Title registration for a review proposal: Displacement of Crime and Diffusion of Crime Control Benefits in Large-Scale Geographic Areas

Submitted to the Coordinating Group of:
_X_ Crime and Justice
___ Education
___ Social Welfare
___ Other

Plans to co-register:
_X_ No
___ Yes ___ Cochrane ___ Other
___ Maybe

TITLE OF THE REVIEW

Displacement of Crime and Diffusion of Crime Control Benefits in Large-Scale Geographic Areas

BACKGROUND

**Briefly describe and define the problem**

Although there is growing evidence that governmental social control, primarily in the form of police activity, can have an impact on crime at the specific areas where efforts are focused (see Sherman & Eck, 2002; Weisburd & Eck, 2004), such approaches risk shifting crime or disorder to other places where programs are not in place or to other times, targets, offenses, tactics, or offenders. This phenomenon is usually termed displacement, and it has been a major reason for traditional skepticism about the overall crime prevention benefits of place-based prevention efforts (Repetto, 1976). While displacement can take a number of forms, the majority of research has focused on spatial or geographic displacement. However, the assumption that displacement is an inevitable outcome of focused crime prevention efforts has been replaced by a new assumption that displacement is seldom total and often inconsequential (Barr & Pease, 1990; Clarke, 1992; Eck, 1993; Gabor, 1990; Guerette & Bowers, 2009; Hesseling, 1994). Clarke and Weisburd (1994), moreover, suggest that scholars need to be cognizant of the reverse of displacement. They point to evidence indicating that situational and place-oriented crime prevention strategies often lead to a “diffusion of crime control benefits” to areas outside the immediate targets of intervention. Such spatial diffusion of crime
control benefits has now been noted in a number of studies (e.g. Braga et al., 1999; Weisburd & Green, 1995; Weisburd et al. 2006).

Much of the displacement literature has focused on local area (“micro place”) displacement. That is, studies have been concerned with geographically focused police initiatives that include interventions at crime hot spots of a single street block, or clusters of street blocks with high intensities of specific types of crime. This has also been the focus of a current Campbell systematic review (Bowers et al., in progress). However, displacement may also occur across larger areas, such as police beats, neighborhoods, cities, regions, states, and even nations (McIver, 1981).

Displacement in this case would involve the movement of crime across administrative, governmental, and/or social boundaries as a result of larger scale interventions of governmental social control (McIver, 1981). Teichman (2005), for example, argues such larger scale displacement can occur as a result of efforts by jurisdictions to push criminal offenders to neighboring locations (see also Broude & Teichman, 2009; Marceau, 1997). The United Nations World Drug Report (2007: 16) describes such a possibility in regards to international methamphetamine markets, noting that “Improved controls in Canada and further tightening of controls in the USA have led to a decline in the number of clandestine laboratories operating within the USA and a shift of production across the border to Mexico. However, Mexico has now also improved its precursor control regime, prompting drug trafficking organizations to exploit other areas, such as Central America and possibly Africa.” Thus, national drug control policy may have been responsible for pushing methamphetamine laboratories across country borders.

The study of large-area displacement is important because, despite the extent of research on “micro places,” many police interventions take place at geographic units larger than hot spots. For example, the evidence-based policing Matrix (see http://gemini.gmu.edu/cebcp/Matrix.html), a compilation of rigorous policing evaluation studies (see Lum et al., forthcoming), suggests that police are frequently targeting crime and disorder at the neighborhood level. While 16 of the 92 studies included in the Matrix (16.5%) focused on crime micro places, 42 (43.3%) used the neighborhood or jurisdiction as the unit of analysis. While the Matrix did not systematically assess displacement and diffusion effects in these studies, these results suggest the importance of understanding the relationship between governmental social control interventions at larger geographic units and displacement/diffusion of crime. Furthermore, empirical evidence on large area displacement is more equivocal than that on displacement at micro places. Some studies indicate no evidence of crime displacement (e.g. Malm & Tita, 2006; McPheters & Stronge, 1981), while others find some spillover effect (e.g. Hakim et al., 1979; Worrall & Gaines, 2006).

Since less attention has been given to large area displacement and diffusion effects, we cannot be confident that the growing body of research suggesting that displacement is not inevitable and is often inconsequential at the micro level necessarily applies to larger units of geography. Because governmental social control interventions are often implemented at such larger geographic units, we feel it important to undertake a systematic assessment of what we know about displacement and diffusion of crime control benefits in broadly targeted place-based interventions.

Briefly describe and define the population
The population includes individual offenders and potential offenders as well as crime and disorder patterns at large geographic units. Displacement only occurs when individuals relocate or alter their offending in some way. We take a broad view of the population as we are interested in all offenders and crime types in understanding displacement at large geographic areas.
**Briefly describe and define the intervention**

Governmental social control interventions will vary but all will focus on reducing crime or disorder in a geographic area larger than a high crime hot spot or other “micro place.” These interventions will include police programs at the beat or neighborhood level, statewide police initiatives or new laws that could impact crime in neighboring states, and national crackdowns, such as operations against drug trafficking, that could shift drug production to other countries. Our main focus is on the impact of this broad category of interventions on crime displacement and diffusion of crime control benefits. Additionally, it is important to note that the police alone do not have to carry out these interventions, but there must be some governmental involvement for the purpose of controlling or preventing crime and/or disorder.

**Outcomes: What are the intended effects of the intervention?**

The primary outcomes are crime displacement and diffusion of crime prevention benefits. We expect to find studies that primarily address spatial displacement and diffusion by examining how crime varies in a geographic area surrounding the area receiving the police or other governmental social control intervention. In addition to spatial displacement, we will also include studies with data on temporal displacement, tactical displacement (e.g. changes in offending patterns from gun robbery to knife robbery), target displacement (e.g. changes in offending patterns from home to business burglary), offense displacement (e.g. changes in offending patterns from robbery to burglary) and offender displacement (e.g. offenders are immediately replaced by others when they desist or are incapacitated). We will also collect data on the direct effects of the intervention. Displacement impacts in particular only become relevant if there was a crime control benefit in the targeted area. That is, it is difficult to show that crime has been displaced if it did not decline in the intervention site.

As noted above, we expect that offending data will generally be aggregated to geographic areas. Accordingly, the primary data are likely to include such outcomes as comparative crime/disorder counts in targeted and comparison areas. An example would be a police intervention that focused resources on a particular neighborhood and used a comparison area in a different part of the city. The assessment would likely compare crime trends in the target area with the control site and spatial displacement and diffusion would be examined by analyzing crime trends in neighborhoods bordering both the target and control sites. If crime declined in the target area, increased or remained stable in the control area, and increased in the catchment neighborhood surrounding the target area, this would suggest an intervention effect but also spatial displacement to surrounding areas. If, however, the same effects in the target and control areas were found, along with decreased crime in the target catchment areas, this would be suggestive of a spatial diffusion of crime control benefits. These outcome measures will all be crime or disorder related and will usually be drawn from official police data (such as calls for service or incident report data). Outcome data could also be drawn from observations of physical and/or social disorder or victimization data.

**OBJECTIVES**

The objective of this systematic review is to synthesize the extant empirical evidence (published and unpublished) on crime displacement and diffusion of crime prevention benefits at large geographic units as a result of governmental social control interventions. Specifically, this review will seek to answer the following questions:

1. To what extent do governmental social control interventions lead to crime/disorder displacement (spatial, temporal, tactical, target, offense,
offender) or diffusion of crime/disorder prevention benefits at units of geography larger than micro places or “hot spots”?
2. Do displacement/diffusion effects vary for different types of interventions and different types of crime or disorder?
3. Do displacement/diffusion effects vary based on the geographic unit of analysis?

METHODOLOGY

Inclusion criteria:

1. The main intervention must be an instance of governmental social control that occurs in a geographic area larger than a crime hot spot with the explicit purpose of controlling or preventing crime or disorder.

2. The intervention must be assessed using at least one crime or disorder related outcome. This could include measures related to total crime or disorder, total amount of a particular crime or disorder type, or the timing of crime or disorder events.

3. The study must measure displacement or diffusion effects. Displacement and diffusion effects need not be the sole focus of the evaluation, but they must be explicitly measured as part of the evaluation (e.g. just noting that displacement did not appear to be an issue without supporting quantitative evidence will be insufficient). Typically, programs will measure crime or disorder outcomes in geographic areas that surround/border the target site for the police or governmental social control intervention and the comparison sites. But they may also examine other forms of displacement in the target areas (e.g. changes in method, types of crime, timing of offending)

4. We will include randomized experiments or quasi-experiments with a comparison group that did not receive the intervention or change in conditions, as well as quasi-experiments that adjust for secular trends (e.g. citywide crime rates), in our main analysis.

We recognize that many studies of displacement and diffusion are likely to simply look at pre-post changes in the target and surrounding areas (i.e. not make use of a comparison group). We think these studies are highly vulnerable to historical validity biases. For example, if crime goes down in a target area and in the area surrounding a police intervention, two possible conclusions can be drawn. One is that there is a target crime prevention benefit, and a diffusion of crime prevention benefits to the surrounding area. But absent a comparison condition or some adjustment for secular trends an equally reasonable conclusion is that there was an historical trend of lower crime in the areas overall. It is sometimes argued that a decrease in crime in the target area but an increase in the surrounding areas would provide a reasonable case for a “displacement” effect even without a comparison group or adjustment for secular trends. However, even here the “displacement” effect could simply represent a secular trend, while the target area effect represented the success of the intervention in offsetting a general secular trend. Because of our concern with drawing conclusions from such studies, we have made an initial decision to be cautious about including them in our main analysis. However, we plan to collect such studies in the search stage of our review and report narratively on their outcomes.

Exclusion criteria:

We will exclude qualitative studies or descriptive studies of displacement that do not include some measurable governmental social control “intervention.” This would
include, for example, reports that simply speculate how U.S. drug control policy in Colombia could be moving drug production to other countries but provide no quantitative data, or studies that examine a police neighborhood-level intervention quantitatively, but provide only brief qualitative speculation on displacement (e.g., “The intervention does not seem to have led to displacement to nearby areas”).

**Your method of synthesis:**

We will use meta-analytic techniques (Lipsey & Wilson, 2001) for combining effect sizes when the number of studies and their composition allow. Our initial assessment of the literature suggests that the number of eligible studies may be fairly small and heterogeneous, so meta-analysis may not be possible. We will also include a narrative review of all eligible studies.

**SOURCES OF SUPPORT**

**External funding:**
This project has received $40,000 in support from the National Policing Improvement Agency (NPIA) in the United Kingdom as part of a grant to George Mason University to fund Campbell systematic reviews relevant to policing.

**DECLARATIONS OF INTEREST**

David Weisburd has been a principal investigator on a number of studies that examined displacement and diffusion effects, although these have focused almost entirely on targeted police initiatives. While his work is generally associated with findings of little spatial displacement, he is committed to identifying what research can say about displacement and diffusion in general. For example, while his 2006 Jersey City Study identified little spatial displacement, the qualitative data pointed to evidence of the importance of ‘method displacement’ (i.e., offenders shifting from prostitution on the street to making “appointments” with clients in hotels) as a response to geographically focused police programs.

Cody Telep has not conducted any prior studies involving displacement and diffusion effects.

Doron Teichman has argued in previous work in law review articles that laws and other governmental social control interventions can lead to displacement at a larger scale (e.g., crime moving across state boundaries). He is also committed to identifying what the extant literature indicates about large scale displacement.

David McClure has not conducted any prior studies involving displacement and diffusion effects.

Charlotte Gill has not conducted any prior studies involving displacement and diffusion effects.

**REQUEST SUPPORT**

*Do you need support in any of these areas (methodology, statistics, systematic searches, field expertise, review manager etc?)*
The review team has both substantive knowledge of crime displacement and diffusion of benefits and extensive experience in conducting systematic reviews and meta-analyses.

We have budgeted for a statistical consultant to provide any assistance we need with calculating effect sizes in our study should we decide to use meta-analysis. We will also consult with an information specialist to assist with our searches.

**AUTHOR(S) REVIEW TEAM**

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ROLES AND RESPONSIBILITIES

Content and methodological expertise within the review team:

- Content: David Weisburd and Doron Teichman
- Systematic review methods: David Weisburd, Cody Telep, David McClure, and Charlotte Gill
- Statistical analysis: David Weisburd and Charlotte Gill
- Information retrieval: David McClure and Cody Telep with consultation from information specialist at the outset of the review

PRELIMINARY TIMEFRAME

The review process plans to adhere to the following schedule:

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<td>Revision and approval of protocol</td>
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<td>Search for published and unpublished studies</td>
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<td>Relevance assessments</td>
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<td>Coding of eligible studies</td>
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REFERENCES


