

Can a risk terrain analytical approach have a practical proactive application on reducing rural crime in Lincolnshire? (working title)

The research aims to test whether a risk terrain model provides a valid analytical methodology within the rural context of Lincolnshire.

Key details

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Police region	West Midlands
Level of research	PhD
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Research context

The research aims to test whether a risk terrain model as developed by Caplan and Kennedy (2010) provides a valid analytical methodology within the rural context of Lincolnshire. Academic literature highlights its validity within urban contexts, but as yet not extended into this type of environment.

Three rural crime types will be considered and the methodology used to create a risk terrain map where possible for hare coursing, farm machinery theft and county lines drug dealing. The resulting map will be assessed to identify its applicability for practical use by police officers.

Research methodology

Threat, risk, and harm are the guiding principles for police action within Lincolnshire Police. The risk terrain model (RTM) developed by Caplan and Kennedy (2010) provides a methodology to consider the differing levels of risk across the county for specific crime types.

RTM is a step-by-step process that refers to three key elements.

1. Standardizing disparate datasets to a common geography.
2. Diagnosing spatial risk factors.
3. Articulating spatial vulnerabilities' (Kennedy and Dugato, 2018).

The methodology brings together data which represents the potential risk of a crime occurring, such as the proximity to a nightclub, the road network, or the type of terrain. It allows different risk factors to be explored depending on the crime type and allows the analyst the opportunity to define potential risks for inclusion based on physical ideas or theoretical concepts.

Through regression analysis those factors which have a significant risk on the location of a crime are identified and combined to produce a map of risk. This identifies those areas most vulnerable to a particular crime type. It also identifies those individual factors which combine to increase the risk, and thus be used to place crime prevention intervention.

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