

Unmanned Aircraft Systems: Trends and Legislation



NATIONAL CONFERENCE *of* STATE LEGISLATURES

The Forum for America's Ideas



Douglas Shinkle
Program Principal
NCSL Transportation Program



What is NCSL?

NCSL is a bipartisan organization.

All 50 state legislatures are our members.

NCSL's mission is to

- Improve the quality and effectiveness of state legislatures.**
- Promote policy innovation and communication among state legislatures.**
- Ensure state legislatures a strong, cohesive voice in the federal system.**





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Partnership Project on Unmanned Aircraft Systems

Provides lawmakers the opportunity to work with industry leaders, researchers and safety experts as they discuss UAS state and federal legislative policy topics and learn about the myriad of UAS uses for private businesses and governments

This project is intended to identify options for maximizing the benefits of UAS while also addressing privacy, safety and 4th Amendment concerns.





Who are the Steering Committee Members?

- **Co-Chairs**
 - Rep. Shelley Hughes (R) – Alaska
 - Sen. Daniel Biss (D) – Illinois
- **Members**
 - Rep. Jimmy Pruet (R) – Georgia
 - Sen. Ray Holmberg (R) – North Dakota
 - Rep. Sharon Schwartz (R) – Kansas
 - Rep. Jeff Essmann (R) – Montana
 - Rep. Kenneth Wilson (R) - Missouri
 - Assemblyman Elliot Anderson (D) – Nevada
 - Rep. Angus McKelvey (D) – Hawaii
 - Sen. A. Donald McEachin (D) – Virginia
- **Legislative Staff Members**
 - Jennifer Jones, Texas Sunset Advisory Board
 - Eric Gray, Connecticut Office of Program Review and Investigations





Who are the Partners?





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Legislator Perspectives





Senator Daniel Biss (D, IL)



“Unmanned Aircraft Systems present stunning new technological opportunities for commerce, industry, recreation, and the public sector. At the same time, they present new and alarming potential threats to safety and, especially, privacy. Balancing the opportunity against the cost is a delicate and crucial question facing policymakers today.”





Senator Ray Holmberg (R, ND)

“UAS applications have great potential to enhance agriculture by doing early detection of stress in our food production and inspect our energy infrastructure over a vast and tough terrain. They offer better ways we can produce more and better food and make our energy supply safer.”





Assemblyman Elliot Anderson (D,NV)



- UAS can provide untold benefits...[b]ut the public must accept and support this industry for it to take off.
- People worry about privacy
- As a policymaker, I share some of their concerns and also want to see the industry prosper.
- Need to balance privacy rights with economic and physical security





Representative Jimmy Pruet (R, GA)

“One of the primary concerns is safety. The FAA has done a great job in the past, but what will their role be in safety, including the quality of the product being built.”





Representative Angus McKelvey (D, HI)



“When crafting UAV policies, it is important to carefully balance the potential economic, security, and scientific benefits with privacy and civil liberty concerns.”





Representative Jeff Essmann (R, MT)

- **“While economic efficiencies and improved services may be offered by FAA regulated commercial operators, the public perceives that the technology in combination with new video technology, if used improperly by hobby operators, may pose a significant challenge to...privacy.”**
- **Local regulation of hobby users to allow communities to develop policies consistent with their culture and expectations deserves study**





Private Partner Interest in UAS





“Prime Air is a future delivery system from Amazon designed to safely get packages to customers in 30 minutes or less using small unmanned aerial vehicles, or drones. With Prime Air, Amazon is developing a rapid delivery system that is safe, environmentally sound and enhances the services it already provides to millions of customers. We look forward to working with the NCSL UAS Foundation Partnership and with policymakers so we can better serve our customers with Prime Air.”





"The rapid rise of mobile computing—and the technology supporting lower power consumption and higher performance computation—has made UAS technology possible at a much lower cost with greater availability. Google's Project Wing includes efforts to design, build, and operate UAS for the aerial delivery of goods. Google believes that smart state laws that work alongside pending regulations by the Federal Aviation Administration will allow the United States to become a leader in the development and deployment of UAS."





An Association of Photogrammetry, Mapping, and Geospatial Firms

“As the only national association exclusively comprised of private sector firms in the remote sensing, spatial data and geographic information systems field, MAPPS is uniquely positioned to act as both expert adviser and witness on UAS technology, best practices and implications. As many of its members operate small UAS (under 55 pounds), MAPPS is well versed in current practice and future plans for commercial UAS. In light of all of the many useful geospatial applications, MAPPS believes ‘regulation of geo-location data, or its collection from a UAS, would have a severe, negative and unintended consequences for the government, business and individual U.S. citizens.’”





“State Farm believes its customers, employees, and the public can benefit from using the technology in a number of ways. In February 2015, State Farm became the first insurance company to receive approval from the FAA to use UAS for commercial purposes. The FAA granted both petition requests State Farm filed. One FAA grant allows the State Farm to use UAS for roof inspections, which can lead to greater employee safety and more effective claims evaluations. In addition, the FAA granted State Farm the ability to use UAS for research and development purposes, including using the technology in catastrophe scenes. State Farm considers its involvement in the NCSL UAS Foundation Partnership an outstanding opportunity to work with legislators and other organizations to help best understand the issues concerning UAS.”





Project Timeline

- Informational session at **NCSL Annual Legislative Summit** in Seattle, Washington.
 - August 4, 2015
- Informational pre-conference at NCSL Forum in Washington, D.C.
 - December 2015
- Publish final partners' project report on UAS legislative landscape
 - First quarter 2016
- Track relevant state legislation
 - Ongoing





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Legislative Information





2013-2015 Legislation

- In 2013, 43 states considered bills and resolutions related to UAS. 13 states enacted 16 bills and 11 states adopted resolutions.
- In 2014, 35 states considered bills and resolutions. 10 states enacted 11 bills and three states adopted resolutions.
- In 2015, 45 states have considered 153 bills and resolutions. 17 states have enacted 23 bills and four states have adopted resolutions.
- NCSL is closely following the proposed federal regulations given how state legislation will interact with these regulations



Legislative Trends

- **Warrant requirements for law enforcement**
 - Alaska, Florida, Idaho, Illinois, Indiana, Iowa, Montana, Nevada, North Carolina, Oregon, Tennessee, Texas, Utah, Virginia, Wisconsin
- **Limitations related to hunting and fishing**
 - Illinois, Michigan, New Hampshire, North Carolina, Oregon, Tennessee, and West Virginia
 - New Mexico adopted a resolution in 2015 requiring a study on protecting wildlife from drones.
- **Criminal penalties related to misuse of drones**
 - Arkansas, Florida, Indiana, Louisiana, Mississippi, Nevada, North Carolina, North Dakota, Oregon, Tennessee, Texas, Wisconsin



Alaska Legislative Study

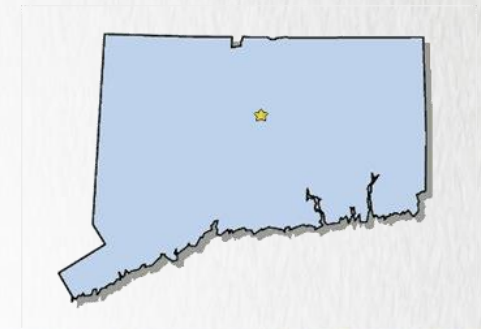
- **Alaska – Legislative Task Force Report to Legislature made 7 final recommendations**
 - **Require all state and local law enforcement entities adopt guidelines to ensure privacy protection**
 - **Convey a clear message to industry that Alaska is open for business to harness the beneficial uses of UAS, to encourage the growth of this economic sector, and to allow Alaska to continue to lead the nation in aviation innovation.**
 - **Encourage UAS training programs**





CT Legislative Study

- **Connecticut – Legislative Program Review and Investigations Committee Report**
 - Remote operations of weapons shall be prohibited
 - Law enforcement use limited in duration unless probable cause and warrant
 - All government owned drones registered with Office of Policy and Management
 - Government drone use recorded, summarized, publicly reported annually





Iowa Legislative Report

- The Department of Public Safety provided a report to the legislature on developing guidelines for the use of UAS and to determine whether changes to the criminal code were necessary
 - No key Supreme Court cases addressing UAS use, but case law suggests government use without warrant would not violate Fourth Amendment in most circumstances
 - Many factors to balance in regulating private use
 - Protect from bad actors
 - Do not want to overly inhibit First Amendment rights and free market
 - Broad commercial potential
 - Until current laws are no longer sufficient to address UAS misuse, legislators may want to “hold off” on expansive regulation





Thank you!

Douglas Shinkle

Program Principal

National Conference of State Legislatures

Douglas.Shinkle@ncsl.org

303-856-1482

