Markets to make food available/affordable to corner stores</td>
</tr>
<tr>
<td>Links to sustainability strategies</td>
<td>Strategy B: Improve the quantity and quality of food available at food outlets; Strategy C: Increase demand for locally-produced, healthy foods by schools, institutions, supermarkets, and citizens</td>
</tr>
</tbody>
</table>
8. Support Street Vending of Healthy Foods

**Action**

Street vending has the potential to provide an opportunity for entrepreneurship for Baltimoreans as well as serve the needs of some of Baltimore’s underserved neighborhoods. By expanding the number of street vendors that exclusively sell nutritious foods and primarily increase healthy food access in the city, the city could address the need for increased healthy food access in the city. This program would streamline the permitting process and promote the vending program.

**Background/Evidence**

Street vending that is well facilitated by Baltimore City can increase the availability of healthy food to underserved Baltimore communities with lower investments in time, money, labor or consensus than a new store or farmers market. Bringing a new supermarket into a low-income neighborhood can take considerable financial investment, long timelines and investments in labor. In fact, to increase the density of supermarkets in these neighborhoods often takes financial and zoning incentives. Unfortunately, new farmers markets also demand high start up costs, in addition to the need for consensus and participation by many parties. In contrast, street vending does not have the traditional start up costs of a store, the period of start up in a well-facilitated system can be small, and there is no need to build consensus among many parties before starting up.

There are several programs in U.S. cities that point to street vending as one solution for bringing healthy food to neighborhoods with low access and availability. NY Green Carts Program aims to increase the availability of fresh produce to city residents closer to their homes. The program sells permits to vendors, who can only sell raw fruits and vegetables, in certain designated areas of the city. In Detroit, a pilot project called MI Neighborhood Food Movers helps vendors sell fresh produce in neighborhoods from produce trucks with low store or vendor competition. In Baltimore, vendors known as “arabbers,” sell produce from horse-drawn carriages in neighborhoods with low food access. Street vending can improve access to local food, while increasing economic opportunity.

Street vending gives individuals an opportunity for enterprise and employment and can therefore contribute to local economic development. In a street vending program that successfully improves availability of healthy foods, potential vendors should be given clear directions and advice on how to apply for a permit, where to apply for a start up loan, how to get a truck or cart and how to process EBT payments. Neighborhoods with low availability should be identified for the vendors, and systems of checks should be in place to ensure that vendors are selling in target neighborhoods and not elsewhere. If the opportunity to become a vendor is made accessible and the enterprise is profitable, then there will be a demand for permits, as there is in New York’s Green Carts Program. A recent NY Times article called street vending a way to ease joblessness. 40

**Case Studies**

**Baltimore Arabbers**

Baltimore is the last remaining U.S. city with food vendors on horse-drawn carriage. Since the food vendors, known as “arabbers,” typically sell fresh fruit and vegetables from carriages that travel to neighborhoods with low food access, they provide a unique opportunity to increase food security.
via a traditional method of food sales. According to David Van Allen, the president of the Arabber Preservation Society, there are currently nine wagon teams that service Baltimore City. Most of the vendors go out each day except Sunday, and make their own routes, sometimes keeping their routes secret to avoid competition from other arabbers. Typically, they sell in low-income areas without supermarkets and with low car ownership, Van Allen said. Although the arabbers work year round, they work more frequently in the summer, when produce is in season. When produce is out of season in the winter, it may be more difficult for the arabbers to make a profit. The arabbers purchase the produce from the Jessup wholesale market. Sometimes, the arabbers find a good customer base, for example at a high-rise senior center, and park there for several hours. Van Allen said prices are competitive and customers can bargain for an even better price as well.

Steps should be taken to ensure the quality of produce carried by arabbers. Facilitation of relationships between arabbers and local farmers could increase the availability of local, seasonal, high-quality fruits and vegetables to low-income communities. Creating one drop-off site where local farmers can sell to arabbers at an arranged time may streamline the process of arabbers purchasing high quality produce and could foster a relationship between the two communities.

**MI Neighborhood Food Movers**

Detroit’s recent pilot project, MI Neighborhood Food Movers—Fresh Food Delivery Program, seeks to address the lack of access and availability to fresh produce in many Detroit neighborhoods. The project is a collaborative effort between the state of Michigan, Detroit local partners, and individuals who wish to become vendors of fresh food. Vendors traveling in trucks on fresh food-sparse routes bring much needed produce to the people of Detroit. The project is financed with a $75,000 loan fund from the Michigan Economic Development Corp., and the Michigan State Housing Development Authority is helping finance the project. Workers hang their schedules on neighborhood residents’ doors and will send information through text to cell phones. The MI Neighborhood Movers project website includes a how-to manual for entrepreneurs who wish to become vendors in the project. The project provides this information in a clear and comprehensive packet that includes step by step instructions on how to develop a business marketing plan, select a neighborhood route, apply for a vendor’s license, register a business, apply for a startup loan, or purchase a truck. Free logistical services are provided to the vendors for 2009, including access to consolidated buying services of fresh produce, bought from local farmers when possible, access to a secure overnight refrigerated storage unit, crushed ice, waste disposal and supplies for the truck. The vendors are told how to gain access to mobile electronic payment, with particular emphasis on how to apply to accept SNAP benefits. By facilitating the process of becoming a fresh produce street vendor, the project clears hurdles for potential entrepreneurs and may make it a more desirable endeavor. All vendors are required to participate in food rescue, where nearly spoiled food will be picked up every Saturday by a non-profit organization that delivers discarded food to organizations in Detroit that feed the hungry.

**NYC Green Cart**

New York City’s green carts program could be a model for a similar program in Baltimore that could be quickly implemented and use many already-available resources. Green carts are mobile vending carts that sell fresh, unprocessed fruits and vegetables in neighborhoods that lack access to fresh produce. In New York City’s program, products other than fresh produce, like chips or candy, cannot be sold from green carts, nor can fruits and vegetables that have been processed in any way. Operators of green carts have special permits that identify them as participants in the program and
restrict the areas where they may set up their carts to the neighborhoods designated in the legislation establishing the program.

Potential benefits of the program include economic development goals, increased access to fresh produce in underserved areas, increased fruit and vegetable consumption and a decrease in the rates of obesity and chronic disease affiliated with diet. Potential barriers to instituting such a program include the lack of research as to the measurable results in fruit and vegetable consumption, and uncertainty about the long-term economic well-being of vendors. Obviously, if vendors are able to profit from the green carts, they will remain a viable fresh food purchasing option, but that depends on consumers.

### Action Plan for Support Street Vending of Healthy Foods

<table>
<thead>
<tr>
<th>Recommendation</th>
<th>8. Support Street Vending of Healthy Foods</th>
</tr>
</thead>
<tbody>
<tr>
<td>FPTF Goals Addressed</td>
<td>1, 2, 3, 4, 7</td>
</tr>
<tr>
<td>Objective(s) of Recommendation</td>
<td>Maximize opportunities for residents to purchase fresh produce and create economic opportunities for potential street vendors.</td>
</tr>
<tr>
<td>Audience/Reach</td>
<td>Targeted neighborhoods with low access to fresh produce.</td>
</tr>
<tr>
<td>Expected Cost</td>
<td>Start-up coordination and promotional materials.</td>
</tr>
<tr>
<td>Funding Source</td>
<td>Small Business Enterprise, Foundations</td>
</tr>
<tr>
<td>Lead Partners</td>
<td>Planning Department, Baltimore Development Corporation, Department of Health, Department of Public Works, University of Maryland Environmental Finance Center</td>
</tr>
<tr>
<td>Barriers/Limitations</td>
<td>Difficulty obtaining licenses; security; food safety; economic viability of vendors</td>
</tr>
<tr>
<td>Implementation Steps and Timeline</td>
<td>Streamline licensing process, identify areas in the city that need street vending as a means of access to health food</td>
</tr>
<tr>
<td>Indicators/Evaluation</td>
<td>Interest/Retention of Vendors, FV consumption, long-term improvements in chronic disease rates</td>
</tr>
<tr>
<td>Co-Benefits from other strategies</td>
<td>Improving the food environment around schools and recreation centers; Develop a targeted marketing campaign to encourage healthy eating among all Baltimoreans.</td>
</tr>
<tr>
<td>Links to sustainability strategies</td>
<td>Strategy B: Improve the quantity and quality of food available at food outlets; Strategy C: Increase demand for locally-produced, healthy foods by schools, institutions, supermarkets, and citizens</td>
</tr>
</tbody>
</table>

## 9. Create Healthy Food Zoning Requirements and Incentives

### Action

The distribution of food is a critical component of commercial economic development in areas of high food insecurity. Zoning regulations accompanied with strategic financial incentives could help attract full-service grocery stores or other healthy food providers to underserved areas of the city or expand the stock of current food providers to include more affordable, healthy choices. Although by several indicators, there is market demand for more healthy food retailers in Maryland and the City of Baltimore, several barriers exist that impede entry into the market. Currently a limited suite of
incentives for food retailers exist such as façade improvement grants, marketing campaigns to such as Buy Local/Shop Baltimore and other location assistance such as One Maryland. Other incentives could take the form of tax exemptions or credits, targeted loans, reduction in required parking, additional floor area permits, etc.

**Background/Evidence**

**Healthy Food Zoning: Banning Fast-Food Restaurants**

Fast-food banning or restriction has been done in a number of cities including Calistoga, Arcata, and Berkley, California. However, these cities cited mostly aesthetic reasons for doing so, justifying their actions as a move towards preserving the historical and small-town charm that draws many tourists to the area and significantly contributes to the local economy. Other cities, such as Detroit, have successfully passed zoning laws prohibiting fast-food restaurants from opening within a given radius of schools. The possibility of Baltimore enacting similar measures to create healthier food environments around schools has been discussed earlier in this series of recommendations. However, a general restriction of fast-food establishments for the sake of public health, as Councilman Rivera proposed in New York City in 2006, has drawn sharp criticism from business owners, urban planners and academics, and much of the general public. Therefore, programs that provide incentives to create healthy food zones may achieve greater success than laws removing unhealthy eating establishments.

Last year, South L.A. passed a one-year moratorium on new fast food restaurants in a lower-income area of the city, hoping to attract more varied supermarkets and full-service restaurants to the area. Thus far, this is the only city that has successfully enacted a moratorium on new fast-food restaurants that cites health reasons.

Cities like Baltimore have the authority to restrict food establishments for health reasons, but often are justifiably concerned about legal challenges to such a rule. There are also significant political barriers and economic implications that would make this type of measure very difficult to implement. Instead, Gibbons agrees that focusing on children and ensuring access to healthy foods is a more feasible approach, politically and legally, than restricting general access to unhealthy foods. Because the business community often cites a lack of consumer demand for healthy food to justify their lack of participation in such programs, advocates may have to work on stimulating such demand among the populace.

Baltimore City is currently revising its zoning code, and publicly available documents on the city’s planning department website do not mention consideration of zoning changes regarding restaurants or other food sellers. However, the Transform Baltimore directions for redrafting the zoning code does mention the city’s desire to consider public health in planning (one example was an increase in urban farming and open space) and increase sustainability with more walkable communities.

**Case studies**

*Pennsylvania Fresh Food Financing Initiative*

A decade ago, national studies showed that Philadelphia had the second lowest number of supermarkets per capita of major cities in the United States. More recently, reports emerged describing an association between lack of access to supermarkets and poorer diets and in turn,
In light of these findings, a Philadelphia-based non-profit group, the Food Trust, partnered with The Reinvestment Fund and the Greater Philadelphia Urban Affairs Coalition to found the Pennsylvania Fresh Food Financing Initiative in the spring of 2004.

The Initiative’s goal is to increase the number of supermarkets or other grocery stores offering healthy food items in underserved communities across Pennsylvania. To date, the initiative has committed $63.3 million in funding for the creation or preservation of 3,700 jobs and 68 supermarket projects across Pennsylvania whose infrastructure and credit needs cannot be met solely by conventional financial institutions.

The Food Trust has also helped numerous communities in other states address issues of food security and supermarket access, including Pennsylvania, New York, New Orleans, and Illinois. Beneficial outcomes of this campaign include the wider availability of fresh, nutritious foods, reduction in obesity and other diet-related diseases, creation of local jobs, and increased community self-sufficiency. Studies show that the presence of supermarkets, stores that generally have greater quantities of healthier food choices like fresh produce than do smaller grocery and corner stores, are associated with a lower prevalence of obesity and overweight.

NYC FRESH Campaign Case Study
In May 2009, Governor Paterson and New York City Mayor Michael R. Bloomberg acted on recommendations made by the New York Supermarket Commission, a group representing private, public and civic center interests to create New York City’s Food Retail Expansion to Support Health (FRESH) program. One of the focus areas of the program is promoting the creation of zoning and financial incentives to facilitate the development of stores selling a wide range of food products, with an emphasis on fresh fruits and vegetables, meats, and other perishable goods.

Some of the zoning incentives include a reduction in required parking area (especially because the campaign focuses on developing grocery stores in underserved residential areas with high pedestrian traffic), additional floor area in mixed residential and commercial buildings to provide greater accessibility to fresh food, and larger as-of-right stores in light manufacturing districts. Financial incentives include real estate tax reductions, sales tax exemptions, and mortgage recording tax deferral. While legislature concerning zoning incentives is currently awaiting the approval of the New York City Planning Commission and the City Council, the financial incentives have been available since May 2009.

In addition to facilitating the creation of new grocery stores, this campaign encourages increased quality of food inside the food store by requiring that participating stores dedicate at least 30% of retail space for perishable goods including dairy, fresh meats, poultry, fish and frozen foods with at least 500 square feet set aside for fresh produce.

Other Examples of Financial Incentives for Supermarkets in Underserved Areas
In an attempt to augment community food security, community health, etc, many cities have provided financial incentives in the form of tax exemptions to supermarkets and other food providers in underserved areas. In 2000 a bill exempted qualified Washington D.C supermarkets in “priority development areas from sales tax on the purchase of building materials equipment for construction or substantial rehabilitation of a qualified supermarket.” It also “exempted the qualified supermarket from the payment of license fees, personal property taxes and real property taxes levied on the supermarket for 10 years.”
Chicago’s Development Fund also provides financial incentives for “grocery-anchored retail” development in or close to identified ‘food desert’ areas of the City of Chicago. They provide loans with interest rates 2 – 2.5 percentage points below market and the loan-to-value ratios are as high as 95 percent of development costs. They finance new construction or substantial renovation projects with total real estate costs in excess of $5 million. On occasional they also practice partial debt forgiveness. They also provide an online, publicly accessible GIS map which identifies areas that are more likely to qualify for loans than others, geographically identifying food deserts and underserved areas.

Opportunities to improve food options within existing stores are a feasible and less resource-intensive option. It would help boost the local economy already in place. It will likely require incentives for the store owners. Store owners may see requirements to stock healthy foods as a nuisance and an economic threat. The city could require stores to stock certain foods, as the government requires WIC-participating stores to stock certain items. Since the healthy food will go to waste if it is not purchased, it should be promoted and incentivized to create demand for the product on the consumer end as well. The city could partner with local farmer’s markets or CSAs to provide fresh produce for such a program.

Menu Labeling

In light of the extent and severity of the obesity problem in Baltimore City, menu labeling legislation may be a worthwhile option to improve the food environment. Menu labeling requires chain restaurants to post nutrition information (often calories, fat and sodium) on the menus or menu boards at the point of purchase to provide consumers with the tools to make a healthier choice, if they so desire. Often, the healthy option is not intuitive and several studies have shown that people routinely underestimate the calories in restaurant food.

Menu labeling legislation has gained momentum, and New York City, Philadelphia, King County, Washington, and the State of California have all passed legislation implementing menu labeling. Although there is currently not definitive evidence that menu labeling will reduce obesity rates, it is a promising policy option because it provides important nutritional information to consumers at the point-of-purchase, not on web sites or in hard-to-find brochures. Chain restaurants are good targets for this legislation because they already know their nutrition information, their recipes are standardized, they have more resources to absorb the costs of implementing menu labeling, and they reach a lot of customers. Presumably, the implementation of menu labeling will also spur companies to develop more healthy options.

Some research suggests that shows that restaurant patrons consume fewer calories when they have access to nutrition information. A study conducted by representatives of the New York City health department found that Subway restaurant patrons who saw calorie information purchased 52 fewer calories than did other Subway patrons. While this may seem small, the differences add up. They also found that the prominent display of nutrition information increases the proportion of customers who see and use the information. Empowering customers to act on nutritional education that other recommendations in this series promote is critical to sustaining healthy behavior change.
**Action Plan for Create Healthy Food Zoning Requirements and Incentives**

<table>
<thead>
<tr>
<th>Recommendation</th>
<th>9. Create Healthy Food Zoning Requirements and Incentives</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>FPTF Goals Addressed</strong></td>
<td>1, 2, 3, 4, 5, 7</td>
</tr>
<tr>
<td><strong>Objective(s) of Recommendation</strong></td>
<td>Use zoning codes and other regulatory/policy actions to increase access to healthy food</td>
</tr>
<tr>
<td><strong>Audience/Reach</strong></td>
<td>Local food store and restaurant owners and managers</td>
</tr>
<tr>
<td><strong>Expected Cost</strong></td>
<td>Staff time to develop policy, tax breaks and small grants to stores providing healthy food in designated healthy food insecure areas. Formative work to identify most acceptable and efficacious strategies.</td>
</tr>
<tr>
<td><strong>Funding Source</strong></td>
<td>Mixed public and private, community reinvestment banks, Center for a Livable Future</td>
</tr>
<tr>
<td><strong>Lead Partners</strong></td>
<td>Baltimore City Planning Department, Baltimore Development Corporation, Baltimore Healthy Corner Store Certification Program, Baltimore Healthy Eating Zones programs (Center for Human Nutrition, JHSPH), Johns Hopkins Center for a Livable Future, The Food Trust</td>
</tr>
<tr>
<td><strong>Barriers/Limitations</strong></td>
<td>Need for an enforcement strategy/policy; Cost of incentives</td>
</tr>
<tr>
<td><strong>Implementation Steps and Timeline</strong></td>
<td>Develop Healthy Corner Store Criteria, survey of healthy food purchase and consumption habits of population surrounding stores participating in healthy food zoning programs, obtain inventory and sales records of healthy food sold by stores participating in the program compared to controls, survey and GIS map city food system, interview stakeholders involved in US corner store programs to identify potential barriers and facilitators</td>
</tr>
<tr>
<td><strong>Indicators/Evaluation</strong></td>
<td>Increase availability of healthy food options and presence of other metrics in neighborhood food sources. Sales of promoted foods.</td>
</tr>
<tr>
<td><strong>Co-Benefits from other strategies</strong></td>
<td>Improve the food environment around schools and recreation centers; develop a targeted marketing campaign to encourage healthy eating among all Baltimoreans; Expand and Promote Farmers’ Markets; Expand and Promote Community Supported Agriculture (CSA).</td>
</tr>
<tr>
<td><strong>Links to sustainability strategies</strong></td>
<td>Strategy B: Improve the quantity and quality of food available at food outlets; Strategy C: Increase demand for locally-produced, healthy foods by schools, institutions, supermarkets, and citizens; Strategy F: Compile local and regional data on various components of the food system;</td>
</tr>
</tbody>
</table>
10. Developing a City-wide Healthy Eating Publicity Campaign

Action

Develop clear, simple, focused messages about healthy eating, especially encouraging the consumption of those foods readily accessible to the targeted population. Promote culturally-relevant single foods as part of a broader healthy eating campaign. Employ creative means to publicize and generate awareness of the health message, involving pre-existing community based organizations.

Background/Evidence

Single-Product Healthy Eating Campaign

Dr. Sarah Samuels, an expert in social marketing and health policy with a PhD in public health from the University of California, Berkley, cautions against a reductionist approach to healthy eating by promoting single products. Because single foods are not placed in the broader context of an individual's diet to take into account what is most accessible and prominent in the individual's environment, such campaigns will not have as wide an audience as planners may hope. Planners are more likely to target a larger audience if the single product is placed in the context of a broader healthy eating campaign. For example, the broader campaign goal may be to increase consumption of fresh fruits and vegetables, but it may be conducted by highlighting a single fruit and vegetable each month. Many lessons about healthy food campaigns can be drawn from the successes of low-fat milk campaigns in the Washington Heights-Inwood neighborhood of New York City and in Wheeling, VA.

Low-Fat Milk Campaigns

1% Or Less: Wheeling, VA
Some of the best examples of successful single-product healthy eating campaigns concerned low-fat milk in the Washington Heights-Inwood neighborhood of New York City and in Wheeling, VA. Much of the success of these campaigns was due to the fact that they provided people with simple and inexpensive ways to make small changes to benefit their health. The makers of the 1% or Less Campaign aimed broadly to reduce cholesterol-related morbidity and mortality by reducing saturated fat intake. They found that over 50% of saturated fat intake appeared to come from just six items, and so chose to focus on one; milk. They measured the effect that their simple, catchy message had on changing people's milk-drinking habits by conducting pre and post-intervention telephone surveys and measuring supermarket sales of various kinds of milk. Their $43,000 campaign consisted of six weeks of television, radio, and print, in addition to creative publicity events such as press conferences with prominent physicians and milk-tasting events stressing low-fat milk’s good taste. They found that where the market share (percent sales of total sales) of low-fat milk (1% or less) accounted for about 29% of milk sales before the campaign, it accounted for 46% a month after the intervention ended, and about 42% an additional five months later. The total market share of milk, did not change, suggesting that same amount of milk was being sold but that more of it was low-fat. The percent of low-fat milk stocked, and with the exception of one isolated incident, the price of low-fat milk did not change after or during the intervention. This, combined with telephone survey results in which 34.1% of high-fat-milk drinkers...
reported switching to low-fat milk, point to the success of the campaign in encouraging positive behavior change even without changing milk availability or prices. That most of the interviewees who reported switching to low-fat milk drank 2% milk to begin with suggests the potential success of campaigns that encourage small, subtle behavioral changes. However, researchers noted that if the promoted product was not available physically or financially, a behavioral campaign would have much more impact if the food was also made more accessible so people could act upon their newly-gained knowledge. In the case of low-fat milk, the product was available and thus people could buy it after they learned it was a healthier alternative to high-fat milk.

*If You are Over Two, Low-fat Milk is Best for You*

The creators of this campaign utilized a number of creative publicity strategies to promote their low-fat milk message. They worked with focus-groups to pre-test their fliers and come up with the slogan "If you are over Two, Low-fat Milk is Best for You," to go a step beyond simply advocating low-fat milk and inform the public that younger children still benefit from high-fat milk. To spread their message they distributed heart-shaped refrigerator magnets with the slogan, reinforcing the message that low-fat milk is good for cardiovascular health. Like the 1% or Less campaigners, they also conducted taste-tests of low-fat milk on busy street intersections, in front of schools, and other areas that experienced heavy children and pedestrian traffic. They involved pre-existing community organizations in their campaign, an essential step for sustained success of any community-based program. They initiated a contest among community organizations to see who could collect the most low-fat milk labels, used their help to organize a healthy heart carnival, etc.

Because monitoring progress is a necessary part of any intervention, the creators of this low-fat milk campaign came up with a clever, inexpensive manner in which to evaluate their campaign. Using a variety of channels including churches, community-based organizations, schools, mailings, etc, they distributed coupons for 25 cents toward the next purchase of any container of low-fat milk during the month of their campaign at participating stores. The coupons were color and number-coded to allow for an analysis of their redemption according to channel of distribution. The reported cost of these coupons was $50 paid to the stores, in addition to a small amount to print and mail the coupons. This simple, inexpensive tracking method allowed the researchers to analyze where most of the coupons had been spent, what channels they had been distributed to, and what demographics of people used them the most.

*Project LEAN: Lessons Learned from a National Social Marketing Campaign*

Project LEAN was a national nutritional campaign initiated in 1987 by the Henry J. Kaiser Family Foundation as a campaign to reduce dietary fat. Investigators aimed to both stimulate consumer demand for and increase availability of low-fat products. Important lessons learned from their experiences that should be considered when formulating a healthy eating campaign in Baltimore include the following:

- Three major barriers investigators identified that had to be overcome in order to convince people to eat low-fat included convenience, habit, and taste.
- They found that people wanted information that had immediacy, was personally relevant, and gave them guidelines for actions they could easily incorporate into their lives (such as recommendations to eat more of a certain food rather than increase intake of a given nutrient). This practical food message could be reinforced and publicized by chefs, local celebrities, etc.
- They found that their campaign met with more success when they focused on gain and not loss; promoting healthier substitutes and alternatives rather than stressing the elimination of a negative product.
They credited “simple, direct, and hard hitting” advertisements as significantly contributing to their success, cautioning that health professionals may advocate more information than the simple, memorable one-liners that advertisers tend to favor. Thus, it is important for advertisers and health professionals to be aware that they may take very different approaches to message development.

They found that well-researched, strategically placed publicity events tailored to local needs and changing campaign dynamics met with more success than national public service announcements which were more generic and randomly placed.

They found that by undertaking campaigns that were a subset of a national coalition or program and modifying pre-designed materials, they could capitalize on the credibility and visibility of the campaign while tailoring it to fit local needs.

**Action Plan for Develop a targeted marketing campaign to encourage healthy eating among all Baltimoreans**

<table>
<thead>
<tr>
<th>Recommendation</th>
<th>10. Develop a targeted marketing campaign to encourage healthy eating among all Baltimoreans</th>
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<tbody>
<tr>
<td><strong>FPTF Goals Addressed</strong></td>
<td>3, 4, 5, 7</td>
</tr>
<tr>
<td><strong>Objective(s) of Recommendation</strong></td>
<td>Increased awareness, demand for, purchase and consumption of healthy foods through targeted marketing</td>
</tr>
<tr>
<td><strong>Audience/Reach</strong></td>
<td>All stakeholders (including store owners, community members, etc)</td>
</tr>
<tr>
<td><strong>Expected Cost</strong></td>
<td>Cost of media buys, promotional materials and staff coordination, subsidized discounts on promoted healthy foods, taste-tests, give-a-ways</td>
</tr>
<tr>
<td><strong>Funding Source</strong></td>
<td>City of Baltimore; Robert Wood Johnson Foundation (for Baltimore Healthy Eating Zones)</td>
</tr>
<tr>
<td><strong>Lead Partners</strong></td>
<td>Baltimore City Health Department, Baltimore City Health Department, Rec &amp; Parks, Baltimore Healthy Stores and Healthy Eating Zones, private health organizations (Kaiser Health Theater Program), Health Care/Hospitals, Johns Hopkins Center for a Livable Future</td>
</tr>
<tr>
<td><strong>Barriers/Limitations</strong></td>
<td>Important to prioritize target audiences, key foods and behaviors for promotion; cost of materials and implementation; compliance of store-owners (etc.) to display marketing materials; implementing a campaign that reaches out to a wider audience.</td>
</tr>
<tr>
<td><strong>Implementation Steps and Timeline</strong></td>
<td>Formative research that uncovers psychographic food behaviors, Population surveys of knowledge, attitude and dietary behaviors, tracking stocking and sales records of stores selling the healthy foods that are promoted, evaluation of most successful distribution channels via inexpensive coupons for discounts on promoted healthy foods,</td>
</tr>
<tr>
<td><strong>Indicators/Evaluation</strong></td>
<td>Change in consumer measures, including psychosocial factors, food purchasing, preparation methods and consumption. Knowledge of healthy food choices, sales records of stores selling the healthy foods, evaluation of most successful distribution channels via inexpensive coupons for discounts on promoted healthy foods;</td>
</tr>
<tr>
<td><strong>Co-Benefits from other strategies</strong></td>
<td>Farmers Market Marketing and Expansion, Improving the Food Environment around Schools, Supporting Street Vending of Healthy Foods</td>
</tr>
<tr>
<td><strong>Links to sustainability strategies</strong></td>
<td>Strategy C: Increase demand for locally-produced, healthy foods by schools, institutions, supermarkets, and citizens.</td>
</tr>
</tbody>
</table>
Endnotes
2 Baltimore City Health Department. “Fact Sheet: Overweight and Obesity in Baltimore City, 1997-2007”
3 Franco, M. “Availability of Healthy Foods, Neighborhood Characteristics, Dietary Patterns and Body Mass Index: The MESA Study in Baltimore.” JHSPH
4 Gittelsohn, J. Baltimore Healthy Stores Project. JHSPH
5 Operation ReachOut Southwest (OROSW) Community Food Assessment. JHSPH
7 Food systems include all processes involved in food production: growing, harvesting, processing, packaging, transporting, marketing, consumption, and disposal. It also includes the inputs needed and outputs generated at each of these steps.
9 Baltimore City Health Department, “Fact Sheet: Overweight and Obesity in Baltimore City, 1997-2007”
10 Baltimore City Health Department. 2008 Health Status Report
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21 In Maryland, the SNAP is referred to as the Food Supplement Program (FSP)
23 Lee, Barrett A.; Greif, Meredith J. Homelessness and Hunger Journal of Health and Social Behavior, Volume 49, Number 1, March 2008 , pp. 3-19(17)
26 The schools that currently operate cooking kitchens will continue to cook meals on site and will also experience menu changes to reflect the new priorities
32 Faber M, Venter SL, Benadé AJ. “Increased vitamin A intake in children aged 2-5 years through targeted home-gardens in a rural South African community.” * cited in Pomerleau, J, 2005
37 http://www.preventioninstitute.org/SA/policies/policy_detail.php?s_Search=detroit&policyID=54
38 The use of zoning to restrict fast food outlets: a potential strategy to combat obesity. 2005 (pdf)
http://www.nber.org/papers/w14721.pdf - working paper on “The Effect of Fast Food Restaurants on Obesity”
http://www.thefoodtrust.org/php/programs/corner.store.campaign.php
41 According to the 2008 Baltimore Drilldown Analysis, there is 1.85 sq. ft. of grocery space per capita. An area is considered well-serviced when the per capita grocery space is at least 3 sq. ft.
52 Samuels S. Project LEAN - Lessons learned from a national social marketing campaign. Public Health Rep 108:45-53, 1993