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Police Vehicle Lights

Reducing crime through increased police visibility

Agency: Vallejo (CA) Police Department

Trial Duration: 11/23/18–12/28/18

Pracademic*: Lieutenant Jason Potts

Context
Some types of crime increase over the holiday season but one promising method of crime deterrence is simply to increase police presence. To determine whether increased patrol visibility reduces crime, the Vallejo Police Department tested whether keeping Code-2 lights on would reduce crime during the holiday season at a specified shopping center.

Key Finding
No auto thefts occurred on days when cruiser lights were kept on compared to four thefts on days when the cruiser lights were off.

*BetaGov trains agency personnel to become research-savvy "Pracademics" who lead trials.

Background

"Code-2" police lights refer to steady flashing blue and red lights on a patrol car that serve to increase awareness and perception of police presence. Increasing the number of law-enforcement personnel may generally help to reduce crime, but the major limitation of this strategy is the cost of resources. Manpower and equipment are costly and must be justified. However, it may be that the *appearance* of increased police presence is a more cost-effective method of reducing and deterring crime than increasing patrols.

Results from increased police presence to deter crime have been mixed. For example, random policing is not seen as successful, whereas increasing patrols in high-crime areas (hotspot policing) has shown reductions in crime.

Trial Design

The Vallejo PD used a randomized controlled trial design to investigate the effectiveness of keeping Code-2 police-vehicle lights on for reducing crime in a specified shopping area over the 34-day holiday season. Randomization to lights on (intervention) and off (control) accounted for day-of-week and weather conditions.

Two police cars were assigned to a high-density shopping center each day for each shift. Officers were told of condition assignment prior to their shifts and were texted reminders during the start of their shifts. Code-2 lights remained on or off during the entire shift except when responding to alarms or non-routine calls for service with a possible threat to officer safety. Frequent spot checks confirmed officers were adhering to the protocol. Outcomes included auto theft, auto burglary, and arrests as well as non-crimes such as DMV-registration checks and citizen contacts.

Results

The table shows the number of events by condition and the statistical results. There were significantly fewer auto thefts in the lights-on condition. No other outcome differences were statistically significant. The low numbers of crimes and other events limited analyses and interpretation of findings.

Outcomes

	Lights On (n=17)	Lights Off (n=17)	P value
Total auto thefts	0	4	**0.03**
Total auto burglaries	6	8	0.4
Daily average DMV checks	12.5	7.4	0.12
Daily average arrests	0.8	0.4	0.2
Daily average citizen contacts	3.9	3.7	0.8

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