

Louisiana Law Enforcement Accountability Database (LLEAD)

**Report: ShotSpotter (SoundThinking technology) Alert Efficiency: New Orleans Police  
Department June 2025 – February 2026**

April 2026

---

## Summary

This report analyzes approximately nine months of ShotSpotter gunshot detection data from the New Orleans Police Department’s pilot program in the Fifth District. From June 2025 through February 2026, the system generated 1,399 alerts, corresponding to 1,010 unique incidents.

Roughly one in four unique incidents (24.3%) produced a police report, while the majority were cleared without documented evidence of confirmed gunfire. The data also shows that ShotSpotter alerts did not meaningfully improve police response times in comparison with 911 civilian gunfire calls for service. At the same time, responding to these alerts required substantial officer resources. Officers spent an estimated 932 hours responding to ShotSpotter alerts during this period, with more than half of that time devoted to calls that did not find evidence of gunfire—placing additional demands on a department already operating below its stated staffing needs.

Overall, these findings suggest that while ShotSpotter may increase awareness of potential gunfire, its limited rate of confirmed outcomes and significant resource demands raise questions about the technology’s efficiency.

---

## Table of Contents

1. Executive Summary
2. Key Findings – Alert Volumes & Outcomes
  1. How ShotSpotter Alerts are Classified
  2. What Happened When Officers Responded
  3. Monthly Trends
3. Key Findings – Response Times
  1. ShotSpotter Response Times by Outcome
  2. How ShotSpotter Compares to 911 Gunfire Calls
4. Key Findings – Resource Cost
  1. Estimated Officer-Hours by Month
5. Key Findings – When and Where Alerts Occurred
  1. Time of Day
  2. Geographic Distribution
6. Conclusion: What the Data Suggests

7. Methodology
8. References

---

## 1. Executive Summary

In June 2025, the New Orleans Police Department (NOPD) launched a six-month pilot program for ShotSpotter, an acoustic gunshot detection system manufactured by SoundThinking, Inc. The pilot area covered approximately five square miles in the Fifth District, including the neighborhoods of Bywater, St. Claude, Holy Cross, St. Roch, and the Upper and Lower Ninth Ward. The system uses a network of sensors to detect the sound of gunfire and alert officers through the city's Real Time Crime Center, allowing police to respond to potential shootings without waiting for a 911 call.<sup>1</sup>

The pilot was offered at no cost to the city and was described as “aimed at determining the efficacy of the new ShotSpotter technology.” NOPD did not state how it might fund the system past the pilot period. Former City Council member Oliver Thomas, whose district falls in the coverage area, advocated for the technology.<sup>2</sup> The six-month pilot was scheduled to conclude around mid-December 2025. However, ShotSpotter alerts continued to appear in NOPD's Calls for Service data through the end of February 2026, more than two months past the planned end date. On March 30, 2026, NOPD publicly stated that it did not recommend and would not continue the ShotSpotter pilot program.<sup>3</sup>

This is not the city's first experience with the technology. NOPD piloted ShotSpotter more than 15 years ago in the Central Business District, but the program never advanced beyond the initial phase. Former NOPD Superintendent Michael Harrison said that the department passed on the system during his tenure due to manpower shortages and concerns about the technology's earlier generation.<sup>4</sup> Staffing remains a concern: at the time of the pilot launch, NOPD had approximately 900 officers, compared to the stated goal of 1,200, and a median response time of around 21 minutes.<sup>5 6</sup>

The technology has faced growing scrutiny in other cities. A 2021 study by the MacArthur Justice Center found that 89% of ShotSpotter deployments in Chicago led officers to find no gun-related crime, and the Chicago Office of Inspector General concluded that the system “rarely leads to evidence of gun-related crime.”<sup>7</sup> Instead,

---

<sup>1</sup> SoundThinking, Inc. “ShotSpotter Public Safety Results.” <https://www.soundthinking.com/shotspotter-public-safety-results/>.

<sup>2</sup> Jeff Adelson. “New Orleans relaunches ShotSpotter technology.” *Axios New Orleans*, June 17, 2025.

<https://www.axios.com/local/new-orleans/2025/06/17/shot-spotter-soundthinking-gunfire-detection-technology>.

<sup>3</sup> New Orleans City Council, Criminal Justice Committee video,

<sup>4</sup> Missy Wilkinson, “New Orleans police are testing a new gunshot detection system. Will it work?” *NOLA.com/The Times-Picayune*, June 20, 2025. [https://www.nola.com/news/new-orleans-police/article\\_2fa47769-b0ca-4da6-bd41-61a1f105e2f5.html](https://www.nola.com/news/new-orleans-police/article_2fa47769-b0ca-4da6-bd41-61a1f105e2f5.html)

<sup>5</sup> *Ibid.*

<sup>6</sup> John Simerman, “‘Forgot How to Fish:’ Why NOPD is Struggling to Attract New Officers.” *NOLA.com/The Times-Picayune*, June 22, 2025. [https://www.nola.com/news/forgot-how-to-fish-why-nopd-is-struggling-to-attract-new-officers/article\\_caa31b81-9670-46a0-b895-8e388ffb021c.html](https://www.nola.com/news/forgot-how-to-fish-why-nopd-is-struggling-to-attract-new-officers/article_caa31b81-9670-46a0-b895-8e388ffb021c.html)

<sup>7</sup> MacArthur Justice Center. “ShotSpotter Generated Over 40,000 Dead-End Police Deployments in Chicago in 21 Months, According to New Study.” <https://www.macarthurjustice.org/shotspotter-generated-over-40000-dead-end-police-deployments-in-chicago-in-21-months-according-to-new-study/>. See also: Chicago Office of Inspector General. “OIG Advisory Concerning ShotSpotter

the ShotSpotter system repeatedly sent police into majority Black and Latino communities in Chicago when there was no evidence of gunfire or any gun related crime.<sup>8</sup> A 2024 audit by the New York City Comptroller found that only 13% of ShotSpotter alerts resulted in confirmed shootings, with officers spending thousands of hours responding to alerts that produced nothing. The Comptroller declined to approve the NYPD's contract renewal. Chicago ended its ShotSpotter contract in 2024.<sup>9</sup>

This report uses NOPD Calls for Service data filtered to ShotSpotter alerts (Type 94S) from June 18, 2025, through February 28, 2026. It examines how often alerts led to documented police outcomes, how quickly officers responded in comparison to 911 civilian reported gunfire calls for service, when and where alerts occurred, and how much officer time the system consumed. The data does not include arrest records, evidence recovery logs, or confirmed shooting reports, so this analysis relies on the disposition codes assigned by responding officers.

Across this period, the data indicates that only about one in four ShotSpotter incidents (24.3%) resulted in documented evidence of gunfire, and even in those cases, alerts often did not identify a victim or property damage. The system did not meaningfully improve police response times to gunfire-related calls for service. Simultaneously, officers spent an estimated 932 hours responding to ShotSpotter alerts, with more than half of that time devoted to incidents that did not result in a report, placing additional demands on a department already operating below its staff capacity goals. Taken together, these findings suggest that while ShotSpotter may increase awareness of potential gunfire, its limited rate of confirmed outcomes and substantial resource demands raise questions about its overall efficacy.

---

## 2. Key Findings – Alert Volume & Outcome

### 2.1 How ShotSpotter Alerts are Classified

When a ShotSpotter sensor detects a potential gunshot, it generates an alert that is routed to NOPD's dispatch system as a calls-for-service record. Officers respond, and each call is closed with one of the following dispositions:

- **Report to Follow (RTF):** Officers found evidence warranting a formal police report. This is the strongest indicator that an alert corresponded to the discharge of a firearm. IJLA reviewed a random sample of 15 incident reports initiated by ShotSpotter alerts: 12 documented evidence of gunfire with no damage to property or civilians, 1 involved the identification of a gunshot victim, 1 identified damage to property, and 1 incident was misclassified.

---

Technology.” August 2021. <https://chicago.suntimes.com/city-hall/2021/8/24/22639473/shotspotter-chicago-police-inspector-general-report-gun-crimes-evidence-shootings>.

<sup>8</sup> Ibid.

<sup>9</sup> Fran Spielman. “Chicago to end ShotSpotter contract.” Chicago Sun-Times, 2024.

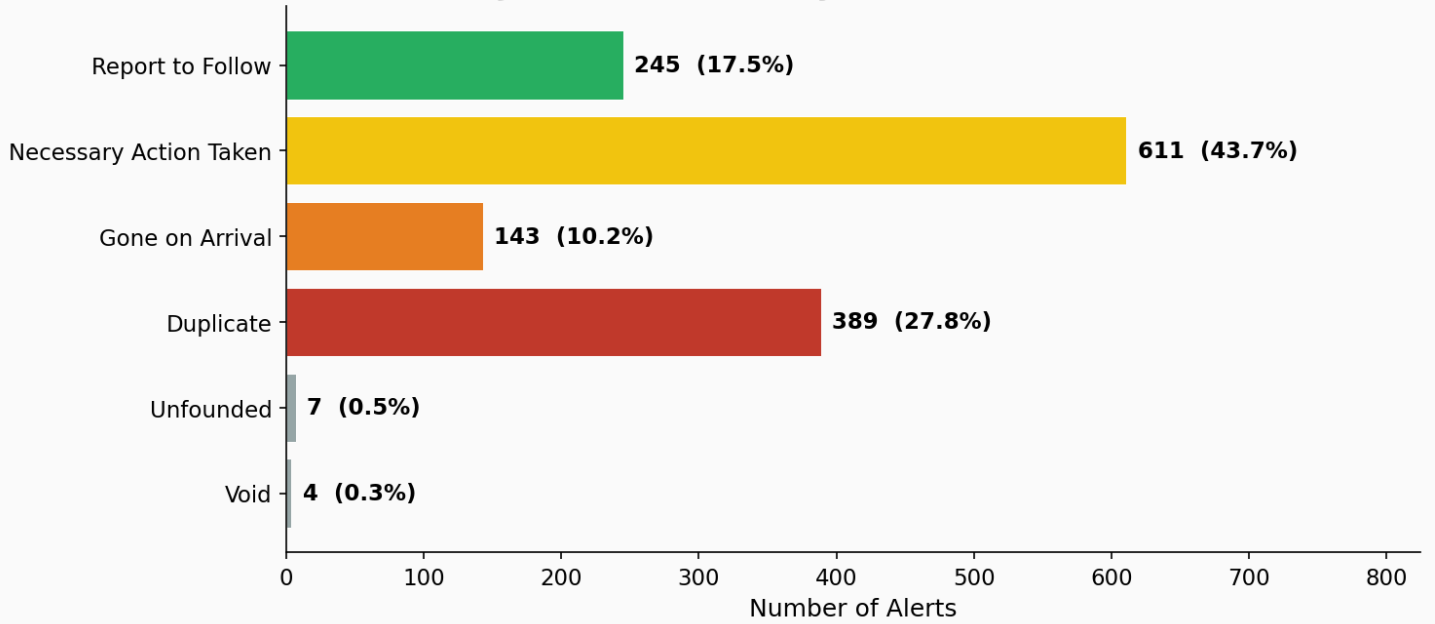
- **Necessary Action Taken (NAT):** Officers responded and took some form of action but did not find evidence of gunfire. In practice, this category is opaque. It may include canvassing the area, attempting to locate witnesses, but it can also reflect that officers arrived and found no evidence or activity and quickly departed.
  - **Gone on Arrival (GOA):** Officers arrived but did not locate a complainant or relevant activity. This is likewise an ambiguous category. In traditional calls for service, this disposition indicates that a 911 caller was no longer present. However, because ShotSpotter alerts are generated by acoustic sensor technology rather than civilian callers, this disposition is ambiguous in this context and provides little insight into what officers actually did. NOPD's records division did not provide clarity to these scenarios over the phone.
  - **Duplicate (DUP):** The alert was a duplicate of another alert for the same incident, typically because multiple sensors detected the same gunfire event. Alerts were presumably marked as duplicates by a dispatcher.
  - **Unfounded/Void:** The alert was determined to be unfounded or was voided. These dispositions accounted for less than 1% of all alerts.
- 

## 2.2 What Happened When Officers Responded

From June 2025 through February 2026, NOPD's ShotSpotter system generated 1,399 total alerts. Of these, 389 (27.8%) were dispatcher-noted duplicates. After removing duplicates, there were 1,010 unique incidents that required an officer response.

This chart shows the breakdown of all 1,399 ShotSpotter alerts by their final disposition. The largest single category is "Necessary Action Taken," which accounted for over 40% of all alerts. About one in four alerts were classified as duplicates.

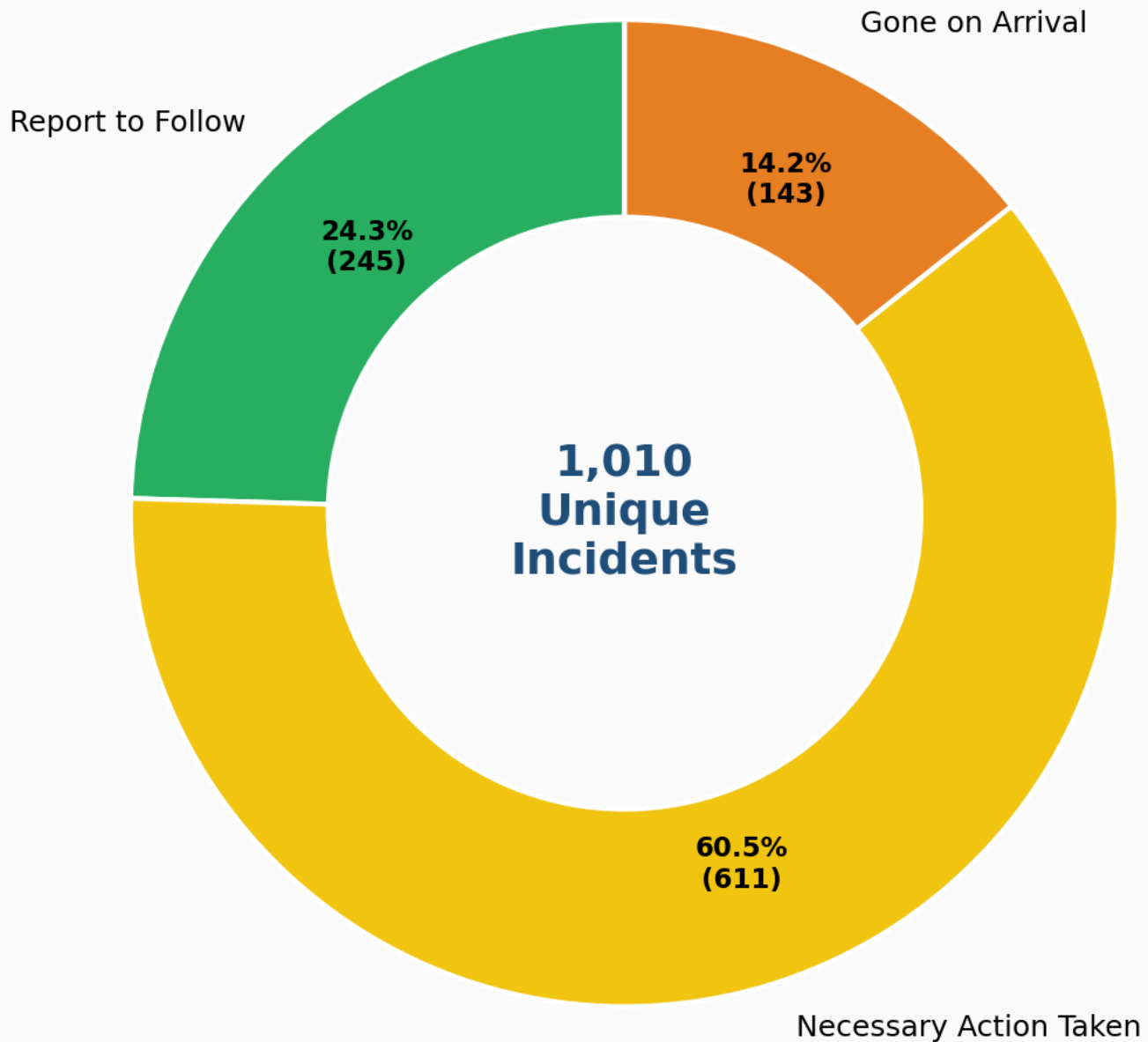
## ShotSpotter Alert Dispositions, NOPD June 2025 - February 2026 (All 1,399 Alerts)



Of the 1,010 unique incidents, only 245 (24.3%) resulted in a “Report to Follow” disposition, meaning that officers found enough evidence to file a formal police report. The remaining 75.7% of unique incidents were cleared without a report. The largest share, 611 incidents (60.5%), were classified as “Necessary Action Taken,” and 143 (14.2%) were “Gone on Arrival,” meaning that officers found no one and no evidence at the scene.

This chart shows the outcomes for unique incidents only, excluding the 389 duplicate alerts. The center number reflects the total unique incidents that required a police response.

**Outcomes of Unique ShotSpotter Incidents, NOPD  
June 2025 - February 2026 (Excluding Duplicates)**



*Note: 11 additional incidents were Unfounded or Void (<1% combined).*

The “Necessary Action Taken” and “Gone on Arrival” categories deserve scrutiny. These disposition codes tell us that officers responded and did something, but it does not specify what that something was. It could mean that officers secured a scene, canvassed an area, spoke with witnesses, or simply drove through the location and left. Without more detailed definitions from NOPD, it is impossible to know if any of these 754 incidents involved meaningful police activity versus routine drive-throughs that found nothing.

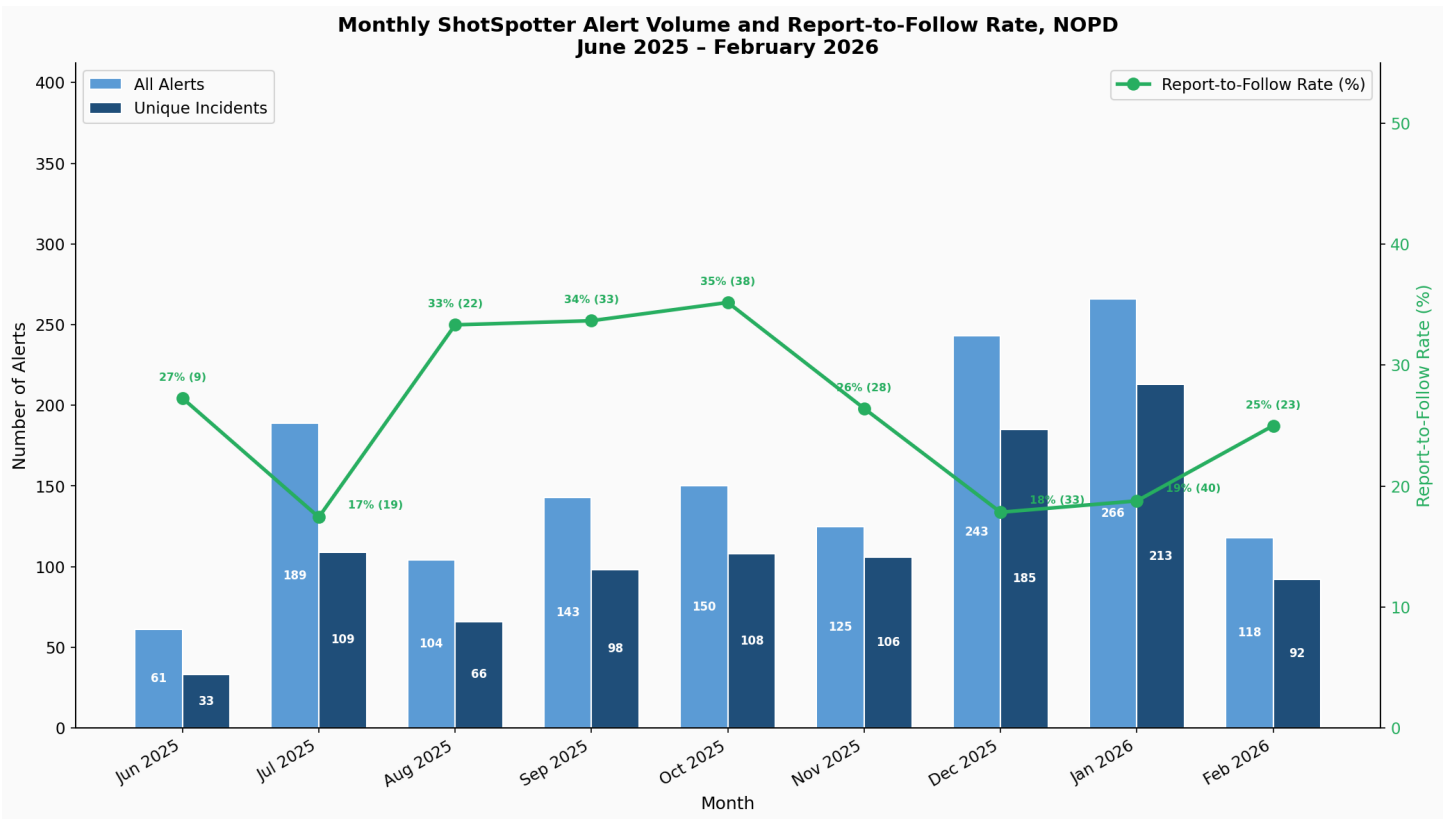
---

## 2.2 Monthly Trend

Alert volume increased substantially over the nine-month period. June 2025 was a partial month (the pilot launched June 18), producing only 33 unique incidents. By January 2026, the system recorded 213 unique incidents, the highest monthly total.

The “Report to Follow” (RTF) rate fluctuated between 17% and 35% across months. The highest rates occurred in October 2025 (35.2%) and September 2025 (33.7%), while the lowest rates occurred in July 2025 (17.4%) and December 2025 (17.8%). January 2026, which had the highest alert volume, also had one of the lower RTF rates (18.8%). The spikes in December and January volume may partly reflect New Year’s Eve fireworks, which ShotSpotter sensors can mistake for gunshots.

This chart shows the total number of alerts and unique incidents by month (bars, left axis), along with the Report-to-Follow rate (green line, right axis). The RTF rate represents the share of unique incidents in which officers generated a formal report.



### 3. Key Findings – Response Times

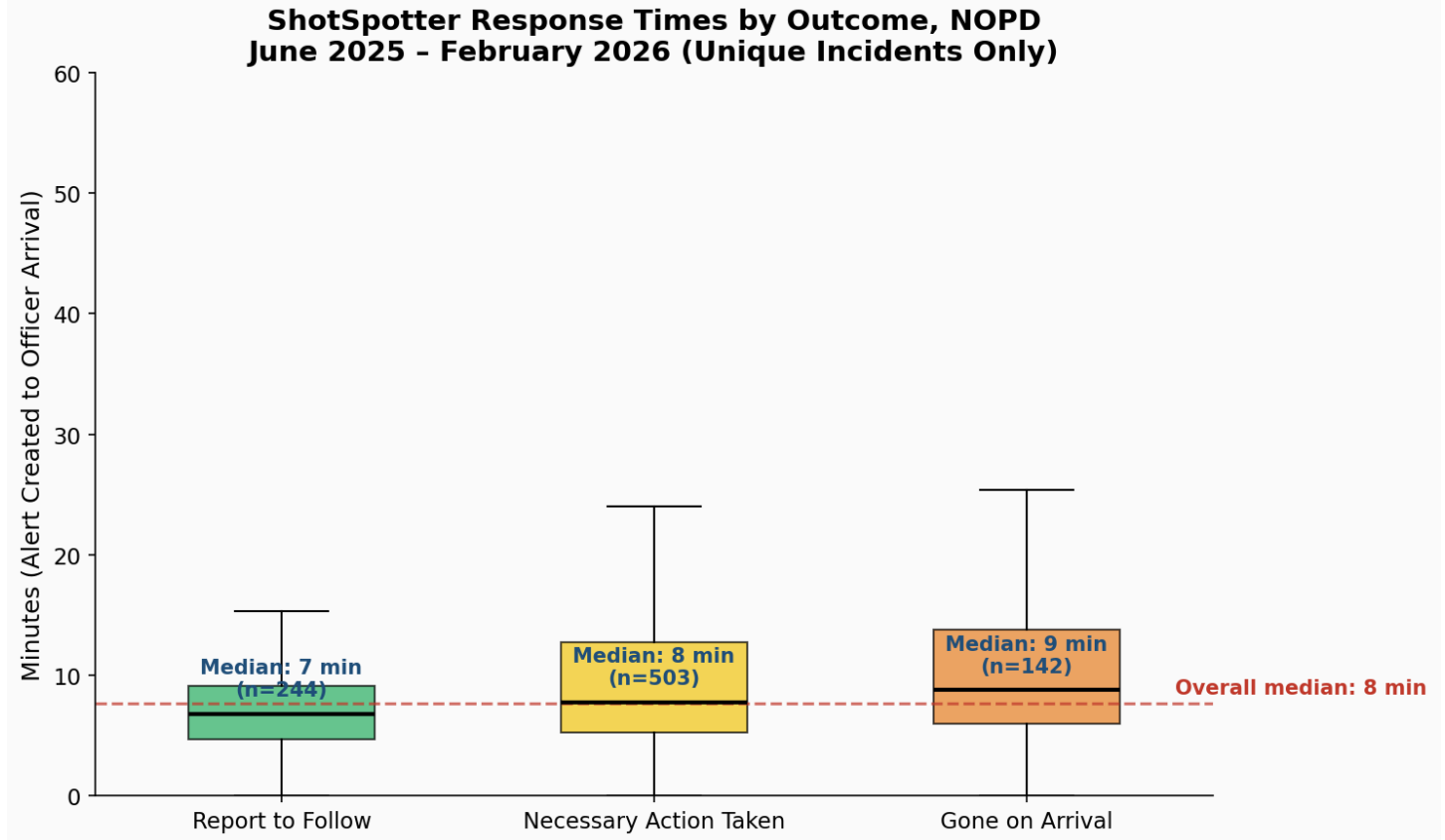
#### 3.1 ShotSpotter Response Times by Outcome

Response time is measured as the interval between when an alert was created in NOPD’s dispatch system and when an officer arrived at the scene. This calculation was possible for 889 of the 1,010 unique incidents occurring in any police district (88%). The remaining 121 incidents had no recorded arrival time, either because no officer was dispatched or because the arrival time was not logged.

Across all unique ShotSpotter incidents with available data, the median response time was 8 minutes and the mean was 13 minutes. Response times varied by outcome:

- **Report to Follow:** Median of 7 minutes. These incidents had the fastest response, consistent with the possibility that officers were dispatched more quickly to alerts that were later confirmed as actual shootings.
- **Necessary Action Taken:** Median of 8 minutes.
- **Gone on Arrival:** Median of 9 minutes.

This chart shows the distribution of response times for each outcome category. The boxes represent the middle 50% of response times (25th to 75th percentile), the black line inside each box marks the median, and the red dashed line shows the overall median across all incidents.



These response times reflect the interval from alert creation to officer arrival, not from the actual moment that the ShotSpotter technology detected an acoustic trigger, as the ShotSpotter system itself takes about 30 to 45 seconds to process and transmit the alert.

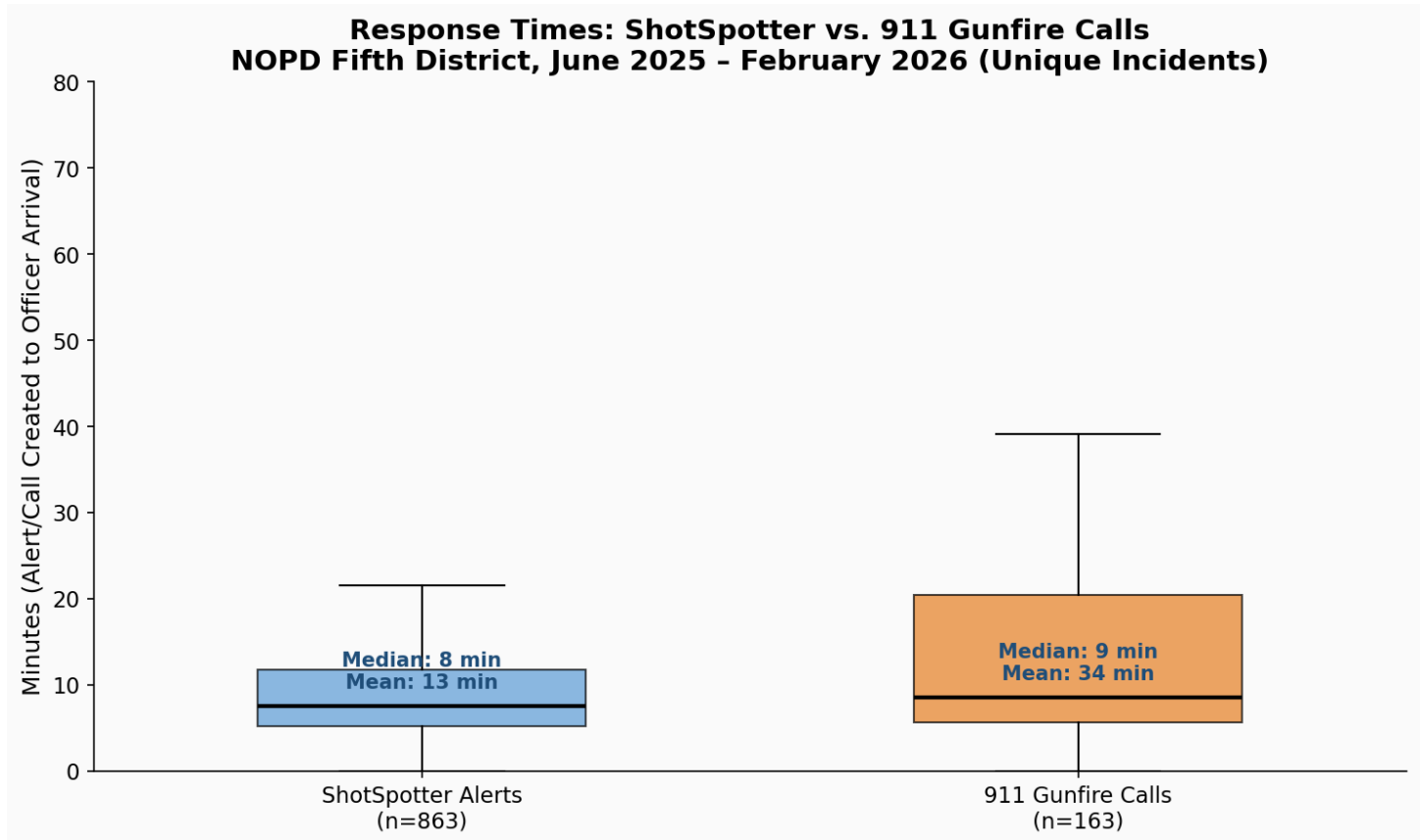
### 3.2 How ShotSpotter Compares to 911 Gunfire Calls

One of the central claims made by ShotSpotter is that it gets officers to shooting scenes faster than waiting for a 911 call. To test this contention, we compared ShotSpotter alerts to 911-reported gunfire calls (calls that entered the dispatch system as Type 94, “Discharging Firearm”) in the same area and time period. This comparison covers the full pilot period (June 2025 through February 2026) in the Fifth District only, ensuring that both groups reflect the same geography and policing conditions.

During the pilot period, there were 975 unique ShotSpotter incidents and 177 citizen-reported gunfire calls in the Fifth District. Of these, 863 ShotSpotter incidents and 163 gunfire calls had valid response time data (a recorded officer arrival time within 24 hours).

The median response time for ShotSpotter alerts was about 8 minutes, compared to about 9 minutes for 911 gunfire calls. The difference at the median is roughly one minute. However, the mean response times diverged more sharply: 13 minutes for ShotSpotter versus 34 minutes for 911 calls. This gap is driven by fourteen 911 calls with response times of over 2 hours. At the 75th percentile, ShotSpotter calls were answered within 12 minutes, while 911 gunfire calls took up to 22 minutes.

This chart compares the distribution of response times for ShotSpotter alerts, and 911 gunfire calls in the Fifth District across the full pilot period (June 2025 through February 2026). The boxes show the middle 50% of response times, and the black line marks the median. While median response times are close, 911 calls have a much wider spread, with some calls taking considerably longer to reach an officer.



The dispatch data offers a possible explanation for this pattern. ShotSpotter alerts were dispatched in a median of about 1 minute after the alert was created, compared to about 2 minutes for 911 calls. ShotSpotter gets calls into the dispatch queue faster, but the on-the-ground arrival time advantage is modest at the median (about one minute).

The disposition patterns also differed markedly between the two call types. ShotSpotter and 911 calls produced nearly identical “Report-to-Follow” rates (24.9% versus 24.3%), suggesting that both pathways are equally likely to lead to a documented police report. However, 911 calls were far more likely to result in “Gone on Arrival” (52% versus 12% for ShotSpotter), while ShotSpotter calls were far more likely to be classified as

“Necessary Action Taken” (62% versus 22%). This pattern is consistent with ShotSpotter getting officers to the scene faster, before subjects leave, though it could also reflect differences in the types of incidents each system captures.

It is worth noting that the two call types differ in important ways beyond the alert mechanism. 911 callers may provide additional context (number of shots, description of a suspect, whether someone is injured) that affects how the call is prioritized and routed. ShotSpotter alerts arrive with a location and a round count, but no witness information. The 911 group is also substantially smaller (163 calls with response data versus 863 for ShotSpotter), so outlier calls with long response times have more influence on the averages. These differences mean that the comparison should be interpreted as an approximate benchmark rather than a controlled experiment.

---

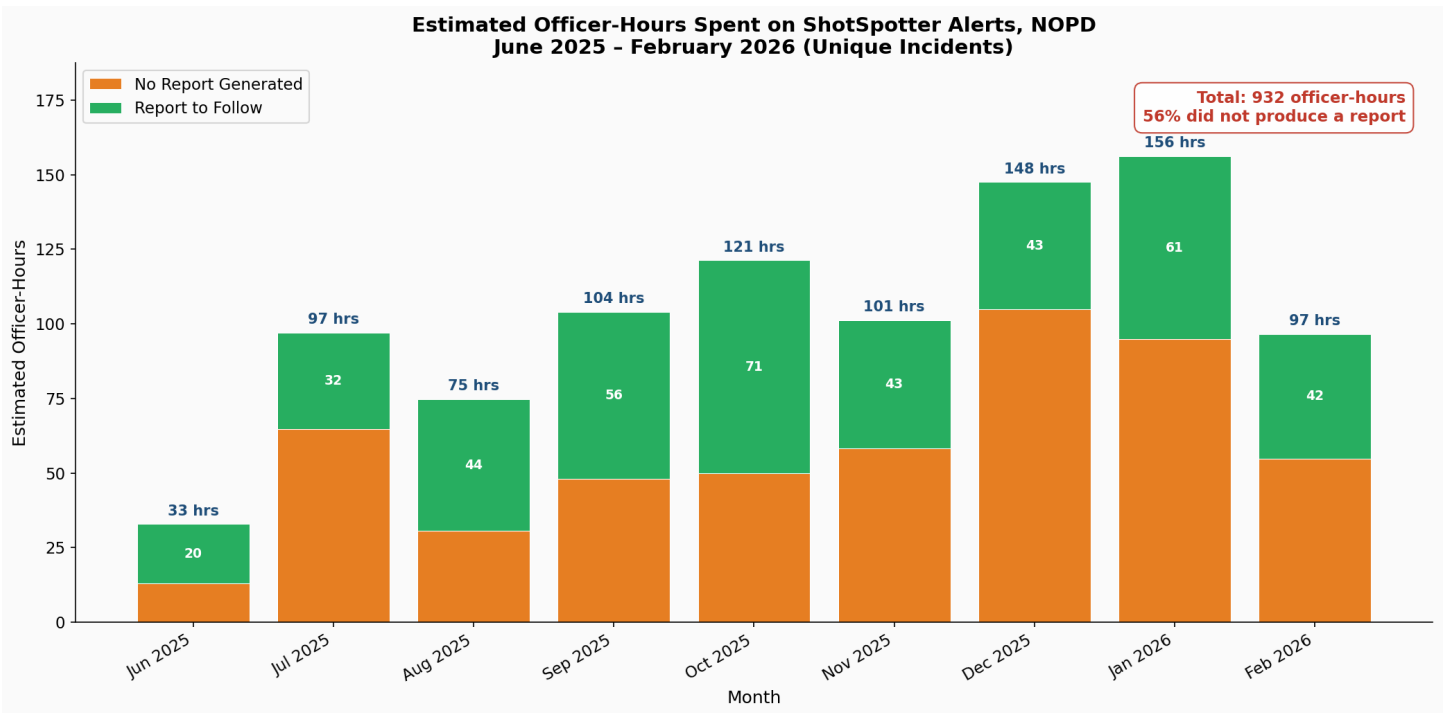
## 4. Key Findings – Resource Cost

### 4.1 Estimated Officer-Hours by Month

Each ShotSpotter alert that is not a duplicate requires an officer response, which occupies patrol time regardless of whether the alert turns out to involve confirmed gunfire. To estimate the total officer-hours consumed by ShotSpotter responses, this analysis uses the time between alert creation and call closure for each unique incident.

Over the nine-month period, NOPD officers spent an estimated 932 hours responding to ShotSpotter alerts. Of those hours, 413 (44%) were spent on incidents that resulted in a “Report to Follow.” The remaining 519 hours (56%) were spent on calls that did not produce a formal report.

This chart shows the estimated officer-hours by month, split between incidents that generated a report (green) and those that did not (orange). The total hours for each month are labeled above the bars.



These estimates have important limitations. The calculation uses the time from alert creation to call closure, which includes time before an officer was dispatched and potentially time spent on administrative tasks after leaving the scene. It also assumes a single officer per call. In practice, multiple officers may respond to a potential shooting. As a result, these figures should be understood as a *minimum* estimate of single-officer time per call, not a comprehensive measure of total resources deployed.

The 932-hour total is equivalent to roughly 23 full 40-hour work weeks. In a department that routinely reports staffing shortages, the question of whether this time investment produces sufficient investigative value is central to evaluating the pilot’s effectiveness.

## 5. Key Findings – When and Where Alerts Occurred

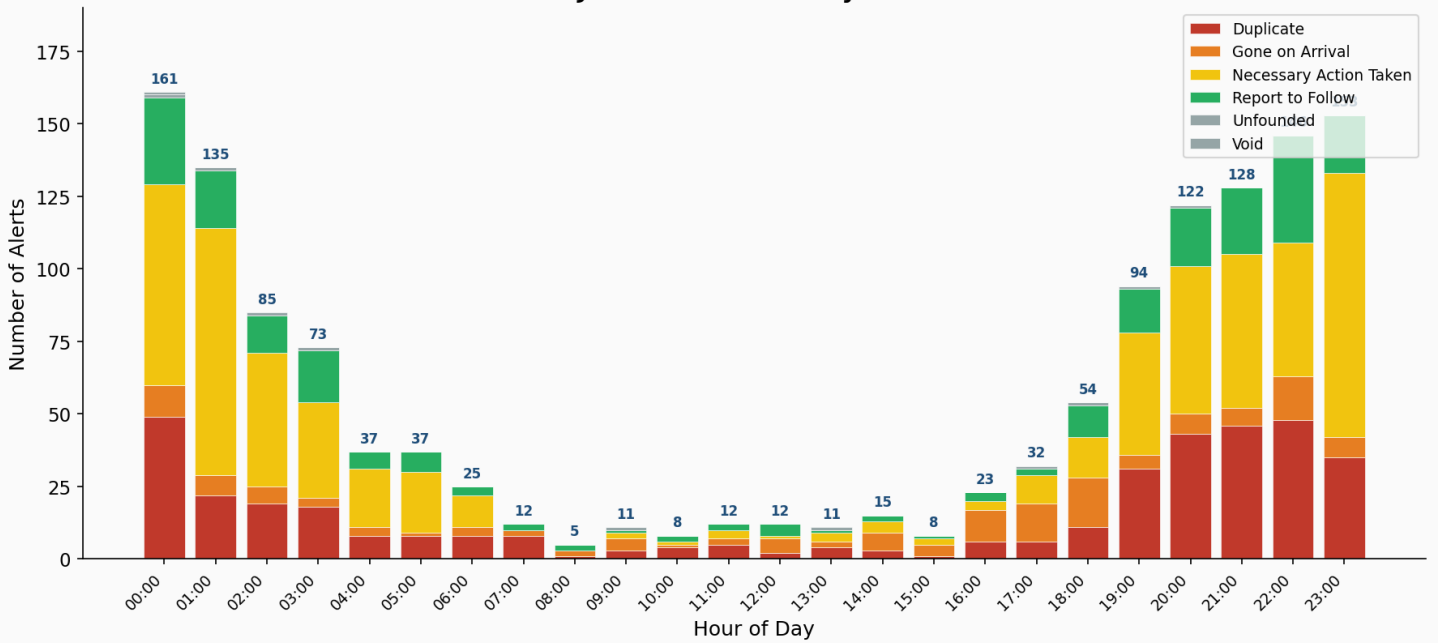
### 5.1 Time of Day

ShotSpotter alerts follow a strong nighttime pattern. The peak hours for alerts are between 8:00 PM and 2:00 AM, with the single busiest hour being 12:00 AM (161 alerts). Activity drops sharply after 2:00 AM and remains low throughout the daytime, with the quietest period between 7:00 AM and 3:00 PM.

This pattern is consistent with national research on policing, which shows peak call volume in late evening and overnight hours. It also means that ShotSpotter alerts are concentrated during the same hours when NOPD is already managing high call volumes for other types of crime.

This chart shows the number of ShotSpotter alerts by hour of day, with colors indicating the disposition of each alert. The chart includes all 1,399 alerts (including duplicates) to show the full volume of system activity.

**ShotSpotter Alerts by Hour of Day, NOPD  
June 2025 - February 2026**



## 5.2 Geographic Distribution

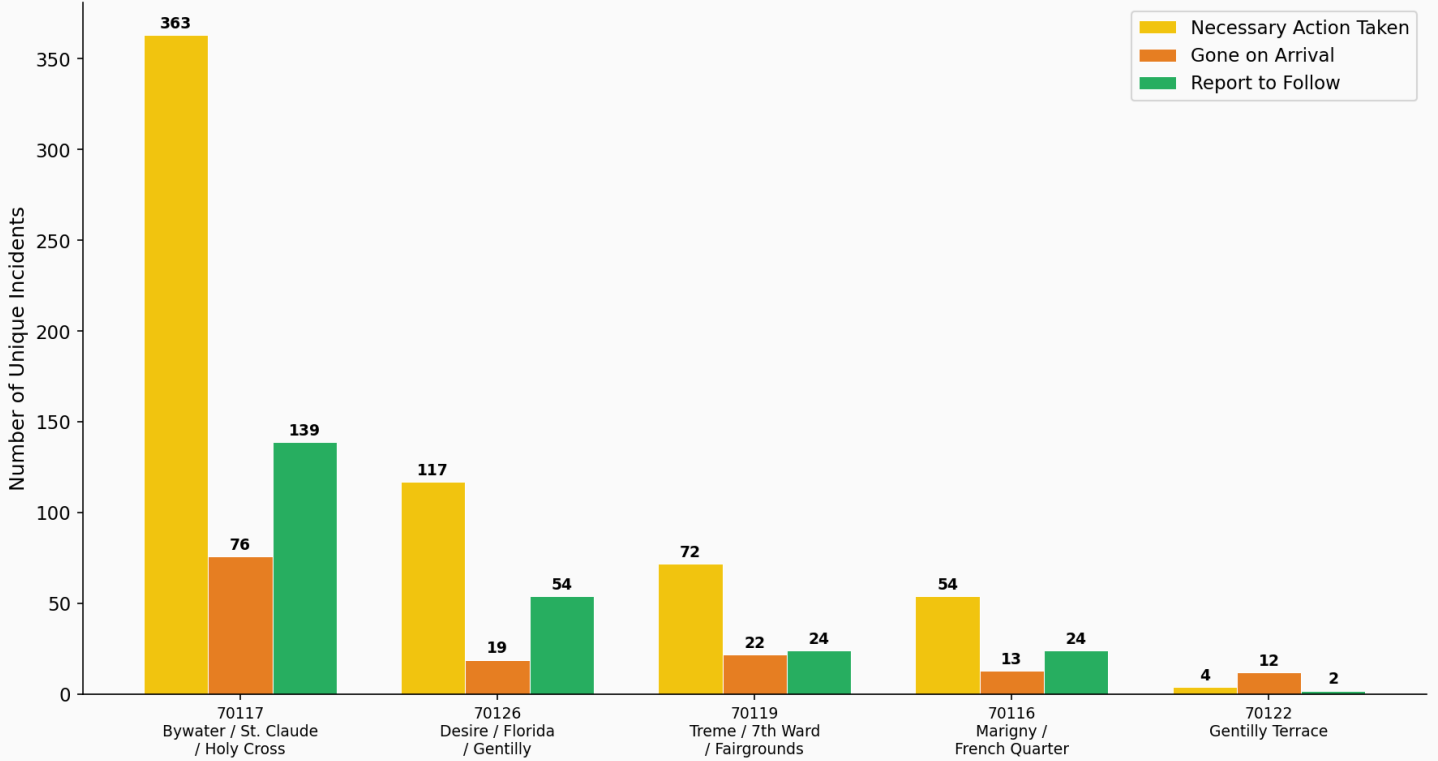
Nearly all ShotSpotter alerts (97%) originated in the Fifth District, which is expected given that the pilot’s sensors are deployed there. Within the Fifth District, alerts were concentrated in a small number of zip codes.

The 70117 zip code (Bywater, St. Claude, and Holy Cross) accounted for 578 of the 1,010 unique incidents (58%). The 70126 zip code (Desire, Florida, and parts of Gentilly) accounted for 190 incidents (19%), followed by 70119 (Treme, 7th Ward, and Fairgrounds) with 118 incidents (12%) and 70116 (Marigny and French Quarter) with 91 incidents (9%).

The “Report to Follow” rate was relatively consistent across the busiest zip codes, ranging from 20% in 70119 to 28% in 70126. The one exception was 70122 (Gentilly Terrace), which had only 18 incidents but a notably high “Gone on Arrival” rate (67%), suggesting that alerts in this area were less likely to correspond to activity that officers could investigate.

This chart shows the number of unique incidents by zip code, broken down by outcome. Ten incidents with the disposition as “Unfounded” or “Void” were excluded from the breakdown, as well as two incidents in zip code 70114 and one incident in 70113, and two incidents with no zip code data.

**ShotSpotter Outcomes by Zip Code, NOPD  
June 2025 - February 2026 (Unique Incidents)**



Note: 5 unique incidents had no zip code recorded and are not shown.

## 5. Conclusion: What the Data Suggests

Nine months of ShotSpotter data from NOPD’s Fifth District pilot reveals a system that generates a high volume of alerts but produces documented investigative outcomes in a minority of cases. Of 1,010 unique incidents, roughly one in four (24.3%) resulted in a formal police report. The remaining three-quarters were cleared without a report, most commonly as “Necessary Action Taken,” a vague category that provides no record of what officers found or did in response to the alert.

Officers spent an estimated 932 hours responding to these alerts, with 56% of that time going to incidents that did not produce a report. Response times were generally fast, with a median of 8 minutes from alert creation to officer arrival. Compared to 911 gunfire calls in the same district, ShotSpotter’s median response time advantage was about one minute, though ShotSpotter showed a clearer advantage in reducing very slow responses. Both pathways produced nearly identical “Report-to-Follow” rates (about 25%).

There are several things this data cannot tell us. The “Necessary Action Taken” category, which accounts for the majority of unique incidents, could include responses where officers found real evidence of gunfire but did not file a report. It could also include responses where nothing was found.

What the data does show clearly is the resource cost. Every alert requires an officer response and the majority of those responses do not produce a documented outcome. Moreover, all ShotSpotter activity was concentrated in the Fifth District. These communities absorbed the burden of frequent non-productive police responses without proportional documented public safety returns.

The data available suggests that NOPD’s ShotSpotter pilot is producing outcome patterns similar to those documented in other cities: a large volume of alerts, a small fraction leading to documented evidence or reports, and substantial officer time invested with limited measurable return. Before committing to a long-term contract, a more thorough evaluation that links ShotSpotter alerts to arrest data, evidence recovery records, and confirmed shooting reports would provide a clearer picture of the system’s actual value.

---

## 4. Methodology

**1. Data source.** NOPD Calls for Service records downloaded from the City of New Orleans open data portal on March 23, 2026. Two files were used: Calls for Service 2025 (all call types, full year) and Calls for Service 2026 (all call types, January through February). ShotSpotter alerts were identified by Initial Type = “94S” (ShotSpotter -- Reported Gunshots). For the response time comparison in Section 3.2, citizen-reported gunfire calls were identified by Initial Type = “94” (Discharging Firearm) in District 5 during the same pilot period.

This analysis uses Initial Type rather than the final Type field to capture all calls that originated as ShotSpotter alerts, including 217 calls (15.5%) that were later reclassified to other call types (most commonly Type 94, “Discharging Firearm”). Using Initial Type ensures the analysis reflects the full volume of ShotSpotter system activity.

**2. Date range.** June 18, 2025 through February 28, 2026 (approximately 8.5 months).

**3. Total records.** 1,399 alert records.

**4. Deduplication.** When ShotSpotter detects a gunfire event, multiple sensors may register the same sound, and each sensor hit enters NOPD’s dispatch system as a separate calls-for-service record with its own NOPD\_Item identifier. NOPD dispatchers then mark the extra records as “DUP” (Duplicate) and close them without dispatching an officer. These duplicate entries are an artifact of the NOPD dispatch system, not the ShotSpotter technology itself. DUP records were excluded from all unique-incident counts, response time calculations, and disposition analyses, but are included in total alert counts to show the full volume of system activity. No duplicate NOPD\_Item values existed across the two input files.

**5. Response time calculation.** Response time was calculated as the difference between the “TimeCreate” field (when the alert was generated) and the “TimeArrive” field (when the first officer arrived on scene). Records

with missing “TimeArrive” values, negative response times, or response times exceeding 24 hours were excluded as data errors. Of the 1,010 unique incidents, 889 had valid response time data.

**6. Officer-hours estimate.** Total time per incident was estimated using the difference between “TimeCreate” and “TimeClosed” fields. This is a rough proxy, as it represents the elapsed time the call was open in the dispatch system rather than actual officer time on scene. Records with durations exceeding 24 hours or negative values were excluded.

**7. Neighborhood assignment.** Neighborhood names were taken from the “NeighborhoodId” field in the Calls for Service data. A large proportion (69.6% of unique incidents) had no neighborhood recorded. This is a significant limitation of the neighborhood-level analysis.

**8. Disposition categories.** The following disposition codes appear in the data:

- **RTF (Report to Follow):** Officers found something warranting a formal written report.
- **NAT (Necessary Action Taken):** A catch-all disposition indicating officers responded and took unspecified action.
- **GOA (Gone on Arrival):** Officers arrived but found no one and no evidence at the scene.
- **DUP (Duplicate):** System-generated duplicate alert for a previously detected incident.
- **UNFOUNDED:** Investigation determined the alert was not based on a real incident. (0 occurrences)
- **VOID:** Alert was cancelled. (0 occurrences)

**9. Software.** Analysis and visualization were conducted using Python 3.13 with the matplotlib and NumPy libraries.

**10. Data Limitations.** This analysis relies on disposition codes from NOPD Calls for Service data, which are imprecise. The “Necessary Action Taken” (NAT) and “Gone on Arrival” (GOA) categories are particularly opaque. NAT likely reflects a range of meaningful police activity such as canvassing the area or attempting to locate witnesses, and that officers found no evidence of gunfire. GOA typically signifies that a 911 caller was no longer present; however, because ShotSpotter alerts are generated by the technology, this designation is especially ambiguous in this context and provides limited insight into what police did.