

Car Key Burglaries: An Exploratory Analysis



Chief Superintendent Rob Carden
Merseyside Police



fighting crime
protecting communities

Car Key Burglary

- Cars stolen using keys taken during a burglary
- Relatively new phenomenon
- 1998 - Requirement for newly manufactured cars in Europe to be fitted with immobilisers
- Impossible to start new cars without keys (Shaw et al., 2010)



fighting crime
protecting communities

Why Car Key Burglary ?

- 2008 – 6% of all burglaries in England and Wales involved the taking of a vehicle
ACPO National Assessment Car Key Burglary 2009 - emerging problem – strategic risk since 2003 & predicted to continue
- 2010 – 13.3% Merseyside & 19% St Helens BCU
(Masking ? 2005/6 – 2010/11 31.5% reduction in recorded burglary)
- Recording issues (definition), under reporting, intelligence gaps and limitations in tactical response (Op. Salvo)
- Limited research



fighting crime
protecting communities

‘When one door closes, another opens’



Greater of two evils ... Rational Choice ?



fighting crime
protecting communities

Operation Salvo

- Arrests – Burglary Nominals 182
- Operation Handle - Dwellings 50637
- Operation Handle - Checks 7295
- Garage Checks 2217
- Crime Prevention Roadshows 195
- VRM Plate Test Purchases 53
- Curfew/Bail Checks 356
- PPO/IOM Visits 286
- Stops 5836
- Burglary related NIRs 385
- Stolen Vehicles Recovered 49
- CSI Live Time Burglary Visits 197
- Drug Testing 190



fighting crime
protecting communities

Exploratory Analysis

To understand the nature of car key burglary by conducting a descriptive analysis of car key burglary and also compare characteristics of car key burglary with regular burglary

Insight into temporal, geographical, behavioural and offender specific aspects of car key burglary

Highlight any differences in the characteristics of car key burglaries and regular burglaries



fighting crime
protecting communities

Data

Three combined datasets relating to car key and regular burglaries recorded by Merseyside Police in 2010

- 1936 car key and regular burglaries (incl. robberies where cars stolen using keys taken from a dwelling – classified as robbery, charged as aggravated burglary)
- 140 offenders who were the subject of either a charge or an offence 'taken into consideration' for car or regular burglary
- 180 unique offences committed by the 140 offenders



fighting crime
protecting communities

Results

Temporal

- Car key burglary more likely at night than regular burglary
- Slight variations in month, day – no notable differences

Geographical

- St Helens and Sefton highest proportion of car key burglaries
- Net importers of car key burglary

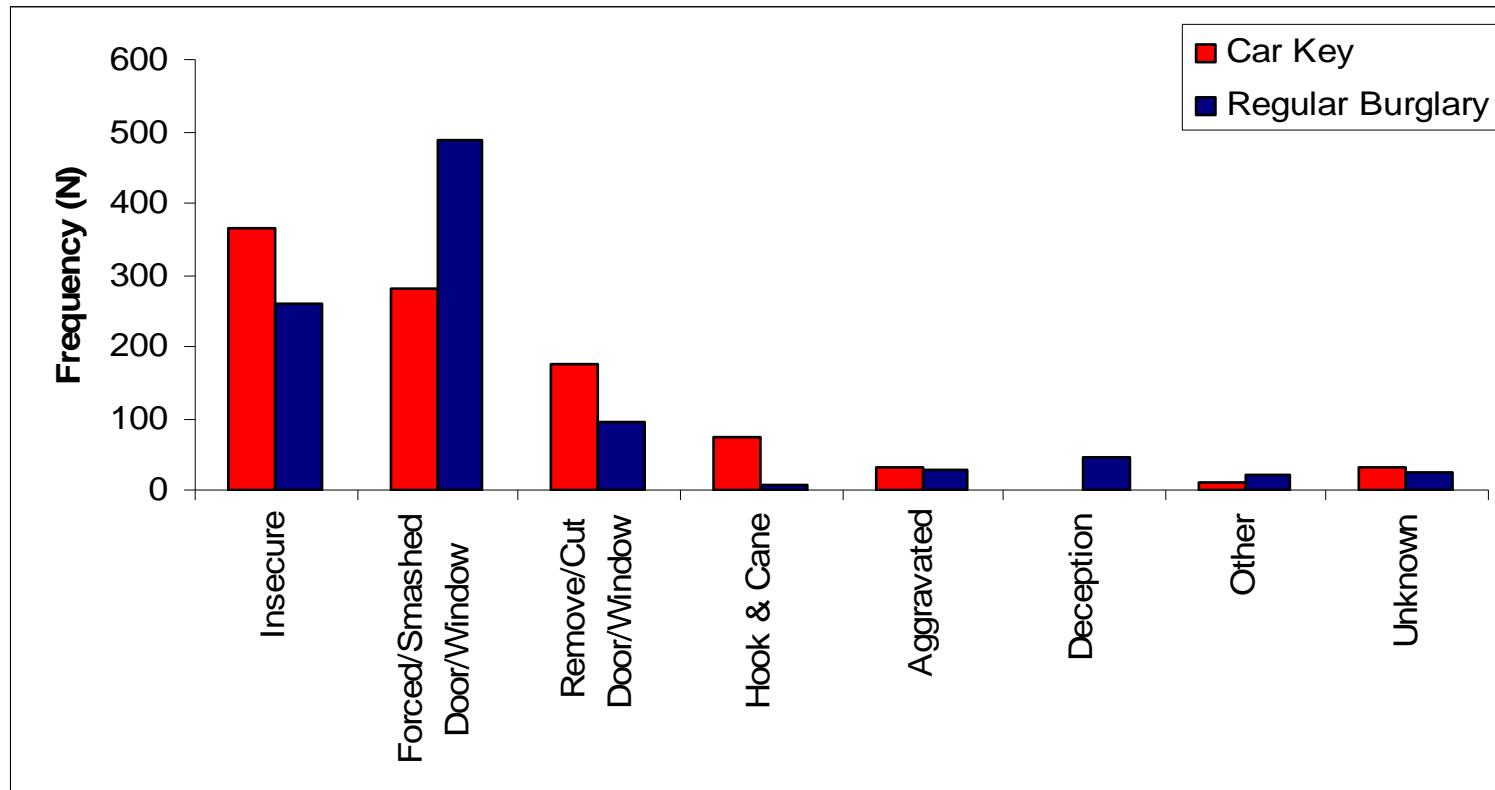
Offenders

- Majority of offenders for both burglary types were male and under 25 years
- Car key burglars could be constrained further to the 18 – 24 years age range



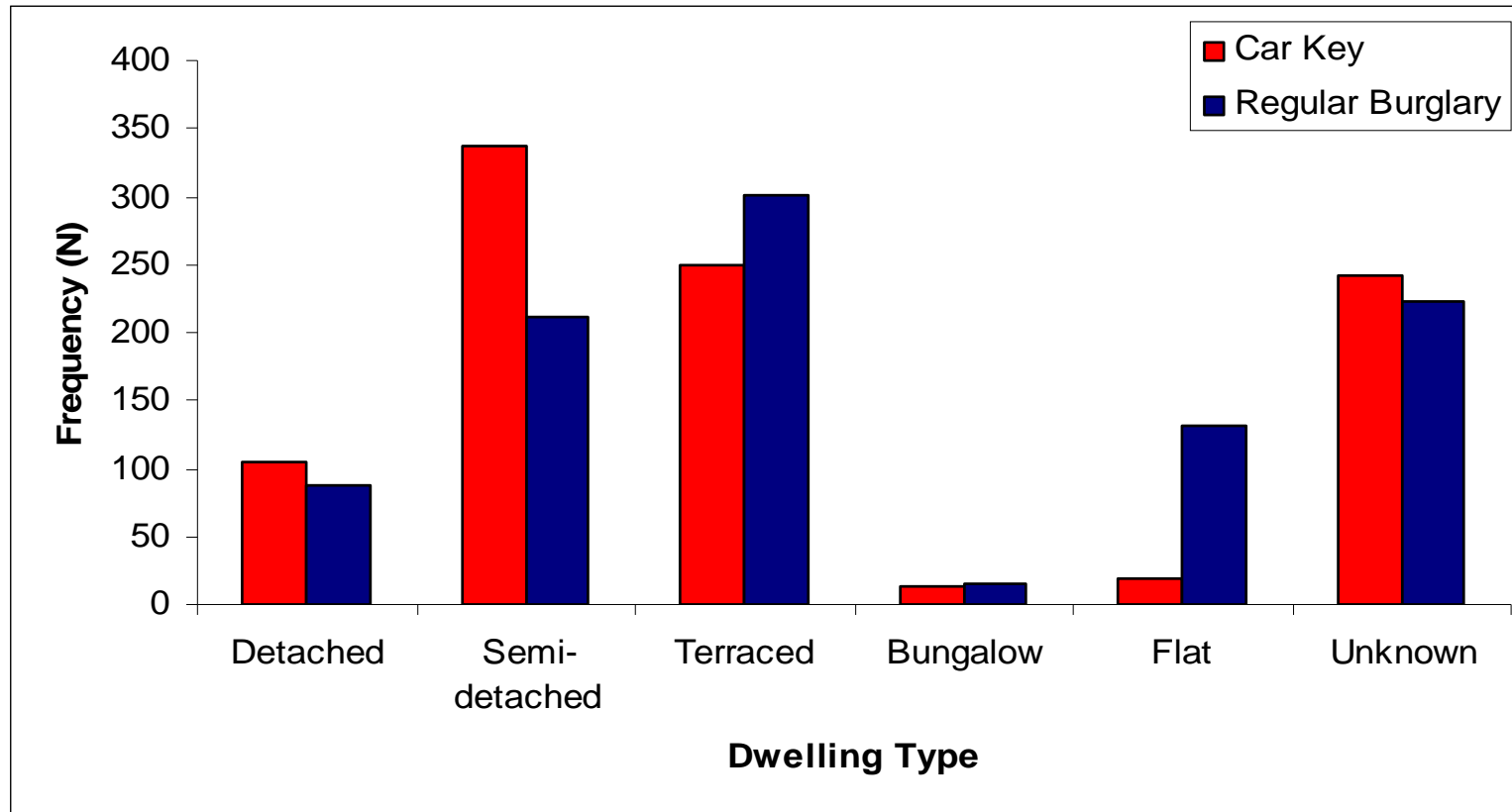
fighting crime
protecting communities

MO Type



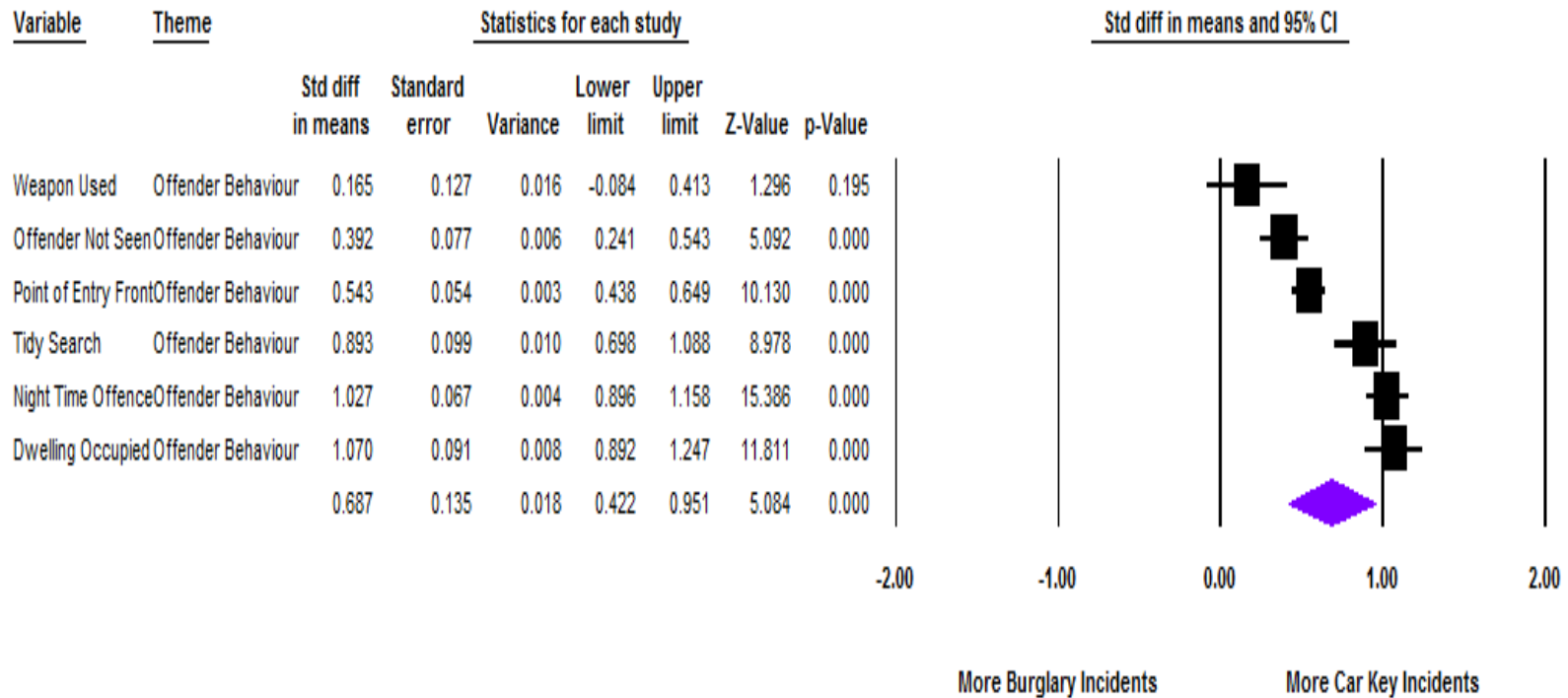
fighting crime
protecting communities

Dwelling Type



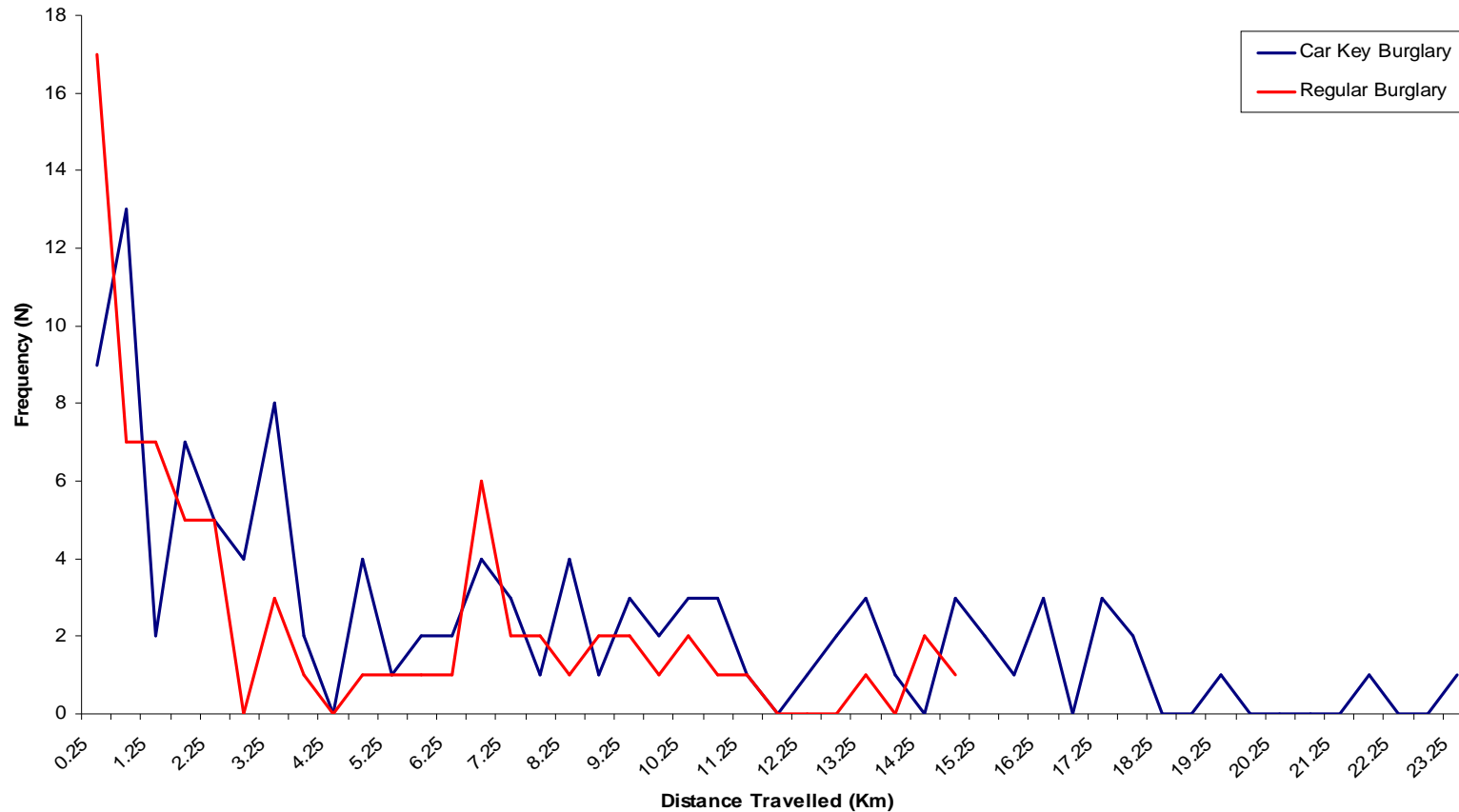
fighting crime
protecting communities

Effect Size Analysis – Behavioural



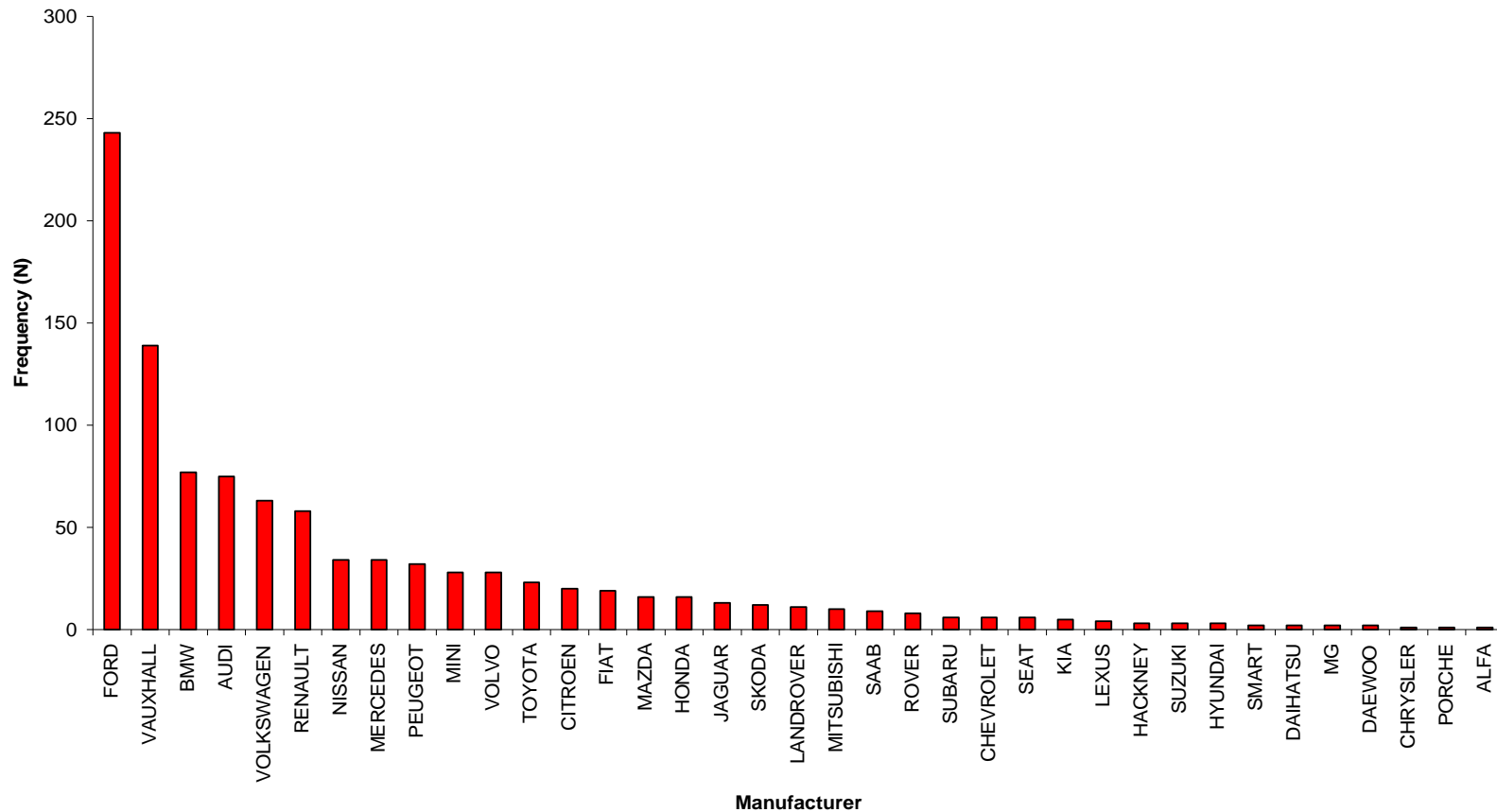
fighting crime
protecting communities

Distance Travelled From Home Base



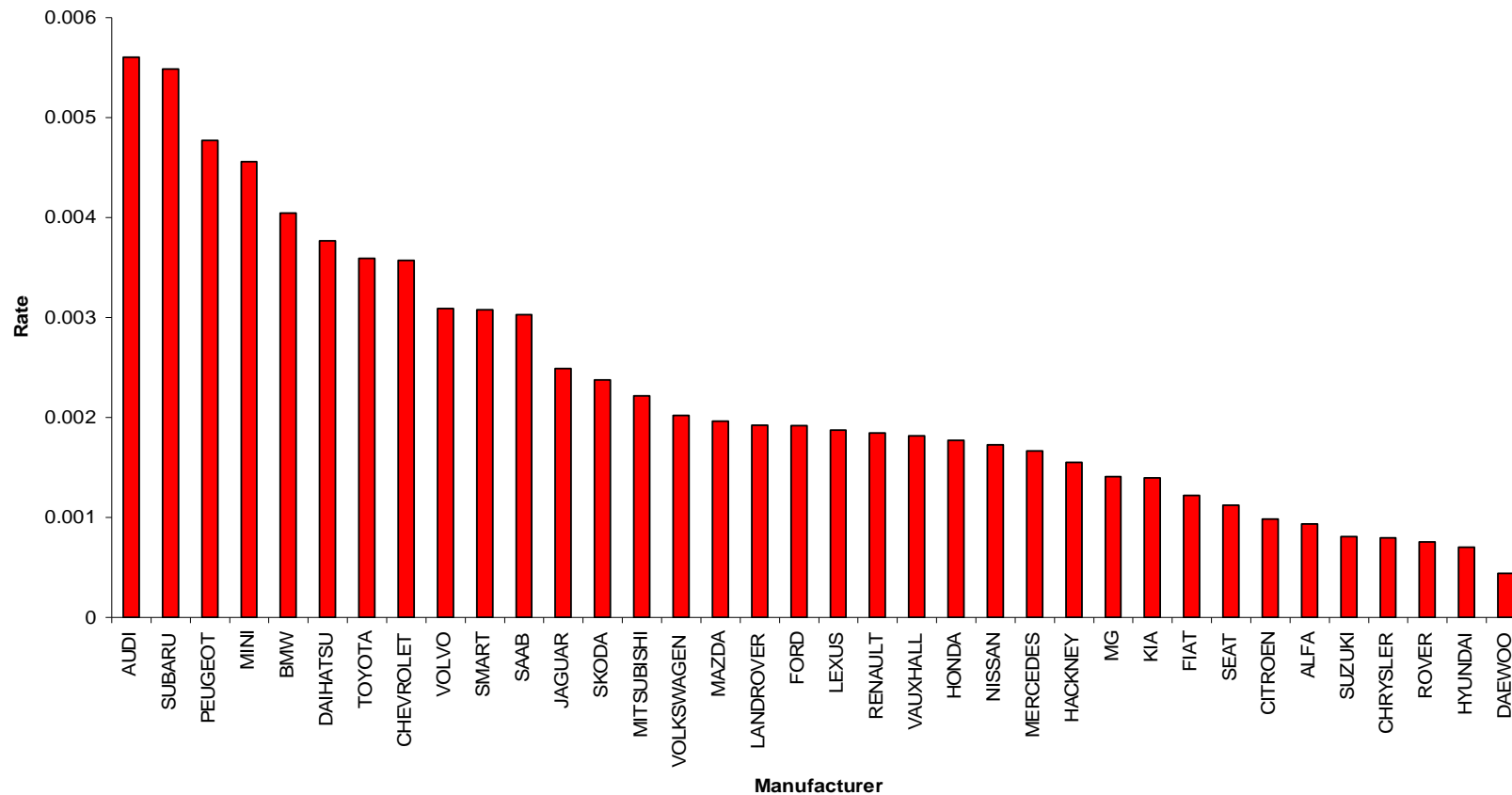
fighting crime
protecting communities

Frequency of Cars Stolen Based on Manufacturer Type



fighting crime
protecting communities

Rate of Registered Cars Stolen by Manufacturer Type



fighting crime
protecting communities

Summary

- Overnight
- 18-24 year old males
- Merseyside – outlying BCUs (net importers) served by fast roads network
- Hook & cane and ‘remove/cut door/window’ techniques
- Semi detached houses but not flats
- Deception and ‘force/smash door/window’ more unlikely
- Front access to premises
- Tidy search
- Occupied premises
- Less likely to be seen
- Little difference in aggravated form of offence
- Audi and Subaru – high performance (further criminality ?)
- Greater distance travelled from home base to offence location



fighting crime
protecting communities

Leadership Meets EBP ... the Other 50 %



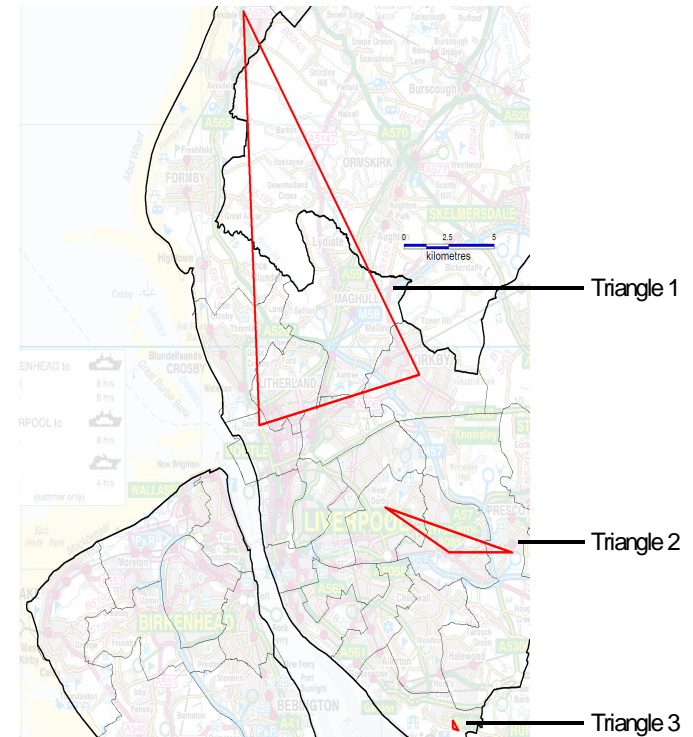
- Criminological theory
- Crime recording (definition, dump sites & geo coding)
- Intelligence (victim, offender location)
- Crime prevention
- Car industry (disabling vehicles remotely ?)
- Export market – ports ?
- Fixed site ANPR
- Multiple offenders – conspiracy investigations



fighting crime
protecting communities

Future Research

- Distance travelled from home base
- Multiple offenders
- Vehicle 'dump sites' and mobility triangles
- Motivation – financial gain, transportation and further criminality (additional items of property stolen in 67% of car key burglaries)
- Situational crime prevention



fighting crime
protecting communities

40 Years



Thank You



fighting crime
protecting communities