

Best Practices:

The 5-Step Path to Building a Fully Automated Drone as First Responder (DFR) Program

Introduction

Drone as First Responder (DFR) is not a far-off future vision. It's a reality in a growing number of law enforcement agencies today. You can step your way into a [DFR program](#), gaining value for your agency and your community as you go, so your program can make an immediate impact on officer and community safety.

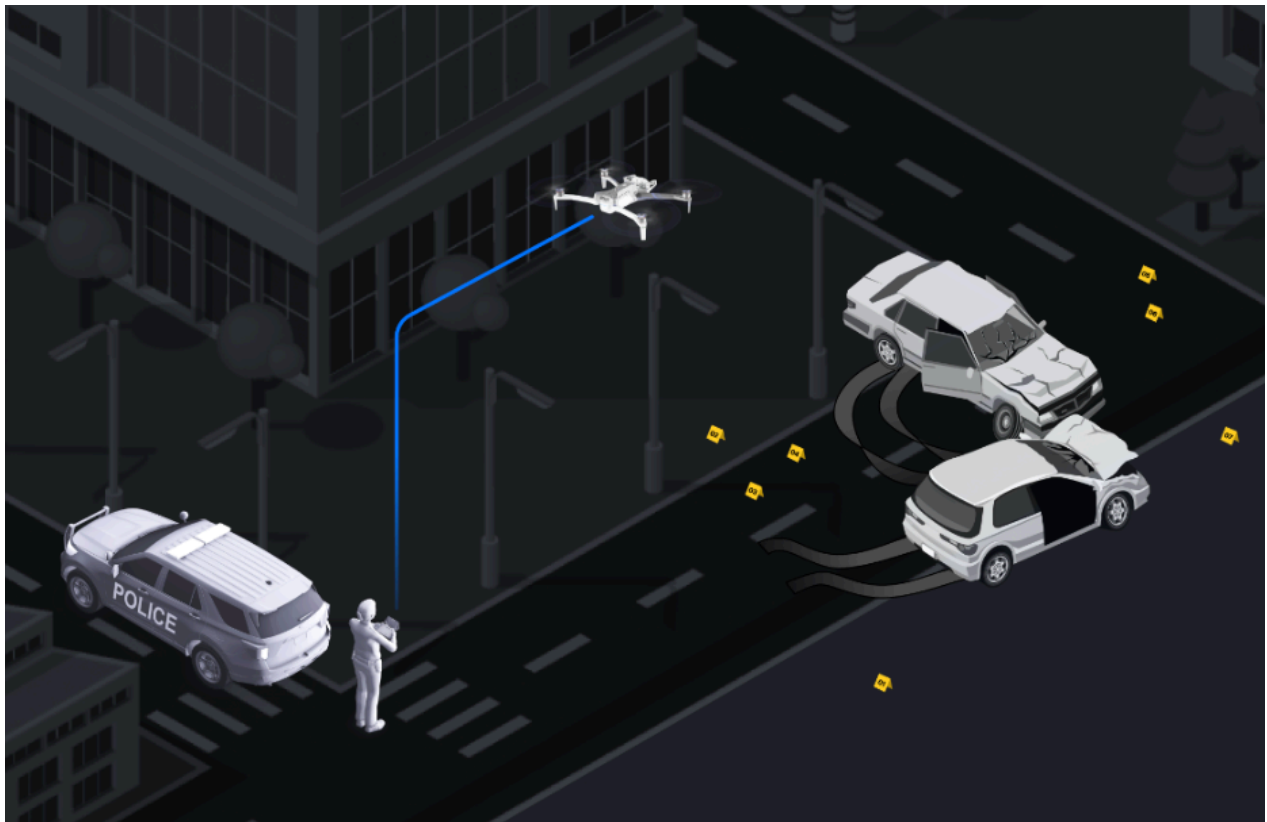
“When someone is in distress or needs assistance, our drones are first responders.”
–Anthony Loperfido, Miami Beach, PD

- **Get there faster**
Drones reduce response times, getting to the scene within 90 seconds.
- **Eliminate need for officer response**
Agencies using DFR can avoid sending ground units at least 25% of the time.
- **Reduce use of force**
Cut by 50% in Chula Vista with their DFR program. ([report link](#))
- **Increase arrests, reduce crime, keep the community safer**
DOJ stats show response time of <5 minutes = 60% probability of arrest
- **Keep officers safer**
Overwatch on every call means officers always know what they're facing.
- **Build stronger community relationships**
Increased safety, more transparency, and better outcomes reduce tensions.

This paper outlines the successful deployment methods agencies are utilizing to immediately prove the value of DFR as your program expands and expectations grow.

1. Get started with drones wherever you see the opportunity.

Many agencies start by empowering specialized units with drones and training a select few pilots to them. [Crash & crime scene documentation](#) and [search and rescue](#) are some common examples, but this can be anywhere in your org. Just know – once your agency realizes the value of using drones you'll want them available for more situations. Envisioning and planning for the future enables you to choose solutions that will meet a broad set of needs and scale from the outset.



Documenting vehicle crash and crime scenes is a common method for agencies to introduce the value of drones.

TIPS:

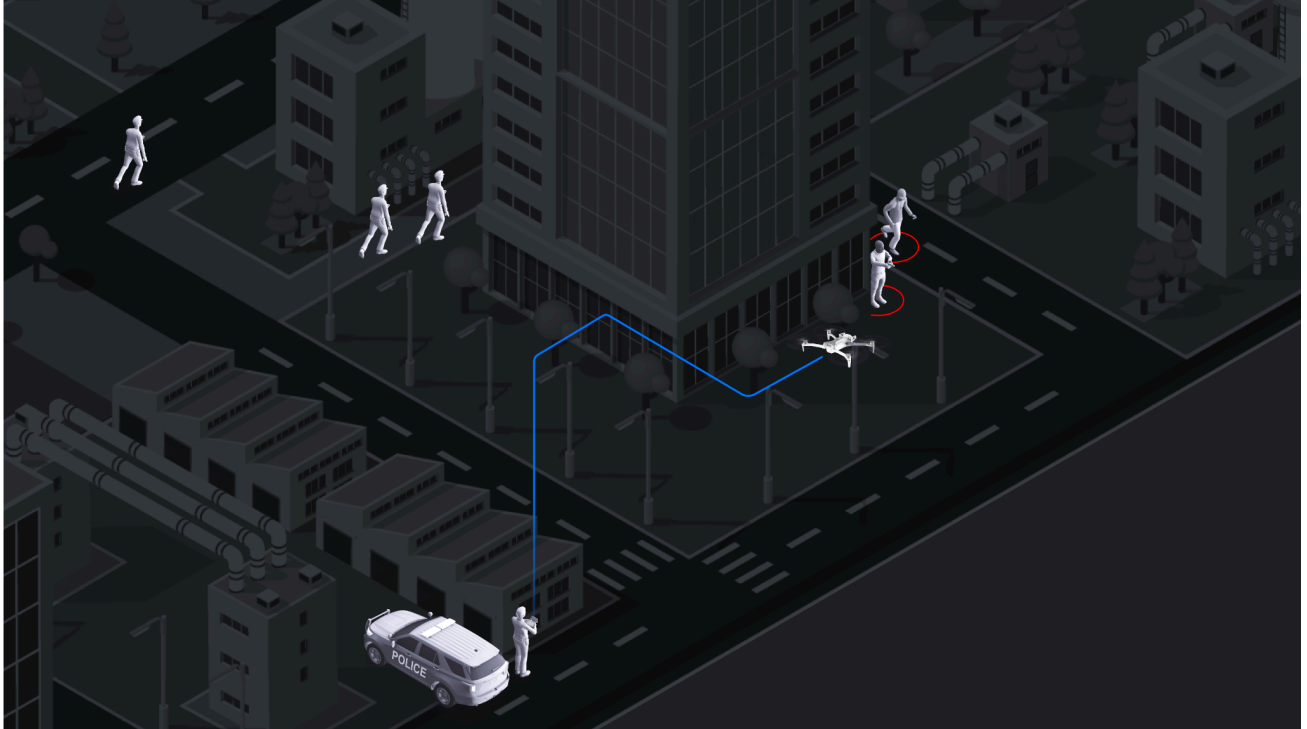
1. For maximum value, choose drones that fly autonomously, so any officer can operate with confidence. Also look for drones that

navigate well day or night, as incidents can happen at any time.

2. Look for a modular design that provides flexibility in mission types, which will enable your agency to use the same drones for a variety of needs.
3. Consider where your drones are made and what support will be available as you grow your program. Locally trusted sources will help you design solutions with your operations in mind and will be there to address concerns and support your program growth.

2. Add drones in patrol vehicles so officers have overwatch whenever they need it.

Once you've seen the value of drones, you'll want to deploy them more widely. Keeping them in patrol cars (sometimes called a drone-in-trunk program) ensures you'll have them wherever necessary to expand officer and community safety. Officers arriving on the scene can quickly get drones in the air to gain [situational awareness](#).



Empowering officers with quickly deployable and easy-to-use drones allows them to provide valuable overwatch and situational awareness when and where it matters most.

TIPS:

1. You'll want drones that are easy to fly and hard to crash so that any officer can fly with confidence amid the action.
2. Fast deployment time is an important consideration with any drone deployment method, especially on patrol where every second in the air counts toward positive outcomes
3. The ability to stream video anywhere with an internet connection enables immediate overwatch and awareness for ground and command units.

3. Enable patrol officers to activate drones and hand off control to a remote pilot.

Once you have drones in patrol cars, enable your experienced pilots to take control and [remotely operate from anywhere](#), away from the scene. The arriving officer simply activates the drone, and then can engage on the ground with the whole team benefiting from immediate aerial awareness.

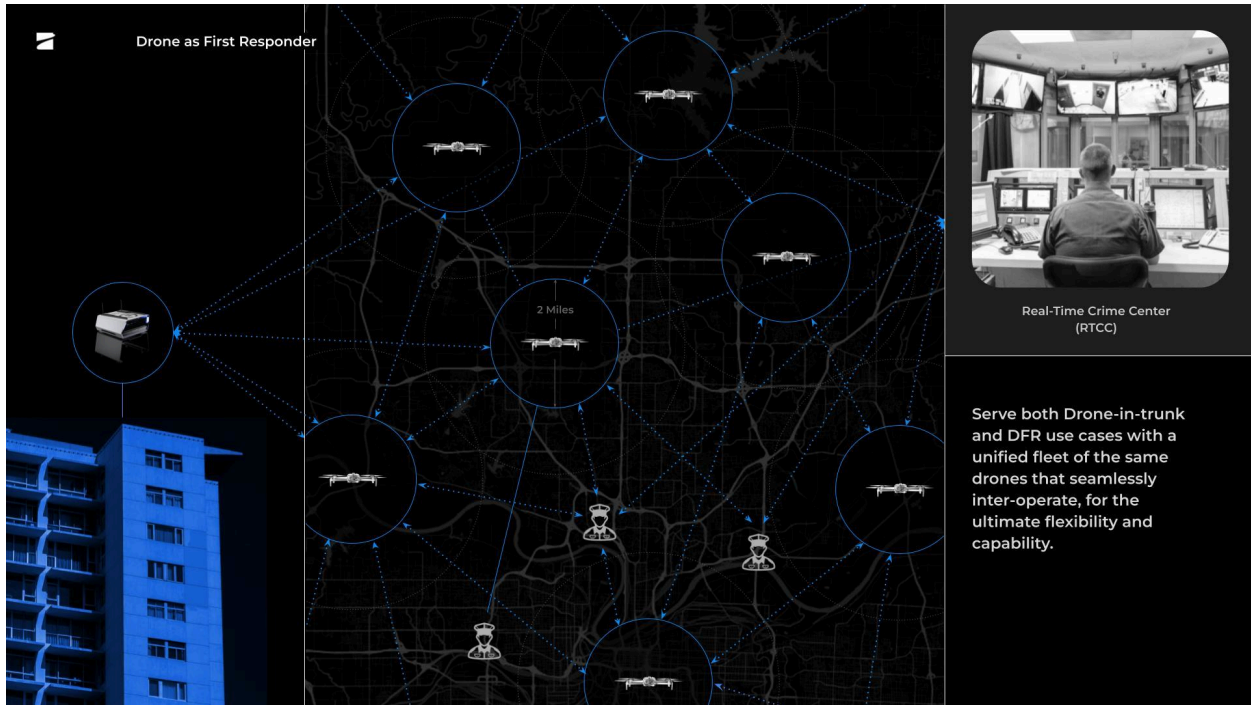


Activating drones from patrol cars for remote pilots reduces cognitive load, enhances incident oversight, and improves decision making at every level.

TIPS:

1. It's essential to choose a drone [platform offering 5G connectivity](#) to enable remote piloting.
2. FAA regulations allow flying beyond visual line of sight (BVLOS) with the appropriate waivers. Drone providers with regulatory support teams can help you [navigate the regulatory process](#), and accelerate the success of your DFR program.
3. Consider your end-to-end solution needs, and understand whether your provider can [integrate with your current systems](#), so data flows

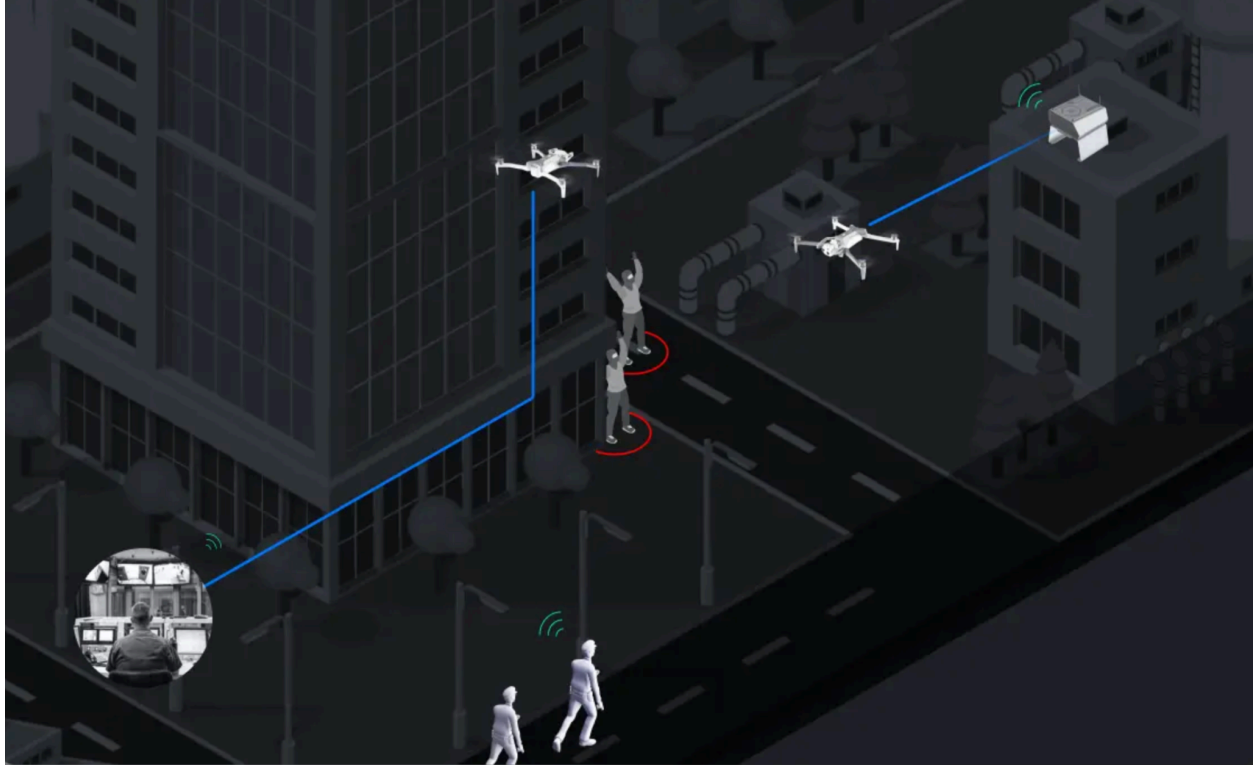
smoothly and securely from your drones into data and evidence management systems.



Strategically located drone docks allow for remote pilots to get eyes on the scene within 90 seconds.

4. Accelerate response with docked drones in strategic locations. Pilot from anywhere.

Scale your program by adding strategically placed drones in docking stations around your jurisdiction. Remote pilots can fly these drones from a browser and get eyes on a scene in as little as 90 seconds. Fast situational awareness informs response and resource allocation. Sometimes you may find no response is required, freeing officers for other calls. And, when the response is required you have almost immediate overwatch providing the data needed to make good tactical decisions.



Launching drones from strategically located docks with remote pilots providing awareness and oversight to stakeholders during incident and emergency response calls.

TIPS:

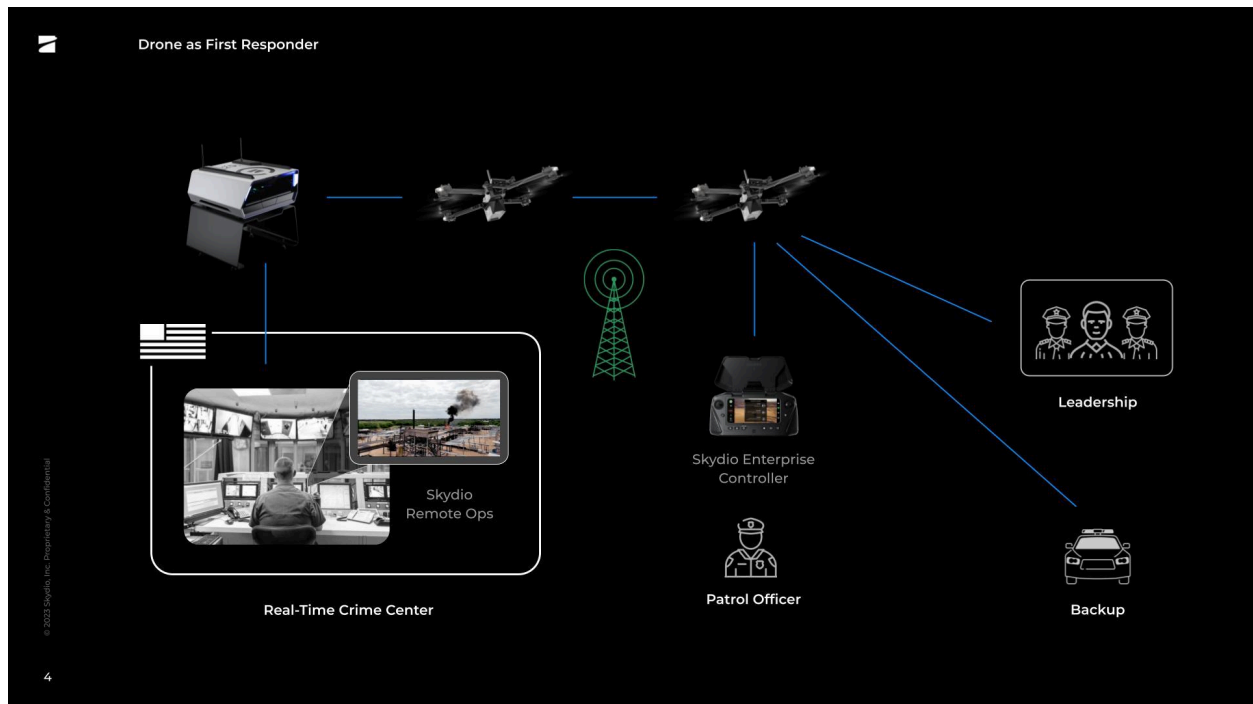
1. DFR solution providers with a proven record of successful deployments will help you get maximum value from your investment in docking infrastructure, based on the metrics you care about.
2. Look for providers with [experience planning the strategic placement of docked drones](#), working with the area, statistics, and budget for your jurisdiction.
3. Establish processes for sharing video streaming links to stakeholders to get the full benefits of on-scene awareness.

5. Add automated flight with integration to your 911 system, ShotSpotter, ALPRS etc.

Accelerate response time even further by fully integrating DFR into your emergency protocols, automating response based on triggers. Missions can be fully automated, or remote pilots can take control at any point.

TIPS:

1. Choose a setup that enables you to automatically trigger drone response via API from your systems, enabling it to reach the scene before responding officers, often before the 911 call ends.
2. Establish emergency incident protocols for providing updates or streaming links directly to stakeholders, no matter their location.
3. Develop strategies for how and when remote pilots vs. automatic triggers deploy drones across the operational spectrum, providing clarity on usage to the community.



Integrating response, oversight, and awareness within a single DFR solution.

Conclusion

The journey toward a fully autonomous Drone as First Responder (DFR) program is not just achievable; it's already a reality for forward-thinking law enforcement agencies. Starting small but thinking big allows agencies to harness the immediate benefits of drone technology. The path to a fully autonomous DFR program is marked by strategic, stepwise implementation, each successful deployment builds on the previous to expand reach and impact. By embracing innovations in [drone technology](#) today, agencies can begin paving the way for a safer, more responsive DFR future.

About Skydio

Skydio not only empowers public safety agencies with drones that are easy to operate, we also offer fully integrated, [end-to-end DFR solutions](#) that are ready to scale at the speed of your agency, to a fully autonomous Drone as First Responder program. As a [trusted partner](#) in your organization's growth, Skydio is committed to providing comprehensive support and continuous improvements, ensuring that your drone program not only meets but exceeds expectations on day one. With Skydio, [DFR is here](#), and it's already transforming how policing is done today.