

## National Crime Mapping Conference 2010



### **Comparison between Repeats and Non Repeat Residential Burglaries: what is significantly different?**

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Although the rate of residential burglary in the Netherlands is slightly less than 1% per year, over 3.2% of burgled houses in the city of Enschede on the Dutch-German border experience more than one burglary per year. A question arising from these figures is whether significantly different characteristics can be identified in the instances of the repeat residential burglaries, and this research aims to prove that this was the case. The findings were analyzed from the point of view of the flag and boost theories. Two analytical approaches were adopted, the first one involved the splitting of the database into non-repeat burglaries and 12 month (rolling window) repeat cases. The second approach focused on reducing a possible bias by concentrating on the initial case of every repeat series (since the second and subsequent burglary probably share similar characteristics of the initial case), and hence non-repeats were compared to the first cases of the 12 month (rolling window) repeat series.

The analysis performed was mainly conducted at a non-spatial level but a spatial double density kernel analysis was also performed using GIS to establish whether repeats conform to the spatial pattern of non-repeats. The method used was designed considering information typically available in Dutch police databases. Whilst this approach is limiting it allows the evaluation of how differences can be identified without time-consuming survey exercises to collect information about the neighborhoods and housing units.

Several variables were extracted from the temporal data related to the burglary event. Other variables that were available were the house and occupancy types as well as modus operandi characteristics such as approach side, entry point and stolen items. The analysis identified several statistically significant differences, particularly in relation to modus operandi. It also showed that unexpectedly some repeats are located outside non-repeat hot spots.

The importance of these findings is two-fold. They aid the characterization of repeat residential burglaries as basis for a) future research into near and virtual repeats and b) the development of adequate strategies to reduce or prevent them in the future. Potential strategies that stem from the findings of this research include guardianship of properties by various methods and the establishment of guidelines to ensure that developers avoid some forms of housing design in favour of others.

#### **Attachments**

**4B - A comparison between repeats and non-repeat residential burglaries (Montoya).pdf [1.81 Mb]**

