



COLORADO

Center of Excellence for Advanced
Technology Aerial Firefighting

Department of Public Safety

HB 17-1070

Study Drone Use By Public Safety Agencies Fact Sheet

House Sponsor: Representative Wilson

Purpose: This bill tasks the Colorado Center of Excellence for Advanced Technology (CoE) with conducting a pilot project and study on the use of Unmanned Aerial Systems (UAS) on public safety incidents.

Problem: Currently, many State and local public safety agencies are not utilizing UAS because of funding, resources, and understanding about the regulatory and operational challenges of UAS. This technology is being utilized worldwide to provide life-saving situational awareness and resource delivery on a variety of public safety incidents, many of which are common in Colorado. Colorado's public safety community does not have clear guidance and direction on how to best integrate this rapidly evolving technology into emergency operations.

This Bill Would:

Require the CoE to conduct a pilot program that would:

- Set up and train a team of UAS operators to respond to a variety of public safety incidents, including, but not limited to firefighting, search and rescue, accident reconstruction, emergency management, and tactical operations; and
- Operate out of the CoE's location at the Rifle-Garfield County Airport and provide emergency response to State and local public safety agencies.

Require the CoE to publish a study informed by the pilot program that would include recommendations on:

- The most feasible and readily available ways to integrate UAS in public safety;
- The cost-benefit of acquiring a variety of different platforms and payloads of different size, cost, and capabilities;
- Hiring and training requirements for UAS operators;
- Other infrastructure required to successfully run a program to use UAS in public safety;
- Mitigating privacy concerns through public outreach and the development of good policy and best practices; and
- Whether or not UAS should be acquired and deployed on public safety incidents by individual agencies, regional groups, or the State.

Practical Implementation and Benefits

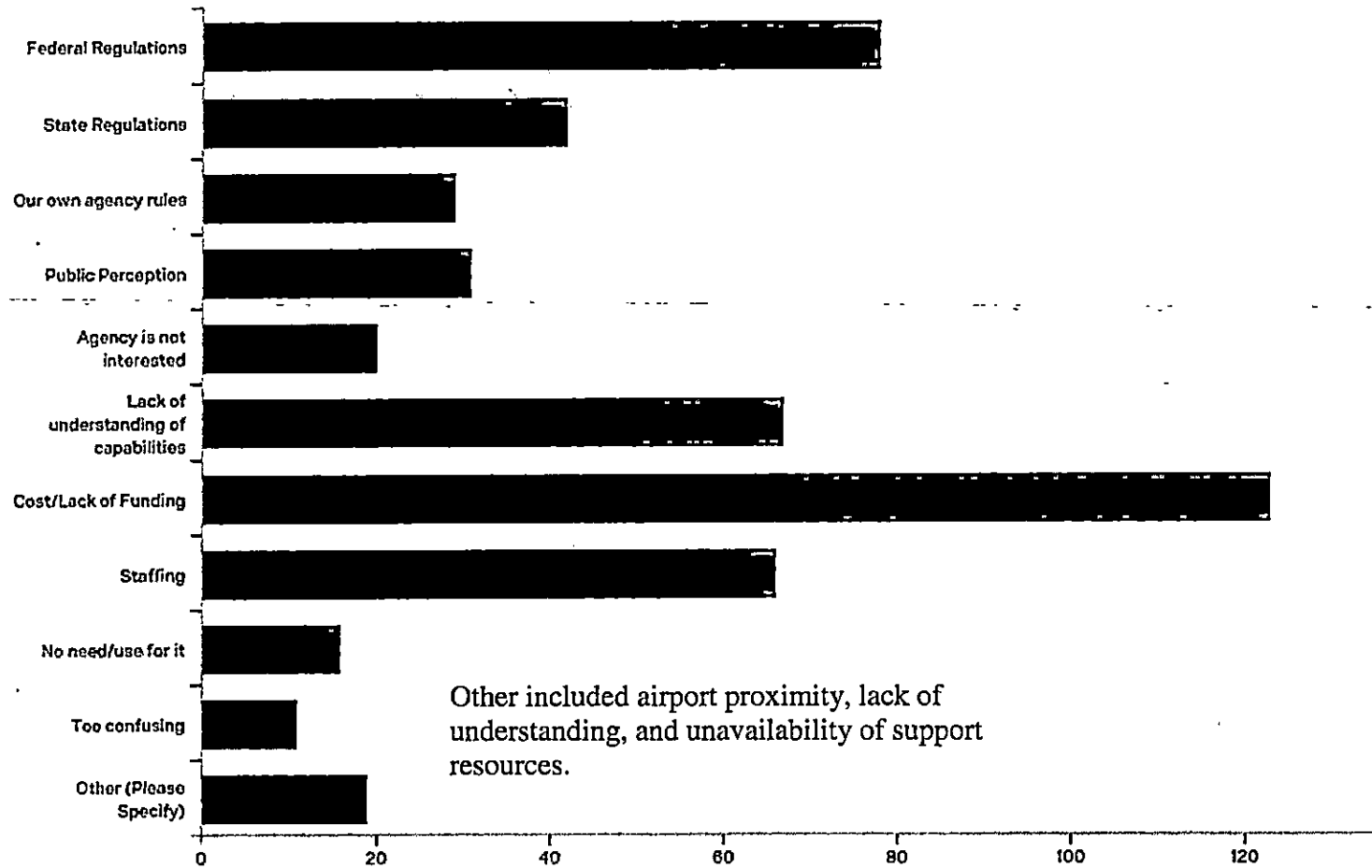
The pilot program would allow the CoE to hire four temp aids, purchase a variety inexpensive and expensive UAS platforms and payloads, and acquire a vehicle to support the effort. Local cooperators could order the UAS team for public safety applications at no cost 24/7 for the nine month pilot program. When the UAS team is not on incidents, they would inform local agencies about their capabilities, conduct public outreach, and maintain currency on the UAS platforms with regular training flights. The pilot program would collect data on use to help the State to effectively determine how much need exists without expending unnecessary funds. This would supplement current similar services that CDPS provides to local agencies at no cost (e.g. DNA lab testing, Multi-Mission Aircraft for wildland fire detection and support, Field and Fire Management Officers for emergency response and recovery).

Colorado is unique in that it has an existing resource to conduct public safety-related pilot projects and studies in the CoE. This approach outlined above would allow the CoE to evaluate several UAS platforms, along with different sensor payloads, to determine the most beneficial equipment and procedures for providing UAS services to public safety organizations in Colorado. The study provides two main benefits:

- If the State decides to provide this resource to local public safety agencies, it can model the best parts of the pilot project and provide the best resource capabilities for the lowest cost in each of the all-hazards regions;
- If the study finds that the less expensive platforms and payloads provide adequate capabilities, the study will inform local UAS programs with cost-benefit analysis, operator training requirements, logistics recommendations, and common operating procedures so that local agencies can respond to mutual aid incidents in other communities without delay.

This pilot project and study would help the State remain on the cutting edge of new emergency response capabilities and provide comprehensive recommendations on how to best utilize the constantly-evolving UAS technology.

What Barriers Exist to Using UAS in your Agency?



What UAS applications are of interest to your agency?

