## From Ambition to Action:

Insights into drone use by Local Government in England

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### **Executive summary**

#### The UK has the ingredients for trusted, scalable, drone adoption in Local Government

- Local Government are active drone users, demonstrating capability as domestic service providers, a strong data protection regime, and acting as a regulator with growing market-shaping powers
- Councils are effectively deploying drones for core statutory functions such as asset inspection and enforcement. Local Government drone users report safety, access, and data benefits, highlighting improved worker safety, better access to remote sites, and more robust data collection
- Yet, while Local Government drone use is growing, it remains fragmented and lacks connection
- Attention is needed to the embedding of drones into strategy or statute/service design, shifting beyond individual champions and enabling value realisation through workflow integration
- While drone technology (particularly sub <250g) is accessible, uptake is limited by organisational inertia
  and a lack of formal coordination or benchmarking across the sector or service areas</li>
- Joined up action has the potential to unlock national impact. Local Government offers a safe and scalable testbed. Coordinating procurement, sharing good practice, and linking to local skills pipelines would support public sector demand, domestic suppliers, and long-term sector growth

#### **Structure**

#### 1. Context and study scope

- Rationale: Why look at Local Government drone use?
- Research: Scope and study design

#### 2. Findings

- Use Cases and use case maturity
- Reported Benefits
- Local Government drones in action (practice and process)

#### 3. Discussion (drivers, barriers, wider stakeholders)

- Drivers to adoption
- Barriers to adoption and scaling
- Wider stakeholders (public and nature)

#### 4. Limitations and Next steps

## Section 1. Context and study scope

#### Context

#### Why study drone use in Local Government in England?

- Local Government are active, yet often under-examined, drone users
- As efforts continue to 'foster growth within the UAS sector' (<u>CAP3105</u>), Local Government have developed diverse use cases, spanning both statutory duties and more ad hoc applications
- Local Government have been supported by various drone-related funding schemes (e.g. Connected Places, Smart Cities), including funding for LG drone training featuring as part of Future Flight (e.g. <u>AAM4Gov</u>). While some Councils are promoted as lead users/pathfinders, it remains useful to reflect on meaningful legacy
- Attention has been paid to byelaws (<u>Grey Arrows</u>, 2024), but Local Government capability matters beyond this, with Local Government playing a central role in drone governance more widely (<u>Lewis et al.</u>, 2025)

### Study scope

- This pilot study the first detailed investigation of Local Government drone use in England
- We focus on current actual real-world use cases, rather than abstract, potential or speculative applications
- Examining drones in action, we explore reported benefits, drivers and barriers to adoption and scaling

#### **Project Methodology:**

- 14 interviews across 11 Local Authorities, between February and March 2025
- Preliminary document analysis (see appendix)

#### **Research Team:**

- Mariela de Amstalden (Lawyer, expertise in regulation and governance of novel technologies)
- Anna Jackman (Academic in Geography, expertise on UK drone use)
- Michael Lewis (Academic in Technology/Operations Management, expertise on Local Government and drones)

## Study design

#### Sampling criteria:

- Local authorities were approached: where they undertook regular drone use, across a diversity of use cases, across different levels of maturity of use case, spanning in-house or external providers, with both locally or externally funded operations, across different geographies and regions in England
- Data gathering: 14 interviews across 11 Local Authorities
  - Interviewees: all with a direct role (e.g. pilot, pilot training) and/or managerial oversight of drone activities
  - All interviews conducted by core research team
  - Material: Approximately 10 hours of interview data, 50k transcript words
  - Geographical distribution: North (n=3), West/South-West (n=2), Midlands (n=3), South/South-East (n=3)
  - Area type: Mixed Urban, Suburban and Rural
  - Participant responses anonymised (P1 14)
- Document review (see appendix)

## Section 2. Findings

#### Local Government use cases observed

Asset inspection (n=12) and enforcement related work (n=5) most frequent

Use Case	n
Asset inspection (bridges, culverts, roads, lighting, buildings)	12
Assisting building control with planning concerns (e.g. Roof inspection, developments) Thermal inspections (e.g. buildings, solar panel, no smoke zone)	3 4
Assessing/monitoring sites to support enforcement work (e.g. fly-tipping)	5
Assessing/monitoring inaccessible sites (e.g. trees/ Tree Preservation Order, large woodland areas, contaminated sites, riverbank, canal and coastal inspections)	4
Gathering imagery (e.g. social media, press releases)	3

- Local Government drone use focused on particular applications (e.g. asset inspection) and related to particular Departments (e.g. Planning)
- Respondents reported predominantly deploying sub <250g drones, working in the Open category

## Use case maturity

Observation-based uses to the fore, which may reflect back-end processing issues

Use Case	Low	Med	High
Inspection (e.g. bridges, culverts, roads, lighting, buildings)	2	3	
Assisting building control with planning concerns (e.g. roof, developments)		3	
Thermal inspections (e.g. buildings, solar panel, smoke zone)	4		
Assessing/monitoring sites to support enforcement work (e.g. fly-tipping)	2	1	2
Assessing/monitoring inaccessible sites (e.g. trees, large woodland areas, contaminated sites, riverbank, canal and coastal inspections)	2	1	2
Gathering imagery (e.g. social media, press releases)		2	1

- Maturity level is a judgement but based on combination of years operating drones (e.g. some use cases dating back to 2017), flight hours, missions (if data provided/ available), clarity of policy
- Supported by interview text coding (e.g. 'routine', 'standard way of working', 'experience', etc)

### Reported benefits of drone use

Identified three clearly positive benefits and two more balanced benefits

- While most Local Authority participants described themselves at the 'beginning' of their drone journeys, they all nonetheless described 'seeing the benefit' (P2)
- Local Government participants highlighted three clearly positive benefits
  - 1. Safety
  - 2. Access
  - 3. Image and data collection
- Local Government participants also highlighted two more balanced benefits
  - 1. Time / speed
  - 2. Direct cost savings
- Note: while environmental benefits are highlighted in policy documentation (HM Government, 2022;
   Department for Transport, 2022), these were rarely mentioned by participants, with:
  - One arguing that drones would assist 'delivering some of [their] Net Zero targets' (P4), and
  - Another 'struggling with analysis of specific benefits' such as CO2 emissions, given available data (P4)

## **Benefit 1: Safety**

Safety was frequently identified as 'biggest driver' of drone use (P6, P2)

- The 'remote' functionality of the drone (P5) was associated with helping to 'look after' teams (P11) by enabling workers to be taken out of 'dangerous situations' that were previously 'putting them at risk' (P2). Examples included:
  - Roof inspection, reducing risks of workers 'on the roof with a ladder' (P9)
  - Highways/ roads inspection to 'take boots off the ground' and get inspectors 'out of harms way' in busy traffic environments (P7)
- Participants outlined 'all the risks that get cut out by using the drone' in relation to the 'health and safety risk register', which they considered important in making a 'business case' (P6)
- Participants reflected on device cost and safety, underscoring that the cost of a drone when compared to an 'individual you could never replace was a no-brainer' (P1)
- Project findings support the recognition of drone-related safety benefits (HM Government, 2022), particularly regarding 'working at height, which tops the list of work-related fatal injuries' (PWC, 2022)

#### **Benefit 2: Access**

Drones support accessing 'sites that are inaccessible' (P3) or 'not easy to access' (P5)

- Local Government drone users described using drones to 'look and see what's going on in areas that are not easy to access' (P5). Examples included:
- Enforcement activities related to remote 'sites of fly tipping' encompassing dirt tracks difficult to 'get a car down', with drones enabling officers to 'see what's going on down there' via 'rapid' remote inspection (P8)
- Participants being 'refused entry' to 'traveller sites' and using drones to ascertain 'breaches of criminal offences' (e.g. 'caravan counts' and 'carbon accounts'), while supporting a 'less invasive' modes of data gathering requiring a 'less heavy handed' police presence (P3)
- Participants also asserted that drones 'opened up' spaces they would not have previously 'looked at' (P5), enabling them to 'see areas that we couldn't see before' (P4)

## **Benefit 3: Image and Data Collection**

Drones offer a unique perspective of the 'landscape from above' (P3) and over time

- Participants understood drones as low cost, easy to use technologies supporting:
  - 'Aerial assessments' (P3) enabling a 'better picture' of a site and 'site surveys' inclusive of 'data you wouldn't have had before' (P6)
  - Seasonal and change-over-time (longitudinal) data (e.g. 'tree health' assessments (P7))
- Participants reflected on the evolution of drone technology and functionality, highlighting:
  - High quality (e.g. 4K) cameras even on 'lightweight, compact' drones (P3)
- Participants shared examples of drone imagery used in legal proceedings (High Court), highlighting:
  - Importance of 'crisp and clean' photography in relation to building an 'evidence base' (P3)
  - Drone imagery was 'very helpful' for their cases as it provided a good point of comparison to 'publicly available area images (e.g. Google Earth Pro)' to identify 'obvious changes' (P3)
  - That they received 'no complaints' from magistrates and barristers (P3)
- Such findings reiterate that drone benefit lies not just in aerial data gathering/ acquisition, but in 'the post-processing of images and videos' (Inform Report, 2019: 5)

## **Balanced Benefit 1: Time and speed**

Drones made some tasks more rapid, but preparation process can be time consuming

- Participants associated drones with enabling time-related savings
- Detailed the 'amount of time' drones saved for elements of their role (P6), describing drone flyovers as enabling the 'covering of more ground' and addressing the 'need to use time more wisely' (P3)
- Time-saving examples included:
  - Infrastructure inspection drones enable participants to 'do things quicker and do more of the statutory inspections that we should be doing' (P2)
  - Asset inspection (solar panels) drones support 'quickly identifying areas of loss generation' (P6)
  - Rapid site assessment in relation to the evaluation of 'biodiversity net gain' (P1)
- However, for other participants, such benefits should be balanced against:
  - Time spent training (in-house) drone flyers and on preparatory flight planning activities (P10)
  - Travelling to get equipment e.g. where drones are in house equipment, storage location matters as their county was a 'big place' so driving between sites to pick up, use and return the drone had to be factored into decision-making (P9)

## **Balanced Benefit 2: Cost savings**

Drones associated with direct and indirect cost savings, but also fixed and variable operating costs

- Several participants described the 'cost benefits' of Local Authority drone use (P2)
- Participants centrally highlighted safety-related avoidance costs:
  - Removing or considerably reducing scaffolding costs by identifying areas of rooftops requiring further attention (P9, P5, P1)
  - Avoiding road closure costs (P4, P7)
- Balanced initial financial outlay as 'small' when compared to 'very big benefits in time and money' (P2)
  - It does not cost 'huge amounts of money' and you 'can get that back so quickly once you use drones' (P5)
  - After purchasing a small drone 'we were up and running for around £1000, and within a week, we'd made that money back' (P3)
- Alongside further attention to cost-savings associated with specific use cases, participants highlighted the importance of considering costs across lifecycle (training, equipment, maintenance, data processing)
  - While drones can be programmed to methodologically cover spatial zones via 'patterns across the land' in a
     'few hours', it is critical to factor in 'the time and the money spent processing the data' afterwards (P8)

## Local Government drones in action: Practice and process

- To dig into how participating Local Government drone users were deploying drones, we focused attention on key practices and processes
- Following open coding, we aggregated collective codes to five core themes, in order of emphasis
- Key themes, explored over the proceeding slides, include:
- 1. Getting started with drones
- 2. Data processes and protection
- 3. Planning to fly
- 4. Technology management
- 5. Insurance Implications

#### 1a. Getting started with drones

**Individual internal champions** often played a pivotal role in initiation of drone work

- Participants revealed that individual internal champions motivated by curiosity and/or frustration,
   rather than institutional enthusiasm, often drove progress with drone use. Participants described:
  - Learning by doing: 'I got my license, bought a drone, and just started testing it' (P5)
  - Undertaking advanced training (e.g. GVC) to be 'as qualified as we could be' and able to respond to any (public) questions (P1)
  - Recognising a governance gap and 'realising someone could go to jail' if documentation wasn't tightened up, and taking it upon themselves to resolve this (P10)
  - Building visibility: sharing/demonstrating 'now other departments are asking us to fly for them' (P2)
  - Framing drone use as 'fun and intuitive' rather than punitive, making it easier to win support (P8)
- However, the reliance on individual drive also revealed vulnerabilities:
  - If a champion left or was overstretched, 'the whole operation stalled' (P5)
  - Limits without support: 'I'm sold on drones, but I don't hold the purse strings' (P9)
  - Limits of time and effort: setting up permissions, liaising with regulators, and handling airspace coordination 'all took time' (P10)

### 1b. Getting started with drones

Funding matters - differential choices between in-house and bought in capability

- Local Government participants shared experiences relating to funding drone activities
- Two participating City Councils received multi-year external support for drone activity (range of funders). Both had focal co-ordination (enthusiast, pilots license) but:
  - One collaborated with an external drone provider and trialled a wide range of use cases
  - One was funded more directly on a specific use case and acquired drones in-house (including additional training, pilot qualifications, larger drones)
- At the conclusion of funding, the City Council with in-house drone capability appeared to be in a stronger position to continue with drone activities
- Other participants described employing external drone provision, with an early adopter celebrated for drone use addressing a specific policy area today having no ongoing drone activity
- Project findings underscore the need for further attention to how drone initiatives are funded (external, in-house), and the benefits, challenges, sustainability and legacies resulting from this

## 2a. Data processes and protection

Process and data protection were understood as 'paramount' (P11)

- Participants underscored 'making sure the correct process' was in place (P10). Regarding data protection, they:
  - Detailed a range of policies regarding data gathering, including General Data Protection Regulation (GDPR) 'compliance' (P7) and Data Protection Impact Assessments (DPIA) (P11, P3)
  - Described contact with the Information Commissioner's Office (ICO) to discuss 'what they were planning to do' and considering 'the distance, height, not picking up a face or number plate' (P11)
  - Described 'ensuring ...no personal data' was collected (P7) and deliberately planning to 'keep far away from people...so you can't recognize individuals' to avoid consent requirements (P5)
- Considerations around data management and security included:
  - Developing processes in case equipment 'goes missing' and for use of 'encrypted' equipment (P10)
  - However, challenges emerged where an external firm (drone provider) wanted to share data via Dropbox and the Local Authority was not 'comfortable' with this (P2)
- Participants underscored the need to ensure appropriate 'process behind' drone imagery and data to ensure 'continuity of evidence is in place', particularly where 'used for any kind of formal investigation' or enforcement (P10, P11)

## 2b. Data processes and protection

Lessons can be learned from the principles for ground-based 'CCTV usage' (P5, P12)

- Several participants highlighted actively learning lessons from the principles of CCTV usage and applying these to developing experience with drones
- They argued that CCTV practices provide ready-made frameworks for managing drone operations (e.g. in areas such as data protection, evidential standards, public engagement, understanding drones as an aerial extension of existing monitoring capabilities
  - Some councils have specifically adapted existing CCTV policies to guide their drone use, using familiar mechanisms like privacy impact assessments and community consultation (P10, P12)
  - This includes both referencing drones in corporate CCTV strategy (P10) and explicitly seeking to 'replicate [the CCTV] model, but from the sky' (e.g. through integration with police partnerships and adherence to CCTV standards such as BS 7958) (P12)
- Some participants described embedding drone operations within CCTV-related teams or governance structures – a resourcing theme ripe for further investigation
  - E.g. one participant's neighbourhood enforcement team includes both CCTV and drone responsibilities (P10)

## 3. Planning to fly

Deployment varied from ad hoc arrangements to structured workflows

- Accounts preparing for drone use spanned ad hoc arrangements to clear, structured workflows
- Participants demonstrated a clear awareness of Civil Aviation Authority (CAA) flight planning protocols
- Participants highlighted examples where drone flight preparations were limited:
  - Described drones as requiring low wind and dry weather, leading to different weather-related experiences and impacts, based on geography (e.g. exposed rural areas) (P3, P9)
  - You can still send someone 'up a ladder on a slightly drizzly, cloudy or windy day' (P9)
  - Sensors (e.g. thermal) added other weather-related considerations and impacts (P10)
- Examples were shared where flight planning was adjusted giving capacity constraints associated with handling (combine, etc.) and analysing data collected (P10)
- Participants underscored the need to consider drone activity beyond the air, i.e. from flight preparation to data processing and analysis

### 4. Technology management

It's not just the drone - consider hardware, software and integration

- In discussion of technology, participants reflected on platform, software and data processing
- Several participants described opting to fly sub <250g drones, citing regulatory considerations:</p>
  - Regulatory requirements 'unbelievably flexible' in comparison to flying larger drones (P1)
  - 'We made an application.. decided in the end it was too much work with everything else to keep up with it. So we've let that go ... and we now fly sub-250g drones' (P11)
  - Different costs associated with insurance (e.g. open category versus specific <u>category</u>) (P3)
- Participants highlighted that technology considerations related not just to hardware, but to software 'to edit the footage' too (P2, P7), describing:
  - IT 'restrictions' related to connecting drones and downloading data 'onto our laptops' (P2)
  - Drones gather 'lots of data' but you need expertise to translate into something to 'make use of' (P7).
     Considerable 'time and money...processing data...that's where your costs are' (P8)
  - Costs associated with different 'levels of processing need' (P5) and required levels of expertise to undertake such post-processing work
- Planning needs to be the same as any IT enabled change project (Inform Report, 2019; PWC 2024)

### 5. Insurance implications

#### Different approaches to insurance for assets and activities

- To a lesser extent, participants discussed the significance of insurance in impacting decisions related to drone implementation
- Some participants described adding drone assets and activities 'to their local authority insurance' as an 'additional addendum costing around £1000 per year' (P10)
- Others instead described having independent or 'separate insurance on the on the drone itself and all the equipment', costing 'less than £100 per year' (P1)
- For some participating Local Government users, insurance costs impacted platform choice (see 4), with decisions to utilise smaller (sub 250g) drones in part to reduce insurance costs (P3)
- Further attention could be given to the provision of guidance to Local Government drone users about insurance options and the implications of these for different use cases, maturity levels, and scales of operations

# Section 3. Discussion (drivers, barriers, wider stakeholders)

#### **Explaining the most common drone use cases?**

A combination of factors may explain why some emerge to the fore

Category	Benefits	<b>Investment Profile</b>	Regulatory Complexity	
Inspection	Replace scaffolding, people at height, health and safety, positive for statutory obligations	Low if sub-250g drone sufficient versus staff time/costs	Open category. Data risk in urban settings but asset focus	
Enforcement	Avoids officer risk, supports	As above + higher	Open category. DPIA.	
Evidence	prosecutions, enforcement	compliance costs +	evidence protocols, RIPA	
Gathering	action	process overhead	(if covert)	
Monitoring	Enhanced understanding of large and remote areas. Informs planning, policy	As above but grant- supported or pilots in data set	Open category and often open environments	
Communication & Engagement	Visual comms, stakeholder reporting, promotion. High impact	'Free' via piggyback on drones used for other purposes	Open Category. Data	

Adoption = ∑ Benefits – Costs (Investment \* Regulatory Complexity)

#### Barriers to wider adoption and scaling

Despite benefits, why no wider scale-up beyond application spaces?

- Unsurprisingly, active drone users argue that drones work. Our pilot research highlighted benefits, low cost, compliance, and effective drone use in targeted use cases – but scaling remains limited
  - 'Some senior leaders are sceptical about the reliability of drones. They still see them as a gadget rather than an essential tool' (P8)
  - 'One of the biggest obstacles isn't regulatory it's just convincing internal stakeholders that drones are more than a novelty' (P12)
- Wider barriers to adoption and scaling, include:
  - Drone savings don't sit cleanly in any one budget; i.e. can be difficult to identify and assign credit
  - Productivity gains can be less visible in headcount-constrained services
  - Inertia can present when trying to create an additional operational capability
  - No formal reporting or benchmarking against peers' activity is taking place. Building an evidence base would support adoption and scaling
  - Local Governments are not being pushed (e.g. by regulator, funder, political body) to consider drone capability as a standard

#### Wider Stakeholders

#### These were surprisingly absent in this pilot data set

- The research team observed a surprisingly lack of detail around stakeholder engagement
- Participants shared no evidence of public discontent or challenge (e.g. objections or complaints related to issues such as privacy or noise) beyond 'what are you up to' type questions. This contrasts with some concerns raised in public-facing surveys (e.g. <u>Future Flight Social Insight</u>)
- There was some mention of (direct) pushback from subjects of enforcement action (P11)
- Participants highlighted several forms of engaging with members of the public regarding drone activities, including letters and information on websites (P7, P8), there are also potentially process gaps here and/or opportunities to share best practice (e.g. public engagement strategies)
- Some participants mentioned impacts on wildlife, though not consistently:
  - You need 'keep an eye on was the local raptors, because they don't like drones' (P11)
  - Drone used to fly up above a tree to prove to a tree officer that a bird's nest was dead (P2)
- Guidance highlights how drones can be disrupted by bird attacks and how drones can impact wildlife, offering recommendations to minimise disruption (Jackman, 2023; Millner et al. 2023)

# Section 4. Limitations and next steps

## Limitations of the study

#### A small-scale snapshot in time

- This research is a small-scale pilot study
- It provides a snapshot of Local Government drone use at one point in time, rather than a comprehensive overview
- While highlighting a range of useful findings related to Local Government drone use and practice in England, there remains a limited triangulation of data sources (e.g. some participants shared flight logs, policies, but this was not the case for all Local Authorities)
- Given resource limitations, this pilot research focused interviews on those with a direct drone-related role (e.g. pilot, pilot training) and/or managerial oversight of drone activities. Further work would benefit from interviewing other, adjacent staff, elected members, etc.
- While no evidence was provided by participants in relation to public discontent, there was also no confirmation of this

## Next Steps (1)

#### Opportunities to develop practice and to extend research

#### Shifting from individual enthusiasm to embedded capability

- Practice: Support committed individuals but move to embedding drone use within formal structures (e.g. mandated for specific services). Develop corporate and use case centred policies, wider training pathways, and designated roles to ensure continuity and oversight
- Research: What drives choice between in-house and outsourced drone capability, examining how governance (including drone unit or developed), risk appetite, procurement systems, and elected member involvement shape capability development. Build comprehensive evidence base (cost, resilience, weather, accountability, etc.) implications

#### **Managing Time and Operational Capacity**

- Practice: Acknowledge that time, not just budget, is a key constraint. As part of wider business case upgrading (EASE), explore workload integration, prioritisation strategies, and opportunities to redistribute effort from lower-value tasks through drone efficiencies
- Research: Track how long it takes for drone assets to become operational post-purchase, and how internal timelines (procurement, training, policy updates) align—or fail to align—with the pace of technological change

## Next Steps (2)

Opportunities to develop practice and to extend research

#### Clarifying the Role of Drones: Substitute, Complement, or Novel Tool?

- Practice: Support teams in systematically evaluating whether drones replace existing methods, enhance current work, or open up entirely new capabilities. Embed these distinctions into cost– benefit cases and operational planning
- Research: Examine how use case selection varies by local context, infrastructure, service types and geographies/spatial situations and constraints

#### **Engaging with Public Contestation and Maintaining Legitimacy**

- Practice: Be proactive about transparency. Share guidance on where familiar CCTV-style engagement tools should and can be used (e.g. <u>privacy impact assessments</u>, community consultation). Prepare for future contestation, even if current complaints are minimal
- Research: Go beyond general surveys to study drone legitimacy in specific local contexts.
   Explore how public perception varies by use case (e.g. enforcement versus environmental monitoring) in situ, and examine contested cases (e.g. NHS drone hub in Northumberland) to identify early warning signs and effective mitigation strategies

## **Appendix**

- 1. Reference list
- 2. Interview Guide
- 3. Document review

#### Reference list

- Department for Transport (2022) Flightpath to the Future
   <a href="https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\_data/file/1079042/flightpath-to-the-future.pdf">https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\_data/file/1079042/flightpath-to-the-future.pdf</a>
- Future Flight Social Insight (n.d.) Resources <a href="https://futureflightsocial.ac.uk/research/">https://futureflightsocial.ac.uk/research/</a>
- HM Government (2022) Advancing airborne autonomy: Commercial drones saving money and saving lives in the UK https://assets.publishing.service.gov.uk/media/62d52e158fa8f50c08c53382/drone-ambition-statement.pdf
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- PWC (2024) Skies Without Limits v3.0 <a href="https://www.pwc.co.uk/issues/technology/drones/skies-without-limits-v3.html">https://www.pwc.co.uk/issues/technology/drones/skies-without-limits-v3.html</a>

## 2. Interview guide

- Describe Local Authority's (LA) history with drones? How initiated? What are key services or functions where drones have been/are deployed?
- Are drones used regularly, on an ad hoc basis, or have they only been trialled?
- Is there a formal strategy or policy guiding drone use?
- How is drone use organized within the council? Is there a dedicated unit or team? How are contractors/ third party operators identified/contracted, etc.? Who oversees drone use (e.g. specific departments, senior leadership?)
- What are the main benefits of using drones?
- specific examples of cost savings, efficiency improvements, or enhanced service delivery?
- contributed to improved public safety or environmental monitoring? Avoiding working at height?
- Have you experienced barriers to use?
- What, if any, are regulatory issues? How do you interact with the Civil Aviation Authority (CAA) and other regulatory bodies?
- Financial or resource constraints on use and/or expansion of drone programs?
- Use and usefulness of any drone generated data?
- Encountered resistance from the public related to privacy, security, or noise?
- How is the LA funding drone operations?
- Are drones budgeted as part of core service delivery, or funded through external grants? What financial or resource constraints have limited the use or expansion of drone programs?
- How do you engage with external stakeholders (e.g., emergency services, industry, academia) in developing drone use cases?
- Do you participate in any regional or national drone-related working groups? PPPs or other collaborations?
- Any steps taken to address public concerns about drones?
- Encountered resistance related to privacy, security, or noise? How engage with local communities?
- Any plans for expanding drone use in next 3-5 years?
- Plans to integrate advanced technologies (e.g. BVLOS, AI-based analytics)? Any additional support (policy, funding, regulation) that would help scale up drone use?

#### 3. Document review

- As part of project preparations, the research team undertook a review of a series of relevant documents, relating to UK drone activity. The team reviewed where Local Government actors were mentioned, coding against key themes to be explored in this review
- While providing contextual and scene setting information, the team found limited examples of actual Local Government drone use
- Key documents included:
- ARPAS UK (2024) End-user Stories of Drones In Action (note: see Renfrewshire Council)
- Baringa (2024) New horizons: The case for public sector drone investment
- Department for Transport (2022) Flightpath to the Future
- HM Government (2022) <u>Advancing airborne autonomy</u>
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https://research.reading.ac.uk/drone-geographies/wpcontent/uploads/sites/271/2025/06/Drone\_Ambition\_to\_Action\_Final.pdf

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