INFORMATIONAL MEMORANDUM

TO: **Public Safety & Transportation and Infrastructure Committees**

FROM: **Mike Villa, Chief of Police**

BY: **Bruce Linton, Deputy Chief of Police**

CC: **Mayor Ekberg**

DATE: **January 24, 2016**

SUBJECT: **The Tukwila Police Use of Unmanned Aircraft Systems**

ISSUE

The Tukwila Police Department wishes to update the Public Safety Committee as to its new policy related to Unmanned Aircraft Systems (UAS). In addition, in order to purchase the equipment needed for the UAS pilot program, the Department needs committee permission due to it being an un-forecasted capital expense in excess of $5,000.

BACKGROUND

The Tukwila Police Department will be implementing a UAS pilot program to validate whether this technology can enhance the Department's ability to save lives, protect property and document crime and collision scenes. In order to do this, the Department has developed the attached presentation that covers the policy development, technology overview and how we will address privacy concerns. The Department intends to report back to committee in six months time with information on the pilot program.

In addition, according to City policy, the Department must receive approval from the Public Safety Committee in order to expend un-forecasted capital funds in excess of $5,000, even though it is below the $40,000 signing authority authorized to the Mayor. The Department proposes to purchase the UAS and necessary peripherals via the drug seizure funds, ensuring no impact to the City's General Fund.

TUKWILA POLICE DEPARTMENT sUAS PROGRAM COST ESTIMATE

ITEM	DESCRIPTION	COST
2 Mavic sUAS w/Accessories	UAV - video, stills, autonomous, obstacle avoidance, live video feed, indoor	$3,000
1 Inspire 2 sUAS w/Accessories	UAV - High Resolution 20 MP Stills, 5K video, autonomous, obstacle avoidance, live HD video	$7,000
PIX 4D Photogrammetry Software	Create 3D Imaging from video or still images to include thermal	$10,000
PIX 4D Photogrammetry Training	Creating a 3D workflow for reconstruction of scenes based off of aerial and ground based photography	$3,000
Computer	computer with increased processing capacity for PIX 4D photogrammetry processing	$5,000

d9 Mapping Package	Autonomously mapping outdoor scenes	$3,500
3dr Solo, Video SE	Video mapping a scene/Targeted Surveillance, live HD feed	$2,500
Mapping and Flight Training	Basic flight and emergency procedures training as well as autonomous flight planning	$5,000
TOTAL ESTIMATED COSTS		$39,000

RECOMMENDATION

The Public Safety Committee is requested to approve the expenditure of seizure funds to support the planned Tukwila Police Department sUAS program. In addition, the Department wanted to be sure members of the Transportation Committee were aware of this pilot program.

ATTACHMENTS

Community Policing and Unmanned Aircraft Systems presentation
Tukwila PD sUAS Policy (adopted from the IACP UAV model policy)
WA State UAS program recommendations
ACLU UAS policy recommendations
Executive Summary, Community Policing & Unmanned Aircraft Systems: Guidelines to Enhance Community Trust

COMMUNITY POLICING AND UNMANNED AIRCRAFT SYSTEMS (UAS)

Tukwila Police Department Integrating 21st Century Technology Improving Community and Officer Safety

It is the intent of the Tukwila Police Department to utilize UAS to enhance the department's ability to save lives, protect property and document crime scenes and collision scenes.

INTEGRATING SMALL UAS TO IMPROVE COMMUNITY AND OFFICER SAFETY

The Benefits of Integrating sUAS

- Enhanced search and rescue operations
- Rapid crime scene reconstruction
- Timely accident scene reconstruction
- Officer safety through better situational awareness
- Critical incident response
- Damage assessments during disaster response

INTEGRATING SMALL UAS TO IMPROVE COMMUNITY AND OFFICER SAFETY


BEST BUY
ROSS
dress for less
TJ.maxx
Total Wine
AIRBORNE


CBTX 741720

Protecting Privacy From Aerial Surveillance:

- Recommendations for government use of “drone” aircraft
- DECEMBER 2011
- **American Civil Liberties Union**

  125 Broad Street, 18th Floor

  New York, NY 10004

  www.aclu.org

Washington State Policy Guidelines For Unmanned Aircraft Systems

- **Chief Privacy Officer**
- **Office of Privacy and Data Protection**
- State of Washington
- Desk 360.407.8678 | alex.alben@watech.wa.gov

PRIVACY AND 4TH AMENDMENT CONCERNS REGARDING THE USE OF UAS

- Police manned aerial surveillance platforms have not generated the same level of privacy concerns
- Negative perception of sUAS associated with armed and surveillance “Drones” on the battlefield
- Heightened public concern over the perceived militarization of police agencies
- sUAS used for public safety are not Military “Drones”

UAS IMAGERY USED FOR SITUATIONAL AWARENESS IS THE SAME DATA PROVIDED BY OTHER COLLECTION SYSTEMS

- News helicopters
- Police in-car video
- Police body-cam video

CNN News Channel Buys Altus Drone For Aerial News

IT'S ABOUT INFORMATION AND WHAT YOU DO WITH IT NOT WHERE YOU GET IT FROM. IT'S NOT ABOUT UAS/DRONES**

Office of Privacy & Data Protection

ACLU
AMERICAN CIVIL LIBERTIES UNION

FEDERAL AVIATION ADMINISTRATION

INTERNATIONAL ASSOCIATION OF CHIEFS OF POLICE
POLICE
SINCE 1893

COPS
Community Oriented Policing Services
U.S. Department of Justice

- Law enforcement adherence and respect for civil rights
- Usage limits and policies that address purpose of use
- Appropriate documentation of operations
- Data minimization and retention policies
- The adherence to FAA regulations
- Policy management
- Abuse Prevention and Accountability

GUIDELINES TO ASSURE COMMUNITY ENGAGEMENT ABOUT A SUCCESSFUL UAS PROGRAM

Police Administration

- All deployments of sUAS must be specifically authorized by the chief of Police or a designated command-level officer.
- TPD has adopted the use of sUAS to provide an aerial visual perspective in responding to emergency situations and exigent circumstances, and for the following objectives:
  - **Situational awareness** – To assist decision makers in understanding the nature, scale and scope of an incident
  - **Search and rescue** – To assist missing person investigations, AMBER Alerts, Silver Alerts and other search and rescue missions.
  - **Tactical Deployment** - To support the tactical deployment of officers and equipment in emergency situations such as large scale tactical operations.
  - **Scene Documentation** – To document a crime scene, accident scene, or other major incident scene such as disaster management or large-scale forensic scene investigation

TPD UAS POLICY HIGHLIGHTS

PROCEDURES FOR sUAS USE

- The agency must obtain applicable authorizations, permits, or certificates required by the Federal Aviation Administration (FAA) prior to deploying or operating the sUAS, and these authorizations, permits, and certificates shall be maintained and current.
- The sUAS will be operated only by personnel (pilots and crew members) who have been trained and certified in the operation of the system.
- The sUAS-certified personnel shall inspect and test sUAS equipment prior to each deployment to verify the proper functioning of all equipment and the airworthiness of the device.
- The sUAS equipment and all data, images, video, and metadata captured, recorded, or otherwise produced by the equipment is the sole property of the agency

TPD UAS POLICY HIGHLIGHTS

PROCEDURES FOR sUAS USE

- All flights will be documented on a form or database designed for that purpose, and all flight time shall be accurately recorded.
- Each deployment of the sUAS shall include information regarding the reason for the flight; the time, date, and location of the flight; the name of the supervisor approving the deployment and the staff assigned; and a summary of the activities covered, actions taken, and outcomes from the deployment.
- Except for those instances where officer safety or investigation could be jeopardized—and where reasonably possible and practical, the Chief of Police or a designated command-level officer will consider notifying the public
- Where there are specific and articulable grounds to believe that the sUAS will collect evidence of criminal wrongdoing and/or if the sUAS will be used in a manner that may intrude upon reasonable expectations of privacy, the agency will obtain a search warrant prior to conducting the flight.

TPD UAS POLICY HIGHLIGHTS

RESTRICTIONS ON USING sUAS

- The sUAS shall be deployed and used only to support official law enforcement and public safety missions.
- The sUAS shall not be operated in an unsafe manner or in violation of FAA rules.
- The sUAS shall not be equipped with weapons of any kind.

TPD UAS POLICY HIGHLIGHTS

DIGITAL MULTI-MEDIA EVIDENCE (DME) RETENTION AND MANAGEMENT

- All DME shall be handled in accordance with existing policy on data and record retention, where applicable.
- All DME shall be securely downloaded at the completion of each mission. The sUAS- certified operators will record information for each file that shall include the date, time, location, and case reference numbers or other mission identifiers—and identify the sUAS personnel involved in mission.
- Officers shall not edit, alter, erase, duplicate, copy, share, or otherwise distribute in any manner sUAS DME without prior written authorization and approval of the Chief of Police or his or her designee.

TPD UAS POLICY HIGHLIGHTS

DIGITAL MULTI-MEDIA EVIDENCE (DME) RETENTION AND MANAGEMENT

- All access to sUAS DME must be specifically authorized by the Chief or his or her designee, and all access is to be audited to ensure that only authorized users are accessing the data for legitimate and authorized purposes.
- Files should be securely stored in accordance with agency policy and state records retention laws and retained no longer than necessary for purposes of training or for use in an investigation or prosecution.

TPD UAS POLICY HIGHLIGHTS

sUAS SUPERVISION AND REPORTING

- sUAS supervisory personnel shall manage all deployments and uses of sUAS to ensure that officers equipped with sUAS devices utilize them in accordance with policy and procedures defined herein.
- An authorized sUAS supervisor or administrator will audit flight documentation at regular intervals. The results of the audit will be documented. Any changes to the flight time counter if equipped will be documented.
- The Chief of Police or his or her designee shall document the agency's deployment and use of sUAS devices.

TPD UAS POLICY HIGHLIGHTS

TRAINING

- Police personnel who are assigned sUAS must complete an agency-approved training program to ensure proper use and operations.
- Additional training may be required at periodic intervals to ensure the continued effective use and operation and proper calibration and performance of the equipment and to incorporate changes, updates, or other revisions in policy and equipment.
- All agency personnel with sUAS responsibilities, including command officers, shall also be trained in the local and federal laws and regulations, as well as policies and procedures governing the deployment and use of sUAS.

TPD UAS POLICY HIGHLIGHTS

- Regulations
- Airspace classifications
- Operating requirements
- Flight restrictions
- Aviation weather sources
- Effects of weather on small UAS
- Small UAS loading
- Emergency procedures
- Crew resource management
- Radio communications
- Small unmanned aircraft performance
- Physiological factors
- Aeronautical decision making
- Maintenance and pre-flight inspections

TUKWILA POLICE UAS CERTIFICATION AND TRAINING

- Flight performance
- Autonomous flight
- Endurance
- Return home capability
- Obstacle avoidance
- Optics
- Photogrammetry software compatibility
- Data storage capacity
- Live streaming
- Program and vehicle costs
- Compatibility with Valley agencies (common training, photogrammetry and equipment packages)

TUKWILA PD UAS SELECTION CRITERIA

TUKWILA PD UAS COMMUNICATIONS PLAN

- Public Safety Committee
- Transportation Committee
- Community Oriented Police Citizens Advisory Board
- Tukwila International Boulevard Action Committee
- Tukwila Reporter Newspaper
- Hazelnut Publication
- City of Tukwila Website linked to Police Department Website

Tukwila Police Department sUAS Implementation Timeline

ITEM	DESCRIPTION	COST
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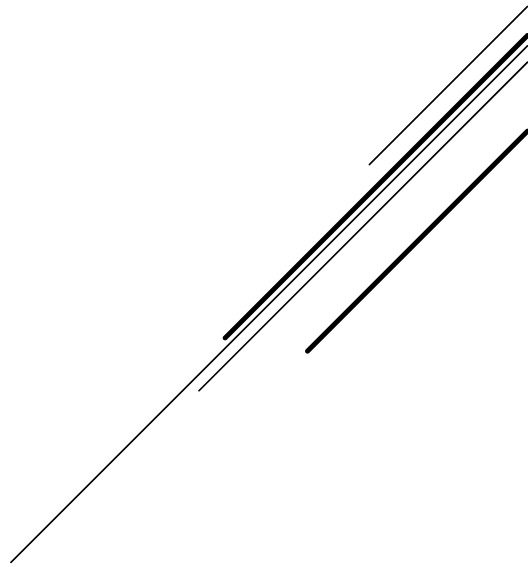
TUKWILA PD UAS PROGRAM COSTS

QUESTIONS



SMALL UNMANNED AIRCRAFT SYSTEMS

706.1 PURPOSE

This policy is intended to provide personnel who are assigned responsibilities associated with the deployment and use of small unmanned aircraft systems (sUAS) with instructions on when and how this technology and the information it provides may be used for law enforcement and public safety purposes in accordance with law

706.2 POLICY

It is the policy of this department that duly trained and authorized agency personnel may deploy sUAS when such use is appropriate in the performance of their official duties, and where deployment and use, and the collection and use of any audio/video recordings or other data originating from or generated by the sUAS, comport with the policy provisions provided herein and applicable law.

706.3 DEFINITIONS

Digital Multimedia Evidence (DME): Digital recording of images, sounds, and associated data.

Model Aircraft: A remote controlled aircraft used by hobbyists that is built, produced, manufactured, and operated for the purposes of sport, recreation, and/or competition.

Unmanned Aircraft (UA) or Unmanned Aerial Vehicle (UAV): An aircraft that is intended to navigate in the air without an on-board pilot. Also alternatively called Remotely Piloted Aircraft (RPA), Remotely Operated Vehicle (ROV), or Drone.

Unmanned Aircraft System (UAS): A system that includes the necessary equipment, network, and personnel to control an unmanned aircraft.

Small Unmanned Aircraft Systems (sUAS): UAS systems that utilize UAVs weighing less than 55 pounds and are consistent with Federal Aviation Administration (FAA) regulations governing model aircraft.

UAS Flight Crewmember: A pilot, visual observer, payload operator or other person assigned duties for a UAS for the purpose of flight or training exercise.

Unmanned Aircraft Pilot: A person exercising control over a UA/UAV/UAS during flight.

706.4 ADMINISTRATION

All deployments of sUAS must be specifically authorized by the Chief of Police or his designee. This agency has adopted the use of sUAS to provide an aerial visual perspective in responding to emergency situations and exigent circumstances, and for the following objectives:

1. Situational Awareness: To assist decision makers (e.g., incident command staff; first responders; city, county, and state officials) in understanding the nature, scale, and scope of an incident—and for planning and coordinating an effective response.

2. Search and Rescue: To assist missing person investigations, AMBER Alerts, Silver Alerts, and other search and rescue missions.

3. Tactical Deployment: To support the tactical deployment of officers and equipment in emergency situations (e.g., incidents involving hostages and barricades, support for large-scale tactical operations, and other temporary perimeter security situations).

4. Visual Perspective: To provide an aerial visual perspective to assist officers in providing direction for crowd control, traffic incident management, special circumstances, and temporary perimeter security.

5. Scene Documentation: To document a crime scene, accident scene, or other major incident scene (e.g., disaster management, incident response, large-scale forensic scene investigation).

706.5 PROCEDURES FOR SUAS USE

1. The agency must obtain applicable authorizations, permits, or certificates required by the Federal Aviation Administration (FAA) prior to deploying or operating the sUAS, and these authorizations, permits, and certificates shall be maintained and current.

2. The sUAS will be operated only by personnel (pilots and crew members) who have been trained and certified in the operation of the system and are FAA Certified Remote Pilots.

3. The sUAS-certified personnel shall inspect and test sUAS equipment prior to each deployment to verify the proper functioning of all equipment and the airworthiness of the device.

4. The sUAS equipment is the responsibility of individual officers and will be used with reasonable care to ensure proper functioning. Equipment malfunctions shall be brought to the attention of the officer's supervisor as soon as possible so that an appropriate repair can be made or a replacement unit can be procured.

5. The sUAS equipment and all data, images, video, and metadata captured, recorded, or otherwise produced by the equipment is the sole property of the agency.

6. All flights will be documented on a form or database designed for that purpose, and all flight time shall be accurately recorded. In addition, each deployment of the sUAS shall include information regarding the reason for the flight; the time, date, and location of the flight; the name of the supervisor approving the deployment and the staff assigned; and a summary of the activities covered, actions taken, and outcomes from the deployment.

7. Except for those instances where officer safety or investigation could be jeopardized—and where reasonably possible and practical, agencies should consider notifying the public.

8. Where there are specific and articulable grounds to believe that the sUAS will collect evidence of criminal wrongdoing and/or if the sUAS will be used in a manner that may intrude upon

reasonable expectations of privacy, the agency will obtain a search warrant prior to conducting the flight.

706.6 RESTRICTIONS ON USING THE SUAS

1. The sUAS shall be deployed and used only to support official law enforcement and public safety missions.

2. The sUAS shall not be operated in an unsafe manner or in violation of FAA rules.

3. The sUAS shall not be equipped with weapons of any kind.

706.7 DME RETENTION AND MANAGEMENT

1. All DME shall be handled in accordance with existing policy on data and record retention, where applicable.

2. All DME shall be securely downloaded at the completion of each mission. The sUAS-certified operators will record information for each file that shall include the date, time, location, and case reference numbers or other mission identifiers—and identify the sUAS personnel involved in mission.

3. Officers shall not edit, alter, erase, duplicate, copy, share, or otherwise distribute in any manner sUAS DME without prior written authorization and approval of the Chief of Police or his designee.

4. All access to sUAS DME must be specifically authorized by the Chief of Police or his or her designee, and all access is to be audited to ensure that only authorized users are accessing the data for legitimate and authorized purposes.

5. Files should be securely stored in accordance with agency policy and state records retention laws and retained no longer than necessary for purposes of training or for use in an investigation or prosecution.

706.8 SUAS SUPERVISION AND REPORTING

1. sUAS supervisory personnel shall manage all deployments and uses of sUAS to ensure that officers equipped with sUAS devices utilize them in accordance with policy and procedures defined herein.

2. An authorized sUAS supervisor or administrator will audit flight documentation at regular intervals. The results of the audit will be documented. Any changes to the flight time counter, if equipped, will be documented.

3. The Chief of Police or his or her designee shall document the agency's deployment and use of sUAS.

706.9 TRAINING

1. Police personnel who are assigned sUAS must complete an agency-approved training program to ensure proper use and operations. Additional training may be required at periodic intervals to ensure the continued effective use and operation and proper calibration and performance of the equipment and to incorporate changes, updates, or other revisions in policy and equipment.

2. All agency personnel with sUAS responsibilities, including command officers, shall also be trained in the local and federal laws and regulations, as well as policies and procedures governing the deployment and use of sUAS.

Washington State Policy Guidelines For Unmanned Aircraft Systems

The advent and widespread use of drones has raised many complex questions in Washington State, resulting in different legislative proposals to regulate the use of drones—unmanned aerial vehicles—by state agencies and programs.

This document is designed to guide policy makers and stakeholders as they develop policy proposals. It reflects input from the Executive Branch, Office of the CIO, DOT, and a broad group of agencies. The guidelines are not listed in any particular order or priority.

1. Definition of "Drones"—should apply to unmanned aerial vehicles controlled by a remote operator. Sample definition: "An unmanned aircraft that is operated without the possibility of direct human intervention from within or on the aircraft."

2. Law Enforcement and Respect for Civil Rights.

> A. Fourth Amendment requirements must apply to the use of evidence derived from drone surveillance. This is grounded on probable cause and the need to obtain a warrant in advance of use for law enforcement purposes, if such evidence is to be introduced in a court of law.
>
> B. Drones should not be used to monitor activities protected by the First Amendment or lawful exercise of other Constitutional rights.
>
> C. Law enforcement personnel should balance use of drones against other means of gathering information in a particular investigative need, assessing whether such alternative means are less intrusive than the deployment of drones.

3. Purpose of Use—the purpose of use of a particular flight should be recorded and maintained by the applicable agency.

> A. Drones should only be used in connection with properly authorized investigations and activities, unless they are authorized for on-going use by documented Agency policy.
>
> B. Exceptions to stating a purpose of use in advance of actual use can be made for emergencies such as natural disasters, terrorism and "hot pursuit" of crimes.
>
> C. Data collected by drones must be subject to existing state and federal laws and regulations regarding the privacy of personal information.

4. Data Minimization—the video images and other data derived from surveillance applications should be minimized in terms of review and retention, consistent with state records retention requirements. Only data pertaining to the original purpose of the drone flight should be retained. Agencies should set retention schedules consistent with the fulfillment of the original purpose of the drone flight.

5. Federal Law

A. FAA regulations regarding registration of drones, safety and no-drone zones must be followed.

B. The state acknowledges existing “open view” doctrines, as set forth by the Supreme Court and other legal authorities.

6. Policy Management

A. Drone guidelines and agency implementation should be reviewed annually to keep up with technology and respond to citizen concerns. Such review should take place within any agency that operates drones.

B. Drone guidelines should be published in print and online by each agency. OCIO will retain the guidelines in a central location.

C. The state should conduct public education and outreach regarding drone policies and operations by state agencies.

D. The state should not share drone data with the federal agencies without judicial authorization or review.

E. The state should not share drone data with local governments or between state agencies, unless such sharing is specified within the original purpose of the deployment

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Published on *American Civil Liberties Union* (https://www.aclu.org)

Domestic Drones [1]

U.S. law enforcement is greatly expanding its use of surveillance drones, and private actors are also seeking to use the technology for personal and commercial use.

Drones have many beneficial uses, including in search-and-rescue missions, scientific research, mapping, and more. But deployed without proper regulation, drones equipped with facial recognition software, infrared technology, and speakers capable of monitoring personal conversations would cause unprecedented invasions of our privacy rights. Interconnected drones could enable mass tracking of vehicles and people in wide areas. Tiny drones could go completely unnoticed while peering into the window of a home or place of worship.

Surveillance drones [2] have been the subject of fierce debate among both legislators and the public, giving rise to an impressive amount of state legislation—proposed and enacted—to protect individuals' privacy. Uniform rules should be enacted to ensure that we can enjoy the benefits of this new technology without bringing us closer to a "surveillance society" in which our every move is monitored, tracked, recorded, and scrutinized by the government.

The ACLU recommends the following safeguards:

- **Usage Limits**: A drone should be deployed by law enforcement only with a warrant, in an emergency, or when there are specific and articulable grounds to believe that the drone will collect evidence relating to a specific criminal act.
- **Data Retention**: Images should be retained only when there is reasonable suspicion that they contain evidence of a crime or are relevant to an ongoing investigation or trial.
- **Policy**: Usage policy on drones should be decided by the public's representatives, not by police departments, and the policies should be clear, written, and open to the public.
- **Abuse Prevention and Accountability**: Use of domestic drones should be subject to open audits and proper oversight to prevent misuse.
- **Weapons**: Domestic drones should not be equipped with lethal or non-lethal weapons.

Source URL: https://www.aclu.org/issues/privacy-technology/surveillance-technologies/domestic-drones

Links
[1] https://www.aclu.org/issues/privacy-technology/surveillance-technologies/domestic-drones
[2] http://www.aclu.org/blog/tag/domestic-drones

Executive Summary

There is no question that technology is rapidly changing the face of policing today. Most police forces now have computers in patrol cars and communicate with their officers via cell phone. They actively use new technologies to gather license plate data and pinpoint hot spots of crime. New DNA testing capabilities are reopening thousands of old cases, offering the chance to complete an investigation or, in some cases, reverse a wrongful conviction.

A driving force among cutting-edge businesses is the search for "disruptive" technologies—a product that will completely transform a market and potentially make former products obsolete. Technology has been a "disruptive" force for law enforcement in many ways. For example, the use of cellphone cameras and the explosive growth of body-worn cameras have irreversibly changed the nature of policing.

Like these other technological breakthroughs, the development of small unmanned aircraft systems (sUAS) has the potential to revolutionize policing. These systems are portable, relatively easy to learn and use, and are becoming increasingly affordable as more manufacturers enter the growing market.

The agencies that have pioneered the use of this technology have discovered that a sUAS can increase operational efficiency and improve officer and community safety. They can, among other benefits, help find lost persons, protect police officers during searches for armed suspects, decrease time needed to process crime and accident scenes, and aid in disaster relief and recovery.

But this is just the start.

Developers have already produced prototype miniature unmanned systems that can be carried in a pocket. They are perfecting the ability of sUAS to fly through a building using their own GPS systems. They are increasing battery power to enable them to fly longer distances or hover in place for an hour or more. And we can only imagine that the use of this technology could one day be the "Airborne Partner" to every public safety officer regardless of their location or the situation they are confronted with.

The potential for these systems has caused a number of policing agencies to take note. However, early adopters of this new technology have discovered a painful truth: Where law enforcement leaders see a wonderful new tool for controlling crime and increasing public safety, a portion of the public sees the potential for a massive invasion of privacy. In the public mind the type specimen of unmanned aircraft systems is the military drone, able to hover for days, spying indiscriminately and conducting missile strikes without warning.

Furthermore, the regulatory environment in the past allowed hobbyists to buy and fly sUAS the same day, while law enforcement leaders faced a number of challenges to using this relatively new technology. Chief among those were restrictions placed on sUAS use by the Federal Aviation Administration (FAA). As a result, few police and sheriff's departments completed the rigorous authorization process and received approval for use. However, in August 2016 the FAA completed an eight-year rulemaking process and established regulations to allow the use of sUAS in the National Airspace System (NAS). With the regulatory framework in place, the use of sUAS will undoubtedly grow at a much greater pace.

In addition, numerous privacy advocates and concerned citizens, as well as state legislatures across the country, have strong and valid concerns regarding privacy and safety. For example, at least 17 states have placed some level of restriction on police use of sUAS, and many others have legislation under consideration. The concerns and questions are many, and the answers thus far, are few.
[1]

The President's Task Force on 21st Century Policing (2015) notes that technology can indeed, be a double-edged sword for law enforcement. While it can provide immeasurable benefits, it can also cause police officers to spend less time interacting with citizens. The resulting alienation can cause communities to see law enforcement as an occupying force, completely divorced from the concerns of the public.

To avoid this alienation, the task force recommended increased engagement with the community during the acquisition phase of any new technology. As task force co-chair and former Philadelphia Police Commissioner Charles Ramsey noted: "Just having the conversation can increase trust and legitimacy and help departments make better decisions."

Law enforcement agencies considering adopting a sUAS must consider ways to include and engage their community in the decision-making process. Beyond official restrictions, law enforcement agencies across the country have encountered strong public opposition when purchasing a sUAS. Protests over potential police surveillance of citizens have led some departments to shelve their sUAS before they ever used them. The public outcry has made it clear that if law enforcement is to benefit from

sUAS use, they must involve the community in the process, being transparent on the benefits and risks and on the safeguards that will be put in place to protect public privacy and safety. Strong community relationships and communication can ensure that sUAS become community assets used to solve community problems.