

Unmanned Aircraft Systems: Trends and Legislation



NATIONAL CONFERENCE *of* STATE LEGISLATURES

The Forum for America's Ideas



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National Conference of State Legislatures



- **Non-profit, bi-partisan organization.**
- **Members are all 50 state legislatures, 7,383 legislators and 30,000 legislative staff in 50 states, D.C. and U.S. territories.**
- **Offices in Denver and D.C.**
- **Among our goals - To provide legislatures with information and research about policy issues, both state and federal.**
- **NCSL tracks state policy developments in all public policy areas.**





Unmanned Aircraft Systems

- **Partnership Information**
- **Federal Action**
- **Trends**
 - Number of bills
 - Task Forces
 - Promoting UAS
 - Government Uses
 - Privacy Concerns
 - Hunting and Fishing
 - Criminal Penalties
 - Weaponization
 - Restricting UAS Near Critical Infrastructure
 - Insurance
 - State Preemption





Partnership Project on Unmanned Aircraft Systems (UAS)

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.





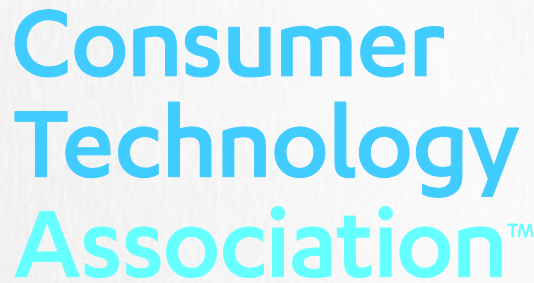
Steering Committee Members

- **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





Private Sector Partners



An Association of Photogrammetry, Mapping, and Geospatial Firms





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Federal Action





Federal Action

- **Proposed regulation of non-recreational small UAS**
 - **Less than 55 pounds**
 - **Maintain visual line of sight, no operation over people not involved with UAS operation, no nighttime operation, no higher than 500 feet**
 - **Must be at least 17 and pass FAA knowledge test, must register aircraft**
- **Commercial operators must apply for Section 333 exemptions**
 - **3,853 granted as of March 8**





Federal Action

- **FAA requiring drone registration for all users**
- **Suggested safety guidelines for hobbyists**
- **B4UFLY smartphone app to determine flight restrictions**





Federal Preemption of State Laws

- **Legislation that directly conflicts with FAA regulations will be invalidated**
- **FAA released a fact sheet on state and local regulation of UAS, specifying what the agency considers to be appropriate areas of state legislation related to UAS**
- **FAA recommends consulting with the administration for operational restrictions such as flight paths, operational bans and any regulation of the navigable airspace**





Trends in State UAS Legislation





2013-2016 UAS 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 considered and resolutions. 20 states enacted 26 bills and four states adopted resolutions.
- In 2016, at least 35 states are debating legislation.
- 26 states have enacted UAS laws and 6 more have adopted resolutions



Task Forces

- **At least 11 states have convened task forces or requested studies on UAS**
 - **Alaska created a legislative Task Force on UAS**
 - **Georgia established a House Study Committee on the use of UAS**
 - **Illinois created a UAS Oversight Task Force**
 - **Iowa required the Department of Public Safety to develop guidelines for the use of UAS and determine if changes to the criminal code were necessary**





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





Iowa Legislative Report

- The Department of Public Safety provided a report to the legislature
 - 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





Promoting Advancement of UAS

○ Alaska

- Allowed University of Alaska to establish a training program in operation of UAS

○ Ohio

- Created aerospace and aviation technology committee. Duties included “promoting...research and development of unmanned aerial vehicles.”

○ Utah

- Statement of intent in legislation: “Nothing herein is intended to prohibit or impede the public and private research, development, or manufacture of unmanned aerial vehicles.”





Promoting Advancement of UAS

- **Virginia Executive Order**
 - **Governor McAuliffe signed executive order in 2015 establishing Unmanned Systems Commission.**
 - **Responsibilities include:**
 - **Identify challenges and needs of unmanned system industry that may be met with Virginia assets**
 - **Provide recommendations to encourage development of unmanned systems industry in VA**
 - **Provide a basis for marketing VA to current unmanned systems industry**





Government Uses of UAS

- **Some states explicitly allow use of UAS for photographing traffic accidents and crime scenes**
- **Search and rescue operations, search for missing persons**
- **Aerial photography to assess fires, floods, other storm damage and determine if state of emergency needs to be declared**
- **Conducting air quality sampling**
- **Fire suppression**





Privacy Concerns

- **21 states enacted legislation within this broad category**

- **17 states have warrant requirements for law enforcement**
 - **At least four states require reporting of the use of UAS by law enforcement**

- **11 states offer protection from other citizens**
 - **Arkansas: voyeurism and video voyeurism**
 - **Mississippi: prohibits peeping tom activities using UAS**





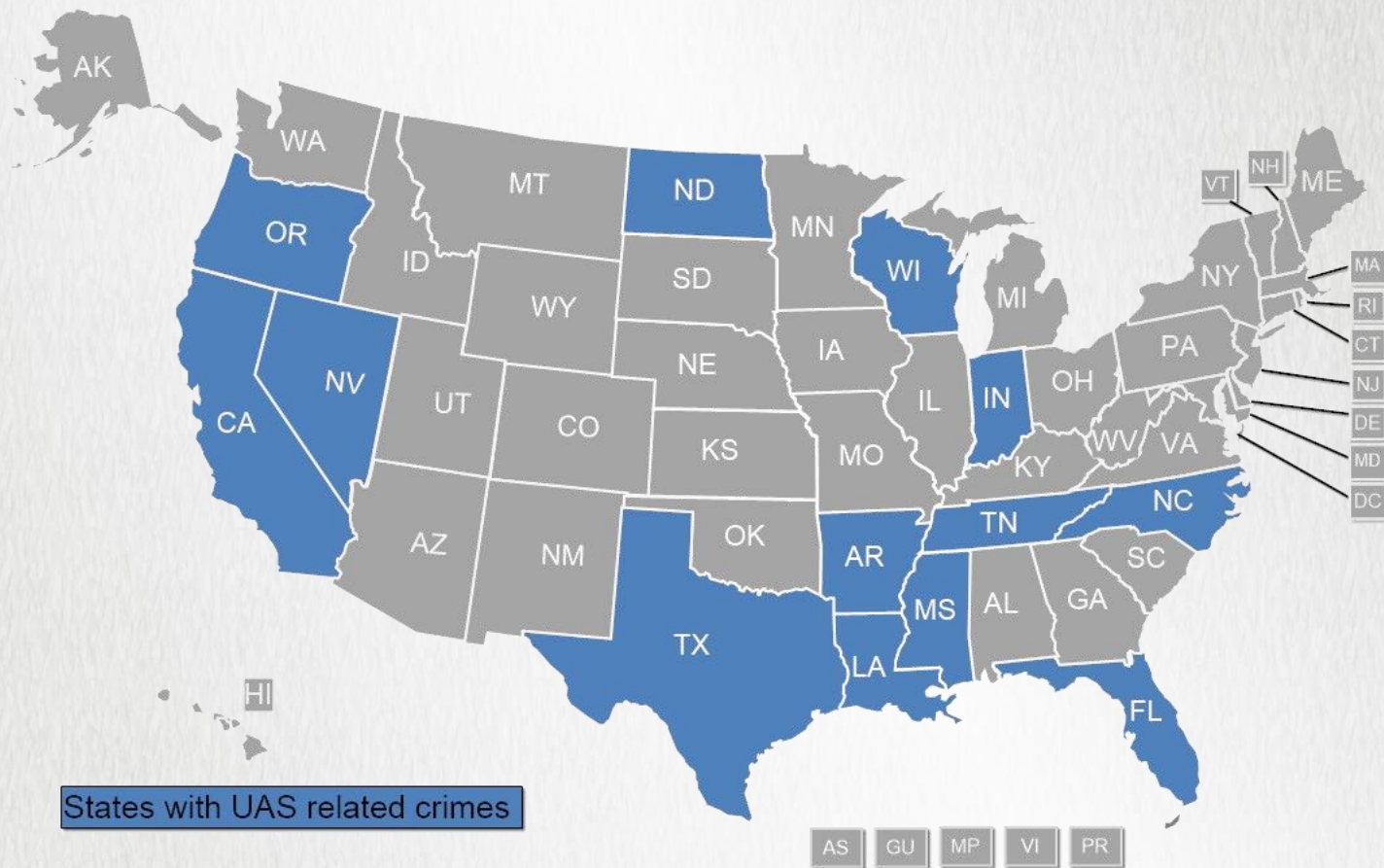
Hunting and Fishing

- **8 states have passed laws related to hunting and fishing**
- **5 states prohibit using UAS for hunting and/or fishing.**
- **6 states prohibit using UAS to interfere with others who are lawfully hunting and/or fishing**
- **Michigan, North Carolina and Oregon prohibit both**
- **New Mexico adopted a resolution in 2015 requiring a study on protecting wildlife from drones.**





Criminal Penalties





Criminal Penalties

- **Indiana – Unlawful photography and surveillance on private property**
- **Louisiana – “Unlawful use of UAS” – Conduct surveillance of targeted facility without owner’s prior written consent**
- **North Carolina – Using UAS to interfere with manned aircraft, possessing UAS with attached weapon, operating commercially without license**
- **Wisconsin – Possession of weaponized drone, use of drone to observe individual in a place where they have reasonable expectation of privacy**



Criminal Penalties

- **Debate regarding necessity of new laws**
- **Three bills vetoed in California related to flying UAS over wildfires, correctional facilities and K-12 schools**
 - **In his veto message, Governor Brown stated that “each of these bills creates a new crime, usually by finding a novel way to characterize and criminalize conduct that is already proscribed. This multiplication and particularization of criminal behavior creates increasing complexity without commensurate benefit.”**





Weaponization of UAS

- **Six states prohibit weaponization of UAS in certain instances, with Maine, North Dakota and Oregon prohibiting them for law enforcement and public bodies**
 - **North Dakota specifically prohibits lethal weapons on UAS**
- **Nevada, North Carolina and Wisconsin prohibit possession or use of a weaponized UAS by anyone**





Restricting UAS Near Critical Infrastructure

- **Arkansas, Louisiana – Prohibit using UAS to conduct surveillance of, gather evidence or collect information about, or photograph or record critical infrastructure/targeted facility without prior written consent of the owner.**
- **Nevada – Prohibits operation of UAS within certain distance of a critical facility without written consent of the owner.**
- **Texas – Prohibits operation of UAS over critical infrastructure facilities**
- **Tennessee – Permits the use of UAS to capture images by or for an electric or natural gas utility for operations and maintenance, for inspecting facilities and other uses. Also permits use of UAS for inspection, maintenance, repair, safety and protection of pipelines.**



Restricting UAS Near Critical Infrastructure

○ Prisons

- Tennessee is the only state with a law prohibiting UAS operation over correctional facilities
- At least 10 other states have considered legislation this year prohibiting operation near and/or over prisons
- Most classify offense as a misdemeanor, subject to fine and imprisonment

○ Capitol Building

- Texas law requires the director of the Department of Public Safety to adopt rules governing the use of UAS in the Capitol Complex. Specifies that rules may prohibit use of UAS in the complex or authorize limited use.



Insurance

- **Florida considered legislation last year to require a report from the Department of Transportation regarding the appropriate amount of liability insurance for commercial operators of UAS. The legislation did not pass.**
- **New Jersey considered legislation on registration and insurance that failed.**
- **California, Hawaii and New Hampshire have pending legislation**



State Preemption

- **Oregon and Maryland specify that only the state legislature can enact laws regulating UAS, thereby preventing local governments from taking action on the issue.**
- **Maryland's law explicitly states that it "Preempts the authority of a county or municipality to prohibit, restrict, or regulate the testing or operation of unmanned aircraft systems; and [] supersedes any existing law or ordinance of a county or municipality that prohibits, restricts, or regulates the testing or operation of unmanned aircraft systems."**



Thank you!

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