Equity in City Services

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① The Question

How should Boston optimize its approach in responding to service requests **equitably** (examples: graffiti removal, potholes, sidewalk repairs, recycling). What does it mean or look like to do this with another kind of request--perhaps with reports on recycling or composting behaviors? Same? Different?

- Background

- Equity and Sidewalks in Boston
  - Idea: augment 311 dispatch requests with data on community need, pavement condition, and usage

Boston Sidewalk Conditions

Sidewalk Conditions
- Poor Condition
- Fair Condition
- Good Condition
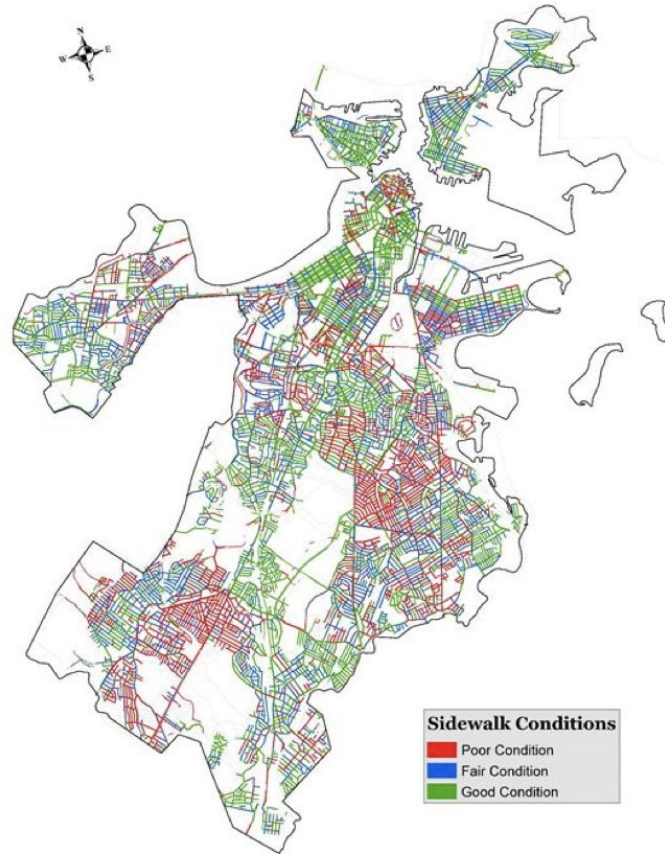
Literature Review

Do Advanced Information Technologies Produce Equitable Government Responses in Coproduction: An Examination of 311 Systems in 15 US Cities

Findings:

- Speed of delivery may be biased against disadvantaged neighborhoods

- Need for service and well-being negatively correlated

  - Awareness of service and well-being positively correlated

  - Need to increase awareness of service

Figure 4: Median Response Time by # of Service Requests and Income
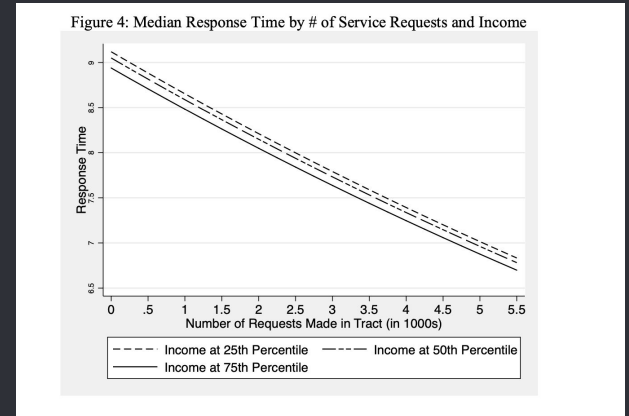
Equity in 311 Reporting: Understanding Socio-Spatial Differentials in the Propensity to Complain

Findings:

◦ In NYC, specific complaint data, coupled with other city records, have also been used to predict the emergence of unsafe or unhealthy conditions, including rodent infestations and illegally converted buildings.

◦ Predict the issue before it occurs

◦ Finds that socioeconomic status, household characteristics, and language proficiency have an effect on the propensity to use 311 across the city.

Predicting demand for 311 non-emergency municipal services: An adaptive space-time kernel approach

Findings:

- Developing and implementing an analytical method to generate reliable predictions of demand in time and space of 311 municipal services

Findings:

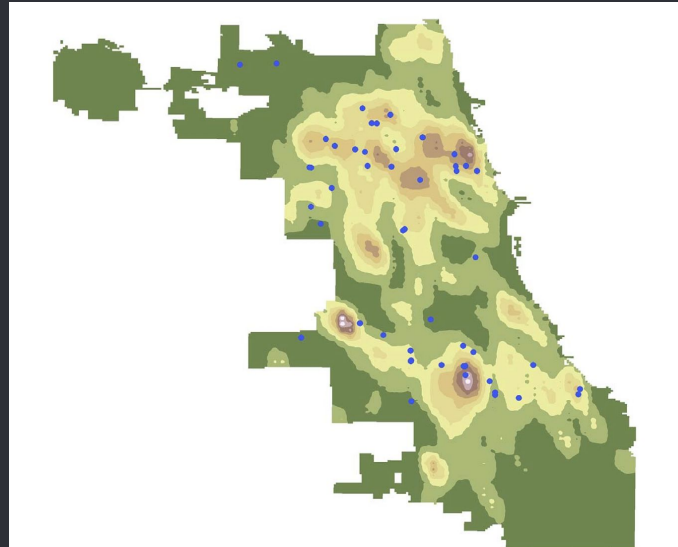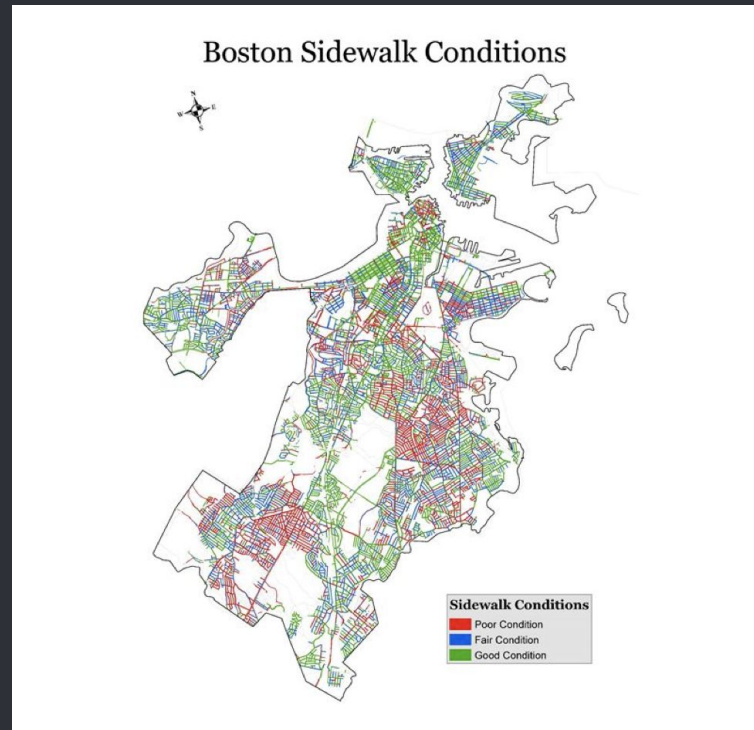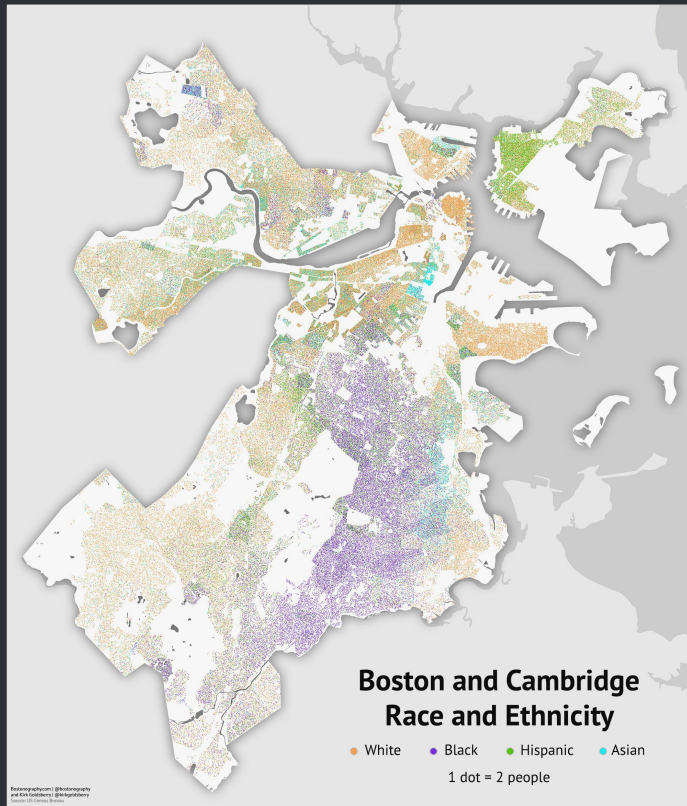- Predicting 311 sanitation code complaints in Chicago

Fig. 5. The predicted density surface of sanitation code complaints on January 30, 2017. Green: low density; Red: high density. The blue points on the density surface are the actual observations on the same day. (For interpretation of the references to colour in this figure legend, the reader is referred to the web version of this article.)
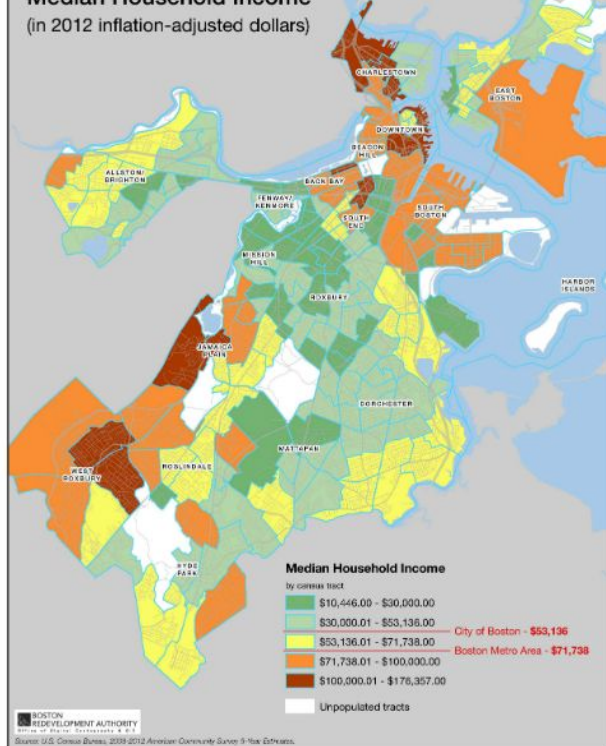
Our Approach:

Combine demand forecasting and a marketing campaign with a foundation of trust to ensure that Boston's 311 system allocates its resources equitably

Boston and Cambridge Race and Ethnicity

White   Black   Hispanic   Asian

1 dot = 2 people

Boston Sidewalk Conditions

Sidewalk Conditions
Poor Condition
Fair Condition
Good Condition

Median Household Income (in 2012 inflation-adjusted dollars)

Boston Sidewalk Conditions
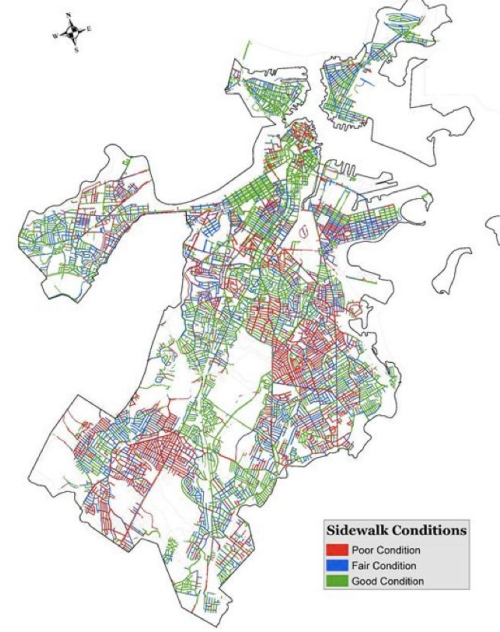
Legitimacy

- Institution
- Comes from the people
- A power dynamic
  - Government vs "Governed"

Establishing Trust

- Steps in giving the people "power"
  - Answering to them
  - Having actual members of the community in positions of power (must be chosen from with in the community)
  - Consider an initial government renovation of a specific service
    - Ex. Entirely fix potholes in a specific area before they even need to be reported
    - Citizens are more likely to trust government after seeing effectiveness and subsequently use the service

A Measure of Good Faith

- Transparency, responsibility, accountability, participation, responsiveness (to the needs of the people) OHCHR
- More support for the community
  - Show them that you care
    - Economic or Political (kind of have to do both)
- Consistency

Marketing Plan

- Focus on long term benefits
  - Community vs individual

Community Marketing

- "Community marketing seeks to engage with and attract prospective customers on a very local level, through their cities or even neighborhoods"
- Make your product/service a part of the community

Benefits
- Loyalty/Trust
- Authenticity
- Understand community needs

Thanks!
ANY QUESTIONS?