

The Florida Senate
BILL ANALYSIS AND FISCAL IMPACT STATEMENT

(This document is based on the provisions contained in the legislation as of the latest date listed below.)

Prepared By: The Professional Staff of the Committee on Criminal Justice

BILL: CS/CS/SB 766

INTRODUCER: Criminal Justice Committee and Senator Gruters

SUBJECT: Expanded Uses of Unmanned Aircraft

DATE: March 27, 2019

REVISED: _____

	ANALYST	STAFF DIRECTOR	REFERENCE	ACTION
1.	Cellon	Jones	CJ	Fav/CS
2.	Proctor	Miller	IS	Fav/CS
3.			RC	

Please see Section IX. for Additional Information:

COMMITTEE SUBSTITUTE - Substantial Changes

I. Summary:

CS/CS/SB 766 expands the possibilities for drone use by law enforcement agencies, fire departments, state agencies, and political subdivisions.

The bill creates additional exceptions for law enforcement agency drone use found in s. 934.50(4), F.S. The new exceptions will allow law enforcement agencies to use drones to:

- Assist in crowd control where the crowd consists of 50 or more persons.
- Assist with traffic management, except that the agency may not use the drone to gather evidence to enforce traffic infractions.
- Facilitate evidence collection at a crime scene or traffic crash scene.

Under the provisions of the bill, state agencies and political subdivisions will not be prohibited from using drones for damage assessment due to a flood, wildfire, or natural disaster, or for vegetation and wildlife management purposes on publicly owned land or water. It also allows certified fire department personnel to use drones to perform tasks within the scope of their certification.

The bill is effective July 1, 2019.

II. Present Situation:

A drone, also called Unmanned Aerial Vehicle (UAV) and Unmanned Aerial System (UAS), is defined in s. 934.50, F.S., as a powered, aerial vehicle that:

- Does not carry a human operator;
- Uses aerodynamic forces to provide vehicle lift;
- Can fly autonomously or be piloted remotely;
- Can be expendable or recoverable; and
- Can carry a lethal or nonlethal payload.¹

Drones range in size from wingspans of 6 inches to 246 feet and can weigh from approximately 4 ounces to over 25,600 pounds.² They may be controlled manually or through an autopilot that uses a data link to connect the drone's pilot to the drone.³ Drones can be equipped with infrared cameras,⁴ and "LADAR" (laser radar).⁵ In 2011, it was reported that the U.S. Army contracted with two corporations to develop facial recognition and behavioral recognition technologies for drone use.⁶

Federal Aviation Authority

In February 2012, Congress passed the Federal Aviation Authority (FAA) Modernization and Reform Act of 2012 (Act), which required the FAA to safely open the nation's airspace to drones by September 2015.⁷ The FAA regulates the use of drones as it does all aircraft in the national airspace, with an emphasis on safety, efficiency, and national security, but views considerations such as privacy beyond the scope of FAA authority.⁸

¹ Section 934.50(2), F.S.

² 14 CFR Part 91, Docket No. FAA-2006-25714, Department of Transportation, Federal Aviation Administration, *Unmanned Aircraft Operations in the National Airspace System*, February 6, 2007.

³ *Id.*

⁴ Infrared cameras can see objects through walls based on the relative levels of heat produced by the objects. *Drones in Domestic Surveillance Operations: Fourth Amendment Implications and Congressional Response*, Congressional Research Service, April 3, 2013, available at www.fas.org/sgp/crs/natsec/R42701.pdf (last viewed February 22, 2019). Search and rescue drones equipped with thermal imaging help first responders identify the location of people lost in chaotic scenes, and police departments have started using drones with thermal capabilities to identify the location of suspects while keeping an infrared eye on their officers. *Best Infrared Drones (Buying Guide)*, Spire Drones, available at <https://buythebestdrone.com/best-infrared-drones/> (last viewed February 22, 2019).

⁵ The research and development laboratory at the Massachusetts Institute of Technology has developed airborne lidar systems that generate detailed 3D imagery of terrain and structures, including those beneath dense foliage. The lab reports that the micro-lidar could be used under both clear and heavy foliage conditions for surveillance and reconnaissance missions as well as for humanitarian assistance and disaster relief operations. Lincoln Laboratory, Massachusetts Institute of Technology, R & D Projects, *Micro-lidar*, available at <https://www.ll.mit.edu/r-d/projects/micro-lidar> (last viewed February 22, 2019).

⁶ Clay Dillow, Popular Science, *Army Developing Drones That Can Recognize Your Face From a Distance*, September 28, 2011, available at pops.ci.com/technology/article/2011-09/army-wants-drones-can-recognize-your-face-and-read-your-mind (last viewed February 22, 2019).

⁷ Public Law 112-95, February 14, 2012, The FAA Modernization and Reform Act of 2012, *Drones in Domestic Surveillance Operations: Fourth Amendment Implications and Congressional Response*, Congressional Research Service, April 3, 2013, available at www.fas.org/sgp/crs/natsec/R42701.pdf (last viewed February 19, 2019).

⁸ 14 CFR Parts 21, 43, 61, 91, 101, 107, 119, 133, and 183, *Operation and Certification of Small Unmanned Aircraft Systems*, 81 FR 42064-01, June 28, 2016.

Under the authority granted in the 2012 Act, the FAA issued its regulations on the operation and certification of small (less than 55 pounds at take-off) unmanned aircraft systems in June 2016.⁹ The 2016 small drone regulations are still in effect and include airspace restrictions and a waiver mechanism allowing for deviations from drone operational restrictions upon application and authorization by the FAA.¹⁰

FAA Drone Airspace Restrictions

The FAA has designated generally restricted airspace including drone flight around and over sports stadiums and wildfires at specified times or under specified conditions. Drone operators must educate themselves on these restrictions prior to flying.¹¹

FAA Drone Operational Restrictions

The following are among the operational restrictions in the 2016 regulation:

- Small unmanned aircraft may not operate over any persons not directly participating in the operation, not under a covered structure, and not inside a covered stationary vehicle;¹²
- Maximum altitude of 400 feet above ground level (AGL) or, if higher than 400 feet AGL, remain within 400 feet of a structure; and
- Daylight-only operations or civil twilight (30 minutes before official sunrise to 30 minutes after official sunset, local time) with appropriate anti-collision lighting.¹³

Both the Lakeland Police Department and the Polk County Sheriff's Office have recently obtained waivers of the daylight-only operational restriction from the FAA.¹⁴

Proposed Rule

The FAA announced a new proposed regulation for the use of drones on January 18, 2019.¹⁵ The proposal appears to provide avenues that would allow drone operators to routinely fly over people and fly at night.¹⁶

⁹ *Id.*

¹⁰ *Id.*

¹¹ See FAA, Unmanned Aircraft Systems, *Airspace Restrictions*, available at

https://www.faa.gov/uas/where_to_fly/airspace_restrictions/#wildfires (last viewed February 19, 2019).

¹² The term "over" refers to the flight of the small unmanned aircraft directly over any part of a person. For example, a small UAS that hovers directly over a person's head, shoulders, or extended arms or legs would be an operation over people. Similarly, if a person is lying down, for example at a beach, an operation over that person's torso or toes would also constitute an operation over people. An operation during which a small UAS flies over any part of any person, regardless of the dwell time, if any, over the person, would be an operation over people. 14 CFR Parts 21, 43, 61, 91, 101, 107, 119, 133, and 183, *Operation and Certification of Small Unmanned Aircraft Systems*, 81 FR 42064-01, June 28, 2016.

¹³ *Id.*

¹⁴ Certificates of Waiver 107W-2018-16741 (dated November 28, 2018) and 107W-2018-16274 (dated November 6, 2018); FAA, Unmanned Aircraft Systems, *Part 107 Waivers Issued*, available at

https://www.faa.gov/uas/commercial_operators/part_107_waivers/waivers_issued/ (last viewed February 20 2019).

¹⁵ Department of Transportation, Office of the Secretary, FAA, 14 CFR Part 107, Notice of Proposed Rulemaking, *Operation of Small Unmanned Aircraft Systems over People*, Comments due on or before April 15, 2019, Federal Register, Vol 84, No. 30, February 13, 2019.

¹⁶ *Id.*

The proposed regulation creates a risk-assessment model based upon the weight of the drone, and the design of the drone, with an eye toward any mitigation the drone design presents to prohibit serious injury or property damage should the drone make contact with a person or property on the ground.¹⁷ The process of the FAA accepting public comment on the proposal, and then drafting a final regulation began on February 13, 2019.¹⁸

Law Enforcement Use of Drones in Florida – Section 934.50, F.S.

The Florida Sheriff's Association estimates that 12 sheriff's offices currently have drones.¹⁹ Of the 139 police departments that responded to the question regarding whether their department has at least one drone, 32 said they do have a drone and 10 responded that they soon will have a drone.²⁰

A law enforcement agency is defined in s. 934.50, F.S., as a lawfully established state or local public agency that is responsible for the prevention and detection of crime, local government code enforcement, and the enforcement of penal, traffic, regulatory, game, or controlled substance laws.²¹

Section 934.50(3)(b), F.S., provides that a real property owner, tenant, occupant, invitee, or licensee of the property is presumed to have a reasonable expectation of privacy from drone surveillance²² of the property or the owner, tenant, occupant, invitee, or licensee by another person, state agency,²³ or political subdivision,²⁴ if he or she cannot be seen by persons at ground level who are in a place they have a legal right to be.²⁵

Section 934.50, F.S., prohibits law enforcement agencies from using a drone to gather evidence or other information, with certain exceptions.²⁶ Evidence obtained or collected by a law enforcement agency using a drone is not admissible in a criminal prosecution in any court of law

¹⁷ *Id.*

¹⁸ *Id.*

¹⁹ E-mail from Florida Sheriff's Association Deputy Executive Director of Operations dated January 28, 2019 (on file with the Senate Committee on Criminal Justice).

²⁰ E-mail from Florida Police Chiefs Association Executive Director dated January 29, 2019 (on file with the Senate Committee on Criminal Justice).

²¹ Section 934.50(2)(d), F.S.

²² Surveillance is defined in s. 934.50(2)(e), F.S.: With respect to an owner, tenant, occupant, invitee, or licensee of privately owned real property, the observation of such persons with sufficient visual clarity to be able to obtain information about their identity, habits, conduct, movements, or whereabouts; or with respect to privately owned real property, the observation of such property's physical improvements with sufficient visual clarity to be able to determine unique identifying features or its occupancy by one or more persons.

²³ A state agency, as defined in s. 11.45, F.S., is a separate agency or unit of state government created or established by law and includes, but is not limited to, the following and the officers thereof: authority, board, branch, bureau, commission, department, division, institution, office, officer, or public corporation, as the case may be, except any such agency or unit within the legislative branch of state government other than the Florida Public Service Commission.

²⁴ A political subdivision is defined in s. 11.45, F.S., as a separate agency or unit of local government created or established by law and includes, but is not limited to, the following and the officers thereof: authority, board, branch, bureau, city, commission, consolidated government, county, department, district, institution, metropolitan government, municipality, office, officer, public corporation, town, or village.

²⁵ Section 934.50(3)(b), F.S. *See also* s. 934.50(5)(b)-(d) F.S., providing for compensatory damages, injunctive relief, attorney fees, and punitive damages for a violation of s. 934.50(3)(b), F.S.

²⁶ Section 934.50(3)(a), F.S.

in this state unless it is permitted under one of the statute's exceptions.²⁷ An aggrieved party may initiate a civil action against a law enforcement agency to obtain all appropriate relief in order to prevent or remedy a violation of s. 934.50, F.S.²⁸

The exceptions for law enforcement agencies using drones to gather evidence and other information are as follows:

- The U.S. Secretary of Homeland Security determines that credible intelligence exists indicating a high risk of a terrorist attack by an individual or organization and the drone is used to counter the risk;
- The law enforcement agency first obtains a search warrant authorizing the use of a drone; or
- The law enforcement agency has reasonable suspicion that swift action is necessary to prevent imminent danger to life or serious damage to property, to forestall the imminent escape of a suspect or the destruction of evidence, or to achieve purposes including, but not limited to, facilitating the search for a missing person.²⁹

Weaponized Drones Prohibited in Florida

In Florida, s. 330.411, F.S., prohibits a person from possessing or operating an unmanned aircraft or unmanned aircraft system as defined in s. 330.41, F.S., with an attached weapon, firearm, explosive, destructive device, or ammunition as defined in s. 790.001, F.S.³⁰ North Dakota is the only state that allows law enforcement agencies to utilize weaponized drones. The weapons are limited to the non-lethal variety such as tear gas, rubber bullets, beanbags, pepper spray, and tasers.³¹

Use of Drones for Law Enforcement Investigations

Several jurisdictions outside Florida, including the Massachusetts State Police and the Lake County Police in Illinois, are reported to be using drones to assist in more efficient and timely traffic crash investigations.³² The North Carolina Department of Transportation and North Carolina State Highway Patrol demonstrated in a research project that some advantages to using drones in traffic crash investigations include faster processing and clearing of the scene and opening the road to traffic flow more quickly than traditional evidence-gathering methods.³³

²⁷ Section 934.50(6), F.S.

²⁸ Section 934.50(5)(a), F.S.

²⁹ Section 934.50(4)(a)-(c), F.S. There are additional exceptions to the prohibition on the use of drones that are not law enforcement agency related. These exceptions can be found in s. 934.50(4)(d)-(j), F.S.

³⁰ Section 330.41(2)(c), F.S., defines an unmanned aircraft system as a drone and its associated elements, including communication links and the components used to control the drone which are required for the pilot in command to operate the drone safely and efficiently. Section 330.41(2)(b), F.S., specifies that drone has the same meaning as s. 934.50(2), F.S.

³¹ North Dakota House Bill 1328 (2015), available at <https://www.legis.nd.gov/assembly/64-2015/documents/15-0259-05000.pdf?20150501154934> (last viewed February 19, 2019).

³² *How drones help Lake County police investigate crashes, get roads open faster*, Daily Herald, May 7, 2017, available at <http://www.dailyherald.com/news/20170506/how-drones-help-lake-county-police-investigate-crashes-get-roads-open-faster> (last viewed February 18, 2019).

³³ "Research shows that documenting a collision scene using photogrammetry and UAS can be advantageous, especially in terms of speed and cost. With a combination of advanced imaging software and the latest UAS technology, we find that the North Carolina State Highway Patrol (NCSHP) can rapidly map collision scenes and simultaneously gather more information than legacy technologies. Indeed, large scenes can be documented in less than 30 minutes." *Collision Scene Reconstruction & Investigation Using Unmanned Aircraft Systems*, Division of Aviation, UAS Program Office, N.C. Department of

In addition to quickly and efficiently clearing traffic crash scenes, drone technology has enhanced crime scene documentation using a process called orthomosaic photography that can recreate a crime scene in 3-D.³⁴

Drones can also be used by law enforcement to more efficiently do jobs such as searching for evidence. For example, the San Bernardino Police Department used a drone to successfully search a large field for a gun thrown by a suspect who was being pursued.³⁵ The San Bernardino police chief emphasized the cost benefit in deploying a drone versus assembling a team to look for the gun in that situation.³⁶

Tactical Uses for Drones

Some have suggested that drones could be used to gain a tactical advantage in active shooter situations like that which occurred in Las Vegas in 2017 at the outdoor music festival at which 58 people were killed and more than 500 injured.³⁷ For example, Brian Levin, director of The Center for the Study of Hate and Extremism at California State University-San Bernardino opines that a “drone could have provided real-time intelligence and surveillance to what’s going on” during the Las Vegas incident.³⁸ In an article written for the International Journal of Aviation, Aeronautics, and Aerospace, Ryan Wallace and Jon Loffi, analyzed the law enforcement response to the Las Vegas shooting, concluding that had a drone been accessible to the Las Vegas Police it may have provided life-saving reconnaissance and shooter distraction.³⁹

Crowd Control and Monitoring for Public Safety

According to a December 2017 news article, the Las Vegas Police Department planned to use drones to monitor New Year’s Eve revelers on the Strip on December 31, 2017. The department decided to use drones to monitor crowds from an aerial view, which would help police better position barricades and other pedestrian control devices. Additionally, the department intended to use the drones to identify suspicious packages, track any unusual activity, and check hotel

Transportation, August 2017, available at <https://www.ncdot.gov/divisions/aviation/Documents/ncshp-uas-mapping-study.pdf> (last viewed February 18, 2019).

³⁴ Mesa County, Colorado, Sheriff’s Office unmanned aircraft program director, Ben Miller, envisions the 3-D crime scene preservation technique as a real aid in cold cases. The Huffington Post, Michelle Fredrickson, *Drones Add a New Dimension to Crime Scene Investigations*, October 24, 2014 (updated December 6, 2017), available at https://www.huffingtonpost.com/pro-journo/drones-add-a-new-dimensio_b_6033392.html (last viewed February 19, 2019).

³⁵ National Police Foundation, Jarrod Burguan, San Bernardino Police Chief, *Drones help augment a police department’s capabilities to fight crime*, available at <https://www.policefoundation.org/drones-help-augment-a-police-departments-capabilities-to-fight-crime/> (last viewed February 20, 2019).

³⁶ *Id.*

³⁷ Las Vegas Review-Journal, Nicole Raz, *Las Vegas police drones will monitor New Year’s Eve crowds*, December 27, 2017, available at <https://www.reviewjournal.com/entertainment/new-years-eve-in-vegas/las-vegas-police-drones-will-monitor-new-years-eve-crowds/> (last viewed February 20, 2019).

³⁸ *Id.* See also Wallace, Ryan and Loffi, Jon, *How Law Enforcement Unmanned Aircraft Systems (UAS) Could Improve Tactical Response to Active Shooter Situations: The Case of the 2017 Las Vegas Shooting*, Vol. 4, Article 7, International Journal of Aviation, Aeronautics, and Aerospace, October 9, 2017, available at <https://commons.erau.edu/cgi/viewcontent.cgi?referer=https://scholar.google.com/&httpsredir=1&article=1198&context=ijaa> (last viewed February 20, 2019).

³⁹ *Id.*

windows to try to detect anyone who might try to recreate the mass shooting incident that occurred in the city just a few months earlier.⁴⁰

Likewise, New York City had planned to have a camera-equipped drone in the sky during the 2018 New Year's Eve celebration, but "relegated to a cordoned-off area and tethered to a building" to prevent injury should the drone fall. Inclement weather prevented the drone operation.⁴¹

As stated above, the FAA, which regulates the use of drones and other aircraft in the national airspace, has restricted drone flight over persons, however at least one local governmental authority has recently had that restriction waived by the FAA.⁴² The same model drone (Vantage Robotics Snap) was used by CNN to obtain a waiver from the FAA due to the safety features of the drone, which has the ability to break apart upon impact.⁴³

Fire Department Use of Drones

According to an October 2018 news article, fire departments use UAVs for reconnaissance of wildfires and motor vehicle accident scenes, hazmat incidents, and hot spot identification at structure fires. In addition to the reconnaissance function and hot spot identification, additional uses for UAVs include:

- Search and rescue, even in urban settings;
- Preplanning with aerial photos and video identifying water supply sources, utility shutoffs, and apparatus location planning;
- Winter and ice rescue; and
- Disaster assessment and post-disaster reconnaissance after weather events such as floods or tornados.⁴⁴

The Mesa Fire and Medical Department in Mesa, Arizona, has also used drones in a variety of capacities, including:

- Gaining a 360-degree perspective on damaged structures;
- Surveying buildings to provide hazard assessments for property owners;
- Water rescue operations and flood damage assessment;

⁴⁰ Las Vegas Review-Journal, Nicole Raz, *Las Vegas police drones will monitor New Year's Eve crowds*, December 27, 2017, available at <https://www.reviewjournal.com/entertainment/new-years-eve-in-vegas/las-vegas-police-drones-will-monitor-new-years-eve-crowds/> (last viewed February 20, 2019).

⁴¹ The Washington Post, Peter Holley, *The NYPD planned to use drones during Times Square New Year's Eve celebration. Then it started raining*, December 31, 2018, available at https://www.washingtonpost.com/technology/2018/12/31/nypds-latest-tool-keeping-times-square-revelers-safe-remote-controlled-drone/?utm_term=.1a63123ba637 (last viewed February 20, 2019).

⁴² See the section of the Bill Analysis on the FAA below; see also Vantage Robotics News, *Snap Gets FAA Waiver with Rutherford County, Tennessee*, November 19, 2018, available at <https://vantagerobotics.com/news/snap-gets-faa-waiver-rutherford-county-tennessee> (last viewed February 20, 2019).

⁴³ IEEE Spectrum, David Schneider, *CNN Uses Vantage Robotics' Snap Drone to Win FAA Fly-Over-People Waiver*, October 19, 2018, available at <https://spectrum.ieee.org/automaton/robotics/drones/cnn-uses-vantage-robotics-snap-drone-to-win-faa-fly-over-people-waiver> (last viewed February 20, 2019).

⁴⁴ Alan M. Petrillo/Fire Apparatus & Emergency Equipment, *Fire Department Drones Serve a Variety of Needs on Incident Scenes*, <https://www.fireapparatusmagazine.com/articles/print/volume-23/issue-10/features/fire-department-drones-serve-a-variety-of-needs-on-incident-scenes.html> (last visited Mar 27, 2019).

- Assisting with a search for a missing kindergarten teacher; and
- Demonstrating how drones outfitted with special meters and cameras to identify lethal chemicals in hazmat situations can help keep first responders safe.⁴⁵

UAV usage is not currently widespread with Florida's fire service providers.⁴⁶ However, in Brevard County, Fire Rescue personnel have been trained to test for the FAA drone pilot certification⁴⁷ so they can conduct search-and-rescue operations, ocean rescue, map brush fires, and examine burning buildings to identify safe entry points for firefighters using drones.⁴⁸

Other Governmental Functions for Drones

Drones are becoming useful for governmental functions outside policing. For example, the Daytona Beach Police Department utilized its drones to document the state of the city's infrastructure immediately before and after Hurricane Irma came through in September 2017 to provide the Federal Emergency Management Agency with the proof necessary to obtain funding for rebuilding. Additionally, the department was able to aid first responders in navigating the fastest and safest routes to those in need of aid by providing a birds-eye view to downed power lines, unstable infrastructure, and blocked roads in the wake of the storm.⁴⁹

Although it does not currently use drones, the Florida Department of Agriculture and Consumer Services suggests that using a drone would be helpful in conducting timber assessments after a wildfire goes through an area and for land management purposes such as prescribed burning, timber stand mapping, and insect and disease monitoring. A drone could also be used by the department to pinpoint areas that need to be further evaluated by field personnel for both timber stand work and insect and disease evaluations. Utilizing a drone over such large tracts of land could reduce potential physical impacts for working around threatened and endangered species by allowing the department to work remotely with the drone thus reducing disturbance to the endangered species.⁵⁰

⁴⁵ Wayne Schutsky/East Valley Tribune, *Ariz. Fire, EMS Leads the Way with Drone Use*, <https://www.ems1.com/ems-products/technology/articles/370989048-Ariz-fire-EMS-leads-the-way-with-drone-use/> (last visited Mar 27, 2019).

⁴⁶ Section 633.102(13), F.S., defines "fire service provider" to mean a municipality or county, the state, the division, or any political subdivision of the state, including authorities and special districts, that employs firefighters or uses volunteer firefighters to provide fire extinguishment or fire prevention services for the protection of life and property. The term includes any organization under contract or other agreement with such entity to provide such services.

⁴⁷ Federal Aviation Administration, *Become a Drone Pilot*, https://www.faa.gov/uas/commercial_operators/become_a_drone_pilot/ (last visited Mar 27, 2019).

⁴⁸ Florida Today, Rick Neale, *Florida Tech drone training takes flight for Brevard County firefighters, lifeguards*, November 30, 2018, available at <https://www.floridatoday.com/story/news/2018/11/30/florida-tech-drone-training-takes-flight-brevard-firefighters/2140086002/> (last viewed February 20, 2019).

⁴⁹ In Public Safety, PoliceOne.com, Jinnie Chua, *Why drones should be part of every PD's disaster response plan*, February 22, 2018, available at <https://www.policeone.com/2018-guide-drones/articles/471474006-Why-drones-should-be-part-of-every-PDs-disaster-response-plan/> (last viewed February 20, 2019).

⁵⁰ Florida Department of Agriculture and Consumer Services, Agency Bill Analysis, February 11, 2019, (on file with the Senate Committee on Criminal Justice).

III. Effect of Proposed Changes:

The bill adds three exceptions in s. 934.50(4), F.S., which will allow law enforcement agencies to use drones to:

- Assist in crowd control involving a group of 50 people or more.
- Assist with traffic management, except that a law enforcement agency may not use a drone to gather evidence to enforce traffic infractions.
- Facilitate the collection of evidence at a crime scene or traffic crash scene.

Additionally, the bill provides that s. 934.50, F.S., does not prohibit the use of a drone by:

- A state agency or political subdivision for:
 - The assessment of damage due to a flood, wildfire, or natural disaster; or
 - Vegetation or wildlife management on publicly owned land or water.⁵¹
- Certified fire department personnel to perform tasks within the scope and practice authorized under their certifications.⁵²

The terms law enforcement agency, state agency, and political subdivision as used in s. 934.50, F.S., are currently defined in s. 934.50(2)(d), F.S., and s. 934.50(3)(b), F.S., (by cross-reference to s. 11.45, F.S.).

The bill is effective July 1, 2019.

IV. Constitutional Issues:

A. Municipality/County Mandates Restrictions:

None.

B. Public Records/Open Meetings Issues:

None.

C. Trust Funds Restrictions:

None.

D. State Tax or Fee Increases:

None.

⁵¹ There does not seem to be a singular definition in the Florida Statutes for the term publicly owned land. For example, in s. 317.0003(8), F.S., public lands is defined as lands within the state that are available for public use and that are owned, operated, or managed by a federal, state, county or municipal government entity. In s. 375.312(2), F.S., public lands means any lands in the state which are owned by, leased by, or otherwise assigned to the state or any of its agencies and which are used by the general public for recreational purposes. There is no definition of public waters appearing in the Florida Statutes although there is a detailed definition of “waters” found in s. 403.031(13), F.S.

⁵² There does not seem to be a definition for the scope and practice authorized for fire department personnel under their certification in the Florida Statutes. However, s. 633.408, F.S., contains firefighter and volunteer firefighter training certification requirements, and R. 69A-37.055, F.A.C., contains curriculum requirements for training firefighter recruits or firefighters.

E. Other Constitutional Issues:

Privacy

Although it is generally understood that a person does not currently have a reasonable expectation of privacy under the circumstances set forth in the bill, with the evolution of technology as it relates to intrusion into a person’s privacy interests, the law applying the Fourth Amendment to the U.S. Constitution, too, may evolve.⁵³

Preemption

The regulation of the national airspace and the aircraft that occupy it is a federal matter.⁵⁴ The FAA Chief Counsel issued a document in 2015 about state and local regulation of drones in which he said that state and local restrictions affecting UAS operations should be consistent with the extensive federal statutory and regulatory framework in order to “ensure the maintenance of a safe and sound air transportation system and of navigable airspace free from inconsistent restrictions.”⁵⁵ However, given the Chief Counsel’s acknowledgement 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”⁵⁶ it appears that the bill would not be an encroachment into an area exclusively regulated by the federal government.

V. Fiscal Impact Statement:

A. Tax/Fee Issues:

None.

B. Private Sector Impact:

None.

C. Government Sector Impact:

The bill allows for new uses for drones by government agencies under certain circumstances which could result in a cost savings for such agencies. However, nothing in the bill requires law enforcement agencies, fire departments, state agencies, or political subdivisions to spend resources to acquire drones or train personnel to use them.

⁵³ The Fourth Amendment to the U.S. Constitution protects persons from unreasonable searches and seizures by the government. U.S. Const. amend. IV. *See Katz v. United States*, 389 U.S. 347 (1967) finding there is no reasonable expectation of privacy in the public view. *See also Carpenter v. United States*, 138 S.Ct. 2206 (2018) a recent Fourth Amendment case finding a reasonable expectation of privacy in historical cell phone location records.

⁵⁴ Congress has vested the FAA with authority to regulate the areas of airspace use, management and efficiency, air traffic control, safety, navigational facilities, and aircraft noise at its source. 49 U.S.C. ss. 40103, 44502, and 44701-44735.

⁵⁵ FAA, Office of the Chief Counsel, *State and Local Regulation of Unmanned Aircraft Systems (UAS) Fact Sheet*, December 17, 2015, available at https://www.faa.gov/uas/resources/policy_library/media/UAS_Fact_Sheet_Final.pdf (last viewed February 4, 2019).

⁵⁶ *Id.*, citing *Skysign International, Inc. v. City and County of Honolulu*, 276 F.3d 1109, 1115 (9th Cir. 2002).

The Florida Department of Agriculture and Consumer Services and the Florida Department of Law Enforcement do not anticipate a fiscal impact related to this bill.⁵⁷

The Florida Fish and Wildlife Conservation Commission indicates by Memorandum that it will not be submitting a bill analysis for this bill.⁵⁸

The Florida Department of Highway Safety and Motor Vehicles expects no immediate fiscal impact, however, if the department decides to expand its use of drones, additional non-recurring budget authority would be required to purchase the equipment and recurring budget authority would be needed for ongoing maintenance.⁵⁹

VI. Technical Deficiencies:

None.

VII. Related Issues:

None.

VIII. Statutes Affected:

This bill substantially amends section 934.50 of the Florida Statutes

IX. Additional Information:

- A. **Committee Substitute – Statement of Substantial Changes:**
(Summarizing differences between the Committee Substitute and the prior version of the bill.)

CS by Criminal Justice on March 4, 2019:

The committee substitute amends the exceptions in the bill to:

- Require that the size of a crowd subject to crowd control be 50 people or more.
- Provide that a law enforcement agency may not use a drone to gather evidence to enforce traffic infractions.
- Allow a state agency or political subdivision to use a drone for vegetation or wildlife management on publicly owned land or water.

CS by Infrastructure and Security on March 26, 2019:

The committee substitute amends the bill to:

- Allow certified fire department personnel to use drones to perform tasks within the scope of their certification.

⁵⁷ Florida Department of Agriculture and Consumer Services, 2019 Agency Bill Analysis, February 11, 2019; Florida Department of Law Enforcement, 2019 Agency Bill Analysis, February 6, 2019 (on file with the Senate Committee on Criminal Justice).

⁵⁸ Florida Fish and Wildlife Conservation Commission, Memorandum, March 1, 2019, (on file with the Senate Committee on Criminal Justice).

⁵⁹ Florida Department of Highway Safety and Motor Vehicles, 2019 Agency Bill Analysis, February 12, 2019, (on file with the Senate Committee on Criminal Justice).

B. Amendments:

None.

This Senate Bill Analysis does not reflect the intent or official position of the bill's introducer or the Florida Senate.
