

**IN THE SUPERIOR COURT OF THE STATE OF DELAWARE**

SHOTSPOTTER, INC.,

Plaintiff,

v.

No. N21C-10-082 SKR

VICE MEDIA, LLC,

Defendant.

**NOTICE OF MOTION**

PLEASE TAKE NOTICE that Plaintiff's Motion for Leave to File Surreply in Further Opposition to Vice's Motion to Dismiss will be presented at the convenience of the Court.

Dated: March 7, 2022

Respectfully submitted,

FARNAN LLP

/s/ Brian E. Farnan

Brian E. Farnan (Bar No. 4089)  
Michael J. Farnan (Bar No. 5165)  
919 N. Market St., 12th Floor  
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*Attorneys for Plaintiff*

**IN THE SUPERIOR COURT OF THE STATE OF DELAWARE**

SHOTSPOTTER, INC.,

Plaintiff,

v.

VICE MEDIA, LLC,

Defendant.

No. N21C-10-082 SKR

**MOTION FOR LEAVE TO FILE SURREPLY IN FURTHER OPPOSITION  
TO VICE’S MOTION TO DISMISS**

Plaintiff ShotSpotter Inc. requests leave to file the Proposed Surreply attached as Exhibit A, to provide the court with additional information relevant to VICE’s pending Motion to Dismiss. The facts discussed in the Proposed Surreply became available only after ShotSpotter submitted its Opposition Brief and Complaint. (*See* Meier Decl. ¶ 3-11.) To ensure the pending motion is resolved based on a current, accurate record, the Court should grant leave to file the Proposed Surreply.

Dated: March 7, 2022

Respectfully submitted,

FARNAN LLP

/s/ Brian E. Farnan

Brian E. Farnan (Bar No. 4089)  
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*Attorneys for Plaintiff*



# **Exhibit A**

**IN THE SUPERIOR COURT OF THE STATE OF DELAWARE**

SHOTSPOTTER, INC.,

Plaintiff,

v.

VICE MEDIA, LLC,

Defendant.

No. N21C-10-082 SKR

**SHOTSPOTTER'S PROPOSED SUR-REPLY IN OPPOSITION TO  
VICE'S MOTION TO DISMISS**

ShotSpotter writes to apprise the Court of relevant facts that occurred after ShotSpotter filed its Opposition to VICE’s Motion to Dismiss. Several publications have now backed away from the demonstrably false claim, originally published by VICE, that ShotSpotter had “changed the alert’s coordinates to a location on South Stony Island Drive near where Williams’ car was seen on camera.” Specifically:

- On March 5, 2022, **The Associated Press** explained that “the two reports the company issued – the initial real-time alert and the detailed forensic analysis later filed in court – contained a street address, *location maps and latitude and longitude coordinates*. The assigned street address changed from the first to the second report, but *the location identified on the maps and GPS coordinates in both reports remained around the same intersection*.” (Ex. D.)
- On February 14, 2022, **The Daily Mail**, among other things, deleted “fabricated AI evidence” from its headline, deleted “tampered” from “tampered ShotSpotter evidence” in the first bullet after the headline, and deleted the false claim that “the location of the recording was changed to fit the narrative that Williams killed Safarian Herring.” (Ex. E.)
- On January 26, 2022, **The University of Illinois at Chicago Law Review** wrote: “Following the publication of this article, [the author] was provided with copies of court documents from the Michael Williams case, which show that ShotSpotter did not change the location of the gunfire as had been previously reported but had identified the same GPS coordinates for the gunfire in both its [initial real-time alert](#) and in its later [detailed forensic report](#).” (Ex. F.)
- On February 7, 2022, **The Register** explained: “ShotSpotter has responded to the allegations raised by Williams’ lawyers, stating that, for its court evidence, its algorithm identified two data points: the exact coordinates where Herring was shot at the junction of South Stony Island Avenue and East 63rd Street, and the street address to the entrance of Jackson Park, the edge of which is where Herring was hit. The park’s entrance is a mile from where the shooting occurred. These

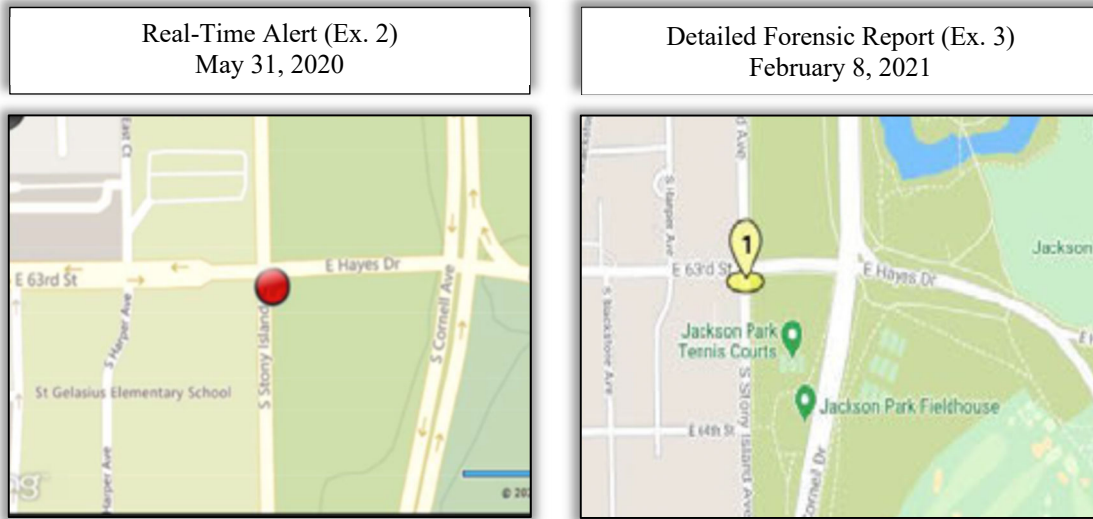
data points were not changed at any time. ShotSpotter also said the reclassification of the sound from a firecracker to gunfire was innocuous: a human reviewer checked the audio and changed it from a possible firework to gunshot within a minute of its detection. Thus, *though Williams’ lawyers sought to paint ShotSpotter’s location and classification as ambiguous and unreliable, it is clear from the evidence why two data points were given – the precise coordinates of the actual shot; and what the algorithm thought was the nearest relevant street address, the adjacent park* – and that these data points were not changed by ShotSpotter staff, and also how the sound was reclassified immediately by an employee.” (Ex. G.)

- On February 16, 2022, the tech industry publication **Hot Hardware** published a full retraction of its article about the Williams case, writing: “Following the publication of this article, Hot Hardware was provided with copies of court documents from this case that show ShotSpotter did not change the location of the gunfire, as had been previously reported, but had identified the same GPS coordinates for the gunfire in both its initial [real-time alert](#) and in its later [detailed forensic report](#).” (Ex. H.)
- On February 2, 2022, **Data Science Central** explained: “It has come to our attention that several statements in this article have been based on sources that have later been recanted and are factually incorrect. Court documents from the case show that ShotSpotter accurately showed the location of the gunfire as reported in both the real-time alert, as well as in the forensic report.” (Ex. I.)

On February 16 and March 6, 2022, ShotSpotter informed VICE of the above.

(See Exs. B-C; see also Meier Decl. ¶¶ 4-5). ShotSpotter also pointed out that, “[a]s VICE already knows, the court records in the Michael Williams case prove that ShotSpotter did **not** change the location of the gunfire between its real-time alert on the night of the shooting and its later detailed forensic report,” but that “both of those court records contain maps showing that ShotSpotter consistently located the gunfire

near the intersection of South Stony Island Avenue and East 63rd Street, on the edge of Jackson Park in Chicago”:



(See Ex. B; see also Meier Decl. ¶¶ 4-5.) And, ShotSpotter again asked VICE to set the record straight. (See Ex. B; Ex. C.) VICE refused. (Ex. C.)

During the meet-and-confer process, VICE advised that it opposes this motion because, VICE claims, “the issues are legally irrelevant and already before the Court.” (Ex. J.) But VICE itself conceded the relevance of other publishers’ actions when it touted the now-outdated Associated Press article in support of its claim that it had represented the court records reasonably. See Def.’s Opening Br. in Supp. of its Mot. to Dismiss at 31-32 (Dec. 10, 2021). As confirmed by the actions of The Associated Press and multiple other publishers, VICE’s representation of the court records was not fair or accurate.

In addition, VICE’s ongoing refusal to retract is further evidence of actual malice. *See Burnett v. Nat’l Enquirer, Inc.*, 144 Cal.App.3d 991, 1011-12 (1983) (holding that republishing or failing to retract disproven claims is evidence of malice). Although VICE’s Reply incorrectly claimed that *Burnett* concerned common-law malice, rather than constitutional actual malice (Def.’s Reply at 23), the *Burnett* court was considering whether the plaintiff had proven that the defendant harbored subjective doubts about the truth of the publication—the test for actual (not common-law) malice. *Id.* (considering whether “the evidence fairly showed that while appellant’s representatives knew that part of the publication complained of was probably false and that the remainder of it in substance might very well be”). In fact, courts nationwide routinely hold failure to retract is proof of actual malice; it is a well-established rule. *Celle v. Filipino Reporter Enters. Inc.*, 209 F.3d 163, 187 (2d Cir. 2000); *Zerangue v. TSP Newspapers, Inc.*, 814 F.2d 1066, 1071 (5th Cir. 1987); *Golden Bear Distrib. Syst. of Tex., Inc. v. Chase Revel, Inc.*, 708 F.2d 944, 950 (5th Cir. 1983).<sup>1</sup>

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<sup>1</sup> *See also Ball v. E.W. Scripps Co.*, 801 S.W.2d 684, 690 (Ky. 1990); *Herron v. KING Broad. Co.*, 746 P.2d 295, 302 (Wash. 1987) (en banc) (evidence of malice includes “failure to follow newspaper procedures for filing papers of inaccuracy”); *Holbrook v. Casazza*, 528 A.2d 774, 780-81 (Conn. 1987); *Mahnke v. Nw. Pubs., Inc.*, 160 N.W.2d 1, 11-12 (Minn. 1968); *Abdelsayed v. Narumanchi*, 668 A.2d 378, 381 (Conn. App. Ct.1995); *Bandido’s, Inc. v. J. Gazette Co., Inc.*, 575 N.E.2d 324, 328 (Ind. App. 3d Dist. 1991); *Durso v. Lyle Stuart, Inc.*, 337 N.E.2d 443, 448 (Ill. App. Ct. 1st Dist. 1975).

Finally, the Court cannot dismiss ShotSpotter's Complaint with prejudice when these relevant facts became available only after ShotSpotter filed its Complaint. *See Malone v. Brincat*, 722 A.2d 5, 15 (Del. 1998) (holding that complaint should be dismissed *without* prejudice where additional facts could still be pled). Therefore, the Court should deny VICE's motion to dismiss or grant ShotSpotter leave to amend its Complaint to incorporate the above facts and any other relevant facts that have occurred since the filing of the Complaint.

Dated: March 7, 2022

Respectfully submitted,

FARNAN LLP

/s/ Brian E. Farnan

Brian E. Farnan (Bar No. 4089)  
Michael J. Farnan (Bar No. 5165)  
919 N. Market St., 12th Floor  
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**IN THE SUPERIOR COURT OF THE STATE OF DELAWARE**

SHOTSPOTTER, INC.,

Plaintiff,

v.

VICE MEDIA, LLC,

Defendant.

No. N21C-10-082 SKR

**[PROPOSED] ORDER GRANTING PLAINTIFF'S MOTION FOR LEAVE  
TO FILE SURREPLY IN FURTHER OPPOSITION TO VICE'S MOTION  
TO DISMISS**

IT IS HEREBY ORDERED, this \_\_\_\_\_ day of \_\_\_\_\_, 2022,  
that Plaintiff's Motion for Leave to File Surreply in Further Opposition to Vice's  
Motion to Dismiss is GRANTED.

\_\_\_\_\_  
The Honorable Sheldon K. Rennie

**CERTIFICATE OF SERVICE**

I, Brian E. Farnan, hereby certify that on March 7, 2022, a copy of Motion for Leave to File Surreply in Further Opposition to Vice’s Motion to Dismiss and the Declaration of Megan L. Meier was served via LexisNexis File&Serve on the following:

Thomas E. Hanson, Jr.  
William J. Burton  
BARNES & THORNBURG LLP  
1000 N. West Street, Suite 1500  
Wilmington, DE 19801-1058

*Counsel for Defendant VICE Media, LLC*

*/s/ Brian E. Farnan*  
\_\_\_\_\_  
Brian E. Farnan (Bar No. 4089)

**IN THE SUPERIOR COURT OF THE STATE OF DELAWARE**

SHOTSPOTTER, INC.,

Plaintiff,

v.

VICE MEDIA, LLC,

Defendant.

No. N21C-10-082 SKR

**DECLARATION OF MEGAN L. MEIER IN SUPPORT OF  
SHOTSPOTTER'S MOTION FOR LEAVE TO FILE A SURREPLY AND  
SURREPLY IN OPPOSITION TO VICE'S MOTION TO DISMISS**

1. My name is Megan L. Meier, counsel for Plaintiff ShotSpotter, Inc., and I have personal knowledge of all facts contained in this Declaration and am competent to testify as a witness to these facts.

2. I am a partner in the law firm Clare Locke LLP with the principal place of business at 10 Prince St., Alexandria, Virginia 22314.

3. After ShotSpotter filed its Opposition to VICE's Motion to Dismiss on January 21, 2022, a number of publishers corrected or retracted the false claim—which had been originally published by VICE—that ShotSpotter had framed Michael Williams by moving the coordinates of the gunfire to the intersection where Mr. Williams had been at the time of a shooting.

4. On February 16 and March 6, 2022, I wrote to VICE, providing copies of the real-time alert and the detailed forensic report from the Michael Williams case,

advising that many publishers had retracted or corrected the false claim, and urging VICE to do the same. True and correct copies of those emails are attached as **Exhibit B** and **Exhibit C**.

5. **Exhibit D** is a true and correct copy of the Associated Press's correction and clarification, issued March 5, 2022.

6. **Exhibit E** contains true and correct copies of the Daily Mail's original article about ShotSpotter, the corrected version of that article from February 14, 2022, and a redline of the text of those two versions.

7. **Exhibit F** is a true and correct copy of the UIC Law Review note about ShotSpotter with the January 26, 2022 retraction highlighted.

8. **Exhibit G** is a true and correct copy of one of the corrected articles from the Register, which was updated on February 7, 2022.


9. **Exhibit H** is a true and correct copy of Hot Hardware's corrected article, updated February 16, 2022.

10. **Exhibit I** is a true and correct copy of Data Science Central's corrected article, as corrected on February 2, 2022.

11. VICE has not corrected or retracted its reporting and failed to respond to my letters until March 6, 2022, after I informed VICE that ShotSpotter would be seeking to file a sur-reply. A copy of the correspondence is attached as **Exhibit J**.

I declare under penalty of perjury under the laws of the United States and the State of Delaware that the foregoing is true and correct.

Executed this 7th day of March 2022, in Alexandria, Virginia.

By:   
\_\_\_\_\_ Megan L. Meier

# **Exhibit B**

**Subject:** Renewed Demand for Retraction  
**Date:** Wednesday, February 16, 2022 at 4:38:53 PM Eastern Standard Time  
**From:** Megan Meier <megan@clarelocke.com>  
**To:** Strom, Rachel <RachelStrom@dwt.com>  
**CC:** Tom Clare <tom@clarelocke.com>, Amy Roller <Amy@clarelocke.com>  
**Attachments:** 20220216 - [FINAL] Fourth Letter to VICE re Retraction.pdf

Rachel,

Please see the attached letter and confirm receipt.

Kind regards,  
Megan

Megan L. Meier | Partner  
**C L A R E L O C K E L L P**  
Office (202) 628-7403  
Cell (202) 280-4454

This electronic message transmission contains information from the law firm of Clare Locke LLP, which may be confidential or privileged. The information is intended exclusively for the individual or entity named above. If you are not the intended recipient, be aware that any disclosure, copying, distribution, or use of the contents of this information is prohibited. If you received this electronic transmission in error, please notify us immediately at [admin@clarelocke.com](mailto:admin@clarelocke.com).



C L A R E L O C K E

L L P

**THOMAS A. CLARE, P.C.**

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(202) 628-7401

10 Prince Street  
Alexandria, Virginia 22314

(202) 628-7400

www.clarelocke.com

**MEGAN L. MEIER**

megan@clarelocke.com

(202) 628-7403

February 16, 2022

Via Email

Rachel Strom

rachelstrom@dwt.com

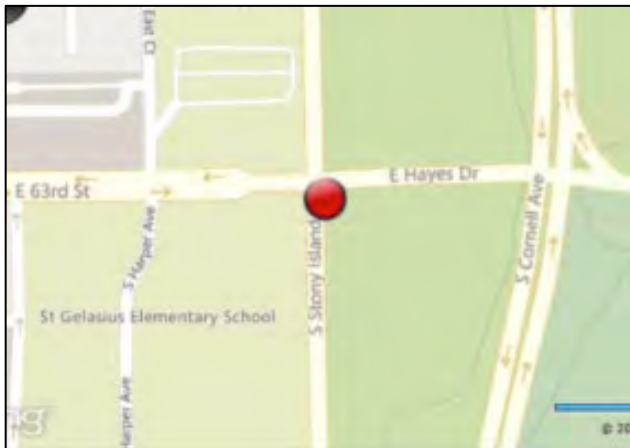
**Re: ShotSpotter**

Dear Rachel:

We write again on behalf of ShotSpotter. As VICE already knows, the court records in the Michael Williams case prove that ShotSpotter did **not** change the location of the gunfire between its [real-time alert](#) on the night of the shooting and its later [detailed forensic report](#), whether to fit the police's narrative or otherwise. (See Exhibits 1 & 2.) Instead, both of those court records contain maps showing that ShotSpotter consistently located the gunfire near the intersection of South Stony Island Avenue and East 63rd Street, on the edge of Jackson Park in Chicago:

Real-Time Alert  
May 31, 2020

Detailed Forensic Report  
February 8, 2021







This fact fundamentally rebuts VICE's false accusation that ShotSpotter conspired with police to alter evidence and frame innocent Black men like Mr. Williams.

Unfortunately, other publishers initially took VICE's false claim at face value and repeated it. But after reviewing the court records for themselves, other publishers have corrected their reporting. So far:

- **The University of Illinois at Chicago Law Review** published a correction, writing: "Following the publication of this article, [the author] was provided with copies of court documents from the Michael Williams case, which show that ShotSpotter did not change the location of the gunfire as had been previously reported but had identified the same GPS coordinates for the gunfire in both its initial [real-time alert](#) and in its later [detailed forensic report](#)."
- **The Daily Mail** deleted the false claim that "the location of the recording was changed to fit the narrative that Williams killed Safarian Herring" and [clarified](#) "that the GPS coordinates in both the original and the amended report remained the same."
- **The Register** published a lengthy explanation and [correction](#), writing: "ShotSpotter has responded to the allegations raised by Williams' lawyers, stating that, for its court evidence, its algorithm identified two data points: the exact coordinates where Herring was shot at the junction of South Stony Island Avenue and East 63rd Street, and the street address to the entrance of Jackson Park, the edge of which is where Herring was hit. The park's entrance is a mile from where the shooting occurred. These data points were not changed at any time. ShotSpotter also said the reclassification of the sound from a firecracker to gunfire was innocuous: a human reviewer checked the audio and changed it from a possible firework to gunshot within a minute of its detection. Thus, *though Williams' lawyers sought to paint ShotSpotter's location and classification as ambiguous and unreliable, it is clear from the evidence why two data points were given - the precise coordinates of the actual shot; and what the algorithm thought was the nearest relevant street address, the adjacent park* - and that these data points were not changed by ShotSpotter staff, and also how the sound was reclassified immediately by an employee."
- **Hot Hardware**, the tech-industry publication, issued a full [retraction](#) of its article about the Williams case, writing: "Following the publication of this article, Hot Hardware was provided with copies of court documents from this case that show ShotSpotter did not change the location of the gunfire, as had been previously reported, but had identified the same GPS coordinates for the gunfire in both its initial [real-time alert](#) and in its later [detailed forensic report](#)."
- **Data Science Central** also issued a [correction](#), writing: "It has come to our attention that several statements in this article have been based on sources that have later been recanted



and are factually incorrect. Court documents from the case show that ShotSpotter accurately showed the location of the gunfire as reported in both the real-time alert, as well as in the forensic report.”

In its legal briefing, VICE has argued that it can get away with misrepresenting the court records to its readers because “even if VICE misread the *Williams* alert, a news organization’s misconception of an unclear source cannot constitute actual malice.”

But VICE’s readers deserve to know the truth. VICE has the real-time alert and detailed forensic report proving that ShotSpotter did not change the location of the gunfire in the *Williams* case, but identified the same intersection in both reports. VICE should do the right thing and set the record straight.

Regards,

Thomas A. Clare, P.C.

Megan L. Meier

# **Exhibit 1**

ShotSpotter Investigator

File Reports Help

Find all incidents between: from: 5/31/2020 23:45:00 to: 5/31/2020 23:47:00

and of type(s): Single Gunshot, Multiple Gunshots, Possible Gunfire

and with: comments, Address(Location), File ID between, CAD ID, Tags, which occurred in, Beat(s), District(s)

and in coverage area(s): ChicagoLDistrict3

Search

---

Search Results

**135393** (Customer Visible)

Source: ChicagoLDistrict3  
 Details: 1 ROUND  
 Rounds: 1  
 District:  
 Beat: 0331  
 Latitude: 41.780491  
 Longitude: -87.586388  
 Address: 5700 S Lake Shore Dr  
 CAD ID: 2015227078  
 Date/Time: 5/31/2020 11:46:28 PM

4 audio files, 48ft closest, 0.2mi farthest, 19 sensors participated, 48ft closest, 0.9mi farthest

310069 622ft

310064 994ft

reviewer@shotspotter.com May 31 23:47:12  
 Published

reviewer@shotspotter.com May 31 23:48:52

Click to chat with SST about this incident. Click to print an incident report.

Search Results

**135393** (Customer Visible)

Source: ChicagoLDistrict3  
 Details: 1 ROUND  
 Rounds: 1  
 District:  
 Beat: 0331  
 Latitude: 41.780491  
 Longitude: -87.586388  
 Address: 5700 S Lake Shore Dr  
 CAD ID: 2015227078  
 Date/Time: 5/31/2020 11:46:28 PM

4 audio files, 48ft closest, 0.2mi farthest, 19 sensors participated, 48ft closest, 0.9mi farthest

310069 622ft

310064 994ft

reviewer@shotspotter.com May 31 23:47:12  
 Reclassified from Firecracker to Single Gunshot

pc0aw47@chicagopolice.org May 31 23:57:30

Search Results

**135393**  
(Customer Visible)

135393  
Support (Internal)

---

Source: **ChicagoIDistrict3**

Details: **1 ROUND**

Rounds: **1**

District:

Beat: **0331**

Latitude: **41.780491**

Longitude: **-87.586388**

Address: **5700 S Lake Shore Dr**

CAD ID: **2015227078**

Date/Time: **5/31/2020 11:46:28 PM**

4 audio files,  
48ft closest, 0.2mi farthest  
19 sensors participated,  
48ft closest, 0.9mi farthest

pc0aw47@chicagopolice.org May 31 23:57:40

**Acknowledged at customer facility**

pc0aw47@chicagoonline.com May 31 23:57:42

Click to chat with SST about this incident

Click to print an incident report

	▲
	622ft
310069	622ft
	622ft
310064	994ft
	▼

Search Results

**135393**  
(Customer Visible)

135393  
Support (Internal)

---

Source: **ChicagoIDistrict3**

Details: **1 ROUND**

Rounds: **1**

District:

Beat: **0331**

Latitude: **41.780491**

Longitude: **-87.586388**

Address: **5700 S Lake Shore Dr**

CAD ID: **2015227078**

Date/Time: **5/31/2020 11:46:28 PM**

4 audio files,  
48ft closest, 0.2mi farthest  
19 sensors participated,  
48ft closest, 0.9mi farthest

pc0aw47@chicagopolice.org May 31 23:57:42

**Modified CAD to 2015227078**

Click to chat with SST about this incident

Click to print an incident report

	▲
	622ft
	622ft
310069	622ft
	622ft
310064	994ft
	▼

6949 S Stony Island Ave  
Chicago  
YESTERDAY 18:27:06  
AREA C60  
2109613362  
SEARCH 1

Chicago District 3

1 RESULTS  
LIST

24  
RESULTS

**ShotSpotter Dispatch**

ZOOM OUT ZOOM IN SINGLE

# **Exhibit 2**





City	Chicago, IL	Incident #	778-135393
Zone	ChicagoILDistrict3	Docket/File #	20CR0899601
Ref. Date	31 MAY 2020	Case Name	POSI V MICHAEL WILLIAMS
Cust. Ref#	2015227078	Report Date	08 FEB 2021

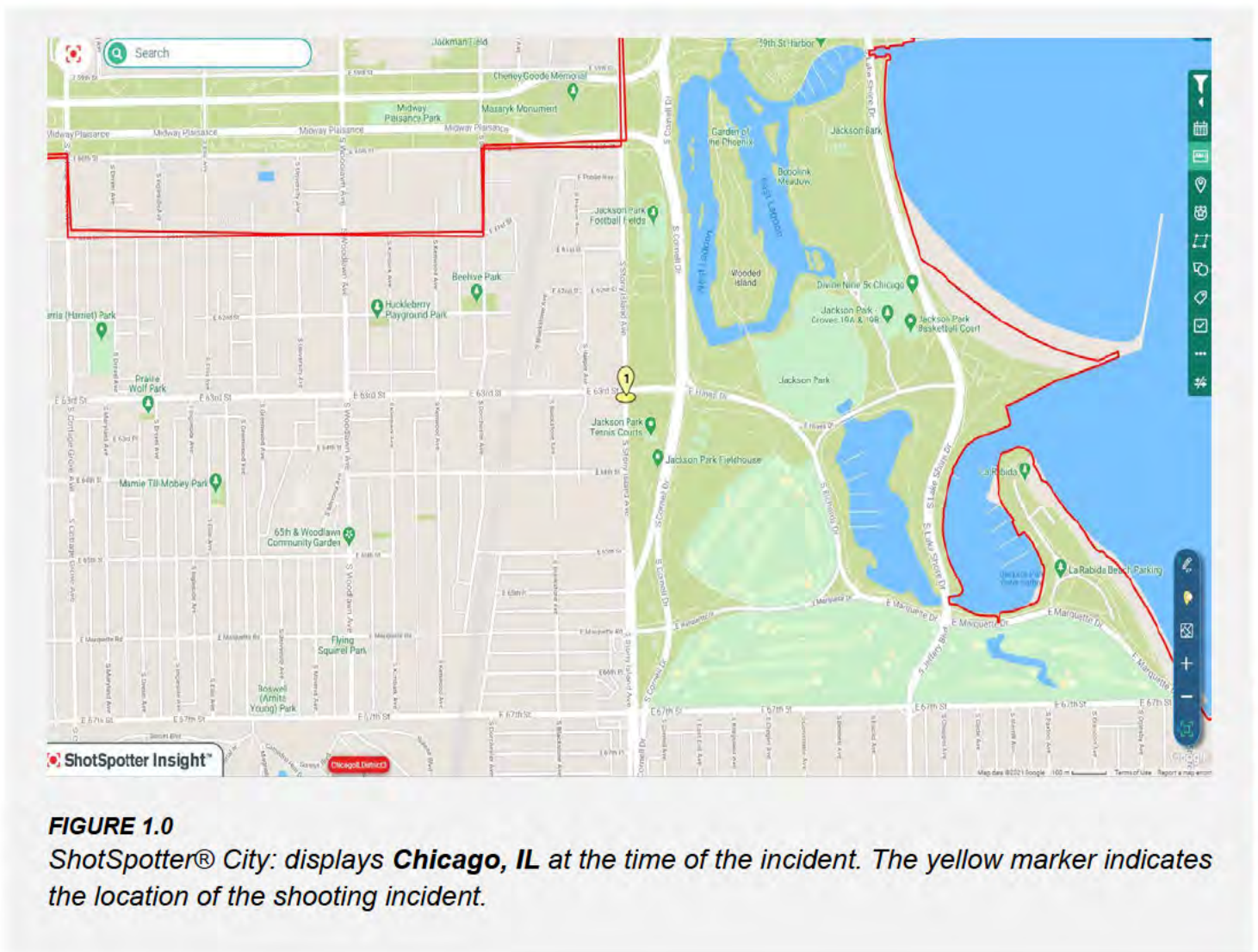
## DETAILED FORENSIC REPORT

# UNAUTHORIZED COPY

### Shooting Description

At 23:46:28 (11:46:28 PM) hours on May 31, 2020 ShotSpotter® detected a Single Gunshot incident in **Chicago, IL**. ShotSpotter® recorded the incident as Incident ID #**778-135393** and located it at 5700 S LAKE SHORE DR.

### Position with Respect to the Coverage Area



**FIGURE 1.0**

ShotSpotter® City: displays **Chicago, IL** at the time of the incident. The yellow marker indicates the location of the shooting incident.



City	Chicago, IL	Incident #	778-135393
Zone	ChicagoILDistrict3	Docket/File #	20CR0899601
Ref. Date	31 MAY 2020	Case Name	POSI V MICHAEL WILLIAMS
Cust. Ref#	2015227078	Report Date	08 FEB 2021

**UNNOTARIZED COPY**

## About ShotSpotter®

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ShotSpotter® was installed in **Chicago, IL (ChicagoILDistrict3)** in 2017. This Zone covers 6.08 Square Miles with 185 sensors deployed within its boundaries.

ShotSpotter® has three primary components: acoustic sensors, a Location Server application, and the ShotSpotter® Respond™ user interface. The ShotSpotter® Location Server is operated by ShotSpotter®, Inc. and runs on a virtual server hosted at a remote facility, the ShotSpotter® Respond™ user interface resides on the customers PC or mobile device. Acoustic sensors are deployed in geographic areas that are designated by the customer.

Each sensor is triggered by impulsive sounds in its environment. The acoustic measurements of these impulsive sounds and the exact time that they were detected are transmitted to the Location Server as possible gunshots. The Location Server analyses the data received and determines if the impulsive sound can be geographically located and classified as gunfire. If the impulsive sound can be located and classified as gunfire, the Location Server reports the incident to the ShotSpotter® Incident Review Center where a human operator reviews the incident for classification accuracy, except in a minority of cases where incidents meets strict criteria to be 'auto-published'. The incident is then published to the customer's user interface. The user interface, referred to as the Flex Alert Console, provides an actionable view of the incident with an emphasis on the time and location of the incident. Gunfire incidents are typically detected, located, classified, reviewed, and published to the customer in under 60 seconds.

The firing of a gun or an explosive device creates a loud, impulsive sound that, under optimum environmental conditions, can be detected above urban background noise up to two miles away from the firing incident location. Thus, the operation of ShotSpotter® is understandably subject to the laws of physics and acoustic propagation.

ShotSpotter® detects and properly geo-locates (provides latitude and longitude) 90% of detectable outdoor incidents within the coverage area, accurate to within a circle whose radius is 25 meters (82ft). ShotSpotter®, Inc. does not guarantee 100% detection because real world environments may contain intervening buildings, topography, foliage, periods of increased traffic or construction noise, and other urban acoustic noises that may either prevent the sound of a gunshot from being detected by the sensors(s), or may change or modify the audio characteristics of the sound of a gunshot so that it no longer matches the sensor(s) detection parameters.

Other factors, such as obstructed or attenuated muzzle blast, weapon discharge in an enclosed space, or if the weapon discharged is of .25 or smaller caliber, may also prevent the sensor(s) from not detecting all, or some shots fired.

City	Chicago, IL	Incident #	778-135393
Zone	ChicagolLDistrict3	Docket/File #	20CR0899601
Ref. Date	31 MAY 2020	Case Name	POSI V MICHAEL WILLIAMS
Cust. Ref#	2015227078	Report Date	08 FEB 2021

# Analysis **UNNOTARIZED COPY**

**TABLE 1.0**

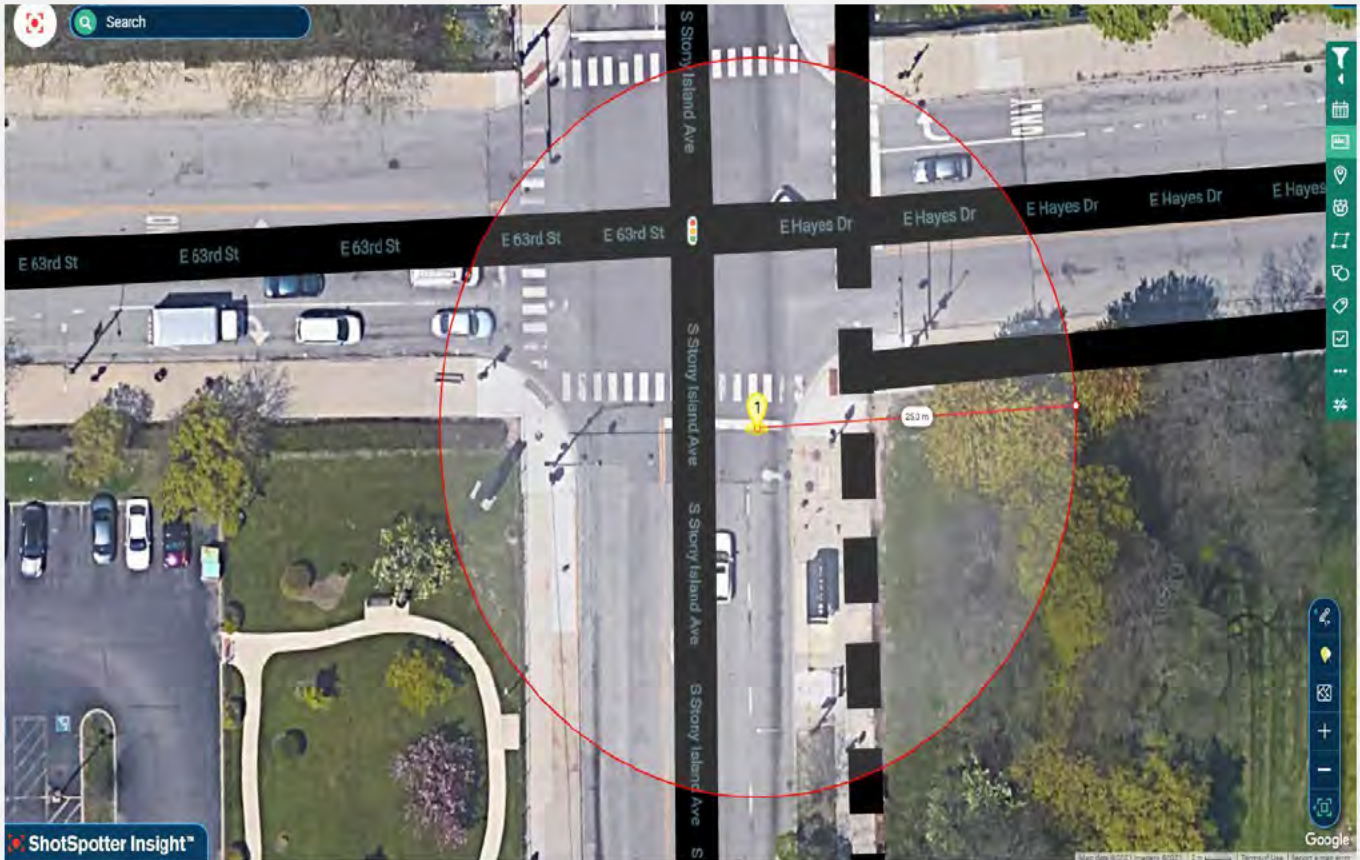
*Reported Incident Detail: At 23:46:28 on May 31, 2020, ShotSpotter® detected and located a Single Gunshot incident in **Chicago, IL**. Below is a table containing additional details about the incident.*

FORENSICS	
Agency:	Chicago PD
Source:	ChicagolLDistrict3
Incident Id:	778-135393
Rounds:	1
Address:	5700 S Lake Shore Dr, Chicago, IL
Latitude:	41.780491
Longitude:	-87.586388
District:	
Beat:	0331
CAD ID:	2015227078
Date/Time:	05/31/2020 @ 23:46:28



City	Chicago, IL	Incident #	778-135393
Zone	ChicagoILDistrict3	Docket/File #	20CR0899601
Ref. Date	31 MAY 2020	Case Name	POSI V MICHAEL WILLIAMS
Cust. Ref#	2015227078	Report Date	08 FEB 2021

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**FIGURE 2.0**

*Address Location: This image displays the shooting location as calculated by ShotSpotter®. The address of 5700 S LAKE SHORE DR was read from either a database of parcel information provided by the city or county and uploaded into ShotSpotter® or is sourced from the satellite map provider. The yellow marker indicates the location of the shooting incident as calculated by ShotSpotter® in real-time and reported to the ShotSpotter® operator.*

City	Chicago, IL	Incident #	778-135393
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**TABLE 2.0**

*Timeline of Discharge of Shots and Calculated Shot Locations: Below table shows the time of discharge, and the calculated Latitude and Longitude for each of the shots which comprise this shooting event. The times listed below are the time the system calculated the trigger was pulled based on the environmental conditions at the time of the event. These times precede the time at which the system notified the ShotSpotter® Operator listed because of small radio, computational, and network delays. All times are obtained from network, system, and sensor clocks that are synchronized to GPS time, which is in turn synchronized with the atomic clock at the National Institute of Standards and Technology in Boulder, CO.*

IID/MDID	Shot	Discharge Date	Discharge Time	Interval (hh:mm:ss.fff)	Latitude	Longitude
135393	1	2020-05-31	23:46:28.856	00:00:00.000	41.780461	-87.586447
Total Elapsed Time				00:00:00.000		



City	Chicago, IL	Incident #	778-135393
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**FIGURE 3.0**

*Individual Shots Fired: The following image depicts the location of each shot onto a satellite image. The latitude and longitude of each shot is calculated by post-processing an incident's audio clips and archived data. Post-processing is a "manual" re-evaluation of incident data through software tools that duplicate the real-time location algorithms that are a resident part of the ShotSpotter® Location Server. Post-processing can be selectively performed on subsets of the raw data so that noises from different sources can be isolated for analysis.*

*In the image above, the red dots indicate the latitude and longitude locations of each of the shots as detailed in Table 2.0.*



City	Chicago, IL	Incident #	778-135393
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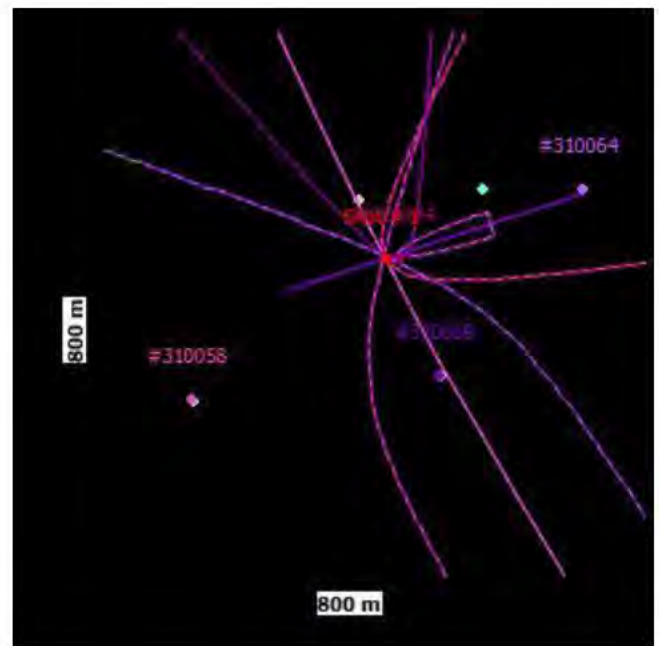
# UNNOTARIZED COPY

## Multilateration

**FIG 5.0**

The source of an acoustic pulse (a sound that goes bang, boom, or pop) is located using a mathematical process called multilateration. Multilateration requires a minimum of three sensors that surround the source to accurately report the time that a pulse is detected. Each participating sensor will detect the same pulse at slightly different times. The Location Server calculates the time differences of detected pulses between unique pairs of sensors against the speed of sound (343 meters per second, or 768 mph) to generate a curve called a hyperbola. All the resulting hyperbolae are then plotted onto a map. The spot where the hyperbolae intersect is where ShotSpotter® locates the shot. When more than three sensors participate in the detection, Location Server performs automatic calculations to find a solution that minimizes the error to the greatest extent possible. The image below is a pictorial representation of the hyperbolae calculated during the analysis of this shooting event. The map space depicts the shooting location at the intersection of the hyperbolae and the positions of the sensors used in the analysis relative to the shooting location.

19 ShotSpotter® sensors participated in automatically detecting and locating Incident ID #778-135393. Post-process location analysis was performed using audio clips from 4 sensors.

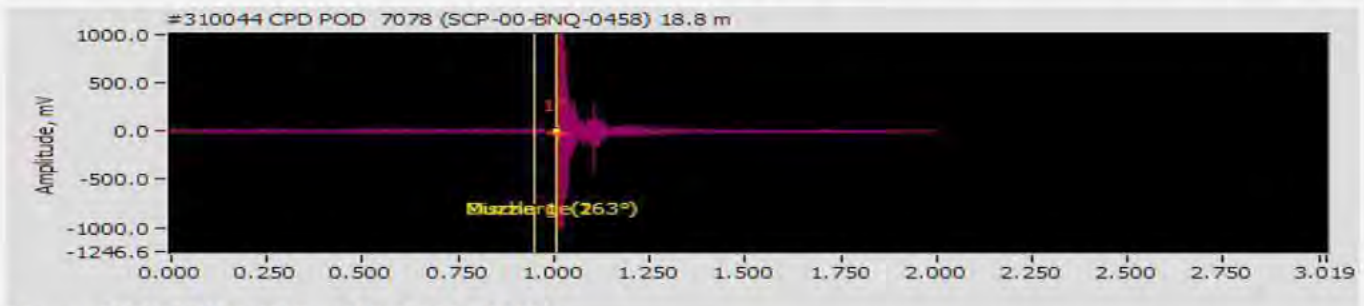


City	Chicago, IL	Incident #	778-135393
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Cust. Ref#	2015227078	Report Date	08 FEB 2021

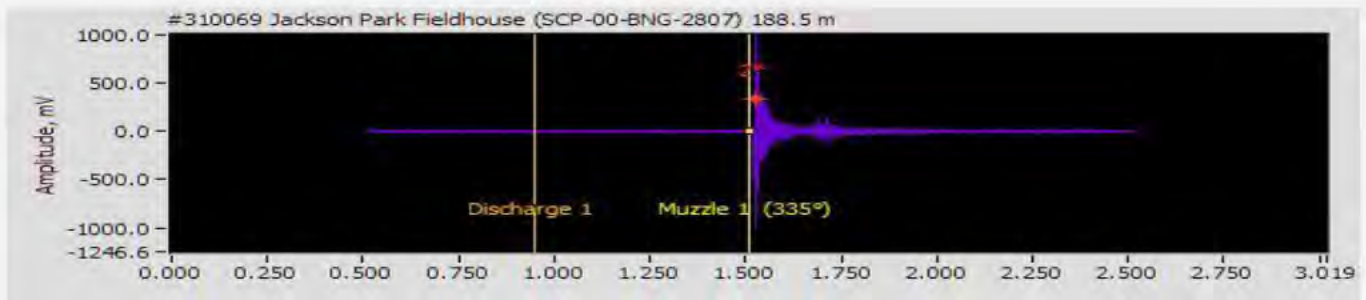
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Site-Specific Acoustics (778-135393)

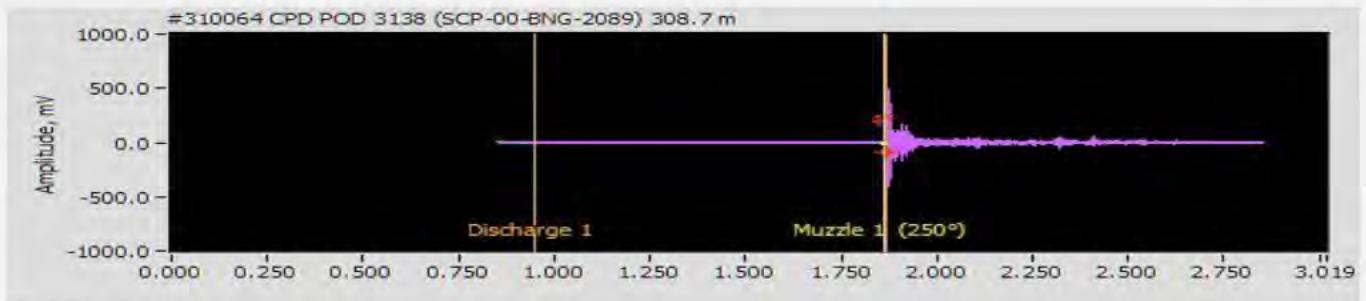
The depicted audio waveforms below, visually represent the incident audio that was recorded by, and downloaded from different sensors. Each sensor number also indicates the calculated distance from that sensor to the incident location. (Click the images to play the audio from each sensor.)



**Sensor 310044 (14m) [2 sec] IID# 778-135393**



**Sensor 310069 (190m) [2 sec] IID# 778-135393**



**Sensor 310064 (303m) [2 sec] IID# 778-135393**



City	Chicago, IL	Incident #	778-135393
Zone	ChicagoILDistrict3	Docket/File #	20CR0899601
Ref. Date	31 MAY 2020	Case Name	POSI V MICHAEL WILLIAMS
Cust. Ref#	2015227078	Report Date	08 FEB 2021

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## Conclusion

---

At 23:46:28 (11:46:28 PM) hours on May 31, 2020 ShotSpotter® detected a Single Gunshot incident in **Chicago, IL**. ShotSpotter® recorded the incident as Incident ID #**778-135393** and located it at 5700 S LAKE SHORE DR. After post-process analysis, the incident is found to have occurred at or near 63RD STREET & STONY ISLAND.

After review, the discharge location and time of 1 round fired was calculated.

Acoustical data analysis of a gunfire incident is complex and not comprehensive. The conclusions above should be corroborated with other evidentiary sources such as recovered shell casings, and witness statements.



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Cust. Ref#	2015227078	Report Date	08 FEB 2021

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**Certification**

**Virginia All-Purpose Certificate of Acknowledgement**

I, Walter Collier III, declare that I am Senior Technical Support Engineer at ShotSpotter® Inc., this report was prepared by me or is a true copy thereof. I have personal knowledge of the matter referred to in this report, and, if called as a witness, could and would testify thereto.

I declare that the above is true and correct.

Executed this 8th of February 2021

at Prince William, Virginia

Signature \_\_\_\_\_

Walter Collier III

ShotSpotter®, Inc. 7979 Gateway Blvd. Suite 210  
 Newark, CA 94560-1156  
 +1 (510) 794- 3142 Extension (X242)  
 +1 (650) 887-2106 fax  
 wcollier@shotspotter.com

A notary public or other officer completing this certificate verifies only the identity of the individual who signed the document to which this certificate is attached, and not the truthfulness, accuracy, or validity of that document

State of \_\_\_\_\_ / County of \_\_\_\_\_

On \_\_\_\_\_,

before me \_\_\_\_\_,

Notary Public personally appeared Walter Collier III who provided to me on the basis of satisfactory evidence to be the person whose name is subscribed to the within instrument and acknowledged to me that he executed the same in his authorized capacity, and that by his signature on the instrument the person, or the entity upon behalf of which the person acted, executed the instrument.

I certify UNDER PENALTY OF PERJURY, under the laws of the State of \_\_\_\_\_ that the foregoing paragraph is true and correct. Witness my hand and official seal.

Signature \_\_\_\_\_

Notary Public

(Seal)

# **Exhibit C**

**Subject:** RE: Renewed Demand for Retraction

**Date:** Monday, March 7, 2022 at 8:57:56 AM Eastern Standard Time

**From:** Strom, Rachel

**To:** Megan Meier

**CC:** Tom Clare, Amy Roller, Brian Farnan (bfarnan@farnanlaw.com), Alexis Chandler, Chase, Jeremy, Azmi, Nimra

Megan,

A few things.

First, I do not see any publication that retracted “that ShotSpotter had framed Michael Williams by changing the coordinates of the gunfire to the intersection where Williams’s car was seen on camera” and your claim that they did is itself false and defamatory. And, VICE itself never reported that ShotSpotter framed Michael Williams.

Indeed, the AP still notes that ShotSpotter in fact did change the address in the Williams case, which is already an issue before the court. The difference between the words “coordinates” and “address” does not change the gist of the reporting. And, more than that, as a matter of law, post-publication events have no bearing on actual malice, which must be assessed at the time of publication. For these reasons, we object to the sur-reply as the issues are legally irrelevant and already before the Court. **We also request that you submit this email with your motion to file the sur-reply so our objection is clear.**

Second, we are disappointed as well in the tone and timing of this email. As you all know, before you all brought this lawsuit, you wrote to VICE seeking a retraction --and you annexed your letters to ShotSpotter’s complaint. What you selectively, and frankly deceptively removed from the complaint, were our numerous responses inviting a conversation just like this – as we had trouble determining precisely what you were arguing was false and defamatory about VICE’s reporting. Indeed, Tom and I even had a call where he welcomed the idea of a discussion to clarify what changes you were actually seeking from VICE’s reporting – but then he never followed up and brought suit instead. This request now is pure and transparent gamesmanship – and while the difference between “address” and “coordinates” is by no means actionable, if it was actually important to your client to have that clarified, I am sure Tom would have called us back.

Thank you. Rachel

**Rachel Strom** | Davis Wright Tremaine LLP  
1251 Avenue of the Americas, 21st Floor | New York, NY 10020  
Tel: (212) 402-4069 | Fax: (212) 379-5244  
Email: [rachelstrom@dwt.com](mailto:rachelstrom@dwt.com) | Website: [www.dwt.com](http://www.dwt.com)

Anchorage | Bellevue | Los Angeles | **New York** | Portland | San Francisco | Seattle | Washington, D.C.

---

**From:** Megan Meier <megan@clarelocke.com>

**Sent:** Sunday, March 6, 2022 10:58 AM

**To:** Strom, Rachel <RachelStrom@dwt.com>

**Cc:** Tom Clare <tom@clarelocke.com>; Amy Roller <Amy@clarelocke.com>; Brian Farnan (bfarnan@farnanlaw.com) <bfarnan@farnanlaw.com>; Alexis Chandler <alexis@clarelocke.com>

**Subject:** Re: Renewed Demand for Retraction

[EXTERNAL]

---

Rachel,

We are disappointed that VICE has not responded to our letter from over two weeks ago, in which we notified you that The Daily Mail, The Register, The University of Illinois at Chicago Law Review, the tech industry publication Hot Hardware, and Data Science Central had all retracted or corrected the demonstrably false claim originally published by VICE that ShotSpotter had framed Michael Williams by changing the coordinates of the gunfire to the intersection where Williams's car was seen on camera.

Yesterday, The Associated Press joined the growing list of publishers who have disavowed that false claim, explaining that ShotSpotter's initial real-time alert and later detailed forensic analysis "contained a street address, location maps and latitude and longitude coordinates. The assigned street address changed from the first to the second report, but *the location identified on the maps and GPS coordinates in both reports remained around the same intersection.*" You can see The Associated Press's explanation [here](#), as well as at the end of The Associated Press's story about ShotSpotter, a now-outdated version of which VICE attached to its legal briefing as evidence that VICE had interpreted the court records reasonably.

These publishers' actions show that VICE's representation of the court records was neither fair nor accurate and that VICE intentionally or recklessly disregarded the truth. Please let us know by 11:00am Eastern tomorrow whether VICE will consent to ShotSpotter's motion for leave to file a surreply notifying the Court of them, our renewed demands for retraction, and VICE's ongoing refusal to retract its demonstrably false claims.

Kind regards,  
Megan

Megan L. Meier | Partner  
**C L A R E L O C K E L L P**  
Office (202) 628-7403  
Cell (202) 280-4454

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---

**From:** Megan Meier <[megan@clarelocke.com](mailto:megan@clarelocke.com)>  
**Date:** Wednesday, February 16, 2022 at 4:38 PM  
**To:** Strom, Rachel <[RachelStrom@dwt.com](mailto:RachelStrom@dwt.com)>  
**Cc:** Tom Clare <[tom@clarelocke.com](mailto:tom@clarelocke.com)>, Amy Roller <[Amy@clarelocke.com](mailto:Amy@clarelocke.com)>  
**Subject:** Renewed Demand for Retraction

Rachel,

Please see the attached letter and confirm receipt.

Kind regards,  
Megan

Megan L. Meier | Partner

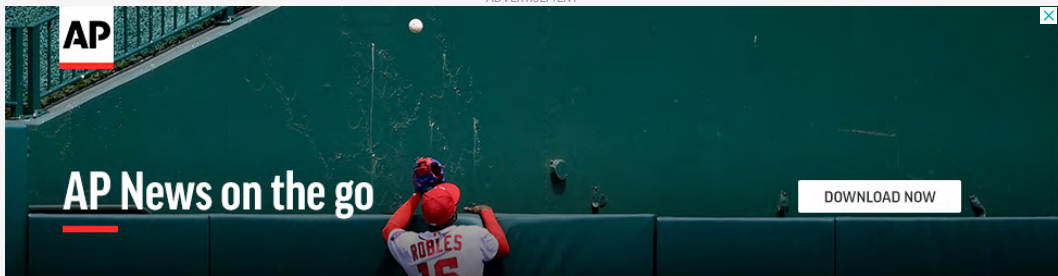
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# **Exhibit D**



# Clarification: BC-AP Investigation-Tracked story

March 5, 2022

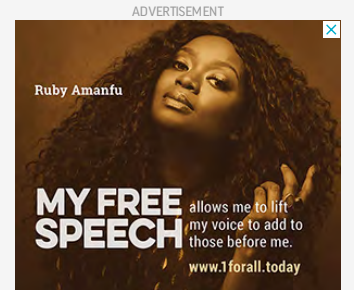


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### RELATED TOPICS

- Technology
- Chicago
- Michael Williams

CHICAGO (AP) — In a story published August 19, 2021, The Associated Press reported that a ShotSpotter engineer changed the reported Chicago address of a sound the company labeled a gunshot to the street where Michael Williams was driving. The story included ShotSpotter’s explanation that the engineer had corrected the street address that was generated in its initial real-time alert to match the actual street address that the company’s sensors had identified. The company has now provided the AP with a copy of the full real-time alert. The two reports the company issued – the initial real-time alert and the detailed forensic analysis later filed in court – contained a street address, location maps and latitude and longitude coordinates. The assigned street address changed from the first to the second report, but the location identified on the maps and GPS coordinates in both reports remained around the same intersection. ShotSpotter says the street address in the initial real-time alert sent to police was wrong because the GPS coordinates fell within a large park for which the officially designated address was about a mile away from the actual location identified by the sensors. In addition, the AP story misstated the status of an attorney who pressed a ShotSpotter engineer testifying in a trial to explain why one of its employees reclassified sounds from a helicopter to a bullet. The article said the attorney was a defense attorney but he was actually a prosecutor. The story also reported that in 2014, a judge in Richmond, California, didn’t allow ShotSpotter evidence to be used during a gang murder conspiracy case. ShotSpotter has now provided AP with additional court records showing that, three years later, the judge reconsidered admissibility of the ShotSpotter evidence and found, based upon the new evidence, that it could be admitted.



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# **Exhibit E**

2021

## ShotSpotter – The New Tool to Degrade What is Left of the Fourth Amendment, 54 UIC L. Rev. 797 (2021)

Benjamin Goodman

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# SHOTSPOTTER – THE NEW TOOL TO DEGRADE WHAT IS LEFT OF THE FOURTH AMENDMENT

BENJAMIN GOODMAN\*

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## I. INTRODUCTION

### A. *The Newest “Big Brother”*

For nearly a year, sixty-five year old Michael Williams spent his days alone in a Cook County jail cell accused of murder.<sup>1</sup> The

---

\*Benjamin Goodman, Juris Doctor Candidate, UIC School of Law. I would like to thank all the people and mentors that have collectively inspired me to become a lawyer.

Following the publication of this article, I was provided with copies of court documents from the Michael Williams case, which show that ShotSpotter did not change the location of the gunfire as had been previously reported but had identified the same GPS coordinates for the gunfire in both its initial real-time

Chicago Police Department arrested Williams for the murder of a young man that was shot in the head three months earlier amid the George Floyd protests.<sup>2</sup> But the key piece of evidence against him was not an eyewitness that could testify they saw Williams shoot the young man.<sup>3</sup> It wasn't a witness that could even put a gun in his hand.<sup>4</sup> Instead, a series of microphone sensors scattered throughout the city, tasked with detecting the sound and location of gunshots, was the instrumental piece of evidence responsible for taking a grandfather and husband away from his family.<sup>5</sup> The Cook County State's Attorney's office eventually dismissed the charges against Williams for "insufficient evidence."<sup>6</sup>

---

alert and in its later detailed forensic report. *SSTI WILLIAMS\_000107*, UIC LAW REV., <https://uofi.app.box.com/s/mq0ody3zrd50ul2eezth2ym98fokhnmy> (last visited Jan. 23, 2022); *Williams Detailed Forensic Report*, UIC LAW REV., <https://uofi.app.box.com/s/of3lm0yv3wbcwutx6n3rwyacu5c8c11q> (last visited Jan. 23, 2022).

In addition, an update was made to a source that I relied on, following the publication of my article. Stanley, *infra* note 7. The update, made by the ACLU on 10/14/2021, explains that ShotSpotter uses an algorithm to filter out sounds that are not gunfire before sending the audio recordings to human analysts for review, and that any inaccuracies in such an algorithm are not going to lead to unfair evidentiary judgments. *Id.*

I have also been made aware of a study done in collaboration with ShotSpotter and Cooper University Health Care, that concluded that ShotSpotter technology used in Camden, NJ decreased prehospital time for patients with gunshot wounds. Anna Goldenberg et al., *Use of ShotSpotter detection technology decreases prehospital time for patients sustaining gunshot wounds*, 87(6) J. OF TRAUMA & ACUTE CARE SURGERY 1253 (2019), [www.journals.lww.com/jtrauma/Citation/2019/12000/Use\\_of\\_ShotSpotter\\_detection\\_technology\\_decreases.2.asp](http://www.journals.lww.com/jtrauma/Citation/2019/12000/Use_of_ShotSpotter_detection_technology_decreases.2.asp).

See generally Ralph Clark, *ShotSpotter's Response to Associated Press Article*, SHOTSPOTTER, INC. (Aug. 26, 2021), [www.shotspotter.com/blog/shotspotter-response-to-associated-press-article](http://www.shotspotter.com/blog/shotspotter-response-to-associated-press-article) [perma.cc/WR7M-JFSL] (outlining ShotSpotter's public response to the Williams case).

1. Todd Feathers, *Police Are Telling ShotSpotter to Alter Evidence From Gunshot-Detecting AI*, VICE NEWS (July 26, 2021), [www.vice.com/en/article/qj8xbq/police-are-telling-shotspotter-to-alter-evidence-from-gunshot-detecting-ai](http://www.vice.com/en/article/qj8xbq/police-are-telling-shotspotter-to-alter-evidence-from-gunshot-detecting-ai) [perma.cc/39U8-2JVY].

2. *Id.*

3. Garance Burke et al., *How ShotSpotter – an AI-powered gunshot-detecting device – landed a Chicago grandfather in jail for nearly a year with scant evidence*, CHICAGO TRIB. (Aug. 20, 2021), [www.chicagotribune.com/news/criminal-justice/ct-shotspotter-chicago-man-jailed-20210820-krlg7y2gt5gwxyzolqvvslni4-story.html](http://www.chicagotribune.com/news/criminal-justice/ct-shotspotter-chicago-man-jailed-20210820-krlg7y2gt5gwxyzolqvvslni4-story.html) [perma.cc/BDF8-EGTZ].

4. *Id.*

5. *Id.*

6. *Id.* The algorithm that powers the microphone sensors first classified the sound as a firework before an analyst manually re-classified the sound as a gunshot. *Id.* Additionally, the microphone sensors first identified that the sounds originated from a location a mile away from where Mr. Williams allegedly committed the murder. *Id.* Then, months later, an analyst manually changed the location of the "gunshot" to coordinates near where Mr. Williams

This technology often makes mistakes, and Williams’s case is only one of dozens across the county that have illustrated its unreliability.<sup>7</sup> These microphones and sensors are part of ShotSpotter’s acoustic gunshot detection technology and may be in a “high-crime” area near you.

The use of ShotSpotter by police departments throughout the United States presents issues beyond those exhibited in the case of Williams. This Note will argue that it is unconstitutional under the Fourth Amendment for police officers to use a ShotSpotter gunfire alert on its own to justify a police stop. Part II of this Note will provide an overview of ShotSpotter technology and its use by police departments throughout the United States. Additionally, it will provide an overview of the United States Supreme Court’s jurisprudence regarding what amounts to reasonable suspicion under the Fourth Amendment to justify an investigatory police stop.<sup>8</sup> Part III will discuss the Seventh Circuit’s analysis in *United States v. Rickmon*,<sup>9</sup> a case of first impression, where the Seventh Circuit justified a traffic stop on the basis of a localized gunfire detection alert by ShotSpotter. Part IV will discuss how the Seventh Circuit not only reached the wrong conclusion but also neglected to consider larger societal concerns. Part V will briefly conclude by summarizing this Note and noting some of the concerns of the continued use of this technology moving forward.

## II. BACKGROUND

### A. *ShotSpotter* – What is it?

ShotSpotter is a publicly traded organization that develops and

---

allegedly committed the murder. *Id.* Understandably, Mr. Williams case was dismissed for insufficient evidence, but not before he spent a year in jail. *Id.*

7. Jay Stanley, *Four Problems with the ShotSpotter Gunshot Detection System*, ACLU (Aug. 24, 2021), [www.aclu.org/news/privacy-technology/four-problems-with-the-shotspotter-gunshot-detection-system/](http://www.aclu.org/news/privacy-technology/four-problems-with-the-shotspotter-gunshot-detection-system/) [perma.cc/A2CC-PAQW]; Feathers, *supra* note 1.

8. There are other companies that make acoustic gunshot detection technology, including Raytheon Technologies with their Boomerang III, and Safety Dynamics with SENTRI. However, this Note focuses on ShotSpotter as it is the most prominently used acoustic gunshot detection technology in the United States. For more information on those technologies, *See Boomerang III*, RAYTHEON TECHNOLOGIES CORP., [www.raytheon.com/capabilities/products/boomerang](http://www.raytheon.com/capabilities/products/boomerang) [perma.cc/H7CC-MCFQ] (last visited Sept. 20, 2020) (“Boomerang pinpoints the shooter’s location of incoming small arms fire.”). “Boomerang uses passive acoustic detection and computer-based signal processing to locate a shooter in less than a second.” *Id.*; *Products*, SAFETY DYNAMICS, INC., [www.safetydynamics.net/prods.html](http://www.safetydynamics.net/prods.html) (last visited Sept. 20, 2020) (“[SENTRI] is a breakthrough technology that recognizes gunshots and explosions and sends range and bearing details to cameras which can then locate the source of the event.”).

9. *United States v. Rickmon*, 952 F.3d 876 (7th Cir. 2020).

sells acoustic gunshot detection and precision-policing solutions.<sup>10</sup> While the company is responsible for a number of products, this Note will focus specifically on their flagship product, ShotSpotter Flex (“ShotSpotter”).<sup>11</sup> In general, ShotSpotter listens for gunshots, identifies their location, and then, after a round of verification by artificial intelligence and experts, notifies the police so they can respond.<sup>12</sup>

At a more technical level, ShotSpotter is a combination of hardware and software.<sup>13</sup> The hardware consists of acoustic sensors, each with four microphones that are installed high above the city, on various structures such as telephone poles and the roofs of buildings.<sup>14</sup> The acoustic sensors are “[r]oughly the size of a medium pizza and designed to look like a rooftop fan.”<sup>15</sup> To adequately detect gunshots in a particular area, ShotSpotter typically installs twenty to twenty-five sensors per square mile.<sup>16</sup> The sensors are passive, meaning they are not actively recording “until they hear an ‘explosive type sound.’”<sup>17</sup> When the sensors identify an explosive

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10. *Company Overview*, SHOTSPOTTER INC., [www.shotspotter.com/company/](http://www.shotspotter.com/company/) [perma.cc/J4DV-5RYC] (last visited Sept. 20, 2020).

11. *Id.* ShotSpotter also sells a host of other products, including ShotSpotter SecureCampus and ShotSpotter SiteSecure. SecureCampus is billed by ShotSpotter as a product that can help accelerate the emergency response to a school shooting. *Don't Risk Your College Campus Safety – Be Prepared for Gunfire Incidents*, SHOTSPOTTER INC., [www.shotspotter.com/risk-management/campus-safety/](http://www.shotspotter.com/risk-management/campus-safety/) [perma.cc/4WY3-YTXD] (last visited Feb. 16, 2020). SecureCampus has a series of acoustic sensors that are triggered by the sound of gunshots, or other impulsive type sounds. *Id.* After the sensors are triggered, they determine the location of the shots through artificial intelligence and triangulation. *Id.* From there, if the sounds are confirmed as gunshots by analysts in ShotSpotter’s Incident Review Center, alerts are sent to campus and local police for dispatch. *Id.* From the moment the sensors are triggered until the sounds are confirmed as gunshots is marketed by ShotSpotter as taking less than sixty seconds. SiteSecure is a functionally similar product to SecureCampus, but is marketed towards businesses, rather than academic institutions. *Protect Your Staff, Visitors, & Physical Assets from Gunfire*, SHOTSPOTTER INC., [www.shotspotter.com/risk-management/physical-security/](http://www.shotspotter.com/risk-management/physical-security/) [perma.cc/E3CZ-43JP] (last visited Feb 16, 2020).

12. *Precision Policing Platform*, ShotSpotter Inc., [www.shotspotter.com/platform/](http://www.shotspotter.com/platform/) [perma.cc/7Z4B-6JPK] (last visited Sept. 20, 2020) [hereafter Precision].

13. Nancy G. La Vigne et al., *Implementing Gunshot Detection Technology*, URBAN INST., 3-4 (Oct. 2019), [www.urban.org/sites/default/files/publication/101161/implementing\\_gunshot\\_detection\\_technology\\_recommendations\\_for\\_law\\_enforcement\\_and\\_municipal\\_partners.pdf](http://www.urban.org/sites/default/files/publication/101161/implementing_gunshot_detection_technology_recommendations_for_law_enforcement_and_municipal_partners.pdf) [perma.cc/Z253-WWWN].

14. *Id.* at 3; Ethan Watters, *Shot Spotter*, WIRED (Apr. 1, 2007), [www.wired.com/2007/04/shotspotter/](http://www.wired.com/2007/04/shotspotter/) [perma.cc/SW54-67BM].

15. Watters, *supra* note 14.

16. Dawn Baumgartner Vaughan, *Leaders Weighs Pros and Cons of ShotSpotter in Durham, N.C.*, GOV’T TECH. (Mar. 8, 2019), [www.govtech.com/biz/Leaders-Weighs-Pros-and-Cons-of-ShotSpotter-in-Durham-NC.html](http://www.govtech.com/biz/Leaders-Weighs-Pros-and-Cons-of-ShotSpotter-in-Durham-NC.html) [perma.cc/NB2H-BX9S].

17. *Id.*

type sound, the software filters out background noise and creates a three second audio recording of the sound.<sup>18</sup> If at least three sensors, through artificial intelligence, determine the sound to be a gunshot, the audio file is then sent to the final round of verification at ShotSpotter's Incident Review Center ("IRC").<sup>19</sup> The IRC is staffed with a team of acoustic experts, that provides a human check on the artificial intelligence.<sup>20</sup> If the final round of acoustic review at the IRC affirmatively classifies the sound as gunfire, an incident notification is pushed out to the police.<sup>21</sup>

### *B. Paying for ShotSpotter, and Who Collects the Data?*

About one hundred cities throughout the United States contract with ShotSpotter for their gun detection technology.<sup>22</sup> The cities range from the large municipalities of Chicago, New York City, and Miami to smaller cities such as Wilmington, Delaware, and Youngstown, Ohio.<sup>23</sup> Regardless of its effectiveness, implementing ShotSpotter presents a financial challenge for many cities.<sup>24</sup> ShotSpotter markets its product under a subscription pricing model at between \$65,000 and \$90,000 per square mile per year.<sup>25</sup> They are, however, flexible in their pricing model.<sup>26</sup> Chicago, for instance,

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18. *Precision*, *supra* note 12; Cale Guthrie Weissman, *The NYPD's Newest Technology May Be Recording Conversations*, BUSINESS INSIDER (Mar. 26, 2015), [www.businessinsider.com/the-nypds-newest-technology-may-be-recording-conversations-2015-3](http://www.businessinsider.com/the-nypds-newest-technology-may-be-recording-conversations-2015-3) [perma.cc/38JS-AC5M] ("there is clear evidence that ShotSpotter can record conversations" (internal quotation marks omitted)).

19. *Precision*, *supra* note 12 (The software uses multi-lateration to determine the perceived location of the gunshots, a means by which it analyzes both the time difference of the sound's arrival at each sensor, as well as its angle of arrival).

20. *Id.*

21. *Id.*

22. ShotSpotter Cities, ShotSpotter Inc., [www.shotspotter.com/cities/](http://www.shotspotter.com/cities/) (last visited Sept. 10, 2021) [perma.cc/K3WB-NE8E].

23. *Id.*

24. Matt Drange, *We're Spending Millions On This High-Tech System Designed To Reduce Gun Violence. Is It Making A Difference?*, FORBES (Nov. 17, 2016), [www.forbes.com/sites/mattdrange/2016/11/17/shotspotter-struggles-to-prove-impact-as-silicon-valley-answer-to-gun-violence/](http://www.forbes.com/sites/mattdrange/2016/11/17/shotspotter-struggles-to-prove-impact-as-silicon-valley-answer-to-gun-violence/) [perma.cc/2JV4-2VZ2] [hereinafter Drange I].

25. *Id.* The subscription pricing model was implemented by current CEO, Ralph Clark, in an effort to reduce the upfront cost and make ShotSpotter more affordable to cities and police departments. *Id.* The prior pricing model included a significant upfront cost of about \$200,000 to \$250,000 per square mile to install and included an annual maintenance fee of about fifteen percent of the installation price. Cara Buckley, *High-Tech 'Ears' Listen for Shots*, N. Y. TIMES (Nov. 20, 2009), [www.nytimes.com/2009/11/22/nyregion/22shot.html](http://www.nytimes.com/2009/11/22/nyregion/22shot.html) [perma.cc/CEZ4-LQMB].

26. *See e.g.*, Press Release, SHOTSPOTTER, *Chicago Signs \$23 Million Multi-year Agreement With ShotSpotter to Extend Gunshot Detection Coverage Into Next Decade* (Sep. 5, 2018), [www.globenewswire.com/news-release/2018/09/05/1565583/0/en/Chicago-Signs-23-Million-Multi-year-](http://www.globenewswire.com/news-release/2018/09/05/1565583/0/en/Chicago-Signs-23-Million-Multi-year-)

signed a three-year contract for more than 100 square miles of ShotSpotter coverage for \$23 million in 2018, at a discount from the advertised price per square and year.<sup>27</sup> Additionally, as recently as May 2020, the city of Springfield, Illinois signed a contract with ShotSpotter at both a discount and on a backloaded payment plan.<sup>28</sup>

Under the subscription model, cities do not own the data accumulated by ShotSpotter sensors.<sup>29</sup> Instead, cities lease the data and are permitted to use it in an unrestricted manner, albeit the cities lose access when they cancel their contract with ShotSpotter.<sup>30</sup> In addition, while cities are paying for a ShotSpotter subscription, they are expressly forbidden from sharing the data with any research institutions.<sup>31</sup> ShotSpotter CEO, Ralph Clark, has stated that “[ShotSpotter does not] want the data to be given away so that other people could derive value from the process,” and compared doing so with “taking someone else’s Netflix subscription.”<sup>32</sup> However, by restricting the sharing of accumulated gunshot data, ShotSpotter makes it difficult for research organizations to study its effectiveness in action.<sup>33</sup>

### C. Assuming that ShotSpotter Functions as Intended, What are its Benefits?

In many cities throughout the United States, most gunshots go

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Agreement-With-Shotspotter-to-Extend-Gunshot-Detection-Coverage-Into-Next-Decade.html [perma.cc/VT2K-7NVS] [hereinafter SS Press Release].

27. *Id.*

28. Brenden Moore, *At Reduced Cost, City Council Approves ShotSpotter*, STATE J.-REGISTER (May 5, 2020), www.sj-r.com/news/20200505/at-reduced-cost-city-council-approves-shotspotter [perma.cc/FF9Z-KK3P] (The deal was discounted from \$838,740, to \$643,750 for a three-year contract, and only required \$75,000 upfront in the first year, with \$284,375 due for both years two and three).

29. Jason, Tashea, *Should The Public Have Access To Data Police Acquire Through Private Companies?*, A.B.A J. 6 (Dec. 1, 2016), www.abajournal.com/magazine/article/public\_access\_police\_data\_private\_company [perma.cc/H2VK-F2CZ]; *ShotSpotter Frequently Asked Questions*, www.shotspotter.com/system/content/uploads/SST\_FAQ\_January\_2018.pdf [perma.cc/S2G8-72WF] [hereinafter SST FAQ].

30. *Id.*; Jennifer L. Doleac, *To Reduce Gun Violence, Empower Citizens To Make Their Communities Safer*, Brookings (Feb. 4, 2016) www.brookings.edu/opinions/to-reduce-gun-violence-empower-citizens-to-make-their-communities-safer/ [perma.cc/2ERK-GLTM].

31. SST FAQ, *supra* note 29.

32. Tashea, *supra* note 29.

33. *See* Drange I, *supra* note 24 (Jennifer Doleac, as well as other researchers have tried to get ShotSpotter gunshot data from the company, “only to be told it was considered ‘trade secret’ and not subject to public records laws.” Additionally, in direct communication with CEO Ralph Clark, Doleac was told that ShotSpotter would provide her with gunshot data at a cost of \$50,000 per city, an outrageous sum for a researcher operating with an academic budget.).



undetected, and thus, unreported to the police.<sup>34</sup> Gunshots may go unreported for many reasons, including individuals not having faith that the police will respond, the existence of a “no-snitch”<sup>35</sup> culture, or just plain misidentification.<sup>36</sup> This environment of unreported gunshots has created a void that ShotSpotter has attempted to capitalize on, by “[g]uaranteeing that the system will capture at least [eighty] percent of all audible, outdoor gunfire in coverage zones”<sup>37</sup> and providing a location of the gunshot within eighty feet of where the gunfire occurred.<sup>38</sup> ShotSpotter also claims that they are able to notify police of a gunshot within thirty seconds, which is significantly quicker than the average response time from a 911 call.<sup>39</sup> So, according to ShotSpotter, not only does their product notify police of more gunshots than 911 calls do, but it also allows police to arrive at the scene of the crime faster and investigate sooner.<sup>40</sup> Furthermore, they also claim to be able to provide police with precise details of the potential crime scene, such as how many shots were fired, whether the shots came from a vehicle, and in what direction the vehicle was traveling.<sup>41</sup>

In practice, however, ShotSpotter does not appear to live up to

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34. Press Release, OAKLAND POLICE DEPT, *86% Of Shootings In Oakland Are Unreported* (July 14, 2020), [www.oaklandca.gov/news/2020/86-of-shootings-in-oakland-are-unreported](http://www.oaklandca.gov/news/2020/86-of-shootings-in-oakland-are-unreported) [perma.cc/2UTN-ZKZY]; Andras Petho et al., *ShotSpotter Detection System Documents 39,000 Shooting Incidents In The District*, WASH. POST (Nov. 2, 2013), [www.washingtonpost.com/investigations/shotspotter-detection-system-documents-39000-shooting-incidents-in-the-district/2013/11/02/055f8e9c-2ab1-11e3-8ade-a1f23cda135e\\_story.html?utm\\_term=.d4bf7815d3](http://www.washingtonpost.com/investigations/shotspotter-detection-system-documents-39000-shooting-incidents-in-the-district/2013/11/02/055f8e9c-2ab1-11e3-8ade-a1f23cda135e_story.html?utm_term=.d4bf7815d3) [perma.cc/L48D-D8MD].

35. A “snitch” is someone that reports crime to the police. Ibram X. Kendi, *It’s Time for Police to Start Snitching*, ATLANTIC (May 14, 2018), [www.theatlantic.com/ideas/archive/2018/05/quis-custodiet-ipsos-custodes/560324/](http://www.theatlantic.com/ideas/archive/2018/05/quis-custodiet-ipsos-custodes/560324/) [perma.cc/T7ED-RRME]. Kendi points out that communities of color, where ShotSpotter devices are largely found, “are actually disproportionately *likely* to report crimes – it’s police themselves who have maintained a culture of silence.” *Id.* (emphasis added).

36. Will Kane, *Oakland Cops Aim to Scrap Gunfire-Detecting ShotSpotter*, SFGATE (Mar. 14, 2014), [www.sfgate.com/crime/article/Oakland-cops-aim-to-scrap-gunfire-detecting-5316060.php](http://www.sfgate.com/crime/article/Oakland-cops-aim-to-scrap-gunfire-detecting-5316060.php) [perma.cc/3BFG-9TEN]; Jacob Ryan, *Can This New Technology Reduce Shootings In Louisville?*, 89.3 WFPL (June 22, 2016), [www.wfpl.org/shot-tracker-might-not-reduce-shootings-louisville/](http://www.wfpl.org/shot-tracker-might-not-reduce-shootings-louisville/) [perma.cc/4L6V-4AMM]; Alex Knapp, *ShotSpotter Lets Police Pinpoint Exactly Where A Gun Was Fired*, FORBES (June 28, 2013), [www.forbes.com/sites/alexknapp/2013/06/28/shotspotter-lets-police-pinpoint-exactly-where-a-gun-was-fired](http://www.forbes.com/sites/alexknapp/2013/06/28/shotspotter-lets-police-pinpoint-exactly-where-a-gun-was-fired) [perma.cc/QA4Z-6Y8E]; Petho et al., *supra* note 34 (demonstrating those who advocate in favor of gunshot detection technology argue that people often do not report gunfire because they misidentify the sound as a car backfiring, fireworks, or other explosive like sounds.).

37. Petho et al., *supra* note 34.

38. Buckley, *supra* note 25.

39. *Id.*

40. Watters, *supra* note 14 (“[eleven] rounds were fired from a car going [nine] miles an hour, northbound, in front of a specific address on Main Street.”).

41. *Id.*

these expectations. If the idea is to catch the criminal in the act by getting the cop to the scene faster, then ShotSpotter fails miserably.<sup>42</sup> A study by the National Institute of Justice found that ShotSpotter correctly detected 99.6% of gunshots.<sup>43</sup> While on its face this number appears to advocate for ShotSpotter's widespread adoption, further analysis shows that it is deceiving. This number does not account for the false positive rate – that is, how often ShotSpotter incorrectly notifies police of a firework, a car backfiring, or a nail gun.<sup>44</sup> One study found that police were unable to find evidence of gunshots thirty to seventy percent of the time after receiving a ShotSpotter alert.<sup>45</sup> The alerts, in practice, rarely ever lead to arrests of the shooter or even witness reports taken by the police.<sup>46</sup> They are significantly more likely to lead to an unfounded result, meaning the police were unable to locate any evidence, speak with any witnesses, or even verify that there were in fact gunshots.<sup>47</sup> Further, no independent analysis exists to suggest that ShotSpotter has an impact on “getting victims to the hospital faster, clearing more cases, reducing crimes, or decreasing gun violence[.]”<sup>48</sup>

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42. Matt Drange, *ShotSpotter Alerts Police To Lots Of Gunfire, But Produces Few Tangible Results*, FORBES (Nov. 17, 2016), <https://www.forbes.com/sites/mattdrange/2016/11/17/shotspotter-alerts-police-to-lots-of-gunfire-but-produces-few-tangible-results/?sh=71aff5bd229e> [perma.cc/ECF2-T4PG] [hereinafter Drange II]. The majority of ShotSpotter alerts end with police closing out the incident without finding anything. *Id.* This was based on a study using data from more than two dozen cities that use ShotSpotter. *Id.*

43. Erica Goode, *Shots Fired, Pinpointed and Argued Over*, N.Y. TIMES (May 28, 2012), [www.nytimes.com/2012/05/29/us/shots-heard-pinpointed-and-argued-over.html](http://www.nytimes.com/2012/05/29/us/shots-heard-pinpointed-and-argued-over.html) [perma.cc/3X49-NUZU].

44. Jay Stanley, *Gunshot Detectors: the ACLU's View*, ACLU (May 29, 2012), [www.aclu.org/blog/national-security/privacy-and-surveillance/gunshot-detectors-aclus-view](http://www.aclu.org/blog/national-security/privacy-and-surveillance/gunshot-detectors-aclus-view) [perma.cc/YZ6Q-WKFR]. This is not meant to lead the reader to any conclusions, other than that this data may not be available because ShotSpotter maintains ownership and authority over its use by research organizations.

45. Drange II, *supra* note 42.

46. *See id.* (finding the following results: Brockton, MA 296 alerts; 152 unfounded; 43 reports taken; 2 arrests. East Palo Alto, CA 1,725 alerts; 1,089 unfounded; 237 reports taken; 4 arrests. Kansas City, MO 6,619 alerts; 2,513 unfounded; 714 reports taken; 108 arrests. Milwaukee, WI 10,285 alerts; 7,201 unfounded; 172 arrests. Omaha, NE 1,181 alerts; 737 unable to locate; 92 reports taken; 14 arrests. San Francisco, CA 4,385 alerts; 1,412 unfounded; 76 reports taken; 2 arrests. Wilmington, NC 1,278 alerts; 399 unfounded; 256 reports taken; 5 arrests.).

47. *Id.*

48. Rod McCullom, *Sensors and Software Listen for Gunfire in Chicago. Does it Make a Difference?*, UNDARK (Dec. 13, 2017), [www.undark.org/2017/12/13/gunfire-detection-chicago-gun-violence/](http://www.undark.org/2017/12/13/gunfire-detection-chicago-gun-violence/) [perma.cc/DBK3-HBEB].

### D. Fourth Amendment Overview

To understand the issues presented in *Rickmon*<sup>49</sup>, an analysis of the Court’s jurisprudence with respect to the Fourth Amendment will be illustrative. The Fourth Amendment provides:

“[t]he right of the people to be secure in their persons, houses, papers, and effects, against unreasonable searches and seizures, shall not be violated, and no Warrants shall issue, but upon probable cause, supported by Oath or affirmation, and particularly describing the place to be searched, and the persons or things to be seized.”<sup>50</sup>

It is often misconstrued that the Fourth Amendment requires a warrant for searches and seizures, when in reality, “it merely prohibits searches and seizures that are ‘unreasonable.’”<sup>51</sup> Therefore, the Fourth Amendment does not mandate for searches and seizures to be pursuant to a warrant, but rather, that warrantless (and warrant-based) searches be reasonable.<sup>52</sup> The Court, over time, has created countless exceptions to the warrant or probable cause requirement, including, as relevant in this Note, automobile searches and “stop and frisk” searches.<sup>53</sup>

#### 1. Stop and Frisk – *Terry v. Ohio*

*Terry v. Ohio*<sup>54</sup> was a landmark opinion by the Berger Court that has provided the basis for police officers to initiate an investigatory stop in the absence of a warrant. It was the first case in which the Court justified an investigatory police stop on less than

49. *Rickmon*, 952 F.3d 876.

50. U.S. CONST. amend. IV.

51. *California v. Acevedo*, 500 U.S. 565, 581 (1991) (Scalia, J., concurring).

52. This aligns with the Framers intent in drafting the Fourth Amendment as they were concerned with the use of “writs of assistance” by the British against American colonists. Tracey Maclin, *The Central Meaning of the Fourth Amendment*, 35 WM. & MARY L. REV. 197, 213 (1993). Writs of assistance were commonly used by the British to combat widespread smuggling in the colonies and gave customs officials “blanket authority to conduct general searches for goods imported to the Colonies in violation of the tax laws of the Crown.” *Berger v. New York*, 388 U.S. 41, 58 (1967). See also *Elkins v. United States*, 364 U.S. 206, 222 (1960) (explaining “[w]hat the Constitution forbids is not all searches and seizures, but unreasonable searches and seizures.”).

53. *Acevedo*, 500 U.S. at 582 (Scalia, J., concurring) (quoting Craig M. Bradley, *Two Models of the Fourth Amendment*, 83 MICH. L. REV. 1468, 1473-74 (1985) (footnotes omitted)) (although not relevant to this note, additional exceptions to the warrant requirement include

searches incident to arrest . . . border searches . . . administrative searches of regulated businesses . . . exigent circumstances . . . search[es] incident to nonarrest when there is probable cause to arrest . . . boat boarding for document checks . . . welfare searches . . . inventory searches . . . airport searches . . . school search[es]. . .

54. *Terry v. Ohio*, 392 U.S. 1 (1968).

probable cause.<sup>55</sup> Terry was convicted for carrying a concealed weapon that was discovered by Officer McFadden while conducting a brief investigatory stop and frisk.<sup>56</sup> Officer McFadden initiated the traffic stop while patrolling downtown Cleveland after he noticed Terry and another man acting in a way that “didn’t look right to [Officer McFadden].”<sup>57</sup> Officer McFadden’s intuition would later be considered a significant factor as he was a veteran officer that had spent thirty years patrolling downtown Cleveland for shoplifters.<sup>58</sup> Terry and the other man walked back and forth past a few stores for more than ten minutes, leading Officer McFadden to believe that they were going to rob the store as their pacing suggested they were scoping the area.<sup>59</sup> It was at this point that Officer McFadden felt it was necessary to investigate further, in part, because he feared that they might have a gun.<sup>60</sup>

Officer McFadden approached them and asked a few questions, but the men responded with incoherent mumbles.<sup>61</sup> This is when Officer McFadden grabbed Terry, turned him around, and patted down the outside of his clothing.<sup>62</sup> During the pat-down, Officer McFadden felt a pistol in one of Terry’s jacket pockets.<sup>63</sup> Ultimately, Terry was arrested and charged with carrying a concealed weapon.<sup>64</sup> He then filed a motion to suppress the evidence on the basis that the gun was uncovered incident to an unlawful search and seizure pursuant to the Fourth Amendment.<sup>65</sup>

In an 8-1 decision, the Court held that the search and seizure were reasonable under the Fourth Amendment.<sup>66</sup> The Court created a balancing test that weighs the scope of the intrusion against the “specific and articulable facts which, taken together with rational inferences from those facts, reasonably warrant the intrusion.”<sup>67</sup>

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55. Daniel R. Dinger, *The Eighth Circuit: Is There a Seat For Miranda at Terry’s Table?: An Analysis of the Federal Circuit Court Split Over the Need for Miranda Warnings During Coercive Terry Detentions*, 36 WM. MITCHELL L. REV. 1467, 1476 (2010) (citing *Terry*, 392 U.S. at 9-10).

56. *Terry*, 392 U.S. at 4-8.

57. *Id.* at 5.

58. *Id.*

59. *Id.* at 6.

60. *Id.* at 6-7.

61. *Id.* at 7.

62. *Id.* The record also states that Officer McFadden did not place his hands beneath the outer clothing until he felt the weapon. *Id.*

63. *Terry*, 392 U.S. at 7.

64. *Id.*

65. *Id.* at 8.

66. *Id.* at 31.

67. *Id.* at 27 (“in determining whether the officer acted reasonably in such circumstances, due weight must be given, not to his inchoate and unparticularized suspicion or ‘hunch,’ but to the specific reasonable inferences which he is entitled to draw from the facts in light of his experience.”). This fact-based analysis has been informally codified as a “totality of the circumstances” approach in more recent cases. See *United States v. Arvizu*, 534 U.S. 266, 273 (2002) (stating that “we have said repeatedly that [courts] must look at the

The analysis is a two-step process: (1) is there a reasonable, articulable suspicion that crime is afoot, and (2) if the officer believes the individual is armed and dangerous, they may perform a protective and limited frisk for weapons.<sup>68</sup> In this instance, the majority found it reasonable for Officer McFadden to believe that Terry was armed and dangerous because his conduct was indicative of someone planning a robbery.<sup>69</sup> Officer McFadden was therefore justified in conducting a limited pat down for weapons for the safety of the officer and those around him.<sup>70</sup> The ripple effect of this decision is that it created an entirely new “reasonableness” test under the Fourth Amendment that is not confined by the Warrant Clause and its probable cause requirement.<sup>71</sup>

## 2. *The Anonymous Tip Cases – Alabama v. White and Florida v. J.L.*

Since the *Terry* decision, the Court has continued to develop case law defining the Fourth Amendment’s reasonableness standard in different situations. In order to shape the subsequent analysis, a discussion must be had on the Court’s jurisprudence regarding anonymous tips and reasonable suspicion under the Fourth Amendment. The Court has addressed a number of cases regarding anonymous tips over the years, including *Alabama v. White*.<sup>72</sup> In that case, the Court held that an officer had reasonable suspicion to conduct a *Terry* traffic stop on the basis that he received an anonymous tip that was “sufficiently corroborated to furnish reasonable suspicion that [the individual] was engaged in criminal activity.”<sup>73</sup> The Montgomery, Alabama police department received an anonymous tip providing the location of the suspect, the time

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‘totality of the circumstances’ of each case to see whether the detaining officer has a ‘particularized and objective basis’ for suspecting legal wrongdoing.”); *Navarette v. California*, 572 U.S. 393, 395 (2014) (holding under a totality of the circumstances that an officer had reasonable suspicion to initiate a traffic stop based on the fact that a truck matched the description of the truck that a 911 caller claimed had driven her off the road); *United States v. Cortez*, 449 U.S. 411, 419-21 (1981) (finding that an officer had reasonable suspicion to stop a vehicle on the southern border based on a totality of circumstances, including that the vehicle: (1) had a camper shell capable of carrying numerous people, (2) was in an area commonly used by human traffickers, and (3) had made a roundtrip from known human trafficking pickup point).

68. *Terry*, 392 U.S. at 27.

69. *Id.* at 30.

70. *Id.*

71. See Ryan J. Sydejko, *International Influence on Democracy: How Terrorism Exploited a Deteriorating Fourth Amendment*, 7 J.L. SOC’Y 220, 226-27 (2006) (explaining that the *Terry* court abandoned the uniform probable cause analysis under the Fourth Amendment, instead, “labeling this an entirely new rubric of police conduct which cannot realistically be subjected to the warrant requirement.”).

72. *Alabama v. White*, 496 U.S. 326, 326 (1990).

73. *Id.* at 331.

that they would leave an apartment complex, the car they would be driving (and specific issues with it), where they were going, and that they would be in possession of cocaine.<sup>74</sup> Officers went to the apartment complex where they observed the car referenced in the anonymous tip.<sup>75</sup> The officers then saw an individual leave the apartment building, get in the car, and drive in the direction of the hotel referenced in the anonymous tip.<sup>76</sup> Just before the car arrived at the motel, the officers initiated an investigatory *Terry* stop, where they ultimately found drugs.<sup>77</sup> On certiorari, the Court addressed whether the officers had the reasonable suspicion necessary to justify the initial stop of the vehicle based solely on the anonymous tip.<sup>78</sup>

In the opinion authored by Justice White, the Court was clear that the anonymous tip, standing on its own, did not provide the “necessary indicia of reliability” to create reasonable suspicion to justify the initial stop.<sup>79</sup> Instead, in justifying the stop, the Court was fixated on the fact that the anonymous tipster was able to corroborate components of the individual’s *future* behavior.<sup>80</sup> The facts that the tipster was able to corroborate about the individual’s future movements were not all easily predicted, unless the tipster had “inside information [or] a special familiarity with respondent’s affairs.”<sup>81</sup> Even with this corroboration, the Court still considered this scenario a “close question” as to whether they had reasonable suspicion.<sup>82</sup>

Conversely, in *Florida v. J.L.*, the Court held that an anonymous tip did not produce the reasonable suspicion necessary to justify a *Terry* stop and frisk.<sup>83</sup> In *J.L.*, the Miami-Dade Police Department received a tip from an anonymous caller “that a young black male standing at a particular bus stop and wearing a plaid shirt was carrying a gun.”<sup>84</sup> Six minutes after the department received the anonymous tip, two officers arrived at the bus stop and saw three black males “just hanging out [there].”<sup>85</sup>

The tip provided the only basis for the stop and frisk of J.L.,

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74. *See id.* at 327.

75. *Id.*

76. *Id.*

77. *Id.*

78. *Id.* at 329.

79. *Id.*

80. *Id.* at 332.

81. *Id.*

82. *Id.* The officers were able to corroborate that (1) an individual left the specific apartment around the referenced time, (2) she entered the brown Plymouth station wagon with the broken right taillight, (3) and that she drove approximately four miles, in what was the most direct route to the referenced motel. *Id.* at 327.

83. *Florida v. J.L.*, 529 U.S. 266, 268 (2000).

84. *Id.*

85. *Id.*

a fifteen-year-old boy who happened to be wearing a plaid shirt.<sup>86</sup> Aside from the tip, the officers could not see a firearm in plain view, nor did J.L. or either of the other two individuals make any suspicious or threatening movements.<sup>87</sup> However, when an officer walked up to J.L. and asked him to put his hands up, he uncovered a gun in his pocket.<sup>88</sup>

In a unanimous decision, Justice Ginsberg wrote that “[t]he tip in the [*J.L.*] lacked the moderate indicia of reliability present[ed] in *White* and essential to the Court’s decision in that case.”<sup>89</sup> Unlike in *White*, there was nothing predictive about the tip in *J.L.* as it merely suggested (without any corroboration) that someone with a specific shirt at a specific bus stop was in possession of a gun.<sup>90</sup> Anyone could have pointed out the person in the plaid shirt by virtue of them just driving by.<sup>91</sup> Even though a gun was found on J.L.’s person, that “after-the-fact” finding cannot be used to deem the initial frisk reasonable under the Fourth Amendment.<sup>92</sup>

The Court declined to adopt Florida’s argument that a *per se* “firearm exception” should be carved into the standard *Terry* analysis, which “would justify a stop and frisk [based on a tip alleging an illegal gun] even if the accusation would fail standard pre-search reliability testing.”<sup>93</sup> This standard would have permitted a frisk for weapons anytime that police received an anonymous tip that someone was in possession of a gun.<sup>94</sup>

### *E. United States v. Rickmon*

A ShotSpotter alert notifying police of gunfire is akin to an

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86. *Id.*

87. *Id.*

88. *Id.* at 269 (He “was charged under state law with carrying a concealed firearm without a license and possessing a firearm while under the age of 18”).

89. *Id.* at 271.

90. *Id.* at 270 (quoting *White*, 496 U.S. at 329) (“[A]n anonymous tip alone seldom demonstrates the informant’s basis of knowledge or veracity.”).

91. *Id.* (citing *White*, 496 U.S. at 329).

92. *J.L.*, 529 U.S. at 271; *see also* David M. Hastings, *Sufficiency of Showing to Support No-Knock Search Warrant – Cases Decided After Richards v. Wisconsin*, 520 U.S. 385, 117 S. Ct. 1416, 137 L. Ed. 2d 615 (1997), 50 A.L.R. 6th 455, 10 (citing *State v. Henderson*, 629 N.W.2d 613 (2001)) (explaining that “[t]he existing case law recognized that allowing the probable cause basis for the issuance of a warrant to be bolstered after the fact would render the warrant clause meaningless by essentially allowing warrants to be issued on less than probable cause, as long as the proper showing could be made later.”).

93. *J.L.*, 529 U.S. at 272 (quoting *Terry*, 392 U.S. at 30) (Stating that

“[f]irearms are dangerous, and extraordinary dangers sometimes justify unusual precautions. Our decisions recognize the serious threat that armed criminals pose to public safety; *Terry*’s rule, which permits protective police searches on the basis of reasonable suspicion rather than demanding that officers meet the higher standard of probable cause, responds to this very concern.”).

94. *J.L.*, 529 U.S. at 273.



anonymous tip relaying the same message.<sup>95</sup> The Seventh Circuit first made this determination in *United States v. Rickmon*, a case that reached the court on appeal from the United States District Court for the Central District of Illinois.<sup>96</sup>

On July 29, 2018, Travis Ellefritz – an officer with the Peoria Police Department – was on duty in his patrol car in the early morning hours.<sup>97</sup> Shortly after 4:40 a.m., Officer Ellefritz received a ShotSpotter alert that reported two gunshots originating from 2203 North Ellis Street.<sup>98</sup> Before Ellefritz received any details from dispatch, he was en route to North Ellis.<sup>99</sup> While on his way, Officer Ellefritz heard the police dispatcher broadcast the same alert, along with an additional ShotSpotter alert identifying three more gunshots from the same location.<sup>100</sup> The dispatcher then relayed more information, including that there were several cars and a “black male on foot” seen leaving the scene.<sup>101</sup> As Officer Ellefritz approached the location on North Ellis, he turned his vehicle’s headlights off.<sup>102</sup> Moments later, he noticed a vehicle leaving North Ellis and driving in his direction.<sup>103</sup>

As the vehicle approached, Officer Ellefritz went to initiate a traffic stop by turning on his patrol car’s emergency lights and blocking oncoming traffic.<sup>104</sup> Officer Ellefritz allegedly feared for a moment that the vehicle was attempting to get away from him, yet the vehicle stopped next to his patrol vehicle within seconds of his command for it to stop.<sup>105</sup> The occupants of the vehicle “pointed backward, in the direction from where they came, yelling: “They are down there! They are down there!”<sup>106</sup> Officer Ellefritz then observed what they were pointing and yelling about – “a crowd of about [fifteen] to [twenty] people at the street’s dead end, approximately 300 feet from him.”<sup>107</sup>

Ellefritz remained at the vehicle, with his gun drawn until backup arrived.<sup>108</sup> Terrell Rickmon, along with the driver and owner of the vehicle, kept their hands up until additional officers arrived on the scene.<sup>109</sup> After backup arrived, Rickmon disclosed to Officer Ellefritz that he had been shot in the leg, presumably from one of

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95. *Rickmon*, 952 F.3d at 882.

96. *Id.* at 878.

97. *Id.* at 879.

98. *Id.*

99. *Id.*

100. *Id.*

101. *Id.*

102. *Id.*

103. *Id.*

104. *Id.*

105. *Id.*

106. *Id.*

107. *Id.*

108. *Id.*

109. *Id.*

the gunshots that were detected about five minutes earlier from ShotSpotter.<sup>110</sup> After receiving consent from the driver, Officer Ellefritz searched the vehicle and found a handgun under Rickmon's passenger seat.<sup>111</sup> He was then arrested and later indicted for possession of a firearm by a felon in violation of 18 U.S.C. § 922(g)(1).<sup>112</sup>

On December 21, 2018, the district court denied Rickmon's motion to suppress evidence of the handgun.<sup>113</sup> On appeal at the Seventh Circuit, Rickmon challenged the district court's denial of his motion to suppress.<sup>114</sup> The Seventh Circuit affirmed the decision, explaining that "the reliability of the police reports, the dangerousness of the crime, the stop's temporal and physical proximity to the shots, the light traffic late at night, and the officer's experience with gun violence in that area – provided reasonable suspicion to stop [Rickmon's] vehicle."<sup>115</sup>

### III. ANALYSIS

The issue on appeal in *Rickmon* was "whether law enforcement may constitutionally stop a vehicle because, among other articulable facts, it was emerging from the source of a ShotSpotter alert."<sup>116</sup> In reviewing the reasonableness of a *Terry* stop, the Seventh Circuit applied a de novo standard, giving no deference to the trial court.<sup>117</sup> This analysis will begin in sections A-F with a discussion of the factors that the Seventh Circuit used to justify the stop of the vehicle.<sup>118</sup> Section G will discuss the dissenting opinion. This decision was a case of first impression involving ShotSpotter, and given the widespread use of the technology in states located in other Circuits, *Rickmon* has the potential to influence future decisions.<sup>119</sup>

#### A. *What Officer Ellefritz Knew at The Time Of The Stop*

According to Judge Flaum and Judge Ripple, this was not a case of a ShotSpotter alert on its own justifying a *Terry* stop of the

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110. *Id.*

111. *Id.*

112. *Id.*

113. *Id.* at 879-80.

114. *Id.* at 880.

115. *Id.* at 885.

116. *Id.*

117. *Id.* at 880-81 (citing *United States v. Watson*, 900 F.3d 892, 895 (7th Cir. 2018)).

118. *Id.* at 881-82.

119. *See id.* at 878 ("As a matter of first impression, this case requires us to consider whether law enforcement may constitutionally stop a vehicle because, among other articulable facts, it was emerging from the source of a ShotSpotter alert.").

vehicle that Rickmon was occupying.<sup>120</sup> The Seventh Circuit questioned “whether a single ShotSpotter alert would amount to reasonable suspicion.”<sup>121</sup> The court continued by explaining that an officer must have “individualized suspicion” in order to stop a vehicle in the vicinity of a ShotSpotter alert.<sup>122</sup> Rickmon argued that Officer Ellefritz did not have “individualized suspicion” to stop his vehicle because the ShotSpotter alert merely provided an approximate location of potential gunfire, but not anything specific regarding potential suspects or vehicles.<sup>123</sup> It is well established in the Seventh Circuit that an individual’s presence in an area of suspected criminal activity, without more, cannot justify a *Terry* stop.<sup>124</sup> While the Seventh Circuit agreed with this notion, it found that there were additional articulable facts that “taken together with rational inferences from those facts” created reasonable suspicion, as opposed to a mere “inarticulate hunch” that Rickmon was involved in criminal activity.<sup>125</sup>

### *B. Individualized or Localized Suspicion?*

The Seventh Circuit considered whether Officer Ellefritz had individualized suspicion that Rickmon *in particular* was involved in the shooting.<sup>126</sup> However, as the dissent explained, it appeared that Ellefritz merely had a localized suspicion that anybody in the vicinity of 2203 North Ellis Street could have fired the shots.<sup>127</sup> According to Ellefritz’s own admission, “he would have stopped literally any car he saw on North Ellis based on the information he had.”<sup>128</sup> Though a *Terry* analysis is objective, rather than subjective, this line of thinking suggests that Ellefritz did not have individualized suspicion for stopping Rickmon’s vehicle as opposed to someone else in the vicinity.<sup>129</sup>

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120. *Id.* at 881.

121. *Id.*

122. *Id.*

123. Brief for Appellant at 12, *United States v. Rickmon*, 952 F.3d 876 (2020) (No. 19-2054), 2019 WL 5328652, at \*12.

124. See *United States v. Bohman*, 683 F.3d 861, 864 (7th Cir. 2012) (explaining that “[a] mere suspicion of illegal activity at a particular place is not enough to transfer that suspicion to anyone who leaves that property.”); *Matz v. Klotka*, 769 F.3d 517, 523 (7th Cir. 2014) (quoting *Ybarra v. Illinois*, 444 U.S. 85, 91 (1979)) (clarifying that “a person’s mere propinquity to others independently suspected of criminal activity does not, without more, give rise to probable cause to search that person.”).

125. *Rickmon*, 952 F.3d at 880 (quoting *United States v. Lewis*, 920 F.3d 483, 493 (7th Cir. 2019)).

126. *Rickmon*, 952 F.3d at 881.

127. *Id.* at 885-86 (Wood, J., dissenting).

128. *Id.* at 886.

129. *Terry*, 392 U.S. at 21-22 (discussing that it is imperative for a judge tasked with evaluating the reasonableness of a search to do so against the backdrop of an objective standard).

Despite only having a localized suspicion, the Seventh Circuit still held that the traffic stop was reasonable under the Fourth Amendment based on the totality of the circumstances.<sup>130</sup> The court stated that there were more circumstances, other than the mere fact that the vehicle was in the ShotSpotter coverage zone that justified the stop.<sup>131</sup> These included:

“(1) the reliability of any reports to police; (2) the dangerousness of the crime; (3) the temporal and physical proximity of the stop to the crime; (4) any description of the vehicle and relevant traffic; and (5) the officer’s (or potentially even the department’s) experience with criminal activity in the area.”<sup>132</sup>

### C. “Corroborated Reports”

The Supreme Court and Seventh Circuit have both held that “[c]orroboration from multiple sources describing the general area and nature of the same crime exceeds the single police tip that alone can supply reasonable suspicion for a stop.”<sup>133</sup> For instance, in *Burgess*, the court justified a stop where officers responded to a shooting after receiving a dispatch (corroborated by multiple callers) that shots were fired from a black vehicle.<sup>134</sup> Based on these tips, the officers in *Burgess* knew they were looking for a black vehicle, as opposed to someone on foot, or in a residence.<sup>135</sup> In addition, while “an anonymous tip alone seldom demonstrates the informant’s basis of knowledge or veracity,” the Supreme Court recognizes that a “suitably corroborated” anonymous tip can exhibit a “sufficient indicia of reliability to provide reasonable suspicion to make the investigatory stop.”<sup>136</sup> Conversely, in *J.L.*, the Court held that an anonymous tip, standing on its own, without any form of corroboration, was not enough to justify an investigatory stop.<sup>137</sup>

In *Rickmon*, the Seventh Circuit drew comparisons to the

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130. *Rickmon*, 952 F.3d at 884-85.

131. *Id.* at 881-82.

132. *Id.*

133. *Id.* at 882 (citing *United States v Burgess*, 759 F.3d 708, 710); *J.L.*, 529 U.S. at 270.

134. *Burgess*, 759 F.3d at 711.

135. *Burgess*, 759 F.3d at 709.

136. *J.L.*, 529 U.S. at 270; see also *White*, 496 U.S. at 332 (finding that an anonymous tip can be suitably corroborated if the tipster is able to accurately predict the suspect’s future movements and the police are then able to corroborate before initiating an investigatory stop.).

137. *J.L.*, 529 U.S. at 271 (holding that “[t]he tip . . . lacked the moderate indicia of reliability present in *White* . . . [because] [t]he anonymous call concerning *J.L.* provided no predictive information and therefore left the police without means to test the informant’s knowledge or credibility.”).

Burgess<sup>138</sup> and White<sup>139</sup> line of cases.<sup>140</sup> The Seventh Circuit agreed with Rickmon's argument that the ShotSpotter alerts were "analogous to an anonymous tipster."<sup>141</sup> However, the court disagreed with the notion that Ellefritz initiated the traffic stop based on uncorroborated information.<sup>142</sup> In the eyes of the majority, the ShotSpotter alert was corroborated by the dispatches reporting to Ellefritz that shots were fired near the location of the ShotSpotter alerts.<sup>143</sup> Even though neither the ShotSpotter alerts nor the dispatches provided Ellefritz with a description of the shooter, the majority stated that he "had a good idea of what to be on the lookout for when he arrived."<sup>144</sup>

#### *D. Responding to an Emergency Situation*

The Seventh Circuit used a balancing test of sorts in their reasonable suspicion analysis that ultimately justified the stop.<sup>145</sup> That is, one of the circumstances the court considered relevant in its analysis was "the dangerousness of the crime."<sup>146</sup> Guns are obviously inherently dangerous, with gun users killing nearly 40,000 people in 2019 — the year Rickmon was arrested.<sup>147</sup> The court distinguished between a tip from an anonymous caller reporting general criminality, like gun possession, versus an anonymous emergency report.<sup>148</sup> In doing so, the Seventh Circuit reasoned that "an emergency report 'can support an officer's reasonable suspicion with less objective evidence to corroborate the report.'"<sup>149</sup> It is true that the threat to public safety is greater in instances where there has actually been a shooting than when

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138. *Burgess*, 759 F.3d. at 709.

139. *White*, 496 U.S. at 326.

140. *Rickmon*, 952 F.3d at 882.

141. *Id.*

142. *Id.* at 882-83.

143. *Id.*

144. *Id.* at 883.

145. *Id.*

146. *Id.* at 881-82. The court noted a number of relevant factors in a reasonable suspicion analysis "[i]n cases where an officer stops a car departing a suspected crime scene . . . [including]: (1) the reliability of any reports to police; (2) the dangerousness of the crime; (3) the temporal and physical proximity of the stop to the crime; (3) any description of the vehicle and relevant traffic; and (5) the officer's (or potentially even the department's) experience with criminal activity in that area." *Id.*

147. *All Injuries*, NAT'L CTR. FOR HEALTH STATISTICS, [www.cdc.gov/nchs/fastats/injury.htm](http://www.cdc.gov/nchs/fastats/injury.htm) [perma.cc/V3EN-5TWV] (last visited Nov. 1, 2020).

148. *Rickmon*, 952 F.3d at 883; *But see J.L.*, 529 U.S. at 272 (recognizing that "[f]irearms are dangerous, and extraordinary dangers sometimes justify unusual precautions . . . [b]ut an automatic firearm exception to our established reliability analysis would rove too far.").

149. *Id.* (quoting *United States v. Williams*, 731 F.3d 678, 684 (7th Cir. 2013); *United States v. Hicks*, 531 F.3d 555, 559-60 (7th Cir. 2008)).

someone may merely be in illegal possession of a firearm.<sup>150</sup> As the Court in *Terry* Court, it would be unreasonable to keep a police officer from being able to disarm a potentially armed suspect.<sup>151</sup> With this rationale as a backdrop, we will now take a closer look at the cases that the *Rickmon* court used to justify the distinction between anonymous tips reporting general criminality versus emergency reports.

In *Williams*, a Seventh Circuit case originating in Wisconsin, the court justified a stop where “there was a large group of people being loud and waving guns in a location at which violent crime and drug activity is regularly reported.”<sup>152</sup> The anonymous caller reported that there was a group of about twenty-five people, three or four of which she observed with “guns out.”<sup>153</sup> The caller did not report that the group was exhibiting aggressive or otherwise threatening behavior – just that they “were being loud while loitering in the parking lot of . . . a local bar.”<sup>154</sup> This area was known to police to be a “high-crime area.”<sup>155</sup> Interestingly, Wisconsin is an open-carry state, meaning that adults over the age of eighteen are legally permitted to open-carry a loaded handgun.<sup>156</sup> While it is a misdemeanor for an individual to open-carry in a bar in Wisconsin, the law, as it is written, only applies within the premises, but not to the parking lot.<sup>157</sup> The Wisconsin legislature even made clear in 2011 that it is not considered disorderly conduct to open-carry a loaded gun “[u]nless other facts and circumstances . . . indicate a criminal or malicious intent.”<sup>158</sup>

When police arrived at the bar’s parking lot about four minutes later, there was only a group of eight to ten people in the parking lot, and they were not acting disruptively.<sup>159</sup> There were no facts provided to suggest that the specific group was involved in any

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150. *Rickmon*, 952 F.3d at 883.

151. *Terry*, 392 U.S. at 24.

152. *Rickmon*, 952 F.3d at 883 (quoting *Williams*, 731 F.3d at 684).

153. *Williams*, 731 F.3d at 681.

154. *Id.*

155. *Id.* at 684. See also Andrew Guthrie Ferguson & Damien Bernache, *The “High-Crime Area” Question: Requiring Verifiable And Quantifiable Evidence For Fourth Amendment Reasonable Suspicion Analysis*, 57 AM. U.L. REV. 1587, 1591 (2008) (stating that courts rarely ask an officer what makes an area a “high-crime area,” and “on what objective, verifiable, or empirical data the police officer has based his conclusion, or whether the officer knew this information before he made the stop.”). Additionally, courts do not ask whether the area is a “high drug area,” “high theft area,” or “high robbery area.” *Id.* This is problematic, but a discussion for another day.

156. WIS. STAT. § 175.60(2)(c) (West 2020) (“Unless expressly provided in this section, this section does not limit an individual’s right to carry a firearm that is not concealed.”).

157. WIS. STAT. § 941.237(2) (West 2020). “Premises” means the area described in a license or permit. WIS. STAT. § 125.02(14m) (West 2020).

158. WIS. STAT. § 947.01(2) (West 2020).

159. *Williams*, 731 F.3d at 685.

criminal activity.<sup>160</sup> Judge Stadtmueller, an appointee of “law and order” President Reagan<sup>161</sup>, nevertheless, considered the tip to be an emergency report, and determined that this justified the police officer stopping Williams, one of the people in the parking lot.<sup>162</sup> Although the court in *Rickmon* used *Williams* to support their decision, *Williams* did not actually involve a shooting.<sup>163</sup>

The court in *Rickmon*, as well as *Williams*, also leaned on *Hicks* for additional support for the notion that when police respond to emergency reports, they can have reasonable suspicion to conduct a stop based on an anonymous tip “with less objective evidence to corroborate the report.”<sup>164</sup> In *Hicks*, a police dispatcher relayed a tip to a responding officer that there was a domestic disturbance in progress involving an armed suspect.<sup>165</sup> The responding officer, based on information relayed from dispatch, believed that Hicks, the suspect he was looking for, was dressed in black.<sup>166</sup> When the responding officer arrived, he saw a man dressed in black (a factor that courts would find indicates an indicia of reliability), stopped him, and put him in handcuffs before he was able to enter a nearby home.<sup>167</sup> This case, unlike *Rickmon* and *Williams*, actually involved a tip with some level of specificity of who the officer was looking for, *as well as* what can be perceived as an active emergency.<sup>168</sup>

### *E. Nothing Good Happens After 2 a.m., But Can That Justify a Stop?*

According to the *Rickmon* court, “it was a ‘natural surmise that whoever fired the shots’ would be in the vehicle that Officer Ellefritz stopped.”<sup>169</sup> This conclusion was based in part on the fact that the stop occurred at approximately 4:45 a.m. when traffic is understandably light.<sup>170</sup> In other words, even though Ellefritz did not have a description of the shooter, the fact that *Rickmon* was out late at night reinforced Ellefritz’s suspicion.<sup>171</sup> This line of

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160. *Id.* (considering that the officers were unable to independently corroborate whether the group, or at least any individuals in the group were waving their guns, or being disruptive, as the anonymous tipster had indicated in her 911 call).

161. Allen Rostron, *The Law and Order Theme in Political and Popular Culture*, 37 OKLA. CITY U.L. REV. 323, 323 (2012) (“In the eyes of law and order conservatives, judges needed to stop coddling criminals and letting them go free on legal technicalities.”).

162. *Williams*, 731 F.3d at 684.

163. *Rickmon*, 952 F.3d at 883.

164. *Id.*; *Williams*, 731 F.3d at 684.

165. *Hicks*, 531 F.3d at 556-57.

166. *Id.* at 557.

167. *Id.*

168. *Id.*

169. *Rickmon*, 952 F.3d at 884 (quoting *Brewer*, 561 F.3d at 678).

170. *Id.*

171. *Id.* (citing *Brewer*, 561 F.3d at 678).



reasoning comes from *Brewer*<sup>172</sup>, a case that at face value appears comparable, but is actually quite distinguishable. For instance, in *Brewer*, an officer stopped the only vehicle leaving the only apartment complex at 2:30 a.m., seconds after he personally heard gunshots coming from inside the complex.<sup>173</sup> Just as in *Rickmon*, the officer did not know whether the shooter was on foot, in a vehicle, or in a residence.<sup>174</sup> However, the court in *Brewer* held that the stop was reasonable in part because of “the brevity of the interval between the firing of the shots and the spotting of the sole vehicle quickly exiting.”<sup>175</sup> This brevity was not present in *Rickmon*, as Officer Ellefritz arrived at the scene nearly five minutes after the shooting.<sup>176</sup> Importantly, the Seventh Circuit in *Brewer* saw the case as being “on the line between reasonable suspicion and pure hunch.”<sup>177</sup> However, the Seventh Circuit in *Rickmon* did not take issue with the significant time difference in arriving on the scene, or find that the facts pushed *Rickmon* into the sphere of “pure hunch.”<sup>178</sup>

#### *F. Nearly Blind Deference to Officer Ellefritz’s Experience*

Finally, the Seventh Circuit looked to the fact that Ellefritz used to patrol this block and often responded to reports of shots fired in this area.<sup>179</sup> Though neither party referred to the area as a “high crime area,” “Ellefritz testified that he had personal knowledge of criminal activity in that part of Peoria.”<sup>180</sup> The court deferred to Ellefritz that he was “right to ‘draw on his own experience and specialized training to make inferences from and deductions about the cumulative information available.’”<sup>181</sup> The majority did not attempt to explain how Ellefritz’s experience could have created particularized suspicion that the shooter was in *Rickmon*’s vehicle as opposed to any of the other people still on the scene. Nevertheless, based on the totality of the circumstances mentioned in sections A-F, the Seventh Circuit found that Ellefritz had reasonable and particularized suspicion to initiate a traffic stop of

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172. *Brewer*, 561 F.3d at 676.

173. *Id.* at 678.

174. *Id.*

175. *Id.* at 679.

176. *Rickmon*, 952 F.3d at 883.

177. *Brewer*, 561 F.3d at 678.

178. *Id.*

179. *Rickmon*, 952 F.3d at 884.

180. *Id.* at 884.

181. *Id.* at 884 (quoting *United States v. Hill*, 818 F.3d 289, 294 (7th Cir. 2016); *See also Brewer*, 561 F.3d at 679 (considering in its totality of the circumstances analysis that the officer “had three years’ experience with criminal activity in the particular housing complex. . .”).

Rickmon's vehicle and denied his motion to suppress.<sup>182</sup>

### *G. The Dissent – Upholding the Framers' Intent*

Chief Judge Wood took issue with the broad discretion that the majority afforded to Officer Ellefritz in justifying the stop of Rickmon's vehicle.<sup>183</sup> His dissent began by looking to the Framers' intent with the Fourth Amendment, stating that "if the Fourth Amendment stands for anything, it stands for the proposition that police cannot seize anyone without adequate, individualized reason to do so."<sup>184</sup> In Judge Wood's eyes, the Seventh Circuit essentially gave Ellefritz a general warrant to stop anyone in the vicinity of a ShotSpotter alert, the exact type of conduct that the Framers sought to prohibit.<sup>185</sup> The comparison to a general warrant was made in this situation because "[t]he only thing that distinguished the car Ellefritz chose to stop was that it existed."<sup>186</sup>

The dissent acknowledged that there were several facts Officer Ellefritz could have relied on when he initiated the traffic stop.<sup>187</sup> In addition, Chief Judge Wood acknowledged that it is illegal to fire

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182. *Rickmon*, 952 F.3d at 885.

183. *Id.*

184. *Id.*

185. *Id.* A general warrant is one that fails "to name the individual possessing the things to be searched or seized." Eric Schnapper, *Unreasonable Searches and Seizures of Papers*, 71 VA. L. REV. 869, 874 (1985) (citing *Henry v. United States*, 361 U.S. 98, 100 (1959)). History reveals that the Framers were primarily concerned with forbidding the use of general warrants with their drafting of the Fourth Amendment. Thomas Y. Davies, *Recovering the Original Fourth Amendment*, 98 MICH. L. REV. 547, 600-01 (1999).

186. *Rickmon*, 952 F.3d at 886. Though not present in this case, one recognized exception to the need for police to have individualized suspicion is through highway sobriety checkpoints where it is permissible for officers to stop every vehicle passing through the checkpoint. *Michigan Dep't of State Police v. Sitz*, 496 U.S. 444, 447 (1990). Another noted exception to the need for individualized suspicion is highway checkpoints near the southern border to detect illegal aliens because of the significant government interest in reducing the flow of illegal aliens into the country. *United States v. Martinez-Fuerte*, 428 U.S. 543, 565-67 (1976).

187. *See id.* at 885 (noting the relevant facts include:

(1) [t]he ShotSpotter system in his squad car registered multiple gunshots at 2203 North Ellis around 4:40 a.m. on July 29, 2018, (2) [t]hat address is near the south end of the street, where it dead-ends, (3) [t]he police dispatcher announced two 'shots fired' alerts detected by ShotSpotter over the radio, (4) [t]he police dispatcher informed Ellefritz that a 911 call had come in reporting gunfire on North Ellis, (5) [t]he 911 caller also said that there were several cars leaving the location and one black male on foot, (6) [b]etween three and a half and five minutes after receiving the initial ShotSpotter dispatch, Ellefritz reached North Ellis Street, [and] (7) [a]s he drove south on the street, he saw a car turn from the east side of the street and proceeded north-bound. He saw no other cars on the road).

a gun within the city of Peoria, and thus, was reasonable based on the facts for Ellefritz to believe that the gunshots were unauthorized.<sup>188</sup> However, the dissent staunchly disagreed with the notion that Ellefritz had reasonable suspicion to believe Rickmon's vehicle, *in particular*, was responsible for the shots.<sup>189</sup> To that effect, none of the facts Ellefritz knew "even hinted at the shooter's car's make, color, age, style, or anything else."<sup>190</sup>

Chief Judge Wood found it problematic that the majority justified this traffic stop, as he believed it was "pure speculation" that Rickmon's vehicle was associated with the shots.<sup>191</sup> In fact, Judge Wood noted there were many reasons for cars to be on the road early in the morning, other than fleeing the scene of gunshots five minutes after they were fired.<sup>192</sup> He found it even more troublesome that the majority stressed the fact that Ellefritz was responding to an emergency in that gunshots were fired, and they always constitute an emergency situation.<sup>193</sup>

Lastly, the dissent dismissed the majority's concern that "compliance with the Fourth Amendment here might have allowed a culpable person to avoid being arrested."<sup>194</sup> In his dissent, Chief Judge Wood explained that "the requirement that the police must have either probable cause or at least reasonable suspicion before arresting someone will, in some instances, hamper their activities."<sup>195</sup> In addition, he argued that granting Rickmon's motion

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188. *Rickmon*, 952 F.3d at 886 (citing PEORIA, IL., CODE OF ORDINANCES § 20-161(a) (stating that "[n]o person shall fire or discharge any gun, pistol or other firearm within the city, except on premises used by a duly licensed shooting gallery, gun club or rifle club.")).

189. *Id.*

190. *Id.*

191. *Id.* (finding that "virtually nothing connected [the gunshots] with the car [Ellefritz] decided to stop, or indeed with any car at all – it was just as likely that the shooter had retreated into a nearby house or fled on foot (as the 911 caller indicated.")).

192. *See id.* (suggesting a few scenarios where a driver would be on the road early in the morning, including

"some workplaces operate on a seven-day week, and early-morning shift are by no means unheard-of: think of production workers, grocery stockers, transportation workers, bakers, and baristas . . . [o]r the driver might have needed to go from Peoria to Chicago, or Springfield, or St. Louis, for social reasons or a business appointment and wanted an early start . . . [o]r maybe the drive was at a late party. The time of day, and the fact that the road was largely empty, do not add up to anything.").

193. *Id.* Chief Judge Wood does not believe that an officer responding to an "emergency situation" has the discretion to limit the protections afforded by the Fourth Amendment. *Id.* He notes that the fact that this was an "emergency situation" does not permit "police to force their way into every house on North Ellis, to make sure that the shooter was not threatening anyone in those houses" nor does it allow for "the police to stop any and every car they saw within 1,000 feet of the point that ShotSpotter identified," so why should it permit stopping "a single car proceeding north, at the speed limit." *Id.*

194. *Id.* at 887.

195. *Id.* (citing *Ybarra*, 444 U.S. at 100) (holding that a police officer did not

to suppress would not allow the source of the crime to go free as “[t]o this day, no one has suggested that he was the shooter.”<sup>196</sup>

#### IV. PERSONAL ANALYSIS

In *Rickmon*, it appears that the Seventh Circuit prioritized governmental interests over individual rights in reaching their decision that justified the stop.<sup>197</sup> This is unfortunately not surprising as it is consistent with the discouraging trend of the reasonableness standard under the Fourth Amendment that prioritizes governmental interests at the expense of individual rights.<sup>198</sup> As with most decisions relating to the reasonableness standard, courts often give significant weight to governmental interests at the expense of an individual’s Fourth Amendment rights.<sup>199</sup> Sections A and B illustrate the doubt as to the capabilities of ShotSpotter and discussing the implications of the Seventh Circuit’s holding in *Rickmon*. Section C provides analysis as to how the Seventh Circuit *should have* handled this case and why an officer does not have reasonable suspicion to stop an individual in the vicinity of a ShotSpotter alert, absent any individualized or particularized suspicion. It will also provide some context as to why we as a society should be concerned about this “big brother”-like technology continuing to denigrate our privacy rights.

##### A. *Over-Policing of Black and Brown Neighborhoods*

The implementation of ShotSpotter can lead to over policing

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have probable cause to frisk defendant in a bar and as a result, petitioners motion to suppress was granted even though the search uncovered criminal activity).

196. *Rickmon*, 952 F.3d at 887 (stating that “the fact that [Rickmon’s] leg had been wounded by a bullet indicated (after the fact) that he was a *victim* of the shooter).

197. *Id.* at 885 (quoting *Burgess*, 759 F.3d at 711) (“In such a situation, it is reasonable for police to act quickly lest they lose the only opportunity they may have to solve a recent violent crime or to interrupt an advancing one”).

198. Thomas K. Clancy, *The Fourth Amendment’s Concept of Reasonableness*, 2004 UTAH L. REV. 977, 1026 (2004) (“Several twentieth century trends underline the need for objective criteria to measure reasonableness. The case-by-case and balancing tests lack objective criteria as guides and, when the Court has employed those models, it has steadily expanded the permissibility of governmental intrusions and deprecated individual liberty.”).

199. *See* *Camara v. Municipal Court*, 387 U.S. 523, 536-37 (1967) (“Unfortunately, there can be no ready test for determining reasonableness other than by balancing the need to search against the invasion which the search entails.”); *see also* *United States v. Knights*, 534 U.S. 112, 121 (2001) (“Although the Fourth Amendment ordinarily requires the degree of probability embodied in the term ‘probable cause,’ a lesser degree satisfies the Constitution when the balance of governmental and private interests makes such a standard reasonable.”).

in specific neighborhoods.<sup>200</sup> What are these specific neighborhoods, one might ask. They are high-crime neighborhoods.<sup>201</sup> Although the Supreme Court has not explicitly defined “high-crime” neighborhoods, they often end up being neighborhoods inhabited largely by Black and Brown people.<sup>202</sup> For instance, in Chicago, an extremely diverse, yet racially segregated city, ShotSpotter devices were first installed in the Englewood neighborhood, with a demographic that was 94.6% Black as of 2019.<sup>203</sup> Chicago later

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200. See Jerry H. Ratcliffe et al., *A Partially Randomized Field Experiment On The Effect Of An Acoustic Gunshot Detection System On Police Incident Reports*, 15 J. EXPERIMENTAL CRIM. 67, 68 (2018). A study in Philadelphia of the effectiveness of an acoustic gunshot detection system found that gunshot incidents increased by 259% after its implementation, yet this did not coincide with a significant increase in the number of confirmed shootings. *Id.* This data illustrates that acoustic gunshot detection is not as perfect as it is made out to be, and often sends police to monitored locations for incidents that did not actually involve gunfire. *Id.* at 74. These false positives can only direct police to neighborhoods that are actually monitored by the acoustic gunshot detection system. *Id.* at 68.

201. Joella Baumann, *This Technology Helps Denver Police Hear Gunshots Remotely. But Does It Cut Crime?*, CPR NEWS (Oct. 30, 2019), [www.cpr.org/2019/10/30/this-technology-helps-denver-police-hear-gunshots-remotely-but-does-it-cut-crime/](http://www.cpr.org/2019/10/30/this-technology-helps-denver-police-hear-gunshots-remotely-but-does-it-cut-crime/) [perma.cc/E9P4-GQ6S]; La Vigne et al., *supra* note 13, at 8; Chris Weller, *There's A Secret Technology In 90 US Cities That Listens For Gunfire 24/7*, BUSINESS INSIDER (June 27, 2017), [www.businessinsider.com/how-shotspotter-works-microphones-detecting-gunshots-2017-6](http://www.businessinsider.com/how-shotspotter-works-microphones-detecting-gunshots-2017-6) [perma.cc/8A3H-ZKLJ].

202. See Ferguson & Bernache, *supra* note 153, at 1590 (quoting *United States v. Montero-Camargo*, 208 F.3d 1122, 1138 (9th Cir. 2000) (high-crime area “can easily serve as a proxy for race or ethnicity”); David A. Sklanksy, *Traffic Stops, Minority Motorists, And The Future Of The Fourth Amendment*, 1997 SUP. CT. REV. 271, 328 (1997) (“[M]inority neighborhoods tend to be poorer and more crime-ridden”); David A. Harris, *Particularized Suspicion, Categorical Judgments: Supreme Court Rhetoric Versus Lower Court Reality Under Terry v. Ohio*, 72 ST. JOHN'S L. REV. 975, 1000 (1998) (“[T]hose who live in high crime areas will likely be poor and members of minority groups”). This is alarming when considering the inherently discriminatory nature of policing. See Emma Pierson et al., *A Large-scale Analysis Of Racial Disparities In Police Stops Across The United States*, 4 NATURE HUM. BEHAV. 736, 736 (2020) (finding in a study of 100 million traffic stops across the United States that black drivers are stopped more frequently during the day when their race can easily be distinguished than at night when it is difficult to determine their race prior to the stop); see also *Floyd v. City of N.Y.*, 959 F. Supp. 2d 540, 559 (S.D.N.Y. 2013) (finding that out of 4.4 million Terry stops conducted by NYPD between January 2004 and June 2012, eighty-three percent of stops were of black and Hispanic individuals, although the population of New York City was only fifty-two percent black and Hispanic) The data in this case shows that weapons or contraband were seized at approximately the same rate regardless of race. *Id.*

203. *Englewood: Community Data Snapshot, June 2020*, CHICAGO METRO. AGENCY FOR PLANNING, 1, 3 (June 2020), [www.cmap.illinois.gov/documents/10180/126764/Englewood.pdf](http://www.cmap.illinois.gov/documents/10180/126764/Englewood.pdf) [perma.cc/QQM5-ANJG]. For a myriad of reasons, including “poverty, governmental neglect, high rates of mental illness, lead poisoning, drug abuse, and joblessness,” Englewood is known to have high rates of violent crime.” Don Terry, *In South Side Neighborhood, Violence Still Hard to Shake*, N. Y. TIMES

expanded the technology into twelve of the city's twenty-two districts, all in areas that are predominantly Black and brown.<sup>204</sup> As ShotSpotter often points out, only about twelve percent of all gunfire is reported to the police.<sup>205</sup> Given this statistic, coupled with ShotSpotter's claim that their technology detects upwards of ninety percent of gunfire in service areas, there have been considerably more police responses in these areas after the installation of the technology.<sup>206</sup>

At first glance, this appears uncontroversial. ShotSpotter alerts result in police responses to gunshots that were once unreported. However, upon closer review, there are some serious implications with the use of ShotSpotter technology. There has not been extensive independent research to verify that ShotSpotter is able to effectively distinguish between gunfire and other "bang-like" noises.<sup>207</sup> A 2018 study of an acoustic gunshot detection system in Philadelphia found that after the implementation of the technology, gunshot incidents increased by 259%.<sup>208</sup> Initially, this statistic appears to support the use of the technology, but the study also found that "there was not a significant increase in the number of confirmed shootings."<sup>209</sup> In other words, the technology led to police frequently being dispatched to what they believe to be gunfire, only to find that there was not in fact a shooting.

This is an issue that should not be overlooked, especially as it relates to the holding in *Rickmon*. That is because the Seventh

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(Feb. 4, 2012), [www.nytimes.com/2012/02/05/us/in-chicago-neighborhood-of-englewood-violence-hard-to-shake.html?\\_r=0](http://www.nytimes.com/2012/02/05/us/in-chicago-neighborhood-of-englewood-violence-hard-to-shake.html?_r=0) [<https://perma.cc/EN5J-ZRHW>].

204. Michael Wasney, *The Shots Heard Round The City*, SOUTH SIDE WEEKLY (Dec. 19, 2017), [www.southsideweekly.com/shots-heard-round-city-shotspotter-chicago-police/](http://www.southsideweekly.com/shots-heard-round-city-shotspotter-chicago-police/) [[perma.cc/GG53-5P5F](https://perma.cc/GG53-5P5F)]. ShotSpotter in Chicago is used exclusively on the South, Southwest, and West sides of the city. *Id.*

205. *Reduce Gun Crime with Proven Gunshot Detection Technology*, SHOTSPOTTER INC., [www.shotspotter.com/law-enforcement/gunshot-detection/](http://www.shotspotter.com/law-enforcement/gunshot-detection/) [[perma.cc/QK5E-7W6N](https://perma.cc/QK5E-7W6N)] (last visited Nov. 1, 2020).

206. Gabriel Sandoval & Rachel Holliday Smith, *'ShotSpotter' Tested As Shootings And Fireworks Soar, While Civil Rights Questions Linger*, THE CITY (July 5, 2020), [www.thecity.nyc/2020/7/5/21312671/shotspotter-nyc-shootings-fireworks-nypd-civil-rights](http://www.thecity.nyc/2020/7/5/21312671/shotspotter-nyc-shootings-fireworks-nypd-civil-rights) [[perma.cc/NY7W-LB8Z](https://perma.cc/NY7W-LB8Z)].

207. Nick Selby et al., *ShotSpotter Gunshot Location System Efficacy Study*, CSG ANALYSIS 25 (2011), [www.njdc.info/wp-content/uploads/2017/10/ShotSpotter-Gunshot-Location-System-Efficacy-Study.pdf](http://www.njdc.info/wp-content/uploads/2017/10/ShotSpotter-Gunshot-Location-System-Efficacy-Study.pdf) [[perma.cc/LX9L-LTZZ](https://perma.cc/LX9L-LTZZ)]. Even in a research study commissioned by ShotSpotter, thirty-three percent of gunfire alerts were false positives. Instead of alerting police to actual gunfire, they were alerting police to "dumpsters, trucks, motorcycles, helicopters, fireworks, construction, vehicles traveling over expansion plates on bridges or into potholes, trash pickup, church bells, and other loud, concussive sounds common to urban life." *Id.* See Ratcliffe et al., *supra* note 200, at 68 (referring to the same efficacy study, notes that "the research was commissioned by ShotSpotter and the researchers investigated agencies hand-picked by the company.").

208. Ratcliffe et al., *supra* note 200, at 67.

209. *Id.*

Circuit explained that responding to reports of gunfire constitutes an emergency, as opposed to one of general criminality.<sup>210</sup> As a result, in emergency situations, the bar for an officer to establish reasonable suspicion to stop an individual is lessened. However, the Philadelphia study<sup>211</sup>, as well as the ShotSpotter efficacy study<sup>212</sup>, present a contradiction to the assumption that a ShotSpotter alert automatically means gunfire.

### *B. The Police Have to Find Something*

In a violent arrest captured on video, Fitzroy Gayle, a 20-year-old Black male, was arrested by six plain-clothes NYPD officers.<sup>213</sup> The police were only in the area because they were responding to a ShotSpotter alert of gunfire in the area.<sup>214</sup> When the officers arrived, they saw Gayle smoking marijuana with another individual, which prompted the arrest.<sup>215</sup> Gayle was not charged with any crimes related to the shooting but rather for resisting arrest, obstruction of government administration, and possession of marijuana.<sup>216</sup>

According to Jerome Greco, an attorney at Legal Aid's Digital Forensics Unit in New York City, a ShotSpotter alert "gives [police] somewhat of a justification in their mind to harass people."<sup>217</sup> Greco bases his opinion on the fact that "Legal Aid has represented people who were charged with something other than gun-related offenses following what started as a ShotSpotter run."<sup>218</sup> With *Rickmon*, precedent has been set to allow officers to rely more on their subjective suspicion, as a ShotSpotter alert may provide the objective suspicion necessary to justify a stop.<sup>219</sup> It can be expected that in the Seventh Circuit, and other Circuits that adopt the rationale in *Rickmon*, that the situation Greco describes will become more commonplace. Given the claims by Greco and the arrests of Rickmon and Gayle, courts, cities, and the public should question whether ShotSpotter actually helps to arrest the shooter rather

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210. *Rickmon*, 952 F.3d at 883.

211. Ratcliffe et al., *supra* note 200, at 68.

212. Selby et al., *supra* note 207, at 25.

213. See Marco Poggio & Noah Goldberg, *Man Punched And Tackled By Cops In Viral Video Meets With Brooklyn DA*, N.Y. DAILY NEWS (Mar. 11, 2020), [www.nydailynews.com/new-york/nyc-crime/ny-brooklyn-man-cops-beat-marijuana-district-attorney-20200311-dmvdpnzh4neolcn3zy7fe6yeua-story.html](http://www.nydailynews.com/new-york/nyc-crime/ny-brooklyn-man-cops-beat-marijuana-district-attorney-20200311-dmvdpnzh4neolcn3zy7fe6yeua-story.html) [perma.cc/8ZYE-LLAY] (highlighting cellphone video taken by a bystander shows the officers tackle, kick, and punch him before eventually arresting him).

214. *Id.*

215. *Id.*

216. *Id.*

217. Sandoval & Smith, *supra* note 206.

218. *Id.*

219. *Rickmon*, 952 F.3d at 882-83.

than an innocent bystander.<sup>220</sup>

### C. Fourth Amendment Protection – A Balancing Test of Conflicting Interests

The concept of policing invokes a balance of governmental interests of stopping crime and keeping the public safe with an individual's right to privacy under the Fourth Amendment.<sup>221</sup> Of course, it would be much easier for police to conduct surveillance and detect crime if they were not limited by the Fourth Amendment. However, the Framers drafted the Fourth Amendment to serve as a specific limit on police powers.<sup>222</sup> With that as a backdrop, the specific governmental interests in conducting a traffic stop in the vicinity of, and shortly after a ShotSpotter alert, are to arrest the shooter, and get a dangerous criminal off the street.<sup>223</sup> However, when viewing ShotSpotter's own publicly available data, it is readily apparent that their technology rarely leads to arrests.<sup>224</sup> More so, police departments struggle with solving gun-related crimes.<sup>225</sup> Even though there is a governmental interest in stopping

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220. *Results*, SHOTSPOTTER INC., [www.shotspotter.com/results/\[perma.cc/9YD7-9BAJ\]](http://www.shotspotter.com/results/[perma.cc/9YD7-9BAJ]) (last visited Sept. 11, 2021). On ShotSpotter's website, it notes success stories, including seventy arrests in Toledo, Ohio (in ten months), fifty arrests in Bakersfield, California (in one year), and 133 arrests in Columbus, Ohio (in sixteen months). *Id.* However, the website does not note whether these arrests figures are of the verified shooter, rather than an individual that was in the wrong place at the wrong time. *Id.*

221. Shima Baradaran, *Rebalancing the Fourth Amendment*, 102 GEO. L.J. 1, 8-9 (2013).

222. Daniel J. Polatsek, *Thermal Imaging and the Fourth Amendment: Pushing the Katz Test Towards Terminal Velocity*, 13 J. MARSHALL J. COMPUTER & INFO. L. 453, 478-89 (1995).

223. See Drange I, *supra* note 24 (“[m]any cities . . . pay for the technology thinking they will catch criminals in the act.”).

224. Drange II, *supra* note 42. This data can be interpreted in a number of ways. One side might argue that ShotSpotter has led to hundreds of arrests and this fact proves it's worth. However, the *percentage* of ShotSpotter arrests that are for shooting related crimes is not publicly known. Poggio & Goldberg, *supra* note 213 (emphasis added).

225. See Sarah Ryley et al., *5 Things To Know About Cities' Failure To Arrest Shooters*, THE TRACE (Jan. 24, 2019), [www.thetrace.org/2019/01/gun-murder-solve-rate-understaffed-police-data-analysis/\[perma.cc/L898-5HB7\]](http://www.thetrace.org/2019/01/gun-murder-solve-rate-understaffed-police-data-analysis/[perma.cc/L898-5HB7]) (noting “[d]etectives are stretched so thin in some cities that many nonfatal shootings don't get investigated at all.”); see also Aamer Madhani, *Unsolved Murders: Chicago, Other Big Cities Struggle; Murder Rate A 'National Disaster,'* USA TODAY (Aug. 10, 2018), [www.usatoday.com/story/news/2018/08/10/u-s-homicide-clearance-rate-crisis/951681002/\[perma.cc/NVM5-KZQW\]](http://www.usatoday.com/story/news/2018/08/10/u-s-homicide-clearance-rate-crisis/951681002/[perma.cc/NVM5-KZQW]) (stating “big cities such as Baltimore, Chicago and New Orleans . . . cleared less than 28 percent of its homicide cases in 2016.”). If ShotSpotter was so good at helping police catch shooting suspects, one may expect the clearance rate in Chicago to be higher, considering that nearly half of the city is patrolled by ShotSpotter sensors. See SS Press Release, *supra* note 26 (stating that ShotSpotter's contract with Chicago spans across a coverage area of 100 square miles and 12



crime, this interest is somewhat illusory because departments often do not arrest the shooter.<sup>226</sup>

The governmental interests in initiating the stop in *Rickmon* are not as significant as the Seventh Circuit perceived. Officer Ellefritz had no indication that the shooter was in Rickmon's vehicle rather than one of the fifteen to twenty additional people just down the street from where Rickmon was stopped.<sup>227</sup> Given that the ShotSpotter alert did not provide any identification of the shooter, statistically speaking, it is more likely that the shooter was in the large crowd down the street, rather than in Rickmon's vehicle.<sup>228</sup> In stopping the first vehicle he saw without any particularized suspicion, it is possible that Ellefritz's actions allowed the shooter to get away. Conversely, an individual walking or driving down a street has a right to privacy codified by the Fourth Amendment; "to be secure in their persons . . . against unreasonable searches and seizures."<sup>229</sup> So long as an officer does not have probable cause or reasonable suspicion to stop an individual, whether in a car, or on foot, the Fourth Amendment provides protection from subsequent unreasonable searches or seizures.<sup>230</sup> In essence, the greater the governmental interest, as compared with this right to privacy, the lower the burden is for an officer to establish reasonable suspicion to justify a stop, search, or seizure.<sup>231</sup>

Courts must prioritize individual privacy rights when evaluating reasonable suspicion in ShotSpotter cases. The Seventh Circuit in *Rickmon* made too many assumptions that led to a flawed holding. For one, there has not been extensive independent research to indicate how accurate ShotSpotter is at distinguishing gunfire from other loud noises, and additionally, with pinpointing its location.<sup>232</sup> The Seventh Circuit brought up the fact that Rickmon,

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police districts).

226. *Id.*

227. *Rickmon*, 952 F.3d at 886 (Wood, C.J, dissenting) (according to Ellefritz, he "would have stopped literally any car on North Ellis" based on the ShotSpotter alert).

228. *Id.* (noting that the ShotSpotter alert did not provide "the shooter's car's make, color, age, style, or anything else.").

229. U.S. CONST. amend. IV.

230. *Id.*; see *Knights*, 534 U.S. at 122 (2001) (explaining that although the Fourth Amendment ordinarily requires probable cause, the Fourth Amendment is still satisfied if an officer has reasonable suspicion).

231. See, e.g., *Terry*, 392 U.S. at 22-23 (justifying a police stop in part finding that the governmental interest in stopping crime was more significant than the scope of the privacy intrusion on the individual.).

232. See Gregory Yee, *When SC Residents Are Afraid To Call The Police, Technology Alerts Officers Of Gunshots*, POST & COURIER (Sep. 14, 2020), [www.postandcourier.com/news/when-sc-residents-are-afraid-to-call-the-police-technology-alerts-officers-of-gunshots/article\\_d54f9cae-8308-11e9-a437-a3bae9e84ac7.html](http://www.postandcourier.com/news/when-sc-residents-are-afraid-to-call-the-police-technology-alerts-officers-of-gunshots/article_d54f9cae-8308-11e9-a437-a3bae9e84ac7.html) [perma.cc/4BAY-CWSQ] (noting "[d]espite ShotSpotter being around for more than 20 years, there is little independent research on the technology and how to best utilize it.").

as a pro se litigant, argued that ShotSpotter is not always accurate and that the record “does not demonstrate how often the Peoria Police Department received incorrect ShotSpotter reports.”<sup>233</sup> However, the court brushed over this fact because Rickmon had a chance to cross examine the police witness about ShotSpotter’s reliability and because there was an additional tip about the shots fired.<sup>234</sup> Even though Officer Ellefritz was cross-examined, he lacked the personal knowledge to testify to the reliability of the technology at a statistically significant level. Since the court analyzes the objective reasonableness of a *Terry* stop de novo, this should actually be quite significant.<sup>235</sup> ShotSpotter and police departments are business partners and have a vested interest inflating the reliability of the technology. However, the reasonableness of the stop would have been called into question if the court did not simply assume that ShotSpotter was accurate at detecting gunfire or the location of gunfire.

Assuming *arguendo* that ShotSpotter is accurate at both distinguishing gunfire from loud noises and pinpointing its location, there are still tremendous flaws with the Seventh Circuit’s analysis. Most notably, there are no facts to suggest that Officer Ellefritz had individualized or particularized suspicion that the occupants of Rickmon’s vehicle were involved in the shooting, or otherwise armed and dangerous. Rickmon happened to be in the wrong place at the wrong time. Being in the wrong place, late at night with few other people on the road, should not automatically justify a *Terry* stop. The reasonableness standard under the Fourth Amendment is admittedly low, but it is not that low.<sup>236</sup> *Terry* stops should not be permitted based on a ShotSpotter alert, unless there are other facts to warrant the stop of that *specific* person or vehicle. For instance, if an anonymous tipster also called in about shots fired from a black vehicle, then the officer knows to look for a black vehicle, rather than one that is red, white, blue, or orange. Ellefritz did not receive a tip with this level of particularity, or any particularity for that matter, he should not have been justified in stopping Rickmon’s vehicle.<sup>237</sup> Though the Seventh Circuit found that the dispatcher announcing “shots fired” over the radio corroborated and helped to justify the stop, they failed to describe the suspect with any

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233. *Rickmon*, 952 F.3d at 879 n.2.

234. *Id.*

235. *Id.* at 881.

236. *Dunaway v. New York*, 442 U.S. 200, 208-10 (1979) (explaining that *Terry* recognized the reasonableness standard as an exception to the requirements of the higher standard of probable cause.).

237. *Terry*, 392 U.S. at 27 (“[a]nd in determining whether the officer acted reasonably in such circumstances, due weight must be given, not to his inchoate and unparticularized suspicion or ‘hunch,’ but to the specific reasonable inferences which he is entitled to draw from the facts in light of his experience.”) (emphasis added).

particularity.<sup>238</sup> Neither the ShotSpotter alerts, nor the dispatcher provided any specific details about a potential suspect.<sup>239</sup> They simply provided information on what type of crime was likely committed.

The fact that *Rickmon* was a case of first impression gives even more reason to justify this requirement of particularity.<sup>240</sup> Many have raised privacy concerns about ShotSpotter and likely do not want police officers randomly stopping people within the vicinity of ShotSpotter alerts.<sup>241</sup> This is a sure-fire way to decrease community trust in the police – when trust in police is already at an all-time low.<sup>242</sup> This analysis still gives police officers the leeway to do their job, without arming them with “general warrants” to stop anyone.<sup>243</sup> The particularity standard is not asking for police to know with certainty that the individual they stop is the shooter but instead asks for there to be some objective reason for them to think that the *specific person* is the shooter.

Critics may argue that this standard hamstring police from being able to do their job. It requires them to stand idly by when they know that crime is afoot. It will lead to police watching the shooter flee the scene without being able to do anything. But police already have plenty of other tools at their disposal. Most notably, the Supreme Court permits police to make pretextual stops, such as a stop for a minor traffic infraction, so long as there exists an objective basis for the stop.<sup>244</sup> They can then use that objective basis for the stop to gather additional factors that lead to a reasonable suspicion, such as something illegal in plain view, like drugs, a weapon, or the smell of drugs.<sup>245</sup> This is not to say that the requirement of particularized suspicion should exist because the

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238. *Rickmon*, 952 F.3d at 882.

239. *Id.* at 886.

240. *Id.* at 878. (“As a matter of first impression, the court considered whether law enforcement’s stop of a vehicle was constitutional under the Fourth Amendment because, among other articulable facts, the car was emerging from the source of [a ShotSpotter alert].”).

241. Stanley, *supra* note 7.

242. Aimee Ortiz, *Confidence In Police Is At Record Low, Gallup Survey Finds*, N. Y. TIMES (Aug. 12, 2020), [www.nytimes.com/2020/08/12/us/gallup-poll-police.html](http://www.nytimes.com/2020/08/12/us/gallup-poll-police.html) [perma.cc/N5F6-U7Q3] (“Amid waves of civil unrest as protestors across the country continue to demonstrate against police brutality, Americans’ confidence in the police has dropped to a record low, according to a Gallup poll.”).

243. See Thomas Y. Davies, *Recovering the Original Fourth Amendment*, 98 MICH. L. REV. 547, 558 (1999) (explaining “[a] ‘general warrant’ [is] a [F]raming-era term for an unparticularized warrant, for example, ordering a search of ‘suspected places.’”).

244. See *Whren v. United States*, 517 U.S. 806, 808 (1996) (permitting officers to stop vehicles for pretextual reasons such as minor traffic violations).

245. The “plain view” doctrine is justified by the idea that if a police officer is lawfully present somewhere and it is immediately apparent that something in plain view is illegal, then its seizure is not an invasion of privacy. *Horton v. California*, 496 U.S. 128, 135-36 (1990).

police have other tools – it is just to say that this argument falls on deaf ears, as the police already have plenty of ability to stop potential suspects for other unrelated reasons. Additionally, ShotSpotter often does not lead to arrests, with a recent study by the MacArthur Justice Center finding that only 10% of over 40,000 ShotSpotter alerts in Chicago likely involved guns.<sup>246</sup> Furthermore, the particularity standard is not unreasonably high – it is not asking for police to get a warrant to justify a stop.

The Fourth Amendment, at times, functions in a way that serves as a barrier to arrests.<sup>247</sup> However, the last thing we should want as a society is to give police officers and departments more discretion, as the Seventh Circuit in *Rickmon* did. If the past is a predictor of the future, giving police discretion invariably will lead to racial bias.<sup>248</sup> With ShotSpotter largely being located in Black and brown neighborhoods, this discretion can and has led to problematic outcomes.

## V. CONCLUSION

ShotSpotter has the capability of being an excellent tool for identifying gun violence hot spots and providing cities with a better indication as to the prevalence of gun violence. This Note is not asking for courts to disobey precedent, or to reinvent the wheel. It is merely asking that courts require some level of objective particularity before a *Terry* stop is commenced within the vicinity of a ShotSpotter alert. In essence, the Seventh Circuit gave officers a general warrant to stop anyone within the vicinity of a ShotSpotter alert within a reasonable time after the alert. That is dangerous, problematic, and arguably will lead to more shooters being able to flee the scene.

The Fourth Amendment still provides individuals with a protection from the police, though the amendment has been stripped down by the courts over the years since *Terry*. As this Note explains, giving officers discretion to stop anyone within the vicinity of a ShotSpotter alert does not make cities safer, actually decreases community relations with the police, and sets a dangerous precedent for how police can utilize this surveillance technology in the future.

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246. CST Editorial Board, *If ShotSpotter Constantly Misfires, What's Chicago Getting for its \$33 Million?*, CHICAGO SUN TIMES (May 4, 2021), [www.chicago.suntimes.com/2021/5/4/22417660/shotspotter-analysis-macarthur-justice-center-chicago-police-chicago-gun-violence-editorial](http://www.chicago.suntimes.com/2021/5/4/22417660/shotspotter-analysis-macarthur-justice-center-chicago-police-chicago-gun-violence-editorial) [[perma.cc/MF83-UZC8](https://perma.cc/MF83-UZC8)].

247. *See* *Ex Parte Buford*, 7 U.S. (3 Cr.) 448 (1806) (reiterating that the Fourth Amendment was designed to protect individuals from arbitrary arrest).

248. *See Floyd*, 959 F. Supp. 2d at 559 (finding that out of 4.4 million *Terry* stops conducted by NYPD between January 2004 and June 2012, 83% of stops were of black and Hispanic individuals, although the population of New York City was only 52% black and Hispanic.).



# **Exhibit F**

# Chicago man, 65, jailed for a year after being arrested for shooting man dead in his car caught COVID twice in lockup and thought about ending his life before being freed

Deleted: **by 'fabricated' AI evidence**

- Michael Williams, 65, was in year in Cook County jail after ShotSpotter evidence implicated him as the shooter in a murder on the South Side
- Safarian Herring, 25, was found shot dead in his car
- Police could provide no motive, no weapon or eye-witnesses in the case
- Williams spent a year in jail, catching COVID twice and planning his suicide
- Activists in Chicago have demanded the Chicago PD end its contract with ShotSpotter, where the tech is mostly implemented in neighborhoods of color
- 'How can they get away with using the technology like that against me,' Williams said, critiquing its prevalence in poor black communities

Deleted: **lockup**

Deleted: **tampered**

Deleted: **<#>Tape changed 'firecracker' noise to 'gunshot' and the location of the recording was changed to fit the narrative that Williams killed Safarian Herring, 25 ¶**

By RONNY REYES FOR DAILYMAIL.COM and ASSOCIATED PRESS

PUBLISHED: 00:53 EST, 19 August 2021 | UPDATED: 17:59 EST, 14 February 2022

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An innocent Chicago man held in jail for a year after the police department's ShotSpotter program implicated him as the gunman in a 2020 murder case said he caught COVID twice while in lockup and contemplated taking his own life before being released last month.

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Michael Williams, 65, was arrested last August, accused of murdering Safarian Herring, 25, three months earlier who asked Williams for a ride during a night of unrest over police brutality.

The Chicago Police Department said ShotSpotter - an artificial intelligence-powered hidden-microphone system that detects gunshots - placed Williams had shot and killed the man inside his car.

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Despite the lack of a motive, weapon or eye-witnesses, Williams was held in Cook County Jail, where he caught COVID twice and made plans to take his own life with a stockpiled stash of pills, he said.

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But after a year, prosecutors said they had insufficient evidence to prosecute Williams and asked the judge to dismiss the case and free him.

Deleted: **Williams**

'I kept trying to figure out, how can they get away with using the technology like that against me?' said Williams. 'That's not fair.'

Williams remains shaken. When he walks through the neighborhood, he scans for the acoustic sensors that almost sent him to prison for life.

'The only places these devices are installed are in poor black communities, nowhere else,' he said. 'How many of us will end up in this same situation?'

His wife, Jacqueline Anderson, has remained by his side throughout the entire ordeal. She said Williams suffered from sleepless nights after driving the wounded Herring to the hospital.

She said their lives came apart when Williams was arrested last August, but the two kept sending each other letters and called each other every day.

She would help him reminisce of happier times together with their grandchildren to get him through the day.

Williams said he used to be able to call her three times a day in the beginning, but when that fell into only a few times a week, his mind started going to dark places.

After being freed, Anderson said she initially had to feed her husband because he was too traumatized to do so himself.

She added that she holds his hands to calm him when they begin to shake.

His experience highlights the real-world impacts of society's growing reliance on algorithms to help make consequential decisions about public life.

This is especially apparent in law enforcement, which has embraced ShotSpotter.

Deleted: despite its faults.

Prosecutors in Chicago have withdrawn the technology's findings in a number of cases due to tampered evidence by police and reports have shown that its sensors are disproportionately placed in minority communities.

ShotSpotter, says its evidence has increasingly been admitted in courtrooms, now some 200. ShotSpotter's website says it's a leader in policing technology solutions that helps stop gun violence by using algorithms to classify 14 million sounds as gunshots or something else.

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But an Associated Press investigation, based on thousands of internal documents, emails and confidential contracts, along with dozens of interviews, has identified serious flaws in the use of ShotSpotter as evidence in court.

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AP's investigation found the system can miss live gunfire right under its microphones, or misclassify sounds of fireworks or cars backfiring as gunshots.

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There were also cases of tampering due to police interference.

During 2016 testimony in a Rochester, New York officer-involved shooting trial, ShotSpotter's engineer Paul Greene said an employee reclassified sounds from a helicopter to a bullet because Rochester police told them to.

In the Williams case, evidence in pre-trial hearings shows ShotSpotter first said the noise the sensor picked up was a firecracker but a ShotSpotter employee re-classified it a gunshot.

Later, a ShotSpotter engineer changed the address where the shot was originally reported to the street where Williams was driving, about 1 mile away, court documents show. ShotSpotter said the report was corrected to match the actual location where the sensors had identified the shot, but that the GPS coordinates in both the original and the amended report remained the same.

ShotSpotter insists it warned prosecutors not to rely on its technology to detect gunshots inside vehicles or buildings, citing language in its \$33 million Chicago police department contract.

Williams' attorney Brendan Max said prosecutors never shared this critical information.

Williams has always maintained that on the day of incident, Herring had waved him down for a ride. Williams told police that a vehicle pulled up beside him and someone shot Herring.

'I was hollering to my passenger 'Are you ok?'' said Williams. 'He didn't respond.'

He sped to the emergency room. Herring died a few days later.

Three months later, police showed up, and after an interrogation they charged Williams with first-degree murder.

'When he told me that, it was just like something in me had just died,' said Williams.

On the night of the shooting, ShotSpotters sensors identified a loud noise the system initially assigned to 5700 S. Lake Shore Dr., according to an alert the company sent police, although the victim was shot a mile away.

Prosecutors also leaned on a surveillance video showing that Williams' car ran a red light, as did another car that appeared to have its windows up, ruling out that the shot came from the other car's passenger window, they said.

Chicago police did not respond to AP's request for comment. The Cook County State's Attorney's Office said in a statement that after careful review prosecutors 'concluded that the totality of the evidence was insufficient to meet our burden of proof.'

ShotSpotter touts its algorithm-backed technology as virtually foolproof. But its algorithms are a trade secret, largely inscrutable to the public, jurors and police oversight boards.

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Amid a nationwide debate over racial bias in policing, civil rights advocates say the criminal justice system shouldn't outsource some of society's weightiest decisions to computer code.

ShotSpotter CEO Ralph Clark said details about artificial intelligence are 'not really relevant.'

'The point is anything that ultimately gets produced as a gunshot has to have eyes and ears on it,' said Clark. 'Human eyes and ears, ok?'

As ShotSpotter's gunshot detection systems expand around the country, so has its use as courtroom evidence - including 91 cases in the past 4 years.

'Our data compiled with our expert analysis help prosecutors make convictions,' said a recent ShotSpotter press release.

Police chiefs call ShotSpotter a game-changer. The technology has been installed in about 110 American cities, often disproportionately placed in Black and Latino communities. Law enforcement officials say it helps get officers to crime scenes quicker making their neighborhoods safer.

But academic researchers who reviewed 68 large, metropolitan counties from 1999 to 2016 found that the technology didn't reduce gun violence or increase community safety.

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- Previous investigations revealed officers have tampered with these recordings

By [RONNY REYES FOR DAILYMAIL.COM](#) and [ASSOCIATED PRESS](#)  
PUBLISHED: 00:53 EDT, 19 August 2021 | UPDATED: 17:36 EDT, 19 August 2021



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An innocent Chicago man held in jail for a year after the police department's ShotSpotter program incorrectly identified him as the gunman in a 2020 murder case said he caught COVID twice while in lockup and contemplated taking his own life before being released last month.

Michael Williams, 65, was arrested last August, accused of murdering Safarian Herring, 25, who asked Williams for a ride during a night of unrest over police brutality.

The Chicago Police Department said ShotSpotter - an artificial intelligence-powered hidden-microphone system that detects gunshots - indicated Williams had shot and killed the man inside his car.



Despite the lack of a motive, weapon or eye-witnesses, Williams was held in Cook County Jail, where he caught COVID twice and made plans to take his own life with a stockpiled stash of pills, he said.

But after a year, prosecutors found that Williams was in fact just driving Herring to the hospital after the young man was shot by unknown assailants, and that the ShotSpotter recording was tampered with to transform the car's backfiring into gunshot sounds.

Last month, they asked the judge to dismiss the case and free Williams.

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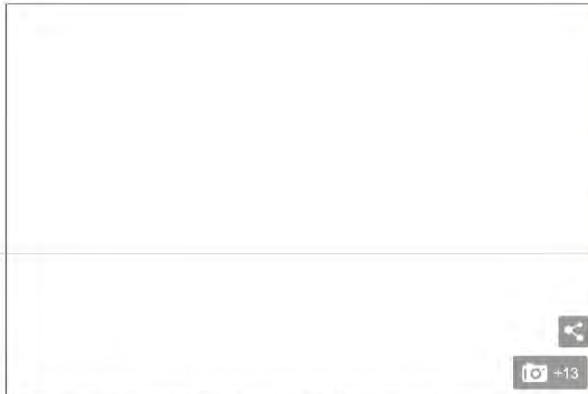
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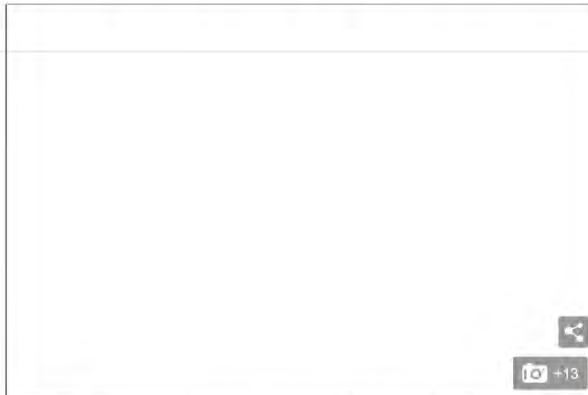
against me?" said Williams. 'That s not fair.'



Michael Williams was behind bars for nearly a year before a judge dismissed the murder case against him in July at the request of prosecutors, who said they had insufficient evidence. He sat for a portrait in his South Side Chicago home on July 27, 2021.



Michael Williams was reunited with his wife, Jacqueline Anderson. On his first night at home, Williams couldn't eat on his own, so Anderson fed him



ShotSpotter equipment overlooking the intersection of South Stony Island Avenue and East 63rd Street in Chicago. The ShotSpotter recording was tampered with to implicate Williams in the 2020 murder of Safarian Herring

Williams remains shaken. When he walks through the neighborhood, he scans for the acoustic sensors that almost sent him to prison for life.

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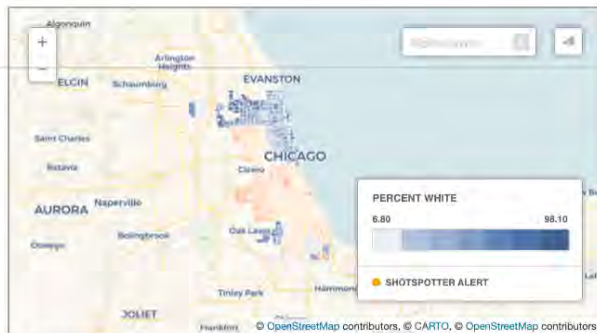
despite its faults.

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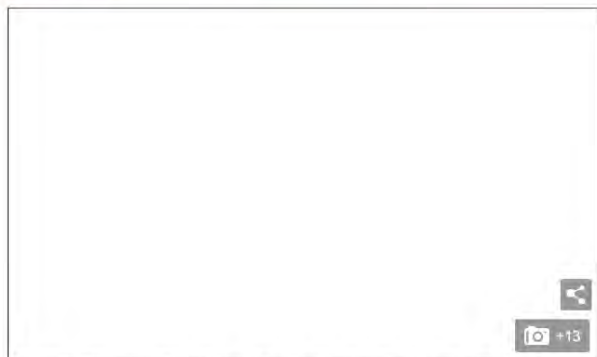
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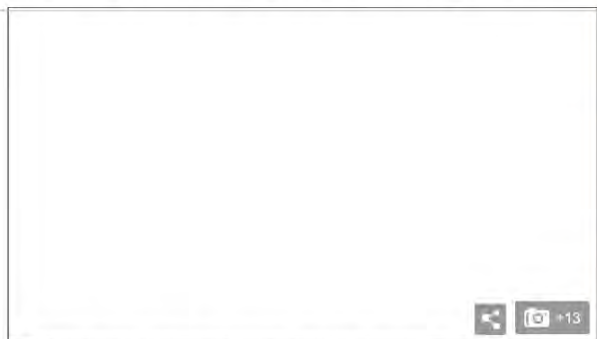
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Activists in Chicago are demand the city's police department end its contract with ShotSpotter, an AI-powered hidden-microphone system used to detect gunshots



Police departments in cities across the country and some overseas have relied on the technology to increase their response times

There were also cases of tampering due to police interference.

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It was never made clear why the changes were made and who ordered them to be changed.

ShotSpotter insists it warned prosecutors not to rely on its technology to detect

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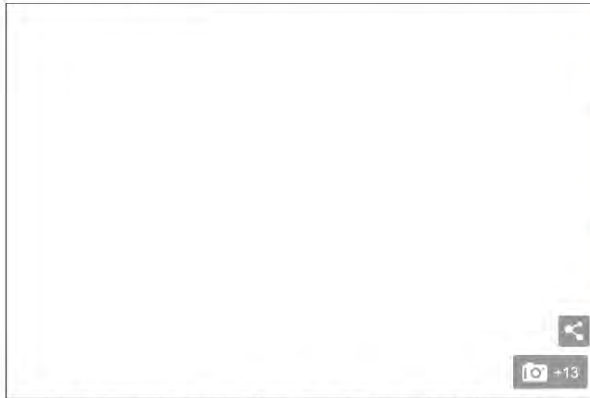
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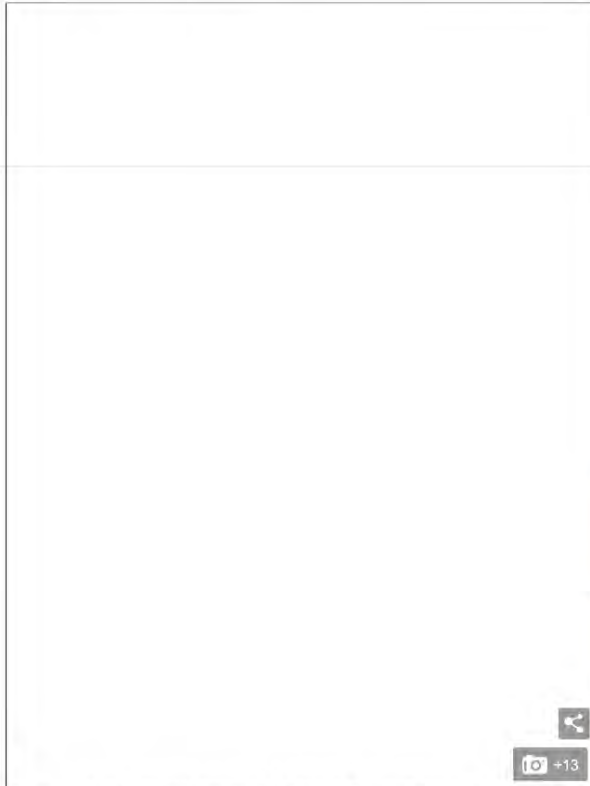
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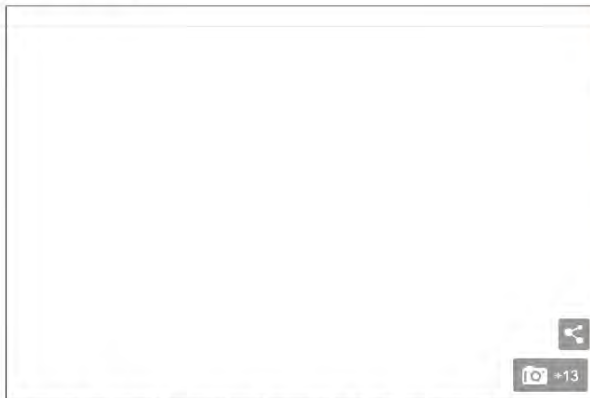
gunshots inside vehicles or buildings, citing language in its \$33 million Chicago police department contract.



Jacqueline Anderson watches as her husband, Michael Williams, takes their dogs, Lily and Shibey, out in the backyard of their home



This undated photo provided by the family in August 2021 shows shooting victim Safarian Herring of Chicago. Two weeks before being fatally shot in May 2020, he had survived a shooting at a bus stop



A man walks past one of the many closed business along East 79th Street in Chicago on Friday, Aug. 13, 2021, in a neighborhood on the South Side near where Herring was shot

Williams' attorney Brendan Max said prosecutors never shared this critical information.

Williams has always maintained that on the day of incident, Herring had waved him down for a ride. Williams told police that a vehicle pulled up beside him and someone shot Herring.

"I was hollering to my passenger, 'Are you ok?'" said Williams. "He didn't respond."

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I was hovering to my passenger. Are you OK?" said Williams. He didn't respond.

He sped to the emergency room. Herring died a few days later.

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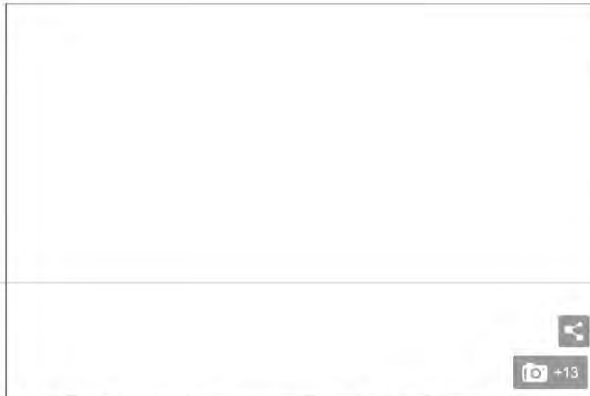


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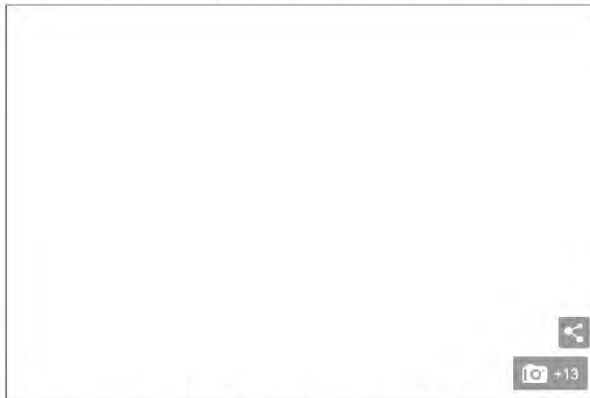
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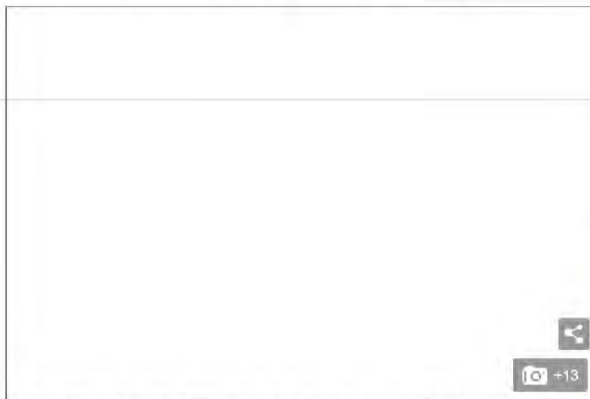
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Michael Williams remains shaken over his experience and continues to question the validity of the ShotSpotter program that led to his wrongful incarceration



Jacqueline Anderson said she did her best to keep her husband's mind at ease while he was in prison, telling him to remember all the joy he's experience with his family



Letters written by Michael Williams to his wife, Jacqueline Anderson, and a card she sent him and sealed with a lipstick kiss are just a few samples of the correspondence between the two

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Addison Rae wows in ruched white dress at the He's All That premiere in Hollywood with Maddie Ziegler

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Family photos sit on a mantle in the South Side Chicago home of the reunited couple

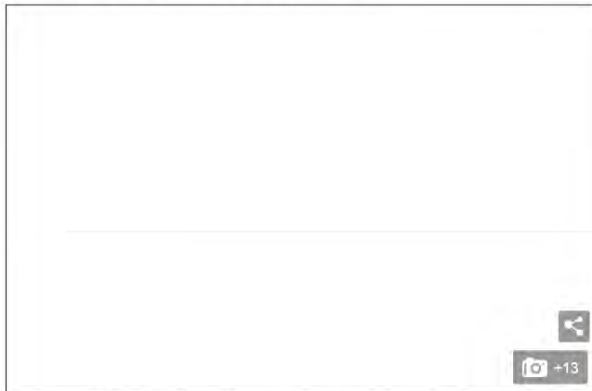
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ShotSpotter CEO Ralph Clark says the company is constantly improving its system, but it still logs a small percentage of false positives. He is pictured at his office in Newark, California

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'Our data compiled with our expert analysis help prosecutors make convictions,' said a recent ShotSpotter press release.

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Share or comment on this article: Chicago man held in jail for a year based on 'fabricated' AI evidence



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## Chicago man, 65, jailed for a year after being arrested for shooting man dead in his car caught COVID twice in lockup and thought about ending his life before being freed

- Michael Williams, 65, was in year in Cook County jail after ShotSpotter evidence implicated him as the shooter in a murder on the South Side
- Safarian Herring, 25, was found shot dead in his car
- Police could provide no motive, no weapon or eye-witnesses in the case
- Williams spent a year in jail, catching COVID twice and planning his suicide
- Activists in Chicago have demanded the Chicago PD end its contract with ShotSpotter, where the tech is mostly implemented in neighborhoods of color
- 'How can they get away with using the technology like that against me,' Williams said, critiquing its prevalence in poor black communities

By [RONNY REYES FOR DAILYMAIL.COM](#) and [ASSOCIATED PRESS](#)  
 PUBLISHED: 00:53 EST, 19 August 2021 | UPDATED: 17:59 EST, 14 February 2022

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An innocent **Chicago** man held in jail for a year after the police department's ShotSpotter program implicated him as the gunman in a 2020 murder case said he caught COVID twice while in lockup and contemplated taking his own life before being released last month.

Michael Williams, 65, was arrested last August, accused of murdering Safarian Herring, 25, three months earlier who asked Williams for a ride during a night of unrest over police brutality.

The Chicago Police Department said ShotSpotter - an artificial intelligence-powered hidden-microphone system that detects gunshots - placed Williams had shot and killed the man inside his car.



Despite the lack of a motive, weapon or eye-witnesses, Williams was held in Cook County Jail, where he caught COVID twice and made plans to take his own life with a stockpiled stash of pills, he said.

But after a year, prosecutors said they had insufficient evidence to prosecute Williams and asked the judge to dismiss the case and free him.

'I kept trying to figure out, how can they get away with using the technology like that against me?' said Williams. 'That's not fair.'

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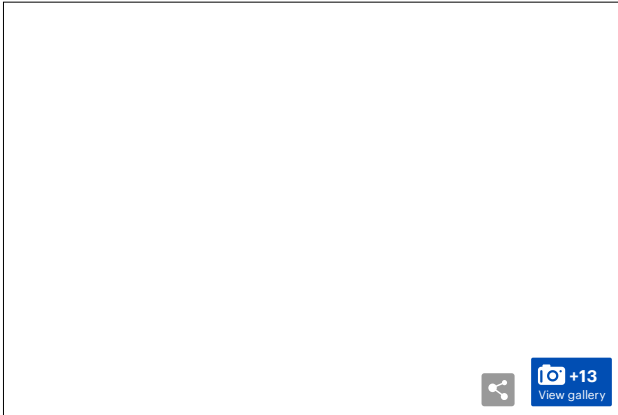
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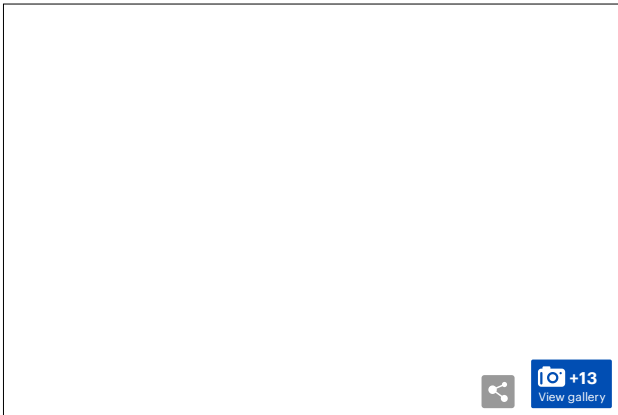
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Michael Williams was behind bars for nearly a year before a judge dismissed the murder case against him in July at the request of prosecutors, who said they had insufficient evidence. He sat for a portrait in his South Side Chicago home on July 27, 2021.



Michael Williams was reunited with his wife, Jacqueline Anderson. On his first night at home, Williams couldn't eat on his own, so Anderson fed him



ShotSpotter equipment overlooking the intersection of South Stony Island Avenue and East 63rd Street in Chicago

Williams remains shaken. When he walks through the neighborhood, he scans for the acoustic sensors that almost sent him to prison for life.

'The only places these devices are installed are in poor black communities, nowhere else,' he said. 'How many of us will end up in this same situation?'

His wife, Jacqueline Anderson, has remained by his side throughout the entire ordeal. She said Williams suffered from sleepless nights after driving the wounded Herring to the hospital.

She said their lives came apart when Williams was arrested last August, but the two kept sending each other letters and called each other every day.

She would help him reminisce of happier times together with their grandchildren to get him through the day.

Williams said he used to be able to call her three times a day in the beginning, but when that fell into only a few times a week, his mind started going to dark places.

After being freed, Anderson said she initially had to feed her husband because he was too traumatized to do so himself.

She added that she holds his hands to calm him when they begin to shake.

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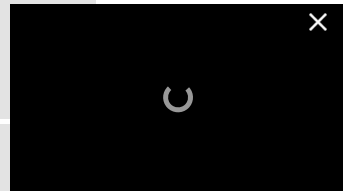
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Kaia Gerber, 20, packs on the PDA with her boyfriend Austin Butler, 30, as they enjoy an afternoon out in Los



His experience highlights the real-world impacts of society's growing reliance on algorithms to help make consequential decisions about public life.

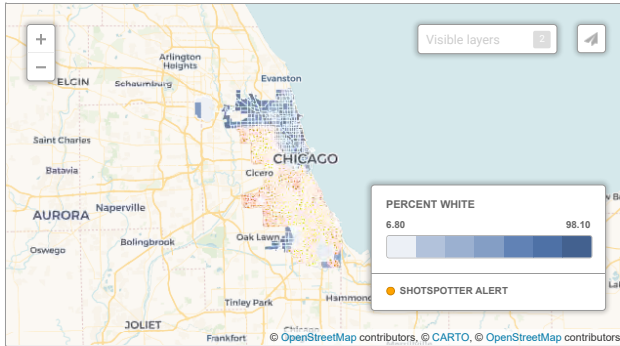
This is especially apparent in law enforcement, which has embraced ShotSpotter.

Prosecutors in Chicago have withdrawn the technology's findings in a number of cases due to tampered evidence by police and reports have shown that its sensors are disproportionately placed in minority communities.

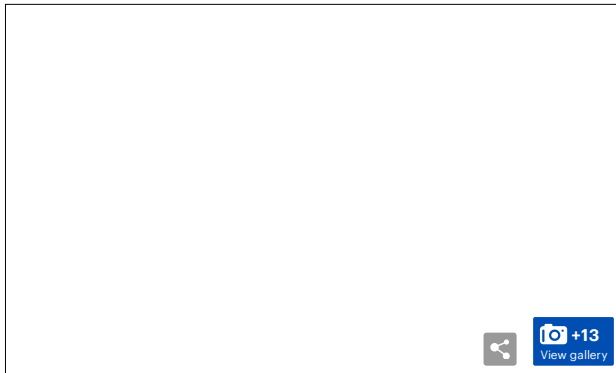
ShotSpotter, says its evidence has increasingly been admitted in courtrooms, now some 200. ShotSpotter's website says it's a leader in policing technology solutions that helps stop gun violence by using algorithms to classify 14 million sounds as gunshots or something else.

But an Associated Press investigation, based on thousands of internal documents, emails and confidential contracts, along with dozens of interviews, has identified serious flaws in the use of ShotSpotter as evidence in court.

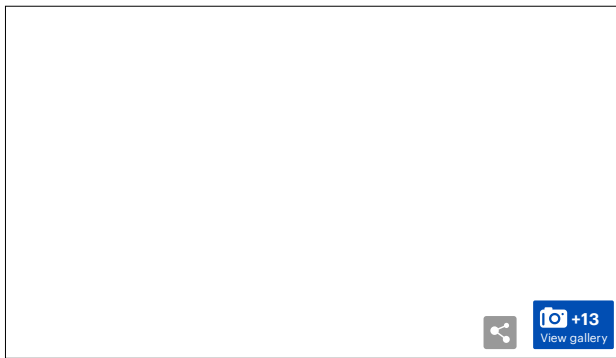
AP's investigation found the system can miss live gunfire right under its microphones, or misclassify sounds of fireworks or cars backfiring as gunshots.



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Activists in Chicago are demand the city's police department end its contract with ShotSpotter, an AI-powered hidden-microphone system used to detect gunshots



Police departments in cities across the country and some overseas have relied on the technology to increase their response times

There were also cases of tampering due to police interference.

During 2016 testimony in a Rochester, New York officer-involved shooting trial, ShotSpotter's engineer Paul Greene said an employee reclassified sounds from a helicopter to a bullet because Rochester police told them to.

In the Williams case, evidence in pre-trial hearings shows ShotSpotter first said the noise the sensor picked up was a firecracker but a ShotSpotter employee reclassified it a gunshot.

Later, a ShotSpotter engineer changed the address where the shot was originally reported to the street where Williams was driving, about 1 mile away, court documents show. ShotSpotter said the report was corrected to match the actual

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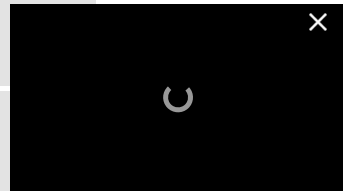
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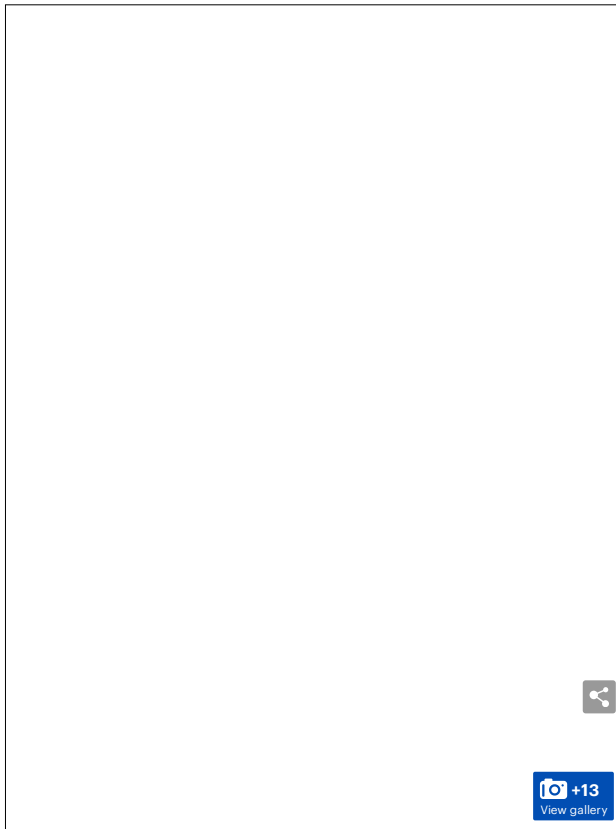


location where the sensors had identified the shot, but that the GPS coordinates in both the original and the amended report remained the same.

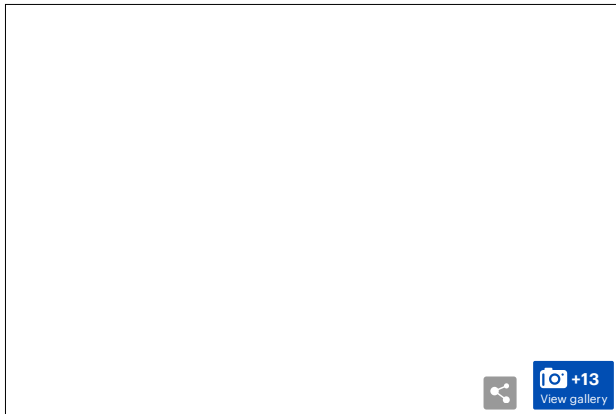
ShotSpotter insists it warned prosecutors not to rely on its technology to detect gunshots inside vehicles or buildings, citing language in its \$33 million Chicago police department contract.



Jacqueline Anderson watches as her husband, Michael Williams, takes their dogs, Lily and Shibey, out in the backyard of their home



This undated photo provided by the family in August 2021 shows shooting victim Safarian Herring of Chicago. Two weeks before being fatally shot in May 2020, he had survived a shooting at a bus stop



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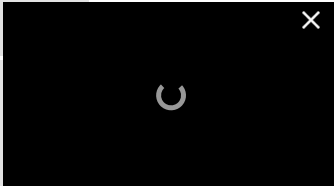
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**A man walks past one of the many closed business along East 79th Street in Chicago on Friday, Aug. 13, 2021, in a neighborhood on the South Side near where Herring was shot**

Williams' attorney Brendan Max said prosecutors never shared this critical information.

Williams has always maintained that on the day of incident, Herring had waved him down for a ride. Williams told police that a vehicle pulled up beside him and someone shot Herring.

'I was hollering to my passenger 'Are you ok?'' said Williams. 'He didn't respond.'

He sped to the emergency room. Herring died a few days later.

Three months later, police showed up, and after an interrogation they charged Williams with first-degree murder.

'When he told me that, it was just like something in me had just died,' said Williams.

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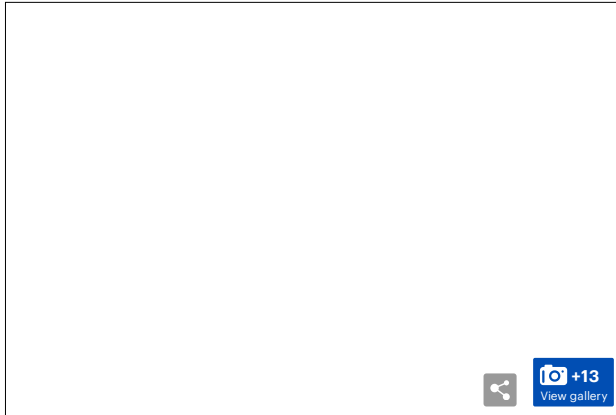


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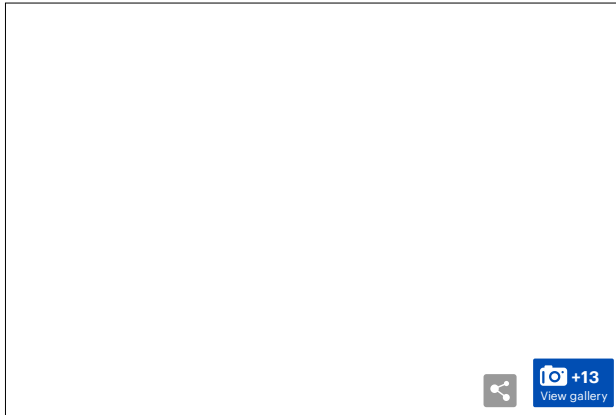
On the night of the shooting, ShotSpotters sensors identified a loud noise the system initially assigned to 5700 S. Lake Shore Dr., according to an alert the company sent police, although the victim was shot a mile away.

Prosecutors also leaned on a surveillance video showing that Williams' car ran a red light, as did another car that appeared to have its windows up, ruling out that the shot came from the other car's passenger window, they said.

Chicago police did not respond to AP's request for comment. The Cook County State's Attorney's Office said in a statement that after careful review prosecutors 'concluded that the totality of the evidence was insufficient to meet our burden of proof.'



**Michael Williams remains shaken over his experience and continues to question the validity of the ShotSpotter program that led to his wrongful incarceration**



**Jacqueline Anderson said she did her best to keep her husband's mind at ease while he was in prison, telling him to remember all the joy he's experience with his family**

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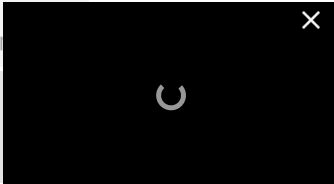
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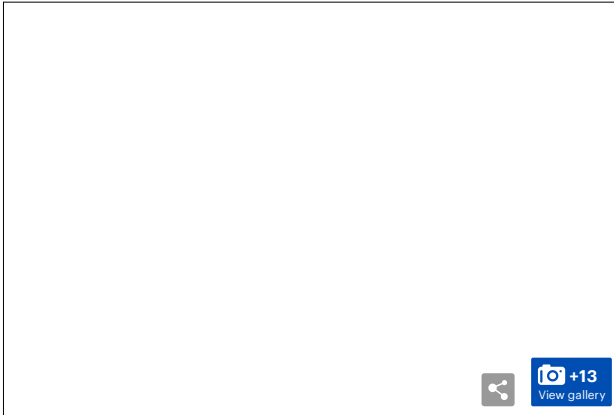
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▶ Daisy Ridley looks chic in a belted coat and mock neck dress as Star Wars actress attends a Stella McCartney show not so far, far away at PFW

▶ Taylor Paige shows off her taut midriff as she celebrates after taking home Best Female Performance at the Independent Spirit Awards

▶ The Walking Dead: Eugene Porter goes on desperate search for missing Stephanie after declaring love





Letters written by Michael Williams to his wife, Jacqueline Anderson, and a card she sent him and sealed with a lipstick kiss are just a few samples of the correspondence between the two



Family photos sit on a mantle in the South Side Chicago home of the reunited couple

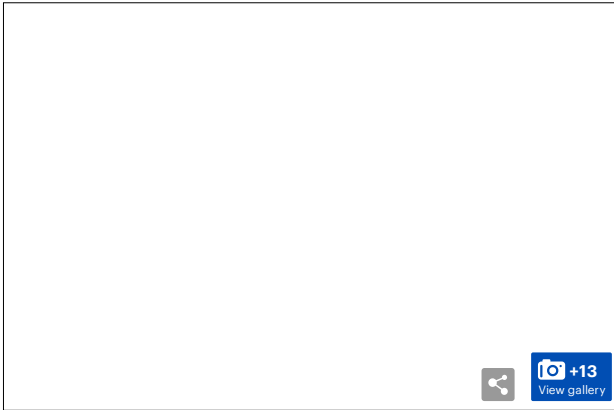
ShotSpotter touts its algorithm-backed technology as virtually foolproof. But its algorithms are a trade secret, largely inscrutable to the public, jurors and police oversight boards.

The company identifies possible gunshots with the acoustic sensors. Then ShotSpotter employees listen to audio recordings of those sounds, and confirms or changes the source of sounds, introducing the possibility of human bias. Employees can and do modify the location or number of shots fired at the request of police, according to court records. And in the past, city dispatchers or police themselves could make some of these changes.

Amid a nationwide debate over racial bias in policing, civil rights advocates say the criminal justice system shouldn't outsource some of society's weightiest decisions to computer code.

ShotSpotter CEO Ralph Clark said details about artificial intelligence are 'not really relevant.'

'The point is anything that ultimately gets produced as a gunshot has to have eyes and ears on it,' said Clark. 'Human eyes and ears, ok?'



ShotSpotter CEO Ralph Clark says the company is constantly improving its system, but it still logs a small percentage of false positives. He is pictured at his office in Newark, California

As ShotSpotter's gunshot detection systems expand around the country, so has its use as courtroom evidence - including 91 cases in the past 4 years.

'Our data compiled with our expert analysis help prosecutors make convictions,' said a recent ShotSpotter press release.

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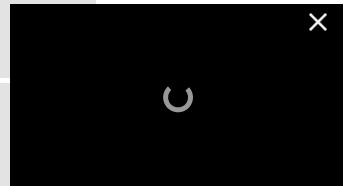
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# **Exhibit G**

(\* AI + ML \*)

## Cops responding to ShotSpotter's AI alerts rarely find evidence of gun crime, says Chicago watchdog

It may hurt community policing, too

Katyanna Quach

Wed 25 Aug 2021 // 22:38 UTC

55

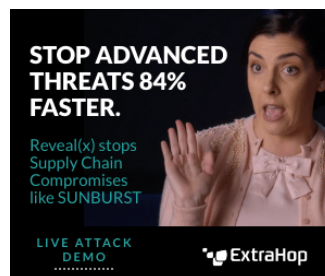


Police responding to ShotSpotter's AI-generated alerts of gunfire find evidence of actual gun-related crime only about one time in ten, a Chicago public watchdog has found.

The California biz uses machine-learning algorithms to determine whether loud bangs caught by microphones deployed across more than 100 US cities are gunshots or not. If a shot is identified, the location of the noise is triangulated and sent to the police as an immediate, real-time alert, and reports are later compiled for prosecutors for use in court cases.

ShotSpotter is under the microscope right now because a 65-year-old man spent almost a year behind bars awaiting trial for murder – and the evidence against him involved a ShotSpotter report of a gunshot.

Michael Williams was last year accused of shooting and killing 25-year-old Safarian Herring, and denied any wrongdoing. Prosecutors said ShotSpotter picked up the sound of gunfire right where and when Williams was seen in his car, in Chicago, giving Herring a ride. Williams said Herring was hit in a drive-by shooting.



Williams' lawyers asked the trial judge to probe the ShotSpotter evidence, alleging in a court filing that ShotSpotter picked up the sound of a firecracker a mile away from where police said Herring was shot and that these details were later corrected by ShotSpotter employees to be gunfire where officers said Herring was hit.

**Editor's note:** ShotSpotter has responded to the allegations raised by Williams' lawyers, stating that, for its court evidence, its algorithm identified two data points: the exact coordinates where Herring was shot at the junction of South Stony Island Avenue and East 63rd Street, and the street address to the entrance of Jackson Park, the edge of which is where Herring was hit. The park's entrance is a mile from where the shooting occurred. These data points were not changed at any time.

ShotSpotter also said the reclassification of the sound from a firecracker to gunfire was innocuous: a human reviewer checked the



audio and changed it from a possible firework to gunshot within a minute of its detection.

Thus, though Williams' lawyers sought to paint ShotSpotter's location and classification as ambiguous and unreliable, it is clear from the evidence why two data points were given – the precise coordinates of the actual shot; and what the algorithm thought was the nearest relevant street address, the adjacent park – and that these data points were not changed by ShotSpotter staff, and also how the sound was reclassified immediately by an employee. We are happy to clarify this situation.

Following the defense's request for an inquiry, the prosecution withdrew the ShotSpotter report, and last month asked for the case to be dismissed as it no longer had sufficient evidence. The judge [agreed](#), and Williams was released as a free man.

The City of Chicago's Office of Inspector General (OIG) decided to dig into the alerts ShotSpotter sends to the Chicago Police Dept (CPD) and the city's Office of Emergency Management. The city had a \$33m three-year contract with ShotSpotter that was due to run out in August 2021, and in December last year, that contract was extended ahead of its expiry to mid-2023.

The watchdog said 50,176 alerts generated by ShotSpotter in Chicago between January 2020 and May this year probably were the result of gunfire, and were assigned unique IDs and had officers show up. Of those alerts, 41,830 resulted in some kind of police action, known as a disposition. And of those dispositions, only 4,556 indicated that "evidence of a gun-related criminal offense was found," the auditors said.

Thus, only 9.1 per cent of ShotSpotter alerts led to the police finding evidence of an actual gun crime. This did not go down well with the auditors, given that the ShotSpotter contract has been renewed.

"The CPD data examined by OIG does not support a conclusion that ShotSpotter is an effective tool in developing evidence of gun-related crime," the watchdog [said](#) this week.

- [A man spent a year in jail on a murder charge that hinged on disputed AI evidence. Now the case has been dropped](#)
- [British Army develops AI shotgun drone with machine vision for indoor use](#)
- [Apple's bright idea for CSAM scanning could start 'persecution on a global basis' – 90+ civil rights groups](#)
- [Cop drone crashes into flight instructor's airplane](#)

The police, meanwhile, defended their use of the service.

"In order to reduce gun violence, knowing where it occurs is crucial," a Chicago police spokesperson told *The Register*. "ShotSpotter has detected hundreds of shootings that would have otherwise gone unreported. ShotSpotter is among a host of tools used by the CPD to keep the public safe and ultimately save lives.

“**ShotSpotter has detected hundreds of shootings that would have otherwise gone unreported**

“Using ShotSpotter, CPD receives real-time alerts of detected gunfire enabling patrol officers to arrive at a precise location of a shooting event quickly. Instead of relying on the historically low rate of 911 calls, law enforcement can respond more quickly to locate and aid victims, identify witnesses, and collect forensic evidence.

“The system gives police the opportunity to reassure communities that law enforcement is there to serve and protect them and helps to build bridges with residents who wish to remain anonymous.”

Chicago's OIG isn't convinced. In a 30-page report [\[PDF\]](#), the watchdog said the technology may lead to over-policing by sending officers into communities in search of serious crimes that never happened.

“Our study of ShotSpotter data is not about technological accuracy, it's about operational value,” Deputy Inspector General for Public Safety Deborah Witzburg stressed.

"If the Department is to continue to invest in technology which sends CPD members into potentially dangerous situations with little information – and about which there are important community concerns – it should be able to demonstrate the benefit of its use in combatting violent crime.

**“This technology is changing the way CPD members interact with members of Chicago’s communities**

“The data we analyzed plainly doesn’t do that. Meanwhile, the very presence of this technology is changing the way CPD members interact with members of Chicago’s communities.”

ShotSpotter’s software and hardware is proprietary, and hasn’t been openly audited for its accuracy. The company says its algorithms are 97 per cent accurate. “It is important to point out that the CPD continually describes ShotSpotter as an important part of their operations,” a ShotSpotter spokesperson told *The Register*.

“The OIG report does not negatively reflect on ShotSpotter’s accuracy which has been **independently audited** at 97 percent based on feedback from more than 120 customers. Nor does the OIG propose that ShotSpotter alerts are not indicative of actual gunfire whether or not physical evidence is recovered.”

*The Register* has asked Chicago’s OIG for further comment. ®

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## Will the Mobileye IPO fund Intel's comeback plan?

Dylan Martin Mon 7 Mar 2022 // 18:21 UTC

Intel has confidentially submitted for an initial public offering of its Mobileye automotive business, a move that CEO Pat Gelsinger has said will help fund the chipmaker's multibillion-dollar comeback plan.

The semiconductor giant disclosed on Monday that it filed a private draft Form S-1 statement for the Mobileye IPO with the US Securities and Exchange Commission. The confidential filing is allowed under Rule 135 of the U.S. Securities Act of 1933, which means no financial details of the IPO are available for public consumption.

The IPO would mark a return to the public market for Mobileye, which Intel acquired in 2016 for \$15bn to chase after autonomous vehicle ambitions after an initial IPO in 2014.

CONTINUE READING

## Lapsus\$ extortionists dump data online as Samsung admits breach

190GB worth of internal files, looks like source code for proprietary tech including Knox, Bootloader and more

Gareth Corfield Mon 7 Mar 2022 // 17:11 UTC

Samsung has acknowledged its data was stolen after the Lapsus\$ extortion gang deposited what appears to be 190GB of the company's stolen internal files online.

"We were recently made aware that there was a security breach relating to certain internal company data," said the Korean multinational in a statement this afternoon.

Lapsus\$, previously known as the criminal crew that stole internal data from Nvidia in a separate ransomware attempt, published 190GB of files on Bittorrent, according to reports. Bleeping Computer reported the torrent contained "source code and related data" for Samsung Knox, the firm's containerisation and security management framework, Bootloader, its Trusted Apps feature and more.

CONTINUE READING

## ZTE summoned to US court over probation terms

Case relates to alleged conspiracy to illegally bring over Chinese nationals

(\* AI + ML \*)

# A man spent a year in jail on a murder charge involving disputed AI evidence. Now the case has been dropped

Plus: Intel winds down RealSense, and more

Katyanna Quach

Sun 22 Aug 2021 // 03:30 UTC

126

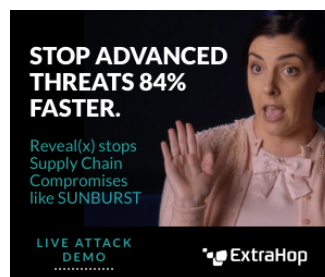


**IN BRIEF** The case against a man accused of murder has been thrown out by a judge after prosecutors withdrew disputed evidence of an AI-identified gunshot sound.

Michael Williams, 65, who denied any wrongdoing, sat in jail for 11 months awaiting trial for allegedly killing Safarian Herring, 25.

It's said that in May last year, Williams was driving through Chicago one night hoping to buy some cigarettes. Herring waved him down for a ride, and Williams, recognizing the younger man from the neighborhood, let him into his car. Soon after another vehicle pulled up alongside, and someone in a passenger seat took out a gun and shot Herring in the head, Williams told police. Herring's mother said her son, an aspiring chef, had been shot at two weeks earlier at a bus stop.

Herring, who was taken to hospital by Williams, died from the gunshot wound, and Williams ended up being charged with his murder. A key piece of evidence against him came from ShotSpotter, a company that operates microphones spread across US cities including Chicago that, with the aid of machine-learning algorithms, detect and identify gunshot sounds to immediately alert the cops.



Prosecutors said ShotSpotter picked up a gunshot sound where Williams was seen on surveillance camera footage in his car, putting it all forward as proof that Williams shot Herring right there and then. Police did not cite a motive, had no eyewitnesses, and did not find the gun used in the attack. Williams did have a criminal history, though, having served time for attempted murder, robbery, and discharging a firearm when he was younger, and said he had turned his life around significantly since. He was grilled by detectives, and booked.

Williams' lawyers asked the trial judge to probe the ShotSpotter evidence, alleging in a court filing that ShotSpotter picked up the sound of a firecracker a mile away from where police said Herring was shot and that these details were later corrected by ShotSpotter employees to be gunfire where officers said Herring was hit. ShotSpotter said it had not improperly altered any data to favor the police's case.

**Editor's note:** ShotSpotter has responded to the allegations raised by Williams' lawyers, stating that, for its court evidence, its algorithm identified two data points: the exact coordinates where Herring was shot at the junction of South Stony Island Avenue and East 63rd Street, and the street address to the entrance of Jackson Park, the edge of which is where Herring was hit. The park's entrance is a mile from where the shooting occurred. These data points were not changed at any time.

ShotSpotter also said the reclassification of the sound from a firecracker to gunfire was innocuous: a human reviewer checked the audio and changed it from a possible firework to gunshot within a minute of its detection.

Thus, though Williams' lawyers sought to paint ShotSpotter's location and classification as ambiguous and unreliable, it is clear from the evidence why two data points were given – the precise coordinates of the actual shot; and what the algorithm thought was the nearest relevant street address, the adjacent park – and that these data points were not changed by ShotSpotter staff, and also how the sound was reclassified immediately by an employee. We are happy to clarify this situation.

After Williams' lawyers asked the judge in the case to carry out an inquiry, the prosecution last month withdrew the ShotSpotter report, and asked for the case to be dismissed on the basis of insufficient evidence, which the judge agreed to. Williams is a free man again.

#### **The internet used our AI to make NSFW images!**

Startup Kapwing, which built a web application that uses computer-vision algorithms to generate pictures for people, is disappointed netizens used the code to produce NSFW material.

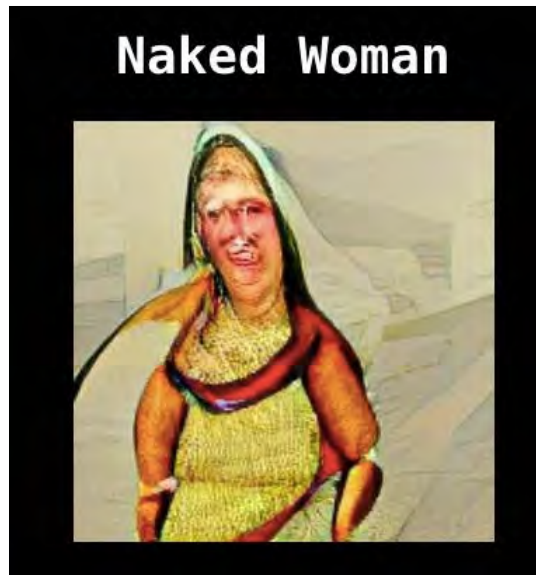
The software employs a combination of **VQGAN** and **CLIP** – made by researchers at the University of Heidelberg and OpenAI, respectively – to turn text prompts into images. This approach was **popularised** by artist Katherine Crowson in a Google Collab notebook; there's a **Twitter account** dedicated to showing off this type of computer art.

Kapwing had hoped its implementation of VQGAN and CLIP on the web would be used to make art from users' requests; instead, we're told, it was used to make filth.

"Since I work at Kapwing, an online video editor, making an AI art and video generator seemed like a project that would be right up our alley," Eric Lu, co-founder and CTO at Kapwing **said**.

"The problem? When we made it possible for anyone to generate art with artificial intelligence, barely anyone used it to make actual art. Instead, our AI model was forced to make videos for random inputs, trolling queries, and NSFW intents."

Submitted prompts ranged from "naked woman" to the downright bizarre "thong bikini covered in chocolate" or "gay unicorn at a funeral." The funny thing is, the images made by the AI aren't even that realistic nor sexually explicit. Below is an example output for "naked woman."



[Click to enlarge](#)

"Is it that the internet just craves NSFW content so much that they will type it anywhere? Or do people have a propensity to try to abuse AI systems?" Lu continued. "Either way, the content outputted must have [been] disappointing to these users, as most of the representations outputted by our models were abstract."

### Intel 'winds down' RealSense biz

Intel is shuttering its RealSense computer-vision product wing. The business unit's chips, cameras, LiDAR, hardware modules, and software were aimed at things like digital signage, 3D scanning, robotics, and facial-authentication systems.

Now the plug's been pulled, and RealSense boss Sagi Ben Moshe is departing Intel after a decade at the semiconductor goliath.

"We are winding down our RealSense business and transitioning our computer vision talent, technology and products to focus on advancing innovative technologies that better support our core businesses and IDM 2.0 strategy," an Intel spokesperson **told** CRN.

All RealSense products will be discontinued, though it appears its stereo cameras for depth perception will stay, to some degree, **according** to IEEE's Spectrum. ®

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## Lapsus\$ extortionists dump data online as Samsung admits breach

190GB worth of internal files, looks like source code for proprietary tech including Knox, Bootloader and more

[Gareth Corfield](#) Mon 7 Mar 2022 // 17:11 UTC

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{\* AI + ML \*}

# Cops responding to ShotSpotter's AI alerts rarely find evidence of gun crime, says Chicago watchdog

It may hurt community policing, too

Katyanna Quach

Wed 25 Aug 2021 // 22:38 UTC

55 



Police responding to ShotSpotter's AI-generated alerts of gunfire find evidence of actual gun-related crime only about one time in ten, a Chicago public watchdog has found.

The California biz uses machine-learning algorithms to determine whether loud bangs caught by microphones deployed across more than 100 US cities are gunshots or not. If a shot is identified, the location of the noise is triangulated and sent to the police as an immediate, real-time alert, and reports are later compiled for prosecutors for use in court cases.

ShotSpotter is under the microscope right now because a 65-year-old man spent almost a year behind bars awaiting trial for murder – and the evidence against him involved a ShotSpotter report of a gunshot.

Michael Williams was last year accused of shooting and killing 25-year-old Safarian Herring, and denied any wrongdoing. Prosecutors said ShotSpotter picked up the sound of gunfire right where and when Williams was seen in his car, in Chicago, giving Herring a ride. Williams said Herring was hit in a drive-by shooting.

Williams' lawyers asked the trial judge to probe the ShotSpotter evidence, alleging in a court filing that ShotSpotter picked up the sound of a firecracker a mile away from where police said Herring was shot and that these details were later corrected by ShotSpotter employees to be gunfire where officers said Herring was hit.

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Following the defense's request for an inquiry, the prosecution withdrew the ShotSpotter report, and last month asked for the case to be dismissed as it no longer had sufficient evidence. The judge **agreed**, and Williams was released as a free man.

The City of Chicago's Office of Inspector General (OIG) decided to dig into the alerts ShotSpotter sends to the Chicago Police Dept (CPD) and the city's Office of Emergency Management. The city had a \$33m three-year contract with ShotSpotter that was due to run out in August 2021, and in December last year, that contract was extended ahead of its expiry to mid-2023.

The watchdog said 50,176 alerts generated by ShotSpotter in Chicago between January 2020 and May this year probably were the result of gunfire, and were assigned unique IDs and had officers show up. Of those alerts, 41,830 resulted in some kind of police action, known as a disposition. And of those dispositions, only 4,556 indicated that "evidence of a gun-related criminal offense was found," the auditors said.

Thus, only 9.1 per cent of ShotSpotter alerts led to the police finding evidence of an actual gun crime. This did not go down well with the auditors, given that the ShotSpotter contract has been renewed.

"The CPD data examined by OIG does not support a conclusion that ShotSpotter is an effective tool in developing evidence of gun-related crime," the watchdog **said** this week.

- **A man spent a year in jail on a murder charge that hinged on disputed AI evidence. Now the case has been dropped**
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- **Apple's bright idea for CSAM scanning could start 'persecution on a global basis' – 90+ civil rights groups**
- **Cop drone crashes into flight instructor's airplane**

The police, meanwhile, defended their use of the service.

"In order to reduce gun violence, knowing where it occurs is crucial," a Chicago police spokesperson told *The Register*. "ShotSpotter has detected hundreds of shootings that would have otherwise gone unreported. ShotSpotter is among a host of tools used by the CPD to keep the public safe and ultimately save lives.

**“ ShotSpotter has detected hundreds of shootings that would have otherwise gone unreported**

"Using ShotSpotter, CPD receives real-time alerts of detected gunfire enabling patrol officers to arrive at a precise location of a shooting event quickly. Instead of relying on the historically low rate of 911 calls, law enforcement can respond more quickly to locate and aid victims, identify witnesses, and collect forensic evidence.

"The system gives police the opportunity to reassure communities that law enforcement is there to serve and protect them and helps to build bridges with residents who wish to remain anonymous."

Chicago's OIG isn't convinced. In a 30-page report **[PDF]**, the watchdog said the technology may lead to over-policing by sending officers into communities in search of serious crimes that never happened.

"Our study of ShotSpotter data is not about technological accuracy, it's about operational value," Deputy Inspector General for Public Safety Deborah Witzburg stressed.

"If the Department is to continue to invest in technology which sends CPD members into potentially dangerous situations with little information – and about which there are important community concerns – it should be able to demonstrate the benefit of its use in combatting violent crime.

**“ This technology is changing the way CPD members interact with members of Chicago's communities**

"The data we analyzed plainly doesn't do that. Meanwhile, the very presence of this technology is changing the way CPD members interact with members of Chicago's communities."

ShotSpotter's software and hardware is proprietary, and hasn't been openly audited for its accuracy. The company says its algorithms are 97 per cent accurate. "It is important to point out that the CPD

continually describes ShotSpotter as an important part of their operations," a ShotSpotter spokesperson told *The Register*.

"The OIG report does not negatively reflect on ShotSpotter's accuracy which has been **independently audited** at 97 percent based on feedback from more than 120 customers. Nor does the OIG propose that ShotSpotter alerts are not indicative of actual gunfire whether or not physical evidence is recovered."

*The Register* has asked Chicago's OIG for further comment. @

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[Gareth Corfield](#) Mon 7 Mar 2022 // 17:11 UTC

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## ZTE summoned to US court over probation terms

Case relates to alleged conspiracy to illegally bring over Chinese nationals

[Dan Robinson](#) Mon 7 Mar 2022 // 15:44 UTC

Chinese telecoms kit maker ZTE is being summoned to court in the US for a hearing over possible revocation of probation after it pleaded guilty in 2017 to violating trade sanctions by illegally shipping US tech to Iran.

The hearing is linked to allegations involving a former ZTE employee accused of conspiring to bring Chinese nationals into the US illegally, although ZTE itself does not appear to be facing charges in that case.

The original case saw ZTE plead guilty five years ago to breaking trade sanctions against the state of Iran by shipping \$32m worth of US-made components for routers, switches, servers, and mobile phone network equipment to the Middle East nation through various China-based subsidiaries, and then attempting to cover up the dealings, as reported by *The Register* at the time.

[CONTINUE READING](#)

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## Microsoft pulls MSIX discussions into Windows Tech Community

Packaging app tech fans asked to huddle under the Windows umbrella

[Richard Speed](#) Mon 7 Mar 2022 // 14:49 UTC

Microsoft is "realigning" the MSIX tech community and cramming all the existing discussion spaces into a single place within the Windows Tech Community.

Unlike the infamous Great Technet Deletion, Microsoft has promised that existing discussions and blogs will remain intact, but simply be moved somewhere else. Affected will be posts regarding MSIX Deployment, the Package Support Framework, MSIX Packaging tools, and the MSIX SDK.



# **Exhibit H**

by [Nathan Ord](#) — Sunday, August 22, 2021, 02:10 PM EDT

## Man Spends Nearly A Year In Prison Over Thin Evidence



[BECOME A PATRON](#)

*“Following the publication of this article, HotHardware was provided with copies of court documents from this case that show ShotSpotter did not change the location of the gunfire, as had been previously reported, but had identified the same GPS coordinates for the gunfire in both its initial [real-time alert](#) and in its later [detailed forensic report](#).*

*Further, the evidence that ShotSpotter provided was later withdrawn by the prosecution and had no bearing on the results of this case.*



[BECOME A PATRON](#)



Artificial Intelligence is a tricky business, as with anything in life, with great power comes great responsibility. On the one hand, AI can power autonomous vehicles or help usher in [more secure computing platforms](#). On the other hand, for example, now it appears it's possible to end up being jailed due to questionable AI-based evidence. This is precisely what happened to 65-year-old Michael Williams when he was arrested last August, after being accused of killing a young man in his neighborhood who asked for a ride during a night of community unrest, due to a reported police brutality incident.

In 2018, the city of Chicago entered a \$33 million contract with ShotSpotter, a network of surveillance microphones that uses a secret AI-powered algorithm to identify and triangulate gunshots with varying degrees of success. In short, this network of microphones is what ended up getting Williams into trouble on the night of Sunday, May 31st, 2020.



*ShotSpotter Equipment At East 63rd Street And South Stony Island Ave in Chicago*

Late in the evening, Williams had made the decision to buy cigarettes at a local gas station, but upon arrival, found that the store had been looted in the riots following George Floyd's murder. He then decided just to head back home, when on his way he spotted Safarian Herring, a 25-year-old aspiring chef who he had seen around the neighborhood, waving him down for a ride. Afterward, Williams explained that "I didn't feel threatened or anything because I've seen him before, around. So, I said yes. And he got in the front seat, and we took off."





*Michael Williams At His Home On The South Side Of Chicago*

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vehicle fired a shot into Williams' car, missing him and striking his passenger, Herring, who slumped over and was unresponsive. As Herring bled, Williams shouted to try and get a response while rushing through the city streets to reach St. Bernard Hospital.

Only two weeks prior, Samona Nicholson, Herring's mother, explained that he had survived a shooting at a bus stop and would stay with a relative where he would be safe. Sadly, though, Herring was pronounced dead on June 2nd, 2020, at 2:53 p.m.

Three months following the traumatic incident, in which Williams endured flashbacks and severe emotional duress, the police showed up. Williams recalled that "officers told him they wanted to take him to the station to talk and assured him he did nothing wrong," but that was not the case. He was interrogated and put into a holding cell where he was told that he was being charged with first-degree murder; the evidence: [ShotSpotter surveillance video data](#).



*The Gas Station Williams Set Out To Visit*

On the night Williams went about his business and witnessed the murder, ShotSpotter sensors detected and alerted police to a loud noise initially triangulated to 5700 S. Lake Shore Drive. This "evidence" was used to anchor the prosecutor's theory of Williams shooting Herring inside his car, though no motives, eyewitnesses, or the murder weapon were found during the investigation.

Ironically, it appeared that this loud noise was identified by the AI as a firecracker with a 98% confidence rating. However, an employee reclassified the sound to a single gunshot a minute after detection. Then, following "post-process analysis," the sound was moved to East 63rd Street and South Stony Island Avenue, the area which Williams was traveling. The Associated Press also notes that the [ShotSpotter](#) system sometimes struggles to identify gunshots within vehicles. Furthermore, data is routinely adjusted, which could introduce bias into the system at the behest of police. We can now see what a slippery slope human-managed [AI](#) can be at times, depending on the application and use case.

Despite this, Williams was incarcerated for approximately 11 months, wherein he battled COVID-19 twice and developed an uncontrollable tremor. After this long stint away from home, Williams hobbled into Courtroom 500, where 78-year-old Vietnam veteran Judge Vincent Gaughan finally dismissed the case for insufficient evidence. Thus, Williams was finally able to walk out of the Cook County Jail on the evening of July 23rd as a free man.

While Williams is still shaken by the entire ordeal, Herring's mother still believes that the police had the right suspect, despite the lack of evidence, outside of what she once called "flimsy data," botched by ShotSpotter. In any event, Williams states that "The only places these devices are installed are in poor black communities, nowhere else," asking, "How many of us will end up in this same situation?" With this report though, we should also ask ourselves, is judging humanity and human actions with an AI algorithm, the right thing to do when someone's life hangs in the balance?

*(ShotSpotter, Michael Williams, and gas station images courtesy of [AP Photo/Charles Rex Arbogast](#))*

# **Exhibit I**



# ShotSpotter: AI at its Worst



Stephanie Glen

November 15, 2021 at 2:00 pm

**Editor's Note:** It has come to our attention that several statements in this article have been based on sources that have later been recanted and are factually incorrect. Court documents from the case show that ShotSpotter accurately showed the location of the gunfire as reported in both the real-time alert, as well as in the forensic report. The initial alert was classified as a *possible* firework, but through their standard procedure of human analysis, it was determined within one minute to be gunfire. The evidence that ShotSpotter provided was later withdrawn by the prosecution and had no bearing on the results of the case.

- An innocent man spends a year in jail after ShotSpotter frames him for murder.
- The gunshot detection system has been widely criticized for degradation of civil rights.
- ShotSpotter's many problems include a false positive rate of up to 90%.

Sixty-five-year-old Michael Williams was released from jail last month after spending almost a year in jail on a murder charge. The key evidence against him wasn't eyewitness testimony or forensics, but an **audio recording from ShotSpotter**, the most popular acoustic gunshot detection technology in the United States.

The "gunshot" sound that pointed the finger at Williams was initially classified as a *firework* by the AI. After the charges were dropped due to "insufficient evidence" it was revealed that one of ShotSpotter's human "reviewers" had changed the data to fit the crime, reclassifying the sound as a gunshot instead of a firework [1]. The case highlighted the dangers that the system poses to civil liberties and brings to question how much power we should give to AI "witnesses", especially those that can easily be tampered with.

## What is ShotSpotter?

Shotspotter is a patented acoustic gunshot detection system of microphones, algorithms, and human reviewers that alerts police to potential gunfire [2]. Once an "explosive type sound" [3] is detected, the sensors switch on and create a three-second audio recording. If three sensors capture the same sound, the recording is sent for further verification at ShotSpotters Incident Review Center. After noise filters remove sounds from construction, fireworks, and other gunshot-like sources, the potential gunshots are then sent to human reviewers—who decide if the police should be alerted.

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ShotSpotter's claim is that the system has a 97% accuracy rate is unsupported by any actual evidence. But that isn't stopping cities from paying a subscription of between \$65,000 and \$90,000 per square mile per year to install the technology [4]: Chicago's three-year contract with ShotSpotter cost \$33 million [5].

### How Does The Algorithm Work?

What's under the hood? No one outside of ShotSpotter knows; the "deep learning" classifier at the heart of the gunshot detection system has not been independently assessed nor peer-reviewed. The company states they have "two AI algorithms," one to determine the location of the gunfire and one to filter noise. The following "fact" from the ShotSpotter website provides a few hints [6]:

<p><b>MYTH</b> AI determines if sounds are gunshots and sends alerts directing police into communities to arrest people.</p>	<p><b>✓ FACT</b></p> <ul style="list-style-type: none"><li>• This is completely incorrect and a misinformed understanding of how our system works.</li><li>• ShotSpotter has two AI algorithms and neither sends alerts to police. Only specially trained human reviewers send alerts that result in a police response.</li><li>• The first algorithm determines the location of the gunfire using math and physics and the approach has been around since WWI. The company has been transparent about this algorithm and published a <a href="#">paper</a> showing how it works.</li><li>• The second algorithm is a noise filter that eliminates sounds that are not gunshots such as fireworks or helicopters. This algorithm filters out the majority of sounds that are not gunshots so as not to overwhelm the human reviewers. Reviewers then analyze the remaining sounds and determine whether those sounds are gunshots or not using a set of tools such as audio playback and visual analysis of the waveform.</li></ul>
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However, the algorithm that determines the location of the gunfire [7] is a simple triangulation algorithm that is definitely *not* AI, despite the company's claims, highlighted above in yellow. The nuts and bolts of the second algorithm, the noise filter, is kept tightly under wraps. Cities using the systems are expressly forbidden from sharing the data with any outside sources—even research institutions [8], which makes it impossible to validate the system's effectiveness or true positive rate. Although ShotSpotter has never been independently evaluated, it has been used as evidence in many court cases [1].

### False Positive Rate May be as High as 90%

Although we know nothing about the "AI, we do know that the system's false positive rate *is* somewhere between 33% to 90%, depending on who commissioned the report; the ACLU puts the rate at the higher end [9], while a report commissioned by ShotSpotter puts the figure at the lower end:

Instead of alerting police to actual gunfire, they were alerting police to "dumpsters, trucks, motorcycles, helicopters, fireworks, construction, vehicles

Deleted: [1](#)



traveling over expansion plates on bridges or into potholes, trash pickup, church bells, and other loud, concussive sounds common to urban life” [1].

So even if the classifier is a novel AI, it isn’t a particularly good one. A whopping 86% of “gunshot” reports to the police lead to no report of any crime at all [3]. Chicago’s Office of Inspector general (OIG) concluded from its analysis that CPD responses to ShotSpotter alerts rarely produce documented evidence of a gun-related crime, investigatory stop, or recovery of a firearm [10].

### Changing the System

Considering that the system has multiples issues, including the high false positive rate and data can be easily changed to “fit the crime,” it may be time for cities to redirect their million-dollar budgets to more effective ways of preventing crime. While ShotSpotter does have the potential to identify gun violence hotspots within cities [1], the technology shouldn’t be used in its current guise: an unreliable “anonymous tipster” sending even more unwarranted police responses to minority neighborhoods that are already over-policed.

### References

Police Image: Adobe Creative Cloud (Licensed)

[1] [ShotSpotter – The New Tool to Degrade What is Left of the Fourth Am...](#)

[2] [ShotSpotter Precision Policing Platform](#)

[3] [Leaders Weigh Pros and Cons of ShotSpotter](#)

[4] [High Tech Ears Listen for Shots](#)

[5] [Chicago Police Department’s Use of ShotSpotterTechnology](#)

[6] [ShotSpotter responds to false claims](#)

[7] [Precision and accuracy of acoustic gunshot location in an urban env...](#)

[8] 29. Jason, Tashea, Should The Public Have Access To Data Police Acquire Through Private Companies?, A.B.A J. 6 (Dec. 1, 2016).

[9] [Four problems with the ShotSpotter gunshot detection system](#)

[10] [THE CHICAGO POLICE DEPARTMENT’S USE OF SHOTSPOTTER TECHNOLOGY](#)

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[2] [ShotSpotter Precision Policing Platform](#)  
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# ShotSpotter: AI at it's Worst



Stephanie Glen | November 15, 2021 at 2:00 pm



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ShotSpotter's claim is that the system has a 97% accuracy rate is unsupported by any actual evidence. But that isn't stopping cities from paying a subscription of between \$65,000 and \$90,000 per square mile per year to install the technology [4]: Chicago's three-year contract with ShotSpotter cost \$33 million [5].

## How Does The Algorithm Work?

What's under the hood? No one outside of ShotSpotter knows; the "deep learning" classifier at the heart of the gunshot detection system has not been independently assessed nor peer-reviewed. The company states they have "two AI algorithms," one to determine the location of the gunfire and one to filter noise. The following "fact" from the ShotSpotter website provides a few hints [6]:

### MYTH

**AI determines if sounds are gunshots and sends alerts directing police into**

### ✓ FACT

- This is completely incorrect and a misformed understanding of how our system works.
- ShotSpotter has two AI algorithms and neither sends alerts to police. Only specially trained human reviewers send alerts that result in a police response.

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- The first algorithm determines the location of the gunfire using triangulation and the approach has been around since WWI. The company has been transparent about this algorithm and published a [paper](#) showing how it works.
- The second algorithm is a noise filter that eliminates sounds that are not gunshots such as fireworks or helicopters. This algorithm filters out the majority of sounds that are not gunshots so as not to overwhelm the human reviewers. Reviewers then analyze the remaining sounds and determine whether these sounds are gunshots or not using a set of tools such as audio playback and visual analysis of the waveform.

However, the algorithm that determines the location of the gunfire [7] is a simple triangulation algorithm that is definitely *not* AI, despite the company's claims, highlighted above in yellow. The nuts and bolts of the second algorithm, the noise filter, is kept tightly under wraps. Cities using the systems are expressly forbidden from sharing the data with any outside sources—even research institutions [8], which makes it impossible to validate the system's effectiveness or true positive rate. Although ShotSpotter has never been independently evaluated, it has been used as evidence in many court cases [1].

#### False Positive Rate May be as High as 90%

Although we know nothing about the "AI, we do know that the system's false positive rate *is* somewhere between 33% to 90%, depending on who commissioned the report; the ACLU puts the rate at the higher end [9], while a report commissioned by ShotSpotter puts the figure at the lower end:

Instead of alerting police to actual gunfire, they were alerting police to "dumpsters, trucks, motorcycles, helicopters, fireworks, construction, vehicles traveling over expansion plates on bridges or into potholes, trash pickup, church bells, and other loud, concussive sounds common to urban life" [1].

So even if the classifier is a novel AI, it isn't a particularly good one. A whopping 86% of "gunshot" reports to the police lead to *no report* of any crime at all [3]. Chicago's Office of Inspector general (OIG) concluded from its analysis that CPD responses to ShotSpotter alerts rarely produce documented evidence of a gun-related crime, investigatory stop, or recovery of a firearm [10].

#### Changing the System

Considering that the system has multiples issues, including the high false positive rate and data can be easily changed to "fit the crime," it may be time for cities to redirect their million-dollar budgets to more effective ways of preventing crime. While ShotSpotter does have the potential to identify gun violence hotspots within cities [1], the technology shouldn't be used in its current guise: an unreliable "anonymous tipster" sending even more unwarranted police responses to minority neighborhoods that are already over-policed.

#### References

Police Image: Adobe Creative Cloud (Licensed)

- [1] [ShotSpotter – The New Tool to Degrade What is Left of the Fourth Am...](#)
- [2] [ShotSpotter Precision Policing Platform](#)
- [3] [Leaders Weigh Pros and Cons of ShotSpotter](#)
- [4] [High Tech Ears Listen for Shots](#)
- [5] [Chicago Police Department's Use of ShotSpotterTechnology](#)
- [6] [ShotSpotter responds to false claims](#)
- [7] [Precision and accuracy of acoustic gunshot location in an urban env...](#)
- [8] 29. Jason, Tashea, Should The Public Have Access To Data Police Acquire Through Private Companies?, A.B.A.J. 6 (Dec. 1, 2016).
- [9] [Four problems with the ShotSpotter gunshot detection system](#)
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# ShotSpotter: AI at its Worst



Stephanie Glen | November 15, 2021 at 2:00 pm

**Editor's Note:** It has come to our attention that several statements in this article have been based on sources that have later been recanted and are factually incorrect. Court documents from the case show that ShotSpotter accurately showed the location of the gunfire as reported in both the real-time alert, as well as in the forensic report. The initial alert was classified as a possible firework, but through their standard procedure of human analysis, it was determined within one minute to be gunfire. The evidence that ShotSpotter provided was later withdrawn by the prosecution and had no bearing on the results of the case.



- The gunshot detection system has been widely criticized for degradation of civil rights.
- ShotSpotter's many problems include a false positive rate of up to 90%.

Sixty-five-year-old Michael Williams was released from jail last month after spending almost a year in jail on a murder charge. The initial evidence against him wasn't eyewitness testimony or forensics, but an **audio recording from ShotSpotter**, the most popular acoustic gunshot detection technology in the United States.





The "gunshot" sound that pointed the finger at Williams was initially classified as a *firework* by the AI and sent for human review. After the charges were dropped due to insufficient evidence, it was revealed that one of ShotSpotter's human "reviewers" had manually classified the sound as a gunshot instead of a firework [1]. The case brings to question how much power we should give to AI "witnesses", especially those that can be tampered with.

## What is ShotSpotter?

Shotspotter is a patented acoustic gunshot detection system of microphones, algorithms, and human reviewers that alerts police to potential gunfire [2]. Once an "explosive type sound" [3] is detected, the sensors switch on and create a three-second audio recording. If three sensors capture the same sound, the recording is sent for further verification at ShotSpotters Incident Review Center. After noise filters remove sounds from construction, fireworks, and other gunshot-like sources, the potential gunshots are then sent to human reviewers—who decide if the police should be alerted.

ShotSpotter's claim is that the system has a 97% accuracy rate is unsupported by any actual evidence. But that isn't

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stopping cities from paying a subscription of between \$65,000 and \$90,000 per square mile per year to install the technology [4]; Chicago's three-year contract with ShotSpotter cost \$33 million [5].

### How Does The Algorithm Work?

What's under the hood? No one outside of ShotSpotter knows; the "deep learning" classifier at the heart of the gunshot detection system has not been independently assessed nor peer-reviewed. The company states they have "two AI algorithms," one to determine the location of the gunfire and one to filter noise. The following "fact" from the ShotSpotter website provides a few hints [6]:

However, the algorithm that determines the location of the gunfire [7] is a simple triangulation algorithm that is definitely *not* AI, despite the company's claims, highlighted above in yellow. The nuts and bolts of the second algorithm, the noise filter, is kept tightly under wraps. Cities using the systems are expressly forbidden from sharing the data with any outside sources—even research institutions [8], which makes it impossible to validate the system's effectiveness or true positive rate. Although ShotSpotter has never been independently evaluated, it has been used as evidence in many court cases [1].

### False Positive Rate May be as High as 90%

Although we know nothing about the "AI, we do know that the system's false positive rate *is* somewhere between 33% to 90%, depending on who commissioned the report; the ACLU puts the rate at the higher end [9], while a report commissioned by ShotSpotter puts the figure at the lower end:

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---

So even if the classifier is a novel AI, isn't a particularly good one. A whopping 86% of "gunshot" reports to the police lead to no report of any crime at all [3]. Chicago's Office of Inspector general (OIG) concluded from its analysis that CPD responses to ShotSpotter alerts rarely produce documented evidence of a gun-related crime, investigatory stop, or recovery of a firearm [10].

### Changing the System

Considering that the system has multiples issues, it may be time for cities to redirect their million-dollar budgets to more effective ways of preventing crime. While ShotSpotter does have the potential to identify gun violence hotspots within cities [1], the technology shouldn't be used in its current guise: an unreliable "anonymous tipster" sending even more unwarranted police responses to minority neighborhoods that are already over-policed.

### References

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[1] [ShotSpotter – The New Tool to Degrade What is Left of the Fourth Am...](#)

[2] [ShotSpotter Precision Policing Platform](#)

[3] [Leaders Weigh Pros and Cons of ShotSpotter](#)

[4] [High Tech Ears Listen for Shots](#)

[5] [Chicago Police Department's Use of ShotSpotterTechnology](#)

[6] [ShotSpotter responds to false claims](#)

[7] [Precision and accuracy of acoustic gunshot location in an urban env...](#)

[8] 29. Jason, Tashea, Should The Public Have Access To Data Police Acquire Through Private Companies?, A.B.A J. 6 (Dec. 1, 2016).

[9] [Four problems with the ShotSpotter gunshot detection system](#)

[10] [THE CHICAGO POLICE DEPARTMENT'S USE OF SHOTSPOTTER TECHNOLOGY](#)



# **Exhibit J**



**Subject:** RE: Renewed Demand for Retraction  
**Date:** Monday, March 7, 2022 at 3:54:52 PM Eastern Standard Time  
**From:** Megan Meier  
**To:** Strom, Rachel, Chase, Jeremy, Azmi, Nimra  
**CC:** Tom Clare, Amy Roller, Alexis Chandler, Brian Farnan (bfarnan@farnanlaw.com), mfarnan@farnanlaw.com  
**Attachments:** image001.png, image002.png

Rachel,

As you know, ShotSpotter consistently provided coordinates and maps that located the gunfire at the same intersection in both its initial real-time alert and in its later detailed forensic report in the Michael Williams case. But VICE falsely reported that ShotSpotter had “changed the alert’s coordinates to a location on South Stony Island Drive near where Williams’ car was seen on camera.” The obvious gist of this demonstrably false statement is that ShotSpotter had framed Mr. Williams, as confirmed by people who read VICE’s story and tweeted about it.



I’m not sure I understand your claim that you “do not see any publication that retracted ‘that ShotSpotter had framed Michael Williams by changing the coordinates of the gunfire to the intersection where Williams’s car was seen on camera.’” Are you quibbling with the exact wording of the accusation or with the word “retracted”? Yes, of course different publishers used their own words to repeat the false accusation that was originally published

by VICE. And the point isn't whether their efforts to set the record straight should be labeled a "retraction" or something else. The point is that, after reviewing the court records for themselves, The Associated Press, the tech industry publication Hot Hardware, Data Science Central, The Daily Mail, The Register, and the University of Illinois at Chicago Law Review have all backed away from the demonstrably false accusation that was originally published by VICE.

For example, the tech industry publication Hot Hardware completely retracted the article *This Man Spent Nearly A Year In Prison Over Erroneous AI-Based Evidence*, which had repeated the lie that "the sound was moved to East 63<sup>rd</sup> Street and South Stony Island Avenue, the area which Williams was travelling." In place of that retracted article, Hot Hardware explained: "Following the publication of this article, Hot Hardware was provided with copies of court documents from this case that show ShotSpotter did not change the location of the gunfire, as had been previously reported, but had identified the same GPS coordinates for the gunfire in both its initial [real-time alert](#) and in its later [detailed forensic report](#)."

The University of Illinois at Chicago Law Review had published a similar statement including the hyperlinks to the two reports. The Daily Mail deleted the false claim that "the location of the recording was changed to fit the narrative that Williams killed Safarian Herring," and Data Science Central acknowledged that several statements in its article were "factually incorrect" and that "Court documents from the case show that ShotSpotter accurately showed the location of the gunfire as reported in both the real-time alert, as well as in the forensic report." After reviewing court records for itself, The Register explained that "it is clear from the evidence why two data points were given – the precise coordinates of the actual shot; and what the algorithm thought was nearest relevant street address, the adjacent park."

On Saturday, The Associated Press likewise disavowed VICE's false claim that ShotSpotter had "changed the alert's coordinates to a location on South Stony Island Drive near where Williams' car was seen on camera," by explaining to its readers that "the location identified on the maps and GPS coordinates in both reports remained around *the same intersection*."

You claim that "the difference between the words 'coordinates' and 'address' does not change the gist of the reporting." But if that were true, then The Associated Press, The Daily Mail, The Register, Data Science Central, Hot Hardware, and The University of Illinois at Chicago Law Review would not have seen the need to make the changes they made. If VICE cared about the truth, it would set the record straight, rather than continuing to mislead readers with the demonstrably false claim that ShotSpotter "changed the alert's coordinates to a location on South Stony Island Drive near where Williams' car was seen on camera."

I'm a bit puzzled by your argument that the issues we intend to raise in our surreply are "legally irrelevant." It is well established that refusing to retract is evidence of actual malice. See, e.g., *Burnett v. Nat'l Enquirer, Inc.*, 144 Cal.App.3d 991, 1011-12 (1983) (holding that republishing or failing to retract disproven claims is evidence of malice); accord *Zerangue v. TSP Newspapers, Inc.*, 814 F.2d 1066, 1071 (5th Cir. 1987); *Golden Bear Distrib. Syst.*



*of Tex., Inc. v. Chase Revel, Inc.*, 708 F.2d 944, 950 (5th Cir. 1983); *Celle v. Filipino Reporter Enters. Inc.*, 209 F.3d 163, 187 (2d Cir. 2000).

And VICE cannot seriously dispute that other publishers' actions are legally relevant. In its legal briefing, VICE itself touted The Associated Press's **now-outdated** article as evidence of the reasonableness of VICE's interpretation of the court records. Especially in light of VICE's previous representation to the Court, I'm surprised that you are opposing our motion and that you do not intend to affirmatively notify the Court of the fact that The Associated Press has now backed away from the false claim originally published by VICE. See Del. Rules of Prof'l Conduct Rule 3.3 (Candor toward the tribunal).

As to your accusation of "gamesmanship" in the "timing" of my email: I wrote to you the day after The Associated Press had disavowed VICE's false claim this Saturday. I obviously could not have written to you to notify you of that fact before it had happened, and I did not even wait until the next business day to notify you.

Finally, as to your claim that you "had trouble determining precisely what [we] were arguing was false and defamatory about VICE's reporting," our multiple demand letters laid that out in painstaking detail and also provided VICE with court records and other evidence disproving VICE's defamatory falsehoods. If VICE were interested in the truth, it would have retracted its false claims long ago, rather than making it clear—as you did during your conversation with Tom—that VICE was not willing to do what was necessary to undo the harm VICE had caused.

As confirmed by the actions of multiple publishers, VICE's representation of the court records was neither fair nor accurate, and VICE's ongoing refusal to set the record straight shows that VICE was not interested in the truth to begin with.

We will, of course, provide the Court with a copy of your email and notify the Court of VICE's position that it does not want the Court to consider these facts.

Megan L. Meier | Partner  
**C L A R E L O C K E L L P**  
Office (202) 628-7403  
Cell (202) 280-4454

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---

**From:** Strom, Rachel <RachelStrom@dwt.com>  
**Date:** Monday, March 7, 2022 at 8:57 AM  
**To:** Megan Meier <megan@clarelocke.com>

**Cc:** Tom Clare <tom@clarelocke.com>, Amy Roller <Amy@clarelocke.com>, Brian Farnan (bfarnan@farnanlaw.com) <bfarnan@farnanlaw.com>, Alexis Chandler <alexis@clarelocke.com>, Chase, Jeremy <JeremyChase@dwt.com>, Azmi, Nimra <NimraAzmi@dwt.com>  
**Subject:** RE: Renewed Demand for Retraction

Megan,

A few things.

First, I do not see any publication that retracted “that ShotSpotter had framed Michael Williams by changing the coordinates of the gunfire to the intersection where Williams’s car was seen on camera” and your claim that they did is itself false and defamatory. And, VICE itself never reported that ShotSpotter framed Michael Williams.

Indeed, the AP still notes that ShotSpotter in fact did change the address in the Williams case, which is already an issue before the court. The difference between the words “coordinates” and “address” does not change the gist of the reporting. And, more than that, as a matter of law, post-publication events have no bearing on actual malice, which must be assessed at the time of publication. For these reasons, we object to the sur-reply as the issues are legally irrelevant and already before the Court. **We also request that you submit this email with your motion to file the sur-reply so our objection is clear.**

Second, we are disappointed as well in the tone and timing of this email. As you all know, before you all brought this lawsuit, you wrote to VICE seeking a retraction - -and you annexed your letters to ShotSpotter’s complaint. What you selectively, and frankly deceptively removed from the complaint, were our numerous responses inviting a conversation just like this – as we had trouble determining precisely what you were arguing was false and defamatory about VICE’s reporting. Indeed, Tom and I even had a call where he welcomed the idea of a discussion to clarify what changes you were actually seeking from VICE’s reporting – but then he never followed up and brought suit instead. This request now is pure and transparent gamesmanship – and while the difference between “address” and “coordinates” is by no means actionable, if it was actually important to your client to have that clarified, I am sure Tom would have called us back.

Thank you. Rachel

**Rachel Strom** | Davis Wright Tremaine LLP  
1251 Avenue of the Americas, 21st Floor | New York, NY 10020  
Tel: (212) 402-4069 | Fax: (212) 379-5244  
Email: [rachelstrom@dwt.com](mailto:rachelstrom@dwt.com) | Website: [www.dwt.com](http://www.dwt.com)

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**From:** Megan Meier <megan@clarelocke.com>  
**Sent:** Sunday, March 6, 2022 10:58 AM  
**To:** Strom, Rachel <RachelStrom@dwt.com>  
**Cc:** Tom Clare <tom@clarelocke.com>; Amy Roller <Amy@clarelocke.com>; Brian Farnan (bfarnan@farnanlaw.com) <bfarnan@farnanlaw.com>; Alexis Chandler <alexis@clarelocke.com>  
**Subject:** Re: Renewed Demand for Retraction

[EXTERNAL]

---

Rachel,

We are disappointed that VICE has not responded to our letter from over two weeks ago, in which we notified you that The Daily Mail, The Register, The University of Illinois at

Chicago Law Review, the tech industry publication Hot Hardware, and Data Science Central had all retracted or corrected the demonstrably false claim originally published by VICE that ShotSpotter had framed Michael Williams by changing the coordinates of the gunfire to the intersection where Williams's car was seen on camera.

Yesterday, The Associated Press joined the growing list of publishers who have disavowed that false claim, explaining that ShotSpotter's initial real-time alert and later detailed forensic analysis "contained a street address, location maps and latitude and longitude coordinates. The assigned street address changed from the first to the second report, but ***the location identified on the maps and GPS coordinates in both reports remained around the same intersection.***" You can see The Associated Press's explanation [here](#), as well as at the end of The Associated Press's story about ShotSpotter, a now-outdated version of which VICE attached to its legal briefing as evidence that VICE had interpreted the court records reasonably.

These publishers' actions show that VICE's representation of the court records was neither fair nor accurate and that VICE intentionally or recklessly disregarded the truth. Please let us know by 11:00am Eastern tomorrow whether VICE will consent to ShotSpotter's motion for leave to file a surreply notifying the Court of them, our renewed demands for retraction, and VICE's ongoing refusal to retract its demonstrably false claims.

Kind regards,  
Megan

Megan L. Meier | Partner  
**C L A R E L O C K E L L P**  
Office (202) 628-7403  
Cell (202) 280-4454

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---

**From:** Megan Meier <[megan@clarelocke.com](mailto:megan@clarelocke.com)>  
**Date:** Wednesday, February 16, 2022 at 4:38 PM  
**To:** Strom, Rachel <[RachelStrom@dwt.com](mailto:RachelStrom@dwt.com)>  
**Cc:** Tom Clare <[tom@clarelocke.com](mailto:tom@clarelocke.com)>, Amy Roller <[Amy@clarelocke.com](mailto:Amy@clarelocke.com)>  
**Subject:** Renewed Demand for Retraction

Rachel,

Please see the attached letter and confirm receipt.

Kind regards,  
Megan

Megan L. Meier | Partner

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