SHOTSPOTTER
PILOT PROGRAM

HOUSTON POLICE DEPARTMENT
SOUTHEAST PATROL DIVISION
COMMANDER M.W. MARTIN

Produced by Southeast Crime Analysis Unit, October 2021
Law Enforcement Sensitive – For Official Use Only
A REVIEW OF THE SHOTSPOTTER SYSTEM

“Three or more sensors pick up the sound of a gunshot and triangulate its location.

“A technician hears the audio at ShotSpotter’s company California headquarters and determines in about 30 seconds if it was, in fact, a discharge of a firearm.”

If it’s gunfire, an alert is sent to HPD.

Officers are dispatched to the call location. They “get a map of the spot where the shots were fired within 82 feet of the location, the time of shooting, the number of shots, whether the shooter was moving, and in what direction.”

“The ShotSpotter system will allow officers to instantly examine video from nearby cameras.”

https://www.nydailynews.com/new-york/nypd-unveils-1-5m-shotspotter-system-bronx-article-1.2151679
DATA SOURCES

• The Report Management System (RMS) report narratives were used to reconcile: firearms and fired cartridge cases recovered, National Integrated Ballistic Information Network (NIBIN) entry for the fired cartridge cases, ATF explosive detection canine (EDC) assistance, number of arrests, number and type of charges, and the number of victims shot/killed (if any).

• The Calls for Service (CFS) Report located within the available HPD CompStat reports was used to reconcile the CAD IDs manually entered into the ShotSpotter by HPD Dispatch.

• The Houston Forensic Science Center, Firearms Section was contacted to determine NIBIN entry for the recovered firearms.

• NIBIN lead notification reports were used for tracking incidents with possible links to ShotSpotter related incidents.
A total of 5,641 alerts are available to HPD in the ShotSpotter program in this date range.

- Total Alerts: 5,641
- Total Gunfire: 5,641
- Total Rounds: 20,368
SUPPRESSED ALERTS

DECEMBER 28, 2020 – SEPTEMBER 30, 2021

- 3,305 alerts are outside the coverage area. Alerts are available to HPD for further review, but there are no ShotSpotter-associated calls for service CAD ID’s for these alerts.

- Total Alerts: 3,305
- Total Gunfire: 3,305
- Total Rounds: 11,661

- Note: Six (6) alerts were dismissed by ShotSpotter reviewers because they were unable to determine if the sounds were gunfire.
PUBLISHED ALERTS
DECEMBER 28, 2020 – SEPTEMBER 30, 2021

• ShotSpotter reviewers determined 2,330 Alerts were gunfire and sent the results to HPD.

• Total Alerts: 2,330
• Total Gunfire: 2,330
• Total Rounds: 8,695

The remainder of this presentation concentrates on the 2,330 published alerts for 12/28/2020 – 9/30/2021.

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THE 2,330 PUBLISHED ALERTS
DECEMBER 28, 2020 – SEPTEMBER 30, 2021
REPORT INFORMATION BREAKDOWN

Of the 2,330 Published Alerts, ShotSpotter detected 8,695 discharged rounds.

Alert analysis results include:
- 471 Offense Reports (ORI’s) generated, which is approx. 20% of all Published Alerts)
- 54 Arrests (2 additional suspects have been identified and have To Be Warrants)
- 60 Charges (28 Felony, 32 Misdemeanor)
- 16 GSW victims (including 6 Murders)

Note:
"DUP" – Used to indicate multiple alerts which were later determined to be related to the same incident. Therefore, an incident can have multiple alerts associated to it.
Alert results also include:

- **1789** fired cartridge cases out of the **8,695** rounds detected, were recovered by officers. (approx. **21%** recovery rate).
- **39** Guns were recovered.
- **123** Alert related incidents had ATF Explosive Detection Canine (EDC) response.
- **385** of the **1789** cartridge cases were recovered from ATF’s response, (approx. **22%**).
- Of the **471** Offense reports (ORI’s), **382** had some kind of evidence recovered (approx. **81%**).
- Of the **471** ORIs, **359** (approx. **76%**) were entered into the National Integrated Ballistic Information Network (NIBIN).
- *At least **87** ShotSpotter related incidents have produced NIBIN investigative leads. This is a preliminary total due to current availability of leads received for review.*
The % change includes the ShotSpotter detected murder incidents in addition to the 4 firearms related murders which were not detected within the coverage area.

*Murders for the previous year, same time frame, and within the coverage area were compared.
Success Stories

HPD Incident #0335439-21
On March 13, 2021, officers were notified by ShotSpotter of a shooting that occurred at 6812 Eastwood. Upon arrival, the Complainant was unresponsive with a gunshot wound to the head and the suspect was GOA. Officers put out a BOLO and the suspect was found by running on Yellowstone and Madrid by a deputy. Suspect was arrested and charged with Murder.

HPD Incident #0646662-21 & 0646647-21
On May 14, 2021 Southeast CST Officers observed a vehicle driving at a high rate of speed eastbound on Dawson and also noticed a ShotSpotter event at the 3500 block of Dawson (14D20). There was a short pursuit which ended in a PIT maneuver. Officers learned the suspects had just committed a gang-related shooting of an adult male, who was a documented “5-2 Hoova Crip”. All three suspects were documented members of the “Most Wanted” gang. Charges included Evading Arrest w/Vehicle, Agg. Assault DW, and Unlawful Carrying a Weapon.

HPD Incident #0897486-21:
On July 3, 2021 officers were dispatched to a ShotSpotter call at 9207 Cullen Blvd. Officers arrived to find that the complainant had been shot due after an argument related to a minor traffic accident. The suspect fired multiple shots at the complainant, striking him several times. Officers rendered aid and applied a tourniquet to the complainant’s leg. The complainant was transported to the hospital by HFD. The suspect was subsequently arrested and charged with Aggravated Assault Serious Bodily Injury.
This information is for operational/informational use only and does not represent the official crime event data captured by the Houston Police Department Office of Planning and Data Governance.

This information is intended for use by law enforcement only and is not intended to be released to the public as the official crime statistics of the Houston Police Department.

The Crime Data represents basic/general data of incidents based on the highest offense listed in a particular report and does not reflect the FBI’s NIBRS coding system in that lesser included offenses may not be included.

The data may or may not have been screened through the Houston Police Department’s quality control process and therefore may reflect:

- Information not yet verified by further investigation and may include mechanical or human error.
- Preliminary crime classifications that may be changed at a later date based upon further investigation.

***Please note this report is for department use only and should not be provided to outside entities, including the media. If you need to release crime data, it should be obtained from the Planning and Data Governance Division.***