

The changing nature of objects stolen in household burglaries

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Aim: To examine changes in the types of objects stolen in household burglary offences.

Method: Comparison of police-recorded numbers, rates and rank orders of stolen objects in 2001 and 2010.

Results: The number of recorded household burglaries in NSW has fallen by 50 per cent since 2001 and the pattern of objects stolen has changed. The theft of cash increased from 23 per cent of all home burglaries in 2001 to 31 per cent of all burglaries in 2010. The relative frequency with which a wallet/handbag/purse, keys or laptop computer were stolen in burglaries also increased over the 10 year period examined. There have been falls in the proportion of burglaries involving the theft of video and DVD players, stereos, video cameras, electrical appliances, power tools and powered garden equipment. In both 2001 and 2010 jewellery was stolen in around 1 in 5 burglaries.

Conclusion: The market for stolen goods has changed considerably over the last 10 years with a shift toward cash and other easily disposed of items.

Keywords: Burglary, break and enter, stolen goods, dwellings, household break-ins

Introduction

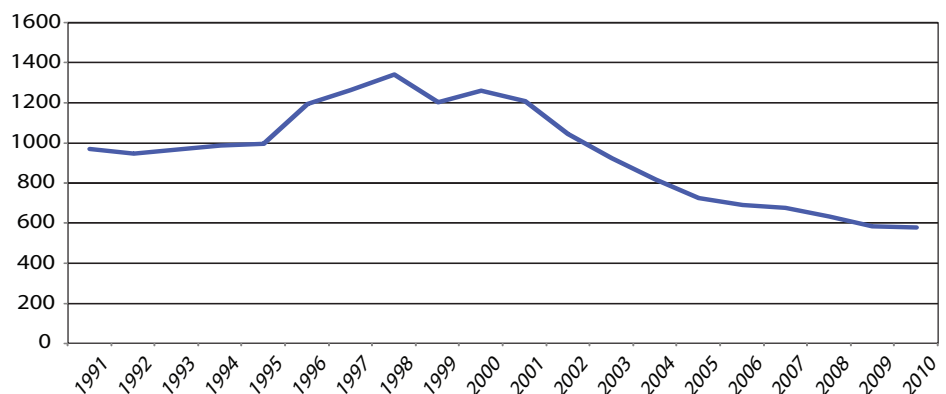
Break and enter of residential premises (household burglaries) is one of the most voluminous offences recorded by NSW Police, with over 40,000 incidents recorded in 2010 (Goh & Moffatt, 2011). In 2008/09, one in 33 NSW households experienced a break-in and in 61 per cent of these incidents something was stolen (Australian Bureau of Statistics [ABS], 2010).

The offence of household burglary not surprisingly arouses considerable public concern. In 2008, nine per cent of people in NSW perceived that household burglary was a problem in their neighbourhood (ABS, 2008). However, while the offence is certainly serious, the incidence of household burglary has fallen considerably in the past 10 years. In the 10 years between 2001 and 2010 the rate of household burglary recorded by NSW Police fell by half and the current rate of household burglary is considerably lower than it was 20 years ago.

Partly in response to the changing prevalence of household burglary, this paper looks at whether there have been other noteworthy changes in the characteristics of the offence over the past 10 years. Specifically, we look at how the items stolen in household burglaries have changed between 2001 and 2010.

Figure 1. Break and enter - dwelling, NSW, 1991-2010

Rate per 100,000 population



Source: NSW Bureau of Crime Statistics and Research

Method

This study analyses the objects recorded as stolen in household burglaries recorded by the NSW Police Force. Crime victimisation surveys tell us that, unlike many offences, household burglary has a high reporting rate with three in four victims reporting the incident to police (ABS, 2010). This indicates that incidents reported to police are a large sample of all incidents and therefore probably a reasonable indication of the offence as a whole. It is also probable, however, that the three quarters of incidents which are reported to police are slanted towards the more serious and are more likely to include incidents where something was stolen.

The NSW Police Force records the details of household burglary incidents on the Computerised Operational Policing System (COPS). In addition to other information, the COPS system allows police to record whether an object was stolen in the incident and, if so, what type of object(s) they were.

As would be expected there is a vast range of objects stolen. For this analysis, specific objects have been grouped into broader categories. For instance the category *Jewellery* includes necklaces, bracelets, rings and brooches. The number of stolen objects of each type is not considered, just whether or not at least one object of each type was stolen. Thus, our analysis makes no distinction between a burglary where one ring was stolen versus a burglary in which five rings and five bracelets

were stolen. They would both be considered to be household burglaries in which an object of the type *Jewellery* was stolen. Just as a burglary can involve the theft of multiple object types, we have counted as many object types as are relevant per incident.

Not all break-ins recorded by police have a stolen object recorded. In 2001, 60 per cent of recorded household burglaries had a stolen object recorded. In each year since then the proportion has been around 60 per cent. In many cases it is likely that no object was stolen, however, there are probably some cases in which the stolen object was simply not recorded. In all cases the results below are limited to incidents in which an object was recorded as stolen.

This study compares the types of objects stolen in home burglaries in 2001 with those stolen in 2010. This 10-year period was chosen as it covers much of the dramatic fall in the offence and is long enough to be able to notice any substantial changes if they have occurred.

Results

Table 1 shows the top 20 object types recorded as stolen by police in residential burglaries in 2001 and 2010. The table also shows the percentage of recorded incidents that had an object of that type stolen (as a percentage of incidents where something was recorded as stolen). A complete list of objects can be found in Table A1 of the Appendix.

Table 1. Top 20 items recorded as stolen in incidents of break and enter - dwelling, NSW, 2001 and 2010

Rank	2001		2010	
	Object type	% ^a	Object type	% ^a
1	Cash	22.6	Cash	31.4
2	Jewellery	21.5	Laptop computer	26.0
3	Video/DVD player	18.9	Jewellery	22.6
4	Watch	13.6	Still camera	15.3
5	Still camera	13.3	Mobile phone	14.6
6	Stereo/audio equipment	12.5	Wallet/ handbag/ purse	13.6
7	Mobile phone	12.5	Identification documents/cards	11.6
8	Television	11.9	Television	10.8
9	Identification documents/cards	11.3	Computer game/ video game equip ^b	10.5
10	Power tools	10.3	Watch ^b	10.5
11	Wallet/handbag/purse	9.9	Credit card/bank card	9.8
12	Credit card/Bank card	9.9	Personal music devices (e.g., iPod, Discman)	9.2
13	Lawn mower or powered garden equipment	8.0	Keys	8.9
14	Music – CD, record, cassette	7.5	Other home entertainment equipment	7.7
15	Electric appliance	7.1	Computer components	6.4
16	Luggage/bag	6.6	Miscellaneous	6.4
17	Video camera	6.4	Luggage/bag	6.2
18	Clothing	6.3	Video/DVD player	5.5
19	Bicycle	6.2	Power tools	5.2
20	Hand tools	6.2	Clothing	5.2

a Percentage of incidents where police recorded at least one object as stolen.

b In 2010 there were 2,638 incidents where a computer game/video game equipment was recorded as stolen and 2,638 incidents where a watch was recorded as stolen. Therefore these two items were ranked in equal ninth place.

In both years cash was the item most often stolen in break-ins; stolen in 23 per cent of break-ins in 2001 and 31 per cent of break-ins in 2010. Jewellery was also a popular item to steal; at least one piece of jewellery was stolen in over 20 per cent of break-ins in both 2001 and 2010 (jewellery was ranked the second and third most stolen object in these years respectively). Still cameras have been and remain a desirable target being stolen in 13 per cent of incidents in 2001 and 15 per cent of incidents in 2010 (ranked fifth in 2001 and fourth in 2010). Televisions are still commonly stolen in burglaries, ranked the eighth most stolen item in both 2001 and 2010. In 2001 televisions were stolen in 12 per cent of break-ins, falling slightly to 11 per cent of break-ins in 2010.

Many other objects however, have shifted considerably in their attractiveness to thieves. Almost one-half of the objects targeted 10 years ago are no longer in the top 20 list, having been replaced by new objects.

Stolen objects which have fallen in popularity

Electrical goods

Video/DVD players: In 2001, a video or DVD player was the third most popular item stolen in household burglaries, being taken in 19 per cent of incidents. In 2010, however, they were stolen in only six per cent of break-ins and had fallen to the 18th most stolen object.

Stereo/audio equipment: Stereo equipment, overwhelmingly CD players, were the sixth most common object type stolen in 2001, and were targeted in 13 per cent of burglaries. Ten years on they were the 33rd most stolen object taken in only three per cent of break-ins.

Video cameras: Video cameras were the 17th most stolen object type in 2001, stolen in six per cent of break-ins. In 2010, video cameras had fallen to the 27th most stolen object taken in four per cent of break-ins.

Hardware

Power tools: Power tools, such as drills, power saws and angle grinders, were the tenth most stolen object type in 2001 with just over one in 10 burglaries reporting the theft of at least one object of this type. In 2010, a power tool was taken in one in 20 burglaries and they were the 19th most targeted item.

Lawn mowers: Lawn mowers and other powered garden equipment were the thirteenth most stolen object type in 2001 with a lawn mower, brush cutter, edge trimmer or similar object being stolen in eight per cent of burglaries. In 2010 these objects had fallen to the 31st most stolen object type and were stolen in only three per cent of burglaries.

Watches

While still a popular target, the proportion of break-ins involving theft of a watch have fallen from 14 per cent of incidents in 2001 (fourth most commonly stolen object) to 11 per cent of incidents in 2010 (the ninth most commonly stolen object).

Stolen objects which have increased in popularity

Cash

Cash: While money was the most common object stolen in both 2001 and 2010, the percentage of incidents where cash was stolen has increased substantially over the 10-year period. In 2001, money was reported stolen in 23 per cent of household burglaries. By 2010, however, this figure had risen to 31 per cent of break-ins.

Personal items

Wallet/handbag/purse: The theft of these objects is another substantial change in the nature of break-ins. In 2001, a wallet/handbag/purse was reported stolen in 10 per cent of break-ins (the 11th ranked object type); by 2010 this had risen to 14 per cent (the 6th most stolen object type). The increase in these objects is likely related to burglar's growing preference for cash as these objects often contain cash.

Keys: Until recently keys were very infrequently stolen. In 2001, keys were the 27th most commonly stolen object being taken in five per cent of burglary incidents. By 2010, however, they had risen to the 13th most stolen item being taken in nine per cent of incidents. The increase in the theft of keys is consistent with a corresponding increase in home burglary incidents connected to a motor vehicle theft incident. In 2001, 2.6 per cent of home burglaries were associated with a motor vehicle theft whereas by 2010 this had risen to 4.5 per cent. However, in more than two thirds of incidents in which keys were stolen a car was not stolen. In these cases perhaps the theft of the keys was an unintended by-product of the theft of a handbag or keys could be taken in order to return to the property.

Electrical goods

Laptop computers: Another important change over the last decade is the increase in the number of laptops stolen. In 2010, laptops were the second most stolen object type in household burglary incidents with a laptop being taken in one in four break-ins. This is a substantial rise from 2001 when they were ranked 21st and were stolen in just over one in twenty burglaries.

Computer game/video game equipment: Home gaming consoles and games discs were stolen in six per cent of incidents in 2001 (ranked 22nd) compared with 11 per cent of incidents in 2010 (ranked equal ninth).

Personal music devices: Portable music players have also increased in desirability. The 2001 version, Discman and Walkman players, were stolen in four per cent of break-ins in 2001 (the 29th most stolen objects). In 2010 the personal music devices being stolen mainly comprised iPods and MP3 players and were taken in nine per cent of incidents (the 12th most stolen objects).

Regional variation in stolen goods

Home burglary is not uniformly distributed across the State. Not only does NSW have areas with high and low rates of burglary, the objects stolen differ across regions. Table 2 shows the

Table 2. Recorded incidents of home burglary and rate per 100,000 population[^] by Statistical Division/ Subdivision, NSW, 2010

Statistical Division / Subdivision	Recorded incidents	Rate per 100,000
Sydney	23,523	522.2
Inner Sydney	2,208	630.2
Eastern Suburbs	1,421	556.7
St George-Sutherland	1,498	325.8
Canterbury-Bankstown	1,690	513.3
Fairfield-Liverpool	2,439	647.3
Outer South Western Sydney	1,702	679.1
Inner Western Sydney	1,031	546.3
Central Western Sydney	2,551	741.4
Outer Western Sydney	1,540	472.5
Blacktown	2,214	738.5
Lower Northern Sydney	1,228	391.2
Central Northern Sydney	1,460	324.4
Northern Beaches	697	285.8
Central Coast	1,844	583.5
Hunter	3,847	597.1
Illawarra	2,529	586.6
Richmond-Tweed	1,394	576.1
Mid-North Coast	2,335	754.2
Northern	1,673	905.2
North Western	1,365	1,151.6
Central West	1,383	755.1
South Eastern	878	405.4
Murrumbidgee	1,126	710.0
Murray	892	752.5
Far West	270	1,187.8
NSW	41,215	577.7

[^] For the rate calculations, population data were obtained from the Australian Bureau of Statistics publication: Regional Population Growth, Australia, 2010, Cat. No. 3218.0.

rates of household burglary across NSW as recorded by police in 2010. Figure 2 displays these rates as a thematic map. The highest rates of household burglary are recorded in the Far West and North Western regions of NSW followed by the Northern part of the State, the Central West, the Mid-North Coast and Murray Statistical Divisions. The lowest rates are in the Northern Beaches in Sydney, Central Northern Sydney and St George/Sutherland followed by Lower Northern Sydney and the South Eastern part of NSW.

Table 3 shows the top five items stolen in each region of NSW. With the exception of Murray Statistical Division, cash was the most commonly stolen item in all the major regions in NSW. Even so, however, it ranged in frequency from being stolen in 42 per cent of burglaries in the Far West to 24 per cent in Murrumbidgee Statistical Division.

Interestingly, within the 14 Statistical Subdivisions of Sydney there were seven where something other than cash was the most commonly stolen object. The alternative objects were laptop computers (the most commonly stolen objects in Inner

Sydney, Eastern Suburbs, Outer South Western Sydney and Blacktown) and jewellery (the most commonly stolen objects in Fairfield-Liverpool, Central Western Sydney and Central Northern Sydney). In Inner Sydney and the Eastern Suburbs a laptop was stolen in nearly half of all household burglaries.

A few areas reported the frequent theft of items less commonly stolen elsewhere. These included power tools in South Eastern NSW (the fifth most commonly stolen object there but only the 19th most stolen item in NSW). Computer and video game equipment was the ninth most commonly stolen object type in NSW in 2010 but they were more popular in the Central West, Murrumbidgee and Murray Statistical Divisions (fifth most commonly stolen item in Central West Statistical Division and fourth most commonly stolen item in Murrumbidgee and Murray Statistical Divisions) and Outer Western Sydney (fifth most commonly stolen item). Televisions were stolen more often than usual in the Central Coast Statistical Subdivision (fifth most commonly stolen item), and both the South Eastern and Murray Statistical Divisions (fourth and fifth most commonly stolen items respectively).

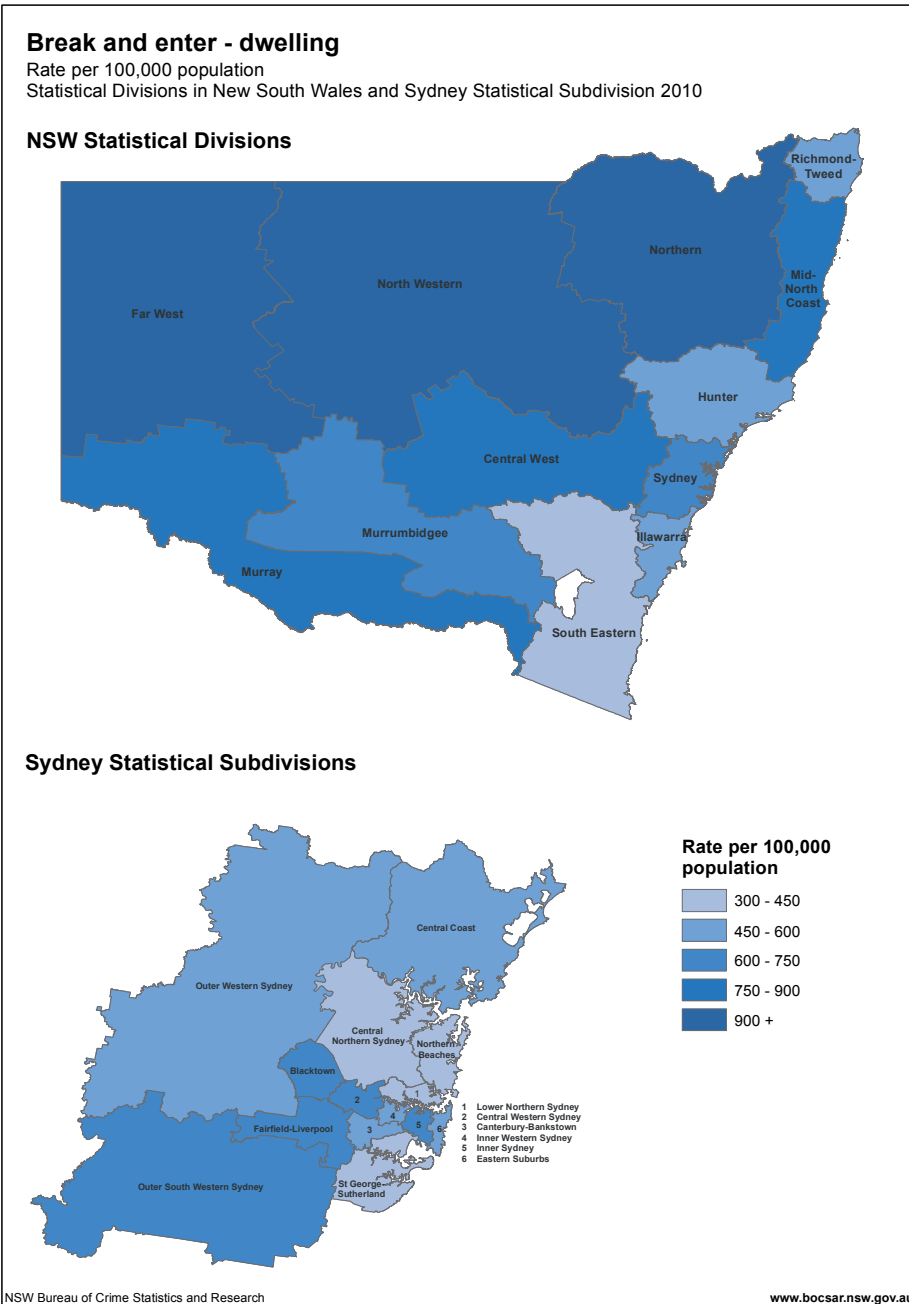
Discussion

Household burglaries in New South Wales have changed dramatically over the past 10 years. While the incidence of household burglaries has fallen substantially, there has also been a noticeable change in the types of objects stolen.

Burglars appear now to be more interested in objects which have intrinsic value or which can be very readily disposed of. The rising popularity of cash (stolen in 31 per cent of incidents in 2010 compared with 23 per cent in 2001) could be due to convenience as it does not have to be on-sold. Similarly, jewellery has remained popular (stolen in 22 per cent of incidents in 2001 and 23 per cent of incidents in 2010) perhaps because of the intrinsic value of gold and gems, which is quite separate to the aesthetic taste of consumers. Indeed, capitalising on the current record high price for gold, in recent years there has been a large increase in outlets offering 'cash for gold' at shopping centres and on television. Note, however that due to the fall in the number of break-ins, there were substantially fewer thefts of jewellery in 2010 than in 2001 (in 2001 jewellery was stolen in 10,308 break-ins compared with 5,649 in 2010).

Theft of many electronic goods and hardware products has fallen considerably. A smaller proportion of break-ins now involve the theft of video and DVD players, stereos, video cameras, electrical appliances, power tools and lawn mowers. Even for objects stolen in a similar or higher proportion of break-ins, such as still cameras, televisions, gaming equipment and mobile phones, often the overall volume of items stolen has still fallen considerably due to the fall in the incidence of burglary. For instance, in 2001 a still camera was stolen in 6,384 household burglaries (13% of break-ins with a stolen object recorded) compared with 3,830 in 2010 (15% of break-ins with a stolen object recorded).

**Figure 2. Police-recorded incidents of Break and enter - dwelling:
Rate per 100,000 population, by area, 2010**



^ For the rate calculations, population data were obtained from the Australian Bureau of Statistics publication: Regional Population Growth, Australia, 2010, Cat. No. 3218.0.

receive a relatively good price for electrical goods and tools. At that time burglars reported that they could swap a \$400 VCR player for \$130 worth of drugs (Stevenson & Forsythe, 1998). It is possible that burglars can no longer achieve such a good return on stolen consumer goods for the following reasons:

- the retail price of electronic goods, tools and other items have fallen so they can now be purchased new very cheaply from legitimate retailers;
- security in many devices such as mobile phones mean that they cannot just be plugged in and used;
- increased economic prosperity and community attitudes may mean that second hand goods are less desirable or attractive to the public;
- legislation tightening the sale of stolen goods through pawn brokers and second hand goods shops;
- the stolen goods market now must compete with a large online legitimate second hand goods market through eBay and the Trading Post, which perhaps does not offer the quick turn around or anonymity desirable to most burglars.

The exception to this trend is the rise over the last decade in household burglaries where a laptop was stolen. In 2001, laptops were stolen in just six per cent of break-ins but by 2010 this had increased to 26 per cent of break-ins with a stolen object recorded. The overall volume of break-ins where laptops were stolen has also increased from 2,907 incidents in 2001 to 6,492 incidents in 2010.

Why have burglary targets changed?

A possible reason why the objects targeted in burglary incidents have changed is due to changes in the market for stolen goods. Research conducted by the NSW Bureau of Crime Statistics and Research in 1998 found that, at that time, burglars could

A collapse in the stolen goods market is also consistent with the increased desirability to steal cash in break-ins, as it is the only object for which burglars can recoup the full value and do not need to on-sell.

Unlike other electrical goods and tools, laptops remain a frequent target for burglars. One obvious reason for the observed rise in laptop thefts over the last decade is that there are simply more available to steal from residential dwellings. Laptops are now a popular purchase for home use (increasingly replacing PCs) and are often supplied to employees to facilitate working from home. Furthermore, since late 2009 every senior NSW public school student has been given a laptop to use at

Table 3. Objects recorded as stolen in incidents of break and enter - dwelling, by region: Top 5 objects stolen and the percentage of incidents in which the item was stolen, NSW, 2010

Division	Most common objects stolen									
	First	%	Second	%	Third	%	Fourth	%	Fifth	%
Sydney	Cash	31.7	Laptop comp.	31.3	Jewellery	27.9	Still Camera	17.3	Mobile phone	15.2
Inner Sydney	Laptop comp.	44.0	Cash	31.5	Still Camera	19.7	Wallet/ handbag/ purse	18.8	Mobile phone	17.0
Eastern Suburbs	Laptop comp.	43.5	Cash	33.6	Jewellery	21.8	Still Camera	18.0	Mobile phone*	17.3
St George-Sutherland	Cash	27.5	Jewellery	25.6	Laptop comp.	24.8	Still Camera	15.8	Mobile phone	11.9
Canterbury-Bankstown	Cash	34.1	Jewellery	33.5	Laptop comp.	32.5	Still Camera	16.5	Mobile phone	15.4
Fairfield-Liverpool	Jewellery	38.3	Cash	36.0	Laptop comp.	30.1	Still Camera	17.5	Mobile phone	16.8
Outer South Western Sydney	Laptop comp.	28.8	Cash	27.1	Jewellery	26.4	Still Camera	21.9	Mobile phone	18.9
Inner Western Sydney	Cash	41.3	Laptop comp.	33.8	Jewellery	32.7	Still Camera	16.9	Watch	16.2
Central Western Sydney	Jewellery	31.6	Laptop comp.	31.5	Cash	31.2	Mobile phone	14.8	Still Camera	14.6
Outer Western Sydney	Cash	23.5	Jewellery	22.5	Laptop comp.	22.3	Still Camera	15.6	Computer game/ video game equip	15.1
Blacktown	Laptop comp.	29.0	Jewellery	25.8	Cash	25.4	Mobile phone	18.0	Still Camera	16.3
Lower Northern Sydney	Cash	32.5	Laptop comp.	31.9	Jewellery	29.6	Still Camera	16.8	Watch	15.4
Central Northern Sydney	Jewellery	40.9	Cash	39.4	Laptop comp.	28.8	Watch	18.3	Still Camera	17.9
Northern Beaches	Cash	31.7	Laptop comp.	28.7	Jewellery	23.8	Still Camera	19.0	Personal music devices (eg ipod, discman)	13.2
Central Coast	Cash	31.5	Jewellery	21.6	Laptop comp.	21.5	Still Camera	17.5	Television	15.8
Hunter	Cash	31.5	Laptop comp.	19.8	Wallet/ handbag/ purse	16.2	ID documents/ cards	13.8	Jewellery	13.8
Illawarra	Cash	30.2	Laptop comp.	20.6	Jewellery	17.0	Wallet/ handbag/ purse	14.1	Still Camera	13.3
Richmond-Tweed	Cash	31.1	Laptop comp.	20.3	Jewellery	17.6	Wallet/ handbag/ purse	15.0	ID documents/ cards	13.4
Mid-North Coast	Cash	38.8	Jewellery	17.9	Laptop comp.	17.5	Wallet/ handbag/ purse	17.5	ID documents/ cards	15.5
Northern	Cash	31.8	Laptop comp.	17.6	Mobile phone	16.6	Wallet/ handbag/ purse	16.0	Still Camera	12.2
North Western	Cash	27.8	Mobile phone	18.0	Wallet/ handbag/ purse	16.9	Laptop computer	15.3	Jewellery	12.9
Central West	Cash	27.7	Laptop comp.	14.4	Mobile phone	14.3	Jewellery	12.4	Computer game/ video game equip*	12.1
South Eastern	Cash	31.2	Jewellery	11.2	Wallet/ handbag/ purse	11.0	Television	10.6	Power Tools	10.4
Murrumbidgee	Cash	24.0	Laptop comp.	17.7	Jewellery	17.0	Computer game/ video game equip	12.6	Still Camera	12.1
Murray	Laptop comp.	23.7	Cash	23.3	Still Camera	15.1	Computer game/ video game equip	14.9	Television	14.9
Far West	Cash	42.1	Jewellery	14.5	Wallet/ handbag/ purse	12.4	ID documents/ cards	11.7	Keys*	9.7
NSW	Cash	31.4	Laptop comp.	26.0	Jewellery	22.6	Still Camera	15.3	Mobile phone	14.6

* Indicates object types which were ranked equally with other object types. In three areas of NSW, multiple object types were ranked as the fifth most stolen item. In the Eastern Suburbs wallet/handbag/purses was ranked in equal fifth place with mobile phones; in the Central West Statistical Division, televisions were ranked in equal fifth place with computer games; and in the Far West, mobile phones, still cameras and watches were all ranked in equal fifth place with keys.

school and home as part of the Federal Government's Digital Education Revolution program. This program alone is estimated to have resulted in an additional 130,000 laptops in circulation in NSW (see <http://apcmag.com/nsw-hands-out-66000-student-laptops.htm>, website accessed April 19th 2011).

It is also possible that the second hand market for laptops is stronger than the market for other stolen electrical items. This is because (1) the retail price of laptops (at least for the latest models) has not decreased to the same extent as other electrical devices over the last 10 years and (2) laptops often contain personal and financial information which can be used in the course of other criminal activity such as identity theft and fraud. Trends in laptop thefts should therefore continue to be monitored in order to assess whether further intervention in this area of the stolen goods market is warranted.

How can we prevent domestic burglary?

Despite the drop in break-ins over the last decade, a large number of people continue to fall victim to this type of crime each year and thus burglary remains an issue of considerable public concern. So what can be done to prevent future break-ins?

There are a variety of different prevention strategies that have been applied to the problem of domestic burglary. This section focuses on some of the more widely used and evaluated crime reduction methods; situational crime prevention measures, police enforcement strategies and repeat victimisation programs. Successful interventions that have combined two or more of these methods are also briefly discussed. Other anti-burglary initiatives such as those which aim to reduce burglary by addressing underlying motivations for crime, by mobilising communities or by applying harsher punishment are not covered here (for further discussion of these see, for example, Homel, 2005; Kelling, 2005; Spelman, 2000; Weatherburn & Grabosky, 1997; Weatherburn, Hua, & Moffatt, 2009).

Situational crime prevention

Situational crime prevention measures are designed to make household burglaries more difficult, risky or less rewarding through management, design or manipulation of the immediate environment (Clarke, 1997). These measures include both those that are concerned with the immediate physical environment and those concerned with the design or management of the social environment (e.g., Neighbourhood Watch). They can be location-specific measures such as those which increase the physical security of particular households through better locks on windows and doors or through the installation of alarms or cameras (also known as target-hardening), or they can be area-wide measures such as restricting pedestrian access to property boundaries through alley gating or increasing lighting in high-risk locations.

There is good evidence that increasing the physical security of homes can have a significant effect on domestic burglary rates (see Budd, 1999; Dijk, Kesteren, & Smit, 2007; Tilley & Webb, 1994; Tseloni, Wittebrood, Farrell, & Pease, 2004). A multivariate

analysis of data from the British Crime Survey, for example, found that the risk of domestic burglary is 7.28 times higher for households with no security devices compared to those households with security, even after accounting for differences in the socioeconomic characteristics of households and neighbourhoods (Budd, 1999). Which security devices are the most effective is not clear from the available evidence because interventions focusing on improving home security usually employ more than one measure (e.g. better locks plus alarms plus property marking). Nevertheless, Budd (1999) reports that the presence of even the most simple security devices such as deadlocks and window locks significantly reduces burglary risk. Installation of electronic security systems (e.g., alarms, security lights) reduces the risk of victimisation even further.

Another situational crime prevention measure that has received attention in the literature is property marking. It works by reducing the rewards obtained from stolen items because the property is difficult to on-sell and it can also help in the recovery of stolen items. Property marking has limited utility when cash is the focus of burglars but it can deter offenders from stealing other high value items such as laptops. The research is mixed on the effectiveness of property marking in reducing domestic burglary rates but it does suggest that the success of this strategy is very much dependent upon it be accompanied by widespread publicity. Unless potential burglars know that the property they want to steal is marked then they will not be deterred (see Laycock, 1992).

At the neighbourhood level, restricting pedestrian access to residential properties through fencing of front/back yards or blockage of passageways has been shown to reduce household burglaries. These designs are thought to reduce the risk of victimisation by increasing the perceived effort required to access/flee a property and increasing the perceived risk of detection (if residents discover the offender in a restricted area). Bowers, Johnson, and Hirschfield (2004), for example, used a quasi-experimental research design to assess the effectiveness of installing gates in the alleys behind terraced housing to prevent non-resident access to the back of house blocks. They found that after 3,178 of these alley-gates were installed in Liverpool, UK, domestic burglaries reduced by 37 per cent. This reduction was independent of more general downward trends in burglary at the time of implementation. Furthermore, they found evidence for strong diffusion of benefits of this intervention to areas immediately adjacent to the target area and limited geographical displacement of burglary to areas slightly further away. Alley-gating is only applicable to areas where there is a high level of Victorian-type terraced or Radburn-styled housing that have alleyways running parallel to their houses. However, other burglary reduction programs using the same principle of restricting movement (either pedestrian and/or traffic access) through urban design in order to increase perceptions of risk and effort have been successfully implemented elsewhere (Atlas & LeBlanc, 1994; Johnson & Bowers, 2010; Newman, 1996).

One of the most widespread and popular situational crime prevention measures for domestic burglary is Neighbourhood Watch (NW). It traditionally involves residents watching out for suspicious activity in neighbouring homes and reporting these activities to police. This is thought to deter potential offenders as they perceive there to be an increase in the risk of being caught. There is also potential for NW to increase the *actual* risk of detection if the flow of information from public to police is useful. Earlier reviews of the effectiveness of NW schemes suggested that despite their intuitive appeal these programs have little impact on burglary rates (Husain, 1990; Sherman et al., 1997). Laycock and Tilley (1995) propose that the underlying theory of NW has merit but often these programs fail to affect crime rates because they are poorly implemented (with little resident cooperation). A more recent systematic review of NW evaluations concluded that they are effective in reducing crime and could reduce domestic burglary by up to 26 per cent. The authors of this review noted, however, that the success of these schemes varies considerably across areas and little is known about the factors that influence program outcomes (Bennet, Holloway, & Farrington, 2008). While a promising intervention, further research is clearly needed in this area.

Enforcement and repeat victimisation measures

Analysis of burglary rates repeatedly shows that household burglary offences (like other crimes) are not random. Burglary is concentrated at specific geographic locations or crime "hotspots" (e.g., Townsley, Homel, & Chaseling, 2000), in particular demographic communities (e.g., Budd, 1999) and at certain times (e.g., Budd, 1999; Townsley et al., 2000). Research also suggests that a small group of offenders account for a disproportionate amount of property crime (e.g., Wright & Decker, 1994; Stevenson & Forsythe, 1998; Weatherburn et al., 2009). Enforcement measures which focus resources on these high-risk targets are therefore expected to impact overall crime rates in an area.

Police crackdowns and arrests of repeat offenders can be an effective crime control method (Sherman et al., 1997). A concern with this approach (from a deterrence perspective), however, is that crime rates will quickly return to their previous levels once these interventions are removed (Sherman, 1990). An evaluation of a burglary reduction program in Leeds, UK, suggests that this issue could be overcome by combining enforcement measures with other crime prevention tactics. This police operation involved two stages. The first stage was a crackdown by police on known burglars which matched offender profiles with modus operandi information from burgled homes. Analyses of recorded crime data suggested that this crackdown resulted in an immediate 60 per cent drop in break-ins in the target area with no evidence of displacement and good evidence of diffusion of benefit to adjacent areas as well as to other crime types. After the crackdown, a multi-agency initiative was launched which target-hardened households most at risk of further burglary victimisation. Provisional data suggested that this 'consolidation' phase may have had further impact on domestic burglary rates by reducing

repeat victimisation at the targeted households. Cyclical use of a crackdown-consolidation approach such as this is thought to prevent crime rates returning to their pre-intervention levels by increasing offender uncertainty of apprehension risks (Farrell, Chenery, & Pease, 1998).

The consolidation phase of the Leeds project was concerned with repeat victimisation. Research shows that burglary victimisation is not only concentrated geographically, demographically and temporally, but is also concentrated amongst prior victims. Households which have been burgled once are four times more likely to be burgled again (Forrester, Chatterton, Pease, & Brown, 1988)² and within a relatively short timeframe (within the first one to four weeks; see Polvi, Looman, Humphries, & Pease, 1991; Townsley et al., 2000). This finding has generated a large amount of interest in crime reduction programs which focus on the victim. Preventing repeat victimisation is an attractive strategy not only because it focuses efforts to crime hotspots and is therefore an efficient means for allocating scarce resources but also because it can foster good relationships between victims and police (Laycock & Farrell, 2004).

One of the earliest repeat victimisation prevention projects and the most widely reported was the Kirkholt Estate project which focused on a particularly high crime rate housing estate in the north of England. Evaluations of the project reported a 40 per cent decline in domestic burglaries in the first year and further declines over the following three-year period, controlling for other factors (Forrester et al., 1988; Pease, 1998). The interventions implemented in the Kirkholt Estate project included target-hardening of repeat victim households and cocoon neighbourhood watch.³ However, coin-operated gas meters were also removed from at-risk households and it is likely that this latter intervention contributed substantially to the observed drop in crime. Another repeat victimisation project was undertaken in Huddersfield, West Yorkshire, UK. This project adopted a phased police response to burglary victims. At each phase the police systematically appraised a range of options (e.g., victim letters, security upgrade, improved lighting, cocoon watch) and applied those which were most appropriate; with the level of response increasing as victimisation increased. An evaluation of this program revealed a 30 per cent reduction in burglary rates post intervention (Chenery, Holt, & Pease, 1997). Attempts to replicate these repeat victimisation interventions in Australia have not been quite so successful (see Taplin, Fletcher, McKenzie, & Flaherty, 2001; Henderson, 2002; Holder, Payne, & Makkai, 2003). The authors of the Australian evaluations identify implementation problems and low levels of victim participation as possible reasons for these poor outcomes.

Multi-tactic interventions

Many of the initiatives discussed above involve the implementation of a variety of measures to reduce household burglaries. While this is a cost effective method from a crime prevention perspective, it means that evaluations of these interventions cannot attribute changes in crime levels to

any specific factor. Nevertheless, what these multi-tactic interventions can tell us is whether or not, in practice, burglary prevention can be achieved (Eck, 1997).

One such intervention is the Reducing Burglary Initiative (RBI) introduced in England and Wales in the early 1990s. This program involved more than 240 locally-based projects targeting domestic burglary. A variety of interventions were funded under this anti-burglary initiative (including enforcement measures, situational crime prevention measures, offender-based schemes and community-oriented approaches) and some areas implemented more than one intervention. Millie and Hough (2004) conducted an evaluation of 20 of these programs in the south of England and found that half had a significant impact on domestic burglary rates. Furthermore, when the programs were successfully implemented, diffusion of benefits to surrounding areas was observed which outweighed any displacement effects. Interventions deemed to be most successful were those that included a combination of target-hardening measures and police enforcement. The impact of these two measures was further enhanced if delivered in combination with other strategies such as property marking, NW and associated publicity.

Safer Cities was another crime reduction initiative launched in the late 1980s by the UK Government, which was locally based but took a multi-agency approach to crime reduction. The programs funded by this initiative tackled a wide range of problems but over 500 schemes specifically focused on domestic burglary and the effectiveness of these schemes was evaluated by the Home Office in 1996. Examining both household survey data and recorded crime data before and after program implementation, the evaluation found a significant positive effect of the Safer Cities initiative on crime reduction. High intensity programs had the biggest impact on household burglary rates, reducing burglary risk by over one-third, but the mere presence of any burglary action reduced burglary risks in an area by 10 per cent. Furthermore, in cases where the burglary action was of a moderate to high level of intensity there was diffusion of benefit to surrounding areas and to other crime types. Again the multi-faceted nature of the interventions meant that it was difficult to isolate the mechanism by which the scheme impacted burglary. However, the survey data suggested that although target-hardening can work alone, the best outcomes were achieved when a more comprehensive approach was taken which combined target-hardening with area-wide burglary reduction measures such as NW. Well publicised actions were also more successful because they sent a stronger deterrent message to burglars and reassured residents (Ekholm, Law, & Sutton, 1996).

The Safer Cities and Reducing Burglaries Initiatives suggest that a multi-faceted approach to burglary reduction will achieve better results than the implementation of any one strategy alone. It is important however for agencies designing anti-burglary initiatives to consider the underlying theory of proposed interventions and select a "package" of crime prevention measures which match local problems and characteristics of the local area (Holder et al., 2003; Laycock & Tilley, 1995; Sorenson,

2003). Policy development should also consider the value of multi-faceted programs when deciding upon the number of crime prevention strategies to implement in an area. Resource intensive programs will only be value for money in areas where burglary risk is greatest (Ekholm et al., 1996).

Notes

1. Note also that about 13 per cent of residential household burglaries recorded by police are attempted break-ins whereas the victim survey results refer to actual household burglaries – not attempts.
2. Cocoon watch is a "mini" Neighbourhood Watch whereby immediate neighbours of the burglary victim are involved in close protection of the victim.
3. The ICVS estimates that about 19 per cent of all burglaries reported by Australian respondents in 1999 were repeats (Dijk et al., 2007).

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Appendix

Table A1. Complete list of items recorded as stolen in incidents of break and enter - dwelling, NSW, 2001 and 2010

	Burglary incidents in which this object type was stolen					
	2001			2010		
	No.	%	Rank	No.	%	Rank
Agricultural grain	1	0.0	82	3	0.0	84
All other objects	2,231	4.7	26	892	3.6	28
Amusement/vending machine	87	0.2	68	47	0.2	69
Animal	59	0.1	71	67	0.3	67
Animal related item	44	0.1	74	22	0.1	77
Appliance - electric	3,407	7.1	15	1,140	4.6	23
Appliance - gas/fuel/solar	605	1.3	48	123	0.5	58
Art	646	1.3	46	359	1.4	44
Award/ceremonial equipment	118	0.2	65	78	0.3	63
Bank/financial documents	1,135	2.4	39	351	1.4	46
Bicycle	2,994	6.2	19	1,166	4.7	22
Book/stationery	886	1.8	45	389	1.6	42
Camera accessories	1,074	2.2	41	515	2.1	36
Cash	10,826	22.6	1	7,858	31.4	1
Clock	292	0.6	55	80	0.3	62
Clothing	3,011	6.3	18	1,297	5.2	20
Coin/card/stamp collection	605	1.3	48	219	0.9	51
Computer accessories and products other than computer	2,601	5.4	23	1,606	6.4	15
Computer game/video game equipment	2,867	6.0	22	2,638	10.5	9
Credit card/bank card	4,752	9.9	12	2,457	9.8	11
Dental item	4	0.0	80	4	0.0	83
Drug	143	0.3	62	242	1.0	50
Drug implement	3	0.0	81	5	0.0	82
Explosive-incendiary-irritant	7	0.0	79	1	0.0	86
Farm/plant/earthmoving equipment	135	0.3	64	28	0.1	73
Firearm	216	0.5	58	125	0.5	57
Firearm - accessory/attachment	55	0.1	72	36	0.1	71
Fish produce	0	0.0	86	6	0.0	80
Furniture	491	1.0	52	207	0.8	53
Gardening material and equipment (not tools)	242	0.5	57	99	0.4	59
Hand tools	2,957	6.2	20	1,089	4.4	24
Hardware/building/decorating	1,318	2.7	36	491	2.0	37
Identification documents/cards	5,415	11.3	9	2,909	11.6	7
Insurance policy	8	0.0	78	25	0.1	75
Intelligence commodity	1	0.0	82	2	0.0	85
Jewellery	10,308	21.5	2	5,649	22.6	3
Keys	2,209	4.6	27	2,217	8.9	13
Laptop computer	2,907	6.1	21	6,492	26.0	2
Leisure equipment	1,398	2.9	34	449	1.8	38
Liquor	1,336	2.8	35	979	3.9	25
Luggage/bag	3,165	6.6	16	1,550	6.2	17
Machine	1,203	2.5	37	392	1.6	41
Marine	249	0.5	56	81	0.3	61
Measuring instrument	215	0.4	59	48	0.2	68
Medical item	180	0.4	60	84	0.3	60
Metal	46	0.1	73	71	0.3	65
Meter	15	0.0	77	15	0.1	79

Table A1. Complete list of items recorded as stolen in incidents of break and enter - dwelling, NSW, 2001 and 2010
- continued

	Burglary incidents in which this object type was stolen					
	2001			2010		
	No.	%	Rank	No.	%	Rank
Miscellaneous	2,205	4.6	28	1,599	6.4	16
Mobile phone	5,992	12.5	7	3,648	14.6	5
Mower or powered garden equipment	3,853	8.0	13	749	3.0	31
Music - accessory	166	0.3	61	71	0.3	65
Music - CD, record, cassette	3,579	7.5	14	350	1.4	47
Musical instrument	599	1.2	50	211	0.8	52
Navigation equipment	0	0.0	86	613	2.5	34
Office equipment	484	1.0	53	168	0.7	55
Other communications equipment	1,038	2.2	42	589	2.4	35
Other documents	1,815	3.8	30	1,167	4.7	21
Other home entertainment equipment	2,256	4.7	25	1,938	7.7	14
Other optical	1,009	2.1	43	357	1.4	45
Paint/paint accessory	102	0.2	66	26	0.1	74
Personal computer	1,203	2.5	37	306	1.2	49
Personal items	1,570	3.3	31	973	3.9	26
Personal music devices (e.g., iPod, Discman)	2,098	4.4	29	2,296	9.2	12
Pest/insect/herbicide	1	0.0	82	6	0.0	80
Power tools	4,944	10.3	10	1,301	5.2	19
Prohibited article	20	0.0	75	25	0.1	75
Pump	141	0.3	63	74	0.3	64
Safe	98	0.2	67	191	0.8	54
Sharp/cutting instrument	613	1.3	47	335	1.3	48
Sporting equipment	2,376	5.0	24	686	2.7	32
Stage equipment	69	0.1	69	37	0.1	70
Stereo/audio equipment	5,999	12.5	6	678	2.7	33
Still camera	6,384	13.3	5	3,830	15.3	4
Sunglasses	1,479	3.1	32	831	3.3	30
Telephone	1,081	2.3	40	129	0.5	56
Television	5,713	11.9	8	2,702	10.8	8
Textile	20	0.0	75	16	0.1	78
Tobacco product/accessory	436	0.9	54	375	1.5	43
Toy/playground equipment	576	1.2	51	422	1.7	40
Trolley/stroller/pram	60	0.1	70	34	0.1	72
Vehicle part	941	2.0	44	427	1.7	39
Veterinary item	1	0.0	82	0	0.0	87
Video DVD player	9,060	18.9	3	1,376	5.5	18
Video camera	3,070	6.4	17	935	3.7	27
Video/DVD tape or disc	1,442	3.0	33	885	3.5	29
Wallet/handbag/purse	4,766	9.9	11	3,410	13.6	6
Watch	6,533	13.6	4	2,638	10.5	9