



# FOOD SYSTEM RESILIENCE IN BALTIMORE

August 2017

## FINDINGS FROM THE FOOD SYSTEM RESILIENCE ADVISORY REPORT

**E**nsuring a healthy food supply, both now and in the future, requires a *resilient* food system – one that can adapt to natural disasters and human-made challenges. While traditional disaster preparedness planning has not included the food system, Baltimore City and the Johns Hopkins Center for a Livable Future (CLF) are working to change that. The CLF’s Advisory Report assesses the Baltimore food system’s strengths and weaknesses related to resilience and recommends strategies for protecting the system against threats that would increase food insecurity in both short-term and long-term crises. The City will incorporate findings from the report into Baltimore’s Disaster Preparedness Plan update.

A disaster can dramatically worsen food insecurity for those already challenged with accessing healthy food, and can create such challenges where they did not exist previously. The City of Baltimore addresses food system challenges from many fronts, and now uses a food resilience lens to work to reduce food insecurity before, during, and after crisis periods. This work will be expanded through the key findings of this report.

### WHAT HAZARDS MIGHT DISRUPT BALTIMORE’S FOOD SYSTEM?

The report highlights the risk to Baltimore’s food system from 14 natural and non-natural hazards, from storms and electrical outages, to pandemics and civil unrest. The city’s Mid-Atlantic location makes its food system particularly susceptible to flooding and snowstorms that disrupt transportation routes.

### WHO MAY BE MOST VULNERABLE TO FOOD SYSTEM DISRUPTIONS?

People with low incomes, residents of food deserts, children, older adults, people with disabilities, people experiencing homelessness, and people with special dietary needs may be most at risk of losing access to safe and nutritious food during and after a crisis.

### WHAT MAKES SUPPORTING FOOD SECURITY IN THE CITY ESPECIALLY CHALLENGING IN THE FACE OF DISASTER?

- ▶ High food insecurity and poverty mean that many residents will not be able to store emergency food supplies or easily restock after a disaster.
- ▶ Grocery stores rely on computer systems and electricity to operate and accept payment and nutrition assistance benefits. This puts economic access to food at higher risk to power outages and cyber attacks.
- ▶ Public schools play a key role in food security, providing 60,000 students with free lunch every day. School closures leave many students without a key food source.
- ▶ Public transit lacks reliability and redundancy, and snow or flooding can close routes.
- ▶ Many neighborhoods are underserved by supermarkets and one third of the city’s residents do not own cars. When public transit is impeded, so too is food access.
- ▶ The Baltimore food system’s connection to the global market makes it vulnerable to global agricultural challenges. Urban agriculture is not sufficient to feed the city’s population.
- ▶ Many food warehouses are located along the I-95 corridor, which is subject to bottlenecks that can disrupt food deliveries to the city.
- ▶ A national truck driver shortage and high staff turnover in the food industry weaken resilience in the food labor supply.
- ▶ Many small businesses and non-profits lack resources to adequately prepare for emergencies.

# WHAT STRATEGIES AND ACTIONS CAN IMPROVE RESILIENCE ACROSS BALTIMORE'S FOOD SYSTEM?

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## **Economic Access**

- ▶ Support economic development programs in food insecure neighborhoods.
- ▶ Improve uptake of existing food assistance programs (before and after disasters).

## **Physical Access**

- ▶ Consider food access in public transit redesign.
- ▶ Expand efforts to develop a community food storage plan.

## **Production**

- ▶ Incentivize increased agricultural product diversity in urban and regional food production.
- ▶ Support local farmer emergency preparedness capacity.

## **Processing/Wholesale**

- ▶ Evaluate the Baltimore metro region's processing facility capacity.

## **Distribution**

- ▶ Expand opportunities for local and regional food aggregation and distribution.
- ▶ Assess feasibility of backup food transport methods.

## **Retail**

- ▶ Support small business preparedness in the food sector.

## **Donations/Food Assistance**

- ▶ Identify and designate critical food facilities in each neighborhood for prioritized access and recovery support.
- ▶ Coordinate resources to enhance preparedness capacity of food assistance organizations.

## **Food Acceptability**

- ▶ Ensure that food stored in communities is culturally appropriate, safely used, and anticipates special dietary needs of community members.
- ▶ Continue and expand existing initiatives that support access to healthy, nutritious food.

## **Government**

- ▶ With community input, incorporate findings into a Baltimore Food System Resilience Plan.
- ▶ Connect food resilience planning to broader city resilience planning.

## **Social Capital**

- ▶ Support existing programs proven to strengthen social capital, such as community gardens.
- ▶ Include community members in development and implementation of the Food System Resilience Plan and local community food storage plans.

## **Labor**

- ▶ Support safe and equitable labor and hiring practices in the city's food industry to increase food industry worker retention rates.

## **Waste**

- ▶ Encourage the inclusion of waste removal contingency plans in business and food assistance organization preparedness training.

## **Monitoring**

- ▶ Develop ongoing and crisis-oriented monitoring to identify food system failures and factors that can lead to them.

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## REPORT METHODS

The Johns Hopkins Center for a Livable Future conducted 36 interviews with local food businesses, non-profits, and community leaders; literature reviews; and GIS mapping to inform the findings and recommendations in the report.

*For more information about the report, please contact:*

*Erin Biehl, Johns Hopkins Center for a Livable Future, [ebiehl1@jhu.edu](mailto:ebiehl1@jhu.edu), or*

*Sarah Buzogany, Baltimore Office of Sustainability, [sarah.buzogany@baltimorecity.gov](mailto:sarah.buzogany@baltimorecity.gov)*

The Johns Hopkins Center for a Livable Future is based within the Department of Environmental Health and Engineering at the Bloomberg School of Public Health.

To see the full report, please visit: <http://bit.ly/2tUI0IY>