AIRBORNE PUBLIC SAFETY: WORTH THE INVESTMENT

DENVER POLICE



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In 1948, the Bell Helicopter Model 47D arrived at the New York City Police Department. It was the world's first police helicopter to be conceptualized, manufactured, and put into service. It would change policing. Fast forward to today, and public safety helicopters are widely known as one of policing's greatest force multipliers. It's not about adding more people – it's about empowering the existing force with innovative technology to maximize their impact.

That's the story of Bell: the same company behind the police helicopter was also the first to break the sound barrier with the Bell X-1 aircraft and was a part of NASA's first

lunar mission. These breakthroughs have created force multipliers and in the case of the police helicopter, public safety advancements.

When matched with innovative helicopter technology and specialized mission equipment, today's police helicopter crews can respond quicker, establish perimeters faster, search larger areas, and work with all parts of the force – more than perhaps any other function in policing. The result: more lives saved, more apprehensions, and greater overall officer safety.

By the Numbers

By the mid-1950s the force-multiplier benefit began to emerge, and the concept grew to include police agencies in Europe and the U.K. (England in 1954, Germany and France in 1955). The Los Angeles PD followed suit in 1956.

1,000 Police helicopters in the United States^{*}

300 Public safety agencies in the U.S. flying helicopters* **4,000** Public safety helicopters flying worldwide^{*}

*Approximate

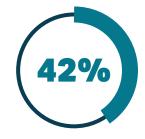
Likelihood a public safety agency has a helicopter:



at least a million people served



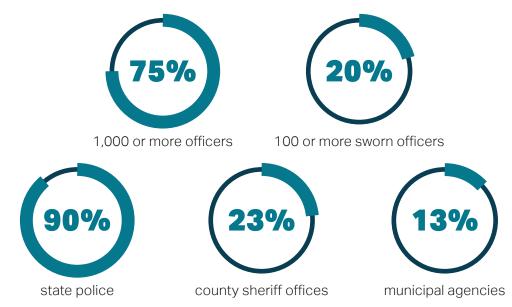
at least 500,000 served



at least 250,000 served

A number of agencies with helicopters also serve smaller populations. This is especially true when part of cooperative agreements where more than one agency pools resources – a force multiplier benefit.

Agencies with police aviation:



Source: U.S. Dept. of Justice and Bureau of Justice Statistics

Measuring the exact impact of police helicopters as force multipliers is challenging, yet their effectiveness is undeniable. Exploratory studies suggest their impact can vary widely from a 9:1 to as high as a 27:1 effectiveness ratio. This means that one officer in the air could potentially do the work of up to nine on the ground, significantly enhancing law enforcement's capability to successfully apprehend suspects. It can even mean the difference between life and death.

Success Defined

Helicopters might seem complicated, but they offer big advantages. Perhaps most obvious: the aerial perspective they provide. On the ground, an officer might see only a couple of sides of a building. But from the air, the crew can see every side, the roof, and even behind fences or around corners. One study found that from a helicopter, an officer can see 30 times more than they can on the ground. Another study showed helicopters can effectively cover 7.6 miles, while an officer walking around can only cover 0.2 square miles.

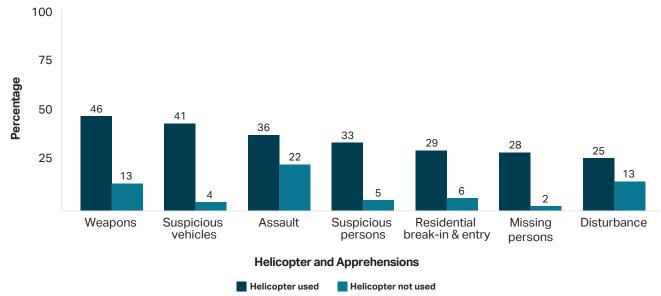
The view from the air most directly contributes to the force multiplier effect. Routine patrol and surveillance are the primary missions. According to the U.S. Department of Justice, 93 percent of police helicopters conduct routine patrols and 98 percent are used for direct surveillance. Helicopters also cover many other missions: How does this aerial advantage lead to better policing? Here are some important factors: **Response Time –** Helicopters not only provide a birdseye view, but also the ability to respond, "as the bird flies." Generally, it's a straight-line direct response versus a more complex ground-based approach. In many cases, the comparison is drastic. The police air crew is often first on the scene. This offers enhanced situational awareness for all responders and helps decrease response time averages, which can come under scrutiny. How much faster? That depends on several factors; however, one thing is for certain: speed is crucial. Even the slowest turbine-powered police helicopters cruise at well over 100 mph, with the most modern models surpassing 170 mph, and they're all able to travel in a straight line, unaffected by traffic or red lights.

Show of Force / Patrol Presence – Officer presence is undoubtedly one of the most widely used forms of force in all of policing. The police helicopter elevates this presence in a more impactful way. While an officer's presence on the ground is effective within a limited area, typically just a couple of streets, the helicopter can oversee a much larger radius, often several miles.

Additionally, with its distinctive noise and illuminating searchlight, the show of force presence is again multiplied. Even if criminal activity is not deterred by the helicopter's presence, the ability to monitor the subject – or crowds, or demonstrations – is enhanced. Live images of ground-based activity seen from the air can be downlinked to ground commanders and command centers.

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Apprehensions – Aerial views and quicker response times alone point to an increase in apprehensions. In 2004, the Metropolitan Police in London conducted a complex yet conclusive study. They found that when their helicopters were part of incidents "in progress" or "just occurred," they had a significant increase in apprehensions. Here are the numbers:



Source: Metropolitan Police Service, London

The same study showed that although helicopter police crews typically do not directly make arrests, they do significantly contribute to arrests by setting perimeters, locating and tracking subjects, and directing officers on the ground.

Pursuits – According to the National Traffic Safety Administration, an average of 350 people die every year in crashes involving police pursuits. This includes officer deaths. Departments that use police helicopters report a reduction in both the duration and total number of pursuits. One study found when subjects realized they were under aerial surveillance, they stopped and surrendered. Even when the subject does not stop, the police helicopter has the advantage of closely monitoring and reporting pursuit activity and can better direct ground units. Often, this leads to a halt of ground-based pursuits while the helicopter stays overhead, later directing ground units to final destinations. Police helicopters not only make pursuits safer, but they also lead to a higher percentage of potential arrests.

Special Teams – The effectiveness of any specialty team within policing is force multiplied when rapidly deployed. For SWAT and K-9 handlers, this typically involves tactical insertion, such as FAST roping or rappelling from helicopters to areas inaccessible by ground, like rooftops or confined spaces. Sometimes, it's rapid egress from the landed helicopter that expedites point-to-point movement. For the HAZMAT team, bomb tech, crime scene investigator,

or other special team, it's the rapidness of point-to-point movement that becomes the force multiplier. A diver is more effective and has longer station time when inserted overhead an incident from a hovering helicopter. A dignitary protection team is less exposed when transporting by helicopter versus ground, not to mention time saved. Regardless of the specialty team, air support allows for rapid extraction and relocation on the fly as needed.

Special Missions – The force multiplier effect of policing with helicopters also benefits other public safety special missions like search and rescue, firefighting and casualty evacuation. For example, the same infrared imaging camera that detects criminal subjects can be used to find a missing person. Whether this be the Alzheimer's patient who walked away from the residence, or the missing hiker or stranded hunter, the odds of detection and rescue are force multiplied. When the aircraft carries specialty equipment, like hoists or short-haul lines, the odds of a timely rescue are further enhanced.

For the fire mission, it's typically a helicopter payload of water that is used to rapidly suppress flames that are threatening lives and property. Even the smallest of police helicopters have a measured ability to provide initial attack firefighting efforts. The same eye-in-the-sky that provides police command and control can easily provide fire command and control. And the same police helicopter that is used to extract the specialty team can also be used for the critical casualty evacuation mission.

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Officer Safety – Arguably the best benefit of policing by helicopter is enhanced safety it provides for officers – a true force multiplier. Hundreds and hundreds of documented cases illustrate how the presence of a police helicopter has prevented officer death or serious harm. The same aerial perspective used to locate criminals also plays a crucial role in safeguarding officers. For instance, a helicopter crew spotting an armed individual around a blind corner can alert approaching officers, potentially preventing an ambush. In some cases, pursuits have been terminated because of the intervention of a police helicopter. The examples are numerous. Police helicopters save lives, including at times the lives of law enforcement.

Is it Worth the Cost?

Enhancing public safety through active policing is justified the world over every day. Any aspect that force-multiplies the public safety effort is also justified. Maybe a better question to ask is whether the agency is willing to invest in it? Police aviation in a professional setting can be expensive, but there are ways to make it cheaper.

For example, the same manufacturer that developed the world's first police helicopter and is known for being a

trusted partner to public safety operators for 75 years recently certified an all-new model. The Bell 505 can be acquired and operated for nearly half the cost of traditional legacy helicopters. That's almost half the cost, all while maintaining 90 percent mission capability and 100 percent patrol capability. Considering that patrol missions make up most agency tasks (approximately 93 percent), why pay more? Plus, the same high-quality infrared imaging cameras used on larger, more expensive twin-engine helicopters are also used on the more affordable single-engine helicopters.

Add to this new aircraft options and creative finance/ leasing structures that are tailored toward government operations. For instance, there are now specific options based on an agency's jurisdictional bond rating and only available to public safety agencies.

Providing public safety is critical and comes with a cost. However, it comes with an even higher cost when it's not done right – or not done as well as it could be. The force-multiplier aspects of police aviation ensure high levels of public safety. Helicopters significantly amplify the ability to protect and safeguard communities. That's why airborne public safety is an incredible force multiplier.

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