

ALGIM

DRONES IN LOCAL GOVERNMENT



ALGIM'S DRONE SURVEY RESULTS

It can be hard to get a clear picture of how a technology is progressing through local government. The ALGIM UAV user group wanted to get a high-level view of how drones are being used – if at all.

The results of our survey are now in – thank you to everyone who filled out the survey. Here is what we found.

Drone numbers

A heavy majority of councils (78%) already have at least one drone, although one-fifth still do not. While the plurality (47%) own only one drone, there are a number of councils (9%) who are utilizing five or more.

Make and model

This won't come as a surprise to anyone familiar with the state of drones, but DJI rules the roost. The majority of these are the Phantom (56%) – which makes sense given its balance between technology and price, and its position at the high end of the consumer market.

A number also opt for the more expensive Inspire (19%) and Matrice. The Mavic (22%) and one Spark round out the DJI line-up, showing that there is a real spectrum in use from the decidedly consumer, through to the professional.

The other drone brands used are Yuneec, Parrot, a custom-built rig, and the cool looking, waterproof Hex H2O.

What are they used for?

What aren't they used for would probably be a better question, given the range of responses. The top two applications are 3D mapping (64%) and marketing images (64%) – which comes as no surprise. Surveying (57%), photogrammetry (54%), and bridge inspections (32%) round out the top five.

Other uses include civil defence response, building inspections, reservoir inspections, fire risk surveillance, and air quality monitoring.

Who is using them?

Perhaps one of the difficulties, thanks to affordable drone tech, is keeping track of where they are being used throughout council, and deciding if one group should have oversight.

In line with what you'd expect from their use-cases, the four largest users are GIS (46%), civil defence (43%), communications/public relations (43%), and assets (39%). Other common business areas include roading, biosecurity, and building.

Training

Something to be monitored is the amount of industry-trained Part 101 operators. Breaching the requirements of the Civil Aviation Authority's Part 101 requirements could have several significant risks for councils, whether that's health and safety or significant legal prosecution.

Encouragingly, the majority (73%) of councils have at least one trained operator – the majority of those that said they don't, also don't have drones.

Continuing to ensure anyone operating a drone is Part 101 trained is crucial to protect councils from serious legal action.

Also, a shameless plug for ALGIM's droneSafe training – see more at algim.org.nz/drones

Looking to the future

The majority of those looking to future applications are similar to those currently being carried out by other councils, as mentioned above.

Some of the different proposed applications include LiDAR, spraying, infrared for leak detection



Most common number of drones in a council



Most popular brand



3D mapping is the most common use case



GIS are the biggest users



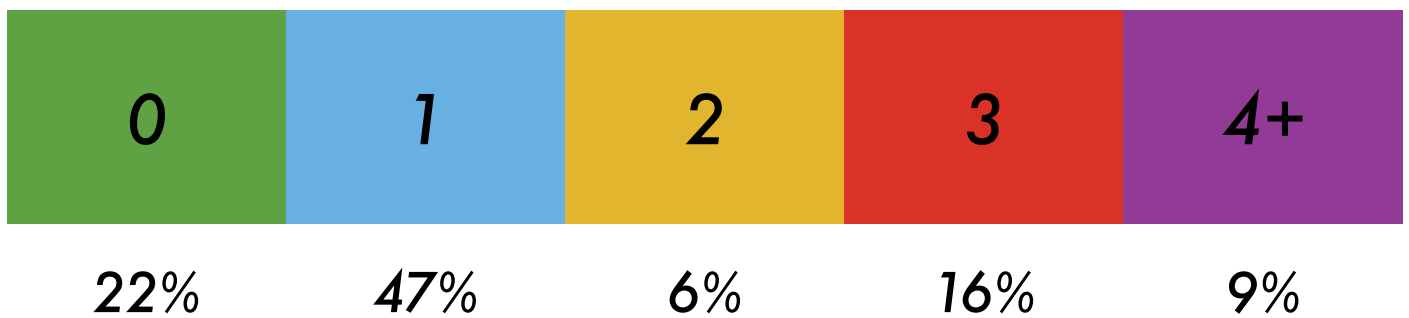
Most common future use is inspections of buildings, roads and bridges

THE FULL RESULTS



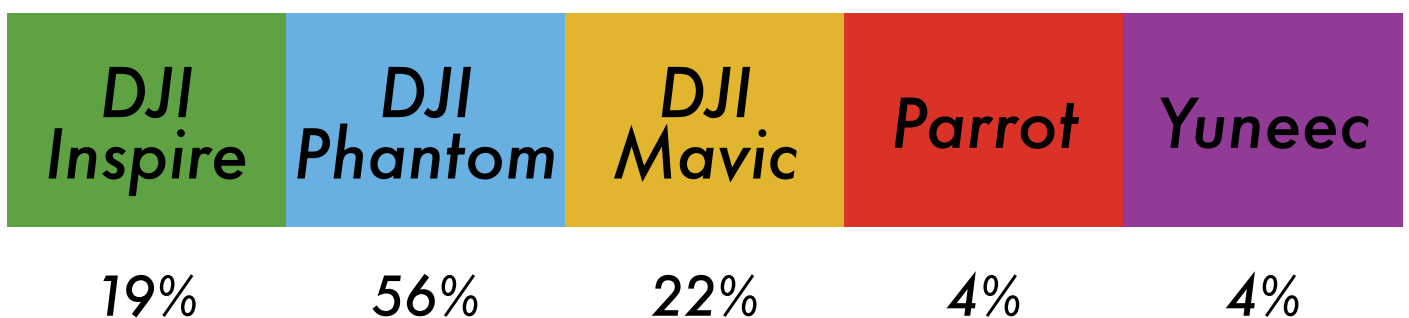
Number of drones

How many UAVs (drones) does your council own?



Drone types

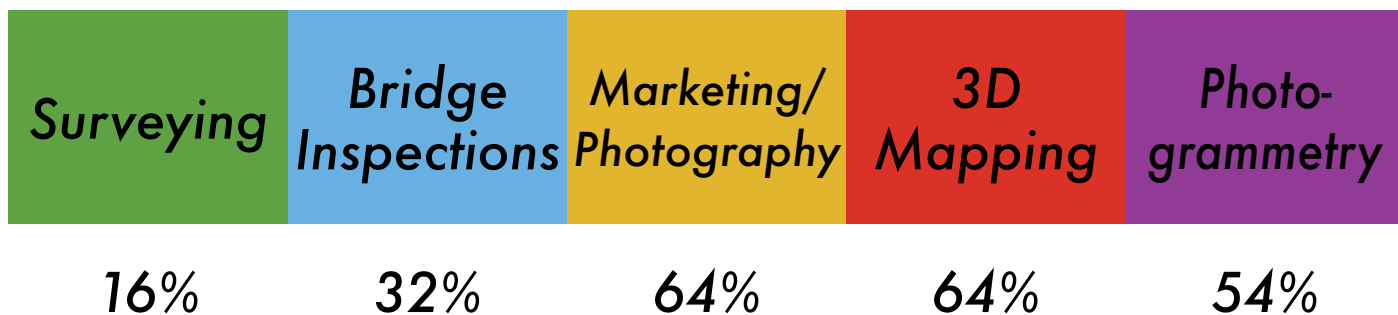
What kind of drones do you use?



- Other responses:
- DJI Matrice
 - Hex H2O
 - DJI Spark
 - Custom built

Applications

What are your council's main applications?

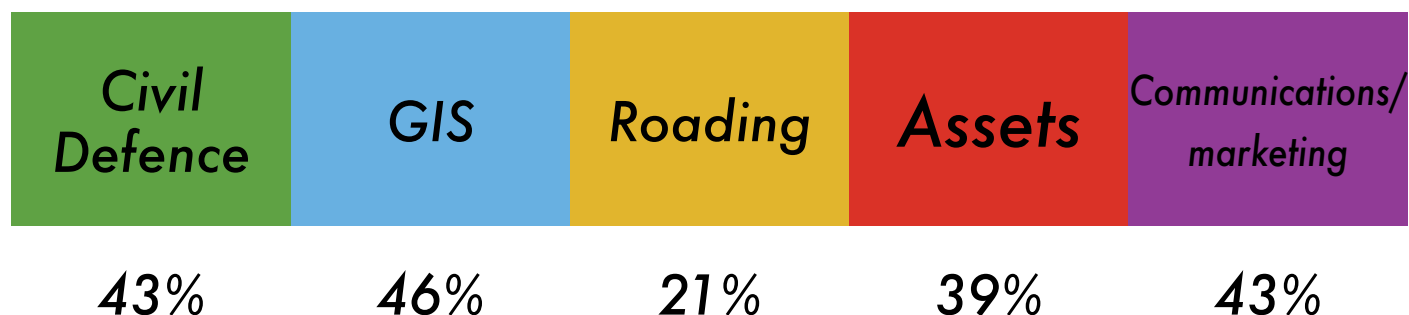


Other responses:

- Fire risk surveillance
- Monitoring groundwater, air quality, water flow
- Reservoir inspections
- Roof inspections
- Civil defence
- Checking alignment of wireless links
- Biosecurity

Business areas

What departments in your council using drones?



Other responses:

- Engineering
- Surveying
- Biosecurity
- Environmental monitoring
- Maritime
- Compliance
- Building/Property
- Infrastructure
- Museum/Heritage

Trained operators

How many trained Part 101 operators does your council have?

