

School Cafeteria Violations and GROWN NYC School Gardens

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Food safety and nutrition in NY schools

- The Health Department inspects all New York City school cafeterias to “make sure that food is prepared, handled and stored safely to prevent food-related illness.”
- “The Department of Education (DOE)’s Office of Food and Nutrition Services (OFNS) operates the largest school food service program in the United States, spending more than \$200 million annually on food, and serving, in a typical year, more than 950,000 meals daily.”
 - The school garden program aims to provide students with a transformative learning experience about sustainability, food and their communities.
 - provides schools with material, technical and financial support
 - promotes knowledge about nutrition and access/exposure to fresh foods

Initial question

Is the number of cafeteria violations at a school correlated to the presence of a community garden?

The Data

- School Cafeteria Inspections for 2019 (NYC Open Data)
- School locations (NYC Open Data)
- GROWN NYC School Gardens

APPENDIX D

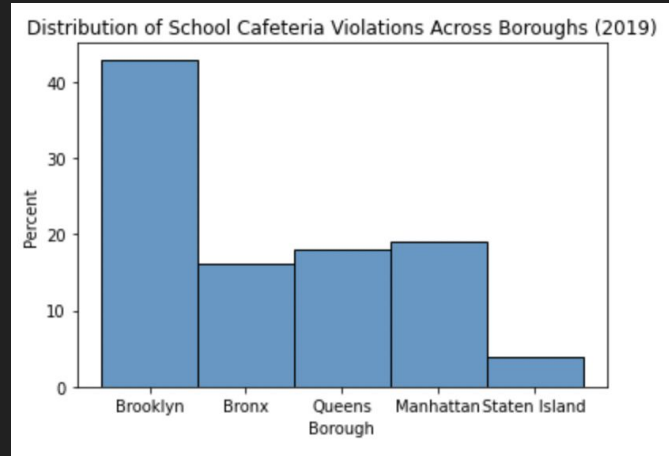
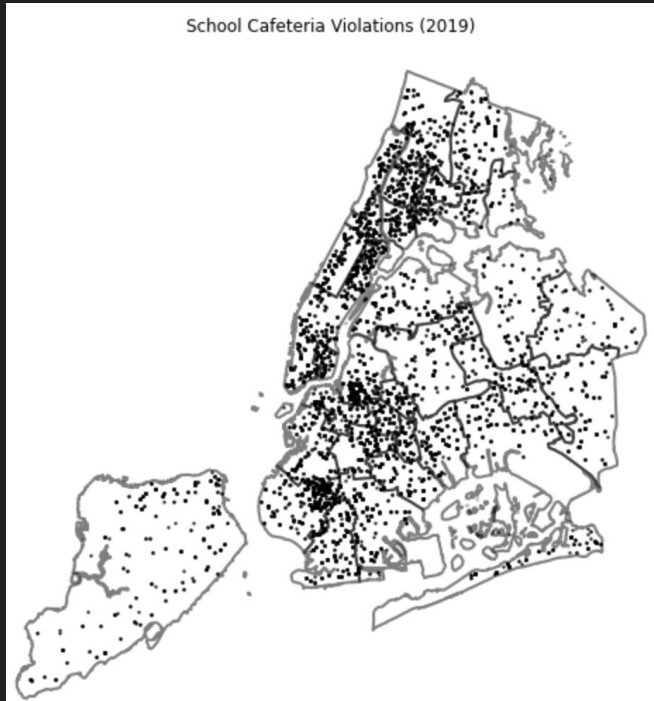
GROWN NYC SCHOOL GARDENS

BUILDING CODE	SCHOOL NAME	TYPE	NUMBER	ADDRESS	BOROUGH	STATE	ZIP
	P233Q@42	P (District 75)	233	488 Beach 66th St	Arverne	NY	11692
Q811	PS811Q@ Queens High School of Teaching	PS	811	74-20 Commonwealth Blvd.	Bellerose	NY	11426
	New York City Children's Center - Queens	P (District 75)	23	74-03 Commonwealth Boulevard	Bellerose	NY	11426
X034		PS	76	770 GROTE STREET	BRONX	NY	10460
X154	Jonathan D. Hyatt	PS	154	333 EAST 135 STREET	BRONX	NY	10454
X400	Bronx International High School	HS	403	1110 BOSTON ROAD	BRONX	NY	10456
XAGV	Family Life Academy Charter School II	Charter	233	296 EAST 140 STREET	BRONX	NY	10454
X064	Lucero Elementary School	PS	311	1425 WALTON AVENUE	BRONX	NY	10452
XAUUV	Bronx Academy of Promise Charter School	Charter	419	1349 INWOOD AVENUE	BRONX	NY	10452
X716	Bronx Lighthouse Charter School	Charter	185	1001 INTERVALE AVENUE	BRONX	NY	10459
X061	Francisco Oller	PS	61	1550 CROTONA PARK EAST	BRONX	NY	10460
X042	Claremont	PS	42	1537 WASHINGTON AVENUE	BRONX	NY	10457
X109	Sedgwick	PS	109	1771 POPHAM AVENUE	BRONX	NY	10453



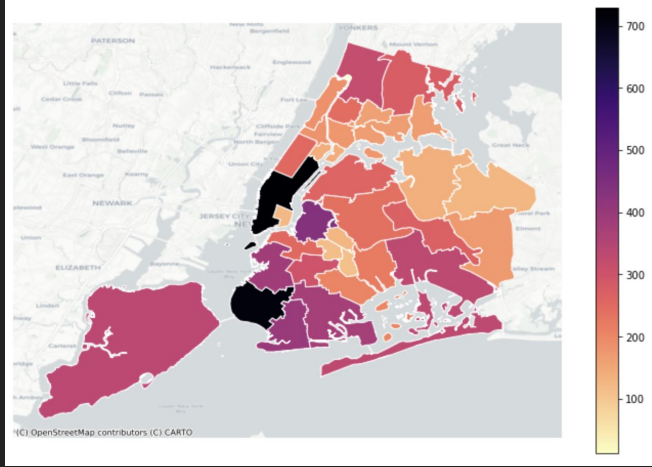
Exploratory findings: cafeteria violations

- Over 40% of school cafeteria violations in 2019 took place in Brooklyn

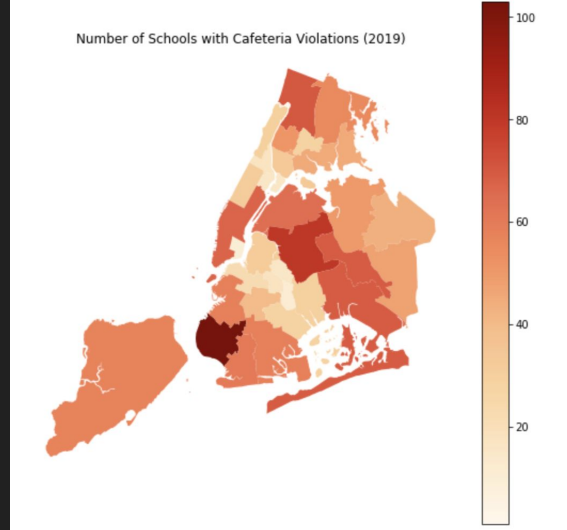


Borough	
Bronx	286
Brooklyn	482
Manhattan	171
Queens	423
Staten Island	57

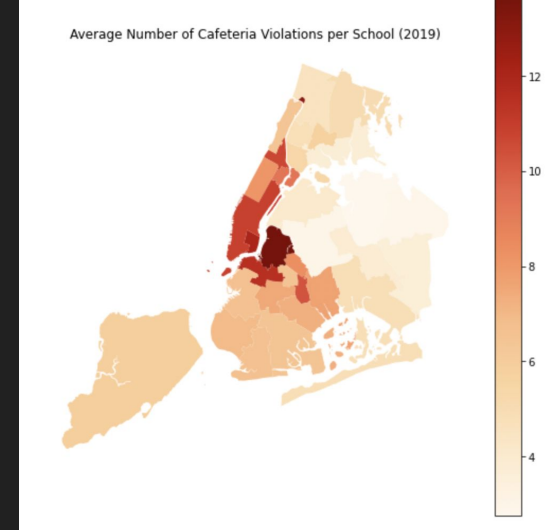
Number of schools
that have violations



Count of violations per district



Count of schools that have violations per district



Count of violations/count of schools that have violations (per district)

Contextualizing Findings

Violation codes

- C = Critical
- G = General
- A, AV = Administrative Violation
- NV = Nutrition Violation
- TV = Tobacco Violation.

From the data dictionary: Site type

- 2529 - FSE (Private School Cafeteria - For Profit)
- 2530 - FSE (Public School Cafeteria)
- 2531 - FSE (Private School Cafeteria)
- 2533 - FSE (Private School Cafeteria - Not-For-Profit)



What to Expect When You're Inspected:

A Guide for Food Service Operators

June 2016

NYC
Health

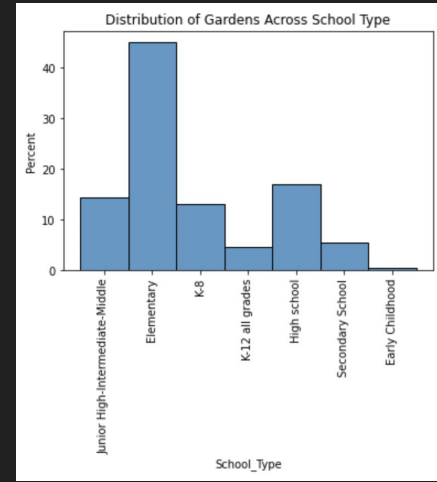
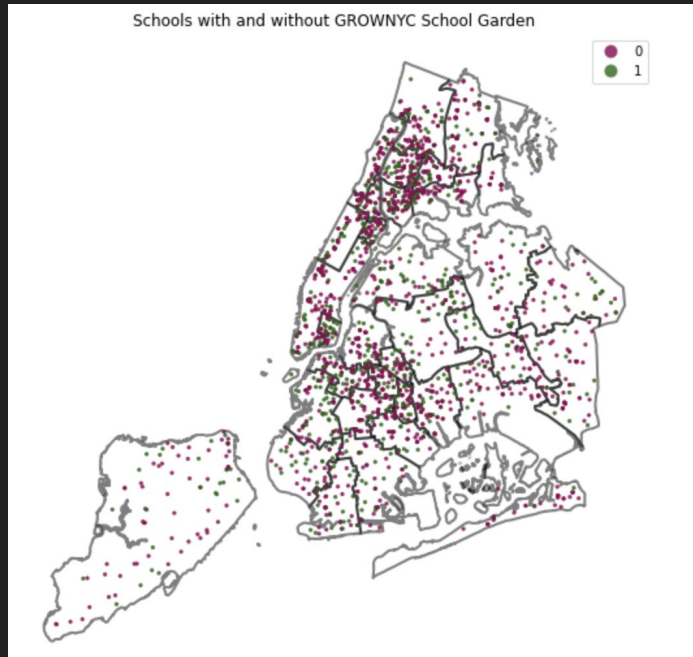
The Top Violations in 2019

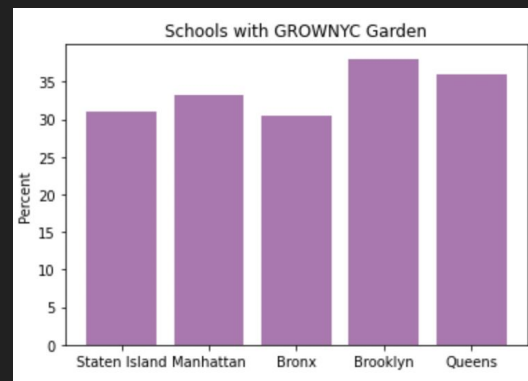
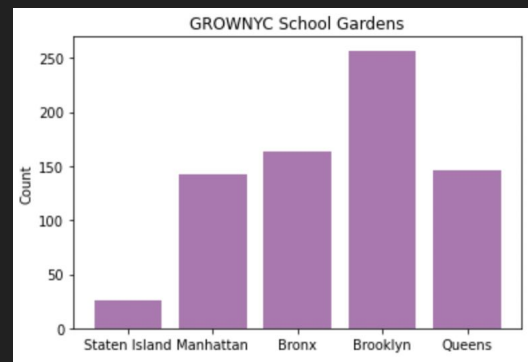
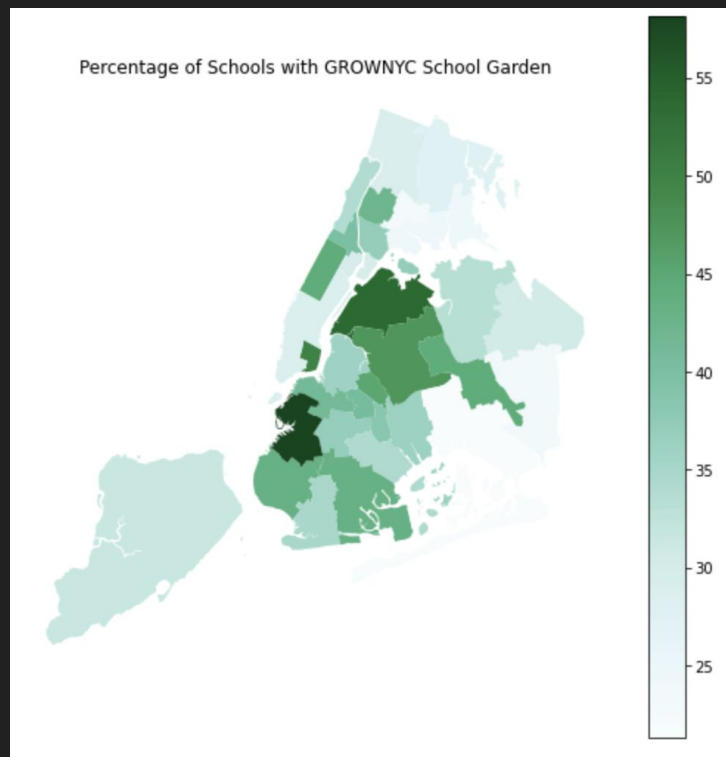
Code		
10F	1980	10F (General): Non-food contact surface improperly constructed. Unacceptable material used. Non-food contact surface or equipment improperly maintained and/or not properly sealed, raised, spaced or movable to allow accessibility for cleaning on all sides, above and underneath the unit.
08A	992	08A (Critical): Facility not vermin proof. Harborage or conditions conducive to attracting vermin to the premises and/or allowing vermin to exist.
10B	836	10B (G): Plumbing not properly installed or maintained; anti-siphonage or backflow prevention device not provided where required; equipment or floor not properly drained; sewage disposal system in disrepair or not functioning properly.
04L	798	04L (C): Evidence of mice or live mice present in facility's food and/or non-food areas.
04N	260	04N (C): Filth flied or food/refuse/sewage-associated (FRSA) flies in facility's food and/or non-food areas. Filth flies include house flies, little house flies, blow flies, bottle flies and flesh flies. Food/refuse/sewage-associated flies include fruit slides, drain flies and Phorid flies.
06C	227	06C (C): Food not protected from potential source of contamination during storage, preparation, transportation, display or service.
22C	226	22C (G): Possess, sell expanded polystyrene single service articles.
04A	176	04A (C): Food Protection Certificate (FPC) not held by supervisors of food operations.
04M	155	04M (C): Live roaches present in facility's food and/or non-food areas.
02G	143	02G(C): Reduced oxygen packaged cold/raw foods not held at proper temperatures.

Total violations: 8,486
86% had a code

GROWN NYC School Gardens

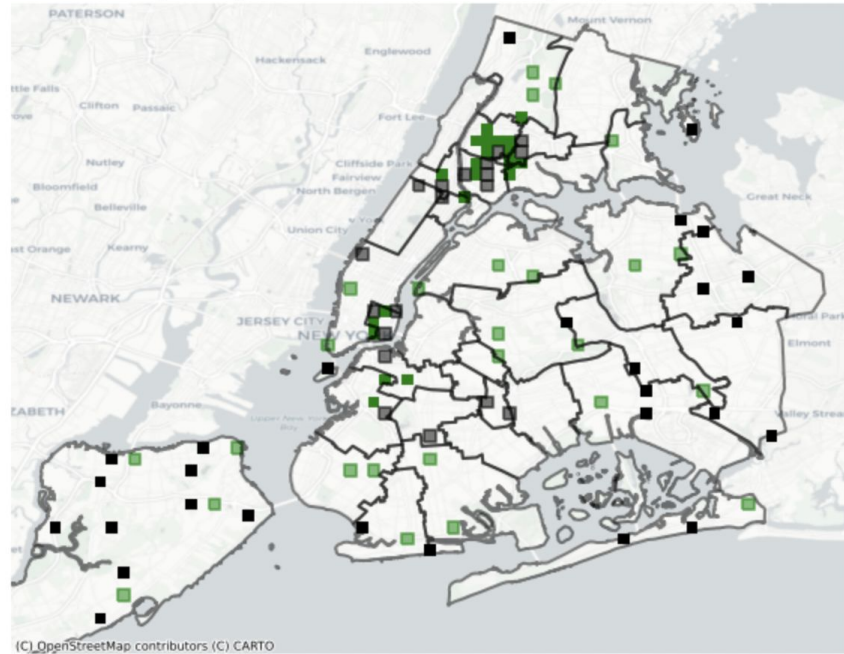
- 35% of schools are linked to a GROWN NYC school garden
- Most gardens are linked to elementary schools





Hot Spot Analysis

Hot Spot Analysis of GROWNYC School Gardens (using Local Moran's I)



Hot Spot Analysis of School Cafeteria Violations (using Local Moran's I)

