



# Complaining about New York

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Assignment #1, January 2014  
General Assembly Data Science Course

Analyses made from 100,000 most recent 311 complaints  
as available from NYC Open Data

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#### NYC Open Data's 311 complaints

##### Database with 311 complaints

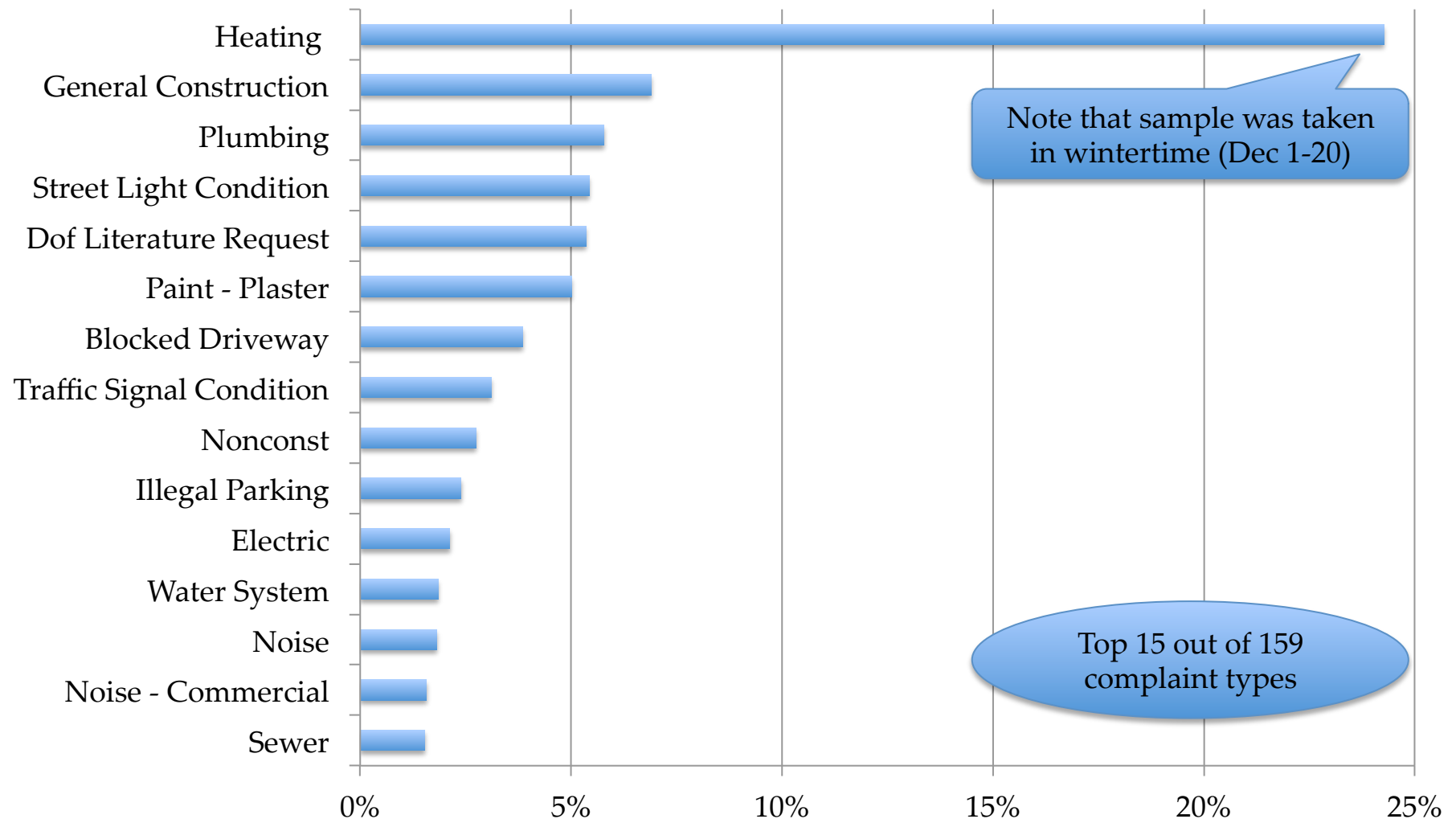
- Daily updated database
- Over 2M complaints
- CSV file over 1 GB

##### Analyses made with sample

- Selection 100,000 complaints
- Spans over ~20 days
- Newest complaint from  
December 21<sup>st</sup>, 2:08am

## By far, most complaints in NYC are about 'heating'

Number of complaints, grouped by complaint type (sample)

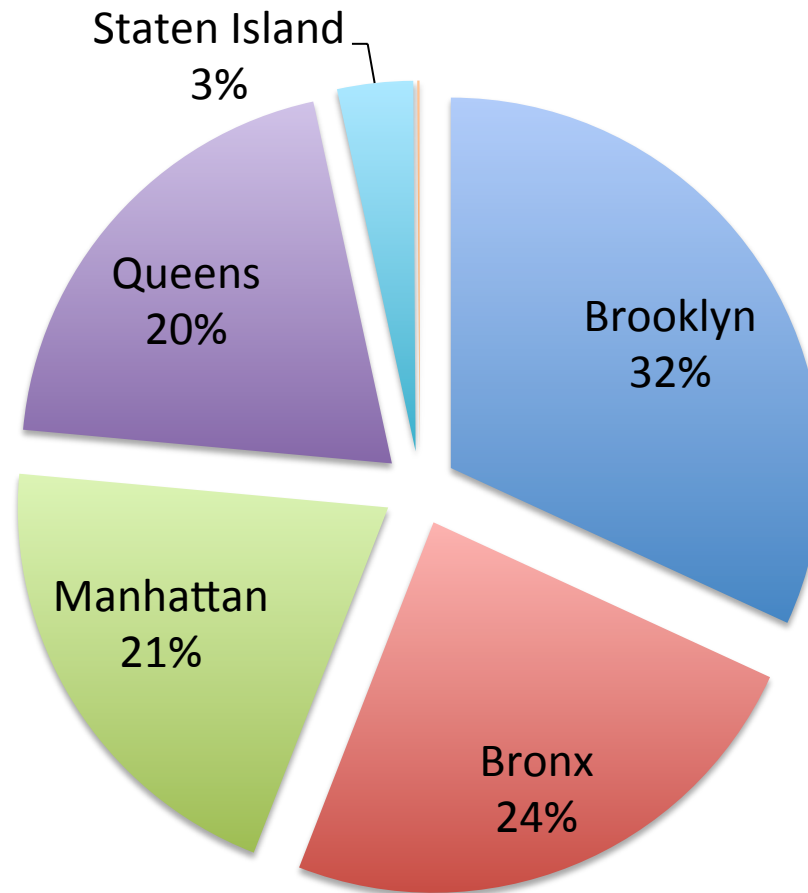


Types taken literally from data; no aggregation  
Source: NYC Open Data

## Most complaints come from Brooklyn...

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Number of complaints, grouped by borough (sample)

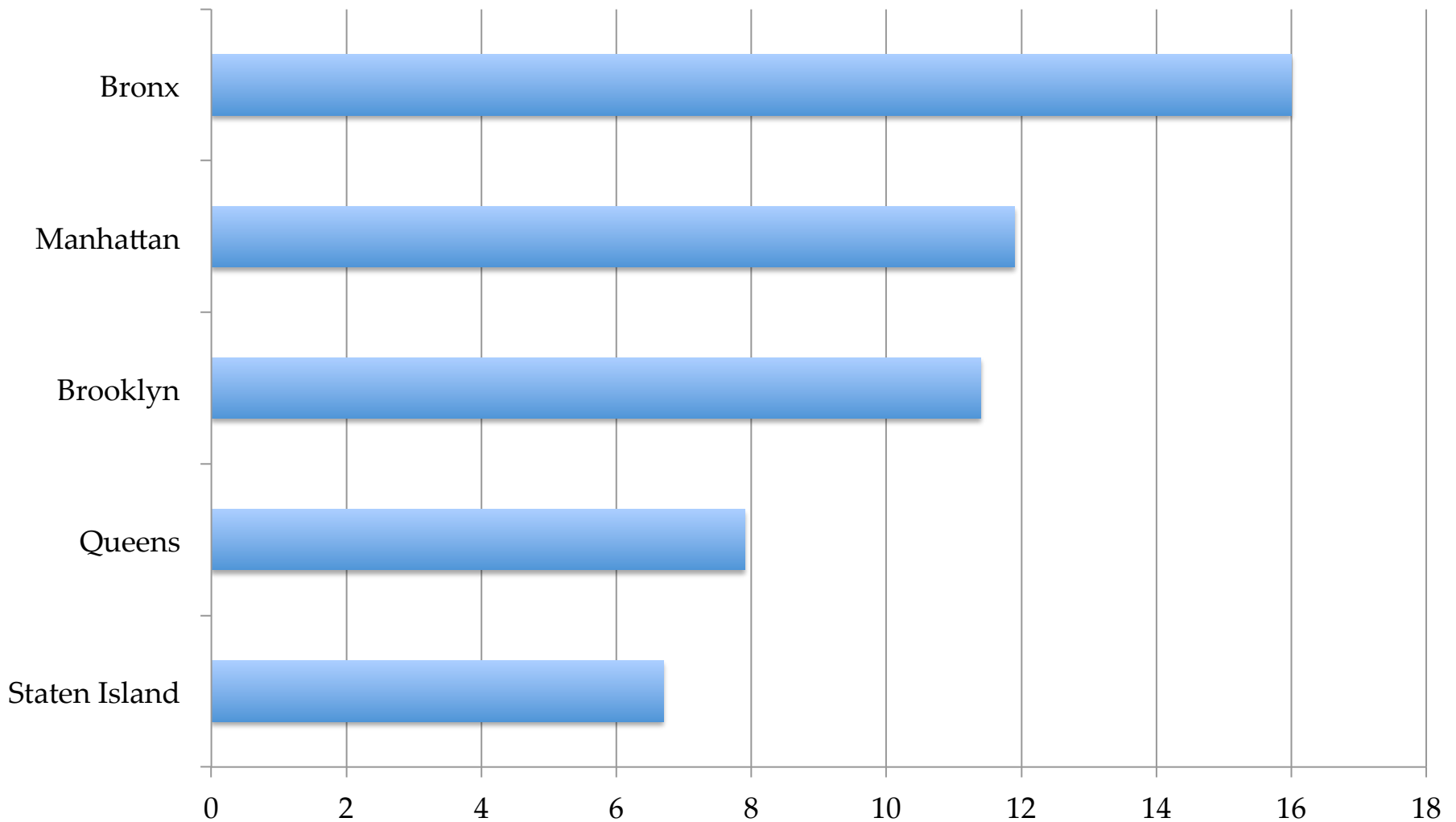


Note that ~10% of all complaints do not have ZIP Code information, or are located outside NYC  
Source: NYC Open Data; United Hospital Fund (neighborhood names)

...But relative to population size, most complaints are from the Bronx

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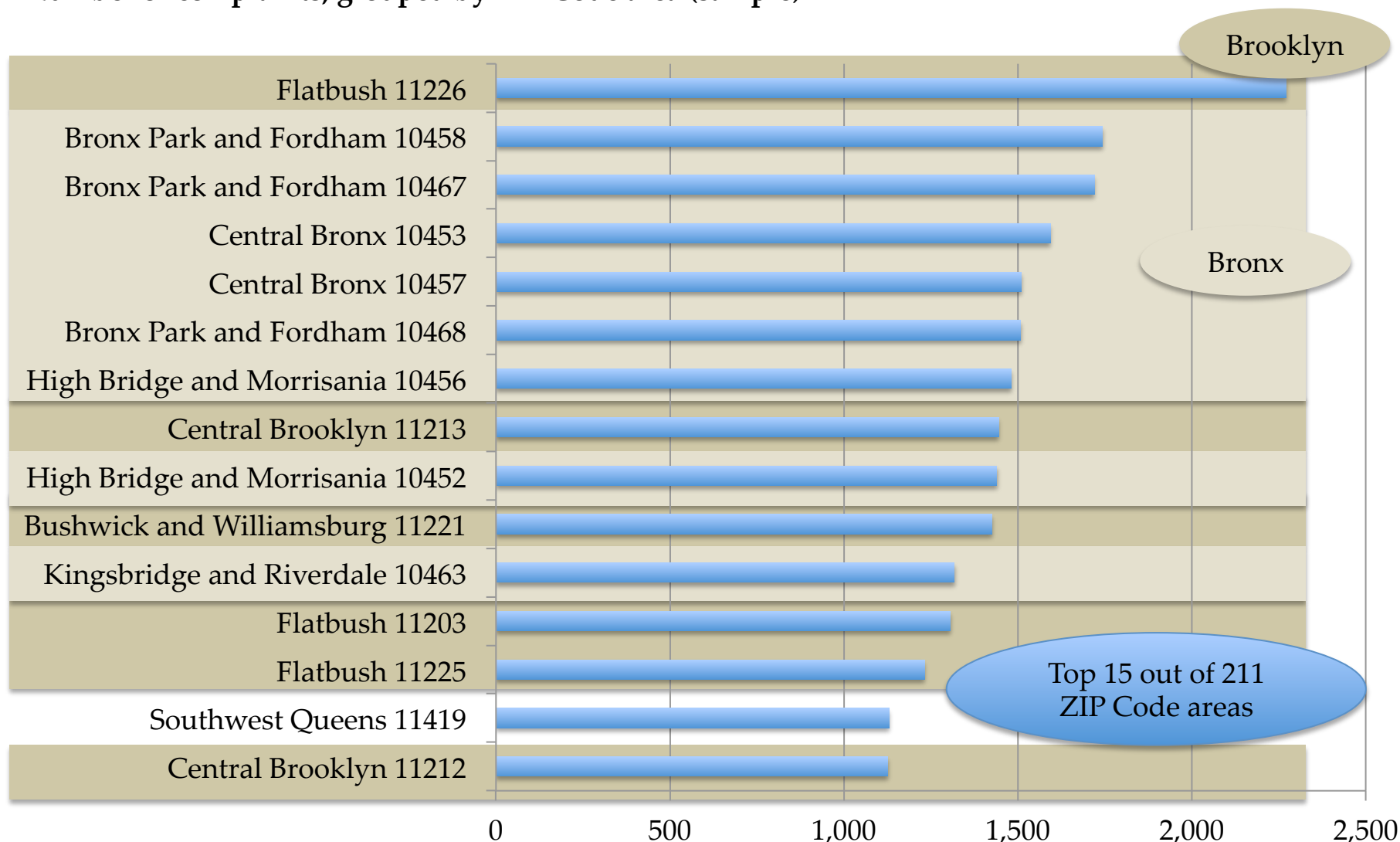
Number of complaints per thousand residents, grouped by borough (sample)



Note that ~10% of all complaints do not have ZIP Code information, or are located outside NYC  
Source: NYC Open Data; United Hospital Fund (neighborhood names)

## 'Top complaining ZIP Code areas' are located in Brooklyn and the Bronx

Number of complaints, grouped by ZIP Code area (sample)

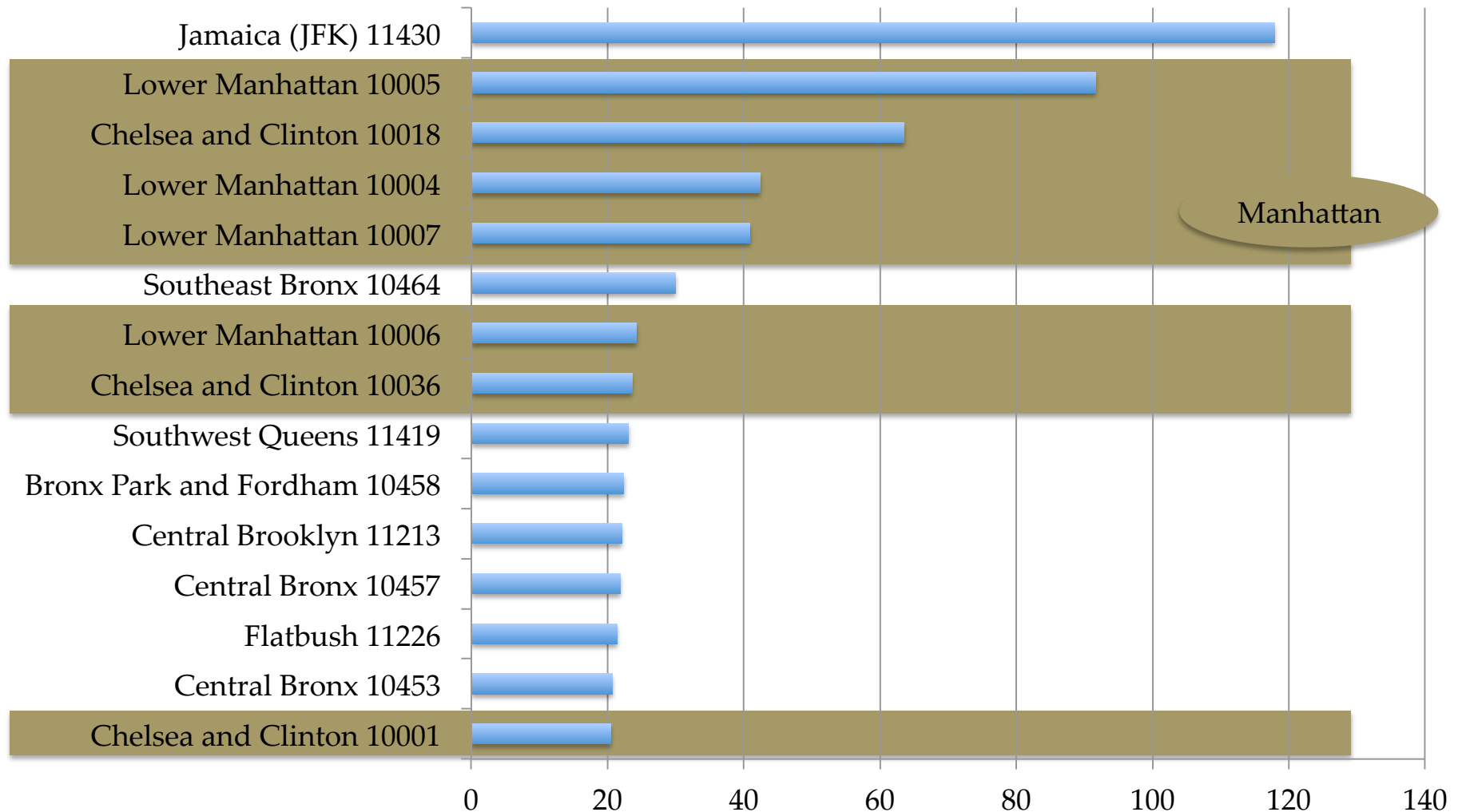


Note that ~10% of all complaints do not have ZIP Code information, or are located outside NYC

Source: NYC Open Data; United Hospital Fund (neighborhood names)

## Complaint-dense ZIP Code areas are at JFK airport and in Manhattan

Number of complaints per thousand residents, grouped by ZIP Code area (sample)



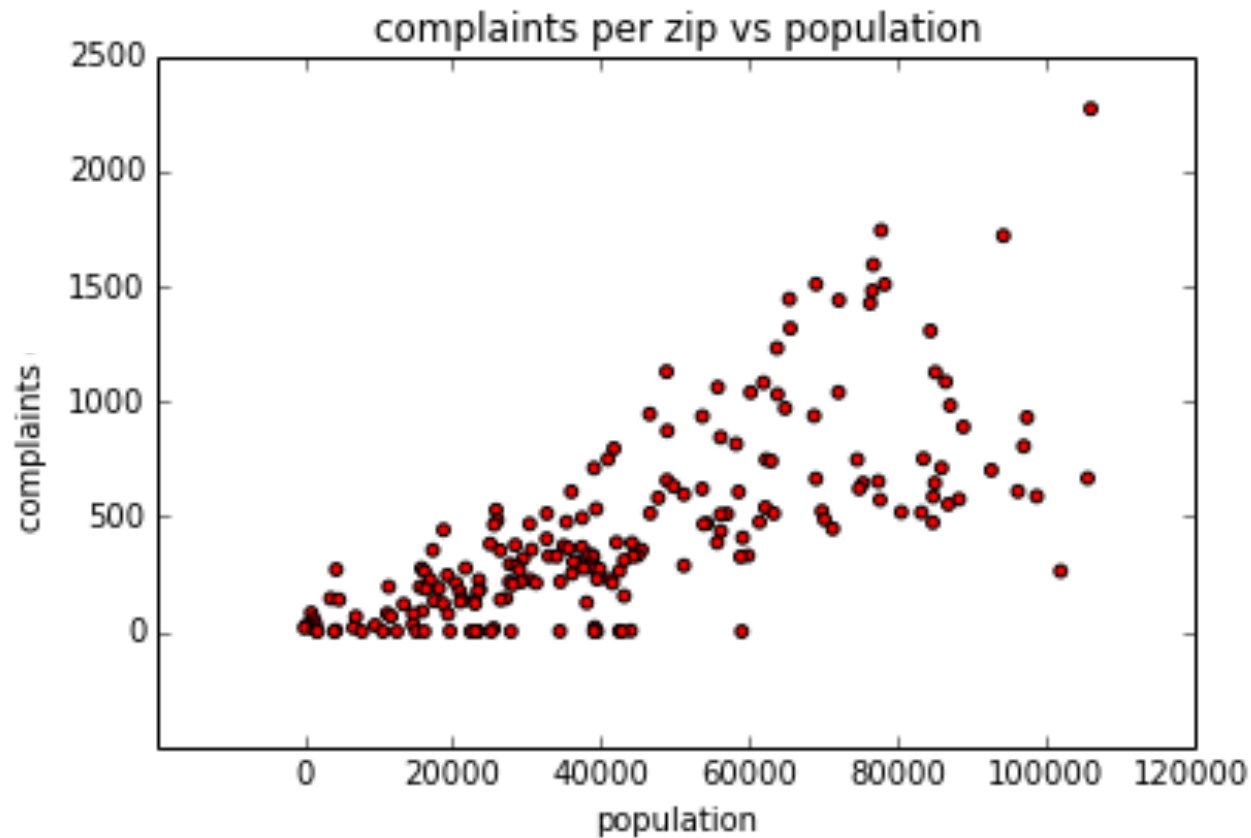
Areas with population under 10 people have been ignored

Source: NYC Open Data; United Hospital Fund (neighborhood names); Google maps (location zip code 10020)

Generally, more populated areas generate more complaints

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Number of complaints vs. population size, grouped by ZIP Code area (sample)



Note that ~10% of all complaints do not have ZIP Code information

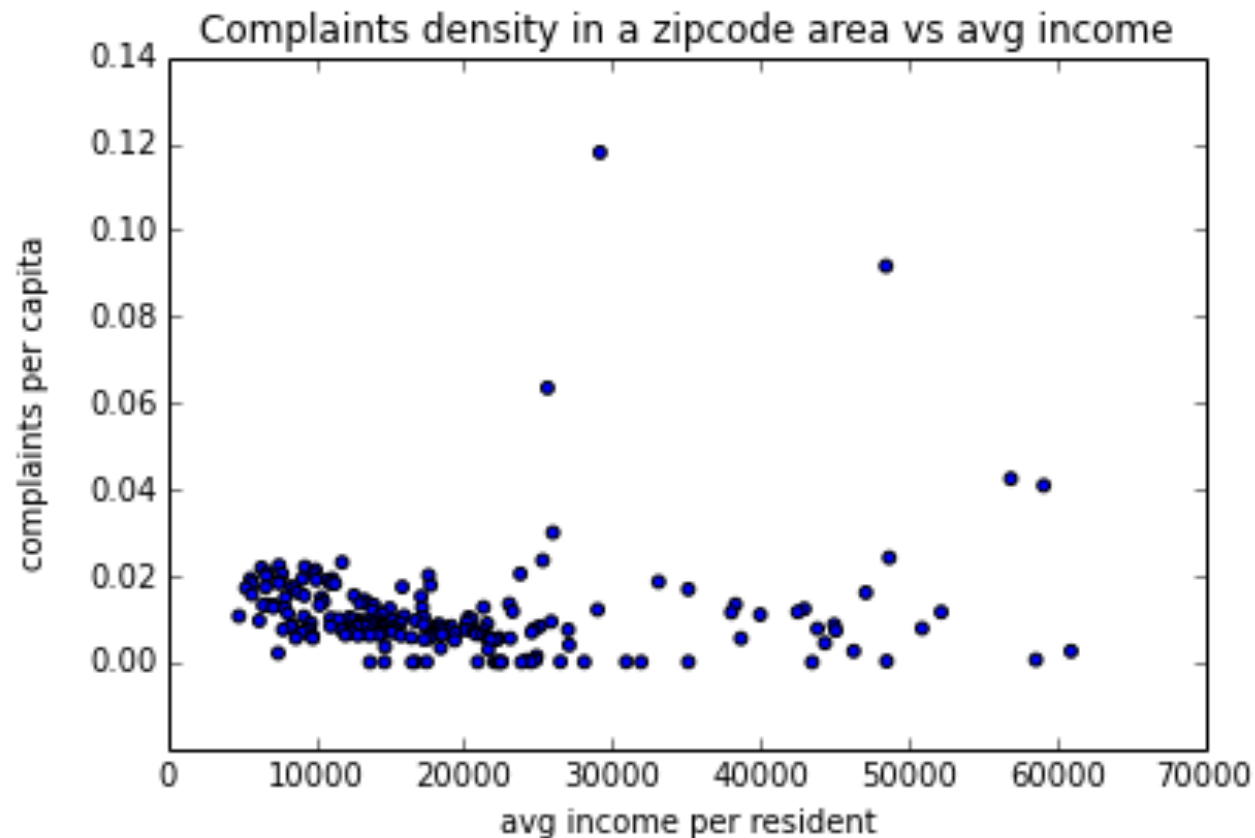
Source: NYC Open Data



Average income does not seem to be related to the complaint-density –  
No difference in complaints per resident between rich and poor areas

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Number of complaints vs. average income per resident, grouped by ZIP Code area (sample)



Outlier 10020 *Chelsea and Clinton* removed for analysis. Note that ~10% of all complaints do not have ZIP Code information  
Source: NYC Open Data, Zip Atlas (income per zip code area)

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**End of presentation**

