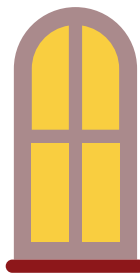# THE BROKEN WINDOW THEORY

THE HISTORY

In 1969 Philip Zimbardo, a Stanford psychologist, conducted a social experiment. He abandoned two cars, one in a low-income neighborhood in New York City and one in an affluent neighborhood in California. Unsurprisingly the car in New York was stripped and vandalized within hours, where the one in California was left relatively untouched. Zimbardo then purposefully smashed up the California car and observed that only then was it vandalized. His conclusion was that signs of disorder, like the now destroyed car in California, can lead to more crime and disorder in otherwise safe and orderly neighborhoods.

This theory informed Rudy Giuliani's campaign for mayor of New York, and was used as the backbone of his promises to clean up the city. Initially this strategy seemed to be working really well. Crime in New York plummeted during Giuliani's term in office and which, in turn, lent credence to the Broken Window theory. Current New York mayor, Bill De Blassio, rehired Giuliani's chief of police, Bill Bratton, and together they implemented the Broken Window strategy under a new name, the extremely unpopular "Stop and Frisk" protocol.
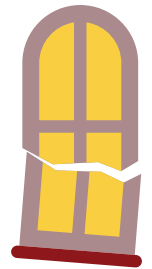
PROJECT GOALS

The goal of the project was to disprove the broken windows theory with crime and service data provided by the DC government. A database of 311 service request for broken window events (graffiti, abandoned cars, etc.) was used to measure their impact on crime rates in DC neighborhoods. Specifically, whether an increase in these events are, in fact, increasing the amount of major crime. Bayesian regression models were used to find the posterior distribution of our broken window events. An average posterior of less than one would call into question the theory.

INITIAL FINDINGS

Outliers in the data quickly pointed to an issue before and after 2012. The DC city government rolled out a 311 app in 2012 and the average broken window events being reported jumped all across the city. From an average of less than one service event per crime before the app, to over seven service events after the app was introduced. The 311 app significantly changed the way these broken window events are reported.

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PROJECT OVERVIEW

Broken Windows has largely been discredited but proactive policing continues in other forms

The roll out of the DC 311 app changed the way, and volume at which, people reported broken windows.

Wards 4, 5 and 6 showed the theory in practice. However these wards had a higher volume of requests and probably reflect gentrification and shifting demographics in those areas.
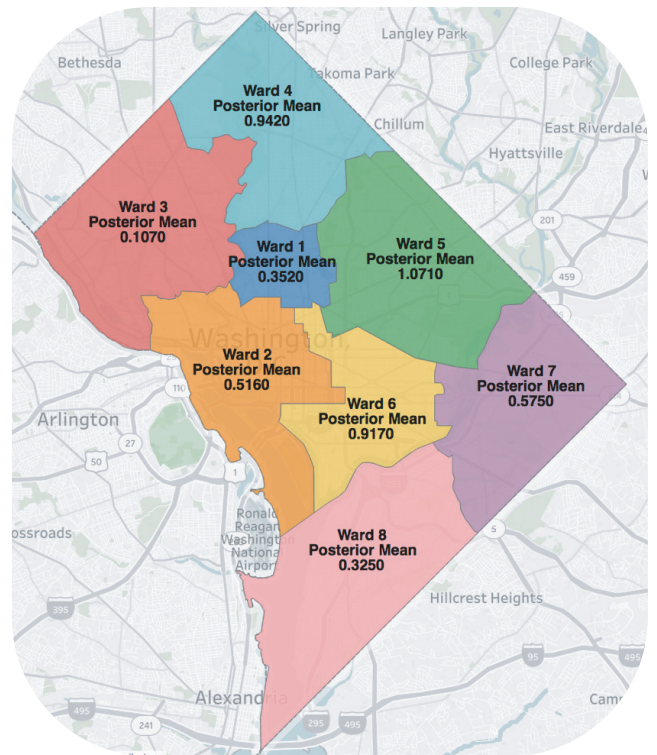
The methods used and data sourced have limitations. A reliance on self reporting is inherently incomplete, as we are unable to observe each broken window event.

The map shows each ward for 2012-2016; a one unit increase in a broken window in those wards results on average in the displayed value increase in crime.

RESULTS & CONCLUSIONS

The results show a posterior mean of less than 1, except for wards four, five and six. These showed the positive correlation the theory would expect us to find. What we may actually be observing here is shifting demographics. These three wards house some of the poorest neighborhoods in the city but unlike wards seven and eight, we saw a positive correlation. This might be the result of gentrification but

more research is needed. The theory is really observing that poorer neighborhoods have more crime. Currently, we rely on data that is being self-reported, and not all of the events are being observed. The service request data can't be filtered for two people reporting the same broken window event. Broken Windows as a foundation of police policy has been discredited with multiple studies since, and my findings seem to support that as well. The Broken Window theory was used as a means to harass low-income areas and lock up small time offenders, it grew in popularity due to our need for simple clean solutions to very complex problems, but reality is almost never that simple.

Total Crime and Broken Window Events
each ward for 2012-2016