ShotSpotter Data Explanatory Note and Dictionary

Explanatory Note: This data represents all ShotSpotter incidents that were classified as "Gunshots_or_Firecracker", "Single_Gunshot", or "Multiple_Gunshots" since January 1, 2014. The Department plans to continue releasing this data each quarter. This data may include duplicate incidents or unverified shots that may have occurred outside of official coverage areas. Classifications are assigned by ShotSpotter and represent their assessment of what kind of impulse noise occurred.

MPD began implementing the ShotSpotter system in 2006 and has added and relocated 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. Please note that starting in the final quarters of 2019, there were updates to the ShotSpotter system. These changes are reflected in the data starting with the 2020 data pulls and outlined in the Data Dictionary below.

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: "Gunshots_or_Firecracker", "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 (Starting in 2020 data): During Q3 2019, ShotSpotter updated the "autoacknowledge" function of their technology. Auto-Acknowledge means that the ShotSpotter array detected and identified a pulse event, and their algorithm determined that it was <u>not</u> 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. <u>We are providing the Auto-Acknowledged alerts for</u> consistency and transparency in the data, but recommend that users exclude them in their analyses of gunshot detections.

InDC (Starting in 2020): ShotSpotter occasionally detects 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'. For alerts that have coordinates that fall outside of DC Boundaries, this field will have a value of 'FALSE'.