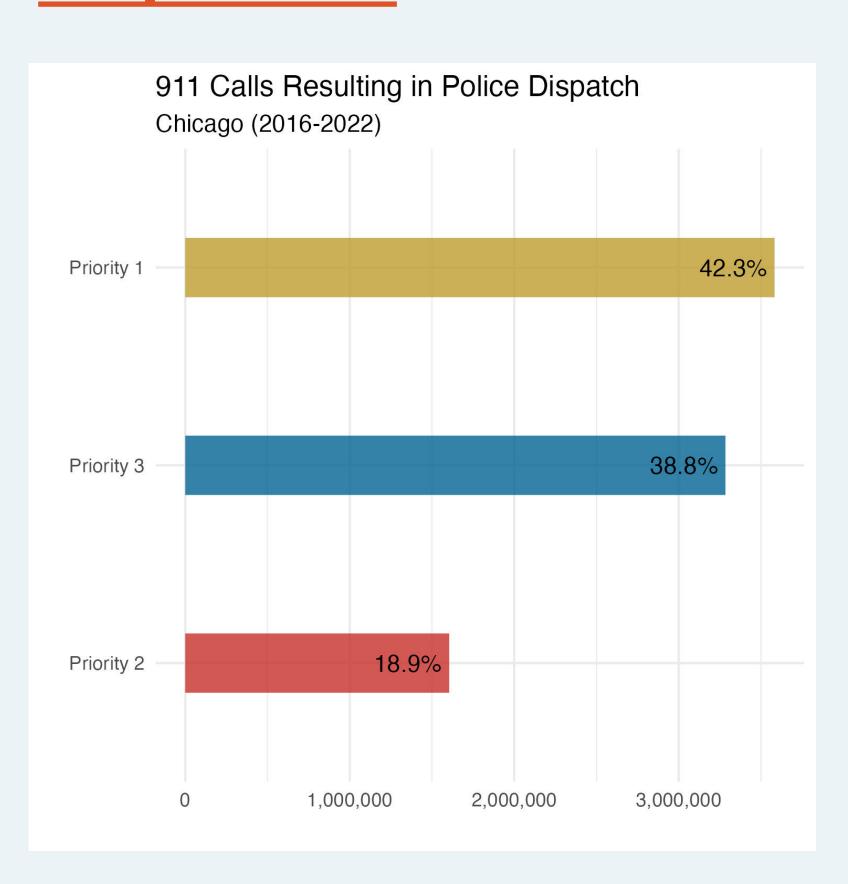
ShotSpotter technology is in 150+ cities world-wide to mitigate gun violence. We find unintended consequences.

Setting: Chicago



We use a comprehensive data set of Priority 1 911 call dispatches over 2016-2022. Merge with shifts, arrests, victimizations.

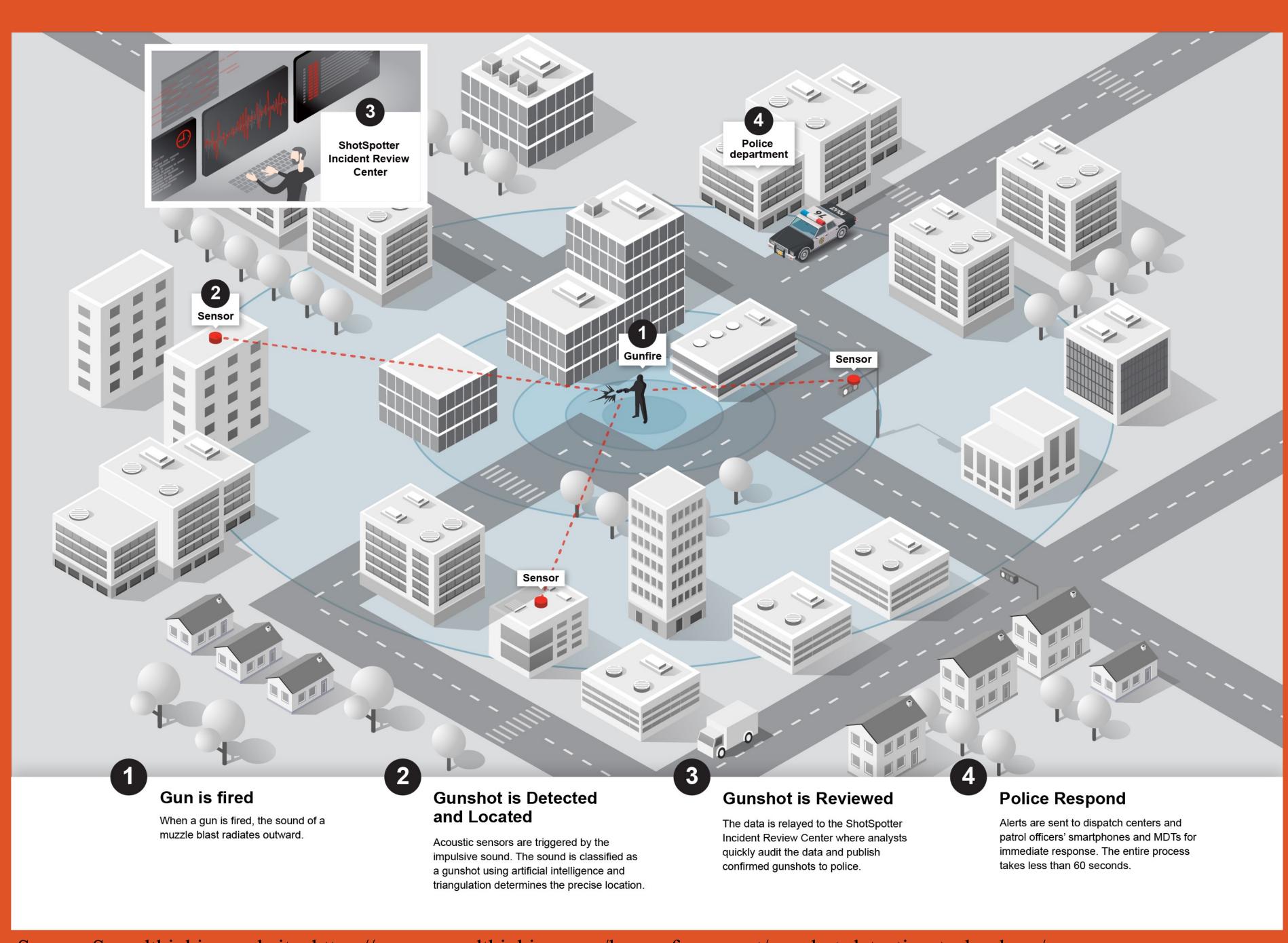
Data: Priority 1 911 Call Dispatches





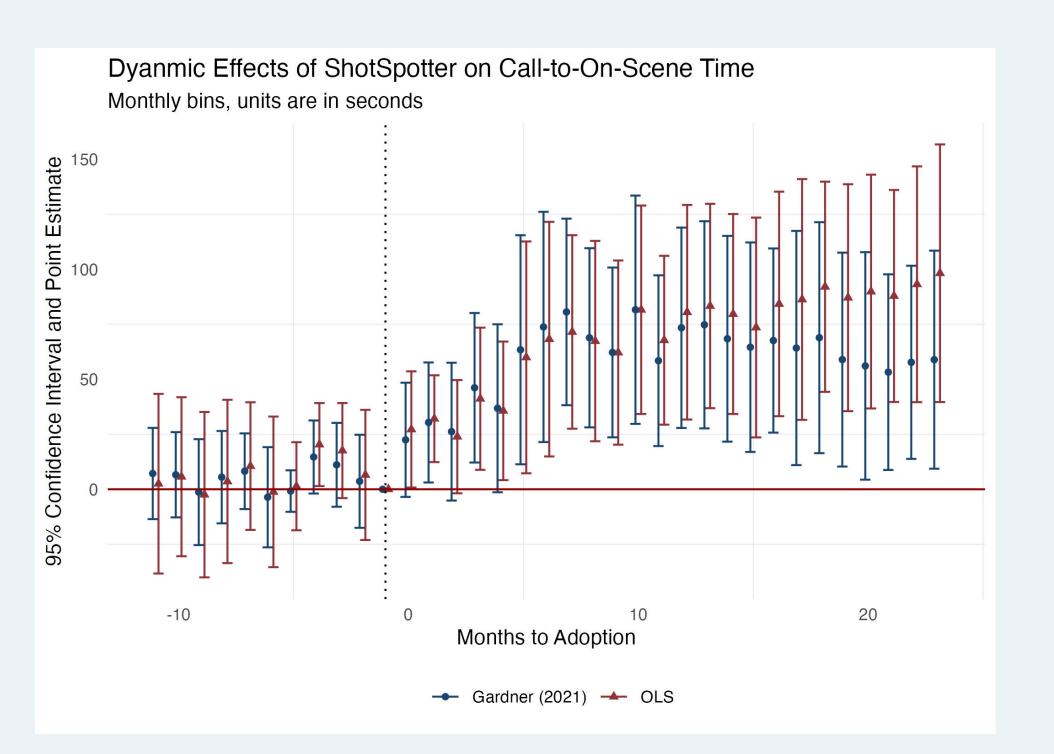
The Effect of ShotSpotter Technology on Police Response Times

Michael Topper and Toshio Ferrazares



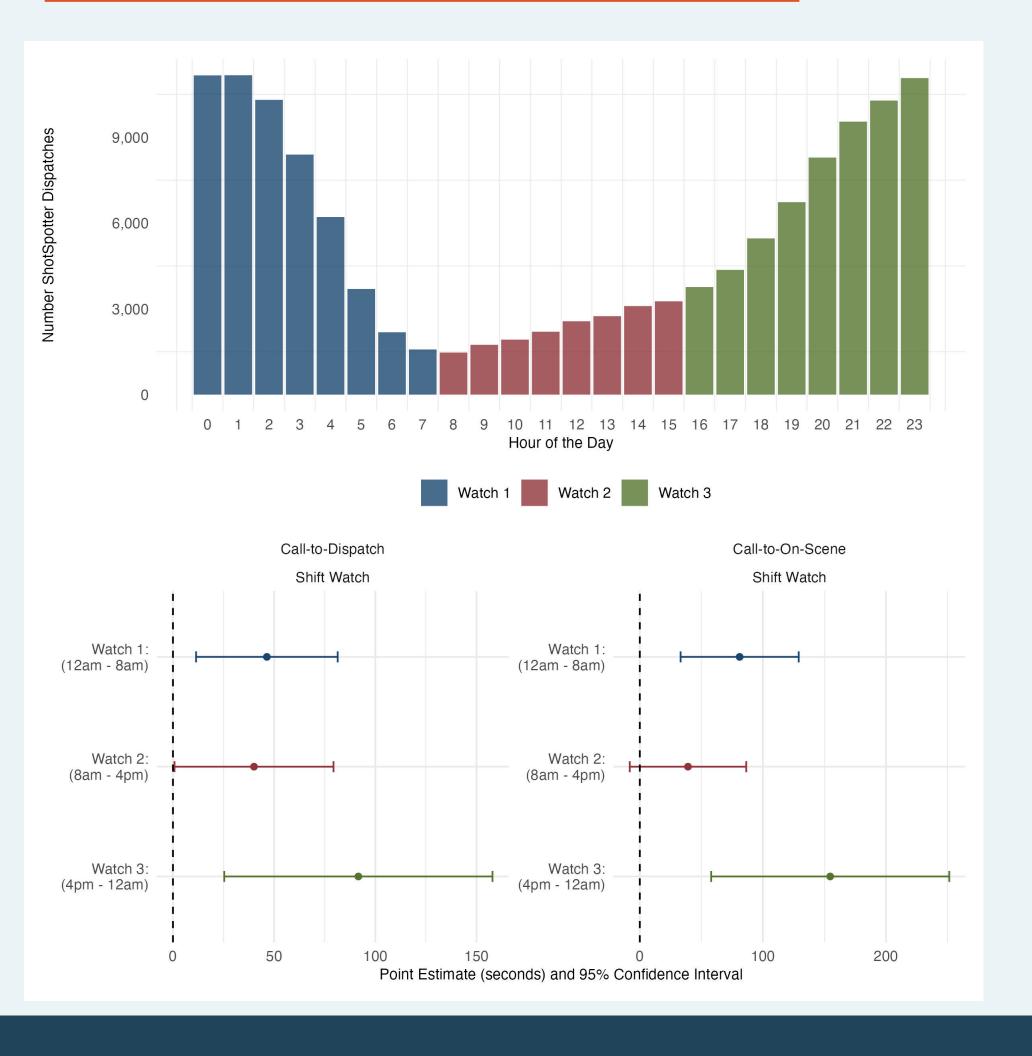
Dispatchers take +1 min to find available officer, officers take +2 to arrive onscene. Results in lower probability of arrest.

Method: Staggered D-in-D



ShotSpotter incapacitates officers from attending to 911 calls by constraining officer time. Driven by times with fewer officers.

More ShotSpotter alerts results in larger effects



Source: Soundthinking website https://www.soundthinking.com/law-enforcement/gunshot-detection-technology/