



February 25, 2021

**RE: Comments on NYPD ShotSpotter Impact and Use Policy**

To Whom it May Concern:

In response to the NYPD's draft Impact and Use Policy on ShotSpotter technology, the Center for Constitutional Rights ("CCR") and Beldock, Levine & Hoffman LLP ("BLH") write to express our concern that the embrace of ShotSpotter technology will lead to increased surveillance of Black and Latinx communities.<sup>1</sup> CCR is an organization dedicated to the advancement and protection of the rights guaranteed by the United States Constitution and international human rights law. We have challenged discriminatory policing for decades, recognizing that discrimination and police violence do not arise as isolated incidents but are deeply embedded within the U.S. criminal justice system. BLH is a law firm specializing in civil rights actions, including police misconduct, wrongful convictions, and employment discrimination. BLH attorneys have brought numerous cases on behalf of individuals and as class actions including the Republican National Convention class action, and the *Daniels v. City of New York* case filed with CCR, the predecessor case to *Floyd v. City of New York*, as well as representing the Exonerated Five and the Estate of Eric Garner. Together, BLH and CCR successfully litigated the landmark federal class action lawsuit, *Floyd, et al. v. City of New York, et al.*, that successfully challenged the racially discriminatory and unconstitutional stop-and-frisk policies of the New York Police Department ("NYPD").<sup>2</sup> BLH and CCR continue to represent the *Floyd* class members in a Joint Remedial Process ordered by the Court to implement reforms with the direct input of the people most affected by the NYPD's discriminatory stop-and-frisk practices.

ShotSpotter<sup>3</sup> is a technology that uses acoustic sensors and computer algorithm(s) to detect the sound of gunfire and record metadata, such as a timestamp, as well as the triangulated location of all gunfire incidents in a covered area. The NYPD's use of ShotSpotter raises serious concerns regarding the increased surveillance of the Black and Latinx communities that CCR and BLH have historically represented. Critically, the placement of the technology in so-called "high crime areas" continues a trend of not only surveilling, but also criminalizing New Yorkers of color who have already been heavily subject to discriminatory enforcement by the NYPD for decades through stop-and-frisk and other enforcement practices. ShotSpotter has the potential to increase racial profiling by law enforcement in neighborhoods across the city. Furthermore, it directly impacts

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<sup>1</sup> See [https://www1.nyc.gov/assets/nypd/downloads/pdf/public\\_information/post-act/shotspotter-nypd-impact-and-use-policy-draft-for-public-comment-01.11.2021.pdf](https://www1.nyc.gov/assets/nypd/downloads/pdf/public_information/post-act/shotspotter-nypd-impact-and-use-policy-draft-for-public-comment-01.11.2021.pdf).

<sup>2</sup> In a historic ruling on August 12, 2013, following a nine-week trial, a federal judge found the NYPD liable for a pattern and practice of racial profiling and unconstitutional stops. See *Floyd v. City of New York*, 959 F.Supp.2d 540 (S.D.N.Y. 2013). The *Floyd* case built on a previous landmark racial profiling case—*Daniels, et al. v. City of New York*, filed by CCR and BLH in 1999.

<sup>3</sup> ShotSpotter is a product of the private company ShotSpotter, Inc. and contracts its product with various police departments across the country.

how NYPD officers encounter and stop individuals across the city—especially Black and Latinx New Yorkers—who continue to be stopped at much higher rates than other residents.

The NYPD’s draft policy is silent on data points that are crucial to public understanding of and confidence in the technology. As a result, the NYPD has left the public in the dark as to the accuracy of the ShotSpotter technology, where the NYPD has chosen to place ShotSpotter sensors, how the Department reviews, analyzes and uses the data it receives, the data’s impact on NYPD enforcement activity, or any evaluation of the program’s effectiveness in actually deterring gun violence. Ironically, the policy states that “Gunfire detection sensors process acoustic data that is audible in open, public locations that do not enjoy a reasonable expectation of privacy,” yet the NYPD refuses to publicly reveal any information taken in by these sensors.

Our concerns and suggestions for improving the policy are listed below.

**I. The NYPD Should Disclose Which Neighborhoods and Precincts Are Using ShotSpotter, ShotSpotter Location Selection Methodology, and Any Disparate Impact on Black and Latinx New Yorkers as a Result of the Selection Methodology.**

The NYPD has continually refused to reveal the neighborhoods or locations where it has installed ShotSpotter technology,<sup>4</sup> and the Impact and Use Policy says nothing regarding how those locations were chosen. However, ShotSpotter’s parent company has admitted that sensors in New York are “prioritized around areas within those boroughs that had higher incidence of gunfire.”<sup>5</sup> This is troubling, as there is no way to know what metrics the NYPD uses to categorize an area as having a “high incidence of gunfire” nor how large each of these “areas” might be. But, based on CCR and BLH’s many years of legal advocacy on behalf of Black and Latinx communities targeted by the NYPD, the data and processes by which certain neighborhoods are categorized as “high crime” are flawed and haphazard.<sup>6</sup> Too often, “high crime” is merely a codeword for an area whose residents are primarily Black or Latinx.

Furthermore, the draft Impact and Use Policy fails to acknowledge the potential disparate impact that such location decisions could have on Black and Latinx New Yorkers. If the NYPD has installed most of its ShotSpotter technology in predominantly Black and Latinx New York City neighborhoods, then NYPD officers will more often be deployed to those neighborhoods than to racially mixed or predominantly white neighborhoods and are more likely to take law enforcement action against Black and Latinx civilians, thus resulting in those groups being stopped, arrested, and/or ticketed at higher rates than whites.

New York City Administrative Code §14-151 prohibits “a policy or practice within the police department [] regarding the initiation of law enforcement action [that] has had a disparate

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<sup>4</sup> See Gabriel Sandoval and Rachel Hollady Smith, ‘ShotSpotter’ Tested as Shootings and Fireworks Soar, While Civil Rights Questions Linger, The City, July 5, 2020 available at: <https://www.thecity.nyc/2020/7/5/21312671/shotspotter-nyc-shootings-fireworks-nypd-civil-rights>.

<sup>5</sup> *Id.*

<sup>6</sup> For example, the Court in *Floyd* found that NYPD stop reports which used “high crime area” as a reason for making a stop had little connection to the actual number of crime complaints in a specific precinct or census tract where the stop was made. Yet officers used “high crime area” to justify over 55% of all Terry stops between 2004 – 2009. See *Floyd v. City of New York*, 959 F.Supp.2d 540, 581 (S.D.N.Y. 2013).

impact on the subjects of law enforcement action” unless such policy or practice “bears a significant relationship to advancing a significant law enforcement objective.” N.Y.C Admin. Code §14-151(2)(i)-(ii). Given the disparate impact that the NYPD’s use of ShotSpotter may have on Black and Latinx New Yorkers, it is incumbent upon the Department to explain clearly and accurately what specific data and/or other criteria were used to select the locations around the City where ShotSpotter technology was placed and is now operating.

## **II. The NYPD Must Publicly Report Data on ShotSpotter Errors and Enforcement Outcomes**

There is currently no method for the public to determine whether ShotSpotter technology is accurate, “effective,” or necessary. Nothing in the Impact and Use Policy gives an overview of the process by which ShotSpotter determines whether the noises it detects are actually gunshots and not the everyday sounds of a major city, how that determination is reviewed by its analysts and the NYPD, and exactly what information is then conveyed to NYPD officers assigned to investigate. There is no information regarding how the algorithm(s) used by ShotSpotter’s parent company to identify gunshots were developed, what data inputs are used, and whether the NYPD had any input into the creation of those algorithms.

Most critically, even though the NYPD has used ShotSpotter for almost five years, it refuses to release any data that could be used to evaluate the technology. It is vital to know how often their sensors register false positives, as well as specific information about the outcomes of enforcement actions triggered by ShotSpotter. There are significant reasons to believe that ShotSpotter regularly returns false-positives for shots fired, which needlessly endangers the public by inviting high-risk interactions with law enforcement. For example, an investigation on the use of ShotSpotter in Newark, New Jersey in 2013 showed that at least 75% of gunfire reports were false alarms.<sup>7</sup> The Center for Investigative Reporting analyzed ShotSpotter use in San Francisco between 2013 and 2016 and found over two-thirds of alerts led to no evidence of shootings.<sup>8</sup> Reporting has also shown that even NYPD officers are suspect of the technology’s accuracy. For example, in July 2020, *The City* quoted a sergeant who works on the Lower East Side of Manhattan saying that “an emergency call of shots fired turned out to [be] more likely noise from a nearby construction site. ‘I told the driver to take it easy because we don’t want to kill someone on the way there,’ said the veteran police sergeant.”<sup>9</sup>

The NYPD must publish monthly reports on the data it receives from ShotSpotter. It should also regularly publish data regarding what actions, if any, were taken in relation to ShotSpotter reports and the outcomes of those actions, along with demographic and geolocation data, e.g., associated stops, arrests or summons of individuals, and whether any guns were recovered. Without such data, it will be exceedingly difficult for the public or any oversight bodies to judge the “impact and use” of the technology.

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<sup>7</sup> Available at: <https://www.wnyc.org/story/311533-gunshot-detection-sensors-newark-result-17-arrests-over-three-years/>.

<sup>8</sup> Available at: <https://revealnews.org/blog/shotspotter-not-exactly-taking-a-bite-out-of-crime/>.

<sup>9</sup> See Gabriel Sandoval and Rachel Hollady Smith, ‘ShotSpotter’ Tested as Shootings and Fireworks Soar, While Civil Rights Questions Linger, *The City*, July 5, 2020, available at: <https://www.thecity.nyc/2020/7/5/21312671/shotspotter-nyc-shootings-fireworks-nypd-civil-rights>.

### **III. More Information on Interactions Between ShotSpotter and Other NYPD Surveillance Technology**

The policy states that “ShotSpotter devices are not and cannot be used to covertly listen to conversations, street-noise, or any non-gunfire acoustic data. ShotSpotter does not use any still or video cameras, and does not use artificial intelligence, machine learning, or biometric measurement technologies.” This is not completely true, since ShotSpotter relies on artificial intelligence algorithms to make the first determinations of whether a noise it senses is actually a gunshot. Furthermore, the policy is silent on how and whether ShotSpotter interacts with other NYPD surveillance technology also in use. ShotSpotter can be installed to trigger security cameras and other devices to turn on, change direction or initiate other directives when its sensors detect certain noises.<sup>10</sup> The NYPD must provide more information on how ShotSpotter interacts with other surveillance technology as well as its use in the NYPD’s Doman Awareness System.

### **IV. The NYPD Must Reveal How ShotSpotter Data is Shared and Used**

The Impact and Use Policy leaves several critical questions about ShotSpotter data unanswered. Specifically, what does the NYPD do with the metadata it has collected via ShotSpotter? Can the NYPD alter or edit its own ShotSpotter data?<sup>11</sup> How long is the data retained? How is the data used and analyzed within the department and does it impact how the department defines “high crime areas” or where it assigns officers within the city? The NYPD has also not revealed who else has access to the audio and metadata collected by ShotSpotter devices beyond the department and ShotSpotter itself. The Impact and Use Policy notes that “[o]ther law enforcement agencies may request ShotSpotter data from the NYPD in accordance with applicable laws and regulations, and NYPD policies. Additionally, the NYPD may provide ShotSpotter data or information related to it to partnering law enforcement and city agencies pursuant to on-going criminal investigations, civil litigation, and disciplinary proceedings. Information is not shared in furtherance of immigration enforcement.” The NYPD should publish a list of the law enforcement, city and other governmental agencies with which it shares ShotSpotter data. Furthermore, the NYPD should add clear statements about whether or not it has or plans to share ShotSpotter data with any private entities or vendors.

According to a report by the Policing Project at New York University School of Law, ShotSpotter retains the right to share data with third parties.<sup>12</sup> This is problematic because, as the Policing Project notes, “SST should avoid sharing data with third parties who likely would use the data to target or undermine the very communities that SST’s technology avers to benefit. By way of example, we can imagine insurance companies using gunshot data as some have used race—as a proxy for actuarial risk and charging minority communities higher insurance rates or even

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<sup>10</sup> See “Integration Services” available at: <https://www.shotspotter.com/law-enforcement/gunshot-detection/>.

<sup>11</sup> For instance, see *Simmons v. Ferrigno*, where a Rochester, NY police officer contacted ShotSpotter after he shot a Black civilian and got the company to change their report of the incident to include a higher number of reported gunshots to support the officer's story that the civilian shot at him first (which was a lie because the civilian did not even have a gun on him).

<sup>12</sup> See Privacy Audit and Assessment of ShotSpotter’s Gunshot Detection Technology at 21, available at: <https://static1.squarespace.com/static/58a33e881b631bc60d4f8b31/t/5d418089ee1e500001b5f9f9/1564573839757/Privacy+Audit+and+Assessment+of+Shotspotter+Flex.pdf>.

denying coverage.” While the NYPD may not control what ShotSpotter’s parent company does with its data, it is critical to review whether such risks with surveillance technology outweigh any benefits.

**V. What Outreach Efforts Has the NYPD Taken That Shows NYC Communities Want ShotSpotter?**

We can find no public record of the NYPD’s surveying the public about ShotSpotter since the sensors were first implemented in 2015. Specifically, the NYPD has never surveyed those living in communities where ShotSpotter devices have been placed about whether they felt there was a need for ShotSpotter technology. It is critical that communities most impacted by policing be given regular opportunities for input into how and whether the technology should continue to be used, and be able to voice their concerns regarding such surveillance technology. We call on the NYPD to solicit substantial input directly from the communities where ShotSpotter technology has been placed and field their opinions and questions about the technology and whether they believe it should continue to be utilized in their neighborhoods.

**Conclusion**

The NYPD needs to make its Impact and Use Policy more transparent about how and why the ShotSpotter technology is being used and publish information that lets the public evaluate its impacts on communities across the city. New Yorkers need to be able to assess the risks ShotSpotter poses to their privacy, the way in which ShotSpotter affects how New Yorkers are policed, the manner in and extent to which data is stored and shared, and the accuracy and usefulness of the technology.

Sincerely,

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