Outlines legal developments surrounding unmanned aircraft systems (UAS), or drones. Discusses how cities are using drones, how cities can legally operate drones, and other considerations for cities before flying drones. Reviews a city’s authority to regulate drones and includes links to helpful Federal Aviation Administration documents and materials.

I. What are drones?
A “drone” is a common name for an unmanned aircraft system (UAS). A UAS is an aircraft without a human pilot on board. Instead, the pilot controls the aircraft from the ground. (https://www.faa.gov/uas/). A UAS can range in size, from toys that weigh a few ounces, to military units capable of carrying loads of 3,800 pounds. The Federal Aviation Administration (FAA) refers to a UAS weighing less than 55 pounds as a small UAS (or sUAS). Throughout the remainder of the memo, “drone” will be used in place of UAS or sUAS.

II. Federal regulation
As the federal agency tasked with ensuring the safety of the airspace of the United States, the FAA has jurisdiction to regulate drones. A 2014 decision by the National Transportation Safety Board (NTSB) determined that drones are legally considered to be aircraft. This decision provided the FAA with the requisite authority to regulate drones as aircraft. However, because drones are vastly different than manned aircraft and come with much different safety concerns, the FAA has worked to develop regulations specific to drones. More broadly, regulations applying to manned aircraft do apply to drones when possible.

III. City users of drones
A. City employees as pilots
Cities are already finding many useful applications for drones. Already, cities in Minnesota are using drones in creative ways, such as assisting with emergencies and search-and-rescue operations. To comply with FAA guidelines, municipalities have two options. Cities may choose to either comply with Part 107, which is generally applicable for all commercial drone pilots, or to register under public operation registration.
1. Registration under Part 107

Part 107 is a comprehensive regulation developed by the FAA to integrate non-hobby drones into the national airspace. The regulations govern pilot certification, aircraft registration, and operating requirements.

Key Part 107 regulations require that drones:

- Fly under 400 feet.
- Fly only during the day.
- Must be kept within the visual line of sight of the pilot.
- Must not be flown over people.
- Must be operated by pilots who have passed a knowledge test and are at least 16 years old.
- Weigh less than 55 pounds.

Besides the pilot certification test, essentially all other Part 107 requirements are subject to individual waivers by the FAA. In other words, if a city is interested in flying under Part 107, but would like to conduct a nighttime flight, the FAA may grant a waiver to allow such a flight. Absent a waiver, the flight would not be authorized.

2. Public operation registration

Cities are not required to comply with Part 107. The FAA has a separate registration process for government entities conducting public operations with drones. Under this process, a city must:

- Register online, using the UAS COA online system. By going this route, the city will not have to go through paper registration, which can take up to six weeks. The city will be issued a username and password so that the certificate of waiver or authorization (COA) process can be completed online as well. Once online registration is completed, the city will be given an FAA registration number. Fill the CAPS Access form and submit it via email to 9-AJV-115-UASOrganization@faa.gov. Allow 1 to 2 business days for the request to be assigned. Upon meeting the COA requirements, the city will be granted access to submit a COA request. Follow the provisions set out in the COA. The COA will indicate when and where the drone can be flown, as well as any other limitations on the operation of the drone.

Part 107 includes default rules for flight operation. Cities should use the alternative registration method if the city determines its drone use would not comply with Part 107. Alternatively, as discussed above, the city could still use Part 107 for most drone flights and seek a waiver for drone activity that would fall outside of Part 107’s parameters. The COA process can be complicated and requires the involvement of the city attorney.
Not all flights conducted by a city will be considered public operations by the FAA. The FAA has released an advisory circular to assist entities in determining whether a given flight meets the requirements of a public operation. Best practices suggest that a city work with its city attorney to determine if a given flight meets the definition of a public operation.

3. State insurance requirements

Minnesota law requires that any operator of an aircraft must have liability insurance that meets certain minimum coverage levels. The insurance requirements apply equally to drones. If a city has liability insurance through the League of Minnesota Cities Insurance Trust, the city’s insurance will exceed the standards required by statute. While commercial users are also required to register with the Minnesota Department of Transportation (MnDOT) and pay a registration fee, city users are not required to pay the registration fee but must register and provide proof of insurance.

B. Contracting for service

Cities can still obtain the benefits of drones without owning or operating their own aircrafts. Many businesses offer various drone services that could be of use to cities. Before working with any drone contractor, cities should carefully evaluate whether the contractor has the appropriate clearances to conduct the city’s proposed drone operation. Specifically, cities should ensure the contractor has satisfied the FAA and MnDOT’s registration requirements, as well as MnDOT’s insurance requirements.

The League offers a free contract review service for its members. A League attorney will review any agreement with a drone contractor before it is signed to be sure the city’s interests are protected.

C. Practical considerations

While registration and compliance with MnDOT and FAA rules are both essential prerequisites for flying drones, cities should also be aware of other general considerations and requirements before taking flight.

1. Internal drone policies

Cities should consider adopting internal policies regarding drone use. Any policy should address, at a minimum, who has the authority to operate the drone. Beyond operational authority, cities should also consider when and how a drone will be used, or who will have the authority to order a drone’s operation.
A city interested in using drones should also consider the public perception of drone usage. Before getting or using a drone, the city should clearly explain to residents what it plans to do with the drone. This can help dispel potential concerns.

The city should also consider providing notice to the public to let them know when flights will occur. While not required by law, providing the public with notice of a city drone operation could help reduce the number of questions the city receives regarding a drone flying around the city.

The FAA has released privacy guidelines for drone users. Though these guidelines are not law, they do provide some good ideas for all drone users for protecting the privacy of others. Any city operating drones should consider including some of the recommendations, or related policies, in its internal drone policy.

2. **Data practices and data retention**

Drone usage will likely create government data because many drones are equipped with cameras. If a city takes photos or records videos or audio with a drone, that data is subject to the Minnesota Government Data Practices Act and the city’s data retention policy. Prior to using a drone, a city should ensure that its data retention policy includes any data generated by a drone.

Any data obtained while using a drone should be destroyed only in accordance with the city’s data retention policy. Relatedly, cities must consider the data practices implications of any drone footage it maintains. This should include budgeting for the costs of maintaining and securely storing the additional data a city’s drone may create.

3. **Warrant requirements**

Certain uses of drones may require the city to obtain a warrant prior to the drone operation. While police use of drones certainly raises warrant concerns, a city’s use outside of a criminal context could also raise warrant issues. For example, if a city uses a drone to fly over a landowner’s backyard to check for code violations, a court could determine that a search requiring a warrant has occurred. However, case law regarding drones is scarce at this point.

IV. **City regulation of drones**

Cities may be interested in regulating drones to ensure the safety and privacy of residents. However, a city’s ability to regulate drones is a bit complicated. Cities likely have little authority to impose many regulations on drones because the FAA’s authority largely pre-empts a city ordinance in this area.
Generally, prohibitions or restrictions on flight paths, required equipment, or knowledge tests for drone operators would likely not be within the purview of local government regulation. On the other hand, privacy concerns involving drones—such as flying close to homes to look inside—is an area local government likely has the authority to regulate.

The FAA has expressed that it is concerned with safely incorporating drones into the national airspace, but not with how a drone is used or what tools (such as a camera) may be incorporated onto a drone. As an example, the FAA has indicated a state law prohibiting drones from being used for hunting or fishing is acceptable.

It appears likely that cities have authority to regulate the takeoff and landing locations for drones via zoning ordinances. However, cities should be careful not to use this authority to effectively ban drone operations within the city. A broad prohibition is likely to be challenged. It seems unlikely a city’s authority would be broad enough to enact what essentially amounts to a ban on drone operation within city limits.

The National League of Cities has developed a model ordinance for drone use that attempts to balance a city’s interest in regulation with the general interest in allowing innovation in the growing drone industry.

Cities interested in regulating drones may find it helpful to look to their current ordinances to determine if any of them can be applied to drones or could be modified to apply to drone operations. It is likely, for example, that an ordinance prohibiting voyeurism could be enforced against a drone operator who is using the drone for voyeuristic purposes.

V. Conclusion

Drones represent a rapidly changing new technology. The law is only beginning to catch up to the present technology. The League is closely monitoring all developments in the drone arena. Cities may find it beneficial to using drones, but they must plan carefully to keep drone operations safe.