RESEARCH BRIEF

When Crime Moves Where Does It Go? Analyzing the Spatial Correlates of Robbery Incidents Displaced by a Place-based Policing Intervention

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Key Takeaways

- This study examined the place-based factors associated with robbery displacement caused by a foot-patrol intervention in Newark, NJ
- Relationships between displaced crime and environmental factors did not always appear in the expected direction
- Bus stops and non-local roads predicted increased levels of spatial displacement
- Residential mobility predicted increased levels of temporal displacement in the catchment area
- Corner stores predicted decreased levels of temporal displacement in the target area
- Police enforcement actions predicted increased levels on temporal displacement

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Research Summary:

There is a well-documented belief among some police practitioners that, despite their best efforts, crime will simply move to another area and/or time in response to targeted crime prevention interventions. While much empirical research reports that crime displacement is rare, a number of other studies indicate the absence of displacement is far from guaranteed. Based on prior reviews of the research literature, 26% of studies reported displacement effects of some kind, a sizable minority.

The current study contributes to the literature on crime displacement through a follow-up analysis of the Newark Police Department's (NPD's) Operation Impact, a foot-patrol intervention. The original evaluation of Operation Impact found the foot patrols generated a significant reduction of overall violence, but robbery suffered from both spatial and temporal displacement. The current analysis focuses on street segments comprising the Operation Impact target area, control area, and catchment zone (used to measure spatial displacement). On each street segment, crime generators and attractors (CGAs) (bus stops, corner stores, known gang territory, at-risk housing complexes, and non-local roads), household-level measures of disadvantage (poverty, residential mobility, and home ownership), and crime incidents were measured. Regression models then tested the level to which each CGA and household characteristic influenced the spatial and temporal displacement of robbery.

Three separate analyses were conducted. Model 1 focused on post-intervention robbery activity in the catchment area. Model 2 focused on both spatially and temporally displaced crime by testing the effect on crime in the catchment area occurring during non-operational hours of the intervention. Model 3 tested the effect on temporal displacement, focusing on crime in the target area during the non-operational hours.

Model 1 found that robbery increased 35% within catchment area street segments containing a bus stop. This contrasts with the effect of bus stops in the study area generally, with the presence of bus stops associated with a 15% decrease in robbery. Non-local roads in the catchment area were associated with a 25% increase in robbery levels. However, non-local roads were also associated with heighted robbery levels throughout the study area.

Model 2 found that robbery activity increased 24% during non-operational time periods within the catchment area street segments containing bus stops. Throughout the entire study area bus stops were again associated with decreased robbery levels. During non-operational periods, residential mobility was associated with an 8% robbery increase in catchment area street segments. Residential mobility did not have a significant effect on robbery in the study area as a whole.

Model 3 found that robbery activity decreased 28% in target area street segments containing a corner store during non-operational time periods. Corner stores were associated with 14% increase in robbery levels during non-operational hours throughout the entire study area. Every 1 standard deviation increase in NPD enforcement actions resulted in a 4% increase of robbery in target area street segments during non-operational time periods.

The findings support the notion that specific features of the environment can influence the occurrence of displacement, even if they do not influence the occurrence of crime more generally.

Research brief and full article available at bit.ly/displacement-impact