

**Researchers**

Robert Blair  
Brown University

Michael Weintraub  
Universidad de los Andes

**Staff**

Viviana Delgadillo  
Field Coordinator

Carlos Santiago Guzmán Gutiérrez  
Research Associate

Sofia Jaramillo  
Senior Research Manager

María Juliana Otalora  
Research Analyst

Dayana Tellez Galeano  
Associate Director, Research and Operations, Colombia

**Study Status**

Results

**Study Type**

Randomized Evaluation

**Sample Size**

1,255 blocks or “manzanas”

**Research Implemented by IPA**

Yes

## *Mano Dura*: An Experimental Evaluation of Military Policing in Cali, Colombia\*

Robert A. Blair<sup>†</sup>  
Michael Weintraub<sup>‡</sup>

**Abstract**

Governments across the Global South rely on their militaries for domestic policing operations. Advocates argue these policies are necessary to control crime; detractors claim they undermine human rights. We experimentally evaluate a military policing intervention in Cali, Colombia, one of the world's most violent cities. The intervention involved rearing, intensive military patrols randomized at the city block level. Using administrative crime and human rights data, surveys of more than 10,000 residents, a conjoint survey experiment, a costly behavioral measure, qualitative interviews, and firsthand observations from civilian monitors, we find that military policing had no effect on crime during the intervention and adverse effects after it was complete. We also find some suggestive evidence of increased human rights abuses committed by police officers in particular. Despite these null or adverse effects, we find that military policing increased demand for more aggressive military involvement in law enforcement and other aspects of governance.

<sup>\*</sup>*Acknowledgements:* Funding for this project was provided in part by the UK Foreign, Commonwealth, & Development Office, awarded through Innovation for Poverty Action's Ponce & Recovery Program. Funding for this project was also provided in part by the Open Society Foundations, awarded through Innovation for Poverty Action's Ponce & Recovery Program. We thank staff at IPA Colombia (Kyle Hollweg and Sofia Jaramillo) for coordination of the project, the Secretaría de Seguridad de Cali (María Alejandra Arbelola, Pablo García, Alberto Sánchez, Juan Diego Tabares, Pablo Uribe, and Andrés Villanave) for logistical oversight, the Third Battalion of the Armed Forces of Colombia (especially Colonel Omar Antequera) for its commitment to the evaluation; and Carlos Bohm, María Fernanda Coma, Abraham Farián, Sergio Flores, Carlos Gómez, Sebastián Hernández, and Lucía Mondura Mora for terrific research assistance. For helpful feedback we thank Peter Axonson, Genevieve Blair, Chris Blattman, Alex Coppock, Erica De Bruin, Leopoldo Ferguson, Don Green, Andrés Moya, Molly Oller Westcott, Matt Ross, Sarah Parkinson, Santiago Tobías, Juan Vargas, Jess Zarkin, and participants at workshops and conferences convened by the American Political Science Association, the American Economic Association, Brown University, Cornell University, Duke University, the Fulbright-Bertrand Academy, Harvard University's Bellin Center, the Households in Conflict Network, the International Studies Association, Oxford University, Ponce Research Institute Oslo, Universidad de los Andes, Universidad del Valle, University of California–Berkeley, University of Pennsylvania, Uppsala University, and the Virtual Crime Economics Online Seminar.

<sup>†</sup>Arkadij Eiser-Goldman Sachs Associate Professor, Department of Political Science and Watson Institute for International and Public Affairs, Brown University, robert.blair@brown.edu

<sup>‡</sup>Associate Professor, School of Government, Universidad de los Andes, mto@uniandes.edu.co

## Una evaluación rigurosa realizada por IPA, la Universidad de los Andes y la Universidad de Brown apunta a que el patrullaje militar no reduce el crimen



Los investigadores Robert Blair, de la Universidad de Brown y Michael Weintraub, de la Universidad de los Andes, en alianza con la Alcaldía de Cali, la Tercera Brigada de las Fuerzas Armadas de Colombia e Innovations for Poverty Action (IPA) Colombia, realizaron en 2019 una evaluación experimental del Plan Fortaleza, una intervención de patrullaje militar en Cali, Colombia.

Los resultados muestran que el patrullaje militar no redujo la criminalidad ni mejoró las percepciones de seguridad mientras la intervención estaba en marcha. De hecho, los resultados apuntan a que el patrullaje militar probablemente exacerbó la criminalidad una vez que la intervención finalizó. Estos resultados son especialmente relevantes ya que el 1ro de enero de 2024 tomaron posesión las y los nuevos alcaldes de Colombia quienes deberán formular su política de seguridad ciudadana. Aunque el patrullaje militar puede ser una opción atractiva para aumentar el pie de fuerza, los resultados de esta evaluación apuntan a que es inefectivo e incluso contraproducente.

Para conocer más detalles sobre la evaluación y resultados, por favor consulte el [artículo académico](#).

### INVESTIGADORES

Robert Blair, Michael Weintraub

### SOCIO

Alcaldía de Cali, Tercera Brigada de las Fuerzas Armadas Colombianas

### PAÍS

Colombia

### SECTOR

Paz y Recuperación

### TIPO DE ESTUDIO

Evaluación aleatoria (RCT)

### MUESTRA

1,256 hogares, 10,500 entrevistas

### IPA STAFF

Dayana Talbot, Jean Quintero, María Juliana Orozco, Diana Rengifo, Sofía Jaramillo, Viviana Delgado

Policy Brief

# The Impact of Military Policing Program in Colombia

## Abstract

The use of military forces for public security tasks has become a common approach to combat crime and insecurity. Advocates of these “*mano dura*” (iron fist) policies view them as necessary to control crime, while detractors claim they undermine human rights. In Cali, Colombia, researchers conducted a randomized evaluation of a military policing program called *Plan Fortaleza* to rigorously measure the impacts of military policing on crime rates and human rights. The results revealed that the military policing program had no impact on crime during implementation and had negative effects after its completion.

## Policy Issue

Latin America is the most violent region in the world. In 2018, the homicide rate, a standard indicator for measuring violence, was 22 people for every 100,000 inhabitants; this is four times the world average. In addition, 39 percent of worldwide homicides occurred in the region, although the Latin American population represents only 9 percent of the global population. Forty-one out of the fifty most dangerous cities in the world are located in Latin America.<sup>[1]</sup>

Insecurity and violence in the region have led many to support “*mano dura*” (iron fist) policies implemented by governments concerned about persistently high crime rates. These policies generally include strict punitive measures against low-level criminals and minor crimes, the militarization of police forces, the reduction or suspension of due process guarantees, and the use of military forces for security and policing work.<sup>[2]</sup> Advocates of these *mano dura* policies view them as necessary to control crime, while detractors claim they undermine human rights. Examples of military involvement in civilian domestic security abound, from Mexico to the Northern Triangle to Brazil. This strategy is not unique to Latin America. South Africa, for example, has relied on soldiers to reinforce police officers in the field for nearly two decades. Military policing is similarly common in Indonesia and the Philippines, among other countries, where the prevalence of violent crime and organized criminal activity is high.<sup>[3]</sup> Despite the military’s increasingly prominent role in law enforcement around the developing world, and vocal public support for it, empirical evidence on the efficacy of these interventions remains scarce.

## Context of the Evaluation

Cali is the third-largest city in Colombia and one of its most violent cities. In 2018, Cali reported a homicide rate of 46.7 people for every 100,000 inhabitants, nearly double the rate of Colombia’s second-largest city, Medellín, and more than triple the rate of the capital, Bogotá. In an effort to reduce the prevalence of crime in the city, Cali’s Security and Justice Secretariat, housed within the Mayor’s Office, deployed the military to patrol crime hot spots as part of an initiative known as “*Plan Fortaleza*”.

*Plan Fortaleza* consisted of recurring, intensive vehicular and foot patrols by heavily armed soldiers from the Armed Forces of Colombia in two “*comunas*” (communes). Cali has 22 “*comunas*” in total; *Plan Fortaleza* focused on *comunas* 18 and 20, both hot spots for crime. The two *comunas* comprise 30 *barrios* (neighborhoods), which are further divided into “*manzanas*” (blocks). Their combined population was approximately 215,000 in 2018.

Researchers partnered with the Cali Mayor’s Office, the Third Brigade of the Colombian Armed Forces, and Innovations for Poverty Action to investigate and evaluate the impact of *Plan Fortaleza* in Cali.

## Details of the Intervention

Researchers conducted a randomized evaluation of the *Plan Fortaleza* program in Cali, Colombia. 1,255 *manzanas* were randomly selected to receive military patrols; a comparison group received normal police presence. Each of the intervention blocks was assigned to receive 30 minutes of military patrols roughly every six days. In reality, the average time spent patrolling was around 11 minutes per block per day, due in part to the small size of most blocks and the large number of soldiers on patrol.

All patrols occurred from 5:00 PM to midnight Monday to Friday. While on patrol, soldiers searched suspected criminals for possession of drugs and weapons, checked IDs and business licenses, erected roadblocks, detained suspected criminals, and conversed with residents. To maximize the military's compliance with the intervention, researchers hired civilian monitors to accompany each patrol. Monitors used GPS devices and smartphones equipped with a customized Google Maps interface to help soldiers navigate to their assigned treatment blocks. The monitors also tracked and reported any abuses perpetrated by soldiers while on patrol. (The monitors recorded just one incident of verbal abuse over the duration of the program.)

To examine the impact of the intervention, researchers used data from the following sources:

1. Administrative crime data from the Colombian National Police, the Mayor's Office, the Attorney-General's Office, and the Coroner's Office, geocoded to the block level; and administrative data on human rights abuses from the Office of the Attorney-General.
2. A household survey of 2,096 randomly selected residents of the two *comunas* between October 17 and December 19, 2019, beginning while the intervention was ongoing and continuing for roughly a month after it was over.
3. A household survey of 7,921 randomly selected residents and business owners between January 17 and February 25, 2020, between two and three months after the end of the intervention.
4. GPS data and geocoded, timestamped firsthand observations from the civilian monitors hired to accompany the soldiers while on patrol.

## Results and Policy Lessons

*Plan Fortaleza* did not reduce the prevalence of crimes including murders, robberies, illegal drug sales, and illegal possession of weapons, even when the soldiers were physically present on the streets.

Researchers observed a **large and statistically significant increase in crime in the weeks after the intervention was complete**. Relative to the blocks with no military presence, the researchers found an average of 0.110 more crimes committed on blocks where the military patrolled and .083 more crimes on adjacent blocks. This translates to, in aggregate, 23 more crimes on blocks where the intervention occurred, and 63 more crimes on adjacent blocks between the end of the intervention and the end of the year.

Researchers found **no evidence that the program reduced citizens' reports of crime victimization either during or after the intervention.** However, there were increases in citizens' accounts of (1) witnessing and (2) reporting crimes to the authorities, (3) police presence, and (4) arrests on both intervention and adjacent blocks. These results are consistent with an increase in crime (and a corresponding increase in police activity) after the intervention was complete.

**Plan Fortaleza improved subjective perceptions of safety among business owners** on participating blocks compared to the blocks where the military wasn't present. In contrast, the intervention had a weak or even negative impact on residents' perception of safety.

**Researchers found weak evidence of increased human rights abuses by soldiers and stronger but still suggestive evidence of increased abuses by police officers.**

This finding is specific to the monitoring and final surveys. Researchers found no evidence of increased abuses in administrative data from the Attorney-General's Office, or in the firsthand observations of civilian monitors.

---

**To learn more read an article on this study in *El Tiempo* [here](#) and listen to CeroSetenta's podcast episode [here](#).**

## Sources

---

<sup>[1]</sup> Nathalie Alvarado and Robert Muggah, "Crimen y Violencia: Un Obstáculo Para El Desarrollo de Las Ciudades de América Latina y El Caribe" (Inter-American Development Bank, November 2018), <https://doi.org/10.18235/0001440>.

<sup>[2]</sup> Robert Muggah, Juan Carlos Garzón, and Manuela Suárez, "La 'Mano Dura': Los Costos de La Represión y Los Beneficios de La Prevención Para Los Jóvenes En América Latina," Instituto Igarapé, accessed February 17, 2021, <https://igarape.org.br/wp-content/uploads/2018/06/La-Mano-Dura-Los-costos-de-la-represio%CC%81n-y-los-beneficios-de-la-prevencio%CC%81n-para-los-jo%CC%81venes-en-Ame%CC%81rica-Latina.pdf>.

<sup>[3]</sup> Robert Blair and Michael Weintraub. "Mano Dura: An Experimental Evaluation of Military Policing in Cali, Colombia"

## Related Content

### NEWS

Findings from IPA evaluation on military policing featured in El Espectador

Discover more from IPA

[View All Studies](#) [View All News](#) [View All Blogs](#) [View All Events](#) [View All Publications](#)