



# UCL



## Short Courses

@ the UCL Jill Dando Institute of Crime Science

The UCL Jill Dando Institute of Crime Science (JDI) is the first in the world devoted specifically to reducing crime, disorder and terrorism. It does this through teaching, research, public policy analysis and by the dissemination of evidence-based information on crime reduction.

JDI plays a pivotal role in bringing together politicians, scientists, designers and those in the front line of fighting crime to examine patterns in crime, and to find practical methods to disrupt these patterns. Our mission is to change crime policy and practice.

JDI offers courses on crime prevention and reduction, community safety, problem solving and crime analysis. The courses draw on our experience, knowledge, expertise, and international reputation in these fields. Our lecturing staff and associates are world leaders in crime science.



**Professor Gloria Laycock**  
Director, UCL Jill Dando Institute of Crime Science

Our courses are relevant to senior crime reduction policy makers, community safety managers, crime analysts, police officers and any agencies with an interest in reducing crime, disorder or other threats using data-driven and evidenced approaches.

Working for 30 years at the Home Office, I know that time and expertise is important to you, which is why we work around your needs. Our flexible approach means that you are put in control. We can teach in an environment that suits you or in our new offices in central London. And if you can't find what you're looking for in this booklet, JDI can design short courses that specifically suit your training and development needs.

You are committed to reducing crime and supporting communities. We are committed to helping you meet that challenge.





5 Day  
Analyst Courses

**5** DAY  
COURSES

# How To Become An Effective Problem Solving Crime Analyst

5 Day course

**Aimed at:** Analysts involved in leading information-driven, evidence-led approaches to reducing crime.

**Interest groups:** Crime science, crime reduction, Routine Activity Theory, offenders' perspectives, geographical crime displacement, Repeat Victimisation, statistics, crime prevention.

**Entry Requirements:** None

This five-day short course for analysts is designed to accompany the award winning JDI manual 'Become a Problem-solving Crime Analyst', commissioned by the Home Office. It offers the essential skills that an analyst requires to become more proactively involved in leading information-driven, evidence-led approaches to reducing crime.

The course approach is directly compatible with the National Intelligence Model and supports national community cohesion guidance.

**Course components:**

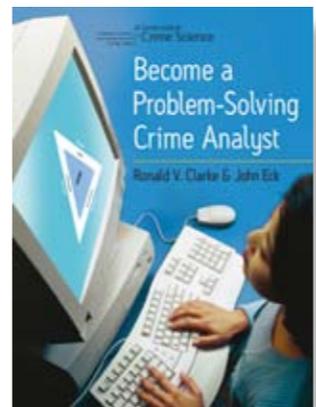
- Introduction to problem solving crime analysis: Introduction to crime science; description of general theories of crime reduction; the role of the analyst; discussion of SARA/POP.

- Opportunity and crime: Covers Routine Activity Theory, the relationship between crime and opportunity; thinking from offender's perspectives; Rational Choice Theory.

- Displacement and Diffusion of benefits: Early sessions discuss displacement and diffusion of benefits. Later sessions determine when displacement is plausible; geographical crime displacement; looking for changes in the way in which crimes are committed (MO switch).

- Working with hypotheses: Early sessions discuss the nature of hypotheses and how they are formulated; implications for data collection and formatting; role of hypotheses; and the relationship between hypothesis testing and action plans. Later sessions explore the ways of identifying the type of problem that exists; how the problem can be best understood; and formulating hypotheses against which to focus analysis and test targeted responses.

- Crime concentrations: Examination of the different ways that crime concentrates; the 80/20 rule; risky facility; and the use of 'CRAVED'.



“This is the only course I have been on where I am eager to return to work and put into practice all I have learnt. The knowledge and enthusiasm has rubbed off on me during the week...”

“...I just want to get back to work and set a project running. ... I have somewhere to go for help and advice now, which was lacking before. It was great to meet some true professionals that appear passionate about what they do.”

- Implementing responses and tackling accountability: Covers the role of the analyst in devising potential solutions; responsibility and competency in crime control; shifting ownership and using levers; obstacles to prevention and how to overcome them.

- 25 practical response techniques: Discusses the techniques and the 5 major approaches that the techniques fall under; and the pros and cons of each.

- Why do places become hot and what data do I need?: Distinctions between different types of hotspots; diagnosing hotspots, and understanding how to use volumes and rates.

- Analysing where and when crime happens: Understanding the geography of crime; the localities where offenders reside, or anchor their criminal activities from; exploring the journey to crime; analysis techniques for understanding long term change; seasonality; crime patterns by day of the week and time of day.

- Repeat victimisation and repeat offending: Measuring Repeat Victimisation (RV); issues relating to data and analysis; the extent of the problem;

the time course of RV and dimensions of risk; why RV occurs; targeting RV and reducing crime; near repeats and the communicability of risk; who commits RV and the scope for detection as well as prevention.

- Basics of process and outcome evaluation: Defining process and outcome analysis; important questions to ask in process evaluation; theory of change analysis; the role of controls in outcome analysis; common methods and statistics used in outcome analysis; safeguarding against bias in crime prevention evaluations.

- Looking for added benefit: Defining diffusion of benefit and illustrating anticipatory benefit; possible mechanisms behind anticipatory benefit methods of detecting diffusion of benefit; defining residual deterrence and discussing sustainability.

- Cost effectiveness and using measures of intensity: Defining cost effectiveness analysis (CEA) and cost benefit analysis; examples of cost effectiveness analysis (CEA); identifying potential problems with CEA; measures of intensity; use of measures of intensity in outcome analysis.

# Getting the Right Stats and Maps for Today's Policing

## 5 Day course

**Aimed at:** Crime and intelligence analysts, and anyone with an interest in producing and interpreting powerful statistics concerned with crime analysis.

**Interest groups:** Thematic mapping, geographics, data analysis, statistics, patterns.

**Entry Requirements:** It is essential that participants have basic numeric skills (at least GCSE level maths or equivalent) and participants should also be familiar with the windows based computing environment.

It is not necessary that delegates have any pre-existing knowledge of ArcGIS.

It is desirable, but not essential for those wishing to participate in this course to have completed the other five day course offered by the JDI- How to become an effective problem-solving crime analyst.

This course is normally taught over five consecutive days and is divided in two parts. While many delegates may choose to attend the whole course it is also possible for delegates interested solely in statistical analysis to complete Part 1 only.



### Course components:

#### Part 1: Statistical analysis covering:

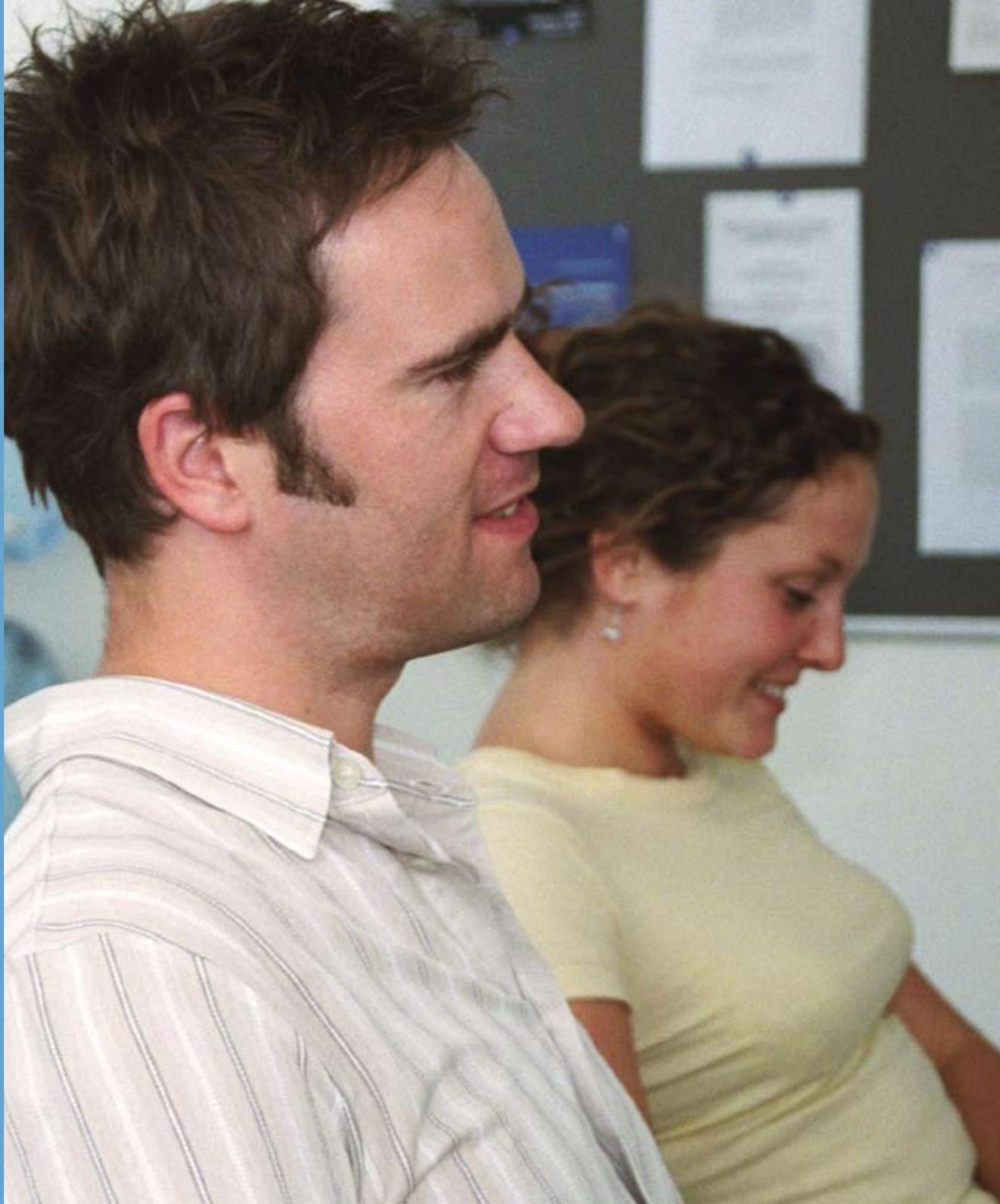
- A reminder of the concept of hypothesis testing in crime science
- Asking questions about the nature of crime problems
- Formulating hypotheses about the significance of factors that correlate with crime (e.g. deprivation or social disorganisation) and producing theories about which measures will be effective at reducing crime in particular circumstances
- A refresher on some useful descriptive statistics for characterising data sets (e.g. mean, mode, variance and standard deviation) and an overview of the principles of inferential statistics
- Computer practicals on basics of the SPSS for windows statistical package
- How to enter and import data, manipulate and aggregate information to the appropriate level for analysis and produce solid descriptive statistics, using crime-based examples
- Analysis of spatial and temporal trends in crime data including methods for investigating daily, weekly, monthly and yearly trends and considering the role of seasonality
- Demonstration of systematic methods of examining spatial variation in area level crime risks

- Computer-based sessions exploring the role of inferential statistics including chi-square, correlation statistics and logistic regression

- Development of skills in evaluation and impact assessment. A suite of different evaluation methods is explained and illustrated including the production of odds-ratios and simple time series analysis

#### Part 2: Crime mapping covering:

- Advice on good practice in crime mapping
- Issues concerning the relationship between different area level units of analysis
- Theoretical principles important in the interpretation of maps
- Use of thematic mapping and area level mapping in characterising crime problems
- How to link data from different sources using GIS to produce further intelligence on crime problems
- How to define your own areas of interest for further study
- Use of CrimeStat II (available for download free of charge) to conduct nearest neighbour analysis and to produce sophisticated hotspot maps
- Procedures for identifying the likely area of residence of a prolific offender (geographic profiling)



## Mapping and Understanding Hotspots

1 Day course

**Aimed at:** Crime analysts, police intelligence analysts, analysts from partnerships and other agencies.

**Interest groups:** GIS-based mapping, hotspots, statistics, crime patterns, Geographic boundary thematic mapping, Quadrat thematic mapping, Continuous surface smoothing.

**Entry Requirements:** At least a foundation in GIS software. It is desirable that delegates have knowledge of a common GIS-platform e.g. Northgate Blue8, Mapinfo and ArcGIS.

This hands-on GIS-based course explores techniques for mapping and understanding hotspots of crime. It can be delivered across any of the common GIS-platforms (Northgate Blue8, Mapinfo and ArcGIS).

**Course components:**

- **Global statistics for describing crime patterns;** Global statistics can provide a useful insight into what types of patterns will be expected when crime data is presented in map form.
- **Point maps;** The mapping of crime is most commonly performed by displaying events as points. However, in many cases it is difficult to interpret any discernable patterns from crime data when using this technique, particularly when large volumes of data are present.

- **Geographic boundary thematic mapping;** Thematic mapping of crime data, aggregated to geographical, administrative, or political boundaries such as Census Output Areas, wards or police beats, is a popular method for visualising crime patterns. This module demonstrates practical opportunities for using this technique, but also demonstrates its disadvantages for understanding hotspots.

- **Quadrat thematic mapping;** Quadrat thematic mapping is a technique that uses uniform grid cells (quadrats) of a specified user width to thematically shade crime patterns. The advantages and disadvantages of this technique are explored for helping to understand hotspots.

- **Continuous surface smoothing;** A more sophisticated method of visualising the distribution of crime is one that aggregates points within a specified search radius, and creates a smooth continuous surface that represents the density or volume of events distributed across the area. Few rules are available that help the analyst choose suitable parameters. This module explores these techniques and demonstrates how parameters can be chosen to aid map interpretation.

★ This course can be delivered on your premises using local crime data and software. Please contact JDI for more details.

“ The course has given me a much better idea of map presentation and analysis of crime data ”

# Advanced Spatial Statistics For Crime Analysis

1 Day course

**Aimed at:** Crime analysts, police intelligence and analysts from partnerships and other agencies exploring the use of hotspotting for crime reduction purposes.

**Interest groups:** GIS-based, spatial analysis, displacement analysis, space-time analysis, spatial clustering techniques.

**Entry Requirements:** At least a foundation in GIS software. It is desirable that delegates have knowledge of a common GIS-platform e.g. Northgate Blue8, Mapinfo and ArcGIS.

This one-day hands on GIS-based course is designed to develop the spatial statistical skills that an experienced crime analyst possesses. It introduces several advanced spatial analysis functions that can be used to explore patterns and relationships in crime data, as well as introducing methods for displacement analysis, and space-time analysis.

The course is suitable for analysts using either MapInfo or ArcGIS and utilises freeware software that is available to all, rather than using expensive add-ons that are only available to the privileged!

“Very practical to my needs as an analyst”

## Course components:

Methods and techniques that are taught on the course include:

- Advanced spatial clustering techniques:
    - o Spatial autocorrelation techniques: Moran's I and Geary's C
    - o Local Indicators of Spatial Association: Local Moran's I, Local Geary's C, and the Getis and Ord Gi and Gi\* statistics
    - o Clustering techniques that use a secondary variable (e.g. the underlying population)
  - Methods for measuring geographical displacement
  - Space-time analysis techniques
- \* This course can be delivered on your premises using local crime data and software. Please contact JDI for more details.



# Crime Reduction for Policy Makers

1 Day Intensive course

**Aimed at:** Senior policy makers, senior practitioners and those from the private security industry. Senior civil servants and regional and local policy makers who are new or relatively new to the crime field.

**Interest groups:** Crime and disorder reduction methods, crime rates and patterns, crime control, displacement mechanisms, logic models, hotspots, overcoming blocks in order to deliver.

**Entry Requirements:** None.

The course concentrates on the development and delivery of short term reductions in crime and disorder. Crime reduction methods such as reducing temptation and the opportunity to offend by making goods, services, policies and environments less conducive to crime; increasing the likelihood of wrongdoing being observed; and reducing the value of goods if they are stolen - or of services if they are obtained by fraud - are all discussed on the course.

By the end of the course delegates will have a clear picture of crime and disorder across the UK; know some key facts from the most recent research in the field; understand the blocks to delivery and how to overcome them and have the opportunity to discuss the issues with senior colleagues and academic experts in the field.

## Course components:

- **Setting the Scene:** Discussion on topics such as: crime rates in the UK and abroad; British Crime Survey and police recorded crime compared; why the public thinks crime is higher than it is and current roles and responsibilities in crime control.
- **Key facts in Crime Reduction:** Covers latest research on crime reduction including: the importance of opportunity in crime control; useful ways of thinking about crime; displacement; mechanisms and logic models; stability and instability in crime rates and crime patterns – hot spots, hot places, hot victims, hot offenders, hot products.
- **Blocks to delivery:** Identifies common blocks to effective delivery and through discussion, suggests how these might be overcome. These blocks include: training, leverage, knowledge management, data access, resource allocation and implementation failure.



# Developing Evidence-Based Crime Reduction Strategies

1 Day Intensive course

**Aimed at:** BCU commanders, regional government crime reduction advisors and senior managers in large CDRPs, community safety managers, senior policy makers, senior practitioners and those from the private security industry.

**Interest groups:** Evidence-Based crime reduction strategies; displacement mechanisms; logic models; crime rates and patterns; hotspots; National Intelligence Model; barriers; educating your analyst; data quality; management.

**Entry Requirements:** None.

The course focuses on crime reduction methods such as reducing temptation and the opportunity to offend by making goods, services, policies and environments less conducive to crime; increasing the likelihood of wrongdoing being observed, and reducing the value of goods if they are stolen, or of services if they are obtained by fraud.

The course assists community safety managers and BCU commanders to get the best out of their analysts and help them to develop a strategic programme for reducing crime.

## Course components:

- **Setting the Scene:** Discussion on topics such as: crime rates in the UK and abroad; British Crime Survey and police recorded crime compared; current roles and responsibilities in crime control and working in partnership.
- **Key Facts in Crime Reduction:** Covers latest research on crime reduction including: the importance of opportunity in crime control; useful ways of thinking about crime; displacement; mechanisms and logic models; stability and instability in crime rates and crime patterns – hot spots, hot places, hot victims, hot offenders, hot products.
- **Getting the best out of the crime analysis: Feeding the National Intelligence Model:** Involves discussions on topics including aims of crime analysis; barriers; educating your analyst; access and sharing of information; data quality; management; feedback and organising the structure around analysis.
- **Implementation and monitoring:** Covers necessary conditions to a good evaluation; knowing when we should evaluate; and writing up the outcome.

“ the day was excellent and promoted my thinking.”



nce  
New approaches to preventing  
and detecting crime  
MELISSA J. SMITH  
and BOB TAYLOR

**GIS and CRIME MAPPING**

# Venue

The courses are held at the UCL Jill Dando Institute of Crime Science in central London. The offices boast a spacious modern environment, with a small lecture room, library, computer room, and break out coffee area. It is surprisingly quiet for its central London location. All computer facilities, software and data will be provided. Alternatively, we can come to your premises - please contact us for more information.

## What's included in the course fees?

Fees include all tuition, course hand outs or CDs, lunch and refreshments for the duration of the course. Delegates should note that travel and accommodation costs are not included, and hotel booking will be the responsibility of the delegate.

Reductions are available for block bookings.

## Certification and Accreditation

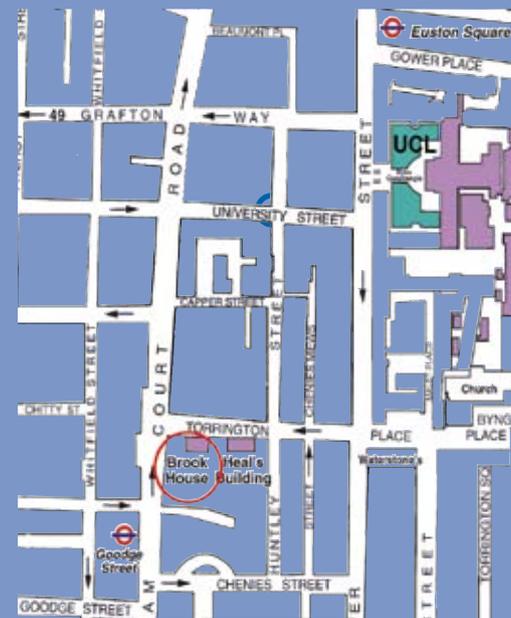
All courses lead to a certificate of attendance on completion of the course. The How To Become An Effective Problem Solving Crime Analyst 5 day course covers similar ground to the Situational Crime Prevention Theory component of the UCL Certificate in Crime Prevention and Community Safety Course.

For more information on UCL postgraduate courses please contact the JDI.

• 020 7679 0818 • [www.jdi.ucl.ac.uk](http://www.jdi.ucl.ac.uk)



# Contact Details



For further details please contact:

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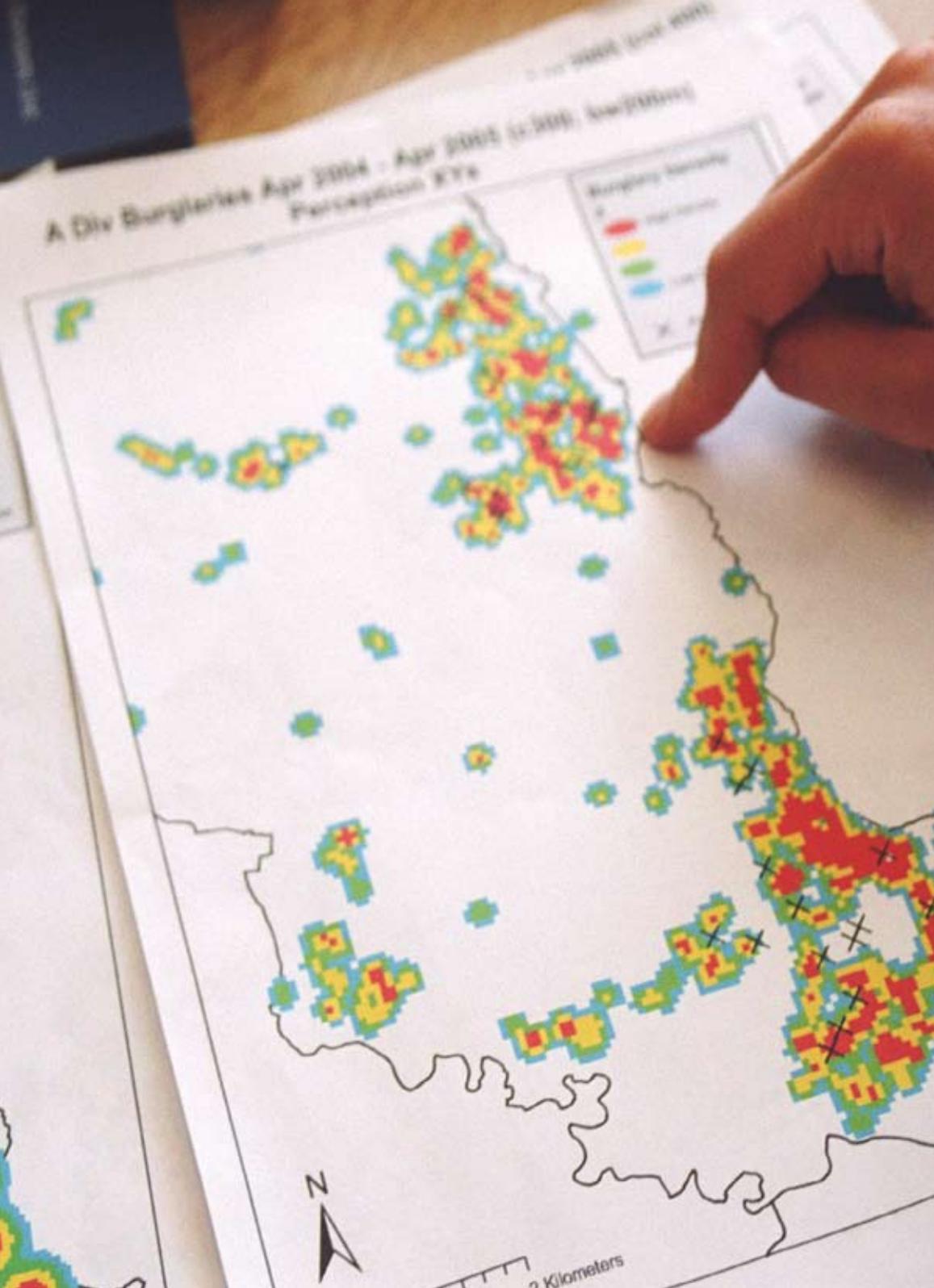
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A Div Burglaries Apr 2004 - Apr 2005 (c.200) Perception KTs



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