The University of Birmingham/UKRI: Future Flight Survey 2024

Technical report

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YouGov®

Methodology

Introduction

The Future Flight Challenge Social Science was commissioned by the University of Birmingham and funded through the UK Research and Innovation (UKRI) Future Flight Challenge, delivered by Innovate UK and the Economic and Social Research Council (ESRC). This research series aims to gain an understanding of public hopes, concerns and expectations towards three specific types of future flight technologies. These are:

- Drones: Unpiloted, non-passenger carrying vehicles varying in size but could carry loads of 2-3 tonnes or be used to capture images and data for surveillance and inspection of infrastructure.
- Advanced air mobility: Electrical vertical take-off and landing vehicles (eVTOLs) that could provide short journeys for a number of passengers (currently expected to be up to 6 passengers but these numbers could increase in the future). These journeys may be up to 100-150 miles and can include short hops (e.g. 10-12 miles).
- Electric or hydrogen regional air mobility: Electric, hydrogen or hybrid aircraft providing short-medium range journeys between fixed locations for 10+ passengers.

A previous edition of this research was conducted in 2022, with the current survey being the first of two waves planned for 2024.

Our approach to conducting the first wave and the final deliverables were as follows:

- An online survey among a representative sample of 3,279 adults aged 18+ living in the UK
- A technical pilot of 115 responses
- Summary data tables and SPSS/ CSV data files provided for the survey results
- A full-length word report detailing the survey findings, both at topline level and among key demographics

Fieldwork for this survey was carried out from the 28th of March – 11th of April 2024. This report provides an overview of the data collection method used, the sampling and the weighting.

Summary of approach

Our approach to conducting this study and the final deliverables were as follows.

An online survey among a representative sample of c.3,000 adults aged 18 or over in the UK, accessed via the YouGov panel. The sample was representative on gender by age, region, urban/rural status and social grade. In our approach, we:

- Designed, programmed, hosted and administered the online survey
- Piloted the survey
- Reviewed the data

- Full launched the survey to c.3,000 respondents
- Provided an SPSS file and data tables in Excel
- Delivered a full-length word report detailing the survey findings, both at topline level and among key demographics

Sampling

Sample selection

The YouGov panel (of 400,000 active panel members in the UK) is recruited through a mixture of organic growth, targeted advertising and recruitment, aimed at recruiting demographic groups who are underrepresented on the panel and, therefore, ensuring that YouGov can provide robust samples that are representative of the British public.

For nationally representative samples, YouGov employ an active sampling method, drawing a sub-sample from the panel that is representative of the group in question in terms of socio-demographics.

YouGov has a proprietary, automated sampling system that invites respondents based on their profile information and how that aligns with targets for surveys that are currently active. Respondents are automatically, randomly selected based on survey availability and how that matches their profile information.

Respondents were contacted by email and invited to take part in an online survey without knowing the subject at that stage. This helped to minimise those opting out on the basis of the topic.

Sample design

The sample was designed to be representative of adults in the UK, aged 18 and over. To obtain a representative sample, recruitment quotas were placed on gender by age, region, urban/rural status and social grade. A small boost was applied in Northern Ireland, to ensure a minimum sample of 100 was collected here. This was then weighted down to its natural population incidence at the data cleaning stage. Data from the Office for National Statistics was used to calculate the sample proportions.

Weighting

Weighting adjusts the contribution of individual respondents to aggregated figures and is used to make surveyed populations more representative of a project-relevant, and typically larger, population by forcing it to mimic the distribution of that larger population's significant characteristics, or its size. The weighting tasks happen at the tail end of the data processing phase on cleaned data.

In order to make this study representative, the sample was weighted on gender by age, region and social grade.

The table below shows the sampling and achieved quotas. A high weighting efficiency of 91.5% was achieved.

Category	Unweighted	Weighted
Age/gender		
Male 18-29	10%	11%
Male 30-39	8%	8%
Male 40-49	8%	9%
Male 50-59	8%	8%
Male 60-69	8%	7%
Male 70+	7%	7%
Female 18-29	11%	11%
Female 30-39	9%	8%
Female 40-49	8%	9%
Female 50-59	8%	8%
Female 60-69	7%	7%
Female 70+	7%	9%
Social grade		
AB	29%	22%
C1	29%	30%
C2	15%	15%
DE	27%	33%
Region		
North East	3%	4%
North West	13%	11%
Yorkshire & Humber	12%	8%
East Midlands	5%	7%
West Midlands	9%	9%
East	8%	9%
London	15%	13%
South East	11%	14%
South West	9%	9%

Wales	4%	5%
Scotland	7%	9%
Northern Ireland	4%	3%