



West Midlands
Combined Authority

Transport Delivery Committee

Date	14 November 2022
Report title	Transport for West Midlands Drone Team
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Report has been considered by	

Recommendation(s) for action or decision:

Transport Delivery Committee Board is recommended to:

- (1) To note the report

1. Purpose

- 1.1 The report updates the Transport Delivery Committee about the formation of a drone team within Transport for West Midlands.

2. Background

- 2.1 Drone technology has the potential to revolutionise the Public Safety industry.

Price Waterhouse Cooper [study](#) 'Skies without limits 2.0' predicts that drones could contribute £45bn to the UK's economy by 2030, save businesses £22bn, reduce carbon emissions and create 650 000 jobs.

As the law stands, all drone flights must be within visual line of sight of the operator. Within the next five years beyond visual line of sight (BVLOS) flights will become more commonplace, trials are currently being conducted in rural settings involving BVLOS. BVLOS will revolutionise the industry and open up numerous opportunities for the public sector.

Project Skyway, a drone superhighway linking Reading, Milton Keynes, Oxford, Cambridge & Coventry is being developed by air traffic management company Altitude Angel.

The West Midlands region has a proud history of transport technology innovation. In April 2022 the world's first Urban Air-Port was built in Coventry. This Urban Air-Port demonstrated the potential of how drones can be used in the future for logistics, public safety and law enforcement.

The Safer Travel Command Centre and Regional Transport Coordination Centre (RTCC) have access to over 2000 static cameras covering the transport network across the West Midlands.

The RTCC has established itself as one true source of transport information utilising the existing fixed CCTV network supported by Local Authorities across the West Midlands. It acted as a multi-agency Tactical Transport Facility during the Commonwealth Games.

The technology exists to stream live drone images into the RTCC. Live streaming drone images into the RTCC will give excellent real time CCTV coverage across the West Midlands.

There are numerous use case scenarios for drones namely:-

- Congestion monitoring
- Road Traffic Collisions
- Major Incidents (supporting blue light agencies)
- CCTV patrol of transport crime hotspots

Monitoring these images via the duty RTCC manager gives excellent situational awareness and allows congestion mitigations to be implemented.

Our Transport Safety Officers (TSO's) are unique in terms of their roles, responsibilities and devolved policing powers. One of their key roles is to reduce disruption on roads and they have the power to control traffic. Two of our TSO's will be trained as drone pilots

along with three members of staff from the Network Resilience team. They will be trained by a Government approved company in visual light of sight operations.

Local Authorities and partner agencies will be able to take advantage of the drone teams services for still aerial imagery, video footage and thermal imagery via an online tasking request form.

We are already working closely with the West Midlands emergency services drone teams. The intention is to form a West Midlands Drone Network.

The emergency services have a well-established ground working protocol know as The Joint Emergency Services Interoperability Programme (JESIP)

Using the West Midlands Drone Network the intention is to work collaboratively at major incidents and develop a 'JESIP in the sky' model.

3. Financial Implications

3.1 Funding for the equipment and training has been allocated from existing current year Budget. An amount of £20,000 has been ring-fenced for the initiative.

4. Legal Implications

4.1 All drone flights must comply with legislation published by the Civil Aviation Authority (CAA) in the form of an approved Operations Manual.

The primary guidance document for unmanned aircraft system operations is known as CAP 722. Planned training alongside West Midlands Police (who enforce CAP 722) will give us assurance that we are fully compliant with all legislation.

The drone operation will be fully insured in accordance with EC785 with Public Liability Cover of £10 million.

The drone team will be audited alongside our CCTV control room to ensure compliance with British Standard 7958 and the Surveillance Commissioners Codes of Practice to ensure they are being deployed in a justified and proportionate way. The drone operation has also been added to the West Midlands Combined Authority CCTV Code of Practice.

Drone pilots will carefully consider the application of the use of their camera in relation to an individual's privacy. The processing of personal data will be:

- Collected for specified, explicit and legitimate purposes;
- Adequate, relevant and limited to what is necessary in relation to the purposes for which they are processed.
- Two of our drone pilots are also Security Industry Association trained in the use of CCTV.

5. Inclusive Growth Implications

5.1 This project aligns with the WMCA priority of connectivity and mobility.

Looking to the future, given the findings from Price Waterhouse Cooper it has the potential to address future employment and skills priorities in the region.

We have already hosted two taster demonstrations of drones for the future with our apprentices, courtesy of West Midlands Police drone team.

6. Geographical Area of Report's Implications

- 6.1 The drone team intend to cover the geographical area of the seven West Midlands Local Authority areas.

7. Other Implications

- 7.1 Prior to deployment a communications plan will be developed to highlight the operational benefits of drone deployments.

Public perception of how drones are used is potentially the greatest risk. However, recent public engagement (over 1000 people) at Urban Airport in Coventry demonstrated overwhelming support for their use in operational environments.

All operational drone flights will be logged on a publicly accessible website dronesafetymap.com

Consultation at a Local Authority level has already commenced. Early initial feedback has been extremely favourable.

8. Schedule of Background Papers

- 8.1 None.