A Randomized Trial Comparing Problem Solving and Saturation Patrol at Hot Spots of Violence

Presented by Christopher Koper
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Project Team:
Bruce Taylor, Christopher Koper, Daniel Woods (PERF)
Jeffrey Egge (Minneapolis PD and PERF)

Matthew White and Jamie Roush
(Jacksonville, FL Sheriff’s Office)

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Crime Concentration and “Hot Spots”

- Half of crime occurs at 5% or less of street blocks and addresses

(e.g., Sherman et al., 1989; Weisburd et al., 2004)
Hot Spot Places

- Offenders, targets, absence of guardianship converge

- Places with facilities and features putting them at higher risk

- Examples: bars, convenience stores, parks, bus depots, apartment buildings, adult businesses, etc.
Advantages to Focusing on Hot Spots

- Concentrate on places where crime is most likely
- Generate more visible presence and greater perceptual effects
- Easier to change conditions that contribute to crime
  - Situational crime prevention
  - Working with place managers or “guardians”
Braga (2007) review of 9 rigorous studies focused on hot spot “places”

- Strategies included directed patrol, crackdowns, problem-solving
- Crime reductions in 7 of 9 studies
- No obvious signs of displacement
  - Some diffusion of benefits to nearby areas
What Strategies are Most Effective for Hot Spots?
PERF–JSO Experiment

- Randomized hot spots experiment with Jacksonville, FL Sheriff’s Office (JSO)

- Testing the effectiveness of problem-solving v. saturation patrol v. normal operation at 83 hot spots of violence
Study Location: Jacksonville, FL

- Consolidated city–county government
- Population = 851,000, area = 841 sq. mi.
- 123 murders in 2007
  - Ranked 13th among U.S. cities
- Partnership with PERF launched in 2007 to address violence
  - Funded by U.S. Bureau of Justice Assistance
Hot Spot Identification

- 83 hot spots identified based on non-domestic violence, 2006–May 2008
  - Average size of 0.02 square miles
  - Average of 26 violent street crimes per year (serious and minor)
  - Variety of locations: problem intersections and blocks, apartments, stores, hotels, bars and entertainment
View of Selected Hot Spots
Experimental Conditions
(90-day trial: Jan. 11–Apr. 11, 2009)

- 22 Problem-oriented policing (POP) hot spots
- 21 Saturation patrol hot spots
- 40 Control hot spots (normal operations)
Problem-Oriented Policing Intervention

- Team of officers and crime analyst assigned to each spot
  - 60 officers and 4 crime analysts
  - Trained in POP and intelligence-led policing

- Address underlying factors; leverage community partners; employ response; assess results
  - Documented projects for JSO command staff

- Officer feedback very positive
Problem-Solving Activities

- Situational cp: 40%
- Business: 14%
- Community organizing: 15%
- Code / nuisance: 6%
- Investigation / enforce: 7%
- Aesthetic: 9%
- Rental: 6%
- Social services: 3%
Saturation Patrol Intervention

- On duty and overtime officers

- Deployed at high-risk times
  - Pairs of officers working 1–3 hot spots
  - Officer-hours averaged 53 per week (per spot)

- Patrol, door to door contacts, investigation (traffic stops, pedestrian checks, etc.)
  - 191% increase in self-initiated activities
  - 85% increase in field interviews
Evaluation Design

- Examine impacts during 90–day intervention period and 90–day post–intervention period

- Outcomes measures:
  - Serious violent crime
  - Serious non–domestic (street) violence
  - Serious property crime

- Data sources:
  - Calls for service
  - Incident reports
Hypotheses

- Saturation may have stronger initial effects that fade over time

- POP effects may occur more slowly but persist over time
Non-Domestic Violence Declined in Saturation Spots During the 90-Day Intervention Period

Regression-adjusted estimates of changes relative to control spots
Non-Domestic Violence Declined in POP Spots During 90-Day Post-Intervention Period

Regression-adjusted estimates of changes relative to control spots
Displacement to Areas Near POP Spots—Or Reporting Effects?

90-day post-intervention period. Regression-adjusted estimates of changes relative to control spots.
Examining Effects from Types and Dosages of Activities (In Progress)

- Preliminary results:
  - Code enforcement / nuisance abatement reduced violence by up to 68%
  - Investigation / patrol enforcement reduced violence by up to 76%
  - Situational crime prevention reduced violence by up to 19%
  - More days and hours per week of police presence reduced violence
Summary

- Saturation may have reduced violence 4% to 20% but effects decayed quickly
  - Ongoing dosage analysis

- Problem-oriented policing reduced violence up to 33%
  - Larger and more lasting effects
    - More crimes prevented per officer-hour based on incident reports
  - Nuisance abatement, targeted investigation, and situational crime prevention most effective
  - Some displacement or reporting effects
Implications

- Further support for effectiveness of police efforts focused on hot spots
- Reorient patrol around hot spots (problem blocks, intersections, places)
- Use problem-solving at hot spots for larger and longer-term crime reductions
- Monitor for displacement or reporting effects in nearby areas
Published results:

A randomized controlled trial of different policing strategies at hot spots of violent crime.

By B. Taylor, C. Koper, and D. Woods

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