

# DEPARTMENTAL INPUT

## CONTRACT/PROJECT MEASURE ANALYSIS AND RECOMMENDATION

☒ New   
 ☐ OTR   
 ☐ Sole Source   
 ☐ Bid Waiver   
 ☐ Emergency   
 Previous Contract/Project No.  

☐ Contract   
 ☐ Re-Bid   
 ☐ Other   
 LIVING WAGE APPLIES: ☐ YES ☒ NO

Requisition No./Project No.: TBD   
 TERM OF CONTRACT 5 YEAR(S) WITH 5 1 YEAR OTRs

Requisition /Project Title: Acoustic Gunshot Detection Solution

Description: The purpose of this solicitation is to to implement an acoustic gunshot detection solution (AGDS) in specified areas of Miami-Dade County (MDC).

Issuing Department: MDPD   
 Contact Person: Brad Skinner   
 Phone: 305-375-1075

Estimate Cost: \$2,400,000 for initial term   
 Funding Source: GENERAL   
FEDERAL   
OTHER

General Fund

### ANALYSIS

<b>Commodity Codes:</b> <span style="border: 1px solid black; padding: 2px;"> </span> <span style="border: 1px solid black; padding: 2px;"> </span> <span style="border: 1px solid black; padding: 2px;"> </span> <span style="border: 1px solid black; padding: 2px;"> </span> <span style="border: 1px solid black; padding: 2px;"> </span>			
Contract/Project History of previous purchases three (3) years			
Check here <input checked="" type="checkbox"/> if this is a new contract/purchase with no previous history.			
	<b><u>EXISTING</u></b>	<b><u>2<sup>ND</sup> YEAR</u></b>	<b><u>3<sup>RD</sup> YEAR</u></b>
<b>Contractor:</b>	<span style="border: 1px solid black; padding: 2px;"> </span>	<span style="border: 1px solid black; padding: 2px;"> </span>	<span style="border: 1px solid black; padding: 2px;"> </span>
<b>Small Business Enterprise:</b>	<span style="border: 1px solid black; padding: 2px;"> </span>	<span style="border: 1px solid black; padding: 2px;"> </span>	<span style="border: 1px solid black; padding: 2px;"> </span>
<b>Contract Value:</b>	<span style="border: 1px solid black; padding: 2px;">\$</span>	<span style="border: 1px solid black; padding: 2px;">\$</span>	<span style="border: 1px solid black; padding: 2px;">\$</span>
<b>Comments:</b> <span style="border: 1px solid black; padding: 2px;"> </span>			
Continued on another page (s): <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO			

### RECOMMENDATIONS

	Set-aside	Sub-contractor goal	Bid preference	Selection factor
<b>SBE</b>	<span style="border: 1px solid black; padding: 2px;"> </span>	<span style="border: 1px solid black; padding: 2px;"> </span>	<span style="border: 1px solid black; padding: 2px;"> </span>	<span style="border: 1px solid black; padding: 2px;"> </span>
<b>Basis of recommendation:</b>				
<span style="border: 1px solid black; padding: 2px;">See scope.</span>				
Signed: <i>Brad Skinner</i>		Date sent to SBD: <span style="border: 1px solid black; padding: 2px;">12/14/2015</span>		
		Date returned to ISD Procurement: <span style="border: 1px solid black; padding: 2px;"> </span>		

11/12/15  
Memorandum



**Date:** November 6, 2015

**To:** Joy T. Stewart, Executive Senior Bureau Commander  
Fiscal Administration Bureau

**From:** Jose L. Rivero, Commander *(SR)*  
Information Technology Services Bureau

**Subject:** Purchase Request for Acoustic Gunshot Detection Solution

**RECOMMENDATION:**

It is requested that a purchase request be approved for the Acoustic Gunshot Detection Solution (AGDS).

Awarded Vendor:	To Be Announced
Vendor FEI:	To Be Announced
Proposed Contract Term:	5 years
Amount:	\$2,400,000
Requested by:	Paul deBodor Angelo XXVII, Police Sergeant
Phone Number:	(305) 471-3085
Ship to Address:	9105 NW 25 Street, Miami, Florida 33172
Index Code:	Impact Fees; code to be determined
Sub-Object Code:	Impact Fees; code to be determined

PD 560408  
22430

**BACKGROUND:**

In response to numerous gunfire incidents in certain areas, it is essential for the Miami-Dade Police Department (MDPD) to increase incident location accuracy, decrease response times, and improve the likelihood of obtaining forensic evidence. To fulfill these needs, an Acoustic Gunshot Detection Solution has been adopted by numerous agencies across the nation, as well as by those contiguous to the MDPD. This Purchase Request covers startup and subscription costs for five years of service for one area in the Northside District and two areas in the South District.

**APPROVED**

**DATE**

**DISAPPROVED**

*(Signature)*  
\_\_\_\_\_  
Juan Santana, Chief  
Special Investigations Division

*11/12/15*  
\_\_\_\_\_

\_\_\_\_\_  
Juan Santana, Chief  
Special Investigations Division

JLR/pda  
Attachments

Prepared by: Sergeant Paul deBodor Angelo XXVII, ITSB-RTCC

Reviewed by: Fiscal Administration Bureau, Budget Liaison (if Applicable)

Chief Financial Officer Gus Knoepffler

Assistant Director Alfredo Ramirez III

Deputy Director Juan J. Perez

Initials

Date

<i>GS</i>	<i>11/16/15</i>
<i>JK</i>	<i>11/5/15</i>
<i>AL</i>	<i>11/6/15</i>
<i>JP</i>	<i>11/9/15</i>

2015 NOV 12 AM 7:00  
RECEIVED  
FISCAL  
ADMINISTRATION BUREAU

FAB 21108

## **SCOPE OF SERVICES**

### **ACOUSTIC GUNSHOT DETECTION SOLUTION (AGDS)**

#### **2.1 Introduction**

This document provides the project services required by the Miami-Dade Police Department (MDPD) in order to implement an acoustic gunshot detection solution (AGDS) in specified areas of Miami-Dade County (MDC).

#### **2.2 Background**

The MDC land mass covers over 2,400 square miles. Less than half of that area is developed. The developed area supports 2.6 million residents and over 13 million annual visitors.

The MDPD serves as the County Sheriff's Office, and provides specialized services to the entire county, including municipalities that have their own police department. The MDPD is solely responsible for law enforcement services to about half of the county's residents with approximately 2,600 sworn personnel.

Because random and intentional gunfire are significant problems, the MDPD has taken an aggressive stance to curtail gun violence. In October 2014, the MDPD formed a partnership with Forensics Logic, Inc., provider of the Law Enforcement Analysis Portal (LEAP), to help address these concerns. This portal is a repository for intelligence information that allows law enforcement to share data that may not otherwise have been made available to local, state, and federal agencies. As the largest source of law enforcement data, the analytical features of LEAP allow users to make "connections" and make other previously-unavailable analysis.<sup>1</sup> In addition to LEAP, the MDPD has been incorporating the National Integrated Ballistic Information Network (NIBIN), a forensic based technology, into their investigations in order to make every effort to identify and arrest shooters. The MDPD has discovered that the ballistic information from NIBIN has "confirmed more than 68,000 NIBIN hits".<sup>2</sup> Though NIBIN has been an integral tool that has helped link individuals to firearm-related crimes, the combination of LEAP and NIBIN is just one of several methods that MDPD is leveraging to overcome the plague of gun violence occurring within MDC.

The MDPD proposes to develop and implement a comprehensive, analysis-and forensic-driven approach to reduce gun violence within the region by incorporating gunshot detection technology as a component of a larger initiative. This initiative will be innovative because it:

- Has not been widely implemented in the region.
- Takes a *regional* approach in lieu of *jurisdictional*.
- Takes an interdisciplinary approach.
- Integrates disparate resources and related resources.
- Technology-driven (not manpower intensive).
- Is an operational component of the MDPD Real-Time Crime Center (RTCC)
- Directly feeds information to the MDPD Forensic Services Bureau.

---

<sup>1</sup> Forensic Logic, Inc., Product Overview, web: <http://www.forensiclogic.com/our-products>

<sup>2</sup> United States Department of Justice, Fact Sheet, Feb. 2015, web: <http://www.atf.gov/publication/factsheets/factsheet-nibin.html>

- Directly feeds information to the MDPD RTCC
- Directly feeds information to the MDPD Communications Bureau for dispatch
- Represents crime-fighting capabilities heretofore only seen in the realm of science fiction.

### **2.3 Current Operating Environment**

There are multiple areas that are plagued by gunshot incidents. Such areas are several square miles each. The large quantity of gunshots in these areas has compelled the MDPD to modernize its methods of response. Such modernization will increase the accuracy of locating gunshot incidents, will decrease the response times thereto, and will improve the likelihood of obtaining invaluable forensic evidence.

To help address such gunshot incidents, numerous initiatives have been in place for many years. These initiatives, implemented at varying but significant cost, included:

- Area saturation
- Line patrol
- Anonymous "tip lines"
- Non-secular public appeals
- Secular public appeals
- Community involvement
- Community-oriented policing

The efficacy of these initiatives is varied.

For gunshot incidents, multiple problems hamper the MDPD response:

- No report from the public
  - Did not hear the incident
  - Did not recognize the incident as a gunshot
  - Did not care
- Delayed report from the public
  - Fear of reporting/becoming involved
  - Did not feel compelled to report
  - Did not know how to report
  - Delayed report often eliminates evidence
    - No timely apprehension of subject
    - Forensic evidence reduced or eliminated
- Inaccurate report from the public
  - Incorrect time or date
  - Incorrect location
  - Incorrect quantity of shots fired
  - Incorrect type of weapon identified
  - Reporting engine backfire or firework as gunshot

Regardless of the reason, delayed or inaccurate information always causes a delayed, incorrect, or insufficient response from the MDPD. Such delays lead to the loss of forensic evidence:

- cartridge cases
- projectiles
- bodily fluids/DNA
- footprints
- theft of weapon left on scene
- other evidence tampering by indigenous personnel

- video

Such inaccuracies and reporting delays regularly permit the subject to escape and continue to pose a danger to citizens.

#### **2.4 Desired Solution Functionality**

It is critical for the MDPD to increase gunshot detection location accuracy, decrease response times, apprehend fleeing subjects, and improve the likelihood of obtaining forensic evidence.

To help fulfill its mission, the MDPD requires a gunshot detection solution whereby all hardware, software, acoustic vetting, and maintenance is handled by the vendor; the epitome of a "turn-key" solution. Such a service is to be quoted for a period of five (5) years, and is to provide coverage for a finite Gunshot Detection Zone (GDZ). The MDPD currently desires such a solution for each GDZ listed below:

- GDZ #1 (4 square miles)
- GDZ #2 (2 square miles)
- GDZ #3 (2 square miles)

To avoid vandalism or any other compromise of the deployed hardware, it is of the utmost importance that location information be withheld from the public. Geographic boundary information will be provided at a later time on a "need-to-know" basis.

The acoustic gunshot detection solution should perform as follows:

1. Install hardware on public or government property.
2. Provide vetted confirmation within 60 seconds of gunshot detection.
3. Provide exact X, Y, and Z coordinates in addition to the address.
4. Overlay incident location onto existing MDPD-utilized mapping.
5. Ensure that vetting is conducted by Subject Matter Experts.
6. Ensure that vetting determines the nature of a sound is a gunshot and not vehicles, fireworks, or other similar sounds.
7. Provide a date- and time-stamped digital recording of the incident for immediate playback.
8. Provide the ability to record the event and save all corresponding information in a method compatible with current MDPD computer systems.
9. Ensure sixty-day data retention.
10. Acoustic sensors must be certified to withstand south Florida windstorm and other harsh climate conditions.
11. Favorable and extensive record of service with 2+ square mile coverage areas in cities within the United States of America.
12. Solution must be able to timestamp individual gunshots to at least 1/10 of a second utilizing a GPS clock or clock compatible with existing MDPD Netclock time stamping.
13. Ability to network acoustic sensors together in a Wide Area Network (WAN) utilizing any/all of the following communication methods: wireless 900 MHz, hardwire, existing WAN access point, public wireless/cellular carriers (encrypted as necessary).
14. Provide the option to interface with networked video surveillance cameras remotely controlled by the MDPD.
15. The solution must be United States Department of Homeland Security (DHS) Safety Act certified and be listed on the DHS Responder Knowledge Base as an allowable use for DHS funds.

16. Total data output from the vendor must assist the MDPD to recreate an incident to assist the forensic investigation: exact location of each shot, exact time of each shot, and matching forensic-grade digital recordings.
17. Vendor must have a favorable record of its data being accepted by court systems in the United States of America.
18. Vendor must have documentation to support the claim of contributing to a reduction of gun-related crime in coverage areas in the United States of America.
19. Vendor must provide, at no charge, forensic and other Subject Matter Expert witnesses to assist the MDPD and the Miami-Dade County State Attorney's Office in the prosecution of cases.
20. Provide a "turn-key" type service, where all hardware, software, maintenance, upgrades, training, and technical support are provided by the manufacturer/vendor, all for a single fee, which the MDPD pays once per year.
21. Solution must be 100% seamless and otherwise compatible with gunshot detection solutions implemented in areas of concern that are contiguous to MDPD-patrolled territory.
22. Vendor will supply a quote for a system described herein, wherein such system is plug-and-play ready for a high-definition, all-weather, video and audio camera system; such system may be purchased by Miami-Dade County (MDC) at a later date; such system will be compatible with the existing MDC video management system (currently Genetec).
23. Vendor will also supply a quote for a system described herein, wherein such system includes a high-definition, all-weather, video and audio camera system; such system shall be compatible with the existing MDC video management system (currently Genetec).
24. To ensure accountability and decrease the quantity of "outside" personnel who are aware of the location of deployed hardware, the vendor must be the only entity involved in the installation and maintenance; no outside contractors.

## **2.5 Required System Interoperability**

The selected AGDS must be seamlessly interoperable with the AGDS in use by agencies whose geographic areas of responsibility are contiguous to those areas in which the MDPD seeks to deploy its own AGDS. Such interoperability is critical in the event of proximal or mobile gunshot incidents.

The selected AGDS must be seamlessly interoperable with the existing dispatch systems used by the MDPD Communications Bureau reference e911 Dispatch functions.

## **2.6 Required Interfaces**

The selected AGDS must be seamlessly interoperable with the existing MDC video management solution (currently Genetec).

## **2.7 Implementation/Configuration Services**

The vendor must provide the epitome of a "turn-key" system, whereby all permitting, site surveys, hardware, software, communication, function, vetting, and data deliverables are the responsibility of the vendor.

It is understood that the MDPD and MDC will provide basic support in order to achieve installation and operational goals of the vendor.

## **2.8 Maintenance and Support Services**

The vendor shall be solely responsible for maintaining the full functionality of their service, including (but not limited to) maintenance of and upgrades to their hardware, software, and procedures that ensure fully vetted and timely deliverables.

In the event of theft, vandalism, weather events, or other damage to vendor-owned and vendor-operated hardware, the vendor shall be responsible for replacing the item(s) with the same or better versions at no cost to the MDPD or MDC. Moreover, vendor shall endeavor to effect such repairs or replacement in an expeditious manner.

## **2.9 Training**

Vendor shall provide training to designated persons within the MDPD as part of their service.

## White Jr., Tyrone (ISD)

---

**From:** Skinner, Brad (ISD)  
**Sent:** Monday, December 28, 2015 12:36 PM  
**To:** White Jr., Tyrone (ISD)  
**Cc:** Johnson, Laurie (ISD)  
**Subject:** RE: RFP-00327 - MDPD Acoustic Gunshot Detection Solution  
**Attachments:** image001.png

Hi Tyrone,

Below are the commodity codes we will be associating with this RFP

203-34 - Covers and Enclosures (acoustical and Protective) (for Equipment), Environmentally Certified Products  
655-96 - Video Capturing Devices Connected To Computers or Computer Networks, (web Cameras)  
803-18 - Electronic Sound Equipment (not Otherwise Classified)  
838-83 - Telecommunication (Internet Protocol) Network Monitoring, Surveillance, Intrusion Detection Systems and Networking Products  
840-67 - Video Camera Recorders, Digital Type  
918-93 - Security/safety Consulting  
920-64 - System Implementation and Engineering Services

Thanks!!!

**Brad Skinner** [MiamiDade County] Internal Services Department | Procurement Management Division  
Procurement Contracting Officer 2  
Office: (305) 375-1075  
E-mail: [brads@miamidade.gov](mailto:brads@miamidade.gov)

**Connect With Us** on [Twitter](#) | [Facebook](#) | [Instagram](#)

Miami-Dade County is a public entity subject to Chapter 119 of the Florida Statutes concerning public records. E-mail messages are covered under such laws and are subject to disclosure.

---

**From:** White Jr., Tyrone (ISD)  
**Sent:** Wednesday, December 23, 2015 12:44 PM  
**To:** Skinner, Brad (ISD) <[BRADS@miamidade.gov](mailto:BRADS@miamidade.gov)>  
**Cc:** Johnson, Laurie (ISD) <[LAURIE@miamidade.gov](mailto:LAURIE@miamidade.gov)>  
**Subject:** RFP-00327 - MDPD Acoustic Gunshot Detection Solution  
**Importance:** High

Good afternoon Brad,

Can you please provide the required commodity codes for the subject project, thanks.

**Tyrone White**  
Contract Specialist  
Small Business Development Division  
Miami-Dade County Internal Services Department  
111 NW 1<sup>st</sup> Street, 19<sup>th</sup> Floor, Miami, FL 33128  
☎Office: (305) 375-3123 | 📠Fax: (305) 375-3160  
Email: [twj@miamidade.gov](mailto:twj@miamidade.gov)



Connect With Us on [Twitter](#) | [Facebook](#) | [Instagram](#)



**"Help stimulate Miami's economy by supporting Small Businesses"**

---

**From:** Skinner, Brad (ISD)  
**Sent:** Thursday, December 17, 2015 10:29 AM  
**To:** White Jr., Tyrone (ISD)  
**Cc:** Johnson, Laurie (ISD)  
**Subject:** RE: For Contract Measures Review - MDPD Acoustic Gunshot Detection Solution

Good Morning Tyrone,

My apologies...

The project number is RFP-00327.

Thanks!!!

**Brad Skinner** |MiamiDade County|Internal Services Department|Procurement Management Division  
Procurement Contracting Officer 2  
Office: (305) 375-1075  
E-mail: [brads@miamidade.gov](mailto:brads@miamidade.gov)

Connect With Us on [Twitter](#) | [Facebook](#) | [Instagram](#)

Miami-Dade County is a public entity subject to Chapter 119 of the Florida Statutes concerning public records. E-mail messages are covered under such laws and are subject to disclosure.

---

**From:** White Jr., Tyrone (ISD)  
**Sent:** Wednesday, December 16, 2015 10:04 AM  
**To:** Skinner, Brad (ISD) <[BRADS@miamidade.gov](mailto:BRADS@miamidade.gov)>  
**Cc:** Johnson, Laurie (ISD) <[LAURIE@miamidade.gov](mailto:LAURIE@miamidade.gov)>  
**Subject:** RE: For Contract Measures Review - MDPD Acoustic Gunshot Detection Solution  
**Importance:** High

Good morning Mr. Skinner,

Can you please provide a project number for the subject project, thanks.

**Tyrone White**  
Contract Specialist  
Small Business Development Division  
Miami-Dade County Internal Services Department  
111 NW 1<sup>st</sup> Street, 19<sup>th</sup> Floor, Miami, FL 33128  
☎Office: (305) 375-3123 | 📠Fax: (305) 375-3160  
Email: [twj@miamidade.gov](mailto:twj@miamidade.gov)  
Connect With Us on [Twitter](#) | [Facebook](#) | [Instagram](#)



**"Help stimulate Miami's economy by supporting Small Businesses"**

---

**From:** Johnson, Laurie (ISD)  
**Sent:** Monday, December 14, 2015 6:01 PM  
**To:** White Jr., Tyrone (ISD); Gannon, Shawn (ISD)  
**Subject:** Fwd: For Contract Measures Review - MDPD Acoustic Gunshot Detection Solution

Please review the attachment and process as requested.

Thanks

Sent from my iPhone

Begin forwarded message:

**From:** "Skinner, Brad (ISD)" <[BRADS@miamidade.gov](mailto:BRADS@miamidade.gov)>  
**To:** "Johnson, Laurie (ISD)" <[LAURIE@miamidade.gov](mailto:LAURIE@miamidade.gov)>  
**Subject:** For Contract Measures Review - MDPD Acoustic Gunshot Detection Solution

Good Afternoon Laurie,

Would you please have the attached document assigned for Contract Measures Review.

If you have any questions, or if anything else is needed, please let me know.

Thanks!!!

Brad Skinner  
Procurement Contracting Officer 2  
Miami-Dade County Internal Services Department  
Procurement Management Division  
111 NW. 1st St. Suite 1300. Miami, FL. 33128  
Office: (305) 375-1075  
E-mail: [brads@miamidade.gov](mailto:brads@miamidade.gov)  
[www.miamidade.gov/internalservices](http://www.miamidade.gov/internalservices)<<http://www.miamidade.gov/internalservices>>

Connect With Us on Twitter<<https://twitter.com/miamidadecounty/>> |  
Facebook<<https://www.facebook.com/miami.dade.county>> |  
Instagram<<https://instagram.com/miamidademedia/>>

Miami-Dade County is a public entity subject to Chapter 119 of the Florida Statutes concerning public records. E-mail messages are covered under such laws and are subject to disclosure.