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POLICY BRIEF

State Drone Laws Frequently Asked Questions

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June 2021

State officials and regulators who want to promote commercial drone services—such as infrastructure inspections and parcel delivery—hope to do so by creating *drone highways* to protect operators from trespass, nuisance, and takings lawsuits. Several state lawmakers in recent months have introduced legislation to create *drone easements* in the state-managed airspace above public roads.[1]

Some common questions state lawmakers have may include the following.

ARE DRONE OPERATIONS PURELY A FEDERAL MATTER?

No. Whereas states and cities have no authority over what happens in airspace hundreds or thousands of feet in the air, they have authority over drone infrastructure on the ground and over surface (that is, low-altitude) airspace.

The Federal Aviation Administration (FAA) recognizes, for instance, that states have authority to regulate drone operations on the grounds of trespass, privacy, and zoning.[2] In 2017, the US Department of Transportation (DOT) established several drone pilot programs to allow states, cities, and tribal governments to experiment with regulatory regimes for drones. Federal regulators anticipate that some authority over drone management would fall to state and local authorities as drone operations proliferate.[3]

DOES THE FEDERAL GOVERNMENT OWN ALL AIRSPACE?

No. The federal government does not own the nation's airspace. A federal court in 2020, for instance, rejected the arguments by drone operators that only the federal government can regulate surface airspace.[4] This common misconception that the federal government owns all airspace arises because there is a federal law noting the US government has "exclusive sovereignty of

airspace of the United States."[5] As the Supreme Court has held, this statute refers to sovereignty *against other nations*, not against the US states.[6]

On the contrary, the Supreme Court holds that landowners own the "immediate reaches" of airspace above their land.[7] State governments and courts have not firmly established where the "immediate reaches" end. However, it is clear that landowners—including residents, state and local agencies, utility companies, and railroads—own the surface airspace and right-of-way easements above their land.

WHAT CAN STATE POLICYMAKERS DO TO BRING DRONE SERVICES TO THEIR STATE?

Drone airspace use involves a mix of federal, state, and local authority. State officials should, in collaboration with the FAA, create the following resources.

Drone Program Offices

States should create drone program offices within the state department of aviation as eight states have done.[8] These program offices can serve as one-stop shops for drone operators in the state to comply with state and local rules. The program office can also serve as an advocate for operators in the state to federal regulators and can recruit companies to their state.

Drone Easements

State DOTs manage more than 8 million miles of roadways and rights-of-way.[9] Many states and cities have laws that allow regulators to create and lease "avigation easements"—corridors of airspace—to private companies.[10] States should use these laws and collaborate with the USDOT and aviation industry to lease avigation easements to drone companies. Permitting drone operations above private land exposes the state or locality to takings lawsuits[11]—drone easements above private roads eliminate that liability and financial risk.

Drone Sandboxes

Drone sandboxes are designated areas and aerial routes—created by regulators—away from airports and other safety hazards where drone operators are invited to test their services.[12] They allow startups and local companies to fly real operations in order to improve their services and to show proof of concept to investors.

ABOUT THE AUTHOR

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NOTES

1. See Sam Mintz, Stephanie Beasley, and Tanya Snyder, "The Auto Industry Moves on Safety, without Tesla," *Weekly Transportation* (newsletter), *Politico*, April 27, 2021, http://politico.com/newsletters. ("Bills to create so-called aviation easements have been introduced in several states, including Louisiana, Mississippi, Texas and West Virginia. The bills would authorize state DOTs or localities to lease or impose fees on drones operating over public roads.") Joann Muller, "Drones Set Off a Land Rush in the Sky," *Axios*, May 19, 2021.

2. See, e.g., FAA, Operation and Certification of Small Unmanned Aircraft Systems, 81 Fed. Reg. 42064, 42194 (June 28, 2016) (noting that "laws traditionally related to State and local police power—including land use, zoning, privacy, trespass, and law enforcement operations—generally are not subject to Federal regulation").

3. USDOT Secretary Elaine Chao noted in a speech, "How much authority should local municipalities or county governments have over drone operations? And what about drones operating beyond the operator's line of sight? The Department has launched an initiative to start answering these questions about airspace." Elaine L. Chao (prepared remarks, Drone Focus Conference, Fargo, North Dakota, May 31, 2017), https://www.transportation.gov/briefing-room/drone-focus-conference.

4. Nat'l Press Photographers Ass'n v. McCraw, No. 1:19-CV-946-RP (W.D. Tex. 2020) (dismissing with prejudice drone operators' claims that Texas creation of drone no-fly areas are subject to field and conflict preemption).

5. Sovereignty and Use of Airspace, 49 U.S.C. § 40103 (2018).

6. "The provision pertinent to sovereignty over the navigable air space in the Air Commerce Act of 1926 was an assertion of exclusive national sovereignty. The convention between the United States and other nations respecting international civil aviation . . . accords. The Act, however, did not expressly exclude the sovereign powers of the states. . . . These Federal Acts regulating air commerce are bottomed on the commerce power of Congress, not on national ownership of the navigable air space, as distinguished from sovereignty." Braniff Airways, Inc. v. Nebraska St. Bd. of Equalization and Assessment, 347 U.S. 590, 595–96 (1954).

7. United States v. Causby, 328 U.S. 256, 264 (1946).

8. Those states are Nevada, New Jersey, North Carolina, North Dakota, Ohio, Oklahoma, Utah, and Virginia. Brent Skorup and Connor Haaland, "Which States Are Prepared for the Drone Industry? A 50-State Report Card, Release 2.0" (Mercatus Research, Mercatus Center at George Mason University, Arlington, VA, January 14, 2021).

9. Carson Poe and Gina Filosa, "Alternative Uses of Highway Rights-of-Way: Accommodating Renewable Energy Technologies" *Transportation Research Record: Journal of the Transportation Research Board* 2270, no. 1 (2012): 23–30.

10. Skorup and Haaland, "Which States Are Prepared for the Drone Industry?"

11. Griggs v. Allegheny County, 369 U.S. 84, 89 (1962). ("The Federal Government takes nothing; it is the local authority which decides to build an airport *vel non*, and where it is to be located.")

12. Spanish regulators and the Barcelona Drone Center, for instance, have opened up a 50-square-kilometer volume of airspace in the countryside for companies to test drones and passenger drones. "BCN Drone Center Segregated Airspace Expansion," *SUAS News*, April 28, 2021, https://web.archive.org/web/20210429032048/https://www.suasnews.com/2021/04/bcn-drone-center-segregated-airspace-expansion/.