Welcome and Introductions

- Name
- Organization and/or Community
Baltimore City’s Food Environment
Dr. Manuel Franco – JHU CLF doctoral student studies the Baltimore City Food Environment

- 2006: CLF created their first Baltimore City food desert map using income and distance to supermarket
- 2009: CLF and BFPI partner to release a joint food desert map
- 2012: Baltimore City’s Food Environment: 2018 Report

www.jhsph.edu/CLF
Why Food Environment Mapping?

- Place matters
- Visualize data across space
- Layer complex data to understand connections, inequalities and trends among systems
- Inform and create effective policies and programs
Identifying Areas of Need

Factors included:

- **Healthy food availability**: average Healthy Food Availability Index (HFAI) score is at or below 9.5

- **Household income**: median household income is at or below 185% federal poverty level

- **Vehicle access**: more than 30% of households do not have access to a vehicle

- **Distance to supermarket**: more than ¼ mile from supermarket
**Healthy Food Availability Index**

**Scored items**
- Vegetables: fresh, canned, frozen
- Fruits: fresh, canned, frozen, juice
- Dried beans
- Milk: skim/low-fat, whole
- Ground beef: lean, regular
- Chicken
- Fish
- Bread: 100% whole wheat, regular
- Corn tortillas
- Low-sugar cereal
- Rice
- Pasta
- Healthy frozen meals
- Low-sodium soup

[Link to CLF website](www.jhsph.edu/CLF)
Surveyed Stores

<table>
<thead>
<tr>
<th>Store Type</th>
<th>Number Surveyed</th>
<th>Range</th>
<th>Average</th>
<th>Median</th>
<th>% SNAP</th>
<th>% WIC</th>
</tr>
</thead>
<tbody>
<tr>
<td>Supermarkets</td>
<td>47</td>
<td>23.5-28.5</td>
<td>27.7</td>
<td>27.5</td>
<td>97.9%</td>
<td>74.5%</td>
</tr>
<tr>
<td>Small Grocery and Corner Stores</td>
<td>525</td>
<td>0-23.5</td>
<td>9.0</td>
<td>9.0</td>
<td>78.1%</td>
<td>19.6%</td>
</tr>
<tr>
<td>Convenience Stores</td>
<td>183</td>
<td>0-18</td>
<td>9.3</td>
<td>9.5</td>
<td>93.4%</td>
<td>1.0%</td>
</tr>
<tr>
<td>Public Markets</td>
<td>6</td>
<td>5-20</td>
<td>14.0</td>
<td>16.25</td>
<td>83.3%</td>
<td>0.0%</td>
</tr>
<tr>
<td>Overall</td>
<td>761</td>
<td></td>
<td></td>
<td></td>
<td>78.2%</td>
<td>15.9%</td>
</tr>
</tbody>
</table>

www.jhsph.edu/CLF
Overall Findings

- Supermarkets and convenience stores tend to score similarly whereas small grocery and corner stores have a wide spread of scores.
Small Grocery and Corner Stores

- The most common food store type and the largest range in HFAI scores.
- The average HFAI score for small grocery and corner stores is 9.1.
- 67% of small grocery and corner stores have 5 or fewer fresh fruit and vegetable varieties.

![Bar Chart](chart.png)
SNAP and WIC

- Stores in every category that accept WIC and SNAP or SNAP only have a higher average HFAI score than stores that do not.
- Small grocery and corner stores that accept both WIC and SNAP have about 41% increase in HFAI scores over those that do not.

*Figure 2: Average HFAI Score by Store Type and Federal Benefits Accepted*
Identifying Areas of Need

Factors included:

- **Healthy food availability**: average Healthy Food Availability Index (HFAI) score is at or below 9.5

- **Household income**: median household income is at or below 185% federal poverty level

- **Vehicle access**: more than 30% of households do not have access to a vehicle

- **Distance to supermarket**: more than ¼ mile from supermarket
2018
Baltimore City
Healthy Food Priority Areas
Typology

Priority Area Typology - Number of Factors Met

0 1 2 3 4

- Neighborhood Boundaries
- Major Parks
- Harbor, Lakes, & Streams
- Non-Residential
Healthy Food Priority Areas

Priority Area Factors:
- Low Healthy Food Availability Score
- At or below 185% federal poverty level
- Low vehicle availability
- ¼ mile from supermarket

Impact:
- 23.5% of residents
- 28.3% school aged children
- 24.3% seniors
- 31% Black vs 8.9% White residents
FOOD RETAIL
### SUPERMARKETS, CORNER & CONVENIENCE STORES

<table>
<thead>
<tr>
<th>Number of Stores</th>
<th>Average HFAI Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>CORNER &amp; CONVENIENCE STORES</td>
<td></td>
</tr>
<tr>
<td>708</td>
<td>9.2</td>
</tr>
<tr>
<td>• Primary purchases are snacks and beverages</td>
<td></td>
</tr>
<tr>
<td>• 2.5% carry over six vegetables</td>
<td></td>
</tr>
<tr>
<td>• 5.5% carry over six fruits</td>
<td></td>
</tr>
<tr>
<td>SUPERMARKETS</td>
<td></td>
</tr>
<tr>
<td>47</td>
<td>27.7</td>
</tr>
<tr>
<td>• Widest variety of healthy staple foods</td>
<td></td>
</tr>
<tr>
<td>• Three located in areas that would become a Priority Area without their presence</td>
<td></td>
</tr>
<tr>
<td>• Quality and affordability of foods varies</td>
<td></td>
</tr>
</tbody>
</table>

### HFAI SCORE RANGE

<table>
<thead>
<tr>
<th>HFAI Score Range</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>HIGH</td>
<td>19.1 - 28.5</td>
</tr>
<tr>
<td>MEDIUM</td>
<td>9.6 - 19</td>
</tr>
<tr>
<td>LOW</td>
<td>0 - 9.5</td>
</tr>
</tbody>
</table>
PUBLIC MARKETS

<table>
<thead>
<tr>
<th>Market</th>
<th># of stalls</th>
<th>HFAI Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lexington Market</td>
<td>98</td>
<td>20.0</td>
</tr>
<tr>
<td>Northeast Market</td>
<td>37</td>
<td>20.0</td>
</tr>
<tr>
<td>Cross St Market</td>
<td>18</td>
<td>17.5</td>
</tr>
<tr>
<td>Hollins Market</td>
<td>12</td>
<td>15.0</td>
</tr>
<tr>
<td>Avenue Market</td>
<td>13</td>
<td>6.5</td>
</tr>
<tr>
<td>Broadway Market</td>
<td>5</td>
<td>5.0</td>
</tr>
</tbody>
</table>
URBAN AGRICULTURE
FARMERS MARKETS, FARMS & GARDENS

Farmers Markets
- 18 farmers markets across the city
- 16 markets accept SNAP
- 9 markets accept Maryland Market Money

Urban Farms
- 23 within the city
- Policies: Land Leasing, Urban Ag Tax Credit, Urban Ag Plan

Community Gardens
- 83 community gardens
- 17 gardens are located in Priority Areas
### MEAL & FOOD ASSISTANCE SITES

<table>
<thead>
<tr>
<th>Service</th>
<th>Number of Sites</th>
</tr>
</thead>
<tbody>
<tr>
<td>Summer Meals</td>
<td>586</td>
</tr>
<tr>
<td>After School Meals</td>
<td>268</td>
</tr>
<tr>
<td>Food Pantries &amp; Meal Sites</td>
<td>425</td>
</tr>
<tr>
<td>Senior Meals</td>
<td>58</td>
</tr>
<tr>
<td>Virtual Supermarkets</td>
<td>11</td>
</tr>
</tbody>
</table>

2018 Baltimore City Nutrition Assistance Programs

*Healthy Food Priority Area is an area where: 1) The average Healthy Food Availability Index score for all food stores is low. 2) The median household income is at or below 185% of the Federal Poverty Level. 3) Over 50% of households have no vehicle available, and 4) The distance to a supermarket is more than 1/4 mile.*
**WOMEN, INFANT CHILDREN (WIC)**

Corner stores accepting WIC benefits have a higher HFAI score than stores not accepting SNAP and WIC.

- **103** out of 525 accept WIC benefits
- **1** in 5 corner stores accept WIC benefits
- **41%** higher HFAI compared to similar stores that do not accept nutrition benefits

**SUPPLEMENTAL NUTRITION ASSISTANCE**

Supplemental Nutrition Assistance Program (SNAP), formerly food stamps

- **580** out of 708 accept SNAP
- **80%** of corner and convenience stores accept SNAP benefits
- **18%** higher HFAI compared to similar stores that do not accept SNAP

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Average HFAI by store type and federal benefits accepted

![Average HFAI by store type and federal benefits accepted](chart.png)
“Last year my car was stolen so I had to walk to the grocery store. The closest store is a mile and a half away. It was challenging to carry the bags, especially during inclement weather. Public transportation was equally as frustrating because the only available bus took a route that was twenty minutes out of the way.”

Anthony Francis
Resident Food Equity Advisor

Maps Driving Policy
COUNCIL DISTRICT ANALYSIS

Key Points:

- **District 9**: the highest proportion of children, adults, and seniors live in Priority Areas.
- **District 3**: the lowest proportion of children, adults, and seniors live in Priority Areas.
- **All Districts**: children and/or seniors disproportionately live in Priority Areas compared to adults.
LEGISLATIVE DISTRICT ANALYSIS

Key Points:
- **District 40**: the highest proportion of children live in Priority Areas
- **District 44**: the highest proportion of seniors live in Priority Areas
- **District 43**: the lowest proportion of children, adults, and seniors live in Priority Areas
- **All Districts**: children and/or seniors disproportionately live in Priority Areas compared to adults
HEALTHY FOOD ENVIRONMENT STRATEGY

1. Support resident-driven processes to guide equitable food policy, programs and resources
2. Improve small grocery, corner and convenience stores
3. Retain and attract supermarkets
4. Increase the ability of the public markets to anchor the healthy food environment
5. Implement supply chain solutions that support healthy food distribution and small businesses
6. Maximize the impact of federal nutrition assistance and meal programs
7. Support urban agriculture, emphasizing historically disenfranchised populations and geographies
8. Address transportation gaps that impact food access
“ACCESS TO GOOD TRANSPORTATION IS SOMETHING THAT IMPACTS BALTIMORE AS A CITY. I DON’T THINK THE TRANSPORTATION IS UTILIZED TO CONNECT TO FOOD AS IT SHOULD.”

JOYCE SMITH
RESIDENT FOOD EQUITY ADVISOR
CO-CHAIR 2017
“I have seen so many friends and family members suffer from diseases such as diabetes and hypertension due to an unhealthy diet. It can be really hard to eat right in Baltimore because many lack the education, exposure, finances and time to do so.”

Mary Brown-Bey
Resident Food Equity Advisor

“I have seen that small family run grocery stores are just as important as large supermarkets because the goal in making healthy produce more accessible should be more businesses that sell produce distributed throughout the city instead of being concentrated points of activity where a supermarket is placed.”

Valeria Fuentes
Resident Food Equity Advisor

Resident Food Equity Advisors
- 16 residents
- 14 city council districts
- 7 meetings
FOOD POLICY ACTION COALITION (FOOD PAC)

Goals
• Food policy barriers and opportunities
• Convener
• Share knowledge

Meetings
• First Wed of every other month (Feb, Apr, Jun, Aug, Oct, Dec)

https://planning.baltimorecity.gov/baltimore-food-policy-initiative/food-policy-action-committee
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BALTIMORE CITY FOOD POLICY DIRECTOR
HOLLY.FREISHTAT@BALTIMORECITY.GOV

HTTPS://PLANNING.BALTIMORECITY.GOV/
BALTIMORE-FOOD-POLICY-INITIATIVE

CONTACT INFORMATION
Workshops

• Station 1: Healthy Food Priority Area
• Station 2: HFAI and Methodology
• Station 3: Briefs & Community
• Station 4: Refugee Food and Security
• Station 5: Pigtown Farmers Market