



# SHOTSPOTTER PILOT PROGRAM

*HOUSTON POLICE DEPARTMENT  
SOUTHEAST PATROL DIVISION  
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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>

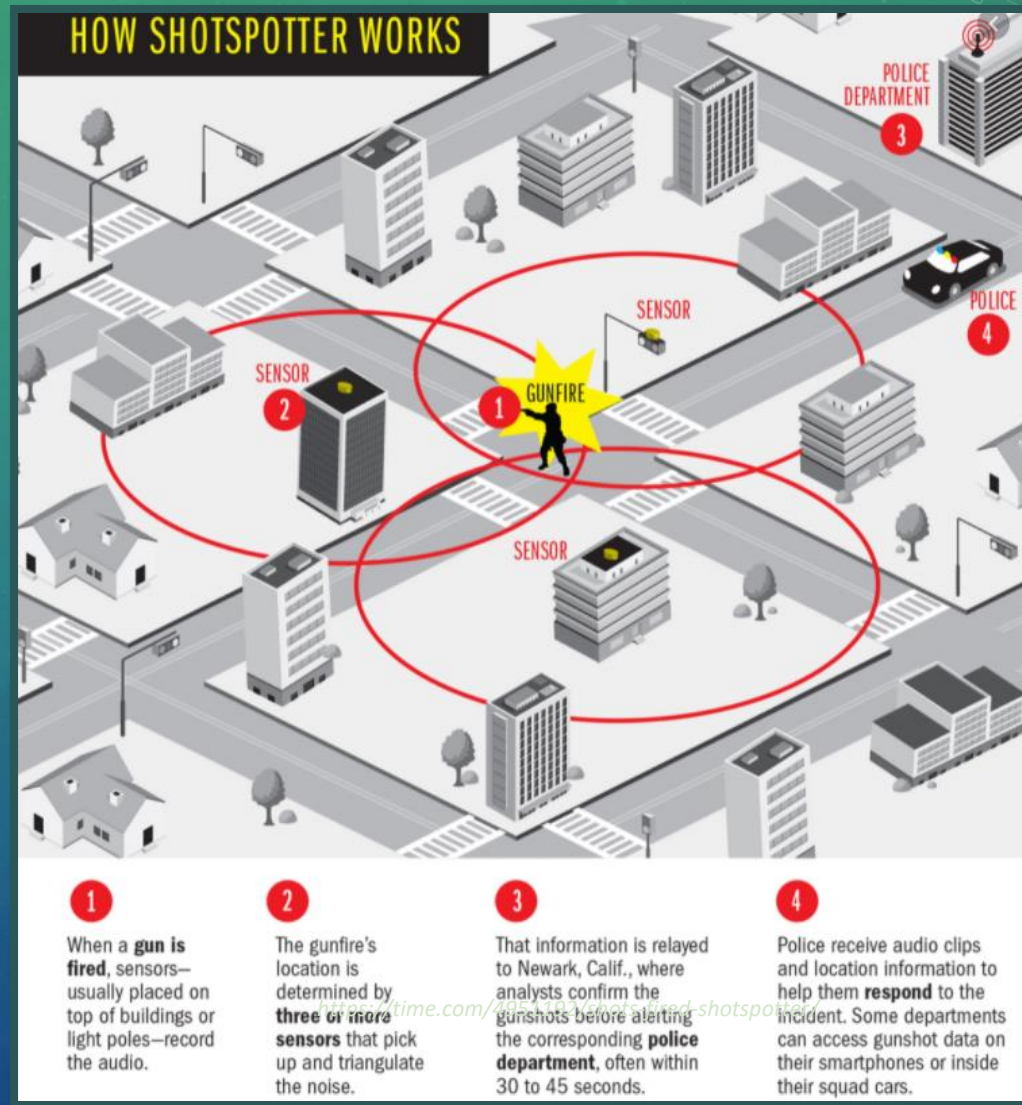


Illustration by Heather Jones for TIME





# DATA SOURCES

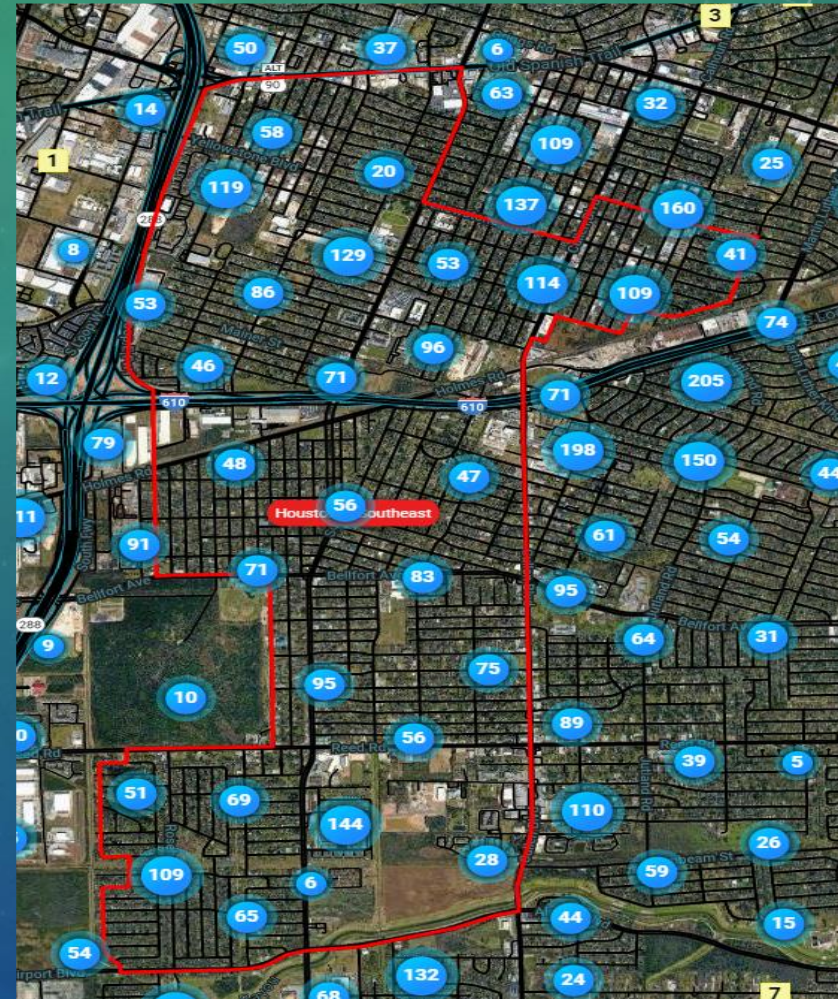
- The Report Management System (RMS) report narratives were used to reconcile: firearms and fired cartridge cases recovered, National Integrated Ballistic Information Network (NIBIN) entry for the fired cartridge cases, ATF explosive detection canine (EDC) assistance, number of arrests, number and type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

# TOTAL AVAILABLE ALERTS

(PUBLISHED, DISMISSED, & SUPPRESSED)

DECEMBER 28, 2020 – SEPTEMBER 30, 2021

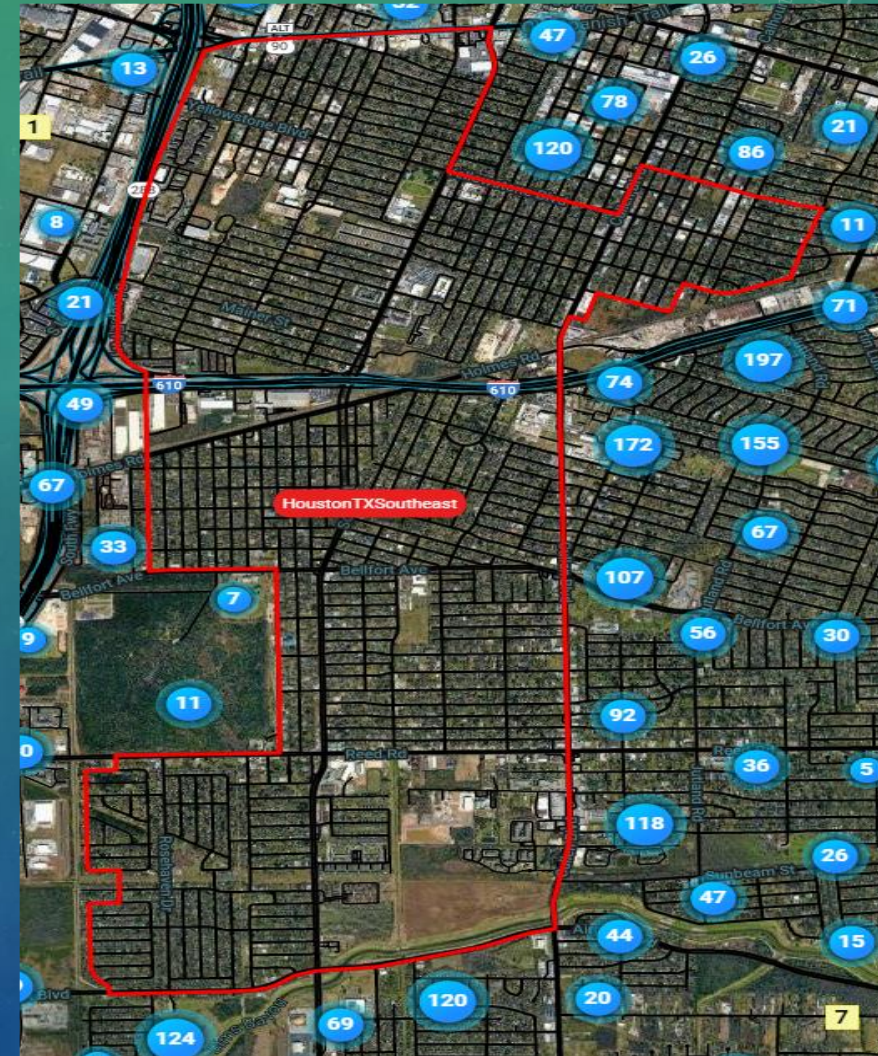
- A total of **5,641** alerts are available to HPD in the ShotSpotter program in this date range.
- Total Alerts: **5,641**
- Total Gunfire: **5,641**
- Total Rounds: **20,368**



# 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.

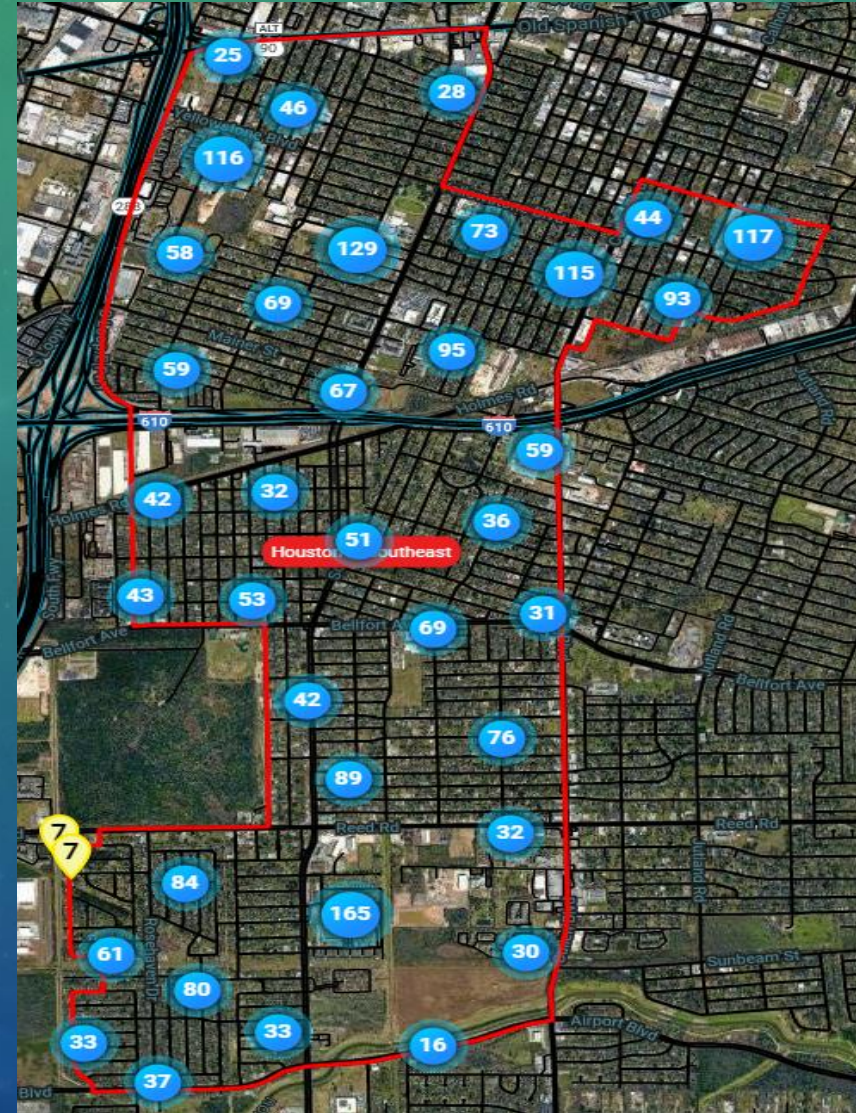




# PUBLISHED ALERTS

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.*

# 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.



Report Made (Y/N)				
Type	DUP	N	Y	Total
Multiple Gunshots	213	688	363	1,264
Probable Gunfire	21	261	36	318
Single Gunshot	100	576	72	748
<b>Total Alerts</b>	<b>334</b>	<b>1,525</b>	<b>471</b>	<b>2,330</b>
Percent of Total	14.33%	65.45%	20.21%	100.00%

Month	Alerts	Rounds Detected	Report Made (Y)	Arrests	Charges	Gunshot Victims
DEC	86	446	8	4	4	0
JAN	405	1,727	50	10	12	1
FEB	275	817	46	11	12	1
MAR	246	718	64	6	6	1
APR	238	886	62	10	12	6
MAY	233	789	48	5	5	1
JUNE	199	696	59	1	2	1
JULY	209	1,021	42	3	3	2
AUG	213	818	52	2	2	1
SEPT	226	777	40	2	2	2
<b>Totals</b>	<b>2330</b>	<b>8,695</b>	<b>471</b>	<b>54</b>	<b>60</b>	<b>16</b>

# THE 2,330 PUBLISHED ALERTS

DECEMBER 28, 2020 – SEPTEMBER 30, 2021  
EVIDENCE INFORMATION BREAKDOWN



## Alert results also include:

- **1789** fired cartridge cases out of the **8,695** rounds detected, were recovered by officers. 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.

Month	Cartridge Cases Recovered	Guns Recovered	ATF /EDC Response	NIBIN ENTRY	NIBN LNIKS made
DEC	48	4	0	7	1
JAN	263	7	4	39	2
FEB	182	13	5	40	5
MAR	152	3	23	49	4
APR	271	5	13	50	5
MAY	171	1	14	34	2
JUNE	191	2	23	41	3
JULY	190	1	15	31	1
AUG	182	1	19	36	1
SEPT	139	2	7	32	10
Totals	1789	39	123	359	87





# Murder Incidents for *DECEMBER 28, 2020 – SEPTEMBER 30, 2021* (within ShotSpotter Coverage area) compared to previous year:

SHOTSPOTTER DETECTED MURDERS DEC 2020 TO SEPTEMBER 2021						
IncBgnDt	IncBgnTime	IncNo	OffenseTyp	AdrBeat	LngIncLoc	PremTyp
2/24/2021	9	25205821	Murder	14D20	3901 LOCKHART ST	Bar or Night Club Parking
3/13/2021	621	33543921	Murder	14D10	6812 EASTWOOD ST	Road, Street, or Sidewalk
4/19/2021	446	51555221	Murder	14D20	3833 GOODHOPE ST	Vacant Other Residential
6/16/2021	2103	81138921	Murder	14D10	6415 DUMBLE ST	Vacant Storage Fac (Barn, Garage, Warehouse)
7/1/2021	36	88375721	Murder	14D20	7300 CULLEN	Street
9/26/2021	357	129828121	Murder	14D20	8210 SCOTT	Convenience Store Parking Lot

MURDERS BY FIREARMS IN COVERAGE AREA BUT NOT DETECTED BY SHOTSPOTTER DEC 2020 TO SEPTEMBER 2021						
IncBgnDt	IncBgnTime	IncNo	OffenseTyp	AdrBeat	LngIncLoc	PremTyp
4/29/2021	1313	56742121	Murder	14D10	3322 YELLOWSTONE BLVD	Apartment Parking Lot
6/21/2021	643	83278521	Murder	14D20	4300 BELLFORT ST	Road, Street, or Sidewalk
9/18/2021	500	126212221	Murder	14D20	3700 FAULKNER	Apartment
9/27/2021	956	130600421	Murder	14D20	9635 SCOTT	Convenience Store

MURDERS BY FIREARMS IN COVERAGE AREA DEC 2020 TO SEPTEMBER 2020 (PRIOR TO SHOTSPOTTER PROGRAM)						
IncBgnDt	IncBgnTime	IncNo	OffenseTyp	AdrBeat	LngIncLoc	PremTyp
1/15/2020	217	6619920	Murder	14D10	3737 SOUTHLAWN ST	Apartment Parking Lot
1/16/2020	1900	7499620	Murder	14D20	8940 CULLEN BLVD	Other, Unknown, or Not Listed
1/19/2020	1902	8908020	Murder	14D20	1203 ELBERTA ST	Road, Street, or Sidewalk
1/30/2020	1944	14132320	Murder	14D10	3600 YOSEMITE ST	Road, Street, or Sidewalk
2/9/2020	1625	18846220	Murder	14D20	8210 SCOTT ST	Other, Unknown, or Not Listed
2/16/2020	1848	22233220	Murder	14D10	4302 DREYFUS ST	Road, Street, or Sidewalk
3/28/2020	1431	41703720	Capital Murder	14D20	7302 TIERWESTER ST	Road, Street, or Sidewalk
4/24/2020	108	53585120	Murder	14D10	4714 WARD ST	Residence or House
4/24/2020	852	53680520	Murder	14D20	4606 WHITE ROCK ST	Road, Street, or Sidewalk
4/27/2020	1454	55204020	Murder	14D20	3826 SEABROOK ST	Other Parking Lot
5/30/2020	2111	72147320	Murder	14D20	9635 SCOTT ST	Commercial Parking Lot or
9/12/2020	1700	121091120	Murder	14D20	2910 REED	Apartment

Dec 28 - September 30 Comparison			
2020	2021	Count	% Change
12	10	-2	-16.7%

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.

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