Proof: ShotSpotter Delivers Results

The ShotSpotter Gunshot Location System has been proven to:

Benefit	Proof
Reduce Violent Crime and Homicides	· Los Angeles, CA: 40% reduction in homicides in ShotSpotter coverage area over 3-year period. See Attachment #1: ABC News Story. · North Charleston, SC: 35% reduction in violent crime in ShotSpotter coverage area over 2-year period. See Attachment #2: Case Study: North Charleston, SC.
Reduce Random Gunfire	· Redwood City, CA: 75% reduction since deployment. See Attachment #3: Testimonials. · Rochester, NY: 43% reduction since deployment See Attachment #3: Testimonials. · Minneapolis, MN: 30% reduction within 30 days of deployment. See Attachment #4: Case Study: Minneapolis, MN.
Aid police in making arrests	· Gary, IN: single largest gun recovery ("bust") in City history. See Attachment #5: Case Study: Gary, IN. · 35 Cities nationwide: just Google "ShotSpotter arrest"—the results speak for themselves.
Aid in Investigation and Prosecution	· Los Angeles, CA: ShotSpotter data and ShotSpotter expert witness help convict two gunmen in capital murder charges in case where only witness was killed. See Attachment #6: Case Study: Los Angeles, CA. · Washington, DC: ShotSpotter data help exonerate and return-to-service two officers accused of an improper shooting. See Attachment #7: Washington Post articles.
Maximize the Use of Scarce Police Resources	· Columbus, OH: police and FBI focus resources to catch Ohio highway "active shooter" Charles McCoy using ShotSpotter data. See Attachment #8: press release and page from FBI website. · Birmingham, AL: data helps focus patrols in the right areas of the city at critical times. See Dep. Chief. Ray Tubbs on WTII News story[1] Dec. 31, 2008 · York, PA: police adjusting coverage and patrols thanks to ShotSpotter data. See York, PA Police Commissioner Mark Whitman in Attachment #9.

[1] All television news stories referenced above are available on the ShotSpotter website at http://www.shotspotter.com/news/news.html.

ShotSpotter, Inc. | 1060 Terra Bella Avenue | Mountain View, CA 94043-1881 | 888.274.6877 | www.shotspotter.com

Attachments

1	KABC News Story: "Deputies in Los Angeles Detect Crime As It Happens"
2	Case Study: North Charleston, SC
3	Customer Testimonials
4	Case Study: Minneapolis, MN
5	Case Study: Gary, IN
6	Case Study: Los Angeles, CA
7	Articles originally published in Washington Post
8	Press release and FBI Website regarding use of ShotSpotter
9	York Dispatch News Story: "York City Police Adjust Coverage Thanks to ShotSpotter"

All television news stories referenced in this letter and additional print and Internet news articles are available on the ShotSpotter website at http://www.shotspotter.com/news/news.html.

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Attachment # 1:
ABC News Story

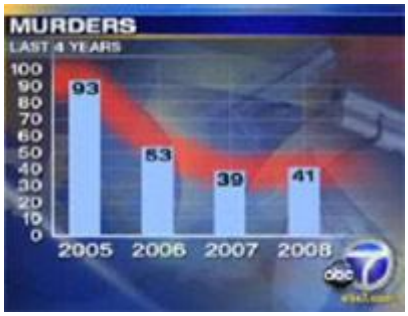
L.A. County Sheriff's Deputies detect crime as it happens

40% reduction in homicides attributed to ShotSpotter technology

January 28, 2009
KABC-TV
Los Angeles, California

LYNWOOD, Calif. (KABC) -- The Los Angeles County Sheriff's Department's Advanced Surveillance and Protection Unit is a trailblazer when it comes to new technology. And now they have a way to detect crime as it happens.

The sheriff's department is listening to catch criminals in the act. They have strategically placed microphones in high-crime areas. "When someone fires a gunshot, rifle or handgun, these microphones will triangulate on the sound and then in live time will show us exactly where that suspect is," said Los Angeles County Sheriff's Deputy Chris Kovac, Advanced Surveillance and Protection Unit.



Click image to enlarge.

The crime-fighting tool is called a "ShotSpotter" and it can pinpoint gunfire often to within a few feet of where the shot was fired.

"This will actually tell us where the suspect is, if he is in the front yard of a house, or backyard. It's that accurate," said Deputy Kovac.

Each microphone has four acoustic sensors. The sound of a gunshot hits each sensor at a different time, separated by milliseconds. ShotSpotter analyzes the time it takes for the sound of that gunshot to travel to the various sensors; then, GPS pins down the exact location.
ShotSpotter is especially helpful in areas where gunfire is so common that people become numb to it, and don't even bother to call 911.

"We've had numerous cases in which we've actually found victims laying there bleeding from gunshot wounds," said Kovac. "We're able to medically treat them, solely based on this alert. If we wouldn't have been notified via this ShotSpotter system, there's a good chance some of these people would've died," said Kovac.

According to the L.A. County Sheriff's Department, someone was murdered in L.A. County every 29 hours in 2008.

ShotSpotter was first rolled out by the Century Station in Lynwood, which patrols 13 square miles of southern L.A. County. Murders there are down 40 percent in the past four years. Deputies attribute much of that decrease to ShotSpotter.

The Advanced Surveillance and Protection Unit is currently working to integrate ShotSpotter with dozens of surveillance cameras.

"So when the gunshot goes off, cameras near there will automatically turn and look at the person shooting," said Kovac.

Deputy Kovac says it's almost like having a deputy on every corner.

"We're not so interested in catching the shooting. What we're interested in is the avenue of escape," said Kovac. "Seeing that suspect leave and being able to detain him after the fact."

Perhaps most importantly, all this high-tech crime-fighting enhances officer safety by letting deputies know what to expect at a crime scene before they arrive.

The city of South Gate has just rolled out its own ShotSpotter system. Compton is looking to expand its gunshot detection system. There is even a version created for the military that can be worn by soldiers in combat.

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Attachment # 2:
Case Study: North Charleston, S.C.

ShotSpotter®

Case Study

North Charleston South Carolina: Growing Safer Day by Day

North Charleston, the third-largest municipality in South Carolina, has seen its safety rating rise dramatically over the past three years. The ShotSpotter Metro Gunshot Location System (GLS) is helping public safety officials reduce violent crime by 35% in some of the more dangerous neighborhoods.

> ***"ShotSpotter, combined with proactive patrol work, reduced violent crime by 35% in 2004."***
>
> *- Sgt. Karen Cordray, North Charleston Police Dept., Crime Analysis Unit*

Problem Overview

North Charleston, SC is a vibrant city that attracts more than two million visitors annually. Its coliseum, convention center, performing arts center and beautiful neighborhoods bring an atmosphere of prosperity, excitement and continued growth. Unfortunately, perhaps due to rapid growth, a small number of neighborhoods have shown a different characteristic: high violent crime rates. In the past few years, narcotics use became prevalent in these neighborhoods, with an accompanying increase in home invasions. This created an atmosphere of fear in certain areas of the city.

The City experienced violent crime rates of 10% in 2001, rising rapidly to 17% in 2002, with almost 900 aggravated assaults (most of them via firearms). In spite of vigorous work on the part of public safety, the rates continued to climb. In 2003, North Charleston was named the 12th most dangerous city in America. Determined to change that unenviable distinction, city officials looked for ways to improve public safety and restore the image of the city.

About ShotSpotter

ShotSpotter, Inc., the world leader in gunshot location and detection systems for the public safety and military markets, is based in Mountain View, CA. ShotSpotter's patented, award-winning solutions are proven to reduce violent crime and gunfire, and thus homicide rates. For more information on ShotSpotter visit www.shotspotter.com, call us at (888) 274-6877 or (408) 329-9200, or email us at info@shotspotter.com.

ShotSpotter®

Case Study

North Charleston, SC

ShotSpotter's sensors "...specifically identify gunfire by screening out other similar sounds...and triangulates to provide a specific geographical location within 20 to 40 feet."

- Justice Technology Information Center, National Institute of Justice

Police in North Charleston work diligently to make their city safer day by day.

Working with the US Attorney's Office

North Charleston officials began to work with the US Attorney's Office (USAO) for the District of South Carolina in 2002 to find a gunshot location solution. The need was apparent, but few products had the proven track record that North Charleston sought. Only one product – the ShotSpotter Gunshot Location System (GLS) - had been working successfully in the field for a number of years. Both the US Attorney and officials in the police department had seen a demonstration of the ShotSpotter GLS and called the company for a demonstration during the summer of 2002.

The USAO selected ShotSpotter as the gunshot location system that best fit the requirements of the project. Their website (www.nlectc.org) states: "This technology consists of acoustical devices, which specifically identify gunfire by screening out other similar sounds (such as automobile backfires and firecrackers) and triangulates to provide a specific geographical location within 20 to 40 feet. The information is displayed on a computerized map, so that reaction teams in targeted areas can immediately respond to the location."

Sgt. Karen Cordray of the North Charleston Police Department's Crime Analysis Unit explains that the city decided to go ahead with a trial of the system, using funding from the Safe Cities project under the auspices of the USAO. The trial was undertaken as part of the Safe Neighborhoods Project, a nationwide program that targets gun crime and provides local communities with funding and tools for hiring and training; supporting investigations, and community outreach programs. The project represents a combination of the above initiatives.

Testing the System

Planning sessions were held throughout the autumn, and the sensors were installed in various parts of the city. ShotSpotter was first tested in two of the worst areas in the city, one on the south end and the other on the north end. To begin the testing, ShotSpotter personnel were on hand to train local dispatchers in the use of the system, especially the Public Safety Console. Training was relatively straightforward, yet special attention was paid to ensuring that dispatchers and public safety officials learned how to listen to the acoustic files and distinguish between a gunshot and other similar noises such as vehicle backfires and firecrackers. Another useful tool is the measuring tool, which provides personnel with a much more focused area of interest.

ShotSpotter®

Case Study
North Charleston, SC

Even during the testing phase, the ShotSpotter GLS proved its worth. In the middle of the test, dispatchers received a call from a resident inquiring as to whether the police were conducting test shootings in the neighborhood. The ShotSpotter sensors had simultaneously detected gunfire, and public safety personnel were dispatched. They were able to catch a shooter who had stolen a gun from a mall 30 minutes previously. In fact, two people were caught red-handed, as a result of the ShotSpotter GLS.

Involving the Community in the Implementation

One of the key ingredients in the North Charleston approach to reducing gun-related crime is community involvement. The police department designed and made up hundreds of door-hangers (see example) to let the citizens know that illegal gunfire is taken very seriously. The door-hangers served as a visual reminder to the citizenry that the North Charleston police were being vigilant, using high-tech tools to locate gunfire, and protecting the safety of the citizens.

Each door-hanger, printed in both English and Spanish, included basic information on how ShotSpotter was assisting public safety officials. The door-hangers also included an email address and/or emergency phone number where a citizen could report a gunshot, as well as a reminder to note the date and time of the incident. Although many people were not eager to be seen talking to the police, they were nevertheless encouraged to be an active participant in making their own streets safe, by reporting gunfire from the privacy and anonymity of their homes.

Citizens Applaud Results

The system has obviously yielded results, judging by the fact that North Charleston has dropped from the 12th most dangerous city in the US to the 20th, thanks to a combined effort on the part of public safety, ShotSpotter and the citizens. According to Sgt. Cordray, the community has been thrilled with the system. It helps identify areas with a lot of gun activity, so that police can then attack these areas through increased canine presence, more patrols, etc. ShotSpotter can overlay a troublesome area and narrow it down to a particular neighborhood or part of a neighborhood. "We can saturate these areas, especially where there are a lot of aggravated assaults and violent crimes," she explains.

Doorhangers, in English and Spanish, alert the citizenry to the fact that public safety officials are being assisted by the ShotSpotter Gunshot Location System, or GLS.

ShotSpotter®

Case Study

North Charleston, SC

> ***"In my opinion, [ShotSpotter] has made a big difference. I think the word got out and guys are scared to fire guns over here."***
>
> *- Larenda Baxley, President, Ferndale Neighborhood Association, North Charleston*

Police Welcome Investigative Help

ShotSpotter will never replace a police officer, but it provides valuable evidence both during investigations and ensuing legal matters. Many arrests are made after the fact through detective investigation, where ShotSpotter helps facilitate evidence-gathering. In addition, according to Sgt. Cordray, "ShotSpotter picks up incidents that people just don't phone in. I think it's your eyes and ears on the street – a good thing to have! In one area of the City a combination of ShotSpotter and proactive patrol work reduced violent crime by 35%. "

Reports show that in the first year, police made 18 arrests as a result of ShotSpotter, six during the initial response and 12 after follow-up investigations. Even when no calls come in, police are able to determine that shots have been fired. They can break out the incident shot by shot, and find the direction in which the shooter is moving, according to Cordray. As they uncover evidence at the scene, it is run through IBIS (Integrated Ballistic Identification System) which helps them determine if the incident can be linked to another crime, such as a homicide. "This case linkage is very valuable," reports Cordray.

Final Words

Larenda Baxley, president of the Ferndale neighborhood association in North Charleston, said she used to hear gunfire three or four nights a week but such incidents do not happen as often now. "In my opinion, [ShotSpotter] has made a big difference," she said. "I think the word got out and guys are scared to fire guns over here."

THE SHOTSPOTTER DIFFERENCE

Proven, Patented Technology
The only gunshot detection system to be successfully deployed for ten years, with more than a dozen installations across the United States.

Seasoned Management.
Senior management- PhDs, retired military officers and former sworn law enforcement officers provide in-depth subject matter expertise.

Industry Best Practices
Providing expert advice to cities and counties as to gunshot detection, deployment and operational enforcement methodology.

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Attachment # 3:
Testimonials

ShotSpotter®

ShotSpotter Gunshot Location System

ShotSpotter Customer Testimonials

Making Your Community Safer with Proven Technology

Helps public safety and Homeland Security officials suppress gunfire, apprehend shooters and confiscate illegal weapons, and makes communities feel safer.

About ShotSpotter

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"ShotSpotter, combined with proactive patrol work, reduced violent crime by 35% in 2004."
- Sgt. Karen Cordray, North Charleston, SC Police Deptartment, Crime Analysis Unit

"Since the very first installation, we've seen about a 75% decrease in gunfire in our jurisdiction."
- Chief Carlos G. Bolanos, Redwood City, CA Police Department

"When you roll on a ShotSpotter call, you're going to be raised up and ready."
- Officer Abdullah Dadgar, Oakland, CA Police Department (Wired Magazine, April 2007)

"ShotSpotter is a better compass to point officers in the right direction."
- Lt. Amelia Huffman, Minneapolis PD (Twin Cities Daily Planet, March 2007)

"The more we expand [ShotSpotter] the more accurate it gets."
- Acting Chief Cathy L. Lanier, Washington DC Police Department

"We've got officers on the scene before calls start coming in."
- Maj. Herbert Whetsel, Charleston, SC Police Department (AP October 2006)

"[ShotSpotter] is like having extra patrol officers on the street."
- Mayor Robert Duffy, Rochester, NY (Democrat & Chronicle, October 2006)

"Response time to ShotSpotter has been less than a minute."
- Chief Tim Dolan, Minneapolis, MN Police Department

ShotSpotter's sensors ...triangulate to provide a specific geographical location within 20 to 40 feet."
- Justice Technology Information Center, National Institute of Justice

"Sixty-nine ShotSpotter calls in the first 30 days results in six arrests and three recovered weapons."
- Lt. Gary Reinhardt, Minneapolis, MN Police Department

"With this piece of technology, it's kind of like hearing the gunshots yourself."
- Officer Abdullah Dadgar, Oakland, CA Police Department (Wired Magazine)

"ShotSpotter requires the lowest number of sensors by far, and is the most cost-effective."
- Sgt. Mike Bialeszewski, Grants Officer for the City of Rochester, NY

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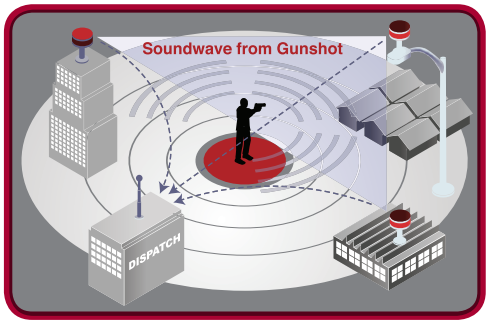

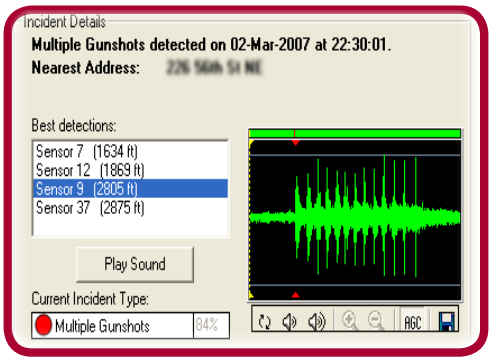

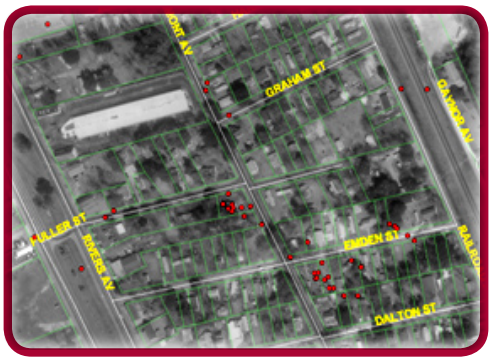

"Literally within a 24-hour to 48-hour period, we knew what kind of gun [the sniper] was shooting, where [the sniper] was shooting from. That let us directly to identifying the individual and locking him up."

- Ron Chavarro, FBI regarding the Columbus, OH sniper incident in 2003 (Washington Times, March 2007)

"[With ShotSpotter], if you fire a gun in Rochester, the police will know the exact location instantaneously, and within minutes they will be on the scene in force."

- Congresswoman Louise Slaughter

"It is time to holster those weapons for good, because Shot Spotter is listening...and if you fire a gun in this city...the chances are you will get caught, and you will go to jail."

- Congresswoman Louise Slaughter

"When trigger-happy people know the police are listening, they are less likely to indulge."

- Wired Magazine, April 2007

"The ShotSpotter Gunshot Location System is a complex piece of hardware that's helping combat gun violence in a number of American cities."

- Simon Read (Contra Costa Times, February 2007)

"ShotSpotter's Gunshot Location System will reduce gunshot-related injuries and deaths, and allow officers to increase arrests and get illegal guns off the streets."

- Chief of Police Timothy Dolan, Minneapolis, MN Police Department (Government Technology, September 2006)

"In my opinion [ShotSpotter] has made a big difference. I think the word got out and guys are scared to fire guns over here."

- Larenda Baxley, President Ferndale Neighborhood Association, North Charleston, SC

"We were getting things like 'in the backyard, ten feet back.' That allowed us to collect shell casings evidence and also to respond very quickly to an incident where shots were fired."

- Chief of Gary, IN Police Department

"As fast as bullets went into the air, police were arresting shooters."

- Gary IN Post-Tribune

"We saw, in the first 30 days, a 30% drop in complaints of shots fired."

- Gary Schiff, Minneapolis, MN Councilmember

"The bottom line is in Minneapolis, if you shoot a gun, we're going to hear it."

- Lt. Greg Reinhardt, Minneapolis, MN Police Department (December 2006)

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Attachment # 4:
Case Study: Minneapolis, Minn.

ShotSpotter®

Case Study

Minneapolis, Minnesota: Bringing Crime to its Knees

Minneapolis, the largest city in Minnesota, has seen immediate and dramatic results since it implemented the ShotSpotter Gunshot Location System (GLS) in two neighborhoods. In some areas, complaints of shots fired dropped 30% over the previous year.

"Sixty-nine ShotSpotter calls in the first 30 days resulted in:

- ***3 felony arrests***
- ***3 misdemeanor arrests***
- ***2 recovered weapons***
- ***1 recovered stolen car***
- ***Information used in homicide, robbery and shooting investigations."***

- Lt. Gary Reinhardt, Minneapolis Police

Problem Overview

Minneapolis is the largest city in the state of Minnesota and one of the 50 largest cities in the country. Straddling the Mississippi River and adjoining Saint Paul, the state's capital, the City boasts impressive natural resources, Fortune 500 businesses, professional sports teams and respected schools. Residents enjoy a high quality of life compared with other US cities, and the City is host to a vibrant nightlife. Unfortunately, some of the neighborhoods that border the entertainment district have become accustomed to an atmosphere of crime. Some areas in North Minneapolis have seen an 80% increase in crime over last year.

According to Deputy Chief Robert Allen of the Minneapolis Police Department's Professional Standards Bureau, "Minneapolis in 2005 saw a huge increase in violent crime and shootings. Two areas in particular – North and South Minneapolis – were especially hard hit by gun violence and shots fired."

Police data show that violent crime in Minneapolis was up last year at six times the national rate of increase in murders, rapes, robberies and aggravated assaults. The City's surge helped drive up violent crime in the Midwest by 5.7 percent, the steepest increase of any region, according to the FBI. Minneapolis residents and leaders, although grateful that the actual figures are lower than the high levels seen in the mid-1990s, are concerned that violent crime rates have risen each year since 2001. They want to reverse this trend.

Minneapolis City Hall

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ShotSpotter®

Case Study
Minneapolis, MN

> ***"Without the grass-roots support we would not have obtained city tax dollars to pay for the system. This initative really came from the ground up - the community came to us."***
>
> ***- Deputy Chief Scott Gerlicher, Minneapolis Police Department***

Police rely heavily on community involvement

Searching for Solutions

Minneapolis relies heavily on a combination of active police work, citizen involvement and technology in its efforts to thwart crime. Community involvement is strong and citizens are not reluctant to call to 911 to report suspected crime. Police activity is equally strong: this past year, Minneapolis added 100 police officers and increased the amount of arrests by 22%, with convictions of chronic offenders up 60%. In addition, Minneapolis streets are already provisioned with cameras that watch every move. However, these measures alone were not making enough of a dent in crime. Police began looking for technologies that could augment the measures already in place.

Police officials researched technological solutions and came across articles written about ShotSpotter, the only field-proven solution of its type. They contacted the vendor and arranged for a demonstration to include police leaders, City Council members, and members of the community. After a successful demo, Minneapolis authorities contacted police agencies in cities that had deployed ShotSpotter, gaining an understanding of the reliability and cost-effectiveness of the product.

Plans were drawn up to implement ShotSpotter to cover the four square miles of the City that are responsible for 50% of the more than 5,000 "shots fired" calls coming to police each year. It was hoped that this additional capability, in conjunction with other technology, police work and citizen involvement, would lead to a dramatic reduction in violent crime. Based on the results seen in cities across the country, Minneapolis officials expected to see faster response times, more accurate location information, and an overall impact on violent crime.

Funding the Project

Many cities rely on grants to fund initiatives such as this. In Minneapolis, the city was fortunate to obtain a grant early on to help fund the initial project and then was able to rely on city dollars to ultimately fund the entire program. Grant money came from Weed & Seed, a community-based strategy sponsored by the US Department of Justice. This is an innovative, comprehensive approach to law enforcement, crime prevention and community revitalization. The strategy aims to prevent, control and reduce violent crime, drug abuse and gang activity in high-crime neighborhoods.

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Case Study
Minneapolis, MN

Weed & Seed involves a two-pronged approach: law enforcement agencies and prosecutors cooperate in "weeding out" violent criminals, while public agencies and community-based private organizations collaborate to "seed" services such as prevention, intervention and neighborhood restoration programs. The aim of this initiative: to give back hope to residents living in distressed neighborhoods and set the stage for community revitalization.

But this was just the beginning. While early funding came from the US Department of Justice, the real money came from the City itself as a result of the excellent community relations and strong support from citizen groups. "Without the grass-roots support," according to Deputy Chief Scott Gerlicher, "we would not have obtained city tax dollars to pay for the system. The initiative really came from the ground up – the community came to us."

US Department of Justice Weed & Seed Program, a community-based strategy aimed at preventing, controlling and reducing violent crime.

ShotSpotter at Work in Minneapolis

ShotSpotter, in conjunction with the City's existing cameras, serves as electronic eyes and ears for the City. Sensors linked to surveillance cameras can pinpoint a gunshot's location, and relay that information to police within seconds. "Faster police time means quicker arrests, shorter investigations and a smarter use of our resources in Minneapolis," said city councilmember Gary Schiff of the 9th Ward. With five to six thousand reports of shots fired in the city each year, hopes were high that the City would see a dramatic reduction in violent crime.

The system can distinguish between gunshots and other loud noises, such as firecrachers and cars backfiring. With ShotSpotter, when shots are fired polce do not have to wait for residents to phone in tips, or waste time driving through neighborhoods looking for the location of an incident. Instead, ShotSpotter will put a dot on a map at the 911 dispatch center, pinpointing the location for police. And since the system is tightly integrated with cameras, police can often get even more information about a gunfire indcident, helping identify criminals and gather evidence.

"You fire a gun in MInneapolis, and we're going to hear it and come after you," Lt. Greg Reinhardt told members of the City Council's Public Safety and Regulatory Services Committee during a meeting in June of 2006. Reinhardt, an 18 year veteran of the Minneapolis Police Department, said, "That's the message we're going to put out."

ShotSpotter®

Case Study

Minneapolis, MN

> ***"Response time to ShotSpotter has been less than a minute."***
>
> *- Police Chief Tim Dolan*

> ***"We saw, in the first 30 days, a 30 percent drop in complaints of shots fired."***
>
> *- Minneapolis Councilmember Gary Schiff*

Impressive Early Results

Within just six hours of taking ShotSpotter live, the system pinpointed a location where shots were fired. Officers responded and stopped a fleeing vehicle, arresting a documented gang member and convicted felon, and recovering a semi-automatic gun. No one called 911 about the event, so without ShotSpotter, officers would not have been able to make the arrest.

According to police, in the first month alone officers responded to 69 ShotSpotter calls, resulting in three felony arrests, three misdemeanor arrests, two recovered weapons, a recovered stolen car, and information in homicide, robbery and shooting investigations. In that short time, violent crime citywide was down nearly 19 percent compared to the same time a year before.

"We saw in the first 30 days, a 30 percent drop in complaints of shots fired in the third precinct compared with the same period last year," said councilmember Schiff. Police Chief Tim Dolan concurs, saying that response time to ShotSpotter has been less than a minute. "We're not just fishing anymore in a big lake," he said. "Word is getting out how quick officers can get to the scene."

Final Words

The community remains squarely behind ShotSpotter. "Our number one priority is to keep the place safe for low income families and kids, and I think this will really help. I'm incredibly pleased," said Minneapolis resident Carol Ann Pass.

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Attachment # 5:
Case Study: Gary, Ind.

ShotSpotter®

Case Study

Gary Indiana: One Night, Record Results

Gary Indiana, just 27 miles from downtown Chicago, proved it was able to dramatically reduce illegal weapons activity. In one night alone, police confiscated 45 illegal weapons, including 27 semi-automatic handguns, 1 revolver, 7 assault rifles, 8 shotguns and 2 rifles - the largest single-shift gun bust in city history.

Problem Overview

Gary is the largest city in Lake County in northwest Indiana. Like many large urban areas in the US, Gary has struggled to control gun violence. The problem had become so serious that shortly before the end of 2005 the media singled out Gary as a city with record gunshot statistics.

The upcoming New Year's Eve holiday was of particular concern to public safety officials, as it is typically a holiday that sees a lot of dangerous gunfire. There was concern that revelry would take a violent turn and shots would be fired into the air during the holiday. Further, officials feared there would be other violence that would need to be controlled.

With a public, city-wide New Year's Eve celebration planned, the City turned to the Gary Police Department to make sure the citizens were safe to ring in the New Year without worrying about stray bullets.

Finding a Solution

The Gary Police Department got a head start and put together a detailed tactical plan for making sure officers would be where they were needed, able to quickly shut down any problems before anyone was hurt. They hoped to be able to leverage gunshot location technology already in place, to aid in their New Year's Eve plan. Gary was the first city in the Midwest to purchase the ShotSpotter Gunshot Location System (GLS), which uses sensors and computer technology to locate the source of shots within a few feet as soon as they occur.

"As fast as bullets went into the air, police were arresting shooters"

- Post-Tribune.com

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 630-0007-01-B

ShotSpotter®

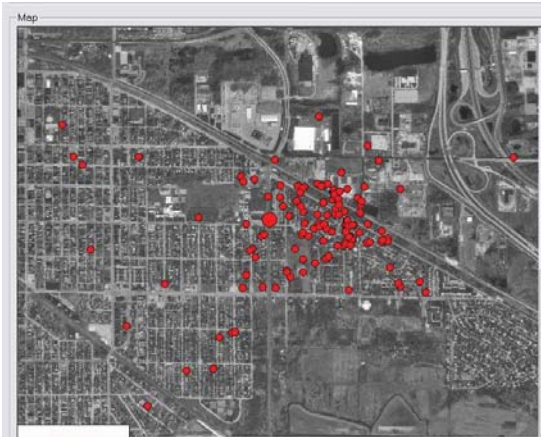
Case Study

Gary, IN

BLUEFORCE TRACKING

ShotSpotter's unique capability lets the City keep track of where their people are at all times, whether in squad cars or on foot.

This vastly improves officer safety without impairing critical response time.



Actual screenshot of gunfire reports from ShotSpotter sensors in Gary on December 31, 2005. The large circle in the middle resulted in 5 arrests and the bulk of the weapons confiscated.

New Year's Eve Plan

The Department knew they needed to have extra "feet on the streets" that night, and planned to have more officers on duty. In addition, they put together a special response squad, partly composed of their SWAT team, which was to spend the whole evening responding to calls. The Gary Police Chief actually planned to spend the night out in the city responding to calls as well.

But even with an officer a block away from an incident, the City needed ShotSpotter technology to pinpoint the location of the shooter and immediately relay that information via mobile equipment to the officer in the area. To assist this team, ShotSpotter devised a short-term deployment solution that was composed of officer-worn and vehicle-mounted wireless gunshot sensors, equipment for a mobile command center, and special "Blueforce Tracking" capability.

This approach, modeled after work done by ShotSpotter for the US military, would not only allow officers to take the system into the areas where it was needed, but also to keep track of where their people were at all times, whether in squad cars or on foot, adding to their safety and improving critical response times.

Community Public Relations Campaign

Preparations began with a public relations campaign. The message reassured the public that police coverage would be heavy on New Year's Eve, while at the same time warning those who might be readying their guns that ShotSpotter coverage would be beefed up for the night: if they fire a weapon, they should expect to be arrested.

The Mayor of Gary held a news conference at City Hall on the Thursday before New Year's Eve and reinforced the message. "Extra police will be on duty Saturday evening through early Sunday, and 18 squad cars will be equipped with mobile gunshot detectors," he warned. "There are many appropriate ways to celebrate," he said. "Firing a gun into the air is not one of them. Don't do it this weekend."

The next day, headlines read "New Year's Eve Patrols Up," "Don't fire your gun New Year's Eve" and "Gary Police to combat New Year's Eve gunshots." The Gary Police Department website put out a special newsletter informing citizens of their plans for extra coverage and special ShotSpotter deployments.

ShotSpotter®

Case Study

Gary, IN

Mobile and Fixed Sensors

ShotSpotter worked with the Gary police department to temporarily extend the existing ShotSpotter Gunshot Location System to reach areas previously not covered, and bulk up the protection for New Year's Eve. During the holiday, 16 sensors, ten of them mobile and six temporarily installed in fixed locations, were added to the existing system linked into dispatch.

Officers wore the mobile sensors on their uniforms as they canvassed parts of the city, while other sensors were mounted in squad cars. A police van equipped with the visual feedback data from the sensors and dispatch equipment served as the mobile tactical command center. This command center also had the added benefit of ShotSpotter's Blueforce Tracking, so dispatchers could see not only the gunfire on screen, but also the position of all officers. Dispatch could easily tell those officers closest to the incident where to respond.

In an eight hour period on New Year's Eve, Gary Police officers confiscated 45 illegal weapons. It was the lead story on the 6 o'Clock News.

ShotSpotter in Action

As anticipated, and despite the thorough efforts to thwart them, some revelers got out of hand and shots rang out in the city. ShotSpotter's Scott Manderville was on hand to experience the ShotSpotter system working hand-in-hand with the Gary Police on that New Year's Eve.

"It was really something to witness," said Manderville. "I rode along for part of the night in the mobile command center, and part of the night in a squad car. We directly assisted in numerous arrests that resulted from data collected both in the mobile unit and main dispatch."

Police were extremely pleased with the accurate help they received from the ShotSpotter sensors. "We were getting things like 'in the backyard, 10 feet back'," said the Chief of Police the next day. "That allowed us to collect shell casings, evidence and also to respond very quickly to an incident where shots were fired."

"We were getting things like 'in the backyard, ten feet back.'

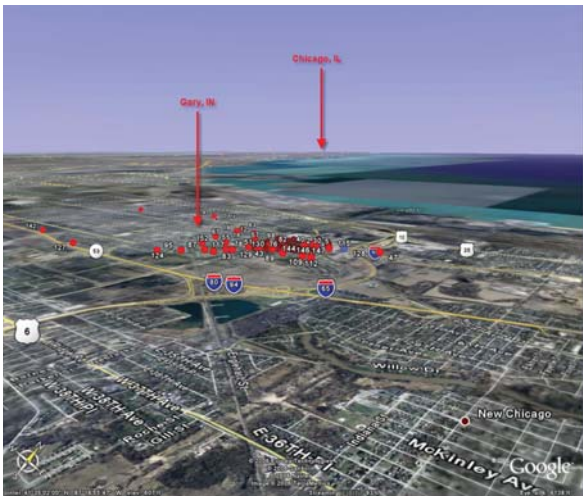
[ShotSpotter] allowed us to collect shell casings, evidence and also to respond very quickly to an incident where shots were fired."

- Gary Chief of Police

ShotSpotter®

Case Study

Gary, IN



Aerial view of the locations of the 158 gunfire events detected on New Year's Eve 2005/6.

Confiscated:

- 27 semi-automatic handguns
- 1 revolver
- 7 assault rifles
- 8 shotguns (3 sawed-off)
- 2 rifles

The Results

It was a very long night for officers working the New Year's Eve celebration late into the next morning. However, the combination of ShotSpotter technology and an active community public relations campaign paid off. The night netted 15 multiple-charge arrests and 45 confiscated weapons - a record for a single evening. The weapons haul was the lead story on ABC's Six o'clock News.

In the days that followed, newspaper headlines proclaimed "Revelry Nets Guns, Arrests" and articles went on to boast: "As fast as the bullets went into the air, Gary police were arresting shooters throughout the city on New Year's Eve." The Gary Police Department posted a special edition of their newsletter on the Department website and included a breakdown of the evening's proceeds. In an eight-hour period on New Year's Eve, Gary Police Officers confiscated 45 illegal weapons.

On the following Monday, the Chief sent a letter to ShotSpotter's Scott Manderville: "I am writing on behalf of the men and women of the Gary Police Department and the citizens of Gary to personally thank you and your company for your efforts on the City's behalf on New Year's Eve. ShotSpotter's efforts in bringing the latest in mobile technology, which allowed us to expand our coverage areas, were of tremendous assistance to us. I look forward to our ongoing collaborative efforts to make Gary a safer city to live in."

As a result of this event, Gary has contracted with ShotSpotter to extend the system to cover the majority of the City.

THE SHOTSPOTTER DIFFERENCE

Proven, Patented Technology
The only gunshot detection system to be successfully deployed for ten years, with more than a dozen installations across the United States.

Seasoned Management.
Senior management- PhDs, retired military officers and former sworn law enforcement officers provide in-depth subject matter expertise.

Industry Best Practices
Providing expert advice to cities and counties as to gunshot detection, deployment and operational enforcement methodology

ShotSpotter®
Sense. Target. Protect.

Attachment # 6:
Case Study: Los Angeles, Calif.

ShotSpotter®
Sense. Target. Protect.

Case Study

CONVICTED

The ShotSpotter Gunshot Location System® (GLS) captures critical forensic evidence that assists the Los Angeles County District Attorney's Office in convicting two gang members of murder.

Aerial image shows the geolocated position and sequence of each individual shot fired by Shooter A (red circles) and Shooter B (blue circles). Data analysis revealed the distance between Shot 7 (fired by Shooter B) and Shot 8 (fired by Shooter A) to be 15 feet and were fired a tenth of a second apart. This revealed that two shooters had committed the crime because a single shooter could not have fired both rounds from the two locations a tenth of a second apart.

The Search for Evidence

Due to rampant gang violence, the region of South Los Angeles, Calif., has a reputation as one of the most dangerous inner city areas within the U.S. To combat the violence, the Los Angeles County Sheriff's Department deployed the ShotSpotter Gunshot Location System® (GLS) as a wide-area acoustic surveillance system to target gun violence within the Century Station zone. Since its introduction, the ShotSpotter GLS has been used to accumulate data on gunfire happening within its coverage area, revealing the area's true level of gun violence. System data are used by deputies and crime analysts to develop violence suppression strategies and programs, while at the same time allowing officers to respond to gunshot incidents on a tactical basis as they occur. When admitted into evidence in trial proceedings, incident data have helped prosecuting attorneys obtain plea bargains, resulting in shortened trial times, thus reducing associated legal and court costs.

> "The ShotSpotter data and expert witness testimony provided unbiased corroboration for the eyewitness's description of the shooting and the number of shots fired, as well as the fact that there were two different shooters using different firearms."
>
> Deputy District Attorney Hector E. Gutierrez
> Los Angeles County District Attorney's Office,
> Hardcore Gang Division

Last year, the Los Angeles District Attorney's Office and the Los Angeles County Sheriff's Department were faced with the challenge of successfully prosecuting two known gang members for murder. As a result of the ShotSpotter GLS detecting, locating, and alerting deputies to the precise location of the crime, crucial physical evidence had already been seized, including shell casings, but could ShotSpotter provide additional acoustic evidence to strengthen the case?

"Recovering those shell casings was huge," said Detective Ty Labbe. According to Labbe, the only witness to the murder identified the shooters and testified that one perpetrator shot the victim, "firing multiple times from a MAC-10 type machine gun pistol" while the other shooter fired a revolver. The shell casings recovered at the crime scene matched the weapons described by the eyewitness as being used in the murder. Labbe stated that the .38 caliber casings recovered matched the only murder weapon recovered, and the Los Angeles County Sheriffs Crime Lab-Firearms Unit confirmed that the primer stamp of the other casings were, "consistent with the primer stamp of a MAC-10 or Uzi-type machine gun."

Still, Labbe and his partner Detective Martin Rodriguez, felt additional evidence was needed to corroborate the witness's testimony because the witness was a drug addict. He added, "You need to be able to corroborate a one-on-one I.D. Someone who witnesses someone else do something: we need additional evidence to corroborate that fact."

The prosecuting lawyer on the case, Deputy District Attorney Hector E. Gutierrez, agreed with their assessment that finding

compelling evidence to corroborate the witness was critical. "There was only one eyewitness whose character was less than ideal and the victim's wounds were also 'through and through,' meaning we had no bullets," explained Gutierrez. According to Gutierrez, additional evidence was needed in order to place two shooters at the crime scene, confirm the events as described by the witness, and negate any possible defense strategy.

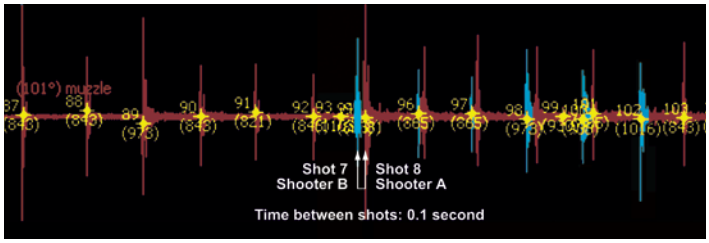
According to Labbe, they needed to prove that one person holding two guns could not have committed the crime. Knowing that the ShotSpotter GLS system had documented the event, detectives called the company and spoke with Customer Solutions Manager, Dana Kirsch Ray. They requested a detailed forensic analysis of the incident, a service provided by ShotSpotter to GLS customers.

Clear and Compelling Evidence

Ray recalled that, "the first question the detectives wanted to know was whether our system could tell if there were two people shooting at the victim."

Because the ShotSpotter GLS detects gunfire activity 24 hours a day and permanently stores all incident information in an auditable, verifiable database repository, Ray was able to perform a detailed analysis of incident data. Her analysis quickly established that weapons of two different calibers had fired a total of 18 rounds during the incident. She then gave investigators a timeline of shots fired: the timeline showed which gun had fired which round; that the time between shots proved that two weapons were involved; and confirmed due to their physical separation, two different individuals firing two different weapons had perpetrated the crime. Ray then further analyzed the data to identify "a shot-by-shot chronology which identified the precise location of each and every round fired."

The case presented unique challenges said Ray. "In most cases when you have a shootout, the shooters are firing in opposite directions because they're shooting at each other. In this case, the two shooters were standing next to each other shooting towards



(Above) Detailed timeline and shot frequency analysis of each round fired revealed that two guns were fired in the crime.

a third person [the victim]. They were firing at the same time, in the same direction, using bullets of nearly the same caliber. These circumstances made it harder to differentiate between the sounds of the two gunshots, and we had to rely on other data from the ShotSpotter system, such as the timing and physical separation of each shot, to positively determine the number of weapons and individuals shooting them."

According to Labbe, "the ShotSpotter GLS provided an absolute court-admissible corroboration of the statement made by the lone witness to the crime."

"The ShotSpotter GLS system was able to show that two different weapons were being fired as well as the sequence in which those weapons, Weapon A and Weapon B, were fired," said Labbe. "It was also able to show distance, which put Shooter A and Shooter B where the witness said they were standing in relationship to the victim. These distance measurements corroborated the location where the physical evidence—shell casings—were located by investigators, giving us evidence to recreate the crime scene, further corroborating the testimony of the lone witness to the murder."

Additionally, Ray was able to confirm that Shooter B had only fired six rounds. According to Labbe, that evidence was also essential to the case. "We know where Shooter B was standing based on the witness and we know the revolver he had on him

“ShotSpotter’s combination of technology and data analysis, in my opinion, was crucial to convince the jury,” said Labbe. “It corroborated a witness at the scene who was no longer available to be questioned.”

Detective Ty C. Labbe
Los Angeles County Sheriff's Department, Homicide Division

only shoots six bullets without a reload.”

Beyond Reasonable Doubt

As the trial date neared, the value of the ShotSpotter data took on an increasing and essential importance to the case and its ultimate verdict.

“The eyewitness to the murder was [himself] murdered in the weeks prior to the trial,” said Gutierrez. “When I tried this case we did not have live eyewitness testimony.” Though the witness’s testimony had been read into the court record, this presented a challenge for Gutierrez. “Our concern was that without that witness it was possible that a juror or some jurors might feel there was insufficient evidence or that they needed to see the person in court.”

Ray testified as an expert witness and explained how the system works, how it stores incident information in a historical database, and how incident data confirmed the witness’s story of events.

An audio recording of the event, automatically captured by the ShotSpotter GLS, was played for the court while Ray explained to jurors how she analyzed the audio to distinguish differences in weapon caliber, identify the number of shooters, plot the sequence of shots fired by each gun, and pinpoint the location of each round fired.

For Gutierrez and the members of the jury, hearing the actual audio from the event was “very powerful.”

“When the sound of the gunshots was played, the jurors realized ‘we are hearing the shots fired at this person who ultimately died,’” said Gutierrez.

Guilty as Charged

According to those involved in the case, the scientific nature of the forensic data, analysis, and expert witness testimony provided by the ShotSpotter GLS and the company’s expert personnel provided circumstantial evidence essential to proving beyond a reasonable doubt that the defendants were guilty of murder in the first-degree, with all special allegations true.

“ShotSpotter’s combination of technology and data analysis, in my opinion, was crucial to convince the jury,” said Labbe. “It corroborated a witness at the scene who was no longer available to be questioned.”

For Gutierrez, the ShotSpotter data was compelling in two ways. “The jurors were able to hear the sound of these two different firearms being used,” said Gutierrez. “The ShotSpotter GLS data and expert witness testimony provided unbiased corroboration for the eyewitness’s description of the shooting and the number of shots fired, as well as the fact that there were two different shooters using different firearms.”

To law enforcement personnel working to alleviate violence on the streets of South Los Angeles, the ShotSpotter GLS has repeatedly proven itself to be a mission-essential tool. By providing persistent wide-area acoustic surveillance that captures and stores unbiased forensic evidence of weapons fire, the ShotSpotter GLS proves its value beyond use in police communications and dispatch centers. Crime investigators, as shown in this case study, use system data in cooperation with prosecutors to strengthen court cases, secure convictions, and obtain more plea bargains.

When case trials conclude faster or result in a plea bargain as a result of ShotSpotter GLS evidence, prosecutors and members of a district attorney’s office can address additional court cases with greater efficiency and reduced costs for the court, prosecution, jail, and armored transport of defendants between jail and court. The result is a reduction in gun violence and improved community and law officer safety while the police department and judicial organization achieve greater effectiveness with available resources.

ShotSpotter®
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Attachment # 7:
Washington Post Articles

One Officer, SUV Left Scene Of Fatal D.C. Police Shooting

By Allison Klein and Keith L. Alexander
Washington Post Staff Writers
Thursday, September 20, 2007; Page A01

Federal prosecutors assumed the lead role yesterday in the investigation into a D.C. police shooting that killed a 14-year-old youth, and more questions emerged about the conduct of the two off-duty officers involved, including why one left the scene.

Law enforcement sources also revealed that authorities first learned of the shooting Monday night through technology designed to detect the sound of gunfire -- and not from the officers themselves. A rooftop ShotSpotter sensor directed police patrols to the Southeast Washington street where they found the body of DeOnté Rawlings, who had been shot in the head.

Police Chief Cathy L. Lanier and other officials provided few new details yesterday about the shooting, which took place after the youth allegedly opened fire on the officers. Authorities have said the officers -- identified yesterday as James Haskel and Anthony Clay -- were riding in Haskel's sport-utility vehicle and looking for a minibike stolen from Haskel's home when they found DeOnté astride it.

Haskel, 44, a 22-year member of the force who works in the helicopter unit, was the only officer to shoot, police said. Clay, 43, did not draw his weapon, officials said. Clay is a 19-year member of the force assigned to the training academy, where he produces instructional videos. Both officers were placed on administrative leave, as is common practice in police shootings.

Mayor Adrian M. Fenty and Police Chief Cathy L. Lanier announce that the U.S. attorney's office is conducting an independent investigation.
(By Nikki Kahn -- The Washington Post)

The youth's family and neighborhood residents have expressed doubts about the police version of events. Police have yet to find the gun allegedly used by the youth or the minibike. Yesterday, law enforcement sources voiced concerns about another key piece of evidence: the SUV, which officials have said was struck in the driver's-side door by a gunshot allegedly fired by the teenager.

Clay rode off in the dark-colored 1999 Chevy Tahoe immediately after the shooting, according to the sources, who spoke on the condition of anonymity because the inquiry is continuing. The sources said that Haskel urged Clay to leave with the vehicle and that Haskel feared that if people in the Condon Terrace neighborhood recognized it, he and his family might be at risk. Clay returned about 10 or 15 minutes later, the sources said, without the SUV; the sources were unclear about where the vehicle was left. It is now in the custody of prosecutors.

Police officials have said the events were set in motion when Haskel arrived at his Southeast Washington home Monday evening and discovered that the minibike was missing. He and Clay, both out of uniform, set off to look for it, the officials said. One law enforcement source said police received a call Monday evening, shortly before the shooting, from a neighbor of Haskel's alerting them to the break-in at the officer's home.

The shooting occurred about 7:30 p.m. in the 600 block of Atlantic Street SE. An angry crowd quickly assembled, and Lanier has said the gun allegedly used by the youth probably disappeared in the chaos.

Eight shell casings from Haskel's police-issued 9mm Glock were recovered from the scene, police said. Three shell casings from a .45-caliber handgun were found, and police said that gun might have been fired by DeOnté.

The sources said that the ShotSpotter technology, which relies on a network of noise sensors on buildings, confirmed that two guns were fired in the area at the time of the confrontation. Authorities are hoping that the same technology will indicate which gun was fired first, the sources said.

Mayor Adrian M. Fenty (D) and Lanier held a news conference yesterday to announce that the U.S. attorney's office is conducting an independent investigation, which is standard procedure in police shootings. Lanier then declined to answer questions about the case, saying it was in the hands of the U.S. attorney. Prosecutors said they could not comment because the investigation is underway.

Lanier said police have turned over materials to the prosecutors and are cooperating fully. The chief said police will continue an internal review to determine whether the officers violated procedures. She declined to say what rules might apply or whether she thought any were broken.

Lanier and Fenty promised a full airing once the investigation is complete. They said that they understood the public's need for answers and that they, too, have questions.

"We want to do everything possible to maintain the public trust," Fenty said.

DeOnté's family continued to say yesterday that he did not have a gun. They said they think someone in the crowd fired at the officers.

The family has described DeOnté as a smart and dependable youth who stayed out of trouble. The teen's father, Charles Rawlings, said that DeOnté had been questioned by police many times in the past year about crimes in the area, including a homicide, but that DeOnté had not been charged in any of them.

Yesterday afternoon, family members and friends of DeOnté's gathered around a television to watch Fenty and Lanier promise an investigation into DeOnté's death.

Tears rolled down the faces of DeOnté's brothers and other relatives and friends as they watched the live coverage of the news conference. DeOnté's mother didn't finish watching the official remarks. She ran into the bathroom shrieking.

"That was my baby," Loretta Bethwith Hall screamed from inside the bathroom. "I'm sorry. I'm sorry. Please, somebody tell me. Oh, God. Somebody tell me why. I need somebody to explain it to me."

Anger, confusion and sorrow filled the split-level house where DeOnté lived with his father, stepmother, brother and sister for the past nine years.

DeOnté was remembered as a boy who loved the Washington Redskins and Los Angeles Lakers. He often attended Bible studies with his father at the nearby First Christian Science Church, where his father also worked, family members said. His bedroom, which he shared with his 18-year-old brother, George, was painted basketball orange. A PlayStation 2 and a television were in a corner of the room, which had twin beds.

George Rawlings said DeOnté never owned a minibike and never brought one home. "He had a mountain bike, that's it," he said.

"Where is the gun he was supposed to have? Where is this bike?" George Rawlings asked. "What is taking them so long to find it if he had them?"

Staff writers Carol D. Leonnig, Robert E. Pierre, Jenna Johnson, Nikita Stewart and Del Quentin Wilber contributed to this report.

washingtonpost.com

Noise Sensors Back Police On Shooting Of D.C. Teen

By Carol D. Leonnig
Washington Post Staff Writer
Wednesday, October 31, 2007; A01

Gunshot sensors indicate that the first shot fired in the police confrontation with 14-year-old DeOnté Rawlings did not come from the off-duty D.C. officers at the scene but from a higher-caliber weapon close to where the slain youth fell, law enforcement sources said.

The data provide support to the account of Officer James Haskel, who said he was not the first to fire a gun the night of Sept. 17. But it does not settle the question of whether DeOnté fired a weapon. Haskel has said he shot the youth after he engaged in a running gun battle with DeOnté over a stolen minibike.

The sensor system, known as the ShotSpotter, indicated that eight shots were fired by the police weapon, a 9mm Glock, and that four shots came from a higher-caliber weapon, which police believe to be a .45-caliber handgun, according to four law enforcement sources. ShotSpotter Inc., the company that provides the sensors, helped perform the analysis for D.C. and federal authorities.

The sources spoke on the condition of anonymity because of the sensitivity of the case. They said that investigators have retrieved seven of the eight casings from Haskel's gun. Shell casings from a .45-caliber gun were recovered, but the gun that DeOnté allegedly fired was not found at the scene in Southeast Washington.

An autopsy showed the youth died of a gunshot wound in the back of the head, and his body was marked with bruises and scrapes.

The case has generated community tensions and a lawsuit from the Rawlings family, which contends that the youth never would have fired a weapon. Law enforcement specialists also have questioned the judgment of Haskel and his friend, Officer Anthony Clay, who were out of uniform and acting on their own when they set off in Haskel's sport-utility vehicle in search of the minibike. Haskel believed that the minibike had been stolen from his home, police have said.

Gregory Lattimer, the attorney for the Rawlings family, called the analysis of the sensor data "pure poppycock," and he repeated his contention that the officers acted improperly. "The facts are the facts," he said. "DeOnté Rawlings didn't have a gun and didn't shoot anybody."

Haskel and Clay, who live in a Washington Highlands development, told authorities that they found DeOnté riding the minibike nearby in the 600 block of Atlantic Avenue SE. Haskel has told authorities that the youth shot at him and that he responded by getting out of his SUV and firing his 9mm service weapon at DeOnté. Authorities have said that Haskel and Clay did not have a chance to identify themselves as police officers.

The law enforcement sources cautioned that ShotSpotter, though a useful tool, is not the final word and that its data must be corroborated by other evidence. ShotSpotter data, on its own, has not yet been admitted in court as evidence against a defendant.

The gunshot sensors -- part of a network installed last year on rooftops in many city neighborhoods -- were used to pinpoint the timing and approximate location of the shots fired that night, the sources said. The information was provided to authorities three days after the shooting. The details have not been officially released pending the completion of the investigation.

The probe should be complete in the coming weeks, the sources said.

Police officials and a spokesman for the U.S. attorney's office declined to comment on the findings, citing the ongoing investigation. Haskel and Clay remain on leave while the probe continues.

ShotSpotter was installed to help police track gun violence and catch the shooters, relying upon the sensors and Global Positioning System tracking. D.C. police obtained the system with help from the FBI and operates it in consultation with ShotSpotter Inc.

The ShotSpotter analysis indicated that the first shot came from the location where DeOnté had allegedly been on the minibike and that subsequent shots came from the general area where Haskel and Clay had been sitting in Haskel's parked SUV, the sources said.

The weapons, though not precisely identified by ShotSpotter technology, made distinctly different sounds, with Haskel's 9mm being the quieter of the two, the sources said.

ShotSpotter's ability to track gunshots can be impaired by unusual topography or high-rise buildings. But the sources said no questions have emerged about its reliability in determining the sequence of gunfire in a scenario such as the shooting of DeOnté.

Big-city police chiefs say ShotSpotter not only alerts police to gun battles but also helps them piece together some perplexing crime puzzles. The technology is operating in 17 cities, including San Francisco, Newark and Charleston, S.C., and is being installed in seven more.

The FBI, which purchased the ShotSpotter sensors as a pilot project for the District, considers the technology so reliable that it has bought two more systems for cities plagued by violent crime and has plans to buy systems for other cities.

ShotSpotter spokesman Gregg Rowland said he could not discuss the details of the company's report in the Rawlings case. But he said the sensors provide an "important piece of the puzzle" for any investigation.

"We're like a live witness on the scene with very good eyes and ears," Rowland said. "Most police officers will match up our information with shell casings on the ground and any eyewitness testimony. When you add up A plus B plus C plus D, you can come to some conclusions."

Staff writers Allison Klein and Allan Lengel contributed to this report.

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Attachment # 8:
Press Release and FBI Webpage

ShotSpotter Assists FBI, Franklin County Sheriff in Apprehending Ohio Sniper Suspect

Columbus, Ohio, March 22, 2004 – ShotSpotter, Inc., the country's leading developer of gunshot location systems and technology, announced today that its products were used by the Federal Bureau of Investigation and the Franklin County Sheriff's Department in their investigation of accused Ohio highway sniper Charles McCoy Jr. Several ShotSpotter Gunshot Location Systems were deployed in the area of interest during the months-long operation that was headed jointly by the FBI and the Franklin County Sheriff's Department.

ShotSpotter was contact by the FBI in late 2003 and deployed the first of its ShotSpotter GLS Systems within days. "The ShotSpotter Gunshot Location System does exactly what it promises to do," said Sergeant Ross Staggs, Detective Bureau, Franklin County Sheriff's Department. "Knowing the precise location and timing of a shooting within seconds is crucial, and knowing whether the shooter was moving, which the ShotSpotter system also tells us, is even more important."

"We are honored to have been able to assist in this investigation," said Major General (Ret.) Steve Siegfried, former head of Homeland Security for South Carolina and Vice Chairman of ShotSpotter. "Gunfire remains the single leading cause of homicide death in this country, and it is ShotSpotter's mission to help control it."

The ShotSpotter system uses the principle of acoustic triangulation to provide accurate locations for gunshot events in urban environments. ShotSpotter systems can detect gunfire over two miles away. The system is hardened to account for and filter out local anomalies and echoes often prevalent in noisy cities, and can even tell the difference between a gunshot and a car backfiring or a firecracker going off.

Sniper suspect Charles A. McCoy Jr. was arrested the morning of March 18 by FBI and local law enforcement personnel in Las Vegas, NV, where he had been under surveillance. Earlier in the week, the Sheriff's office released his photograph and a description of his vehicle, naming him a suspect in a string of highway shootings in and around the Columbus, Ohio area.

About ShotSpotter, Inc., www.shotspotter.com
ShotSpotter, Inc., the leading developer of gunshot location systems and technology, is based in Mountain View, CA. ShotSpotter's flagship product, which detects gunfire across large urban areas using a small number of inexpensive and easy-to-deploy sensors, currently protects the citizens of cities nationwide, from Los Angeles, CA to Charleston, SC. In 2000, ShotSpotter was honored for its techology vision and leadership when it was nominated by William H. Gates, Chairman and Chief Software Architect of Microsoft Corporation, and the Smithsonian added its technology to the museum's permanent collection. With its technology covered by a US Patent, and with other patents pending, the company also offers products to the homeland security and military markets. ShotSpotter technology has produced arrests and weapons confiscations nationwide and has helped reduce gunfire and crime rates in cities which deploy it, making our streets safer and helping to revitalize local economies previously stunted by crime and violence.

# # #

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Fields PR
(425) 497-0128
stacey@fieldspr.com

A WEAPON AGAINST CRIME
Tracking the Sound of Gunfire

01/23/08

The situation was dire. A sniper was terrorizing the area around Columbus, Ohio, firing randomly at drivers and buildings near I-270 beginning in November 2003. One person had been killed, others had been wounded, and more casualties were expected unless they could find the culprit. But weeks into the joint investigation, the Franklin County Sheriff's Department and the FBI still had no solid leads.

Finally, during a strategy session with our law enforcement partners, FBI Supervisory Special Agent Ron Chavarro offered a possible solution—a private sector technology called ShotSpotter that he'd overheard others talking about at a conference.

ShotSpotter, he explained, is a new crime-fighting tool that helps locate and track gunfire using "acoustic triangulation"—caused when sound waves are recorded at two or more locations.

Employing a network of hidden microphones linked to a central computer, the system is designed to detect a shot within seconds. It can "hear" a gunshot, provide accurate location information within several miles depending on the number of sensors deployed, and archive the audio for forensic analysis. The technology is also capable of determining information relating to the direction and speed of shooters on the move.

But would it work in this case? Although initially skeptical, the task force leadership decided to deploy the system along I-270. Within hours of becoming operational, ShotSpotter began to register the sound of gunfire. The resulting data led investigators to pinpoint the location of the shots, where shell casings were recovered. Armed with this information, we were later able to locate and arrest the shooter—Charles McCoy, Jr.—in March 2004. McCoy later pled guilty to the shootings.

Impressed by the technology and its potential value in other shooting investigations, Chavarro brought ShotSpotter to the attention of our Washington Field Office Criminal Division. Working closely with the company, our Washington office devised a plan to offer it as a pilot program in the D.C. area to help agents and local police in more violent neighborhoods.

A partnership was set up between the FBI and the Washington Metropolitan Police Department in late 2005. Since then, the system has helped locate gunshots fired in urban environments and has guided authorities there to several homicides. In addition, because it differentiates between and filters out other sounds frequently heard in noisy cities, like car backfires or fireworks, it has cut down on police having to investigate unnecessary false alarms.

Soon the word began to spread to other FBI offices. Currently, the system is deployed in a dozen cities nationwide where shooting incidents occur more frequently. Special agents working these cases hope that

by integrating technologies like ShotSpotter they will be better able to locate violent criminals and produce valuable forensic data in court to help convict them.

“This technology has been an invaluable tool in helping us fight violent crime,” says Chavarro. “We’d welcome the opportunity to partner with other law enforcement agencies in deploying and utilizing this system in other jurisdictions.”

To work with Chavarro, contact our Washington field office.

http://www.fbi.gov/page2/jan08/shotspotter012308.html

ShotSpotter®
Sense. Target. Protect.

Attachment # 9:
York, P.A.
Police Commissioner
Mark Whitman

York City Police adjust coverage thanks to ShotSpotter

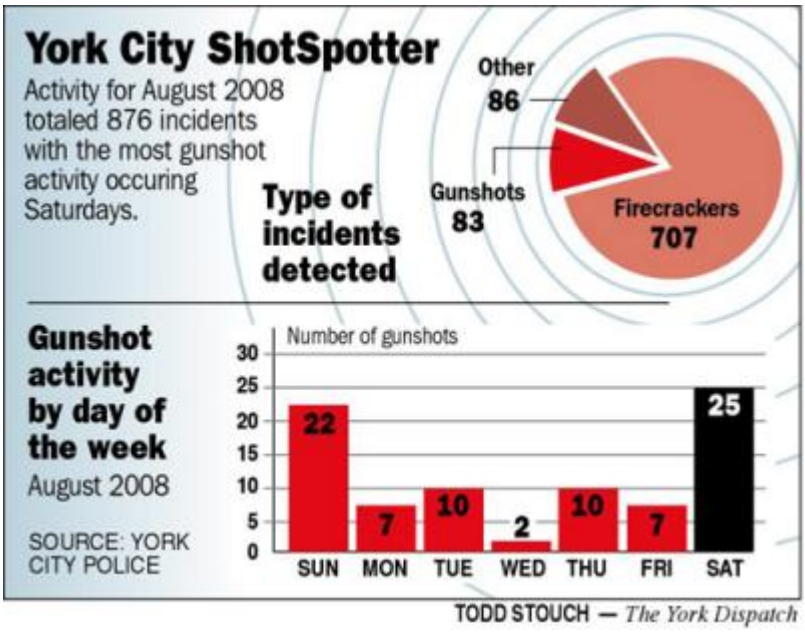
BROCK PARKER - The York Dispatch
Article Last Updated: 09/11/2008 10:50:36 AM EDT

York City Police have begun targeted patrols based on information from the city's new ShotSpotter system.

Police Commissioner Mark Whitman said Wednesday that adjustments to the gunfire detection system are enabling police to more precisely pinpoint the location of gunfire, instead of simply using the system identifying the general area of shots.

As a result, Whitman said, police have started some "more directed gun patrols" and are hoping they lead to more arrests and deterrence.

In August, the ShotSpotter system detected 83 incidents of gunfire in the city -- down from 157 gunshots picked up by the system in July and 103 shots detected in June, according to York City Police.



TODD STOUCH — *The York Dispatch*

"I think 83 is a very high number," Whitman said. "Our goal is to get it to as close to zero as we can."

The number of firecrackers detected by the ShotSpotter system in August was 707 -- down dramatically from the 4,463 incidents in July and the 1,339 firecrackers the system detected in a single day on July 4th.

Whitman said police are also about to install two additional sensors for the ShotSpotter system to address areas where gunfire has been verified by police officers, but went undetected by the system. The system of sound sensors and cameras is designed to detect gunshots, map their location and notify police and York County 911 within seconds. It will cost the city $650,000 during the next five years.

Early results: Despite continuing needs to adjust and "tweak" the ShotSpotter system throughout the first year of its use, Whitman said, police are already seeing results.

He said police were able to use the system to help identify some people at the scene of the fatal shooting of Ian Chambers, who was shot in the area of South Penn and West Princess streets Saturday afternoon.

Whitman said the ShotSpotter system detected the gunfire simultaneously or possibly even prior to the first report police received of the shooting, and he said police did recover one gun at the scene.

By being able to quickly identify the exact location of a shooting, Whitman said the ShotSpotter system often allows police to arrive at crime scenes more quickly, and as a result they can collect better evidence to build a case.

In other instances, Whitman said, police have used the ShotSpotter system to "verify or knock down" the stories of people who arrive at York Hospital with gunshot wounds, and claim to have been shot in certain locations of the city. Sometimes the stories have checked out, or have been disproved by the ShotSpotter system, Whitman said.

"As an investigative tool, it's been beneficial," Whitman said.

Reach Brock Parker at 505-5434 or bparke r@yorkdispatch.com.