

Authors

Christopher Blattman The University of Chicago

Donald Green Columbia University

Daniel Ortega CAF, Development Bank of Latin America

Santiago Tobón Universidad EAFIT

> Place-based interventions at scale: The direct and spillover effects of policing and city services on crime*

Christopher Blattman Donald Green Daniel Ortega Santiago Tobón[†] January 15, 2019

In 2016 the city of Bogotá doubled police patrols and intensified city servihigh-crims streets. They did so based on a policy and criminological consensus that such place-based programs not only decrease crime, but also have positive spillawers to marrby streets. To test this, we worked with Bogotá to experiment on an unprecedentle scale. They randomly assigned 1,919 streets to either 8 months of doubled police scale. They randomly assigned 1,349 streets to either 8 months of domined poince patrols, greater numicipal services, both, or neither. Such scale brings econometric challenges. Spatial spillowers in dense networks introduce bias and complicate variance estimation through "funcy clustering." But a design-based approach and randomization inference produce valid kypothesis tests in such settings. In contrast to the consensus, we find intensifying state presence in Bogotá had modest but imprecise direct effects and that such crime displaced nearby, especially property crimes. Confidence interval-suggest we can rule out total reductions in crime of more than 2-2% from the two policies. More promising, however, is suggestive evidence that more state presence led to an 9% full in hemicides and rape citywide. One interpretation is that state presence may move easily deter crimes of pussion than calculation, and place-based interventions could be targeted against these incredibly costly and violent crimes.

JEL codes: K42, O17, E26, J48, C93

Keywords: crime, violence, police, public services, state building, spillovers, field experiment

Kepuerdic crime, violence, police, public services, state building, spillovers, field experiment.

"Actinovirdigments This research is thissis to the militheation of the National Police of Colombia and
the Mayur's Office of Bugstá, especially Bugstá's 2006-18 Servitary of Security, Daniel Mejia, lausentions
for Powerty Action in Colombia and the Center for the Study of Security and Drugs at Universidad de los
Andres coordinated research activities. Survey data was collected by Sisteman Especializades de Información.
For research assistance we thenk Juan Carlos Angolo, Peter Defebach, Matrix Caruelli, Dissista Collisade,
Eduardo García, Sofia Jaramillo, Bichard Peck, Patry is Perkovski, Oscar Pocassagee, Maria Rodríguez, Zach
Tassamerichte and Phabis Villas. For comments we thank Thomas Arlo, Baseanas Andre, Anthony Braga,
Adriana Camardee, Anton Chadia, Steve Dudard, Mascola Educa, Chadio Ferras, Larry Katz, David Lans,
Leopidio Fergusson, Nicolái Graz, Sara Heiler, Daniel Mejia, Ben Ollera, Jan Pierskalla, Tristan Reed, Jacob
N. Shapio, Bastago Saaras, Jann F. Vargos, Bavid Weisburd, Dam Yang, and many conference and suning participants. Bata and analysis were funded by the J-PAL Governance Inkative, Jie, the Development Bank
of Laxia America (ZAF) Enabatasia Probogació, Organización Arlifa Lidie via Universidad de los Andre CESED, COLCENCIAS in the Governancet of Colombia, and the J. William Fulfright Program.

"Billittman Governopoulling anthes) University of Chéango and BPA, tobouffuchicago, eds.

University, dpg21105trohunbia.edv. Ortego: Development Bank of Latia America (CAF), and BESA dortegelleraf.com; Tobio: University of Chéango and BPA, tobouffuchicago.eds.

Place-based interventions at scale: The direct and spillover effects of policing and city services on crime

In 2016 the city of Bogotá doubled police patrols and intensified city services on high-crime streets. They did so based on a policy and criminological consensus that such place-based programs not only decrease crime, but also have positive spillovers to nearby streets. To test this, we worked with Bogotá to experiment on an unprecedented scale. They randomly



assigned 1,919 streets to either 8 months of doubled police patrols, greater municipal services, both, or neither. Such scale brings econometric challenges. Spatial spillovers in dense networks introduce bias and complicate variance estimation through "fuzzy clustering." But a design-based approach and randomization inference produce valid hypothesis tests in such settings. In contrast to the consensus, we find intensifying state presence in Bogotá had modest but imprecise direct effects and that such crime displaced nearby, especially property crimes. Confidence intervals suggest we can rule out total reductions in crime of more than 2–3% from the two policies. More promising, however, is suggestive evidence that more state presence led to an 5% fall in homicides and rape citywide. One interpretation is that state presence may more easily deter crimes of passion than calculation, and place-based interventions could be targeted against these incredibly costly and violent crimes.

January 19, 2019