

Explanatory Note: This data represents all ShotSpotter incidents that were classified as “Probable Gunfire”, “Single_Gunshot”, or “Multiple_Gunshots” occurring within one of the six coverage areas defined below since January 1, 2014. The Department plans to continue to release this data with quarterly updates. Classifications are assigned by ShotSpotter and represent their assessment of what kind of impulse noise occurred. Some impulses initially dismissed as non-gunfire are manually audited and resubmitted to the dataset after ground truth analysis.

MPD began implementing the ShotSpotter system in 2006 and has added sensors and upgraded components of the system at various times. ShotSpotter has also enhanced their ability to distinguish gunshots from other impulse noises. For example, the number of impulse noises coded as gunshots during Independence Day celebrations have significantly decreased over the past four years.

ShotSpotter does not provide coverage for the entire District of Columbia. Official coverage areas are designed by ShotSpotter in conjunction with MPD, to target high population density areas with frequent sounds of gunshots incidents.

A ShotSpotter incident may involve one gunshot or multiple gunshots depending on the time elapsed between each shot. Each incident is given a serial number ID when it occurs.

The Latitude and Longitude of the incidents are rounded to three decimal places due to privacy concerns. This roughly corresponds to a 100 meter resolution.

Software Upgrade (2020): Please note that starting in the final quarters of 2019, there were updates to the ShotSpotter system. These changes are reflected in the in the 2020 data pulls only and outlined in the Data Dictionary below. We are providing the Auto-Acknowledged alerts for consistency and transparency in the data, but recommend that users exclude them in their analyses of gunshot detections for any 2020 data.

Software Upgrade (2021 and later): ShotSpotter released a mandatory software upgrade that implemented a change in the nomenclature used to describe alerts. Changes to the software included the removal of the “Auto-Acknowledged” checkbox. This is reflected in the details and definitions outlined in this note as they pertain to data from 2021 and later.

Data Dictionary:

ID: A unique serial number used to identify incidents.

Type: Classification of the incident assigned by ShotSpotter. Three (3) different classifications indicate that a gunshot may have been detected: “Probable Gunfire”, “Single_Gunshot”, and “Multiple_Gunshots”.

Date: The date that the incident was first detected by the ShotSpotter System.

Time: The time that the incident was first detected by the ShotSpotter System.

Source: The source network of sensors that detected the incident. MPD has ShotSpotter coverage in six (6) of its seven (7) police districts. The source networks are divided by MPD police districts.

Latitude: The Latitude of the incident determined by the ShotSpotter System, rounded to three (3) decimal places.

Longitude: The Longitude of the incident determined by the ShotSpotter System, rounded to three (3) decimal places.

Auto-Acknowledged (2020 data only): During Q3 2019, ShotSpotter updated the “auto-acknowledge” function of their technology. Auto-Acknowledge means that the ShotSpotter array detected and identified a pulse event, and their algorithm determined that it was not a gunshot (i.e., fireworks, helicopter sounds, etc.). Due to this technology upgrade, these auto-acknowledge detections were removed from the queue for ShotSpotter operators to manually review. (Previously, these impulses noises were manually reviewed by ShotSpotter operators and then labeled as fireworks or helicopter noises, and not counted as single or multiple gunshots in the data.) This field will have a value of ‘TRUE’ if the alert is auto-acknowledged by ShotSpotter (indicating that the alert is likely due to fireworks or helicopter noises) and ‘FALSE’ if the alert is reviewed by a ShotSpotter operator and determined to likely be sounds of gunshots. **We are providing the Auto-Acknowledged alerts for consistency and transparency in the data, but recommend that users exclude them in their analyses of gunshot detections.**

InDC (Starting in 2020): ShotSpotter occasionally does detect sounds of gunshots in neighboring jurisdictions. We provide this indicator based on the coordinates of the alert and DC Boundaries (as defined here: <https://opendata.dc.gov/datasets/washington-dc-boundary>) to make clear which alerts occurred in DC. For alerts that have coordinates that fall within DC Boundaries, this field will have a value of ‘TRUE’. The value will be ‘FALSE’ if the alert fell outside of DC Boundaries.

Additional Notes: ShotSpotter occasionally reclassifies alerts through investigation. Additionally, there are some differences in reporting requirements and methodology for various Shotspotter reports. Therefore, the statistics reported on this site may not match numbers reported in other forums.