Geographic Aspects of Sex Offender Residency Restrictions: Policy and Research
Carrie F. Mulford, Ronald E. Wilson and Angela Moore Parmley
Criminal Justice Policy Review 2009 20: 3
DOI: 10.1177/0887403408327683

The online version of this article can be found at:
http://cjp.sagepub.com/content/20/1/3

Published by:
SAGE
http://www.sagepublications.com

On behalf of:
Department of Criminology at Indiana University of Pennsylvania

Additional services and information for Criminal Justice Policy Review can be found at:

Email Alerts: http://cjp.sagepub.com/cgi/alerts
Subscriptions: http://cjp.sagepub.com/subscriptions
Reprints: http://www.sagepub.com/journalsReprints.nav
Permissions: http://www.sagepub.com/journalsPermissions.nav
Citations: http://cjp.sagepub.com/content/20/1/3.refs.html

>> Version of Record - Feb 5, 2009

What is This?
Geographic Aspects of Sex Offender Residency Restrictions

Policy and Research

Carrie F. Mulford
Ronald E. Wilson
Angela Moore Parmley
National Institute of Justice

Keywords: sex offender residency restrictions; notification laws; crime mapping

Throughout the 1990s and 2000s, there has been a trend in the United States to register and control the movement of convicted sex offenders. Following the abduction of an 11-year-old boy, the Jacob Wetterling Crimes Against Children and Sexually Violent Offender Registration Act (1994) required that all states create sex offender registries. Then, in 1996, Megan’s Law was passed, which required public notification of the presence of sex offenders.

Residency restriction laws and ordinances have become an increasingly popular way to respond to public outcry about sex offenses against children. These laws serve to extend the punishment of sex offenders out of fear they will be hunting for victims because they live in proximity to where children congregate. In 1996, Alabama became the first state to restrict where sex offenders were allowed to live. Although a handful of states had already passed exclusion zone laws prior to 2005, the idea of local ordinances took hold following an ordinance that was passed in Miami Beach, Florida, in response to the abduction and murder of 9-year-old Jessica Lunsford.

As of 2006, 29 states and hundreds of localities had adopted measures to restrict where registered sex offenders are permitted to live (Nieto & Jung, 2006). Typically, the laws are intended to protect children by limiting offenders’ access to locations where children congregate by establishing buffer zones of between 1,000 feet and 2,500 feet around these locations. There is wide variation in the details of the laws, including the types of offenders who are required to comply, the types of facilities included to create the buffer zones, the distance of the buffer zones, and how the distance is to be determined. Some of the laws make distinctions between categories of risk of offenders and include only high-risk offenders. Another area of variability is the retroactive nature of the laws, with some jurisdictions requiring all sex offenders on their registries to comply, regardless of when the offense occurred.
Some empirical research has begun to examine the potential impacts of these laws on offenders, communities, the criminal justice system, and perceptions of public safety. Issues that have emerged include the lack of available housing, housing instability, problems associated with concentrating sex offenders in limited residential areas, and limited access to jobs, treatment, and supportive family and friends (Levenson & Cotter, 2005; Levenson & Hern, 2007). From a criminal justice perspective, it has been noted that residency restriction laws have led to decreases in offender compliance with registry requirements, making it harder for parole officers to monitor offenders and ensure that they are receiving mandated treatment (Iowa County Attorneys Association, 2006). In addition, there is some indication that these laws are extremely difficult to enforce even in situations where the offenders’ residential locations are known (Grubesic, Mack, & Murray, 2007; Minnesota Department of Corrections, 2003).

Prior literature in the field has highlighted sex offender perpetration patterns and recidivism statistics for sex offenders to suggest that residency restrictions are misguided and give the public a false sense of security (see Walker, 2007). Rates for sex offenders committing another sex offense are quite low. One study found that among released sex offenders, 5.3% were rearrested for a new sex crime in a 3-year follow-up period, dropping to 2.2% for those who reoffend with a child victim (Langan, Schmitt, & Durose, 2003). Another study in Minnesota examined all of the sex offenses committed by sex offenders released between 1990 and 2002 and concluded that none of the 224 new sex offenses would have been prevented by residency restrictions (Duwe, Donnay, & Tewksbury, 2008). Research has indicated that there is no relationship between sex offending and residential proximity to locations where children are known to congregate (Colorado Department of Public Safety, 2004; Stengel, Tewksbury, & Mustaine, 2008; Tewksbury & Mustaine, 2006). However, one study found that child molesters were more likely to live near schools than adult rapists (Walker, Golden, & VanHouten, 2001), but the general consensus in the research community is that economic factors, not proximity to potential victims, drives sex offenders’ selection of residence (Tewksbury & Lees, 2006). In addition, the vast majority (93%) of sex offenses against children are committed by a family member or someone who is known to the child (Snyder, 2000). Thus, residency restriction laws based on the assumption of stranger-related sex offending may do little to protect children.

### Theoretical Framework

Theories currently used to examine the potential impact of sex offender residency restrictions include routine activity and social disorganization. Routine activity theory (L. E. Cohen & Felson, 1979) posits that for a predatory crime to occur, there must be a convergence in time and space of three elements: (a) motivated offender, (b) suitable target, and (c) absence of a capable guardian. Routine activity theory may have limited relevance for analyzing sex offender residency restrictions, however. The
reason is that places serving as the epicenter of these restriction zones have an abundance of the third and most crucial element, the capable guardian. These places often have multiple capable guardians present at one time, some formal and others informal. For example, schools have multiple teachers and other staff (formal set of capable guardians) whose charge is to look after children. Similarly, parks often have multiple parents or caretakers around (informal set of capable guardians) who could intervene should an abduction or other offense be attempted. Further still, the presence of multiple children would likely deter an offender out of fear that he or she could be recognized. As indicated by the 93% of child sex offenses that are committed by family members or others known to the child, offenses in proximity to these places likely occur by taking advantage of activity patterns that are known by those who have close relationships to the victims.

Social disorganization theory may be more relevant to understanding the impact of laws that restrict where sex offenders can live. Social disorganization theory, which is essentially a theory of place, seeks to explain differences in crime rates across communities. Crime is more likely in communities that are economically deprived, have higher rates of residential mobility, have more multidwelling units, are larger and/or more dense, have deteriorated physical environments, and are high in family disruption (high rates of divorce and single-parent families; Shaw & McKay, 1942). These factors reduce the ability of community residents to exercise effective social control (both formal and informal). Individuals living in socially disorganized communities may have fewer stakes in conformity, less social capital, and less collective efficacy (social cohesion among neighbors combined with their willingness to intervene on behalf of the common good; Sampson, Raudenbush, & Earls, 1997). Registered sex offenders have been found to live in neighborhoods with high levels of social disorganization (Mustaine, Tewksbury, & Stengel, 2006). In these neighborhoods, community members might not intervene when a victim is being abducted or assaulted because of the lack of collective efficacy and/or the fear that they might become victims if they get involved.

As a result of residency restrictions, sex offenders may be forced to live in socially disorganized communities because these communities may not have such laws in place, be able to effectively enforce them, or have places near them where children congregate. Consequently, sex offenders can disappear into these communities by not registering that they live there, increasing the difficulty for authorities to monitor and track their whereabouts. Furthermore, the deficits inherent in socially disorganized communities may only exacerbate the collateral consequences of these policies, which include homelessness, unemployment, and lack of access to social services and mental health and sex offending treatment. Empirical research has demonstrated that factors such as these are related to reoffending (see Meredith, Speir, Johnson, & Hull, 2003).

Strain theory may also be relevant to an analysis of the impact of sex offender residency restrictions. Agnew’s (2006) extension of prior iterations of strain theory
by Merton (1938), A. Cohen (1955), Cloward and Ohlin (1960), Agnew (1992), and Messner and Rosenfeld (1994) posited that there are likely a combination of stress-inducing factors that lead to an individual reoffending. For sex offenders who live in jurisdictions with residency restrictions, the feeling of being punished more than the crime warrants can lead to undue stress. This is not to say that sex offenders should not be punished in proportion to their offenses. However, policy makers should consider the potential unintended consequences of residency restrictions. These laws can lead to what Tenner (2003) called a “revenge effect.” Rather than producing a specific deterrent effect, these policies can lead to a criminogenic effect.

Agnew’s three classifications of stressors—(a) preventing offenders from achieving positive-valued goals, (b) removing offenders from positively valued stimuli, and (c) placing offenders in noxious or negative stimuli—may result from being subjected to residency restrictions. Sex offenders may have difficulty achieving positive goals because they are forced to move from their place of residence. Opportunities for engaging in necessary life activities such as work or attending treatment are reduced. Consequently, sex offenders may think they are being unduly sanctioned and as a result become frustrated and angry, which may ultimately lead to deviant or criminal behavior.

Sex offenders can be removed from positively valued stimuli when residency restrictions force them to move from their current residences. Usually their informal and formal support networks, such as families, religious organizations, and social services, are located in their communities. Moving away from these support networks can have a deleterious effect on offenders’ physical, economic, and emotional well-being, in addition to decreasing their likelihood of successful reintegration on release from jail or prison.

The exposure to noxious or negative stimuli results from living in the jurisdictions in which offenders are forced to live. Communities that would be available to sex offenders, particularly in urban areas, likely are those that are socially disorganized. More stable and/or affluent communities may not be economically feasible, even if they are not within exclusion zones. Socially disorganized neighborhoods and deviant places have been shown to have a negative influence on the behavior of residents in committing crimes (Brantingham & Brantingham, 1991; Bursik & Grasmick, 1993; Sampson et al., 1997; Shaw & McKay, 1942; Stark, 1987; Weisburd, Bushway, Lum, & Yang, 2004). Living in these environments can lead to the transfer of the visible undesirable conditions into sex offenders’ psyches and may lead to stress and anger fueling the sense of disenfranchisement with their communities.

**Geographic Information Systems (GIS) and Spatial Analysis**

GIS and spatial analysis have much to contribute to the examination of sex offender residency restrictions. GIS and spatial analysis are often used interchangeably, but they
are not the same. GIS are simply geographic data visualization and manipulation tools that are used to prepare data for statistical analysis and to display the output from analysis, although some GIS include spatial analysis tools. Probably the greatest impact that GIS have had on the social sciences is that they allow for assembling, integrating, and creating new units of analysis that better model human behavior. This capability affords a more accurate analysis of the spatial interactions among offenders, victims, and their environments. These new or altered units of analysis can then be used for further statistical analyses, spatial or classical. Spatial analysis is the analysis of objects in relation to other objects across space, that is, their location and proximity to each other. Without spatial techniques, it would be difficult to analyze how people interact in the spaces they traverse and the characteristics of those places.

According to the principles of geography, one or more of six outcomes will occur when a new policy or law is put into effect: (a) nothing happens, (b) the problem completely vanishes, (c) the problem diminishes, (d) the problem disperses, (e) the problem concentrates, or (f) the problem is replaced by another problem (Wilson, 2007). In the case of sex offender residency restriction laws, the first two options are mutually exclusive and require evidence that the removal of offenders produced no change in reoffending (in the targeted jurisdiction or neighboring jurisdictions) or that children in the targeted jurisdiction are now safe from these offenders, with no negative effects on children in neighboring jurisdictions. The remaining four outcomes are more plausible and can occur in combination (e.g., sex offending may diminish in the target areas, but higher concentrations of sex offenders in nonrestricted areas may lead to higher sex offense rates in those communities). The plausible outcomes indicated by the principles of geography suggest some potential long-term consequences of these policies that can and should be examined.

The current research looks at the more immediate effects of residency restriction laws, but the potential long-term effects can be more problematic and costly. These policies can have substantial negative impacts on housing markets, recidivism, families of the offenders, children exposed to sex offenders in disorganized neighborhoods, the relocation of large amounts of offenders, and the ever-increasing diminishment of permissible space for sex offenders to live based on neighboring jurisdictions wanting to keep them out, among other things. GIS and spatial analysis software can be used effectively to visualize and analyze the aforementioned outcomes.

Some limited research has used GIS and spatial analysis techniques to examine the impact and consequences of restricting locations where sex offenders are permitted to live. For example, Zandbergen and Hart (2006) conducted a case study of Orange County, Florida, and determined that expanding the buffer zone from 1,000 feet to 2,500 feet would not have a major impact if bus stops were included in the restricted categories because most properties (95.2%) fell within the 1,000-foot zones around bus stops. However, if bus stops were not included, changing the buffer zone to 2,500 feet would have a major impact. For example, including schools and day care centers with a 1,000-foot buffer leaves 64% of properties available, but increasing the buffer to 2,500 feet leaves only 29% of properties available.
Despite some compelling arguments against sex offender residency restriction legislation, these laws are extremely popular. Only a handful of states or jurisdictions that have considered the laws have decided to reject them. One of the challenges that communities face is that when neighboring jurisdictions pass residency restriction laws, there is increased pressure to pass similar laws to keep sex offenders from migrating into their communities. These become “not-in-my-backyard” (NIMBY) policies and have the effect of excluding sex offenders from large parts of jurisdictions so as to protect the community against potential recidivism (Herbert, 2005). A collective sentiment about sex offenders begins at the community level and aggregates upward in geographical scales from the local municipalities to the state. Legislative bodies have responded by crafting ordinances that create expansive geographies of exclusion. There is limited space that separates the origin points of the restriction laws (e.g., schools, day cares, parks, etc.), such that when the restricted zones are merged, sex offenders are prohibited from living in substantial areas within a jurisdiction.

This special issue addresses ways that GIS technology and analysis can be used to examine the potential impact of sex offender residency restriction laws. The first theme that emerges from these article is that it seems that policy makers and the public may not realize how large an area 1,000-foot and 2,500-foot buffers ultimately encompass. This is evident in the percentages of area that become off-limits for offenders to live. The most dominant theme that emerges across the articles is the geography of exclusion. Quite simply, this means that people are instantaneously being excluded from geographic areas in great percentages, thus rendering the areas off-limits.

**The Articles**

The first article, by Paul Zandbergen and Timothy Hart, explores issues related to the accuracy of geocoding that have potential legal implications for those considering drafting and implementing residency restriction laws. Using a case study of registered sex offenders in Orange County, Florida, they examine the positional accuracy of street geocoding and its impact on spatial analysis. Zandbergen and Hart’s findings strongly suggest that the current practice of using street geocoding techniques to establish restriction zones, particularly around schools and day care facilities, is inadequate and insufficient. They recommend the use of property boundaries to produce more reliable results. If restriction zones are not accurately constructed, it could have the effect of placing offenders in zones where they should not be located (i.e., near schools or child care facilities) or potentially placing sex offenders at a disadvantage by uprooting them from their current locations and forcing them to move to an area where they otherwise would not have to live.

Michael Chajewski and Cynthia Mercado examine the potential effect of residency restriction laws in urban, suburban, and rural communities in New Jersey. In addition, they point out the potential challenges that may arise when the restricted
zones cross over into other jurisdictions where the law is not in effect. Their research suggests that large areas in rural, suburban, and urban areas would be off-limits to sex offenders if highly restrictive (2,500 feet) buffer zones were enacted. Residency restrictions of 2,500 feet would require 100% of sex offenders in the rural areas, 91% in the suburban areas, and 98% in the urban areas examined to relocate if these policies were enacted. The impact of these policies would likely be most pronounced for sex offenders living in urban jurisdictions. Although about 54% and 37% of the territory would remain available in rural and suburban areas, respectively, if 2,500-foot buffer zones were implemented, only 7% of the territory would still be available in the urban areas examined. Furthermore, the greatest impact of cross-jurisdictional issues was found in urban areas where more than 19% of the buffer zone fell outside of the city limit in the case of 2,500-foot boundary restrictions. In short, highly restrictive residency policies would make it especially difficult for sex offenders to find affordable housing in urban areas.

Kristen Zgoba, Jill Levenson, and Tracy McKee look at the potential differential impact of 1,000- versus 2,500-foot buffer zones in a metropolitan county in New Jersey. They find that 80% of the population lives within 2,500 feet of a school or day care center but that sex offenders do not appear to live closer to schools and day care centers than other residents. Similar to those of Chajewski and Mercado, their results suggest a vast majority of sex offenders would be forced to relocate if residency restrictions were put into place, and few options for housing exist outside of typical exclusion zones.

Finally, J. C. Barnes, Tony Dukes, Richard Tewksbury, and Tim De Troye examine the potential impact of legislation being considered by the state of South Carolina. Two versions of sex offender residency restrictions are under consideration, one that places a 1,000-foot boundary and another that places a 1-mile boundary around schools, parks, day care centers, recreational facilities, bus stops, and other areas where children are known to congregate. The authors add to the body of research indicating that large buffer zones severely reduce available housing options for sex offenders, often forcing them to live in rural areas. A special emphasis in this article is placed on the distance that offenders would be forced to live from sex offender treatment facilities. A meta-analysis of sex offender treatment programs indicated sex offenders recidivate at lower rates when they receive treatment (Losel & Schmucker, 2005). Therefore, forcing sex offenders to live in areas where it is difficult to access treatment may thwart efforts at successful reintegration. This article demonstrates that in the four counties analyzed in South Carolina, the mile buffer zone, but not the 1,000-foot zone, would result in offenders being forced to live further away from treatment facilities.

The first commentary, by Tom Casady, the chief of police in Lincoln, Nebraska, points out some of the forces driving public policy and public opinion about the treatment of sex offenders. He notes that despite solid evidence presented here and elsewhere, the public and policy makers will not be compelled to repeal or defeat residency restriction legislation unless the message is recast with a focus on how
residency restriction laws make neighborhoods less safe. The second commentary, by Bonnie Dumanis, the San Diego County district attorney, demonstrates how policy makers can work with mapping analysts to make informed local decisions about sex offender residency restriction laws. Her comments highlight the promise that can be achieved when public officials have an appreciation for social science research.

These articles demonstrate how GIS are well suited for analysis of policy, especially one that is so explicitly spatial in nature. Policy solutions to crime and public safety problems are necessarily about “where.” “Where” questions have scale considerations that need to be recognized when considering policy effects at the local and state levels. Because place matters in our daily activities, it is critical to understand “where” problems occur to better focus solutions.

**Setting the Research Agenda**

The analyses presented in this special issue could be conducted by crime analysts in any locality considering enacting or modifying sex offender residency restrictions. Prior to implementation, it would be advantageous for jurisdictions to examine the potential impact of increasing the area of the restricted zones or contemplating two versions of residency restriction legislation with different size buffer zones. The maps produced provide a visual display that allows policy makers and the public to see the viable properties available to sex offenders who have to comply with residency restriction laws.

Beyond these analyses is the larger issue of the long-term impacts of sex offender residency restriction laws. Prior research has indicated that stable housing is critical to successful reintegration of offenders into their communities (LaVigne, Visher, & Castro, 2004; Meredith et al., 2003). Although this finding has not been specifically demonstrated for sex offenders, simple mapping and spatial analysis of the zones themselves are not enough. As with any group in society, there are interactions between humans and their environment that need to be investigated to prevent unintended consequences if these laws are to continue to be implemented. It would be advantageous to use spatial analytical techniques to examine mobility patterns or the interactions between individuals and their communities of registered sex offenders in jurisdictions with and without residency restriction laws. It might be warranted to examine mobility patterns pre- and post-residency restriction implementation to examine how easy or difficult it is for sex offenders to get to work and access treatment and services. Mobility patterns could also help determine if sex offenders are spending more or less time in restricted zones (e.g., near parks and schools).

A word of caution about the use of geographic data to analyze human behavior is in order here. There is a serious concern with regard to inferences being made about what people are doing based on their individual characteristics, the demographics of the locations of where they live, and the increasing ability to correlate their spatial behavior with
the places they go (Cho, 2005). For sex offenders, the continuing connections of data will likely lead to concerns that hearken to increase NIMBY-ism before all the facts have been assembled. Furthermore, if sex offenders are tracked with locational devices such as global positioning systems and are seen as frequently passing through spaces that are excluded, it may be assumed that they are there for nefarious reasons.

The timing of this special issue is opportune, as many states and communities are considering residency restriction legislation and ordinances. We hope that the analyses presented will provide policy makers with information they need to make informed decisions. In addition, some of the techniques could be replicated by localities to determine the potential effects of residency restriction laws in states and communities where they are under consideration. This special edition is only the first step in understanding the immediate effects of these laws. Long-term trends that transpire from those laws will also need to be examined. It will not be possible, in our opinion, to disentangle the effects of residency restriction laws on sex offenders and communities without analyzing the geography in which they interact and live. GIS and spatial analysis, coupled with geographic principles, will be required tools for a complete analysis.

Disclaimer

The findings and conclusions of the research reported here are those of the authors and do not reflect the official position or policies of the National Institute of Justice, the Office of Justice Programs, or the U.S. Department of Justice.

References