CIMCON *Lighting*

Gunshot and Noise Detection

Crime plagues many cities in the US and other countries. One of the most significant improvements municipal leaders can make to improve the desirability of their city is to reduce the crime rate and improve public safety. Often high noise levels are associated with violent crime and theft. Changes in noise level can, therefore, indicate a crime was just committed or even be an early warning sign to potential upcoming crimes. Sensors that detect changes in noise level can assist police departments in preventing and responding to criminal activities.

NearSky – Detection System for Crime-Related Noises

The NearSky smart city platform uses advanced audio analytics to detect crime-related noises. The platform allows you to easily deploy noise sensors throughout a city and detect and respond to crime-related noises, such as:

• Gunshots
• Broken glass
• Car alarms
• Aggression

GUN VIOLENCE

27,394 homicides
by firearm in the US in 2015-2016

44,955 suicides
by firearm in the US in 2015-2016

Source: Centers for Disease Control and Prevention

Value

Reduce response time of police and emergency responders

Reduce instances of physical aggression by detecting and responding to increasing levels of fear and anger

Better prepare first responders

Detect and Respond to Critical Crime-Related Noises

The NearSky platform has advanced audio analytics software that can detect the following crime-related noises:

Noises Detected	Description
Aggresion	Recognizes aggression in a person's voice, allowing you to alert staff, police and other people as situations escalate and prior to an act of physical aggression. Detection range: 115 ft.
Gunshots	Recognizes shots from handguns, shotguns, rifles and automatic rifles within seconds. Detection range: 245 ft.
Breaking Glass	Recognizes the sound of breaking glass, whether it is laminated, single or double plate, tempered and wired glass. Detection range: 115 ft.
Car Alarms	Recognizes the sound patterns of common car alarms. Detection range: 230 ft.

Key Components of The NearSky Platform

NearSky 360 – a streetlight-mounted data processor that runs the audio analytics software and provides the sensor with electricity and a communications channel to alert police and staff.

NearSky StreetVibe – cloud-based management software that allows you to visualize the noise data collected by the sensor and NearSky 360 and export data to other standards-based tools for further analysis.
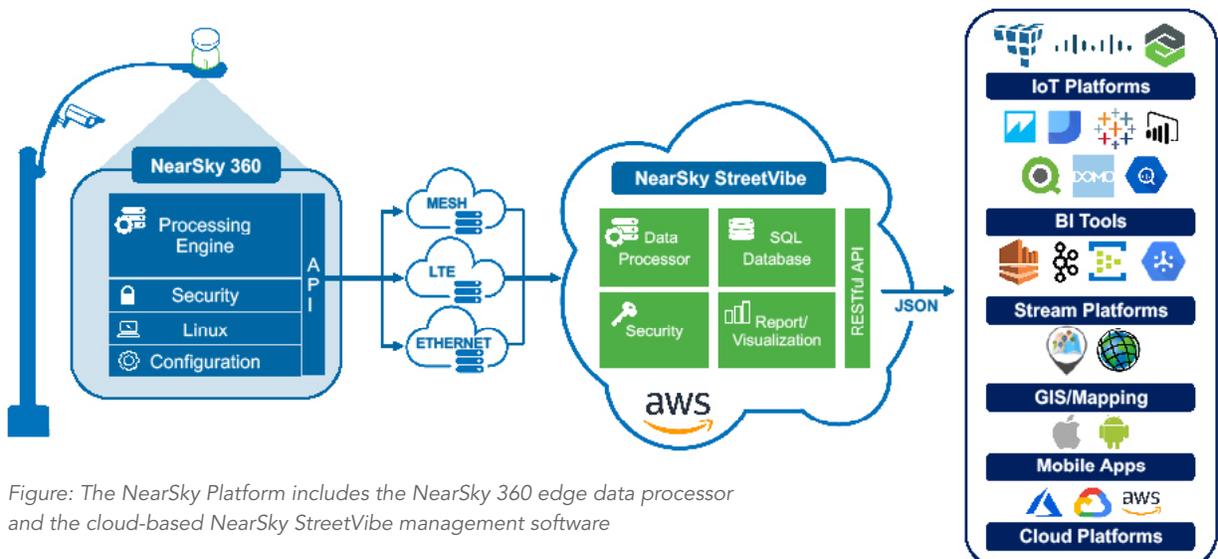
Figure: The NearSky Platform includes the NearSky 360 edge data processor and the cloud-based NearSky StreetVibe management software