

Small Area Crime Database

Introduction

Crime statistics are an important dimension to deprivation and hardship and are often used in assessing insurance premiums and credit worthiness. Since September 2011 all police authorities in England and Wales have published detailed information on crime incidents, which can be linked to very small area local geography and provides a unique opportunity to not only identify areas by overall crime rates but also to use more detailed data on type of crime such as burglary rates or vehicle crime rates to provide direct measures for setting household insurance or vehicle insurance premiums.

Information Held

Details of all crime incidents are published monthly for each police authority and contain the crime type and the latitude and longitude location of the incident. This information has been linked to postal geography and used to create a database with detailed crime information down to the full unit postcode. This means that the data can be easily linked to any database through a simple postcode match.

Data for the period March 2017 – February 2018 has been used to calculate crime rates for:

1. Anti-Social Behaviour
2. Bicycle Theft
3. Burglary
4. Criminal Damage & Arson
5. Drugs
6. Other Crime
7. Other Theft
8. Possession of Weapons
9. Public Order
10. Robbery
11. Shoplifting
12. Theft from Person
13. Vehicle Crime
14. Violence & Sexual Offences
15. All Crime

For each category two different measures were calculated, crime rates per hectare and crime rates per thousand properties paying council tax. The reason behind deriving two sets of measures is the fact that some crime like anti-social behaviour, public disorder or shoplifting are often carried out in public places like city centre areas or shopping malls, where relatively few people live. Other crimes like burglary or vehicle crime are perhaps better suited to being standardised by a measure like the number of households. Therefore, all the crime statistics are standardised in two ways; by area size, and also by the number of properties paying council tax.

The directory contains 2,308,521 records with one record per postcode and with the following information for each record.

- 1) Postcode
- 2) Ordnance Survey Grid References for the Postcode
- 3) Anti-Social Behaviour Rate per 000 properties
- 4) Bicycle Theft Rate per 000 properties
- 5) Burglary Rate per 000 properties
- 6) Criminal Damage & Arson Rate per 000 properties
- 7) Drugs Rate per 000 properties
- 8) Other Crime Rate per 000 properties
- 9) Other Theft Rate per 000 properties
- 10) Possession of Weapons per 000 properties
- 11) Public Order Rate per 000 properties
- 12) Robbery Rate per 000 properties
- 13) Shoplifting Rate per 000 properties
- 14) Theft from Person Rate per 000 properties
- 15) Vehicle Crime Rate per 000 properties
- 16) Violence and Sexual Offences Rate per 000 properties
- 17) All Crime Rate per 000 properties
- 18) Anti-Social Behaviour Rate per Hectare
- 19) Bicycle Theft Rate per Hectare
- 20) Burglary Rate per Hectare
- 21) Criminal Damage & Arson Rate per Hectare
- 22) Drugs Rate per Hectare
- 23) Other Crime Rate per Hectare
- 24) Other Theft Rate per Hectare
- 25) Possession of Weapons per Hectare
- 26) Public Order Rate per Hectare
- 27) Robbery Rate per Hectare
- 28) Shoplifting Rate per Hectare
- 29) Theft from Person Rate per Hectare
- 30) Vehicle Crime Rate per Hectare
- 31) Violence and Sexual Offences Rate per Hectare
- 32) All Crime Rate per Hectare

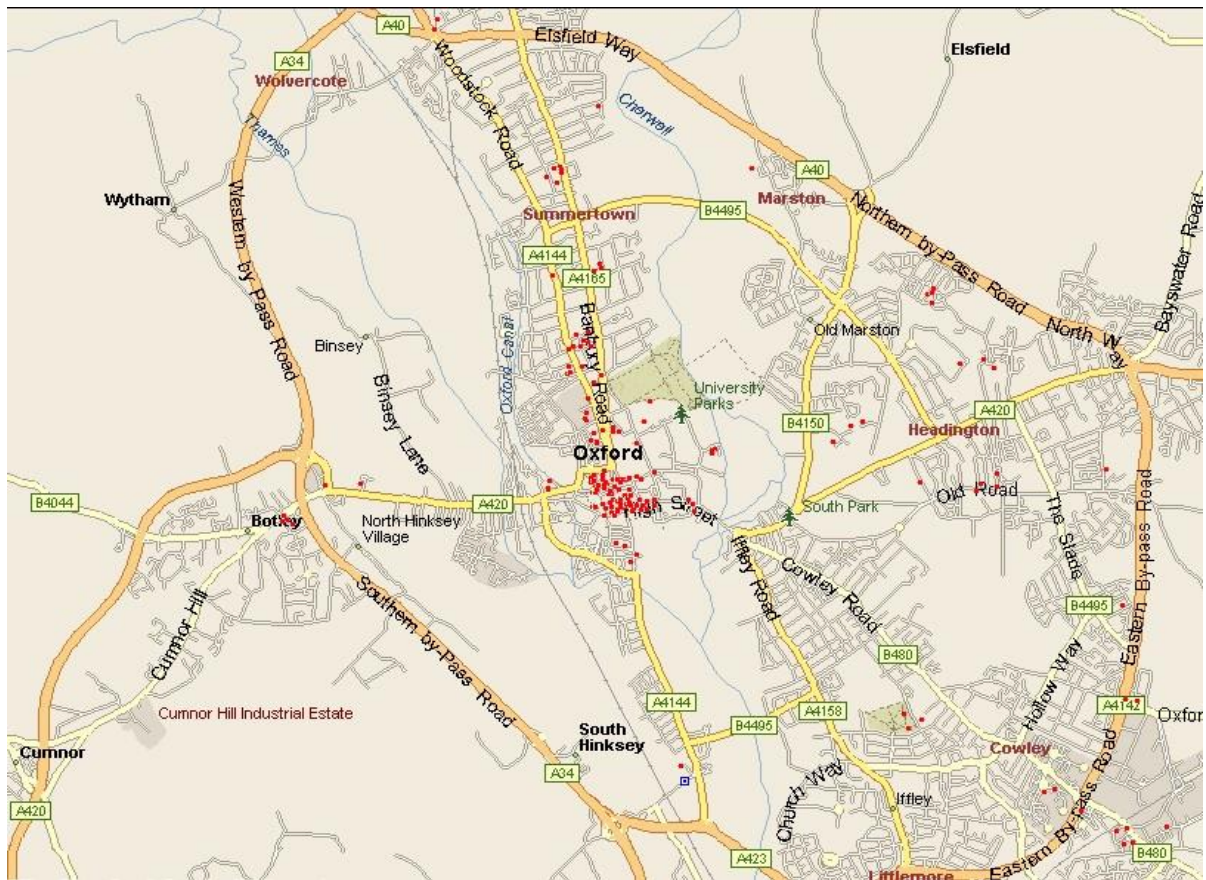
Geographical Variation in Crime Rates

There are large geographical variations in crime rates. To demonstrate this, areas with the very highest burglary rates per thousand households (more than 85 burglaries per thousand properties paying council tax, the national upper decile) in both Central London and Oxford were mapped and the results are shown below. The red dots highlight postcodes with the very highest rates.



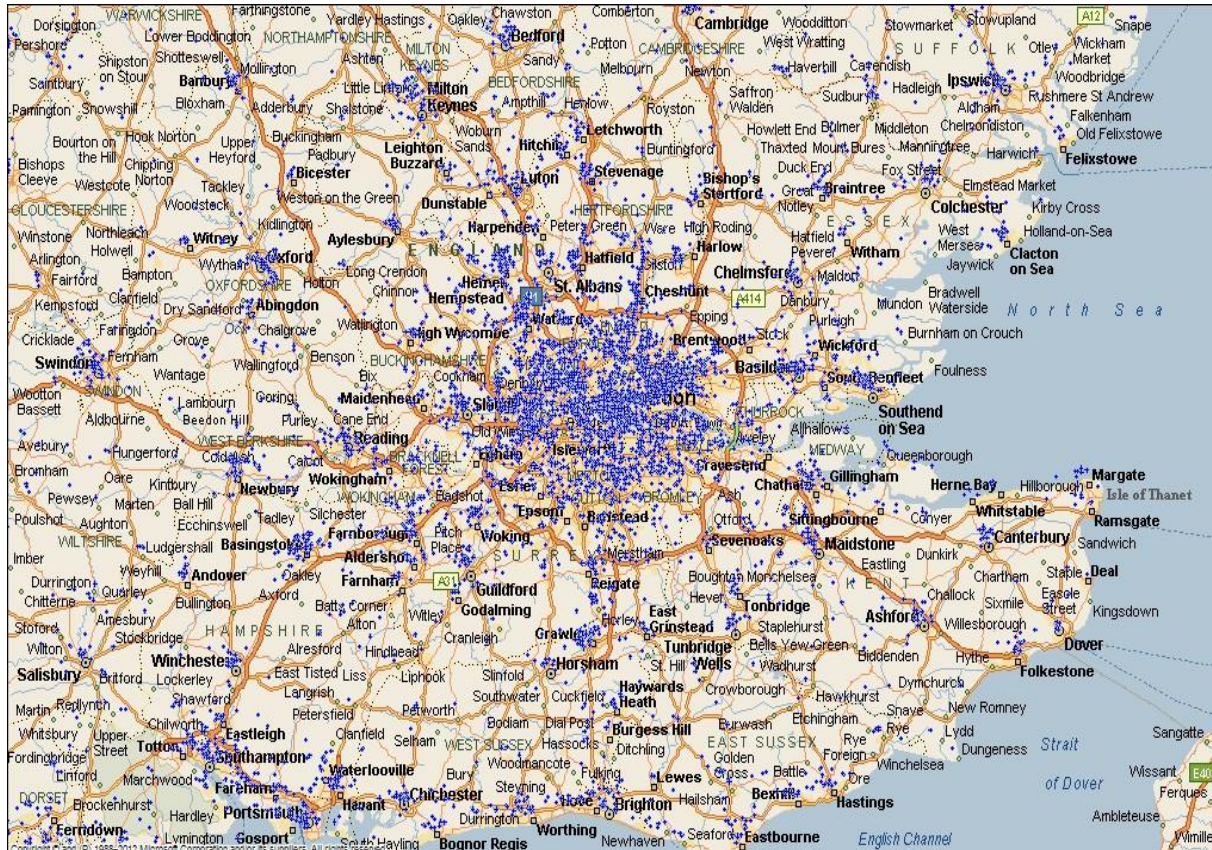
Even for a crime like burglary the location of the areas with the highest rates are closely linked to the Capital's busy major shopping areas.

In the case of Oxford, we find that the very highest burglary rates are in the very centre of the city close to the major shopping areas.



These two areas were chosen so as to illustrate the detailed nature of the crime data and not because the relationship between the shopping centres and burglaries is somehow typical.

The final map shows the location of areas with the highest rate of drugs crimes per properties paying council tax (more than 35 crimes per thousand properties, the national upper decile) in the South East of England. The postcodes with the highest rates are identified by the blue dots. The map shows the ubiquity of drugs crimes although the concentration within London is quite marked.



The detailed nature of the data should prove to be very useful in assessing risk for products like home or vehicle or even bicycle insurance. It could be easily appended to a database through a simple postcode match and used alongside other data in coming to a more informed view of risk.

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