

TESTIMONY

TEXAS FARES WELL WITH DRONE POLICY AND HAS POTENTIAL TO BECOME A LEADING LOCALE FOR THE DRONE INDUSTRY

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Texas Senate Committee on Business & Commerce

October 15, 2020

Chair Hancock, Vice Chair Nichols, and members of the Senate Committee on Business and Commerce,

I'm a senior research fellow at the Mercatus Center at George Mason University. By training, I am an attorney, and my research focuses on emerging technologies. I am also a member (nonvoting) of the Texas Department of Transportation's Connected and Autonomous Vehicle Task Force and a drone law adviser to the Virginia Department of Aviation. Through that work, I have had the pleasure of interacting with the regulators and companies around the country who are working on aerial vehicles and drones. Though my views and policy recommendations have been shaped by discussions on the task force, the views I present here are my own.

I would like to commend you and the committee for raising the issue of protecting the privacy and property rights of Texans while enabling the development of the drone industry. One way to strike that balance is for state and local officials—in cooperation with the Federal Aviation Administration—to demarcate and lease to drone operators aerial corridors above the public rights-of-way. Through a system of aerial easements and aerial property rights, cities gain revenue from the use a public resource, private property is protected, and drone operators receive the green light to operate "drone highways."

My coauthor Connor Haaland and I discuss these and other issues in a 50-state report the Mercatus Center published in spring 2020. The report shows that Texas ranks well (at number 10) in our ranking of states for drone policy. But we believe that, with a few reforms, Texas could lead the nation in developing a commercial drone sector. For reference, I have attached a research summary of that report and the one-page profile of Texas drone policies and aerial laws.

Thank you, and please don't hesitate to reach out if you have questions about this submission.

For more information or to meet with the scholar, contact
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¹ Brent Skorup and Connor Haaland, "Which States Are Prepared for the Drone Industry? A 50-State Report Card" (Mercatus Research, Mercatus Center at George Mason University, Arlington, VA, March 2020).

ATTACHMENTS (2)

Jump-Starting the Drone Industry: Which States Are Ready to Fly? (Research Summary)
Brent Skorup and Connor Haaland, "Which States are Prepared for the Drone Industry? A 50-State Report Card" (Texas State Profile).



RESEARCH SUMMARY

Jump-Starting the Drone Industry: Which States Are Ready to Fly?

Commercial drone companies have long operated in countries such as China, Japan, Rwanda, and Switzerland—for the delivery of medical and other supplies as well as for agricultural uses. In the United States, however, widespread deployment of commercial drones has been slow. This is owing, in part, to a lack of clarity about federal and state roles regarding drones and airspace management.

In "Which States Are Prepared for the Drone Industry? A 50-State Report Card," Brent Skorup and Connor Haaland argue that states should take the lead. By creating drone highways that mirror the paths of the public roads beneath them, states can bring new services to residents, create jobs, and save lives. In addition, the report card makes the following points:

- Many states already possess the legal rights to demarcate drone highways and establish rules for their use.
- State and local authorities should manage the new drone highways.
- Authorities can monetize this currently unused public resource—the public right-of-way between 50 feet and 200 feet above the ground.

The report card ranks states on their readiness to get the new technology into America's skies.

STATES WITH THESE LAWS RECEIVE HIGHER SCORES

- *Airspace lease law.* Drone highways must be demarcated by regulators and safely separated from airports, homes, schools, and other sensitive locations.
- Law vesting air rights with landowners. These laws clarify that the state is exercising its police powers and defining property rights. They also inform drone operators and residents about the extent of homeowners' property rights, which reduces litigation risk for operators and homeowners alike.
- Avigation easement law. These laws allow drone operators to fly so long as they are high enough not to bother landowners and passersby. Even if the state or municipality doesn't own the aerial corridors above public roads, drones will generally be allowed to access the aerial easements that state officials demarcate above public roads.

OTHER FACTORS CONSIDERED IN THE REPORT CARD

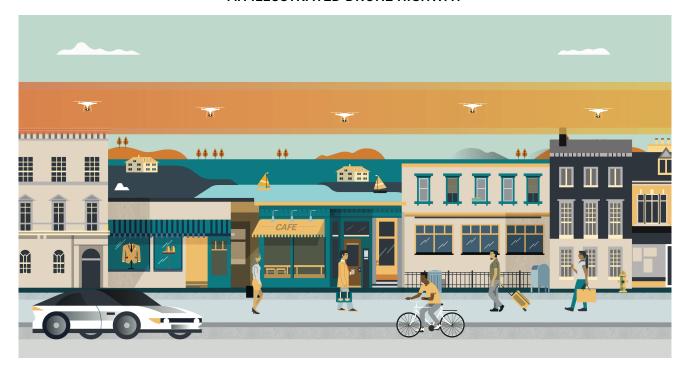
Aviation advisory committee. For state and local authorities, widespread commercial drone services will
raise issues such as zoning rules, noise limits, time-of-day restrictions, job training and education, and
insurance. Most of these issues will require extensive exploration—by regulators, residents, researchers,

- and operators. States that have a statewide committee, task force, or department of transportation team dedicated to drones merit a higher score in the report.
- Drone jobs estimate. The report card ranks states based on the number of drone jobs per 100,000 people.
 Drone jobs serve as a proxy for soft factors such as whether a state has a community college system with
 drone programs or has workers in the aerospace industry. These factors can position states for future jobs
 growth in the industry, much as the auto industry has centered around Detroit and the IT industry
 around Silicon Valley.

KEY TAKEAWAY

The report card helps states gauge how prepared they are for the future of drone services. It also demonstrates which states have model laws and policies that legislators in other states can learn from.

AN ILLUSTRATED DRONE HIGHWAY



TEXAS

Score: 54/100

• Airspace Lease Law: 30/30

• Law Vesting Air Rights with Landowners: 0/10

• Avigation Easement Law: 0/25

• Aviation Advisory Committee: 20/20

• Drone Jobs Estimate: 4/15

Factors Helping the State Score

- *Airspace Lease Law*: Texas law allows airspace leasing above local roads, state roads, and state property.⁸⁴ This law allows state authorities to create drone highways above state and local roadways and reduces the risk of litigation.
- Aviation Advisory Committee: In 2019, Governor Abbott created a Connected and Autonomous Vehicle Task Force within the Department of Transportation. 85 The task force has representatives from the drone industry, and part of the task force's mission is to stimulate drone jobs and services in Texas.

Factors Hindering the State Score

- Law Vesting Air Rights with Landowners: Texas law doesn't expressly provide air rights to landowners, which raises litigation risk for drone operators because landowners don't know the extent of their property rights and may sue to protect their interests.
- Avigation Easement Law: Texas law doesn't create an avigation easement, which means drone operators may be subject to nuisance and trespass laws, even if their drones don't disturb people on the ground.
- *Drone Jobs Estimate*: Texas has 7.2 drone-related jobs per 100,000 people, ranking it in the bottom half of states.

These factors make Texas the 10th most drone-friendly state in the country.

^{84.} Tex. Transp. Code Ann. § 202.052 (2019); Tex. Loc. Gov't Code § 373.005 (2019).

^{85.} Press Release, TxDOT Media Center, Texas to Form Connected and Automated Vehicle Task Force (Jan. 22, 2019), https://www.txdot.gov/inside-txdot/media-center/statewide-news/020-2019.html.