

**DRONE
PREPARED™**



THE DRONE PREPARED FLIGHT PLAN

How to Ensure Your State or City Is Ready for
the Future of Advanced Aviation

THE DRONE PREPARED FLIGHT PLAN

The expansion of the drone industry is an opportunity for policymakers to improve the lives of their constituents. By following this plan, state and local lawmakers from around the country can ensure that their state or city is Drone Prepared – in other words, ready for the future of advanced aviation and the numerous benefits that Uncrewed Aircraft Systems (UAS), and eventually Advanced Air Mobility (AAM), will bring to their communities.

The Flight Plan has four steps:

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ABOUT DRONE PREPARED

Drone Prepared is a multi-state initiative to help states get ready for the benefits the future of advanced aviation will bring to their communities. Learn more at droneprepared.com.

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UAS codified by definition in P.L. 112-95 the FAA Modernization Reform Act of 2012. AUVSI uses gender-inclusive terms such as “drone,” “drone system,” “uncrewed,” and “uncrewed system” and this document uses such terms, as opposed to the “unmanned” and “unmanned system.” This aligns with FAA endeavors and our own association values in creating a more open industry. See FAA’s Notice of Public Meeting (Inclusive Language Summit), 86 Fed. Reg. 59,266 (Oct. 26, 2021)



Look for Opportunities to Promote Drone Use for Public Benefit

Look for Opportunities to Promote Drone Use for Public Benefit

UAS are poised to bring numerous public benefits wherever they are deployed, including by making monitoring, inspection, and information-gathering activities safer and less expensive, creating jobs, and making everyday experiences more convenient. States and localities should strive not just to ensure their laws are consistent with federal aviation law and are appropriate for UAS, but also should actively seek to encourage beneficial use cases that will transform society, both by public and private entities.

POLICY PLAN

- Ensure that laws and government programs focused on promoting advanced technology (through education, grants, etc.) apply to UAS, as appropriate.
- Ensure that laws and government programs that provide incentives for using beneficial technology (e.g., technology with a positive environmental impact) apply to UAS.
- Look for opportunities to participate in collaborative UAS pilot programs such as the FAA BEYOND program, which enable city, state, and tribal governments to play important roles in promoting beneficial drone operations in close partnership with the federal government.
- Look for opportunities to incorporate UAS in government contracting and other governmental activities (e.g., inspection of government-owned facilities), and take advantage of UAS-specific federal grant programs, such as the \$200 million Drone Infrastructure Inspection Grant Act currently pending in Congress, and the existing federal SMART grant program run by US DOT; ensure that government contracting rules allow for UAS.

A faint, light blue background graphic featuring a globe with a grid of latitude and longitude lines. A torch with a flame is positioned in the center, superimposed on the globe. Two five-pointed stars are located on the left and right sides of the globe, connected by a horizontal line that passes through the center.

Leave Air Navigation and Aviation Safety to the FAA

Leave Air Navigation and Aviation Safety to the FAA

The U.S. has the safest airspace in the world. This is because of comprehensive regulation and oversight by the Federal Aviation Administration (FAA). As the central regulator for the airspace, the FAA ensures that aircraft are safe, pilots are qualified, and that the airspace is appropriately managed to avoid collisions and crashes.

Drones and AAM are no different. These aircraft have to share the air with each other and with crewed aircraft, too—even at low altitudes. That means that attempts to single out UAS or AAM and subject them to different local airspace rules will introduce unnecessary uncertainty and risk. The FAA is working diligently to implement a measured, incremental plan to drone integration that will enable growth of the UAS industry while maintaining the safety of the airspace. The agency has adopted regulations governing the safe operation of drones in Class G (uncontrolled) airspace up to 400 feet, and has augmented those regulations to allow flights over people for aircraft that is proven not to pose a significant danger to persons or property on the ground. The agency has also adopted procedures for authorizing UAS flights in controlled airspace, such as the airspace surrounding airports.

Finally, the FAA has published a range of resources to help public safety officials and critical infrastructure operators understand UAS regulations and flight restrictions, such as [Public Safety and Law Enforcement Toolkit](#) and [Critical Infrastructure and Public Venues](#).

POLICY PLAN

Lawmakers should protect against the adoption of laws that—either expressly or inadvertently—regulate air navigation or aviation safety. Such laws conflict with, and would be preempted by, federal law.

- Expressly Acknowledge the Federal Government's Authority over the Airspace and Aviation Safety and the Individual's Right to Fly. Lawmakers should adopt laws that expressly acknowledge that the federal government has exclusive control over the airspace, and that, just like operators of piloted aircraft, operators of drones have a right to use the airspace. Such laws should make clear that simply operating a UAS, standing alone, does not give rise to liability under state or local law. A provision like this, in conjunction with an extension-of-self law as described above, will ensure that violations of law perpetrated via drone can be enforced without impinging on the right to operate drones in the airspace pursuant to federal regulations.
- Harmonize Legislative Language with Federal Law. Lawmakers should ensure that any laws related to UAS use the same terminology as the federal government, such as the definitions of "uncrewed aircraft" and "uncrewed aircraft system." This will help to ensure that there are no gaps or legal gray areas between federal and state law.
- Reject Laws that Directly Regulate Air Navigation or Aviation Safety. Lawmakers should decline to adopt laws that directly regulate air navigation or aviation safety. By way of example, this includes laws that do the following:
 - Dictate when or where UAS can fly
 - Mandate specific UAS routes and/or establish "drone highways"
 - Purport to give property owners a right to exclude UAS from operating in the airspace above their property
 - Set aircraft design or equipment standards
 - Impose qualifications or certification obligations for UAS pilots

Leave Air Navigation and Aviation Safety to the FAA

POLICY PLAN (cont'd)

- Reject Laws that Look Like Something Else, But Actually Regulate Air Navigation or Aviation Safety. In addition to laws that directly regulate aviation, lawmakers should avoid laws that purport to regulate other conduct or activities that have the effect (whether intentionally or unintentionally) of regulating air navigation or aviation safety. Examples could include:
 - **Takeoffs and landings.** While states and localities historically have had regulatory control over airport siting, small UAS do not need the significant infrastructure required for airports used by large crewed aircraft. Further, because of the technical constraints of UAS batteries, most small UAS flights are limited in duration. A law that purports to restrict where UAS can take off and land could have the effect of unlawfully regulating air navigation, because of the significant impact that such a law would have on the ability of UAS operators to conduct flights.
 - **Zoning.** While zoning is traditionally within state and local police power, and neutrally applicable zoning decisions like whether land may be used for commercial versus residential purposes is consistent with that authority, local zoning authority does not extend to regulation of the airspace itself. Non-neutral zoning laws that purport to restrict where UAS, specifically, can operate likely would constitute unlawful regulation of air navigation.
- Carefully Consider Policies that Regulate How Drone Pilots Can Operate from Public Spaces. There are some publicly-owned areas—nature preserves, parks, or sports stadiums, for example—where it might be desirable to limit whether and how a drone pilot can use the property as a location from which to launch, operate, and land a drone. While states and localities cannot infringe on the pilot's right to fly a drone overhead, adopting reasonable, appropriate limits on a drone pilot's right of entry to public property on the ground may help to assuage concerns in these public spaces. At the same time, complete bans on drone operations from these areas may cut off substantial public benefits, such as aerial photography or search and rescue (and, depending on how pervasive, may also serve to impermissibly regulate the airspace like the laws discussed above). We caution against imposing broad restrictions of this kind, particularly without the inclusion of exceptions for emergency operations and allowing operations of substantial public benefit such as aerial photography, search and rescue or package delivery.
- Adopt Preemptive Laws. For a legislative body such as a state government that has preemptive authority over lesser sovereigns like local governments, consider adopting affirmative provisions that prohibit those sovereigns from adopting laws that regulate or have the effect of regulating UAS, other than in the context of laws governing the operation of UAS from public spaces discussed above.



**Leverage
Existing
Law**

Leverage Existing Law

Often, there is no need for elaborate drone-specific laws because laws that are already on the books can and do apply to conduct that the government seeks to regulate or prohibit, irrespective of whether there's a drone involved. For instance, intentional torts or crimes against a person such as harassment, assault, and invasion of privacy should be equally actionable whether someone uses a drone to help carry them out. Where there is a lack of clarity about application of existing laws to drones, minor changes can make sure these existing policies continue to apply to uncrewed aircraft.

A critical exception to this is trespass to land. Equating flying a drone over land with a person walking on the ground misunderstands real property law and has the potential to disrupt the operation of the federally-controlled and regulated airspace.

Because drones fly in the air rather than travel on the ground, and because real property ownership is tied to use and enjoyment of the surface rather than the adjacent airspace, just flying a drone above someone's property is simply not the same (legally, or practically) as entering into that property on land.

But luckily, there is existing law to help there, too: the doctrine of aerial trespass has existed since the early days of commercial aviation, and courts around the country have used it to assess whether overflights by all manner of aircraft implicate property rights in a way that gives rise to legal action.

POLICY PLAN

Ensure that the laws on the books appropriately account for conduct perpetrated via drone. If there could be confusion about this, look to legislate, but don't change every single law to have a drone component. Instead:

- Adopt "extension of self" laws. Adopt one law that makes clear that violations of law perpetrated via drone are actionable to the extent that the conduct would have been a violation of that law if committed by a person without the aid of a drone. Any extension-of-self law should be abundantly clear that an overflight is not trespass to land, and thus trespass or other violations of law dealing with intrusion to land can be committed by drones as an extension of the person only if the drone actually lands on the property.
- Consider expressly addressing the applicability of the aerial trespass doctrine. Lawmakers should also consider adopting a law that makes clear that the doctrine of aerial trespass applies to drones. Under this standard, a UAS overflight—wherein the UAS does not make contact with the ground—is an actionable trespass only if the flight enters into the "immediate reaches" of the person's property and constitutes a "substantial interference" with the owner's "use and enjoyment" of the land.
- Clarify application of privacy laws. Often, the biggest concerns that people have with drones stem from concerns about privacy. Several states have adopted their own privacy laws. In many cases, these laws apply just as they do to any other technology, meaning that additional legislative action is not needed. But as with extension-of-self laws, there may be minor changes to existing privacy laws that ensure that drones are covered by the privacy rules that apply in any given state.



**Use Caution
in Adopting
Drone-Specific
Laws or
Requirements**

Use Caution in Adopting Drone-Specific Laws or Requirements

To the extent an existing law does not reach or appropriately address UAS-related activity that falls within state and local police power to regulate, lawmakers must exercise caution in adopting a UAS-specific law. In particular, lawmakers should avoid passing laws that will become rapidly obsolete, create confusion in their implementation, or prevent the benefits of UAS operations.

POLICY PLAN

For any UAS-specific laws or regulations, lawmakers and regulators should:

- Strive for clear, consistent language that reflects knowledge of how UAS operate. As set forth above, the terminology used should be consistent with federal definitions.
- Avoid placing disproportionate burdens on the UAS industry. For example, a tax law that is adapted from one designed for large crewed aircraft should take into account the significant differences between large crewed aircraft and small UAS with respect to cost and economic value.
- Promote technological neutrality. Wherever possible, ensure that laws are not tied to specific UAS technologies, as such laws can quickly become obsolete.



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