

## Risk Factors of Urban Residential Burglary

**Summary of Key Factors:** Social disorganization, Proximity to public housing units, Proximity to pawn shops, Proximity to bus stops, Time of day, Day of week, Proximity to police stations, fire stations and hospitals.

**Aim:** To assist analysts with the identification of risk factors for the production of risk terrain maps. Specifically, this brief provides an annotated review of the factors related to urban residential burglary and the settings and times for which some factors may be most relevant. This information should be especially useful to help choose a time period for creating risk terrain maps (i.e., Step<sup>1</sup> 3), to identify aggravating and mitigating risk factors to include in your risk terrain model (i.e., Steps 5 and 6), and to inform the operationalization of your risk factors to risk map layers (i.e., Step 7).

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### Operational Definition

Burglary can be broadly defined as the illegal and unlawful entry into a home or structure to commit a felony or theft<sup>2</sup>.

Burglary is manifested in several ways and can occur in several distinct settings and contexts. Both residences and commercial/retail establishments can be burgled. Moreover, the broad categories of residences and commercial/retail establishments can further be disaggregated into discrete sub-categories. For instance, residential burglary can be broken down into occupancy (single-family and multi-family); design (attached, separated or semi-separated residences); and structure (houses, apartments, condominiums and public housing).

Any residence, business or establishment can conceivably fall victim to an act of burglary; however, in reality, there are certain areas and places that are more conducive for offenses to occur<sup>3</sup>. For instance, four distinct factors have been identified that affect the variation in risk of a location being victimized: (i) surrounding area; (ii) household/premise characteristics; (iii) immediate design and planning features and; (iv) other aspects of lifestyle affecting the location<sup>4</sup>. For the purposes of investigating urban residential burglary, the surrounding area should be the main focus since the household/premise characteristics and immediate design and planning features of a location are at a micro-level that only explain one particular location's risk.

The general purpose of risk terrain modeling (RTM) is to identify risky areas and not individual locations. Furthermore, prior research has acknowledged that burglars search for an

appropriate offending area first and then search for a specific target within that area<sup>5</sup>. Utilizing an RTM approach results in the identification of factors which contribute to an environment that promotes, stimulates, sustains and/or enables acts of residential burglary to occur.

### Setting Effects

It is vital at the onset of any study to not only identify the specified issue that is being addressed, in this case residential burglary, but also the setting in which the study will occur. Distinguishing between urban and suburban neighborhoods will also affect the eventual framework, both theoretical and practical, during any analysis. Further, an appropriate area of study must be determined. This is especially true in any form of geographic analysis as the different levels of spatial aggregation will require different data and techniques and will provide different outcomes<sup>6</sup>. While a more specific level of analysis could be conducted (i.e. at a neighborhood level), an analysis at the city-level will be sufficient in order to prove the utility of RTM.

At a more specific level, an entire neighborhood could be assessed to determine which individual residences are at more risk based on certain factors; however, such a subjective analysis may be more suited after a general risk terrain is modeled and specific locations can be addressed. For example, a high risk area of a city may be identified based on the amalgamation of crime correlates creating an environmental setting conducive for residential burglary. Based on this information, it may be possible to identify residences within such an area that may be at even more risk solely based on individual characteristics of that home (i.e. security measures, points of entry, proximity to alleyways etc). Furthermore, such

neighborhood-level analyses could utilize specific risk terrains based on prior empirical evidence that acknowledges issues related to repeat victimization (including, near-repeats, early repeats, delayed repeats)<sup>7</sup>.

Conversely, a broad application of RTM at a state-level could also be conducted, but may not yield any meaningful information due to the fact that the area of study is simply too large. Further, it may be difficult to identify crime correlates at a state level that produce meaningful information regarding a criminogenic environment. Indeed, it can be argued that assessing a local-level problem like residential burglary through a state-level lens potentially results in the neglect of interactions and relationships that may be of importance<sup>8</sup>. Additionally, state-level analysis may not necessarily yield useful intelligence that authorities and policy-strategists can utilize for appropriate responses.

It is recommended that the most efficient and useful way to make use of RTM in investigating the risk of urban residential burglary based on the surrounding environmental context is by conducting an analysis at a city-level. It is believed that at this level of spatial analysis, the identification of crime correlates and temporal features will produce information that is not only insightful but also practical.

### **Aggravating/Mitigating Risk Factors Based on a Review of the Empirical Literature**

By focusing on a city-level unit of spatial analysis, an analyst will be able to explicitly identify contextual factors that contribute to the risk of an area to residential burglary. This forward-looking approach results in the ability to forecast locations of future events based on the characteristics of places and not on prior events like conventional hot-spot mapping. It is important to note that crime correlates can be weighted. However, if such a method is used, it is up to the analyst to determine the level of significance and the subsequent risk value for each correlate in relation to one another in a meaningful and empirical manner.

Based on prior empirical research, five crime risk correlates have been identified to be associated with urban residential burglary:

#### Social Disorganization (proximity to public housing)

Research has indicated that residences in socially disadvantaged and disorganized areas have high levels of crime due to low levels of collective efficacy and informal surveillance, low levels of socioeconomic status, high levels of ethnic heterogeneity and high levels of residential mobility<sup>9</sup>. Further, residents in such areas may not have the resources to safeguard their homes with adequate security measures<sup>10</sup>. In addition, socially disadvantaged areas may have more offenders living within or in near proximity of the area; thus, increasing the overall levels of risk of an area<sup>4</sup>. Importantly, research has also found that offenders do not travel far in

order to offend and do so based on a crime template derived from their daily routines, traveling paths and overall awareness space<sup>11</sup>. Lastly, the residents of such areas may lack the appropriate security measures needed in order to deter and/or prevent being victimized resulting in multiple victimizations.

While there are several ways to operationalize social disorganization<sup>12</sup>, the risk correlate that seems to encompass several aspects of social disorganization is public housing units and certain other private complexes. This can be attributed to the fact that many such housing units are located in areas of social disadvantage and disorganization. Therefore, public housing and other similar housing units and the surrounding locations should be considered at higher levels of risk.

#### Proximity to Pawn Shops

Burglars not only want to burgle a residence in a relatively quick fashion in order to avoid detection, but they also want to discard of any stolen property as quickly as possible. While most burglars may initially seek out cash, since it can be immediately used, they may also find objects that can be easily taken and sold in exchange for money. This may be especially true in impoverished areas, where objects that are of higher value or "hot products" may be at greater risk of being stolen due to their perceived value<sup>13</sup>. Pawn shops, especially ones that have lax policies, are avenues for burglars to dispose of stolen goods in a swift and immediate manner<sup>14</sup>. As such, it is generally understood that proximity to a pawn shop will increase the risk of an area.

#### Proximity to Bus Stops

Public transit stations may place certain locations at more risk since such connectors provide a way for offenders to access neighborhoods more readily, while also providing a means for exit<sup>15</sup>. Offenders may be able to expand their crime template by using public transportation as a means to move in and out of nearby (or possibly at even greater distances) neighborhoods. Unlike suburban residential burglary, urban burglars may not need to secure and use their own means of transportation to move larger products (i.e. televisions); and hence, are able to use public transportation as a means to move about.

#### Time of Day/ Day of Week

Burglars are more likely to burgle a home when it is not occupied<sup>16</sup>. While the occupation of a specific household is dependent on the individual lifestyles of the occupants<sup>17</sup>, it is argued that specific time-periods can be aggregated to identify risky times due to the general routine activities of most communities<sup>18</sup>. For instance, an average work day could range from 8AM to 6PM (accounting for possible travel-time); therefore, the risk levels of an area as an aggregate would be higher during this time period. Additionally, since the average

work week in the U.S. is Monday to Friday, it can be argued that households are more likely to be victimized during these time periods due to lack of guardianship.

#### Proximity to Police Stations, Fire Stations and Hospitals

These have been shown to mitigate risks of urban residential burglary. Findings indicate that burglars take into account the patterns of police activity when offending<sup>19</sup>; thus, it can be argued that the increased presence of authorities, the increased likelihood of authorities being present and the increased ability of authorities to respond quickly can be considered mitigating factors resulting in a decrease of risk in an area.

### Temporal Differences

Twelve-month or smaller time periods should be selected carefully to account for seasonal fluctuations (i.e. winter months v. summer months); commercial-retail times of the year (i.e. winter holidays) and work/school-related changes (i.e. summer holidays). Time periods can inherently change the dynamics of an environment. For example, summer months will result in increased guardianship in the form of children (possibly even a parent) staying home. Individuals' also go on vacations at different times of the year, namely during the summer and winter months leaving their homes unattended. Lastly, commercial-retail seasons results in an influx of "hot products" being purchased for gifts (i.e. "Black Friday", "Cyber Monday", and Christmas). As can be seen, the mere concept of season can vary and is dependent on the way it is defined.

### Recommended (Publicly Available) Readings

Clarke, R.V., Perkins, E., & Smith Jr., D.J. (2001). Explaining Repeat Residential Burglaries: An Analysis of Property Stolen. In G. Farrell, & K. Pease (Eds.), *Repeat Victimization, Crime Prevention Studies* (Vol.12), pp. 119 – 132. Available: [www.popcenter.org/library/crimeprevention/volume\\_12/07-ClarkePerkins.pdf](http://www.popcenter.org/library/crimeprevention/volume_12/07-ClarkePerkins.pdf)

Clarke, R.V. (1999). *Hot Products: understanding, anticipating and reducing demand for stolen goods*. Policing & Reducing Crime, Police Research Series Paper 112. London, UK: Home Office Policing and Reducing Crime Unit. Available: <http://rds.homeoffice.gov.uk/rds/prgpdfs/fprs112.pdf>

Sutton, M., Schneider, J., & Hetherington, S. (2001). *Tackling Theft with the Market Reduction Approach*. Home Office Crime Reduction Research Series Paper 8. London, UK: Home Office Policing and Reducing Crime Unit. Available: <http://rds.homeoffice.gov.uk/rds/prgpdfs/crrs08.pdf>

Winchester, S., & Jackson, H. (1982). *Residential Burglary: the limits of prevention*. A Home Office Research and Planning Unit Report. London: Home Office Research Study No. 74. Available:

[www.popcenter.org/problems/burglary\\_home/PDFs/Winchester Jackson 1982.pdf](http://www.popcenter.org/problems/burglary_home/PDFs/WinchesterJackson1982.pdf)

Refer to [www.popcenter.org](http://www.popcenter.org) to access several more burglary-related book chapters, reports and problem-oriented policing guides.

### Endnotes

- <sup>1</sup> For steps of risk terrain map production, download the RTM Manual at [www.riskterrainmodeling.com](http://www.riskterrainmodeling.com)
- <sup>2</sup> Mawby, R.I. (2001). *Burglary*. Portland, OR: Willan Publishing. / FBI, 2010
- <sup>3</sup> Wright, R.T., & Decker, S.H. (1994). *Burglars on the Job: Streetlife and Residential Break-ins*. Boston, MA: Northeastern University Press. / Winchester, S., & Jackson, H. (1982). *Residential Burglary: the limits of prevention*. A Home Office Research and Planning Unit Report. London: Home Office Research Study No. 74.
- <sup>4</sup> Mawby (2001)
- <sup>5</sup> Wright & Decker (1994)
- <sup>6</sup> Brantingham, P.L., Brantingham, P.J., Vajihollahi, M., & Wuschke, K. (2009). Crime Analysis at Multiple Scales of Aggregation: A Topological Approach. In D. Weisburd, W. Bernasco, & Bruinsma, G.J.N. (Eds.), *Putting Crime in its Place: Units of Analysis in Geographic Criminology*, pp. 87 – 107.
- <sup>7</sup> Bowers, K.J., Johnson, S.D., & Pease, K. (2004). Prospective Hot-Spotting: The Future of Crime Mapping?. *British Journal of Criminology*, 44, pp. 641 – 658. / Clarke, R.V., Perkins, E., & Smith Jr., D.J. (2001). Explaining Repeat Residential Burglaries: An Analysis of Property Stolen. In G. Farrell, & K. Pease (Eds.), *Repeat Victimization, Crime Prevention Studies* (Vol.12), pp. 119 – 132. / Townsley, M., Homel, R., & Chaseling, J. (2000). Repeat Burglary Victimization: Spatial and Temporal Patterns. *The Australian and New Zealand Journal of Criminology*, 33(1), pp. 37 – 63. / Ratcliffe, J. H., & McCullagh, M.J. (1998). Identifying Repeat Victimization with GIS. *British Journal of Criminology*, 38(4), pp.651 – 662.
- <sup>8</sup> Malczewski, J., & Poetz, A. (2005). Residential Burglaries and Neighborhood Socioeconomic Context in London, Ontario: Global and Local Regression Analysis. *The Professional Geographer*, 57(4), pp. 516 – 529.
- <sup>9</sup> Capowich, G.E. (2003). The Conditioning Effects of Neighborhood Ecology On Burglary Victimization. *Criminal Justice and Behavior*, 30, pp. 39 – 61. / Ratcliffe & McCullagh (1998) / Sampson, R., & Groves, W.B. (1989). Community Structure and Crime: Testing Social Disorganization Theory. *American Journal of Sociology*, 94, pp. 774-802.
- <sup>10</sup> Millie, A. (2008). Vulnerability and risk: some lessons from the UK Reducing Burglary Initiative. *Police Practice and Research*, 9(3), pp.183 – 198.
- <sup>11</sup> Bernasco, W. (2010). A Sentimental Journey to Crime: Effects of Residential History of Crime Location Choice. *Criminology*, 48(2), pp. 389 – 416. / Bernasco, W. (2006). Co-offending and the Choice of Target Areas in Burglary. *Journal of Investigative Psychology and Offender Profiling*, 3, pp. 139 – 155. / Brantingham, P.L., & Brantingham, P.J. (1991). Notes on the geometry of crime. In P.L. Brantingham, & P.J. Brantingham (Eds.), *Environmental Criminology*, pp. 27 – 54, Prospect Heights, IL: Waveland Press, Inc.
- <sup>12</sup> Author's Note: It is vital to assess factors related to social disorganization in a specific city as such factors will vary and may or may not apply. See Sampson and Groves (1989) for the seminal article on social disorganization theory.
- <sup>13</sup> Evans (1992) as cited by Mawby (2001, p.23); Clarke, R.V. (1999). *Hot Products: understanding, anticipating and reducing demand for stolen goods*. Policing & Reducing Crime, Police Research Series Paper 112. London, UK: Home Office Policing and Reducing Crime Unit.
- <sup>14</sup> Sutton, M., Schneider, J., & Hetherington, S. (2001). *Tackling Theft with the Market Reduction Approach*. Home Office Crime Reduction Research Series Paper 8. London, UK: Home Office Policing and Reducing Crime Unit / *St. Petersburg Times* (January 2<sup>nd</sup>), 2010, retrieved online: <http://www.tampabay.com/features/humaninterest/after-a-burglary-victim-must-buy-back-items-from-pawn-shop/1062282>
- <sup>15</sup> Clare, J., Fernandez, J., & Morgan, F. (2009). Formal Evaluation of the Impact of Barriers and Connectors on Residential Burglars' Macro-Level Offending Location Choices. *The Australian and New Zealand Journal of Criminology*, 42(2), pp. 139 – 158. / Brantingham & Brantingham (1991).
- <sup>16</sup> Tseloni, A., Osborn, D.R., Trickett, A., & Pease, K. (2002). Modelling Property Crime Using The British Crime Survey: What have we learnt?. *British Journal of Criminology*, 42, pp. 109 – 128 / Wright & Decker (1994) / Cohen, L.E., & Cantor, D. (1981). Residential Burglary in the United States: Life-Style and Demographic Factors Associated with the Probability of Victimization. *Journal of Research in Crime and Delinquency*, 18(1), pp. 113 – 127.
- <sup>17</sup> Tseloni, A., Wittebrood, K., Farrell, G., & Pease, K. (2004). Burglary Victimization in England and Wales, The United States and the Netherlands: A Cross-National Comparative Test of Routine Activities and Lifestyle Theories. *British Journal of Criminology*, 44, pp.66 – 91.
- <sup>18</sup> Cohen, L.E., & Felson, M. (1979). Social Change and Crime Rate Trends: A Routine Activity Approach. *American Sociological Review*, 44, pp. 588 – 604.
- <sup>19</sup> Rengert, G., & Wasilchick, J. (1985). *Suburban Burglary: A Time and a Place for Everything*. Springfield, Illinois: Charles C Thomas / Capowich (2003); Rengert & Wasilchick (1985)