

City of Phoenix

Unmanned Aircraft Systems (Drones) Community Meetings

Feedback Summary

Community engagement meetings held in March and April 2022

Questions:	
Is the City comparing its policy to that of other cities? How does the City policy compare to other cities?	The City of Phoenix has researched UAS/UAV policies from across the country as well as several here in Arizona. The draft policies are a comprehensive collection of best practices identified to date, in an effort to “right size” the policy to meet the needs of our community.
Is the City consulting with the US military while drafting its policy?	The City of Phoenix is not looking to implement any type of military UAS/UAV systems or platforms as part of our program, therefore there has been no consultation with the military at this time.
What are the differences between the DOJ example drone policy and the City’s drone policy?	The draft policies have been developed using local and national best practices as well as DOJ recommendations to create a robust policy. They incorporate DOJ recommendations and also build on those with other best practices.
What is the timeline for drone policy development, equipment purchase, and program implementation?	<p>This would vary depending on each Department’s proposed use cases, procedures and specific UAV models chosen. All proposed Department UAV programs will be evaluated by the Technical, Security & Privacy Committee (TS&P) subcommittee. Based on this review process a department may be required to modify their proposed program for approval by the TS&P subcommittee. The subcommittee is required to complete their review of each Department’s program within a 90-day time period.</p> <p>The Fire Department is planning to implement its program in June 2022.</p> <p>The Police Department is looking to implement UAS/UAV technology as soon as possible. Once the final draft policy is approved, the Police Department is ready to move forward</p>

	with purchasing UAVs in accordance with existing City procurement processes and implementing the program.
Has the drone program already been approved?	Yes. The Police, Fire and Parks and Recreation Departments are continuing to seek community input as we finalize the policies, as directed by the City Council.
What will the costs for the drones be and how will they be funded?	<p>The Police Department was authorized on February 16, 2022 for \$516K to implement a UAS program. These funds were identified within the department’s existing budget.</p> <p>The average UAV is between \$4,000-\$36,000 depending on model and manufacturer.</p> <p>The Fire Department’s initial UAV program costs are estimated at \$125,000 dollars. This will include the purchase of the UAV’s, consulting services, and training. The anticipated annual cost of the program once fully implemented is \$250,000 dollars. The costs will be absorbed in the Fire Department’s FY 22/23 budget.</p>
How much money would be saved by using drones instead of helicopters?	It is not the City’s intent to substitute helicopters with drones. Both tools will still be used.
How would drones have impacted the February 11 incident?	The deployment of a UAV to a violent and emergency incident enables law enforcement to quickly gain situational awareness concerning hazards in the immediate area, expanded perimeter security, and deployment of personnel to establish and maintain containment of scene. The drone that was borrowed from a neighboring city on February 11 allowed PPD to avoid having to send additional officers into the residence.
How often do drones fail? How safe are the drones during potential failures? How dangerous would drone malfunctions be?	The failure rate of UAVs is very low, but should it occur, it is usually the result of pilot error or overloading the UAV platform with payload. The police department will not be utilizing UAV platforms to carry payloads resulting in even less risk of failure.

	<p>Should a UAV experience a “Loss-link” incident, the UAV is equipped to “Return to Home” or can be set to safely land in a controlled manner to be retrieved by the pilot.</p> <p>Each UAV is equipped with state-of-the-art enterprise security software so that in the event of a lost-signal situation, the UAV is programmed to return to its “home” launch point, or can be programmed to conduct a controlled landing at its current location for retrieval by the pilot.</p>
<p>Are the drones armed?</p>	<p>No. The UAVs will never be armed or weaponized in any way.</p>
<p>How will the Parks Department respond to fires caused by crashed drones?</p>	<p>Fires are extremely rare with the types of UAVs we intend to fly. We will always keep line of site with our UAVs to ensure out ability to respond in the extremely unlikely chance that such a fire should occur.</p>
<p>Who would be liable for damage caused by drones?</p>	<p>Any damage that results from the use of a city drone would be evaluated by the City of Phoenix Risk Management Department through the claims process.</p>
<p>Will Parks and Recreation use drones for enforcement of Parks policies?</p>	<p>Parks does not intend to use UAVs to patrol parks looking for park rule violations. At this time Parks intends to utilize drones to protect our Mountain Preserves and Desert Parks.</p>
<p>Can drones be used to assist in Police Department responses to burglaries? What types of crimes would drones be used to respond to?</p>	<p>Initial implementation of the UAS Program will be limited to supporting the following three areas of the Police Department:</p> <p>Operations: Tactical scenes, (i.e. barricade, hostages, emergency incidents.)</p> <p>Investigations: Investigative support and crime scene mapping for traffic fatalities, homicides, multi-faceted, complex scenes.</p> <p>Event Management: Situational awareness and live streaming of large-scale events like Super Bowl, NCAA Final Four, parades, and similar events.</p>

<p>Could drones be used to track vehicles on the highway during police pursuits?</p>	<p>No. This practice would greatly exceed the scope and scale of our initial program and is not currently recognized as a law enforcement best practice on a national level.</p>
<p>How will the “reasonableness” of a drone use-case be evaluated?</p>	<p>Once the request for UAS support at a scene is received by the Program Manager, the request will be evaluated to ensure its deployment falls within our guidance criteria. Once on scene, the pilot is responsible for flying the UAV in a manner consistent with federal and state law, their training, certification, and in accordance with policy. The UAS Program Manager is responsible for reviewing the Mission Flight Reports and ensuring the flight telemetry data is consistent with the type of mission flown. Violations of FAA regulations, unsafe operation, or violations of department policy and City Administrative Regulations will be addressed utilizing the department’s existing disciplinary process.</p>
<p>Are the Fire and Police Department drones used at night?</p>	<p>Yes. The Police Department will be utilizing UAS technology during nighttime operations as dictated by the requests for assistance.</p> <p>Initially the Fire Department does not intend to utilize UAV’s at night but as the program expands, night use may be included.</p>
<p>Doesn’t the City already use drones? How is this different?</p>	<p>No. This would be a new program for the City of Phoenix.</p>
<p>Why is it that the City is asking for drones now when they have not been used before?</p>	<p>The integration of UAS technology in law enforcement/fire service applications has continued to grow and expand. As the technology continues to improve, law enforcement/fire service has identified opportunities to leverage this technology to increase our officer/firefighter safety and department efficiencies.</p>
<p>Will drones be insurable?</p>	<p>Yes, City of Phoenix Risk Management will insure them.</p>
<p>Will they have infrared capabilities?</p>	<p>Some selected platforms are capable of utilizing FLIR (Thermal Imaging) technology.</p>

How secure will the telemetry of the drones be? Is streaming data encrypted?	UAV telemetry is secure. Any interruption of signal during a flight would either result in the return of the UAV back to point of origination (Home Feature), or could be set to land safely in a controlled descent for retrieval.
Will drones be visually identifiable as City of Phoenix drones?	UAVs are equipped with mandatory aircraft lighting required by the FAA and will bear registration markings identifying them as City of Phoenix drones, but given their small visual profile in the air, the markings may be difficult to see by the public.
Where will the drones be housed and deployed from?	They will be stored in various locations throughout the city so they will be ready to be deployed where needed.
What will the response time be for drones to reach emergency situations?	Response times will vary depending on the location of the incident and the location the pilots are responding from, however the expected response time will be within one hour or less.
Does the FAA need to be notified with every drone deployment?	The Remote Pilot In Command (RPIC) will access the Low Altitude Authorization and Notification Capability (LAANC) online system to make all appropriate notifications to Air Traffic Control about an impending mission or as soon as possible if exigency exists.
What will the image resolution of drone cameras be?	The majority of UAV platforms currently on the market have the ability to capture imagery in both 1080p and 4K digital resolution. Phoenix Police intend to utilize the 1080p option to reduce storage capacity.
Will drones be implemented in the community?	Yes, as provided by the approved policies.
Would there be a night vision option for the Police and Parks Department?	Yes. Each Department will select the features that are needed to support their specific mission and use cases. As our UAV programs develop additional features would be evaluated and included as needed.
Would each department have its own type of drone for different heat scenarios?	Each Department will have their own UAV's based on their needs and planned uses.

	The Fire Department does intend to utilize thermal imaging, and this will be available.
How do personal drone users impact city-owned drone operations?	During Public Safety operations City owned UAV use would have priority. Personal use over an active scene would not be allowed, therefore impacts to city operations should be limited. If personal UAVs are present, the department will attempt to locate the operator and through education, have them discontinue use while public safety is on scene.
How will drones responding to HAZMAT issues be decontaminated?	The Fire Department has comprehensive processes to decontaminate any equipment that has been exposed to a hazardous environment. Those procedures will be utilized for any City of Phoenix UAV that may become exposed.
How many drones will each department be purchasing and using?	Due to each Department having different use cases and needs, each Department will have their own UAV's (drones) to support their program. The Fire Department's initial purchase will be for three UAV's. The Police Department initial purchase may include 8-12 UAVs to address the varying objectives. The number of UAVs used by Parks has not yet been determined.
How will geofencing guidelines apply to the City's drones?	Yes. The City of Phoenix will utilize manufacturer's pre-set geo-fencing guidelines and will also be able to program additional geo-fencing settings to remain compliant with the Air Traffic Control Tower and FAA guidelines for operation within the National Air Space.
What are the differences between helicopter and drone missions?	<p>The Police Department's Air Support Unit oversees the department's 5 patrol helicopters, 1 twin rescue and fixed wing aircraft intended to support patrol with citywide response to crimes in progress. Additionally, the helicopter is utilized to support the Fire Department with performing medical and tactical rescues.</p> <p>The UAS program is designed to provide smaller scale operational support for an isolated tactical scene, investigative crime scene mapping support, and event management support. The UAS program is not designed to replace the use of manned aircraft, but to be a complimentary resource that can free up the city's helicopter for citywide patrol support.</p>

	<p>Fire Department helicopter operations are primarily focused on mountain rescue operations. The use of a UAV may reduce the need for a helicopter to provide reconnaissance on some incidents.</p>
<p>Are critical infrastructure areas in the City geofenced?</p>	<p>The Police Department has identified those critical infrastructure locations within our jurisdiction and those coordinates can be programmed into the UAVs utilized. Additional manufacturer pre-set geo-fenced locations include those locations within a 5-mile radius from any airport in accordance with FAA regulations.</p>
<p>Will the data hosting contactor be subject to the RFP process and public information requests?</p>	<p>Yes.</p>
<p>What is the minimum height a drone will fly enroute to an incident?</p>	<p>The current FAA guideline for UAS operation in Class B Airspace is less than 450 feet above ground level (AGL). The City of Phoenix will abide by this guideline however the exact height of each flight will vary for a variety of reasons including proximity to the scene, topography, hazards (i.e. power lines, trees, etc.).</p>
<p>Why will facial recognition not be used in the drone program?</p>	<p>It is the policy of the Police Department and City of Phoenix that facial recognition technology not be utilized in the UAS program.</p>
<p>How will public safety drones deal with other drones from news media or non-city pilots?</p>	<p>Should the police department encounter a media UAV at or near one of our scenes, we would work through our Communications Bureau and Air Support Unit to make direct contact with our media partners to advise them to remove their UAV so as not to interfere with an on-going public safety incident.</p> <p>If a non-city or private UAV is operating or interfering with an on-going public safety operation, we would attempt to locate the pilot and conduct an educational contact to have the UAV removed from the immediate area.</p>

<p>Will privately-owned drones over public land be limited by Parks Department drones?</p>	<p>The City’s UAV program does not include regulation of the use of privately owned UAV’s. This issue would be regulated by City Code 24-49, where drones can be operated only in designed parks and areas.</p>
<p>Will drone footage and digital media be subject to FOIA requests?</p>	<p>Yes.</p>
<p>Are we thinking drones are similar to robots in their ability to view a threat and not endanger an officer?</p>	<p>Yes. The Phoenix Police Department is dedicated to the security, safety, and preservation of life of its residents and employees. The UAS technology is intended to provide an enhanced level of operational capability, safety, and situational awareness that can serve these goals and reduce the risk of injury.</p>
<p>Do the drones have lights?</p>	<p>Yes. Each UAV platform comes from the manufacturer with airship/chassis marker lighting as required by the FAA.</p> <p>Depending on the model selected for each type of deployment scenario, additional lighting either comes with or is available for nighttime flight illumination as a safety measure (similar to an LED flashlight).</p> <p>Nighttime lighting is a requirement to ensure there is clear visibility to operate in a given space and to avoid any potential safety hazards during flight.</p>
<p>Can someone take over the video feed or take control of the drone during flight?</p>	<p>This is extremely unlikely. The video feed will be transmitted over an encrypted public safety network and the UAVs come equipped with enterprise grade security from the manufacturer to prohibit a cyber intrusion such as this. Currently, the City of Phoenix is not aware of any incidents where a video feed or actual control of an airborne UAV has been compromised in this manner.</p>
<p>Can we disable a drone that has been co-opted by an adversary?</p>	<p>The UAS pilot has the ability to immediately land or have the UAV return to its launching point should they encounter an issue during flight. Currently, the City of Phoenix is not aware</p>

	of any incidents where a UAV has been co-opted by an adversary.
Why is the Fire Department not planning on recording flights?	The Fire Department program was the first approved program and intended to be an early adopter. Because of this, the initial phase did not include recording of flights. It is anticipated that the next phase of the Fire Department’s program will include recording of flights.
Would a drone team have a minimum of 3 people?	A typical deployment team will consist of a minimum of two pilots. One will act as the Remote Pilot in Charge (RPIC) and the other will serve as the Observer. However, each scene is different and if the RPIC determines additional are necessary to ensure a safe flight is conducted, they can adjust as needed.
Would the airspace clearance to fly be approved under the certified pilot or the City?	The City’s UAV program will operate under a Certificate of Authorization (COA) with Part 107 licensed pilots. <u>The Remote Pilot in Command would follow the Part 107 Airspace Authorizations.</u>
Would the City have its own qualified certification with the FAA?	The City’s UAV program will operate under a Certificate of Authorization (COA) with Part 107 licensed pilots.
Would the drones be purchased from and manufactured within foreign or domestic sources?	The City continues to explore multiple UAV companies and our research has shown manufacturers conduct research and development and assembly in different locations both foreign and domestic.
Would the City establish a policy to prohibit drone use that would violate civil and constitutional rights?	Yes, this is addressed in both the City of Phoenix Administrative Regulation 1.56 as well as the department policies.

<p>Will drones be used in private communities?</p>	<p>The UAV will operate in all areas where a response by Phoenix Police may be warranted or is defined within our City’s jurisdiction.</p> <p>Fire Department UAV’s would be utilized at the scene of emergencies. If these incidents occur in a private community, it is possible a UAV would be used.</p>
<p>Will drones be used for surveillance?</p>	<p>No. The Phoenix Police Department will not utilize UAS technology to conduct tracking or surveillance of persons or vehicles.</p>
<p>What data are drones collecting? Does this include Images, Radar/Lidar, Thermal, RF, Acoustic, etc.?</p>	<p>The Police Department’s use of UAS technology may include the collection of photos and video as well as the use of Thermal/Lidar imaging.</p>
<p>Where are the keys stored? How are they generated? What is the re-keying interval?</p>	<p>Each Department program manager will be responsible for managing the UAV’s and securing of all components in compliance with City policies.</p>
<p>How do drones behave in proximity to cell towers, microwave LOS links, high voltage power transmission lines?</p>	<p>We will follow the manufactures recommendations and FAA guidelines for safe operations of the UAVs around these types of obstacles.</p> <p>Additionally, all pilots are trained to identify and avoid these types of obstacles during their Part 107 Certification Training.</p>
<p>Are any areas geo-fenced (e.g. critical infrastructure like power plants or transmission lines)?</p>	<p>It varies based on the UAV manufacturer.</p>
<p>What happens if GPS signals are unavailable?</p>	<p>This would depend on the UAV manufacturer and the settings on the specific UAV. Most UAVs do not need GPS to operate and can still safely fly if there is a loss of GPS signal.</p>
<p>What if there is signal jamming, interference or excessive attenuation? What does the drone do?</p>	<p>Most UAVs are programmed to “return to home” if signal is lost with the flight controller. The exact safety procedures may vary by manufacturer.</p>

What is the wildlife impact of drones?	The City will minimize any adverse impact to wildlife.
Will these be civilian or military drones?	The drones used will be civilian (consumer grade) UAVs.
Do drones have dead reckoning capabilities?	While most UAV manufacturers do not specifically refer to “dead reckoning” capabilities, the UAVs the City intends to deploy are designed and programmed by the manufacturer to safely perform navigational activities similar in nature.
Can drone batteries be swapped quickly?	Yes. This process typically takes between 1-3 minutes to change batteries.
Are there spare controllers? What if one is damaged during an operation?	No. Another drone will need to be deployed if there is damage to a controller.
Are drones FPV or flown from a line-of-sight position?	The City UAVs will be flown using Line of Sight (LOS) protocols in accordance with <u>Part 107 regulations</u> .
Will drones be used to limit hunting and natural resource theft in parks and preserves?	No.
Who is staff working with from the community to ensure that First Amendment, privacy, and other community concerns are being addressed?	To date, we have consulted with multiple in-state and out of state agencies across the country to identify best practices and lessons learned from their drone programs. We have also contracted with an attorney with expertise in privacy law and civil rights issues. Further, we have received feedback on the draft policies from several community organizations that focus on civil rights. Additionally, community feedback and input from citywide community discussion sessions will be considered before the draft policy is finalized.

<p>Where is this data from the drones stored?</p>	<p>The City of Phoenix will utilize only hardware/software storage systems approved by the City of Phoenix Information Technology Services Department and in accordance with city policies and procedures.</p> <ul style="list-style-type: none"> • The City will only collect information obtained by use of UAS for an authorized purpose. • Information collected that is evidentiary will be impounded in accordance with existing policy • Information collected that is non-evidentiary will be retained for 190 days
<p>What is the retention period/policy for collected data?</p>	<p>Information collected that is evidentiary will be impounded in accordance with existing policy.</p> <p>Information collected that is non-evidentiary will be retained for 190 days.</p>
<p>If sensitive data (e.g. critical infrastructure images) is captured, what is the protocol to ensure is protection/destruction?</p>	<p>Information collected that is evidentiary will be impounded in accordance with existing policy.</p> <p>Information collected that is non-evidentiary will be retained for 190 days.</p> <p>Video footage containing sensitive data such as critical infrastructure would be reviewed and appropriately redacted for its protection.</p>
<p>What privacy considerations/protections are in place?</p>	<p>It is the policy of the City of Phoenix that all operations of UAS and all UAVs shall be carried out in a manner that respects and protects personal privacy consistent with the United States Constitution and Federal, State, and local law.</p> <p>The impact on privacy and civil liberties shall be balanced against the governmental interests leading to a deployment.</p> <p>The City of Phoenix will only collect, use and retain information for a properly authorized purpose.</p> <p>The City of Phoenix prohibits the collection, use, retention, or dissemination of UAS collected information in any manner that would impinge on the right to free speech under the First Amendment of the US Constitution and/or Article 2, § 6 of the Arizona Constitution; or conduct a search and seizure that</p>

	<p>violates the Fourth Amendment of the US Constitution and/or Article 2. § 8 of the Arizona Constitution.</p> <p>The use of UAS shall not be to violate any constitutional right of any citizen, including Victim's Rights, due process of law, the right to petition and assembly, or the right to worship or religion.</p> <p>UAS will not be used or operated to violate a person's reasonable expectation of privacy. A person does not have a reasonable expectation of privacy out in public or openly accessible places.</p> <p>Incidental and transitory capture of information and images do not violate the 4th Amendment or an expectation of privacy. For example, aerial flyovers of homes, neighborhoods, or business in route to an incident are allowable, but unnecessary and unauthorized stationary surveillance or hovering over a person or place without the appropriate authority is not permissible.</p>
<p>Who can access the recordings?</p>	<p>Only City employees who have a legitimate business need to access the data will be allowed to access it.</p> <p>If a Public Records Request is made the data will be processed for release in accordance with existing policies.</p>
<p>Are drone deployments requiring search warrants anticipated?</p>	<p>Yes. The Remote Pilot In Command (RPIC) and scene Investigator will comply with all US and State Constitutional laws surrounding the Fourth Amendment (Search and Seizure) during deployment of a UAV. Any scenario that requires a search warrant will also apply to the use of a UAV and the City will comply with such requirements.</p>
<p>Where does a homeowner's airspace begin and end?</p>	<p>The FAA controls (but does not own) all navigable airspace above approximately 500 feet above ground level.</p>
<p>Would the Police Department drone recordings and data storage match the body worn camera systems and processes?</p>	<p>Yes. The recording and data storage process for the Police Department's UAS program is designed to utilize a very similar process to that of the department's body worn camera program.</p>

<p>Would criminal activity observed enroute to another scene be used to charge those uninvolved in the scene requiring drone deployment?</p>	<p>This would not be the Police Department’s priority during a UAS deployment.</p>
<p>Will the drone be recording enroute to an intended scene?</p>	<p>The decision on when and what to record would be determined at the scene after discussion between the on-scene Incident Commander and the pilot. Typically, transitory flight recording would not be required unless there was a specific reason related to the scene to do so.</p>
<p>Will the TS&P Subcommittee meetings be open to the public? If so, where would the public find information on these meetings?</p>	<p>No. The current TS&P subcommittee is not designed to include the public as a part of the membership. The City of Phoenix has and will continue to seek community comment and feedback through community discussion forums and during public comment at Public Safety & Justice Subcommittee.</p>
<p>How will TS&P subcommittee members be selected?</p>	<p>Members of the TS&P have been selected based on position and function within their respective city department areas of operation.</p>
<p>Is the TS&P subcommittee advisory or binding?</p>	<p>The TS&P subcommittee is an advisory committee that provides recommendations to the Executive subcommittee.</p>
<p>Will future changes to the UAS city administrative regulations have to go through similar community engagement processes?</p>	<p>The current City governance structure outlined in Administrative Regulation 1.56 details a pathway via the UAS Program Executive Committee to review and approve any policy changes prior to implementation on behalf of the City. The decision to conduct additional community engagement meetings would be determined by City of Phoenix leadership.</p>
<p>Will any of the drone camera footage be available to the public?</p>	<p>UAS footage being live-streamed to a command center will not be available for viewing by the public. However, any video or data imagery collected that is not evidentiary in nature is subject to availability utilizing the current Public Records Request process.</p>

<p>Are the draft policies on the Phoenix.gov website?</p>	<p>The Phoenix Police and Phoenix Fire Department Draft UAS Program policies can be found at Phoenix.gov/Newsroom along with the City’s Administrative Regulation 1.56.</p>
<p>Will an additional public hearing process be conducted if facial recognition technology is to be implemented in the future?</p>	<p>Yes. If there was ever an interest in pursuing this technology, it would be brought through the City Department Head to City Leadership for Council consideration/action. At this time, the City has no plans to utilize facial recognition technology.</p>
<p>How would complaints about drone usage be received?</p>	<p>Complaints of misconduct may be referred to the City Manager’s Office.</p>
<p>Why were community members not involved in the discussion about drones in 2016?</p>	<p>The process in 2016 halted before it progressed to the point of community engagement.</p>
<p>Why was the community not involved prior to the programs being approved?</p>	<p>The City Council approved the drone program as a result of several Council members making the request to add it to a Council meeting agenda. There was not time to conduct community engagement due to the short notice of this request, therefore the Council directed staff to conduct the engagement following the approval.</p>
<p>Can the programs be withdrawn if enough members of the public get involved?</p>	<p>The program has been approved by the City Council, therefore it would require a Council vote to change the current trajectory of the program.</p>
<p>Can this issue be on the ballot for the public to vote on?</p>	<p>This is not an issue that is currently under consideration for the public to vote on. It is within the purview of the City Council.</p>
<p>Can helicopter use be scaled down with increased drone use?</p>	<p>No. There is no intention to reduce helicopter use or hours of operation. The implementation of the department’s UAS program is intended as a complimentary resource and not as a replacement to the use of manned aircraft.</p>
<p>How many helicopters does the Police Department have?</p>	<p>The police department has 5 patrol helicopter and 1 rescue helicopter.</p>

<p>How will any misuse of drone equipment be addressed, and how will individuals involved be held accountable?</p>	<p>All complaints or allegations of misconduct or abuse of the City's/Department's UAS policy/program will be reviewed and referred for follow up or subsequent investigation. All employees will be held accountable to the UAS policies in accordance with the City's existing discipline policy.</p> <p>Complaints regarding the use of UAS may be received via the City's Integrity Line or by contacting the City Manager's Office.</p>
<p>What tools do SWAT teams already have at their disposal? Do their tools currently include drones?</p>	<p>The Police Department's Special Assignments Unit (SAU) utilizes a variety of tactical and technical tools to perform their tasks. The Police Department has previously borrowed UAS technology from partner agencies.</p>
<p>Why can't SWAT use their other resources (e.g., robots) to eliminate the need for drones?</p>	<p>The use of a UAV to provide an aerial platform significantly expands department personnel's field of view during high-risk, multi-faceted complex incidents.</p>
<p>Have the presenters flown a drone before?</p>	<p>Yes. Some are licensed drone operators and have operated a UAV before.</p>
<p>Concerns:</p>	
<p>Concern that bureaucratic processes will limit usefulness of drones to first responders in the moment</p>	
<p>Concern that too much attention is being paid to privacy issues rather than first responder needs</p>	
<p>Concern about long timeline to procure drones</p>	
<p>Concern that Fire Department may need a drone with higher heat tolerance</p>	
<p>Concern about individuals shooting firearms at drones</p>	
<p>Concern about the fire hazard posed by lithium-ion batteries in drones</p>	
<p>Concern regarding potential invasion of privacy</p>	

Concern about weaponization of drones by third parties
Concern that drones can interfere with or obstruct other aircrafts
Concern about lack of citizen representation in the TS&P subcommittee
Concern about hazardous materials that will be picked up by drones and cause hazardous exposure to Fire staff
Concern about potential future facial recognition use
Concern that bureaucratic processes and additional community involvement will reduce program effectiveness
Concern about the potential for the program to evolve over time to include currently prohibited uses such as surveillance and weaponization
Concern about individual privacy violations
Concern that the drones may violate the privacy laws in the Arizona Constitution
Concern that federal agencies and regulations would not protect personal freedoms and adequately regulate the program
Concern about drone records being released to federal authorities when requested
Concern about stored video recordings and how they would be used
Concern about public records request process and its potential use to violate individual privacy
Concern about hackers and malicious third parties taking control of drones
Concern about private drone use also violating individual privacy
Concern that drones will be used to restrict personal freedoms and target specific individuals based on personal characteristics
Concern about the potential influence of political ideologies on the drone policy

Concern that drones are being requested because there is not enough funding or support for the Police Department staff
Concern that the City will not represent or follow the public's voice and needs
Concern about training and certifications of drone pilots not being adequate
Suggestions:
Suggestion that Fire record flights for Fire staff safety
Suggestion that the drones have infrared capabilities
Suggestion that drones be used to track vehicles on highways during police pursuits
Suggestion that policies on City website be advertised more
Suggestion that additional outside legal counsel and collaboration with community leadership/groups be incorporated into the policy development process
Suggestion that liability insurance cover the City as well as the certified FFA pilot. Insurance coverage should include negligence , wanton usage, civil rights, constitutional, including all other physical injuries cause by drone maintenance defect, SOP, IOS or any and all other possible incidence placed by legal suit by a private, organization private, or government
Suggestion that each participating department completely review FAA regulations and determine areas needing legal review
Suggestion that there be citizen involvement in the TS&P subcommittee
Suggestion that helicopters not be compared to drones in presentations, as this creates confusion
Suggestion that public hearings be part of the any changes to the governance policy
Suggestion that the drone policy be voted on by the public