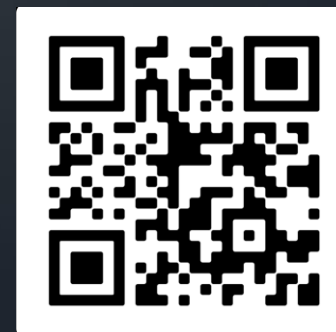




# Cost- Benefit Analysis of **SoundThinking** (ShotSpotter)

IMPROVING THE POLICE RESPONSE TO GUNFIRE



# Background Information



- ▶ Center for Crime Science & Violence Prevention (Southern Illinois University)
- ▶ Dennis Mares, Research Partner for Strategies in Policing Innovation (SPI) Grant
- ▶ Independent study
- ▶ No Cost



# Implementation Overview



- ▶ Implementation in August 2021
- ▶ 3 sq mile radius coverage area (based on violent crime data)
- ▶ Data collected for evaluation from 2020-2022
- ▶ WSPD responded to over 1,500 unique gunfire calls/alerts in SST area – **more than double the # of responses prior to implementation**



# Key Findings



Improved response times to SST alerts as compared to calls from residents (-5 min.)

ShotSpotter calls = greater investigative time & increased amount of evidence recovered

Fewer than 1 out of 4 ShotSpotter calls had a corresponding 911 call for service (80%)



# Key Findings



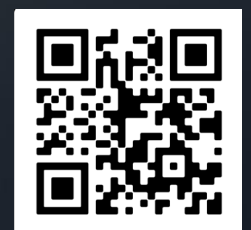
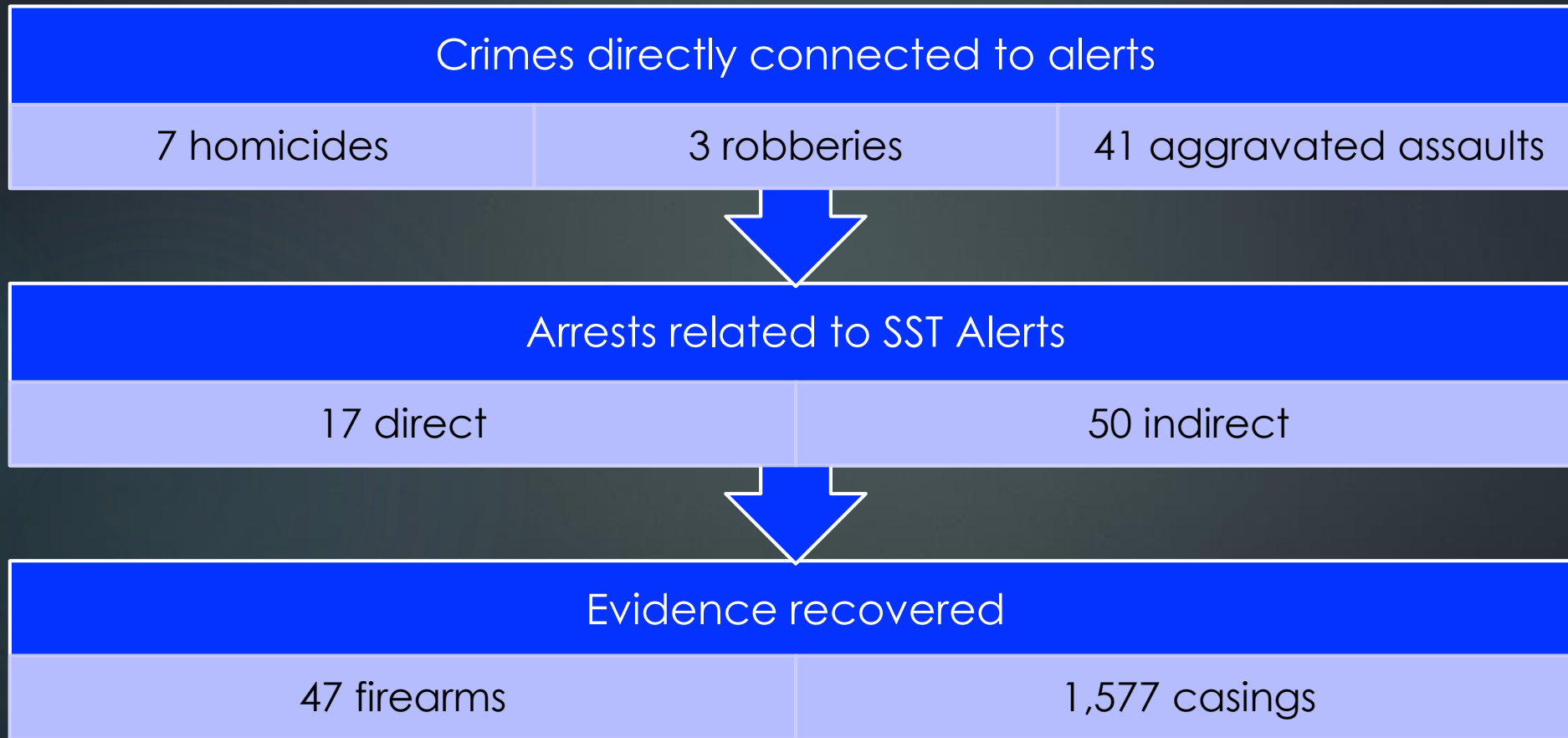
Aggravated assaults are down 26% in SST area post implementation

Cost benefits analysis indicates cost of gun violence in W-S reduced by approx. \$5-\$8 million in SST area

SST estimated to provide a return of \$15-\$25 for each dollar spent on the technology



# Improved Response to Discharging Firearms



# Limitations of the study



Limited data with only a bit more than a year of post-implementation data.

The number of homicides/robberies is too small to provide a confident assessment of impacts.

The comparison area is not as similar as one would like and has slightly lower crime levels.



# Conclusions



Complete secondary study in 2024

Use as tool in determining next steps after CGIC grant ends in 2024

Public remains an important partner in reporting crime, but they can't do it all. Gunshot detection systems provide a way to more consistently respond to outdoor shooting events.

SST enhances police response by quickly and precisely locating gunfire and improving investigative recoveries.

