Development of a Food Environment Equity Dashboard for New York City (FEED-NYC)

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This project convenes researchers, NYC officials, and community-based organizations to co-design and test a prototype Food Environment Equity Dashboard (FEED-NYC), a data, information, and knowledge platform focusing on food insecurity in New York City.

The Issue

Food systems data are:
- Incomplete (measure some dimensions but not others)
- Siloed in different organizations
- Privately-owned and inaccessible (e.g., food prices)
- Insufficiently disaggregated to identify racial, ethnic, or spatial disparities
- Not available at a useful spatial granularity
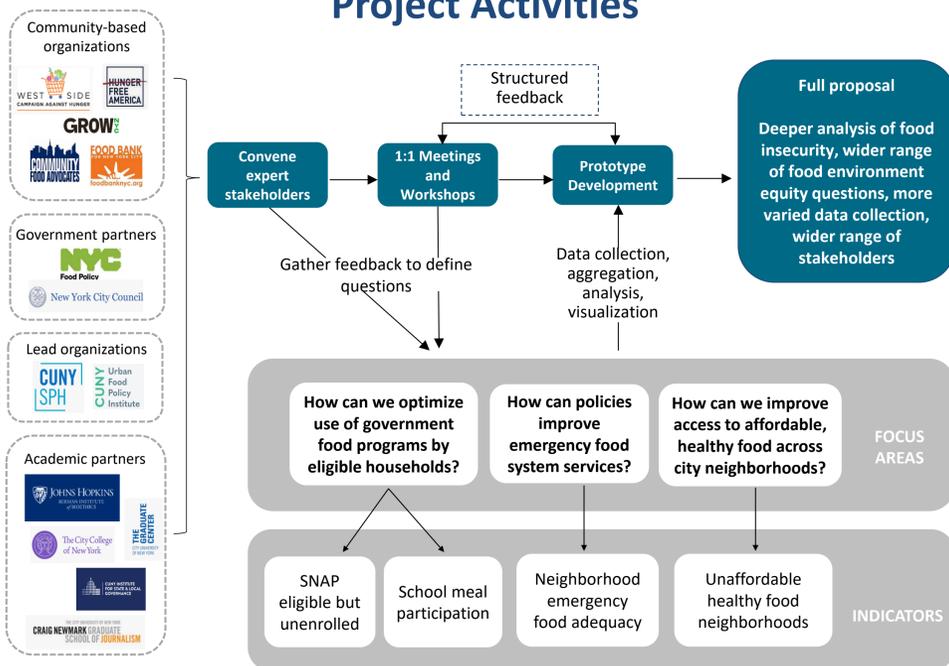
FEED-NYC Research Questions

1. How can innovative data sources illustrate and explain food security disparities?
2. To what extent can novel analytical methods enable stakeholders to visualize, communicate, and model alternative scenarios to reduce food insecurity?
3. How does the process of dashboard development advance evidence- and equity-based policymaking?
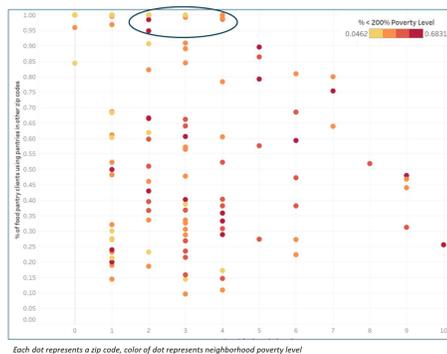
Intellectual Merit

Developing a dashboard that analyzes and visualizes food systems data in unique ways enables stakeholders to:
- Improve understanding of food system inequalities
- Identify data needs and potential innovative sources and analytical methods
- Produce data-driven, policy-relevant evidence using novel data sources to reduce disparities in food insecurity

Project Activities

Community-based organizations

Government partners

Lead organizations

Academic partners

Convene expert stakeholders → **1:1 Meetings and Workshops** → Structured feedback → **Prototype Development** → **Full proposal: Deeper analysis of food insecurity, wider range of food environment equity questions, more varied data collection, wider range of stakeholders**

Gather feedback to define questions

Data collection, aggregation, analysis, visualization

FOCUS AREAS:
- How can we optimize use of government food programs by eligible households?
- How can policies improve emergency food system services?
- How can we improve access to affordable, healthy food across city neighborhoods?

INDICATORS:
- SNAP eligible but unenrolled
- School meal participation
- Neighborhood emergency food adequacy
- Unaffordable healthy food neighborhoods

Several paradoxes identified

Although many food pantries are physically close to clients who need them, some food insecure neighborhoods are insufficiently served by pantries. By mapping pantry visits, we show that residents of certain neighborhoods travel to food pantries outside their neighborhood and some food insecure neighborhoods lack pantries within walking distance.
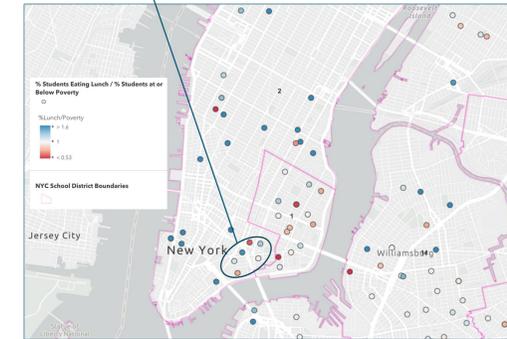
Despite universal free school lunch, mapping lunch participation among low-income students by school shows that (1) some schools in food insecure neighborhoods have low rates of lunch participation, and 2) participation rates vary widely within the same neighborhood and school district.

The value of SNAP benefits does not vary by neighborhood but the cost of living, especially the cost of food, varies significantly, making it harder for households receiving the same benefits to buy sufficient, healthy food. The prices for common grocery items varied widely among branches of a ubiquitous mid-level grocery chain, with some of the highest prices found in neighborhoods with very high food insecurity. This illustrates that food cost, more than physical proximity to supermarkets, determines access.

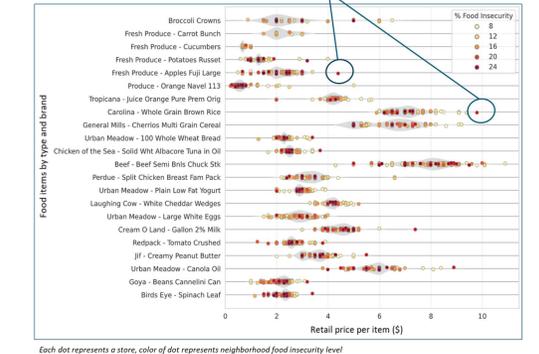**How this information can be used by stakeholders**

Community organizations in conjunction with government agencies can advocate reallocation of food pantries and quantities of emergency food to better meet the needs of food insecure households in underserved neighborhoods.

Parents in schools with low participation can ask why lunch is under-used, and school administrators of low-participating schools can adopt best practices from schools with high participation rates.

Government and non-profit agencies can identify programs and policies (e.g., fruit and vegetable subsidies) to increase economic access to healthy food in high-cost neighborhoods.

Impact – Short Term

- Established a collaborative community of practice focused on food system inequities in New York City.
- The prototype dashboard has provoked discussion on data needed to better inform policy.
- By shedding light on data inadequacies, the team hopes to influence how future data are collected, managed, and shared.

Impact – Long Term

- Developing the prototype into a fully operational dashboard will allow stakeholders to better manage programs and advance policy.
- Conceptualizing new indicators beyond conventional measures (e.g., food deserts) will better address food system inequities.
- Sharing best practices will allow replication of the dashboard in other cities.

Next Steps

1. Finalize three use cases based on core stakeholder group feedback
The use cases are scenarios showing how the dashboard might identify and frame aspects of food insecurity and how a stakeholder might use insights from the dashboard to better deploy resources, prioritize policy, etc.

2. Administer survey to broader stakeholder group to solicit feedback
How do potential users of the dashboard envision incorporating information from the dashboard to their work? Are the visualizations easy to interpret?

3. Finalize prototype dashboard design
Incorporate feedback to refine dashboard design and visualizations

4. Develop and submit a full SCC IRG proposal
Build on the work from planning grant to develop a full IRG proposal that would address multiple aspects of equitable food systems planning