
PAVED with good intentions ? An evaluation of a French police predictive policing system

Yann Lecorps*^{†1} and Gaspard Tissandier²

¹Groupe d'Analyse des Itinéraires et des Niveaux Salariaux (GAINS) – Le Mans Université – Université du Maine - Avenue Olivier Messiaen - 72085 Le Mans cedex 9, France

²Centre d'économie de la Sorbonne (CES) – Université Paris 1 Panthéon-Sorbonne, Centre National de la Recherche Scientifique – Maison des Sciences Économiques - 106-112 Boulevard de l'Hôpital - 75647 Paris Cedex 13, France

Résumé

From late 2017 to early 2019, one of the two french law enforcement agencies tested in 11 out of 101 departments a predictive policing system named PAVED. The system design by the Gendarmerie predicts burglaries and vehicle thefts with the stated objective of better allocating patrols and thus increasing deterrence. We use month-law enforcement jurisdiction area panel data to evaluate whether the system produces the expected reduction in these thefts and whether this effect is due to a deterrent effect or a displacement effect. Both the standard Two Way Fixed Effect and Synthetic Difference-in-Difference estimations consistently indicate a significant reduction of vehicle thefts in the treated Gendarmerie areas but no detectable effect on burglaries. Most of our results indicate that vehicle theft has not increased in areas near the treated areas, suggesting that the reduction in vehicle theft is due to a deterrent effect rather than a displacement effect.

Mots-Clés: predictive policing, paved, deterrence, law enforcement

*Intervenant

[†]Auteur correspondant: yann.lecorps@gmail.com