



POLICE DEPARTMENT

Authorization to Enter into a Purchase Order Contract with ShotSpotter

Bill Grisafe

Lieutenant

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BACKGROUND

Police Department

- Since January of 2019, the City has received 300+ “Shots Fired” CFS and almost 400 incidents of gun related crimes:
 - > Assaults using a firearm(s)
 - > Robberies utilizing a firearm(s)
 - > Illegal possession of a firearm(s)
 - > Felons in possession of a firearm(s)
 - > Possession of Ammunition
 - > Possession of silencer
- Gun violence has resulted in close to 40 members of the Pasadena community either killed or injured (January 2019 – June 2021)
- The Pasadena Police Department has seized almost 700 firearms





BACKGROUND - Cont'd

Police Department

- ShotSpotter system provide gunshot detection, alert, and analysis services which enhances the Police Department's response & investigation
- Deterrent for would-be shooters while providing precise location for a rapid response by first responders
- Systems core capabilities
 - > Detect – quickly locates gunfire incidents enabling a fast & precise response
 - > Protect – comprehensive information provides critical response information
 - > Connect – Rapid response by officers to communities impacted by gun violence
- Improves the reporting of shooting incidents & reduces the number of un-reported shootings
 - > Recognition – “Was that gunfire?”
 - > Retaliation – Fearful to call
 - > Redundancy – “Someone probably already called 9-1-1”
 - > Resignation – Diminished quality of life



BACKGROUND - Cont'd

Police Department

- Provided ShotSpotter with 2 ½ years of gun related crime data
- Analysis of data determined location of sensors
- Proposed 3 square mile area of Pasadena community most impacted

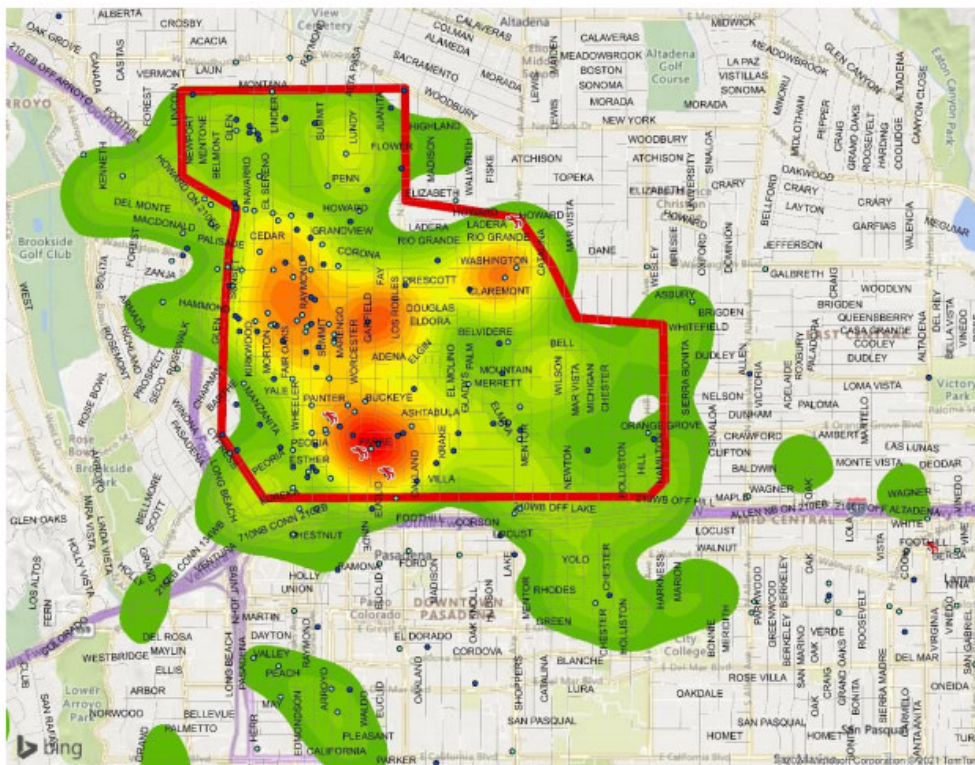


Figure 1: Proposed ShotSpotter Coverage Area = 3 square miles

Icon	Crime Type Definition	Quantity	Percentage of Totals
	Gun-related Homicides	4	66.7%
	Gun-related Aggravated Assaults	90	73.2%
	Weapons Law Violations	67	45.3%
Heat Map	Gun-related Calls for Shots Fired	184	55.4%

PASADENA



BACKGROUND - Cont'd

Police Department

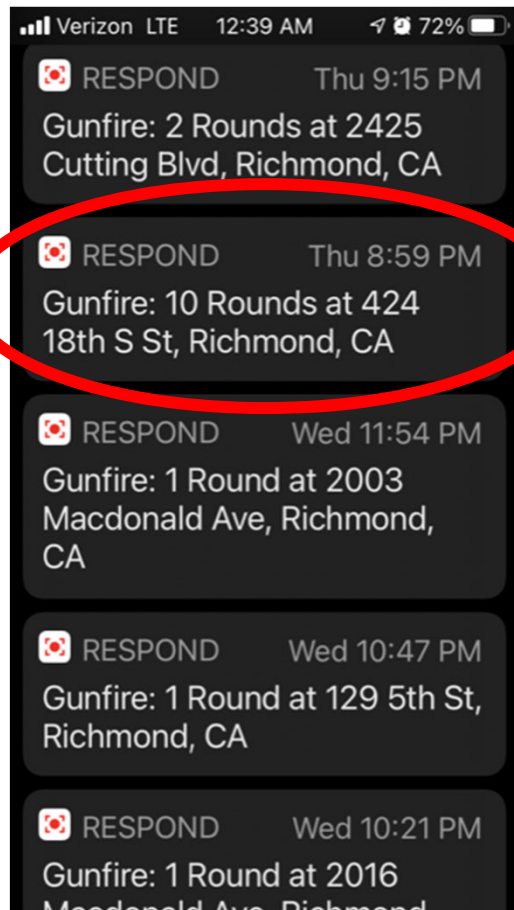
- ShotSpotter technicians install the various sensor's throughout the proposed area
- The system listens for loud, impulsive sounds (i.e. gunshots) which generate an incident
- Sound triangulation determines shot location within an 82 ft. radius
- 2 Phase review
 - > Artificial Intelligence software reviews and filters out any non-gunfire incidents
 - > ShotSpotter's Incident Review Center for verification by acoustic experts
- All confirmed gunfire incident are sent out to users via app within 60 seconds or less



BACKGROUND - Cont'd

Police Department

How ShotSpotter System Works



Data Provided

1. Precise location
2. Date/Time Stamp
3. Multiple shooters
4. Automatic / high capacity
5. Short audio clip of shots

PASADENA



BENEFITS

Police Department

- **Accurate location = faster response by first responders**
 - > Life saving measures
 - > Preserve evidence
 - > Locate witnesses
 - > Locate/apprehend shooting suspect(s)
- **Better information for officers**
 - > Identifies multiple shooters and number of rounds
 - > Types of weapons – high capacity or fully automatic weapons
 - > Information provides critical information for a safer response
- **Sound evidence can assist in criminal proceedings – “Where & When”**
 - > Only a piece of the investigation – arrests not made solely on ShotSpotter evidence
 - > Sound evidence works in concert with other forensic evidence / detective investigation



REVIEW OF SYSTEM

Police Department

- Pasadena PD would be the first city in Los Angeles County
- City of Bakersfield
 - > Beginning in 2018 - Response times to shooting alerts have improved by more than 9 minutes with detection system
 - > Activations led to the seizure of 37 firearms and the arrest of 50 different individuals
 - > Renewed contract in 2020 and includes an expansion
- City of Fresno
 - > Reports a 96% accuracy rate
 - > Expanded coverage in 2020
- City of San Pablo
 - > Reports a 70% decrease incidents of gunfire
 - > Recently expanded contract to cover 100% of city
- City of East Palo Alto recently renewed contract



REVIEW OF SYSTEM – Cont'd

Police Department

- **Oakland's Privacy Advisory Commission** (March 2021 Report)
 - > Did not find any violations of the Surveillance Use Policy
 - > Community members requesting greater ShotSpotter coverage
- **New York University's Policing Project study**
 - > Conducted a personal privacy assessment of system
 - > Determined the risk of voice surveillance was extremely low
 - > Privacy-enhancing recommendations were provided and adopted by ShotSpotter
- **MacArthur Justice Center Study**
 - > Public interest law firm
 - > Advocate for human rights and social justice through litigation



REVIEW OF SYSTEM – Cont'd

Police Department

- **Edgeworth Analytics Independent Audit**
 - > Concludes MJC study is misleading because of inappropriate data source
 - > Data was obtained from Office of Emergency and Communications (OEMC) rather than Chicago PD
 - > Audit determined ShotSpotter system has a 97% accuracy rate

- **Chicago Office of Inspector General**
 - > Report based on same information as MJC report
 - > Concludes ShotSpotter alerts rarely produce evidence of gun-related crimes
 - > Never question the accuracy of ShotSpotter system as MJC study concluded
 - > Determine the value is ultimately a question of relative costs vs benefits
 - > Admits Chicago PD & the City need to make decision due to a lack of available data
 - > OIG is unable to reach a well informed conclusion because of difficulties in matching ShotSpotter events with police records
 - > Chicago renewed contract with ShotSpotter



FISCAL IMPACT

Police Department

- Amend the Fiscal Year (FY) 2022 Operating Budget by appropriating \$220,000 from unappropriated fund balance in the Supplemental Law Enforcement Fund 201 (20133001-850400)
- The cost of the remaining two years will be programmed into the Police Department's annual operating budget in either the Supplemental Law enforcement Fund 201 or the Public safety Augmentation Fund 202



RECOMMENDATION

Police Department

- Proposed Action is Exempt from CEQA; and
- Amend the Fiscal Year (FY) 2022 Operating Budget by appropriating \$220,000 from unappropriated fund balance in the Supplemental Law Enforcement Fund 201; and
- Authorize a purchase order contract with ShotSpotter for the purchase of a subscription to the ShotSpotter system not to exceed \$640,000 over a three year period. Competitive bidding is not required pursuant to City Charter Section 1002(f), contract for professional and unique services; and
- Grant the proposed contract an exemption from the Competitive Selection process pursuant to Pasadena Municipal Code Section 4.08.049(B) contracts for which the City's best interest are served.