Memorandum

MIAMI-DADE COUNTY

Agenda Item No. 2(B)(6)
March 1, 2022

Date: January 11, 2022

To: Honorable Chairman Jose "Pepe" Diaz
and Members, Board of County Commissioners

From: Daniella Levine Cava
Mayor

Daniella Levine Cava

Subject: Report Describing the Results and Any Relevant Recommendations of the Carbyne Ltd. Pilot Project - Directive 211366

The following information is provided in response to Resolution No. R-614-21, sponsored by Commissioner Joe A. Martinez, and adopted by the Board of County Commissioners on June 15, 2021, directing the County Mayor to negotiate and, if successful, execute an agreement with Carbyne Ltd. for a pilot project or product demonstration relating to the 911 Call Center, and provide a report after the pilot project has concluded describing the results and any relevant recommendations.

Carbyne Ltd. is a public safety technology company that has developed a national real-time communication platform for emergency call centers. Carbyne's services include video-to-911 technology, which enables any emergency call center to turn regular calls to live video in order to better communicate with the caller.

The pilot project began on July 16, 2021, with pre-planning discussions to design the most practical workflow process within the Miami-Dade Police Department's (MDPD) Communications Bureau, 911 Call Center. The Miami-Dade Fire Rescue Department was present for the initial workflow discussions, but elected not to participate citing little opportunity to apply the technology. It was determined that a limited call volume would be the best approach to test the product's abilities. Specifically, the calls identified as acceptable for the pilot project included major incidents such as airplane crashes, train derailments, building collapses, newsworthy events, robberies in progress, shootings in progress, suicidal threats, abductions in progress, or any call requiring more accurate location of the caller. Upon receiving a 911 call, the trained call taker would verify call criteria for Carbyne use, then send an SMS invitation link to the caller. The caller can then choose to accept the invitation to share device location information and activate their camera. These images and video would then be accessible to the Real-Time Crime Center (RTCC) to view live for possible benefit to responding officers in crisis situations. Historical data, securely stored in the cloud, could also be accessed by investigators to assist them with their follow-up investigations.

The resolution adopted by the Board of County Commissioners stipulated a 30-day testing period. The go-live date for the 30-day testing period was August 16, 2021. In the days preceding this launch date, operational policies were created, 120 call taker staff were trained, and technical assistance was provided by on-site Carbyne representatives. After 30 days, data and observations were collected and analyzed by 911 Call Center staff and Carbyne representatives. There were no solicitations for caller feedback or survey requests during the testing period.

During the 30-day testing period, the 911 Call Center received 113,097 calls. Using the aforementioned criteria, the call takers were able to connect 148 calls with video and 96 with chat. All of the calls with video were stored in the cloud, and available to MDPD for review and future public records requests. A clear strength of Carbyne is an enhanced location and mapping ability for 911 calls, which resulted in 92,111 calls with identified locations within 5 meters. The enhanced location capability for 911 calls produced the following notable successful outcomes:

- A call was received that an elderly man had fallen off a seawall into the Intracoastal waterway. Based on a call alone, with no video link available, protocol would have activated numerous resources (marine, fire, aviation, etc.). However, the video link from the caller revealed that the gentleman was simply standing on a rock below the seawall and not in imminent danger, thus limiting the required response to an appropriate level.

- A call was received that a person had difficulty breathing and required immediate medical assistance. The call taker observed that the location, without the assistance of Carbyne, was not specifically identified, but near a building and a large parking lot, which could have caused a significant delay to the medical response. When Carbyne was utilized, the location of the caller was identified within 4.6 meters and an immediate medical response was obtained.

In another instance of Carbyne value, the video link obtained during a shoplifter in progress call that developed into a strong-arm robbery scenario, produced a detailed subject description. The potential value of such information to responding officers and the subsequent criminal investigation is obvious.

The workflow proposed by MDPD was designed for call takers to triage the calls and send links for shared video, which the RTCC staff would be able to utilize as needed. Carbyne's technical model was not intended for that workflow, but they worked with the 911 Call Center staff to establish technical work arounds. Ultimately, the RTCC was never able to view live videos during this testing period, as the workflow was intended, since the Carbyne system is not currently configured to do this. However, the RTTC was able to view historical videos, as they did in the aforementioned case examples. Carbyne representatives advised that they have software fixes that can provide live videos on an RTCC wallboard in the future to support the proposed MDPD workflow model.

The Carbyne pilot project provided an opportunity for the MDPD to evaluate the potential benefits of the product. Enhanced location services and mapping provided by Carbyne has true benefits to the Department. Although the Miami-Dade Fire Rescue Department elected not to participate in this pilot project, caller location enhancements provide them the same benefit.

If the MDPD stays with the same workflow model, Carbyne would be required to add the extra services described above regarding RTCC live viewing for daily operations. Additionally, the purchase of Carbyne will result in a significant increase to the amount of work performed within the 911 Call Center and the RTCC, which would require increased staffing for call taking, viewing live videos, and producing public records requests related to the live videos. The anticipated positions needed are indicated below:

- Six (6) officers for the RTCC (2 per shift). The anticipated yearly cost for each officer is $112,382.40, including fringe.
- Four (4) police records specialist 1s (PRS1) for the 911 Call Center (Records Production). The anticipated yearly cost for each PRS1 is $46,051.20, including fringe.

If the aforementioned Carbyne enhancements can be obtained, and the Department commits to the appropriate staffing requirements, then the 911 Call Center and RTCC see value in the Carbyne product and support its purchase. However, it should be noted that other companies currently offer enhanced location services in combination with videos, photos, and/or chat function to support 911 Call Centers (Saferwatch and 911eye are two such companies). Additionally, according to Information Technology Department representatives, pending CPE (911 Call Center equipment) and CAD upgrade procurements would not present any technical or operational impediments to the acquisition of the Carbyne product. Information Technology Department is committed to supporting the MDPD's position on Carbyne, and will continue to provide key guidance on this and any future procurement items.

Per Ordinance 14-65, this memorandum will be placed on the next available Board meeting agenda.

Should you require additional information, please contact Director Alfredo Ramirez III, Miami-Dade Police Department, at 305-471-3272.

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