

Analyzing the Broken Windows theory in DC

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Objectives & Goals

"The idea [is] that once disorder begins, it doesn't matter what the neighborhood is, things can begin to get out of control" - George L. Kelling

1

WHAT IS BROKEN WINDOWS

Theory from an interpretation of a bad experiment.

2

THE DATA

DC 311 service requests and Metro PD crime.

3

MODELING

Why we want to take a Bayesian approach and what we want observe.

4

FINDINGS & CHALLENGES

Understanding our results and accepting our limitations.

5

SUMMARY

Bringing it all together, next steps and recommendations.



the village

V

Broken Windows

Theory of how signs of disorder can lead to crime.

From silver bullet to junk science

- Zimbardo's abandoned car experiment. Kelling proposes it to inform police.
- Rudy Giuliani and its rise.
- Understanding the trends in crime rates.
- Seeing Disorder Sampson. study.
- Stop and Frisk and legacy.

THE NYPD'S
INSPECTOR
GENERAL
SHATTERS

**BILL BRATTON'S
"BROKEN
WINDOWS"
STRATEGY
NOW WHAT?**

**FLAWED
THEORY**



Data Sources



Using opendata.dc

Metro PD crime report 2009-2017

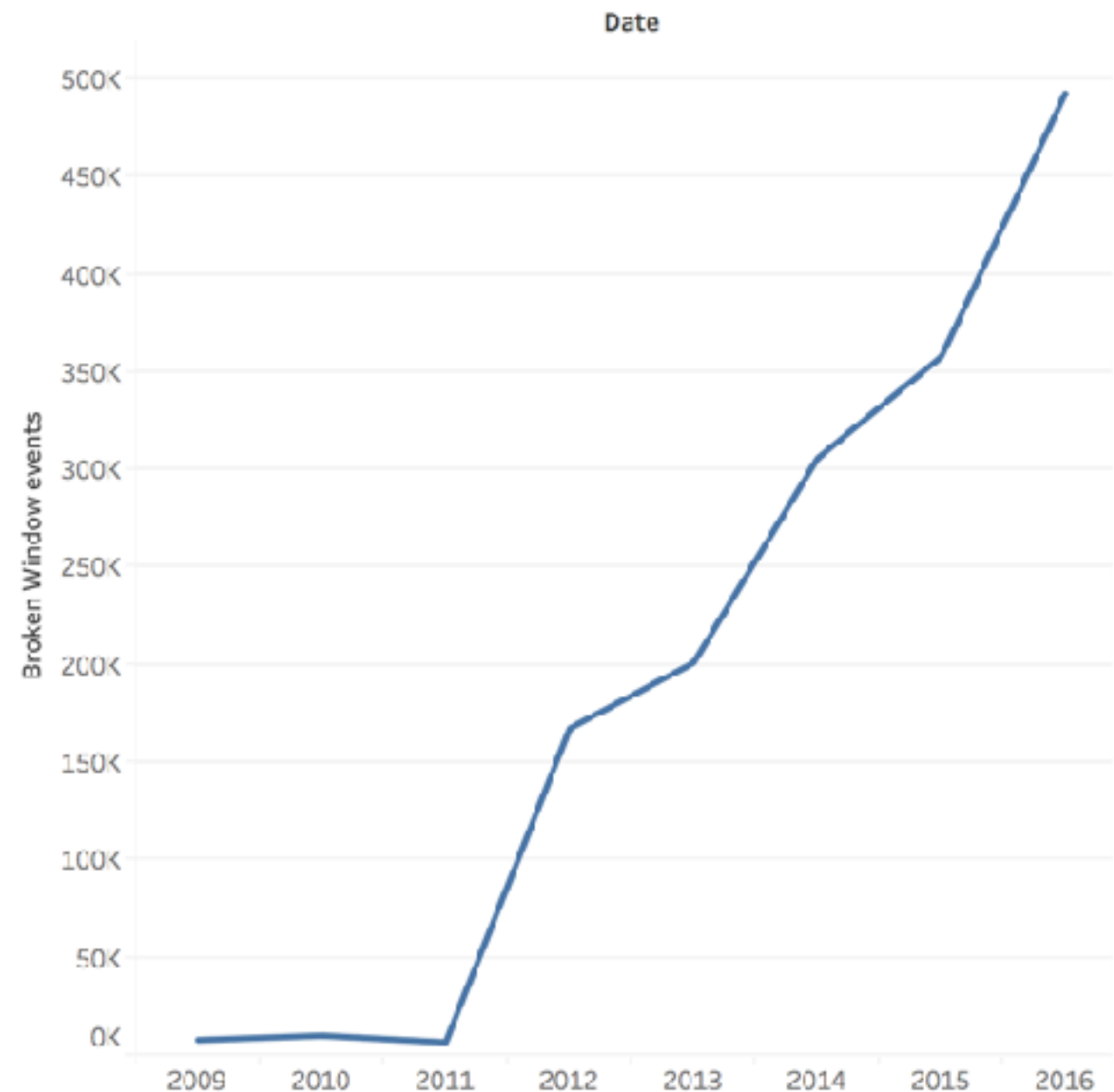
DC #311 service request
2009-2017.

Feature engineering.

Outliers and the implementation of
311.

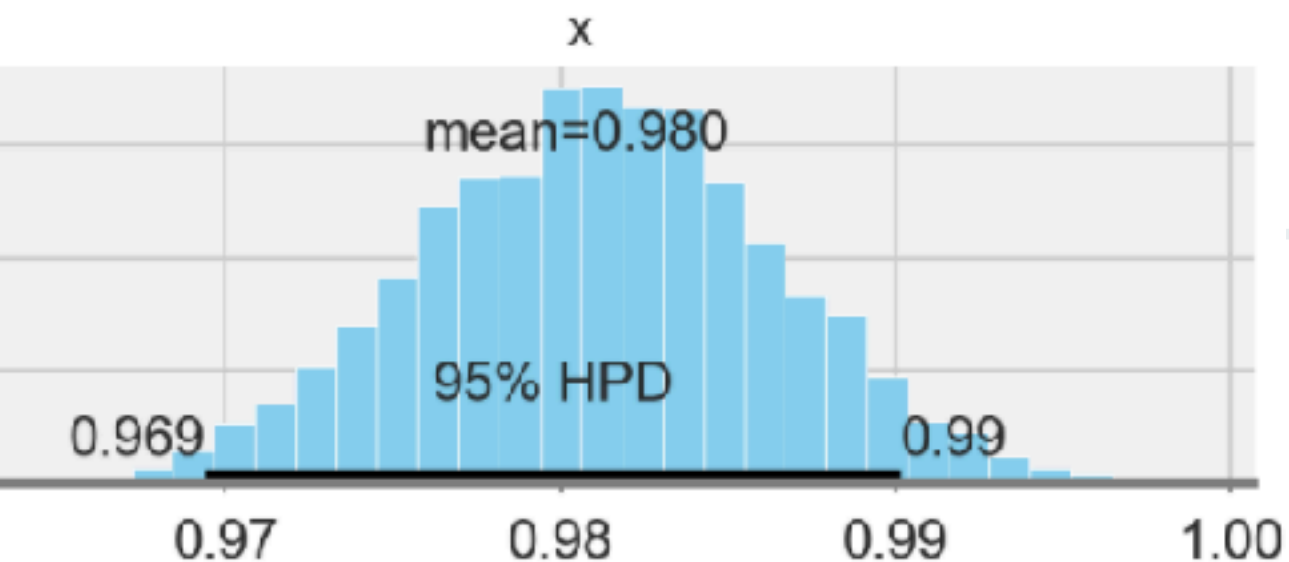
Fluctuations in crime and reporting
by area.

Broken Window Events by Year



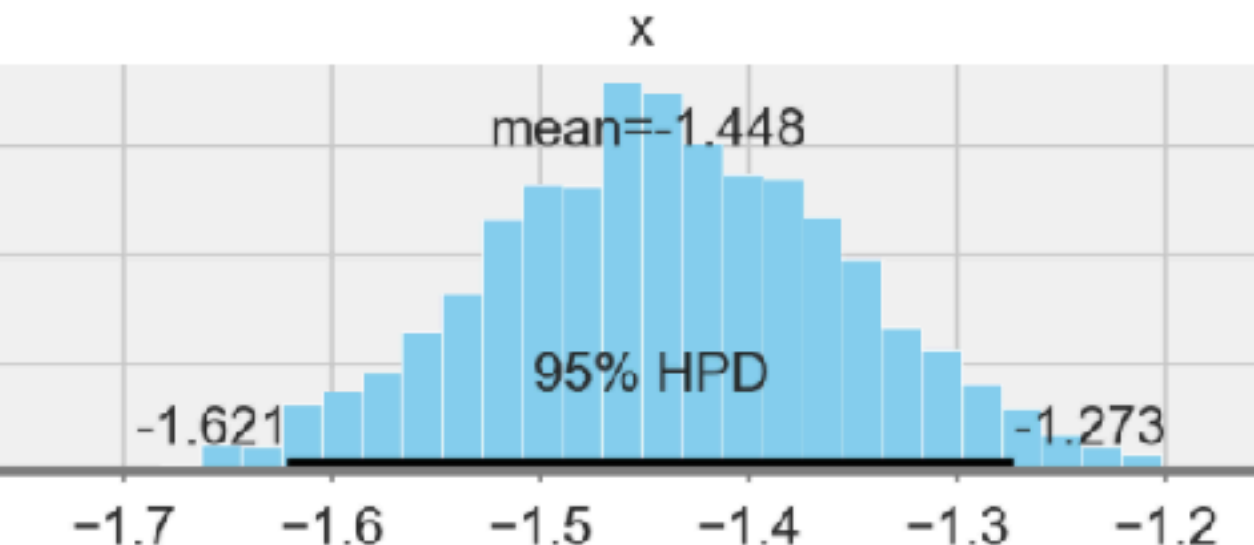
Bayesian Regression

I wanted to determine how a
1 unit increase in broken windows effects crime.



We could not observe a significant impact.

- Choosing a prior.
- Interpreting our results.
- Comparing results before and after app.



Interpretations

We were unable to completely disprove the Broken Windows theory

1

We were able to observe in the way people report service request to the city.

2

Our results seem to indicate the change in service requests took place in High crime areas.

3

Being able to filter requests for the same broken window would help.

4

The Broken Windows theory of law enforcement lacks nuance.