

# How Do You Estimate the Impact of a Progressive Prosecutor?

Group members:

- Vittorio Costa - modelling, hypothesis tests, diagnostics
- Gabriel Pincus - modelling, hypothesis tests, diagnostics, and writing
- Branden DuPont - feature creation, modeling, writing, and data visualization

## ***Abstract***

A wave of progressive prosecutors have been elected in recent years promising to reform a broken criminal justice system. Reducing the system's punitiveness is one key policy platform these reform-minded prosecutors share. In practice, this takes the form of declining to criminally charge certain non-violent offenses or reducing the severity of offense charged from a felony to a less serious class of offense, e.g. misdemeanor. Currently, there exists an absence of a rigorous and generalizable method researchers, internal analytic staff, and the public can use to causally assess this impact of this reform.

We will use the example of Cook County State's Attorney Kim Foxx policy to only prosecute felony shoplifting for thefts greater than 1,000 dollars to demonstrate that an interrupted time series (ITS) modelling approach can provide a measure of confidence and reliable estimate on the impact of a progressive prosecutor.

We will discuss how this prosecutorial policy fits the modelling assumptions required for an ITS design. Then, employ a frequentist and bayesian interrupted time series approach using [SimITS](#) and a python port of Google's [Causal Impact](#) to estimate the number of cases Foxx's office turned away that would have been pursued by the previous State's Attorney Anita Alvarez.

Finally, we will explore threats to validity, hypothesis tests, and various model diagnostics to provide a check on the confidence and reliability of our findings.

This project will provide generalizable methodological guidance for those who seek to conduct similar analyses in other countries, either internally within the prosecutors' offices or externally to public stakeholders and advocates. This approach will also provide direction on the form and content of the data a newly elected prosecutor decides to release publicly for purposes of accountability.

# Project Narrative

A wave of progressive county prosecutors have been elected in recent years promising to reform a broken criminal justice system. And with accessible intake data from Cook County, the ongoing debate over criminal justice reform, and the absence of a rigorous and generalizable method to assess the impact of prosecutorial policies makes this topic timely, novel, and important.

Reducing the system's punitiveness is one key policy platform reform-minded prosecutors DA's share. Although DAs lack the authority to change law, they have tremendous authority and discretion in deciding whom to charge and how aggressively to charge. In practice, progressive DAs are using their authority to decriminalize certain non-violent offenses or reduce the severity of offenses and sentence level. DA Rachel Rollins (Suffolk County, Massachusetts) decriminalized shoplifting, larceny under 250 dollars and drug possession with intent to distribute. Kim Foxx (Cook County, Illinois) enacted a policy to only prosecute felony shoplifting for thefts greater than 1,000 dollars.

Kim Foxx's office's unprecedented release of 6 years of case-level data provided the opportunity for the Marshall Project to investigate the effect of Foxx's policy. In a discussion of data and methods the author finishes with a nod to the limitations of his approach: *"The aim of this project was not to find an absolute figure for a progressive prosecutor's impact, but rather a rough estimate of how Foxx's policies affect the people of Cook County."*

The purpose of this study is to provide a precise estimate on the effect of progressive prosecutorial policies under Kim Foxx in Cook County, Illinois. Currently, it is the only county in the United States that has publicly released case-level data at the intake stage, i.e. when county prosecutors decide how aggressively to pursue charges. We will use two separate interrupted time series models to estimate the number of cases Foxx's office turned away that would have been pursued by previous State's Attorney Anita Alvarez. We will explore threats to validity, hypothesis tests, and various model diagnostics to provide a sense of confidence around our findings.

Cook County is hopefully the first in a wider trend towards prosecutorial transparency, supported by many advocates like the ACLU and the Urban Institute. Such advocacy work shows evidence of gaining traction. For example, the state of Connecticut passed the Increasing Fairness and Transparency in the Criminal Justice System Act (SB 880) in 2019, although the underlying case-level datasets there have yet to be published. As such data becomes public, the analysis proposed here becomes possible and can increase pressure on prosecutors around the country to publicly release such data.

## Data Sources

- [Cook County Prosecutor Intake Data](#)

## References

- [ACLU \(2019\). Unlocking the Black Box: How the Prosecutorial Transparency Act Will Empower Communities and Help End Mass Incarceration.](#)
- [Urban Institute \(2018\). \*Collecting and Using Data for Prosecutorial Decisionmaking\*.](#)
- [Connecticut's new transparency law is one chance for prosecutors to embrace their role in ending mass incarceration and racism in the justice system](#)
- [Kim Foxx Effect](#)
- [Causal Inference at Uber](#)
- [Evaluation of Pretrial Justice System Reforms That Use the Public Safety Assessment pt 1](#)
- [Exploring the Effect of 2019-nCoV Containment Policies on Crime: The Case of Los Angeles](#)
- [Using Simulation to Analyze Interrupted Time Series Designs](#)
- [SimITS](#)
- [Causal Impact](#)