Summary of the Health Impact Assessment of Modifications to the Trenton Farmers’ Market

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Farmers’ Market or Public Market?
Definitions of “farmers’ markets” and “public markets” vary and have changed over time. “Farmers markets are generally considered to be recurrent markets at fixed locations where farm products are sold by farmers themselves.” (Brown, 2001). They vary in size, frequency, type of facility, mix of products and ownership.

In the United States, a public market has been usually defined as a venue where vendors sell fresh food from open stalls. Public markets must have public goals which give a defined civic purpose to the activity including attracting individuals to the neighborhood, providing affordable retailing opportunities, utilizing farmland in the region, and using underused public space or renovating undesirable use of public space.

The Trenton Farmers’ Market, which is owned and operated by a board of farmer-vendors, is both a farmers’ market and a public market. Thus, the generic portions of this analysis that are extrapolated to analyses of other markets will be applied to those markets, which like Trenton are both public and farmers’ markets.

Summary of health impacts
Farmers’ markets and public markets in general can influence public health in a number positive ways. However, careful consideration must be given to: market location, outreach, vendor mix, and involvement from other community programs. The Trenton Farmers’ Market in particular has the potential to significantly benefit the health of area residents, especially in neighboring, under-served populations in central Trenton. Recognizing the major disparities in health status, risk factors and food access between residents of Central Trenton and residents in outlying areas of Mercer County where the market is located, we developed a policy scenario (Market outreach/Improved access) to capture the full potential of the market to positively impact public health. The analysis of health impacts compares this scenario to two other options: (1) limited or no change to the market, and (2) a series of major remodeling/revitalization steps as outlined in their study of the Trenton Farmers’ Market (October, 2007).

Health impacts examined
This HIA highlights the pathways through which farmers’ markets might impact health, examine supporting evidence, and identify strategies that this and other markets can utilize to maximize potential health benefits. After a thorough review of published reports and journal articles on public markets; consultations with technical experts, and meetings with Trenton Farmers’ Market stakeholders, we identified five major pathways through with changes in the market may impact the health in the affected populations:

1) Nutrition
2) Physical activity
3) Economics (vendors and surrounding community)
4) Social Capital
5) Public health services

The analysis is primarily qualitative, but yields some descriptive quantitative information as well.

Why examine health impacts?
Stakeholders in Trenton and other communities can use the framework developed for this HIA to help identify areas in which to maximize potential health benefits for all members of the community, and particularly among low-income and underserved populations.

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Lessons learned from other markets

The Project for Public Spaces (PPS) reviewed findings on eight unique markets in low-income communities and discovered the following:

- Social capital is key—markets must have more than food;
- Customers come to markets because it brings them together with other people (28%), products (17.7%), and price (15%);
- Customers and vendors are ethnically diverse;
- Can create upward mobility when farmers and consumers are ethnically diverse;
- Almost half the vendors (46.5%) operate at only one market, while the others sell at multiple markets or have another job;
- Approximately 60% of vendors noted that 0-25% of their total household income is derived from selling at public markets, while 20% responded that sales from public markets make up 26-50% of income. The remaining 20% indicated that 51%-100% of their income comes from sales at public markets;
- 83% of vendors fund start-up costs with their own savings.

Potential benefits for health

- **Nutrition**
  Public and/or farmers’ markets can serve as a vehicle to increase access to fresh fruits and vegetables, particularly in low-income communities. However, in order to change consumption behaviors among non-fresh produce consumers, substantive adjunct programs are necessary. There is ample evidence suggesting that both coupons and education are necessary to change fresh produce consumption behavior in low-income individuals.

- **Economic development**
  A large body of research demonstrates the connection between wealth and health. Economic development spurred by a public market has the potential to improve the health and well-being of both individuals and communities. The Project for Public Spaces estimates there is over $7.5 million in of annual sales potential if local, low-income residents begin shopping at the market, with daily sales per square foot comparable to an existing farmers’ market in a low-income community. In addition, $3 million has been projected in other sales from specialty shops, neighboring retailers and others.

- **Physical activity**
  The Trenton Farmers’ Market has the potential to increase physical activity by (1) encouraging more patrons to travel to the market on foot or by bicycle instead of by motor vehicle, (2) serving as a catalyst for the development of a more walkable neighborhood, and (3) providing a venue for physical activity promotion education.

- **Social Capital**
  A popular, vibrant market is likely to benefit social capital in many ways. Merely serving its core function to offer a place that attracts and holds customers is likely to increase social capital by increasing opportunities for social interaction.

- **Preventive health services**
  A number of markets across the country have demonstrated that they can serve as valuable venues for providing preventive health services to the community. Such services include health screenings, healthy cooking demonstrations, nutrition education and other types of health and nutrition programs.

Health disparities:

High priority health concerns in Trenton include: asthma, obesity-related diseases, environmental pollutants and racial disparities in morbidity and mortality. There were over 370,000 deaths in New Jersey from 1999 to 2003, of which about 4% occurred in Mercer County. A prominent feature of the mortality statistics for both the state and county is the disparity in mortality rates by race. All-cause mortality was about 1.4 times greater among Blacks than Whites in Mercer County. Compared to Whites, mortality rates for Blacks were 1.3 times greater for heart disease, 2.5 times greater for hypertension, 1.2 times greater for cancer, and 2.5 times greater for diabetes.

Maximizing the potential of the Trenton Farmers’ Market

As demonstrated by its long history, the Trenton Farmers’ Market is a valuable community asset. Helping the market realize its full potential to benefit the health and well being of residents will require the coordinated efforts of many community partners. Actions to help maximize the health benefits of the market include:

- Develop outreach mechanisms to bring the market to residents’ in Central Trenton, e.g. a satellite market or mobile market vans;
- Work with existing vendors and new farmer/vendors to expand the selection of fresh produce available in the market during more of the year;
- Improve the walking and biking infrastructure around the market to make it easier to walk or bike to from nearby residential areas and retail centers;
- Build on the success of the current market to catalyze economic growth by improving business and infrastructure linkages in the neighborhood;
- Use expanded and renovated spaces at the market to offer more preventive health services and social events at the market;

Relevancy to other markets

Not all the impact pathways identified in this HIA may be relevant to other. There could also be additional impacts, such as impacts on traffic congestion and housing, which may be pertinent to other situations. Due to baseline health conditions and interactions with other factors, all of these impacts may affect local population sub-groups differently.
Figure 1: General Logic Framework illustrating how changes to a farmers’ market might impact health

**Policy Components**
- Health Services: Nutrition ed., health screenings, etc.
- Loans and other financial support for vendors
- Recruitment and support for fresh fruit and vegetable vendors
- Support for market management
- Purchase/lease of property for vendors
- Facility maintenance & remodeling
- Adjuncts to enhance access (e.g. mobile vendors, delivery, expanded public transport)

**Proximal Impacts**
- Nutrition knowledge and motivation
- Availability/accessibility of fresh fruits and vegetables
- Sales of fresh fruit and vegetables
- Other Sales (non-fruit/veg)
- Market Patronage (i.e. visits)

**Intermediate Outcomes**
- Nutrition pathway
- Economic pathways
- Social capital pathways
- Physical activity pathway

**Health Outcomes**
- Consumption of fresh fruits and vegetables
- Income for vendors, local producers
- Secondary community economic impacts
- Community social capital
- Short-term physical activity

The framework shows the following pathways:
- **Preventive health Services pathway**
- **Economic pathways**
- **Social capital pathways**
- **Physical activity pathway**

The question marks indicate areas where the impact on health outcomes is not specified.