# New York Waste

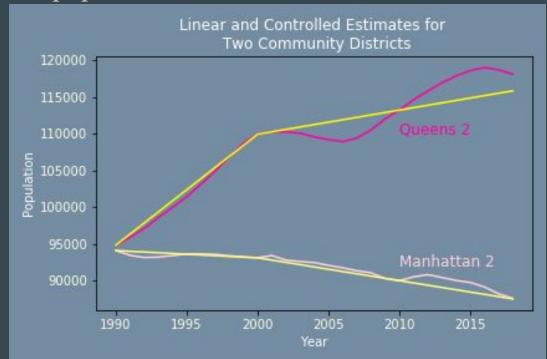
Analysis of NYC Refuse for the Years 1992 - 2019

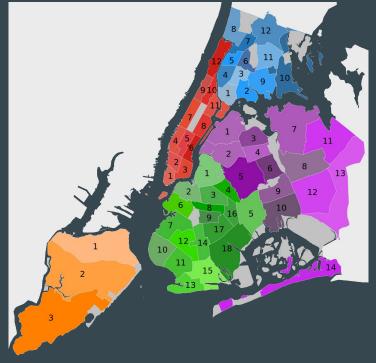
### Data and Methodology

- ☐ We sourced <u>Refuse, Recycling</u>, and <u>Population</u> data from the NYC Open Data portal and census population data from the <u>US Census</u>
- We examined trends in population, total and per capita refuse, and recycling to determine the state of waste production in NYC for the years 1992-2019. This included tons of trash or refuse collected from NYC residences and institutions serviced by the NYC Department of Sanitation
- In order to compute per capita waste production, we computed intercensal estimates of the population of NYC community districts based on official intercensal borough population estimates.

# **Population Estimates**

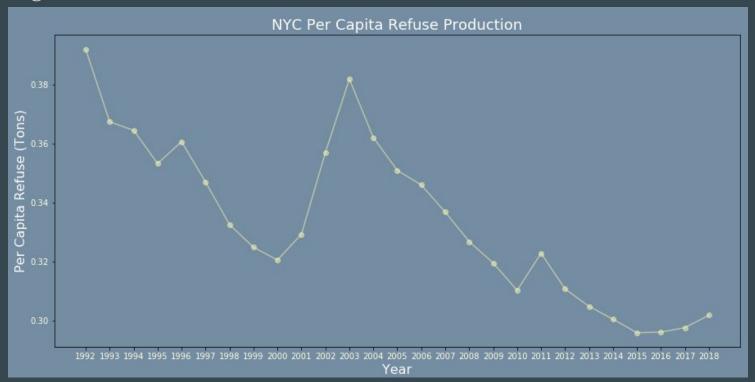
Linear Estimates of community district population controlled to borough population





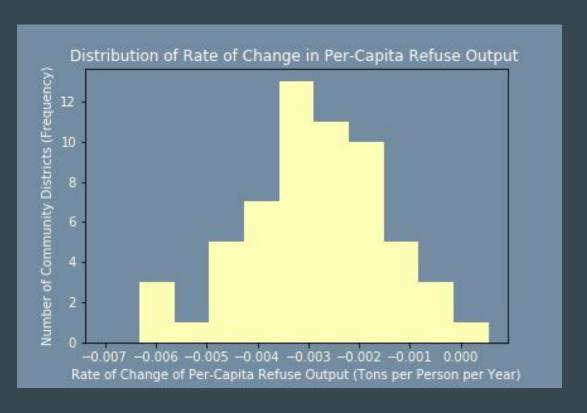
#### **New York City Refuse Production**

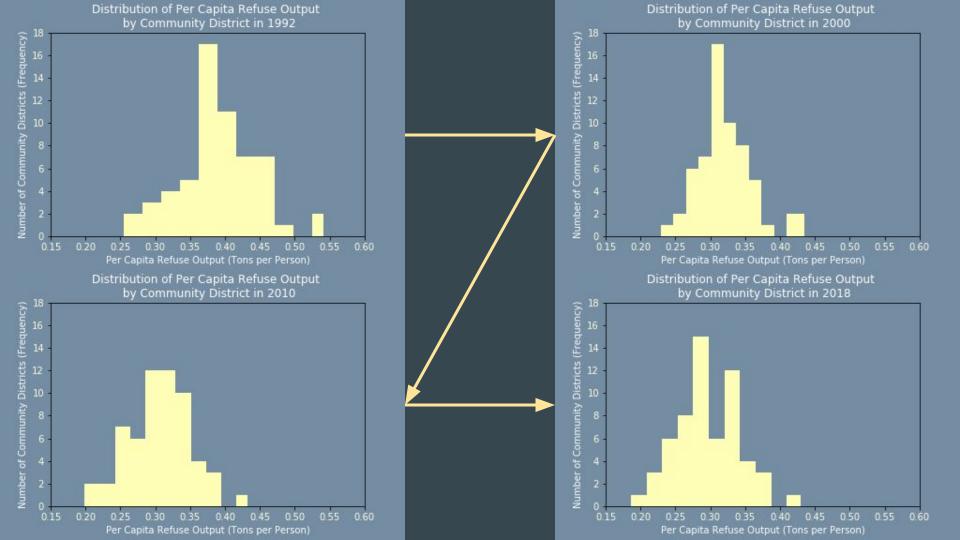
- Overall New York City refuse production decreased for the years 1992-2018
  - □ Slight increase between 2000 and 2003



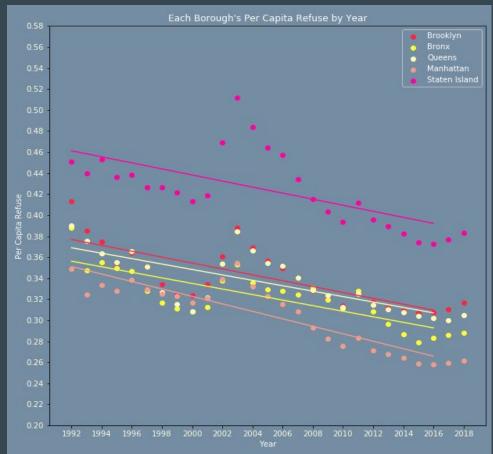
#### **Community District Analysis**

■ Where did this decrease come from?





# **Borough-Level Analysis**



- Decrease in per-capita refuse
- ☐ Greatest per-capita refuse production: Staten Island

Staten Island: r = -0.64

Bronx: r = -0.81

Manhattan: r = -0.9

Brooklyn: r = -0.78

Queens: r = -0.75

# **Recycling 2005-2019**

- Recycling of paper as a percentage of total waste and recycling **decreased** from 10.9% to 9.5%
- Recycling of metal, glass, and plastic (MGP) as a percentage of total waste and recycling **increased** from 7.1% to 9.7%



### Summary of Results

Per-capita refuse production decreased at all scales in New York City for the time period examined (City, Borough, and Community District).

Refuse production varied significantly between community districts.

Trends for recycling do not necessary parallel trends for refuse.

### **Going Further**

- Money
  - ☐ Gathering Data on Per Capita Household Income per Borough
  - Demographic Insights: Who is using more refuse?
- ☐ Laws
  - Given the population increase and the refuse decrease
  - ☐ Were People Forced?





# Going Even Further

- ☐ Attitude
  - ☐ Are we really "Greener"?
  - Interest in being proactive when it comes to waste gathered
  - Political data showing what people consider to be important social issues
- **→** Weather
  - □ Does climate affect the amount of waste?
  - □ Does the amount of waste affect the climate?

