

You are kindly invited to attend the public PhD defence of
Maite Dewinter

“Optimising daily police patrol:

Towards better matching police supply and demand by directing
police in space and time”

When? Wednesday 3 May 2023, at 17:00 (CEST)

Where? Auditorium Vandenhove (Rozier 1, 9000 Ghent)
or follow the livestream via: <http://www.geoweb.ugent.be/events/all>

After the defence, you are invited to the reception in Rozier 44 at 19:00 (CEST).

Please confirm your in-person attendance before 27 April 2023 via [this link](#) or by
e-mail (Maite.Dewinter@UGent.be).



Summary

A courier knows at the beginning of his round which parcels to deliver to which addresses. This is not the case for police patrol officers of the emergency response unit. At the start of their shift, they do not know where and when an emergency call will come in, what kind of incident it will be and where the unit should position itself next to ensure optimal regional coverage. Moreover, the combination of crime prevention and handling emergency calls makes the police patrol problem more complex than other allocation and routing problems. Although "emergency" calls suggest that they are always urgent and life-threatening incidents, they represent only a small proportion of the total number of calls. This shows that police work largely consists of structural, non-emergency demand and that inspectors act mainly as mediators and responders. Developing a patrol strategy involves matching supply to this demand. Undersupply is logically undesirable, but conversely, it is also difficult to determine when there is sufficient police presence somewhere. It is important to realise that (over)supply in one place means that other places cannot be served with those resources at that time. Therefore, this study examines where and when available resources can be optimally deployed.

Examination Committee

Prof. dr. Veerle Van Eetvelde (Ghent University)
Prof. dr. Haosheng Huang (Ghent University)
Prof. dr. Eva Lievens (Ghent University)
Prof. dr. Wim Hardyns (Ghent University)
Prof. dr. Wout Dullaert (VU Amsterdam)

Supervisors

Prof. dr. Frank Witlox (Ghent University)
Prof. dr. Christophe Vandeviver (Ghent University)
Prof. dr. Tom Vander Beken (Ghent University)

About the author

Maite Dewinter (°1995) is a researcher at the Department of Geography at Ghent University. She obtained her Bachelor's and Master's degrees in Geography both at Ghent University. In 2018, she started her interdisciplinary PhD (funded by BOF) at the Social and Economic Geography Research Group of Ghent University. This PhD project is an interdisciplinary PhD with the Institute for International Research on Criminal Policy at Ghent University. As a geographer, she is interested in the geography of crime and police patrols as well as mobility research.