

Research Objectives

- Understand changes in crime incident levels due to the pandemic and protests
- Understand causes of changes in crime incident levels due to the pandemic and protests
- Use decreases in police stops as a natural experiment in determining the relationship between number of police stops conducted and effectiveness of policing
- Help the public better understand crime trends in major cities across the US

Controls

- Controlled for changes in traffic composition as a result of the events by using hospital traffic accident data, concluded no significant changes in traffic composition
- Controlled for changes in criminal activity – overall incident levels remained the same or fell during the pandemic

Methods

- Analyzed extremely granular data collected from Philadelphia and Chicago police for changes in policing around two extraordinary events, the onset of the COVID pandemic and the George Floyd protests using difference in difference analysis
- Used public crime data to display time series graphs of crime rates

Data

- Philadelphia police pedestrian stops
- ~2.3 million individual observations from Jan 2015 - Dec 2020
- Information on timing, location, racial demographics, whether a search, frisk, or arrest occurred, results of the stop, narrative field

Results

- Analysis of Philadelphia data yielded **increases in “hit rate” of police stops** after post-pandemic decreases in number of police stops
- Data yielded mixed results: **weapons found in vehicle stops increased 2.09%** after pandemic onset, but **weapons found in pedestrian stops decreased 0.35%**
- Analysis of Philadelphia data yielded increases in “hit rate” of police stops but which were not statistically significant
- Philadelphia homicide rates **increased 40%** from March to Dec 2020 compared to average of previous 4 years

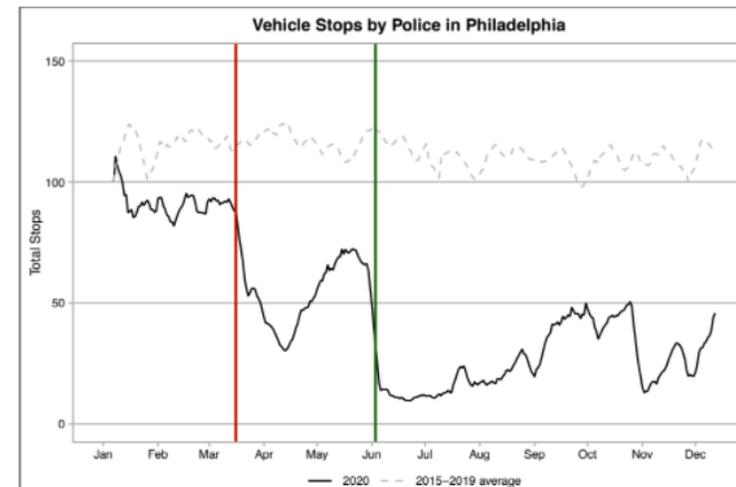


Table 1: Summary Statistics

	Pedestrian Stops		Vehicle Stops	
	Before	After	Before	After
Panel A: Pandemic				
Stops per Day	118	78	786	393
% Male	86.25%	88.73%	71.73%	74.92%
% Black	70.30%	77.79%	73.50%	80.42%
Age	33.94	33.26	34.93	33.03
Frisked/Searched	19.53%	28.46%	11.55%	15.89%
Contraband (given frisk/search)	12.09%	10.18%	19.16%	18.52%
Gun (given frisk/search)	3.10%	2.75%	3.22%	5.31%
Panel B: Protests				
Stops per Day	99	26	522	105
% Male	86.55%	85.35%	78.00%	77.47%
% Black	75.82%	70.82%	79.31%	75.50%
Age	32.7	35.5	32.09	33.32
Frisked/Searched	25.53%	24.82%	20.12%	18.29%
Contraband (given frisk/search)	13.96%	12.82%	21.11%	24.57%
Gun (given frisk/search)	2.83%	4.40%	3.72%	5.56%

Glossary

- **Hit rate:** rate at which police stops and frisks find contraband or reason for arrest
- **Terry Stops:** stops made if police have reasonable suspicion of criminal activity