The City of Cleveland is officially home to approximately 400,000 residents with a workday population of about 650,000 and potentially a million on certain weekends and special event days. The City is the business, entertainment, healthcare, education and sports hub for Northeast Ohio.

The City of Cleveland, Department of Public Safety, and Department of Innovation and Technology, are soliciting proposals from qualified firms for to provide a Drone as a First Responder Program. The Departments are looking to be at the forefront of utilizing technology to maximize the effectiveness and efficiency of responses to the Division of Fire and Division of EMS calls for service as well as other public safety related events.

Leveraging Drone as a First Responder and getting on-scene within a few minutes of incoming calls for service will provide better situational awareness. A shorter response time allows the Divisions of Fire and EMS to get the right equipment and resources on-site more quickly, which has the potential to reduce the property damage as well as enhance critical/emergency care response.

The goals of this RFQ are as follows:

Rapid Incident Assessment – The goal of the Drone as a First Responder, will allow for on-scene deployment offering real-time video that provides dispatchers and incident commanders enhanced situational awareness before personnel arrive on-scene

Improved Resource Allocation – Real time situational awareness will allow dispatchers to assess the scope and severity of the incidents which can lead to increasing/decreasing resource callouts and the appropriate response

Data-Driven Operations – Post incident video can be analyzed for after action reports, training, performance audits and future planning

Increased visibility and access to real-time actionable intelligence in emergency situations can mean the difference between life and death. This is why the City is incorporating Drone as a First Responder into the Fire and EMS standard operating procedures. Dispatchers and First Responders equipped with drone technology rapidly make informed decisions from a safe distance which ultimately may reduce injuries and save lives.

Fee Structure – Option 1

Single Drone as a First Respond Site (Hive)

- 1 Drone Aircraft – Minimum Above Ground Level Flight Ceiling 200FT – 400FT
    - If deploying a hive to ensure continuous flight operations, 3 drones would be needed
- 1 Radar Unit
- 1 Docking Station
    - If deploying a Hive to ensure continuous flight operations, 3 docking stations would be needed
- Air Traffic Radar
- Flight Operations
- Viewing Module with integration into FususOne
- Flight Log and Reporting
- Community Transparency
- CAD and 911 Integration
    - Motorola Premier One and Motorola Vesta
- Installation, Training, FAA Certification

- Support and Maintenance

Fee Structure – Option 2

Full City Coverage Drone as a First Respond Site (Hive)

- 3 Drone Aircraft – Minimum Above Ground Level Flight Ceiling 200FT – 400FT
    - If deploying a hive to ensure continuous flight operations, 9 drones would be needed
- 2 Radar Unit
- 3 Docking Station
    - If deploying a Hive to ensure continuous flight operations, 9 docking stations would be needed
- Air Traffic Radar
- Flight Operations
- Viewing Module with integration into FususOne
- Flight Log and Reporting
- Community Transparency
- CAD and 911 Integration
    - Motorola Premier One and Motorola Vesta
- Installation, Training, FAA Certification
- Support and Maintenance

RFQ Evaluation and Submission

The evaluation and ranking of proposal will consist of three phases. Phase 1, a review committee will rank and score the written proposals based upon the evaluation criteria. Phase 2 (optional), The City will short list a

number of Proposers to proceed to the oral presentation by the Proposer outlining qualifications, proposed services and capabilities. The third and final phase, is evaluating the proposed fee schedules.

This RFQ does not obligate the City to complete the selection and contract award process. The City reserves the right to accept or reject any and all proposals; request additional information from any or all proposers to assist the City in its evaluation process; amend or withdraw this RFQ prior to the announcement of the selected firm and award the proposed services in whole or in part, to one or more firms. In case of an amendment to the RFQ, all Proposers will be provided with a copy of any such amendment(s) and be afforded the opportunity to revise their Proposals in response to the RFQ amendment.

A Pre-Proposal Conference will be held on June 2nd at 3:00 PM EST. Below you will find the TEAMS meeting link. JOIN FROM THE MEETING LINK - Drone as a First Responder TEAMS Meeting

Request for Quote submissions will be accepted until 3:00 PM EST on June 10, 2025 and should be emailed to ljones4@clevelandohio.gov

Requirements

- Professional Services
  - Coordinates delivery, installation, FAA certification, CAD and 911 integration and training to ensure successful implementation
    - CAD – Motorola Premier One, 911 Motorola Vesta
  - Subscription model providing proactive monitoring and maintenance for the drones, docks and radar

- Comprehensive platform that includes operating system, hardware, software, detection radar and frequency/nextgen cell service for Drone as a First Responder Operations

Drone as a First Responder

- 911 Call for Service or Non-Emergency Call and/or Special Event
  - In coordination with the Dispatch Center, the pilot can hear the Call for Service and dispatch the Drone as a First Responder
  - Drone as a First Responder launches in 45 seconds
  - Fly between 200 FT – 400 FT and up to 53MPH
  - Drone as a First Responder returns to the dock based on battery status
  - The Dock has an automated battery swap that changes the battery in under two minutes for continuous operations
    - Vendors may propose a hive dock setup which would allow for additional drones to added to the initial location to meet this requirement

- Drone Software Platform
  - Flight Operations – Allows the operator to remotely control the drone with a 1080p feed, utilize night vision and thermal cameras, automatically navigate to locations and constantly display weather and safety information
    - Ultimate control with manual override ability
    - Geofencing for obstacle avoidance
    - Automatic return to home when needed
    - Automatic flight data
    - Stream and manage previous flight video

- Viewing Module – Allows Incident Commanders, Emergency Operations Center, Dispatchers and Public Safety Leadership to view real-time video
  - Securely view live video streams from anywhere with very low latency
  - Receive alerts regarding live flights
  - Integration into FususOne
- Radar – Air Traffic – Integration of Air Traffic radar and sensors with the flight operations screen so that pilots can be notified of any potential conflicts. Drone(s) should also be set to auto-mitigate threats as well
- Logs and Reporting – Flight Log should aggregate all historical flights, providing flight maps, durations, telemetry data, collected media and mission reports. All flight details should be logged after each flight. Any pictures and video taken during the flight should be viewable here and available for download
- Community Transparency – Creation of a public facing dashboard that ensures transparency and accountability as it relates to flight logs and redacted flight data for community members

- At minimum the fully remote, fully automated, multi-station, multi-drone as a first responder must have the following:
  - Water and Wind resistant body
  - Advanced obstacle sensing ability
  - Operating temperature range of -4 degrees to 113 degrees F
  - Wind resistance up to 32 ft/s
  - Must support downward gimbal mount, upward gimbal mount and dual downward gimbal mounts
  - Must have at least 24 minutes of flight time per battery
  - Must have enough batteries for continuous flight assuming on scene recharging capability
  - Optional retractable landing gear
  - Intelligent APP controlled flight modes

- At minimum drone Camera must have the following:
    - Must include a minimum of three cameras; one front facing First Person View Camera, One Gimbal Mount Zoom Camera and one Gimbal mounted thermal imaging camera
    - Front-facing camera must be capable of real time video
    - Gimbal mounted zoom camera
        - Must be minimum 30x optical zoom and 6x digital zoom
        - Weight should not exceed 556g
        - Must have at minimum 2.12M effective pixels
        - Tap to Zoom controls
        - Gimbal must have a controllable range, pitch +40 to -90 degrees and yaw +-320 degrees
    - Gimbal mounted thermal imaging camera
        - Must be uncooled VOx Microbolometer
        - Weight should not exceed 270g
        - Thermal Resolution 640 x 512 Frame Rate : 30Hz Visible Sensor Resolution 4000 x 3000
        - Must be 13mm lens
        - Must have operating temperature range 14 – 104 degrees F
        - Gimbal must have a controllable range, tilt: +35 to -90 degrees, yaw +-320 degrees, roll +-45 degrees
        - Must have color and monochrome palettes
        - Must have image optimization
        - Must have digital detail enhancement
- The system should include integration into the City's situational awareness applications (FususOne) which would allow Department of Public Safety users to access Drone data/images within the situational awareness application
- The footage must remain the property of the City of Cleveland Department of Public Safety, who will be able to determine who can have access to review the information

- The system must monitor the Drone's cameras status, flight status, battery and internal system operations in real time and at all times, providing immediate notification for problems that arise with the unit
- The cost of maintenance must be included in the original cost
- Maintenance request for service must be addressed with a technician on-site within 72 hours, barring any extenuating circumstances

RFQ Project Requirements

- Work Orders & Invoices shall be produced by the vendor and shall include the following information: Drone as a First Responder Site/location(s), Drone Model(s), Date of Service, Invoice Number, itemized cost by equipment and service and a total cost
- All work and materials must be guaranteed and be acceptable to the City of Cleveland
- When requested the Vendor will supply the City with parts warranty information
- The Vendor will be fully responsible for any damage to or loss of City equipment while in the Vendor's possession or under the Vendor's control
- The Vendor will provide the required services and will not subcontract or assign the services without the prior written approval of the Department of Public Safety
- The City reserves the right to approve or reject the use of outside subcontractors by the Vendor
- The Vendor is responsible for having sufficiently trained, certified technicians available to rapidly process Drones as a First Responder Platform maintenance, repairs and/or professional service installation
- The Vendor will provide proof of Worker' Compensation coverage for its employees, a general liability policy in an amount not less than $500,000 per occurrence

THE CITY OF CLEVELAND IS AN EQUAL OPPORTUNITY EMPLOYER