

# **JUST ENOUGH POLICE PRESENCE: REDUCING CRIME AND DISORDERLY BEHAVIOR BY OPTIMIZING PATROL TIME IN CRIME HOT SPOTS**

**Dr. Christopher S. Koper** (*George Mason University*)

## **SUMMARY**

This study examined the residual deterrence effects of police patrols in hot spots, or small clusters of high crime addresses. Residual deterrence in this study represents the continuing deterrent effect that police presence has on disorderly and criminal behavior after police depart from a location. This study was based on three concepts: (1) that controlling disorderly behavior can reduce fear and more serious crime; (2) that police can reduce disorder and crime by increasing their presence at hot spots where such behavior is concentrated; and (3) that the presence of an officer in a hot spot has the effect of deterring disorderly and criminal behavior even after police depart (for example, by driving troublesome people away from the area). Extrapolating from theory and research on police crackdowns, the study examined whether stronger dosages (i.e., longer instances) of police presence create stronger residual effects on crime and disorder and, if so, whether there is an optimal length for police presences at hot spots (i.e., a point of diminishing returns).

## **DATA AND METHODS**

The study employed observational data collected during the Minneapolis hot spots experiment. Observers visited hot spots at randomly selected times to record police presence, crime, and disorder. The analysis is based on approximately 17,000 observed instances of police presence (blocks of time when at least one officer was present at the hot spot) and 4,000 instances of observed disorderly or criminal behavior. Survival analysis methods were used to determine whether patrol presences of greater duration produced a longer “survival” time—i.e., a longer time without observed criminal or disorderly behavior after the police departed. The analysis focused on drive-bys and stops of up to 20 minutes. The survival time was measured using a follow up period of up to 30 minutes following each police presence.

## **FINDINGS**

For police stops, each additional minute of police presence increased survival time by 23%. The ideal dosage for police presence was 10-15 minutes; a threshold dosage of 10 minutes was necessary to generate significantly more residual deterrence than was generated by driving through a hot spot. The likelihood of criminal or disorderly behavior occurring within 30 minutes after a police drive-by was 16%; for stops of 10-15 minutes, this was reduced to 4%. Residual deterrence effects were greatest for police presences of 14-15 minutes; longer presences had diminishing effects.

## **IMPLICATIONS FOR POLICY MAKERS**

Police can maximize crime and disorder reduction at hot spots by making proactive, 10-15 minute stops at these locations on a random, intermittent basis, thus maximizing deterrence and minimizing the amount of unnecessary time spent at hot spots. The study did not address the types of activities conducted by officers at hot spots.

## **Reference:**

Koper, C. (1995). Just enough police presence: Reducing crime and disorderly behavior by optimizing patrol time in crime hotspots. *Justice Quarterly*, 12(4): 649-672.