"*At this Annual Report review stage, the City Council must make a determination that the benefits to the community of the surveillance technology outweigh the costs; that the proposal will safeguard civil liberties and civil rights; and that no alternative with a lesser economic cost or impact on civil rights or civil liberties would be as effective.*

Based on the following factors, the PAC finds that the benefits of using Shotspotter technology ***do not*** *outweigh the costs to civil liberties and Oakland taxpayers, and that there are more effective alternatives to reduce gun violence with a lesser economic cost or impact on civil rights and civil liberties:*

- *Like every other jurisdiction in the country which has been researched and uses the technology, ShotSpotter has* ***failed to reduce gun violence*** *in Oakland.*
- *Per OPD's last four annual reports, the false positive or "wild goose chase" rate has been 74% ('20), 83% ('21), 76% ('22), 78% ('23).*[1] *Statistical analysis has shown that* ***response times actually increase*** *in Shotspotter jurisdictions.*[2] *With a national average 86% false alert rate, similar to Oakland's,* ***ShotSpotter takes police away from more effective police work due to daily wild goose chases****.*[3]
- *ShotSpotter use* ***fails*** *to lead to a sufficient number of arrests, let alone convictions,* ***to have a deterrent effect****. According to OPD, the number of arrests in Oakland have been 8 ('20), 8 ('21), 7 ('22), and 4 ('23).*[4]
- *Statistical analysis in other jurisdictions has shown that the recovery of guns and shell casings at Shotspotter alert sites have* ***no proven positive correlation on the rate of gun violence, nor led to increased arrests and/or convictions***[5]*. Based on DOJ data, it was reported that for year 2022, for all Part 1 (violent, major property crimes) categories OPD's average clearance rate of these 7 - homicide, rape, robbery, aggravated assault, burglary, vehicle theft, larceny/theft, OPD's average clearance rate was 1.5%, with a 6.5% clearance rate for violent crime.*[6] *This supports that evidence collected at the scene is not leading to prosecution of violent crimes.*

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[1] OPD Annual Reports for Years 2020-2023.
[2] https://michaeltopper.netlify.app/research/jmp_michael_topper.pdf
[3] https://chicago.suntimes.com/crime/2021/5/3/22416397/chicago-gunshot-detection-system-dead-end-deployments-macarthur-justice-center
[4] OPD Annual Reports for Years 2020-2023.
[5] *GDT seems to positively impact a number of procedural aspects of police response to gun fire. GDT further demonstrates a positive influence on evidence collection. Unfortunately, these procedural benefits did not translate to any meaningful improvements to crime control outcomes.* https://www.ojp.gov/pdffiles1/nij/grants/308357.pdf
[6] https://www.cjcj.org/reports-publications/report/california-law-enforcement-agencies-are-spending-more-but-solving-fewer-crimes

- *The increase in number of alerts due to use of ShotSpotter itself **dramatically increases the number of incidents responded to, increasing officer workload with no commensurate increase in public safety**[7].*
- *ShotSpotter leads to mission creep, as **the overwhelming amount of arrests and police reports filed are due to non-gun crimes** (e.g. probation violations, public drunkenness, disorderly conduct), **increasing the negative disparate impact effect of over-policing on marginalized communities**, which in Oakland primarily means historically Black neighborhoods, **while doing little to reduce gun violence.** One of the duties of the PAC is to ensure that adequate policy guardrails are in place to mitigate any disparate impacts such as racial profiling. The history of American policing, and Oakland specifically, demonstrates that we use surveillance technology and/or overpolice certain communities more than others. We find no such comfort in the ShotSpotter policy to guard against such an impact, as the nature of the technology itself, which increases interactions with armed officers, and its location in minority neighborhoods, moots policy guardrails.*
- *On March 4, 2014, former OPD Chief Sean Whent stated to the City Council that renewing the ShotSpotter contract was "**not a priority.**"[8]*
- *On March 4, 2024, the Durham City Council voted not to renew its ShotSpotter contract.[9]*
- *On February 15, 2024, the City of Chicago, after extensive research by its OIG and third-party academic researchers, announced it will let its ShotSpotter contract expire in September due to lack of efficacy.[10]*
- *The PAC further finds that there are more effective alternatives with a lesser economic cost or impact on civil rights or civil liberties, including the recommended reallocation of resources below.*
- *Despite agreeing to abide by a November 2023 settlement agreement with Secure Justice, which includes among other things, adhering to the surveillance technology ordinance, the corresponding ShotSpotter use policy, and the settlement agreement itself, OPD admits in this Annual Report that it has again illegally provided direct login access to a third party in conflict with the approved use policy, demonstrating disregard for the law and civilian oversight, and further increasing harm to Oakland taxpayers that will again be forced to pay the attorneys fees and court costs to Secure Justice as it moves to enforce the settlement agreement and seeks sanctions against OPD and OCA.*

ShotSpotter Motion (Hofer, Leavitt, Katz, Suleiman)

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[7] https://link.springer.com/article/10.1007/s11292-023-09594-6
Anecdotally, it appears more likely than not that first aid provided due to ShotSpotter alerts is rarely life saving, and more of the skinned knees and bruised body nature.
[8] https://www.sfgate.com/crime/article/oakland-cops-aim-to-scrap-gunfire-detecting-5316060.php
[9] https://abc11.com/durham-shotspotter-crime-gun-shots-fired/14491996/
[10] https://www.npr.org/2024/02/15/1231394334/shotspotter-gunfire-detection-chicago-mayor-dropping

The PAC recommends that the City Council <u>not renew or extend</u> the contract with Shotspotter (now Sound Thinking) which expires June 30, 2024, and that the approximately $1.8 million+ in future savings (if a similar 2 year contract were to be renewed) be directed towards the crime lab which is greatly understaffed and lacking in capacity to process our multi-year backlog of evidence. Improved processing of evidence will increase our low clearance rates, and is a far more effective and proven alternative to improving public safety as we solve violent crimes, which should be our priority in Oakland. Oakland cannot rightfully claim to care about victims of violent crime when it takes years to process evidence, let alone lead to an arrest and/or conviction, preventing the victims themselves and their loved ones from getting justice and closure. This has been a widely known problem since at least the 2012 Alameda County Grand Jury report. The above findings are to be included with this motion forwarded to the City Council.

(this part is just research, and maybe some content for my public comments. Not part of motion)

ANALYSIS

Our present ShotSpotter contract of $1.8M expires on June 30, 2024. Oakland has used Shotspotter since at least 2008, and in that time period, ShotSpotter has failed to positively impact the rate of gun violence in our city. Gunshot Detection Technology is an easy technology to root for, but just because a concept may be exciting and non-controversial (in theory anyway) on its face, if it is the wrong tool for the job, we need to have the courage to say so. Although the PAC's primary responsibility is to ensure that adequate guardrails are in place to protect the civil liberties and privacy interests of Oaklanders, the cost-benefit analysis at this stage must involve consideration of whether our scarce taxpayer dollars are being spent wisely, especially as we face yet another historic projected budget deficit.

Benefits are intentionally not defined in our ordinance. The PAC has previously relied upon potential benefits to recommend continued use such as the faster rendering of first aid when we respond to a gunshot alert. However, there is no evidence before the PAC that any of the reported numbers in the report are true - they could be, but they have no support before us. OPD has historically and consistently stated to us since 2016 that they are "working on it" - when we remind them of their obligations under the ordinance to track use of surveillance technology. We do acknowledge that the vendor for this particular tech is able to supply some of the data in the report, however that reported data is likewise not independently verified, and ShotSpotter is well known for being aggressively opposed to an independent audit of their data and algorithm. They regularly challenge public record requests to their clients, and they often refuse to comply with subpoenas asking prosecutors to dismiss charges rather than be forced to open their system to inspection.

However, the last two years have shown a remarkable increase in research into ShotSpotter's claims of efficacy, as several police departments have either voluntarily opened their own records, or like Chicago, had an inspector general with sufficient authority to examine whether ShotSpotter is an effective tool.

Today, based upon statistical analysis, we can state the following about ShotSpotter:

LACKS EFFICACY

1. ShotSpotter has never been shown to reduce gun violence in a statistically significant manner in a city where they maintain a presence.
2. On average across the country, and in Oakland per OPD's own numbers, 86% of "alerts" are wild goose chases, where no actionable intel or evidence is obtained. These wild goose chases take place away from other valuable police work, an especially heightened concern in Oakland where we do not have sufficient staff to police a city of this size. We doubt any of you would continue to pay millions of dollars for a product that provides no value 86% of the time.

From MacArthur Justice Center at Northwestern University of Law (Chicago PD ShotSpotter):

> *An analysis of the city's gunshot detection system released Monday found that nearly 86% of police deployments to alerts of gunfire prompted no formal reports of any crime.*
>
> *The research, conducted by the MacArthur Justice Center at the Northwestern University School of Law, shows there were more that 40,000 "dead-end deployments" to gunshot alerts recorded between July 2019 and mid-April — an average of 61 each day.*
>
> *Just 10% of the alerts over that period sent officers on calls that likely involved guns, the researchers found after analyzing records kept by the city's Office of Emergency Management and Communications.*
>
> https://chicago.suntimes.com/crime/2021/5/3/22416397/chicago-gunshot-detection-system-dead-end-deployments-macarthur-justice-center

3. Shots fired calls for service in the GDT area were 15% more likely to be unfounded.
4. For fatal shootings, GDT treatment was not associated with increased likelihood of ballistic evidence collection or case clearance.
5. For non-fatal shootings, GDT treatment was not associated with increased likelihood of ballistic evidence collection or case clearance.
6. GDT may not add value to investigations and may increase patrol workload.

(The Effect of Gunshot Detection Technology on Evidence Collection and Case Clearance in Kansas City, Missouri. Journal of Experimental Criminology 2023.)

MAY <u>INCREASE</u> RATE OF VIOLENCE

7. Use of GDT may escalate violent interactions with responding police that believe an armed and dangerous shooter is present. GDT sensors in US cities, and here in Oakland, are placed primarily in lower income neighborhoods that are historically Black neighborhoods. Soundthinking's CEO likes to say that these communities are "underserved and overpoliced" and yet his product seems to defend that status quo by unnecessarily bringing armed officers into more frequent contact, while not reducing gun violence in that same community.

Results indicate in Chicago:

• 15.6 more fatal shootings occurred in GDT target areas over the duration of the intervention period, on average.

• 77.5 more non-fatal shootings occurred in GDT target areas over the duration of the intervention period, on average.

• 115 more gun assaults and robberies occurred in GDT target areas over the duration of the intervention period, on average.

(*National Criminal Justice Reference Service - Office of Justice Programs, The Impact of Gunshot Detection Technology on Gun Violence in Kansas City and Chicago: A Multi-Pronged Evaluation, January 2024*)

RESPONSE TIMES <u>INCREASE</u> IN GDT COVERED AREAS

ShotSpotter offers a solution wherein police officers are dispatched to additional instances of potential gunfire. In Chicago, the setting of this paper, this results in approximately 70 ShotSpotter-related dispatches each day, equating to 75 total hours of officer time. This represents a two-fold increase in the number of gunfire reports that require officers to engage in rapid response.

In Chicago, this amounts to approximately 70 instances per-day whereby officers are immediately dispatched to potential instances of gunfire. However, this allocation diverts police resources away from confirmed reports of 911 emergencies, creating delays in rapid response—a critical component of policing with health and safety implications. In this paper, we utilize variation in timing from ShotSpotter rollouts across Chicago police districts from 2016-2022 to estimate the causal effects of ShotSpotter on 911 emergency response times that are designated as Priority 1 (immediate dispatch). Using comprehensive 911 dispatch data from the Chicago Police Department, we find that ShotSpotter implementation **causes police officers to be dispatched one-minute slower (23% increase) and arrive on-scene nearly two-minutes later (13% increase).** Moreover, these effects are driven by periods with fewer police on-duty and times of day with larger numbers of ShotSpotter-related dispatches. **Consequently, when responding to emergency calls, police officers' success rate in**

arresting perpetrators decreases by approximately 9%, with notably large decreases in arrests for domestic battery (14%).

ShotSpotter forces officers to make trade-offs in favor of responding to ShotSpotter alerts. Consistent with this mechanism, response times from other time-sensitive calls (Priority 2) are also increased, and in addition, time-insensitive calls (Priority 3) show suggestive evidence of longer delays, providing further evidence of heightened officer responsibilities. Consequently, these elevated response times come at a significant cost. In Section 5.3, we analyze the relationship between police response time and the likelihood of an arrest. We find that Priority 1 calls are 8% less likely to have the perpetrator arrested, consistent with Blanes i Vidal and Kirchmaier (2018) who attribute faster rapid response to higher crime clearance rates. The effect is particularly strong in calls regarding domestic battery (14%) and domestic disturbances (13%)—two situations where reoffending is likely (Maxwell et al., 2001).

We find that police dispatches for emergency medical services are delayed by nearly one minute due to ShotSpotter implementation. As mentioned earlier, this could prolong treatment to critical injuries if ambulance personnel are waiting for police to arrive to a crime scene. In turn, this could have significant implications, as longer travel times and ambulance response times have been linked to higher mortality rates (Avdic, 2016; Wilde, 2013).

https://michaeltopper.netlify.app/research/jmp_michael_topper.pdf

POLICE WORKLOAD INCREASES WITHOUT INCREASE IN PUBLIC SAFETY

A partially block-randomized field experiment in Philadelphia, PA, suggested that **GDT dispatches may place a significant burden on police patrol operations** (Ratcliffe et al., 2019). **Police responses to gunshot incidents increased by over 259% in the 800 feet surrounding the GDT target locations over the 8-month study period, but there was no significant increase in the number of confirmed, or "founded," gunfire incidents.** Ratcliffe et al. (2019) concluded **the GDT system substantially increased the workload of police attending to incidents for which no evidence of gunfire was found, while having no effect on confirmed shooting events. Police workload increases have also been observed elsewhere**, with police responses to gunfire increasing 80% in St. Louis (Mares & Blackburn, 2021) and 287% in Dallas (Mazerolle et al., 1998) following the introduction of GDT.

https://link.springer.com/article/10.1007/s11292-023-09594-6

In 2011, OPD announced it planned to stop investigating non-homicide requests over three years old because of a 15 percent increase in backlogged cases. The report also highlighted 650 unsolved sexual assault cases and 330 unsolved homicides that have gone untested for lack of resources.

As a result of understaffing and underfunding, the OPD's fingerprint division has a historical backlog of over 10,000 cases and is now collecting half of the fingerprints it did 10 years ago, despite an increase in the crime rate.

"Due to lack of funding by elected officials in Oakland, many requests for forensic testing have simply been canceled, leaving victims to wonder if their cases will ever be solved," the jury reported.

https://thepioneeronline.com/11490/politics/grand-jury-says-oakland-and-alameda-county-should-merge-crime-labs/ (2012 grand jury report)

A sweeping audit by the office of California Attorney General Xavier Becerra found nearly 1,200 untested rape kits at the Oakland Police Department, accounting for about 9% of the nearly 14,000 untested kits held by law enforcement agencies across California.

https://www.sfchronicle.com/crime/article/Audit-finds-Oakland-police-have-1-200-untested-15271265.php (May 2020)