Local and State Drone Laws

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Drones at Home is a three-part study on the landscape of drone use and regulations at the local level in the United States.

Over the past few years, the United States has witnessed a growing trend of state and local drone-specific regulations that extend beyond the guidelines and restrictions established for non-recreational and recreational drone users by the Federal Aviation Administration (FAA). These rules restrict a wide variety of behaviors, including drone use over private property without the property owner's permission, invading privacy, conducting surveillance, and operating over public property or public parks. This report, the first in a three-part series on the local landscape of drones in the U.S., provides a detailed portrait of state and local drone rules across the country, and analyzes the implications of these rules for both rulemakers and drone operators. The report consists of an an analysis of a database of 133 localities that have enacted rules for drone use, a breakdown of drone-related statutes in states that have passed legislation governing the use of unmanned aircraft, and a brief discussion of the federal government's regulations for drone use and its position on the enactment of local legislation and rules.

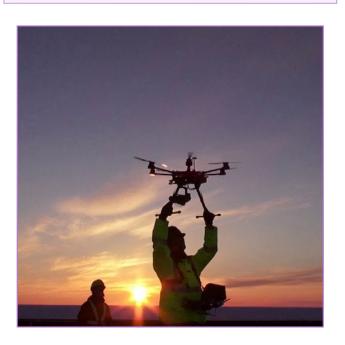
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Key Takeaways

- One hundred and thirty three localities in 31 states have enacted drone rules in recent years. These localities are home to over 30 million people.
- The most common local restrictions include prohibitions against flying drones over public property and private property without the property owner's consent.
- A number of these rules may to contravene federal authority, and could result in legal conflict.
- State statutes restrict the use of drones by law enforcement, the use of drones over critical infrastructure, and flights over private property, among other types of operations.



Local Drone Laws

We have identified 133 localities across 31 states that have enacted local rules governing the use of drones. These localities are home to over 30 million people. Of these 133 localities, only three appear to have enacted ordinances that actively promote the use of drones. A summary of all localities is provided on page seven of this report. The full dataset is available on our website at www.dronecenter.bard.edu/drones-at-home/.

Methodology

We have sought to identify as many cities, counties, and municipalities as possible that have adopted rules for drone use. The local laws presented in our database were discovered by open-source Internet searches as well as searches of municipal code websites.

We have only included laws that explicitly address the use of "drones," "unmanned aircraft," or "unmanned aerial vehicles." Other ordinances that may affect the use of drones, such as Peeping Tom rules, were not included in our database unless they specifically define drones or unmanned aircraft as a restricted technology. Our list includes a number of park authorities that have specifically restricted drone use in recent years. Park authorities that have for many years restricted "remote control aircraft" use have not been included, since many of these rules predate the emergence of drone technology and thus do not represent a part of the growing trend of local drone regulation.

Local Laws Quick Facts

• Earliest ordinance: 2009

• Number of people living in localities with local drones rules: 30 million

• Largest defined penalty for drone-related violations: \$10,000

Number of localities that promote drone use: Three

This database only reflects the results of an exhaustive search of published discoverable documentation, and should not be taken as a complete tally of every municipality and park authority in the country with rules for drones. Rather, it is intended to serve as a comprehensive guide to a broad sample of known laws currently in effect, and may be used to indicate the scope and spread of the trend of local drone law adoption.

Findings

The earliest enacted rule in our database is a 2009 ordinance from Grand Forks, North Dakota, which prohibited the landing or take-off of drones from airports, helipads, or other unauthorized locations. Various early ordinances date to 2012 and 2013, including ordinances from Charlottesville, Virginia; Deer Trail, Colorado; and Berkeley, California.

The ordinances that we discovered appear to reflect a growing rate of adoption. Only a handful of localities passed ordinances in 2012, 2013, and 2014; however, out of the 114 ordinances for which an adoption date is available, we discovered 34 ordinances from 2015, and 58 from 2016.

The vast majority of local rules—127 out of the 133 that we discovered—restrict private drone use, and either exempt or do not mention law enforcement drone use. Six ordinances restrict law enforcement or governmentuse of drones, of which only four localities—Syracuse, New York, Pierce County, Washington, Seattle, Washington, and Spokane, Washington—solely restrict law enforcement use.

The most common restricted behavior in the localities we discovered was operating in public space; 67 localities restrict the use of drones in public spaces such as parks, roads, and near public buildings. Thirty one localities ban the use of drones to invade a person's privacy by conducting surveillance or recording private activities, and 32 ordinances specifically forbid the use of drones over private property without the property owner's consent. Forty eight localities restrict either the use of drones over private property or the use of drones to invade privacy in any way. Twenty four

Commonly Restricted Behaviors

- Operations over public property
- Operations over private property without the owner's consent
- Operation in parks
- Operations at large events
- Invasion of privacy and surveillance
- Impaired operations

localities restrict both the use of drones over private property and drone use over public property. Thirty ordinances restrict drone use in parks specifically. At least 17 ordinances specifically forbid the use of drones over large events. At least 13 localities require drone operators to obtain some form of permit to fly in certain areas. Other common prohibited restricted behaviors include impaired operation, harassing people with drones, arming drones, and interfering with first responders.

Seven states—Virginia, Arizona, Delaware, Rhode Island, Michigan, Oregon, and Maryland—have passed bills that explicitly forbid local authorities from enacting certain rules regulating the use of drones. We discovered 16 localities with drone

Map of Local Drone Laws

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Localities in the United States that have enacted drone rules.

regulations in five of these states, including six in Arizona, two in Virginia, six in Michigan, and one in both Delaware and Rhode Island.

Not all localities define a specific punishment for drone-related offenses. Of the 40 localities that specify fine amounts for violations, the most common sanctions appear to be fines ranging from \$50 to \$1,000. The highest fines are in Berkeley, California (\$10,000), St. Bonifacius, Minnesota, and Suffolk County, New York (\$5,000 respectively). Of the 35 localities that specify a potential charge type associated with violations, 25 localities impose a misdemeanor charge for violations, while nine localities apply an infraction charge, and one locality defines infractions as a civil violation.

Analysis

The rate of new ordinances does not appear to be slowing. We have observed that news stories about municipalities that are considering new ordinances appear with frequency. In part, the proliferation of these laws appears to be tied to the expanding use of drones in the U.S. airspace system, and the growing rate of drone-related incidents. A council member in Bethany Beach, Delaware who sponsored an ordinance restricting drone use over private property told a local paper that she had observed a drone flying over her at a New Year's celebration. Three months after a drone crashed

into a power line in West Hollywood, California, the local council approved an ordinance imposing broad restrictions on drone use in the area.

It appears that the adoption of these rules is largely motivated by a sense that the FAA's regulations are not comprehensive and strict enough to prevent potential abuses of the technology. For example, the League of California Cities has stated the

FAA's registration rule "may not go far enough" to mitigate such hazards. The widespread adoption of local drone rules may present a challenge to the integration of drones at scale into the national airspace system.

Given the FAA's stated position, detailed in its State and Local Regulation of Unmanned Aircraft Systems (UAS) Fact Sheet, that it maintains exclusive authority to regulate the U.S. airspace system (see page 6 for further details), the proliferation of these laws could potentially lead to legal conflict. While many ordinances relate to restrictions deemed permissible by the FAA—including rules regarding privacy and trespass—many appear to contravene FAA authority by imposing restrictions on operations within the navigable airspace. For example, by the FAA's analysis, a locality banning all drone use over public space is likely infringing on federal authority. Over 60 localities restrict drone use over public space in some form.



Furthermore, the distinction between a permissible restriction and a restriction that contravenes FAA authority is not completely clear. Whether or not an ordinance contravenes the FAA may be a matter of open interpretation of its language. For example, over thirty localities ban the use of drones over private property without the property owner's permission; local authorities might argue that this is a trespass and privacy protection matter, which is permitted by the FAA, but such rules by nature impose limits on the navigable airspace, and so would appear to simultaneously contravene FAA authority over the airspace system.

If these local rules continue to be adopted,

and local law enforcement authorities restrict operations that are permitted by the FAA, such as commercial flights over private property, the federal government may intervene with legal action. For example, 24 localities specifically define jail time as a possible punishment for violations of drone-related rules; a number of these localities define punishments for rules that the FAA would define as preemptable. The FAA has not yet disclosed what actions, if any, it plans to take with regards to local drone ordinances, but it is actively studying the issue.

Citizens and commercial entities may also challenge local drone rules. A man in Newton, Massachusetts, Michael Singer, is suing the city of Newton for its ordinance, which requires drone operators to obtain a permit, and prohibits operations over private property, surveillance, and interfering with emergency responders. Singer, who says that he uses his drone to document illegal snow dumping by the city, contends that the ordinance impinges on his "constitutionally protected" First Amendment right to conduct "information gathering." Similar suits are likely to emerge as more local authorities impose drone regulations. The town of Palm Beach in Florida has had to revise its drone regulations limiting drone use in the town after several drone operators pointed out that it impinged on FAA authority. The outcomes of these suits will serve to better define the limits of local authority to implement regulations for drone use.

State Drone Laws

Beginning in around 2013, a growing number of states have passed legislation on drones. Several organizations, including the National Conference of State Legislatures and the Institute for National Security and Counterterrorism at Syracuse University, have been tracking state drone legislation. In January 2017, the NCSL published "Taking Off: State Unmanned Aircraft Systems Policies," a detailed assessment of state drone laws. The report found that 31 states had enacted drone legislation between 2013 and 2016 and that every state except South Dakota has considered

proposed bills. Many of the laws that have passed have enacted statutes aimed at restricting the use of drones by law enforcement, prohibiting drones from flying over critical infrastructure, and preventing individuals from using drones to invade someone else's privacy. Some of the laws have defined strict penalties for violations, including felony and misdemeanor charges and fines. State drone legislation has at times faced opposition from drone hobbyists, businesses, and industry organizations, who claim that they place undue restrictions on drone users. Today, state legislatures around the country continue to debate the effects of proposed drone legislation and the authorities of state legislatures to regulate drones.

Our database of state drone laws presents the individual statutes that regulate drones in the 31 states that have adopted legislation. Each statute is accompanied by the corresponding bill number and statute text, as well as the date of enactment. The statutes and bill numbers include embedded links to the original text. The database is organized according to state statutes so that stakeholders and researchers can more easily navigate the state-level regulatory environment for drones and review individual statutes on a more granular level. Our full database of state drone statutes is available on our website at www.dronecenter.bard.edu/drones-at-home/.

Background

The U.S. federal government maintains rules governing the use of drones by both recreational and non-recreational drone users. These rules have been drafted and implemented over the course of a multi-year rulemaking process. Increasingly, state legislatures and local governments are enacting additional rules that supplement the federal regulations for drone use. In some cases, these rules may conflict with federal authority, and could potentially pose a challenge to the broad integration of drones into the national airspace system.

The FAA defines two types of drone users: recreational and non-recreational operators, each

of whom are beholden to different restrictions. Recreational drone users are held to a basic rule, established in the Special Rule for Model Aircraft (Public Law 112-95 Section 336), which forbids any behavior with unmanned aircraft that endangers the airspace system. The FAA does not specifically define what constitutes such an action, but the Administration's voluntary guidelines for recreational drone and model airplane users list a number of recommendations. Operators that break these recommendations could be construed as engaging in an endangering behavior:

- Fly the UAS within visual line-of-sight
- Give way to manned aircraft
- Provide prior notification to the airport and air traffic control tower, if one is present, when flying within 5 miles of an airport
- Fly UAS that weigh no more than 55 lbs. unless certified by a community-based organization
- Follow a community-based set of safety guidelines

Though the FAA does not specifically forbid flights by recreational users over people, the community-based safety guidelines of model aircraft groups such as the Academy of Model Aeronautics do forbid such operations, meaning that the FAA likely treats such actions as reckless and punishable behaviors

Alternatively, recreational drone operators can fly in accordance with the regulations governing the use of non-recreational drones. These regulations are set forth in the Department of Transportation's Part 107 regulations were implemented in August 2016. These include prohibitions against flying over people, flying at night, flying near airports, flying above 400 feet, carrying goods for delivery, operating beyond visual line of sight, and arming of a drone.

The Department of Transportation's Part 107 regulations were implemented in August 2016. Prior to that time, non-recreational drone operators were beholden to similar rules under the Section 333 exemption program, an interim arrangement by which drone operators could be granted

permission to fly for non-recreational purposes on a case-by-case basis.

Both recreational and non-recreational drone users operating a drone weighing more than 250 grams must register with the Federal Aviation Administration and clearly display the aircraft's registration number on the system during any flight in U.S. airspace, regardless of whether they are operating over private property or over public land. The registration program was established on December 16, 2015.

Enforcement

The FAA recognizes that it is limited in its capacity to enforce its rules for both recreational and non-recreational drone use, so it relies on local law enforcement agencies to identify and interdict violations. In a guidance document outlining its position on the enforcement of its rules by local law enforcement agencies, the FAA emphasizes that law enforcement agencies "are often in the best position" to discover, address, and punish drone-related violations. The FAA further states that although "there are Federal criminal statutes that may be implicated by some UAS operations (e.g., 49 U.S.C. § 46307), most violations of the FAA's regulations may be addressed through administrative enforcement measures." The FAA asserts that it relies on a cooperative partnership with local law enforcement to enforce its rules, but stresses that all enforcement must be carried out in accordance with its specific rules for drone use.

Preemption

The FAA maintains in its "State and Local Regulation of Unmanned Aircraft Systems (UAS) Fact Sheet," published in December 2016, that it has the sole authority "to regulate the areas of airspace use, management and efficiency, air traffic control, safety, navigational facilities, and aircraft noise at its source." The FAA expresses in this fact sheet that the growing trend in local drone rules impinges upon its authority and its ability to effectively manage the airspace system. Such a "patchwork quilt' of differing restrictions," as the

guidance puts it, would hinder the FAA's ability to coordinate flight patterns and air traffic flow.

Broadly speaking, the FAA states in the fact sheet that it would preempt any state or local regulations that control operations in the navigable airspace system. This includes "operational UAS restrictions on flight altitude, flight paths; operational bans; any regulation of the navigable airspace." The FAA offers, as an example of a rule that it would preempt, a city ordinance that bans all drone flights over public and private property. Furthermore, the FAA prohibits local authorities from imposing additional drone registration programs beyond the federal registration system. The FAA has cited various court cases that uphold the right of individuals to operate aircraft freely in the National Airspace System.

The FAA does, however, <u>state that local authorities</u> <u>may enact</u> certain rules controlling drone use, including regulations around "land use, zoning, privacy, trespass, and law enforcement operations." The FAA suggests that local authorities are free to regulate the use of drones by police, the use of drones for voyeurism, the use of drones for hunting, and the arming of drones.

Furthermore, seven state legislatures—Virginia, Arizona, Delaware, Rhode Island, Michigan, Oregon, and Maryland—have banned local government regulation of drones, and an additional four—Tennessee, California, Nevada, and Minnesota—declare state sovereignty of the airspace.

In early 2017, the <u>FAA instructed the Drone</u>
<u>Advisory Committee</u>, a multi-stakeholder
body that advises the federal government on
rulemaking matters associated with drones, to
study the question of local drone regulation and
propose clearer, workable guidelines for how
local governments may regulate drones without
contravening the FAA's authority over the national
airspace system. The FAA's efforts to address local
drone regulations are ongoing.

Further Reading

A number of organizations have studied the growing adoption of local drone rules in the U.S. In 2016, the National League of Cities published a report about drone rule adoption for local rulemaking authorities. "Cities and Drones: What Cities Need to Know About Unmanned Aerial Vehicles" covers the regulatory landscape, and provides guidance on the type of rules that local authorities might consider adopting. The report is accompanied by a sample ordinance that local authorities can use as a model for developing their own rules for drone use.

The Institute for National Security and Counterterrorism at Syracuse University has been tracking the adoption of both local drone rules and state laws under its "<u>Domesticating the Drone</u>" initiative. The Institute has compiled information on several dozen localities that have adopted ordinances for drone use in recent years.

The Federal Aviation Administration Office of the Chief Counsel has compiled a guidance for local authorities considering the adoption of rules for drones use. This guidance includes information on the type of local rules that the FAA considers permissible, as well as those that it believes might contravene federal authority over the airspace system.

List of Localities with Drone Laws

| Locality Name | State | Adopted | Restrictions | Source |
|-------------------|----------------|------------|---|-------------|
| Aberdeen | South Dakota | 3/7/2016 | Invading Privacy, Operations in public space, Underage operation, Operations over people | <u>Link</u> |
| Allendale | New Jersey | 4/7/2016 | Operations in public space, Operations over Private Property, Operations in parks | <u>Link</u> |
| Amberley Village | Ohio | 5/9/16 | Operations in public space | <u>Link</u> |
| Antigo | Wisconsin | | Promotes drone use and testing. | <u>Link</u> |
| Archer Lodge | North Carolina | 12/6/2016 | Requires permit | <u>Link</u> |
| Atherton | California | | Requires permit, Recording devices must be disabled | <u>Link</u> |
| Augusta | Georgia | 3/3/2016 | Operations in public space, Operations over private property | <u>Link</u> |
| Aventura | Florida | 05/01/2016 | Operations in public space, Invading Privacy, Operations over events | <u>Link</u> |
| Bannon County | Idaho | 8/26/2015 | Operations in public space | <u>Link</u> |
| Barnstable | Massachusetts | 5/2016 | Operations in public space | <u>Link</u> |
| Barstow | California | 12/21/2015 | Harassing, Interfering w/ First Responders, Operations over private property | <u>Link</u> |
| Beach Haven | New Jersey | 11/10/2014 | Operations over beach | <u>Link</u> |
| Beachwood | New Jersey | | Operations in public space, Operations over private property | <u>Link</u> |
| Berkeley | California | 12/18/2012 | All drone use in Berkeley | <u>Link</u> |
| Bernards Township | New Jersey | | Operations in parks | <u>Link</u> |
| Bethany Beach | Delaware | 6/17/2016 | Operations over private property, Operations over people | Link |
| Bonita Springs | Florida | 11/13/2014 | Operations in public space, Operations over people, Operations over events | <u>Link</u> |

| Locality Name | State | Adopted | Restrictions | Source |
|------------------|----------------|------------|---|-------------|
| Bottineau | North Dakota | 8/2016 | Invading Privacy, Operations over private property, Operations in public space, Imapired Op, Underage op, Arming, Hurting, Operations over people, Operations over utilities, Operations Over Schools | Link |
| Boulder City | Nevada | 9/27/2016 | Enforces FAA Rules | <u>Link</u> |
| Boulder County | Colorado | | Operations in public space | <u>Link</u> |
| Buffalo Grove | Illinois | | Requires Permit | <u>Link</u> |
| Burbank | California | 5/10/2016 | Invading Privacy, Arming, Interfering w/ First Responders, Intoxicated or Impaired Op, Operations over private property, Operations over utilities | <u>Link</u> |
| Carmel | Indiana | 8/15/2016 | Operations over events | <u>Link</u> |
| Celina | Ohio | 11/10/2015 | Operations in public space, Operations in parks | <u>Link</u> |
| Chaska | Minnesota | 8/15/2016 | Invading Privacy, Harassing, Arming, Hurting, Interfering w/ First Responders, Operations in public space, Intoxicated or Impaired Op, Altitude over 400 feet, Operations over events | Link |
| Chatham | New Jersey | 10/8/2015 | Operations in public space | <u>Link</u> |
| Cherokee County | Georgia | 6/16/2015 | Operations in public space | <u>Link</u> |
| Cherry Hills | Colorado | 1/13/2015 | Operations in public space, Operations over Private Property | <u>Link</u> |
| Chesapeake | Virginia | 4/12/2016 | Operations in parks | <u>Link</u> |
| Chetek | Wisconsin | 4/18/2016 | Operations in public space, use near airports | <u>Link</u> |
| Chewelah | Washington | | Operations over airport | <u>Link</u> |
| Chicago | Illinois | 11/18/2015 | Operations in public space, Operations over Private Property, Arming, Hurting, Impaired Op, Operations Over Schools | <u>Link</u> |
| Chicopee | Massachusetts | 2016 | Invading Privacy, Arming, Operations in public space, Operations over private property | <u>Link</u> |
| Cleveland | Ohio | 4/27/16 | Enforces FAA rules | <u>Link</u> |
| Conoy Township | Pennsylvania | 3/13/2013 | Invading Privacy, Operations over private property | <u>Link</u> |
| Cramerton | North Carolina | | Requires Permit | AmLegal |
| Cuyahoga Heights | Ohio | 10/29/15 | Operations in public space, Operations in parks, Invading Privacy | <u>Link</u> |
| Daly City | California | 11/9/2015 | Operations in public space | <u>Link</u> |
| Davie County | North Carolina | 10/3/2016 | Operations in parks | AmLegal |
| Deer Trail | Colorado | 2013 | Invading Privacy, Harassing, Operation in private space | <u>Link</u> |
| DeForest | Wisconsin | 4/22/2015 | Invading Privacy | <u>Link</u> |
| Delanco | New Jersey | 10/6/2014 | Operations in parks | <u>Link</u> |
| Dewitt | Michigan | 11/24/2015 | Invading Privacy, Harassing, Arming, Hurting, Interfering w/ First Responders, Operations in public space, Non-recreational ops, Operations over events, Operations over Utilities, Operations Over Schools | <u>Link</u> |

| Locality Name | State | Adopted | Restrictions | Source |
|------------------------------------|----------------|------------|---|-------------|
| East Bay Regional Park District | California | 4/19/2016 | Operations in parks | <u>Link</u> |
| East China | Michigan | 9/19/2016 | Operations in public space | <u>Link</u> |
| East Goshen Township | Pennsylvania | 3/17/2015 | Operations over private property, Operations in public space | <u>Link</u> |
| East Lansing | Michigan | 2/16/2016 | Invading Privacy, Harassing, Hurting, Interfering w/ First Responders, Operations in public space | Link |
| Elkhart Lake | Wisconsin | 6/16/2014 | Invading Privacy, Requires Permit | <u>Link</u> |
| Euless | Texas | | Interfering w/ First Responders | <u>Link</u> |
| Evanston | Illinois | 4/18/2013 | Operations in public space | <u>Link</u> |
| Ferrysburg | Michigan | 7/22/2015 | Operations in public space, Operations in parks | <u>Link</u> |
| Flushing | Michigan | | Invading Privacy | <u>Link</u> |
| Franklin | Wisconsin | 5/31/2016 | Operations in public space | Link |
| Franklin Lakes | New Jersey | 8/16/2016 | Operations in public space, Operations over private property, Operations over people | Link |
| Geneva | Illinois | 11/2014 | Operations in parks | <u>Link</u> |
| Gilbert City | Arizona | 8/18/2014 | Operations in parks | <u>Link</u> |
| Grand Forks | North Dakota | 8/17/2009 | Operations in public space, no unlicensed use of landing strips | Link |
| Green Bay | Wisconsin | 8/24/2015 | Operations in public space, Operations over events | <u>Link</u> |
| Hayward | California | | Operations in parks | <u>Link</u> |
| Hempstead | New York | 6/21/2016 | Requires permit, Insurance | <u>Link</u> |
| Hermosa Beach | California | 5/10/2016 | Invading Privacy, Harassing, Interfering w/ First Responders, Operations in public space, Interfering with manned aircraft, Operations over private property | Link |
| Holyoke | Massachusetts | 9/20/2016 | Invading Privacy, Operations in public space, Operations over private property | Link |
| Huntington | New York | 10/15/2017 | Operations over private property, Operations in public space, Operations over people, Invading Privacy, Impaired Op | Link |
| Kannapolis | North Carolina | | Operations in parks | <u>Link</u> |
| Key West | Florida | 2/17/2016 | Operations in public space | <u>Link</u> |
| La Cañada Flintridge | California | 8/4/2015 | Operations in parks, Operations over events | <u>Link</u> |
| La Habra | California | 9/16/2016 | Invading Privacy, Interfering w/ First Responders, Intoxicated or Impaired Op, Operating near utilities, Operations in public space, Operations over events | Link |
| Lago Vista | Texas | 12/18/14 | Ops at airport | <u>Link</u> |
| Laurel Hollow | New York | 4/15/2015 | Invading privacy, Operations over private property, Operations in public space | <u>Link</u> |
| Lawton | Oklahoma | 3/22/2016 | Enforces FAA rules | <u>Link</u> |
| Lincoln | Nebraska | 4/4/2016 | Invading Privacy, Harassing | Link |
| Lombard Park District | Illinois | | Requires permit | Link |

| Locality Name | State | Adopted | Restrictions | Source |
|---------------------|----------------|------------|---|-------------|
| Long Beach Township | New Jersey | 5/18/2015 | Operations in public space, Operations over private property | <u>Link</u> |
| Los Angeles | California | 12/2/2015 | Operations in public space | Link |
| Mackinac Island | Michigan | 7/6/2016 | Requires permit | <u>Link</u> |
| Manassas | Virginia | 8/10/2015 | Nighttime op | <u>Link</u> |
| Manhattan | Illinois | 2015 | Operations in public space, Operations over private property, Arming, Drone weight, Operations over events | <u>Link</u> |
| Manhattan Beach | California | 2/2/2016 | Invading Privacy, Arming | <u>Link</u> |
| Miami | Florida | 12/20/2015 | Operations in public space, Operations over events, Operations in parks | <u>Link</u> |
| Monroe County | Florida | 5/25/2016 | Operations in parks | <u>Link</u> |
| Nags Head | North Carolina | 3/2/2016 | Invading Privacy, Hurting, Interfering w/ First Responders, Operations in public space | Link |
| Narragansett | Rhode Island | 6/6/2016 | Operations in public space, Operations over events, Operations in parks | Link |
| New York City | New York | | Unlicensed use | <u>Link</u> |
| Newton | Massachusetts | 12/16/2016 | Invading Privacy, Harassing, Interfering w/ First Responders, Operations in public space, Operations over private property, Requires Permit | Link |
| Nichols Hills | Oklahoma | | Invading Privacy, Operations over private property, Arming, Hurting | <u>Link</u> |
| Northampton | Massachusetts | 6/27/2015 | Invading Privacy, Operations over private property, Operations in public space | <u>Link</u> |
| Northport | New York | 5/17/2016 | Invading privacy, Operations over private property, Operations in public space, Impaired operations | Link |
| Oak Lawn | Illinois | 3/14/2016 | Operations in parks | <u>Link</u> |
| Ocean City | New Jersey | 2015 | Ops at airport | <u>Link</u> |
| Ocean Township | New Jersey | 7/30/2015 | Operations in public space, Operations over private property | Link |
| Orchard Park | New York | 4/1/2016 | Operations in public space, Operations over events | Link |
| Orland Park | Illinois | 1/4/2016 | Invading Privacy, Harassing, Hurting, Operations in public space, Intoxicated or Impaired Op, Operations over private property, Operations over utilities, Operations Over Schools, Operations in parks | Link |
| Orlando | Florida | 1/22/2017 | Intoxicated or Impaired Op, Operations over events, Requires Permit | <u>Link</u> |
| Oxford | Alabama | 11/28/2016 | Operations in public space | <u>Link</u> |
| Oxnard | California | | Operations in public space | AmLegal |
| Palm Beach | Florida | 9/12/2016 | Operations in public space, Requires Permit | Link |
| Paradise Valley | Arizona | 12/3/2015 | Operations in public space, Operations over private property | <u>Link</u> |
| Parkland | Florida | 2/16/2016 | Operations in parks | <u>Link</u> |
| Parma | Ohio | 1/20/2015 | Interfering w/ First Responders, Operations in public space | <u>Link</u> |

| Locality Name | State | Adopted | Restrictions | Source |
|----------------------|--------------|------------|--|-------------|
| Payson | Arizona | 9/18/14 | Operations in parks, Operations over people | <u>Link</u> |
| Peachtree City | Georgia | 4/7/2016 | Operations over recreational facilities | <u>Link</u> |
| Phoenix | Arizona | 7/1/2016 | Operations in parks | <u>Link</u> |
| Pierce County | Washington | 4/24/2014 | Police surveillance | <u>Link</u> |
| Pima County | Arizona | 12/22/2015 | Operations in parks | <u>Link</u> |
| Pittsburgh | Pennsylvania | | Operations in parks | <u>Link</u> |
| Port Aransas | Texas | 8/2/2016 | Operations near airport | <u>Link</u> |
| Poway | California | 8/2/2016 | Interfering w/ First Responders | <u>Link</u> |
| Ripon | California | 8/2016 | Operations over events | <u>Link</u> |
| Rockland County | New York | 6/15/2015 | Operations in public space, Operations over private property | <u>Link</u> |
| Rolling Meadows | Illinois | 11/10/2015 | Operations in public space, Hurting, Invading Privacy, Requires insurance, Operations Over Schools | <u>Link</u> |
| Rosenberg | Texas | 11/20/2013 | Operations in parks | <u>Link</u> |
| San Diego | California | | Operations in parks | AmLegal |
| Santa Barbara County | California | 5/10/2016 | Operations in parks | <u>Link</u> |
| Santa Clara | California | 9/3/2015 | Operations in public space, Operations over events, Weight | Link |
| Schaumburg | Illinois | 4/8/2016 | Operations in public space, Operations over Events | <u>Link</u> |
| Scottsdale | Arizona | 9/20/2016 | Operations in parks, Operations over people | <u>Link</u> |
| Seattle | Washington | | City agency drone use | <u>Link</u> |
| Skokie | Illinois | 5/19/2015 | Operations in public space | <u>Link</u> |
| Spokane | Washington | 12/8/2013 | City agency drone use | <u>Link</u> |
| St. Bonifacius | Minnesota | 2/20/2013 | Operations in public space, Law Enforcement | <u>Link</u> |
| Suffolk County | New York | 9/9/2015 | Requires permit, Operations in parks | <u>Link</u> |
| Syracuse | New York | 12/15/2013 | City agency drone use | <u>Link</u> |
| Vail | Colorado | 5/2016 | Operations in Certain Restricted Areas | <u>Link</u> |
| Ventnor | New Jersey | 7/31/2016 | Operations in public space | <u>Link</u> |
| Warner Robins | Georgia | 3/20/2017 | Op in public space, Op over private property, Interfering w/ First Responders | <u>Link</u> |
| West Goshen | Pennsylvania | 6/11/2016 | Operations over private property, Operations in public space | <u>Link</u> |
| West Hollywood | California | 1/19/2016 | Invading Privacy, Harassing, Interfering w/ First Responders, Operations in public space, Operations over schools, Operations over events | <u>Link</u> |
| West Monroe | Louisiana | 8/9/2016 | Invading Privacy | <u>Link</u> |
| Wichita | Kansas | 5/22/2015 | Operations in public space | <u>Link</u> |
| Wildwood | Missouri | 2016 | Operations over private property, Operations over utilities/infrastructure, Impaired op, Harassing | Link |
| Willistown | Pennsylvania | | Invading Privacy, Operations in public space, Operations over private property | Link |
| Wilmette | Illinois | 6/2016 | Operations in public space, Requires Permit | <u>Link</u> |
| Windsor | Wisconsin | 6/3/2015 | Enforces state law | <u>Link</u> |

The Center for the Study of the Drone at Bard College is an interdisciplinary research institution founded in 2012 that examines the novel and complex opportunities and challenges presented by unmanned technologies in both the military and civilian sphere.

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