

Proposal of a Community Vegetable Garden as a Viable Healthful Food Source in a Food Desert

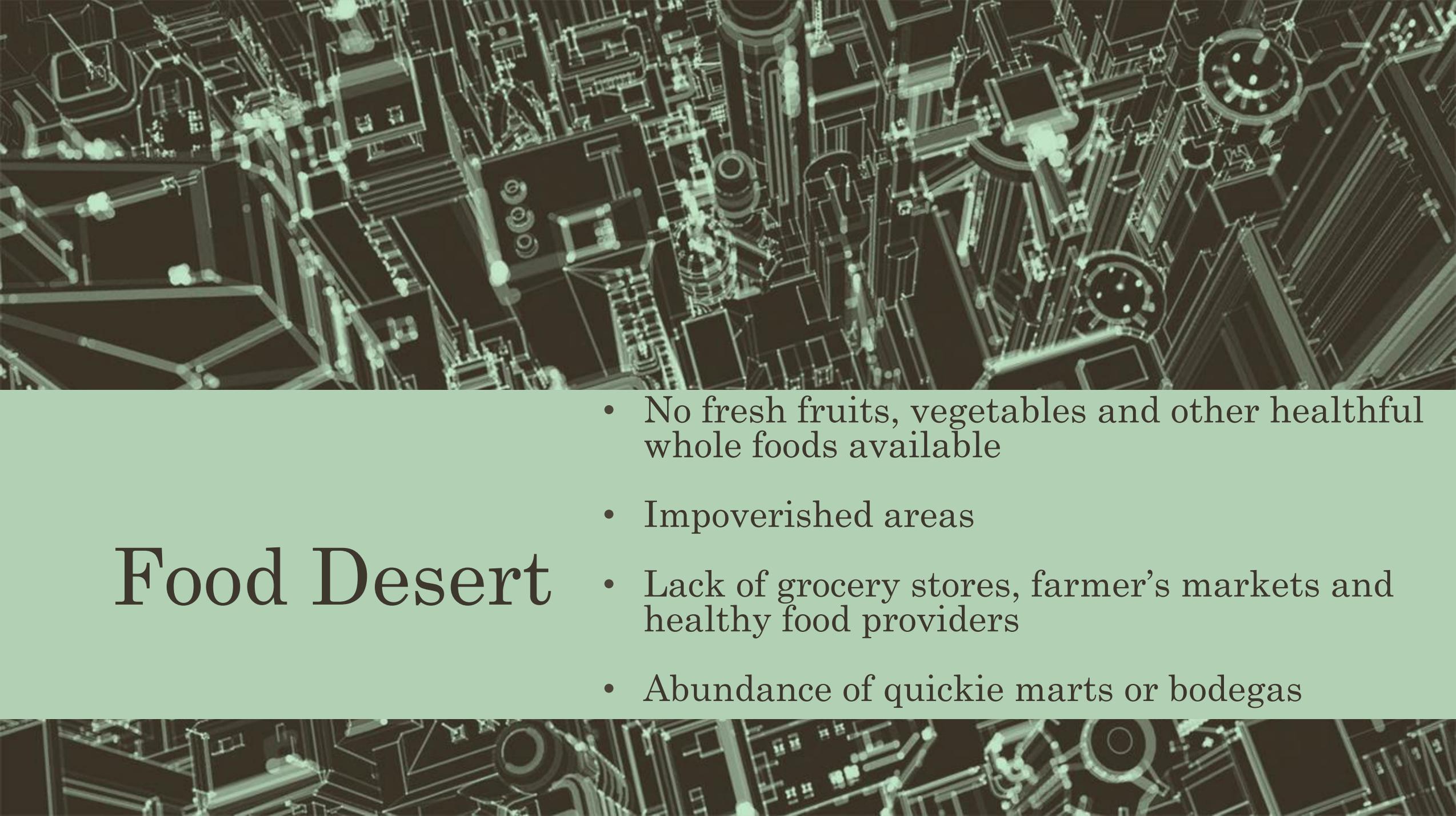
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ECON 2505 Spring 2016

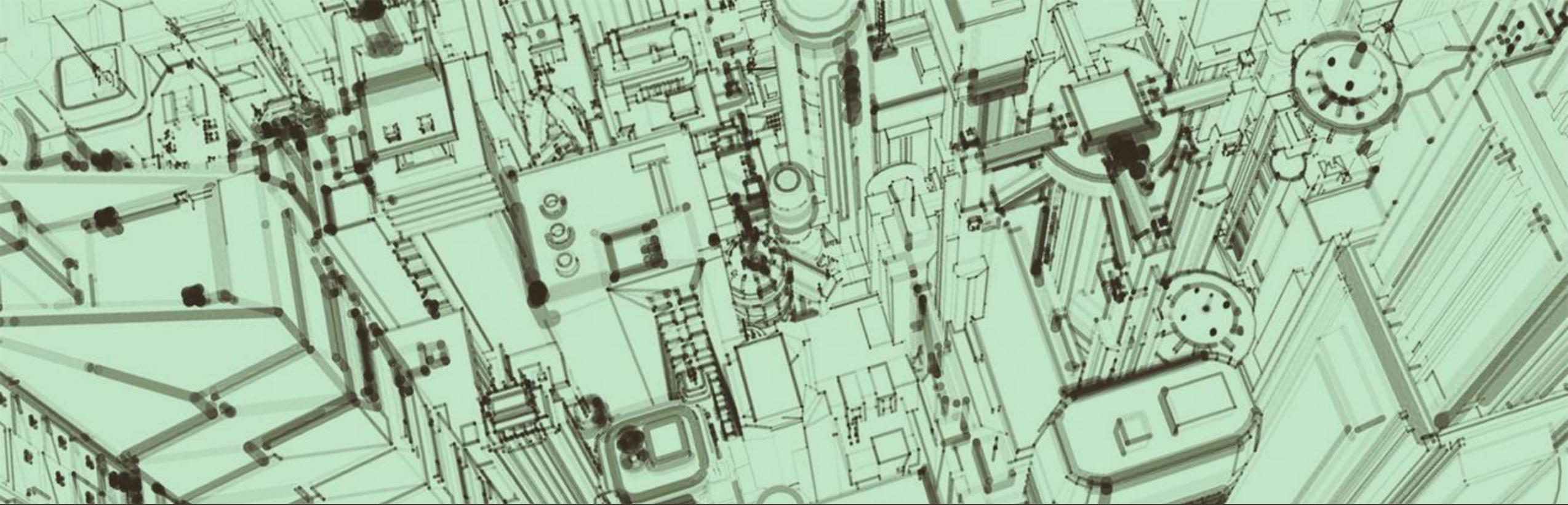
Presentation Goals

- Define Food Desert
- Describe Some Effects of a Food Desert on the Community
- Evaluate Research on Possible Solutions
- Introduce Green City Force



Food Desert

- No fresh fruits, vegetables and other healthful whole foods available
- Impoverished areas
- Lack of grocery stores, farmer's markets and healthy food providers
- Abundance of quickie marts or bodegas

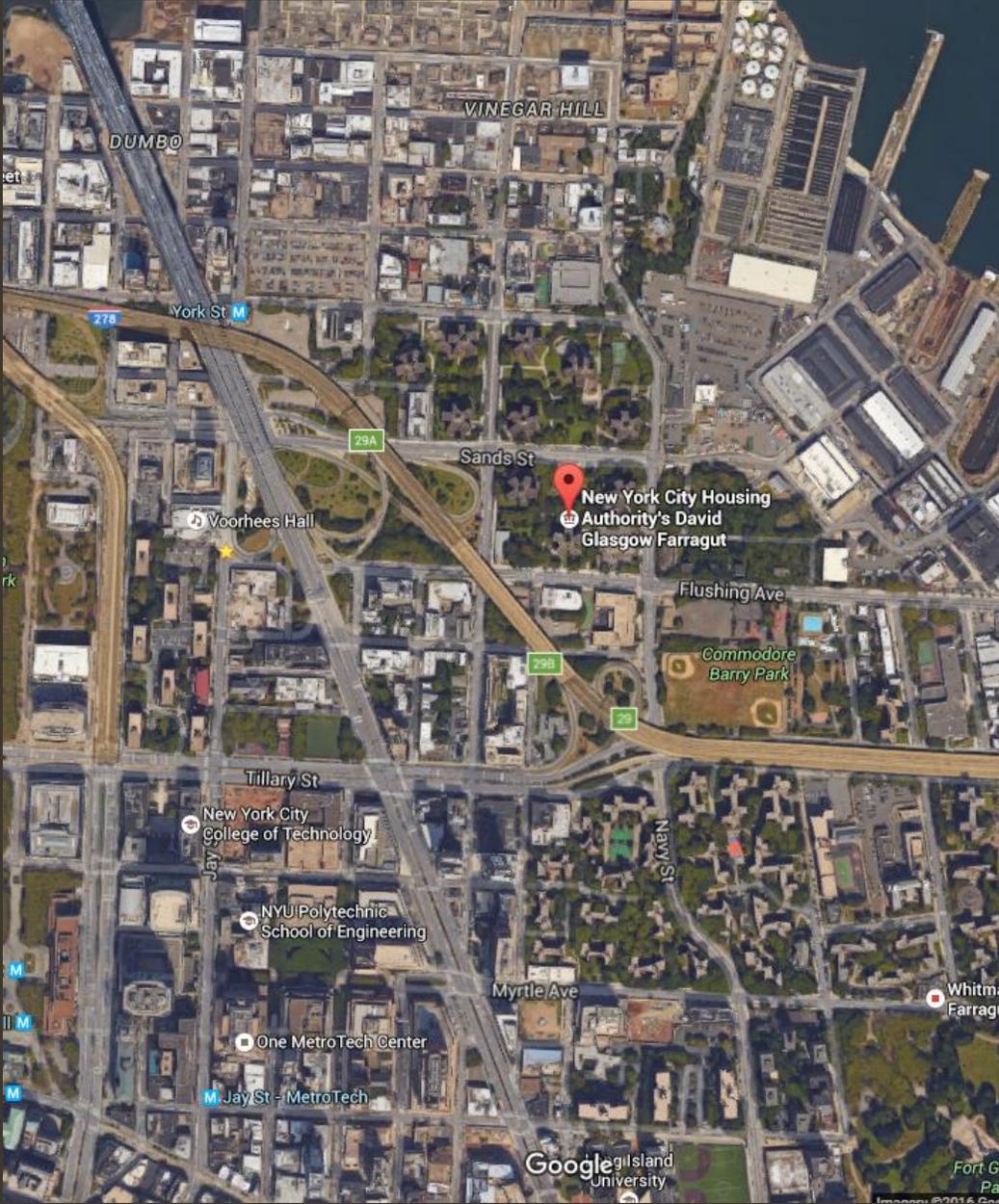


Can you name a Food Desert?

Hint: Our tour guide at the Brooklyn Navy Yard mentioned it.



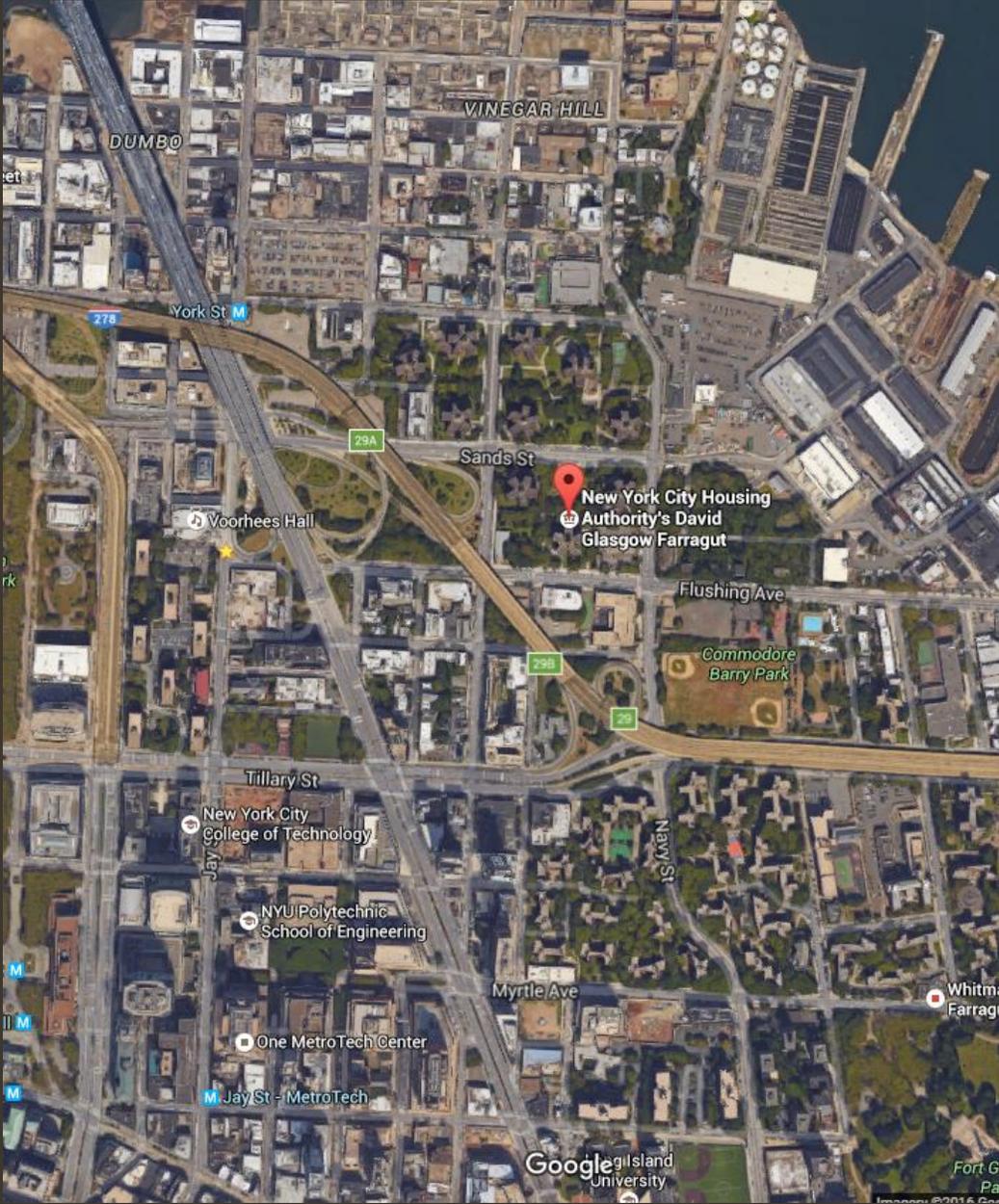
Aerial View



Farragut Houses, Brooklyn, NY



Aerial View





York Street

Jan. 2013





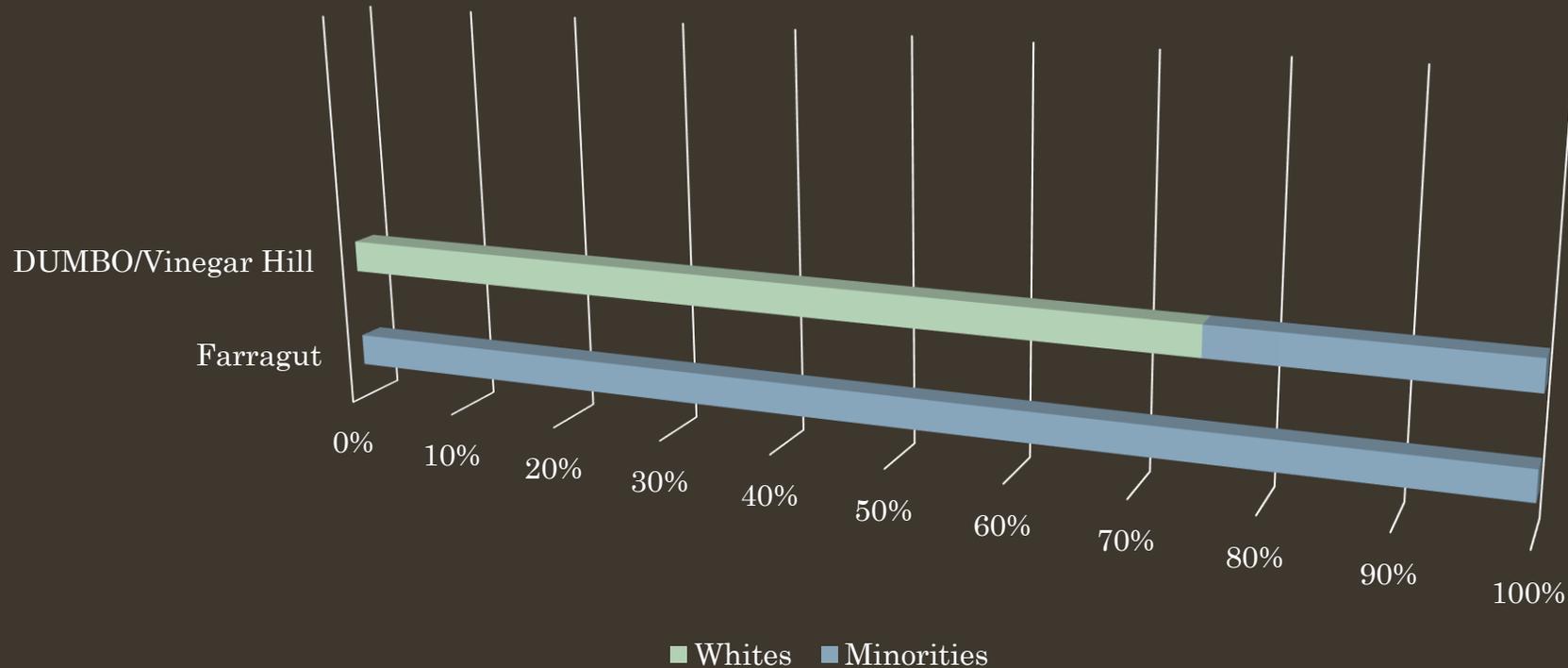
York Street

May 2016



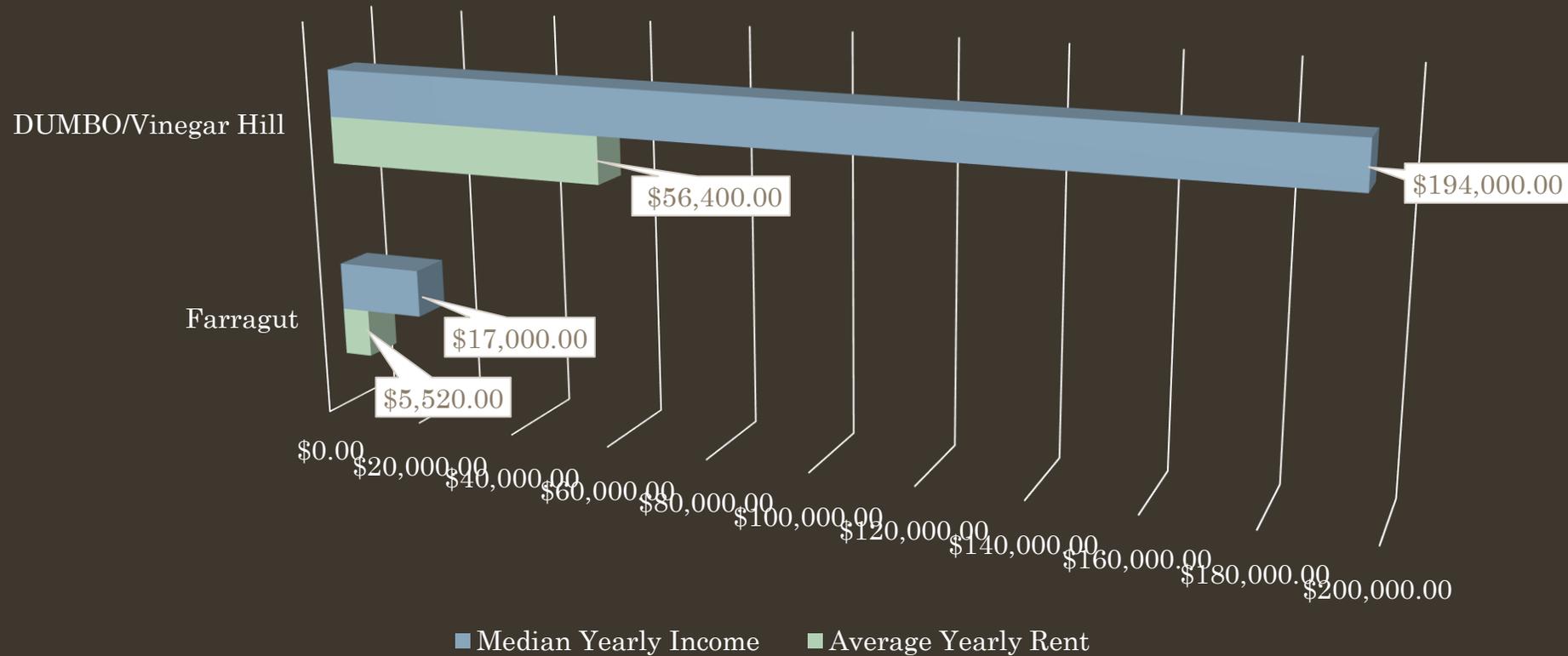
Minority Composition

Farragut Residents vs. DUMBO / Vinegar Hill



Median Yearly Income and Average Yearly Rent

Farragut Residents vs. DUMBO / Vinegar Hill

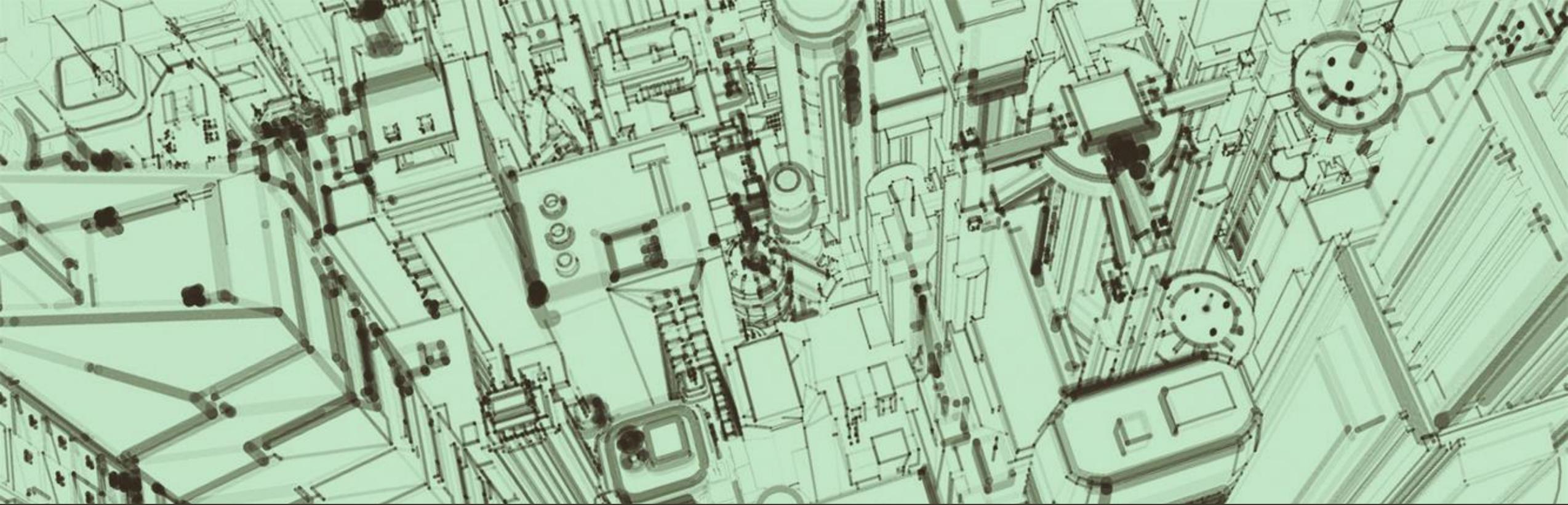


PolicyLink and The Food Trust

Who has Access to Healthy Food and Why it Matters

(Treuhaft, 2010)

- Reviewed 132 studies in which subjects were low-income communities, communities of color and/or scarcely populated rural areas.
- Determined poor availability or opportunity to buy healthy, affordable food.
- Found higher rates of diseases related to poor diet in lower income communities when compared to higher income communities.

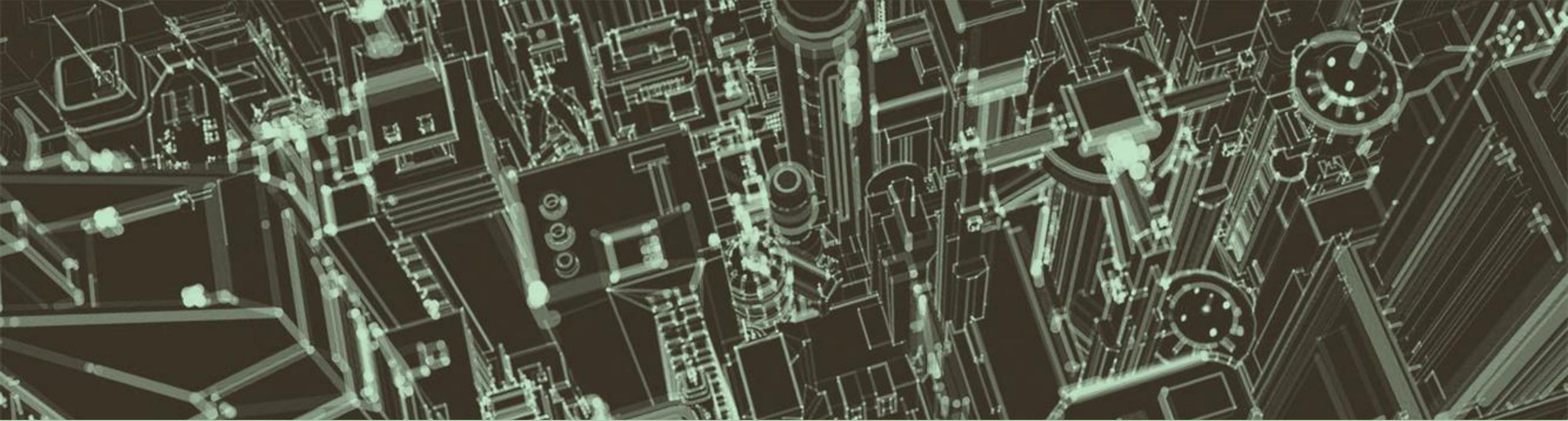


Effects of a Food Desert on the Community



Effects of a Food Desert on the Community

- Higher incidences of dietary health issues
 - Obesity, diabetes (Treuhaft, 2010)
 - Chronic cardiac disease (Segal, 2010)
 - Bone & Joint pain and lower life expectancy (Kisner, 2011)
- Children lacking a healthy, nutritionally balanced diet have a micronutrient deficient diet and therefore suffer from
 - Impaired cognitive development
 - Reduced school readiness
 - Lower educational attainments
 - Slower physical, mental and social development (O'Hara, 2015)
 - Weakened immune system; lessening their ability to resist disease
 - Increased risk to babies and their mothers at childbirth (Segal, 2010)



Brooklyn Navy Yard's Contribution





The Civil War-era homes of Admiral's Row in the Brooklyn Navy Yard are approved for redevelopment.

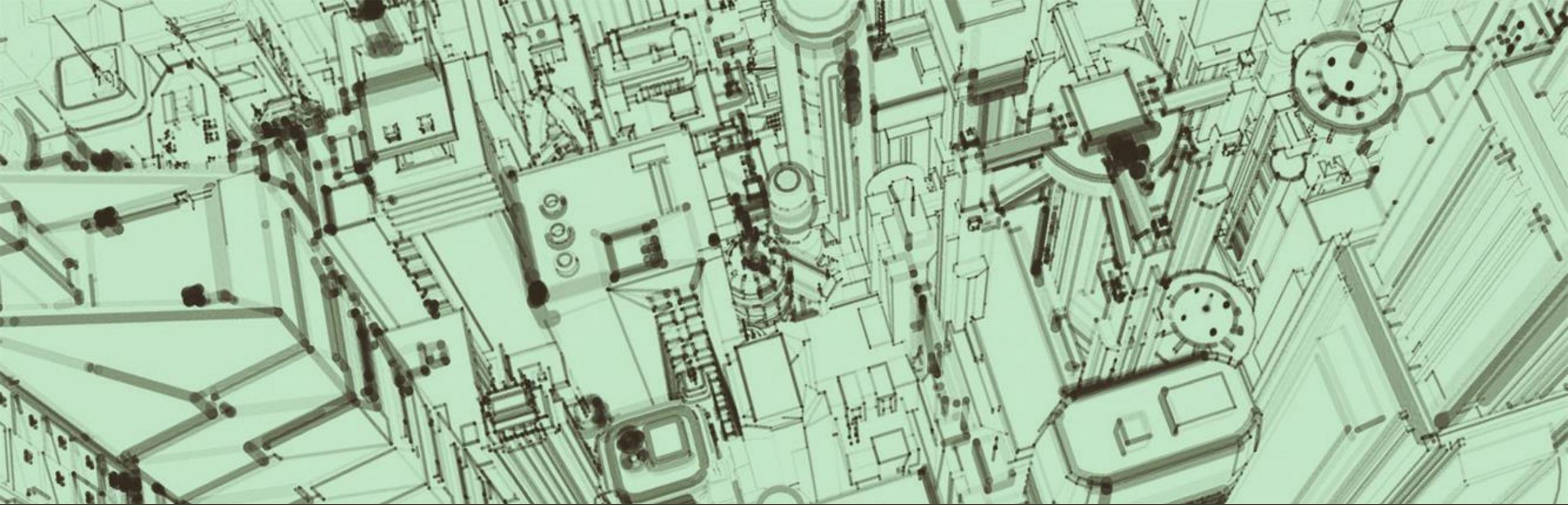
Photo Credit:
Fred R. Conrad / The
New York Times

http://www.nytimes.com/2015/05/13/nyregion/wegmans-to-open-at-brooklyn-navy-yard.html?_r=0



The proposed Wegmans store, set to open in 2017, at the Brooklyn Navy Yard.

Rendering Credit:
Greenberg Farrow



Research Evaluation



New York University Study

Assessment of Government-Subsidized Supermarket in High-Need Area on Household Food Availability and Children's Dietary Intakes (Elbel, 2015)

- Studied children, ages 3-10, in the underserved Morrisania neighborhood of the Bronx.
- Findings:
 - **No impact** on the availability of healthful foods in the home or dietary habits of the children studied.

New York Times

Giving the Poor Easy Access to Healthy Food Doesn't Mean They'll Buy It (Sanger-Katz, 2015)

- “The cost of food — and people’s habits of shopping and eating — appear to be much more powerful than just convenience.”
- “National Bureau of Economic Research, looked across the country and found that no more than a tenth of the variation in the food people bought could be explained by the availability of a nearby grocery store. The education level of the shoppers, for example, was far more predictive.”

The National League of Cities Center for Research & Innovation and the Sustainable Cities Institute

Developing a Sustainable Food System (Kisner, 2011)

- Presents nine cities and towns as case studies of innovative solutions with combinations of community gardens, urban agriculture, farmer's markets and affordable grocery stores.
- States officials can implement policies and programs to allow residents to grow, sell, buy and eat more sustainable foods that were locally grown, while strengthening the community.
- “Comprehensive sustainability plans for food systems can jointly benefit public health, the local economy and the environment.”

The College of Agriculture, Urban Sustainability, and Environmental Sciences (C.A.U.S.E.S.) of the University of the District of Columbia

Food Security: The Urban Food Hubs Solution (O'Hara, 2015)

- Urban Food Hub concept is a diversified system that includes local, urban communities for the production, preparation, and distribution of food as well as waste reduction and reuse.
- It improves access to healthy food therefore improving food security.
- It also contributes to job creation and urban sustainability via economic, social and environmental impacts.

Pitzer College: Senior Thesis

Let's Not Eat Alone: A Search for Food Security Justice (Schor, 2014)

- Calls for community food projects so that low-income minorities and other marginalized groups can have access to healthful foods.
- States community based solutions are the most tangible due to
 - ✓ the proximity to those in need
 - ✓ the ability to be run by community members
 - ✓ the empowerment of the individuals to take control of their food and health
- Creates new economies in communities that are becoming stronger and healthier.

Urban Studies Program at Columbia University

Food Deserts: A Global Crisis in New York City (Segal, 2010)

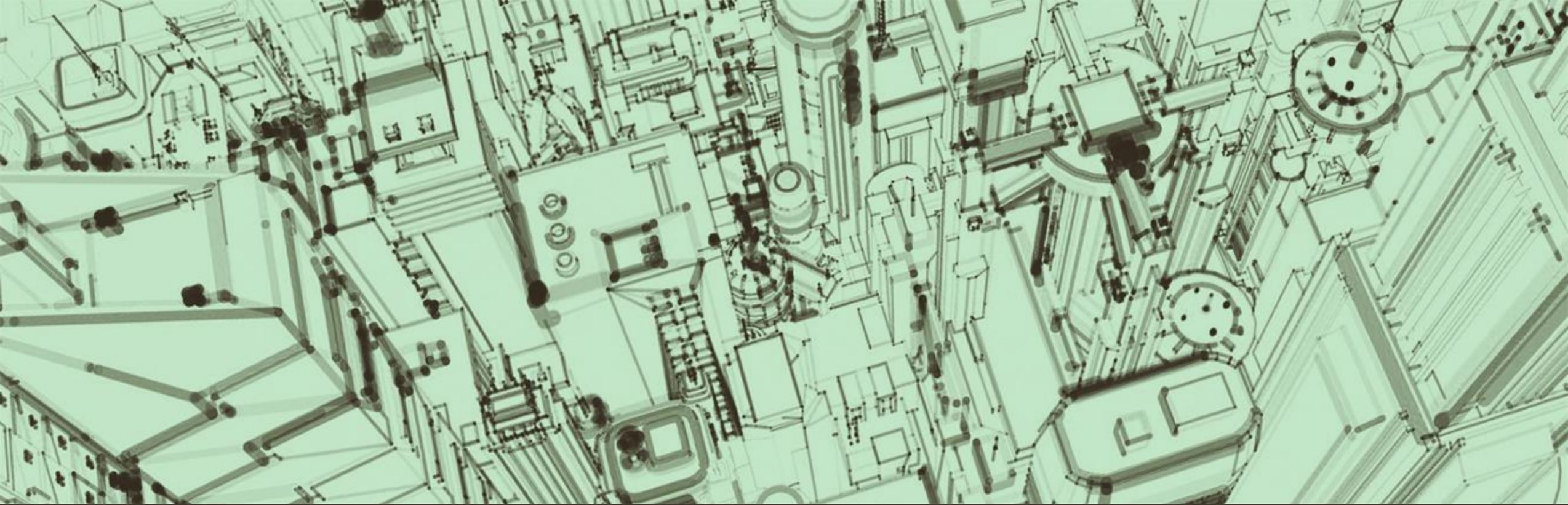
- Studied Harlem, which lacks healthy affordable food options.
- Recognizes lack of nutrition leads to health problems and developmental cognitive gaps.
- Proposes to solve the problem with food deserts by initiating free public nutrition education.

Free Education to Inform &
Rehabilitate Consumers

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graph TD; A[Free Education to Inform & Rehabilitate Consumers] --> B[Creates Demand for Community Gardens & Farmer's Markets]; B --> C[Creates Regional Healthful Food System];
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Creates Demand for Community
Gardens & Farmer's Markets

Creates Regional Healthful Food
System



Research Evaluation Summary

Proposal of Community Garden as a Viable Source of Healthful Food



Food Deserts lack access to affordable healthful foods.

Poor nutrition causes dietary diseases and developmental cognitive deficiencies.

Making healthful foods available does not get the foods purchased.

Community programs and gardens will help those in need, can be run by members and empowers the individuals to take control of their food and health.

Educated consumers will demand community gardens and farmer's markets.

The consumer needs to be educated about nutrition to break shopping and eating habits.

Community gardens are essential to diversified, sustainable food systems that require the production, preparation, distribution, waste reduction and reuse of food.

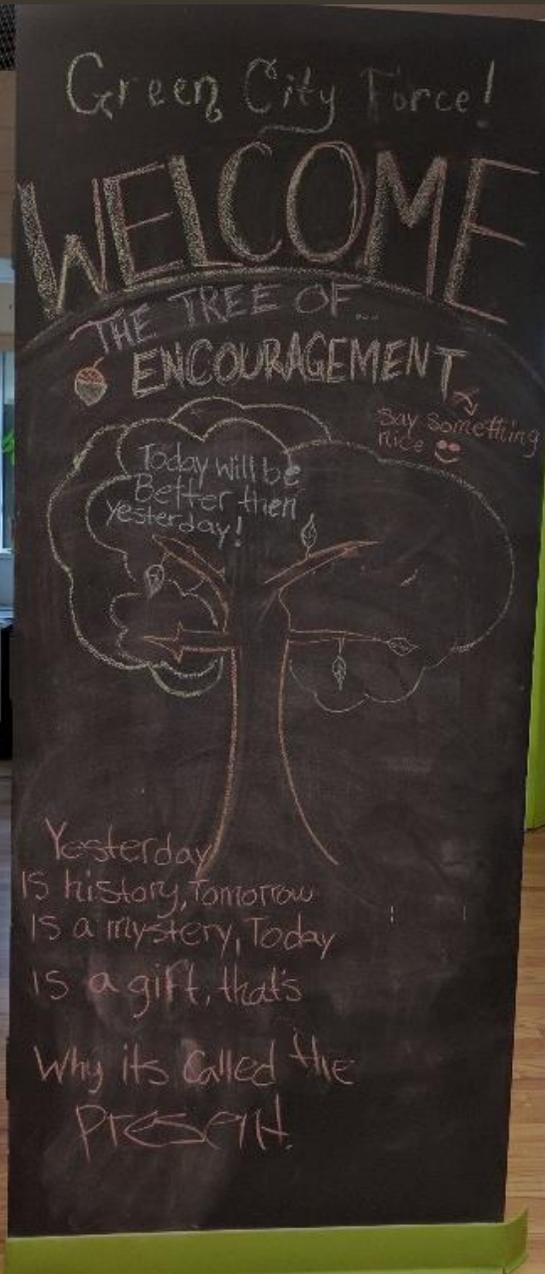
Community gardens improve accessibility to affordable and healthful foods, creates jobs, attains urban sustainability via economic, social & environmental impacts.

Local officials must assist by providing policies and programs to allow residents to grow, buy, sell and eat more sustainable food which is locally grown.

Green City Force



Click on the logo to go to the webpage or the photo for the FaceBook page.



IN 2013 GREEN CITY FORCE, ADDED VALUE & NEW YORK CITY HOUSING AUTHORITY (NYCHA) PARTNERED TO BUILD THE FIRST LARGE-SCALE FARM IN NYC PUBLIC HOUSING



RED HOOK NYCHA PILOT FARM OUTCOMES



497
school children
educated through
farm-based learning

297
volunteers
engaged
at the farm

300
visitors attended
the two
Harvest Festivals



3.6 TONS
of vegetables
grown and
distributed

16
Corps Members
trained in
basic culinary skills

10
cooking demos
performed by
Corps Members



195 LBS
of food scraps
collected for
composting*

200 TONS
of food scraps
and leaves composted
at the farm

500
nearby apartments
engaged in energy
and water conservation
measures



29
Corps Members
trained at Red Hook
NYCHA Farm
in 2013 and 2014

81%
of Urban Farm Corps
graduates are either
employed or enrolled
in college

10
are employed in the fields
of urban agriculture,
landscaping or energy
efficiency

SERVICE Corps Members engage fellow public housing residents and corporate partners in environmental service projects around gardening, composting and energy efficiency.

*Red Hook residents, 2014



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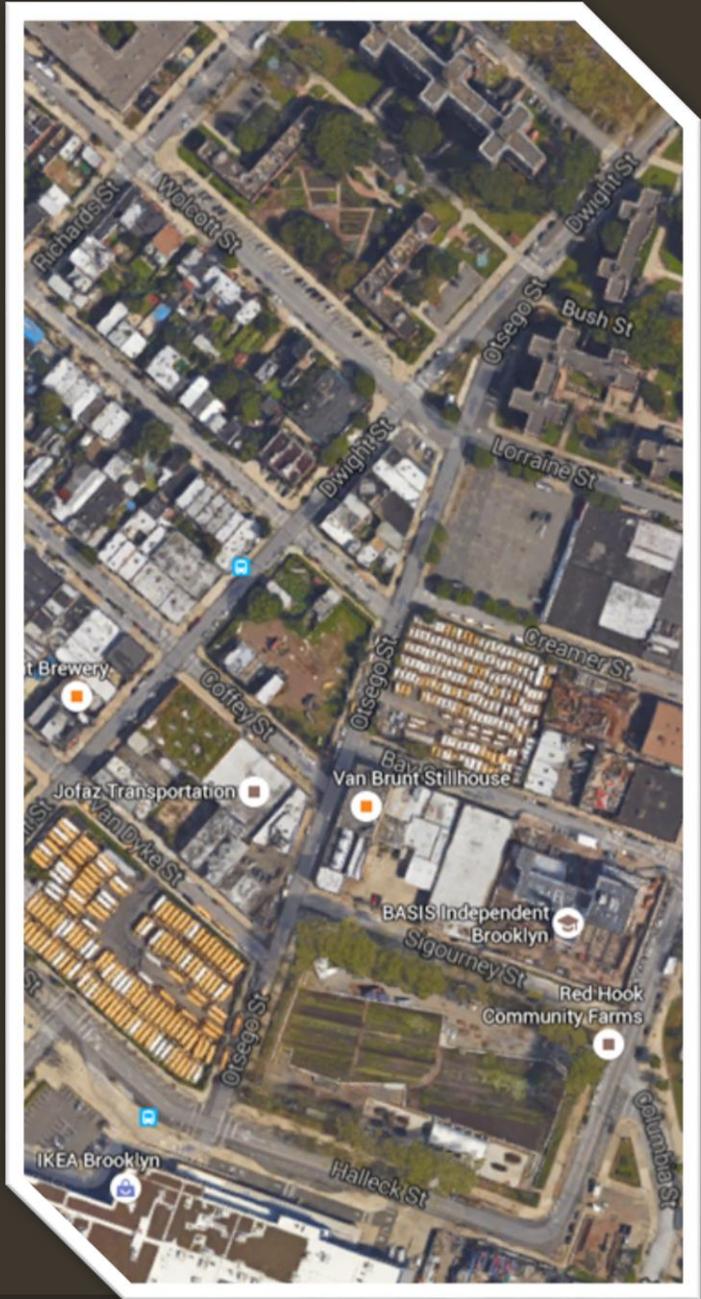
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NYCHA Red Hook Farm









Added-Value Farms



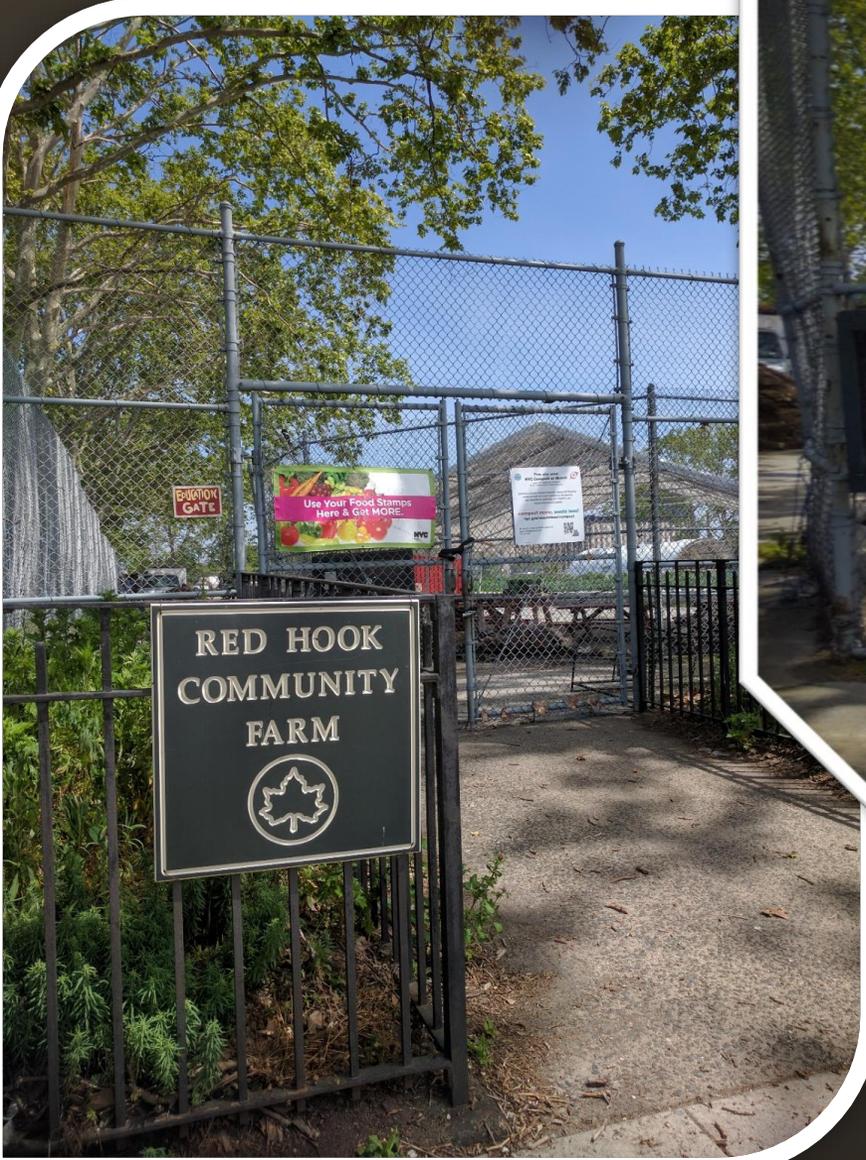


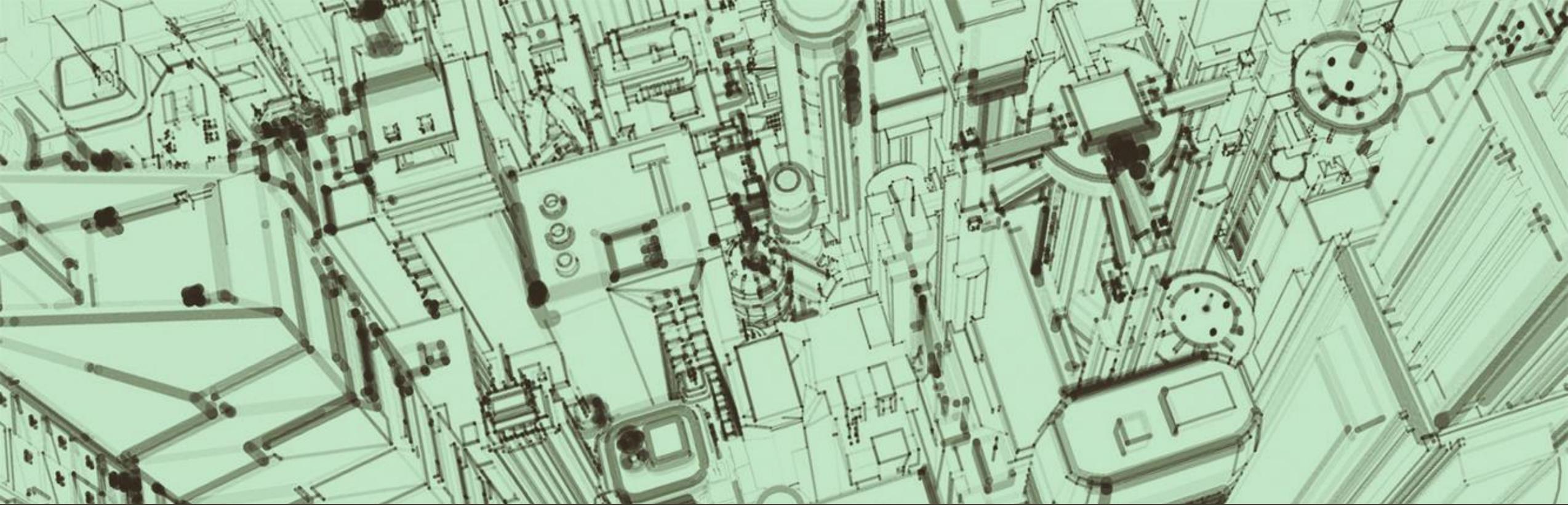
WELCOME TO THE NYC COMPOST PROJECT

HOSTED BY THE BROOKLYN BOTANIC GARDEN

HERE AT THE RED HOOK COMMUNITY FARM







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