Future Flight Challenge Social Science National Survey and Public Dialogue – Headline Findings

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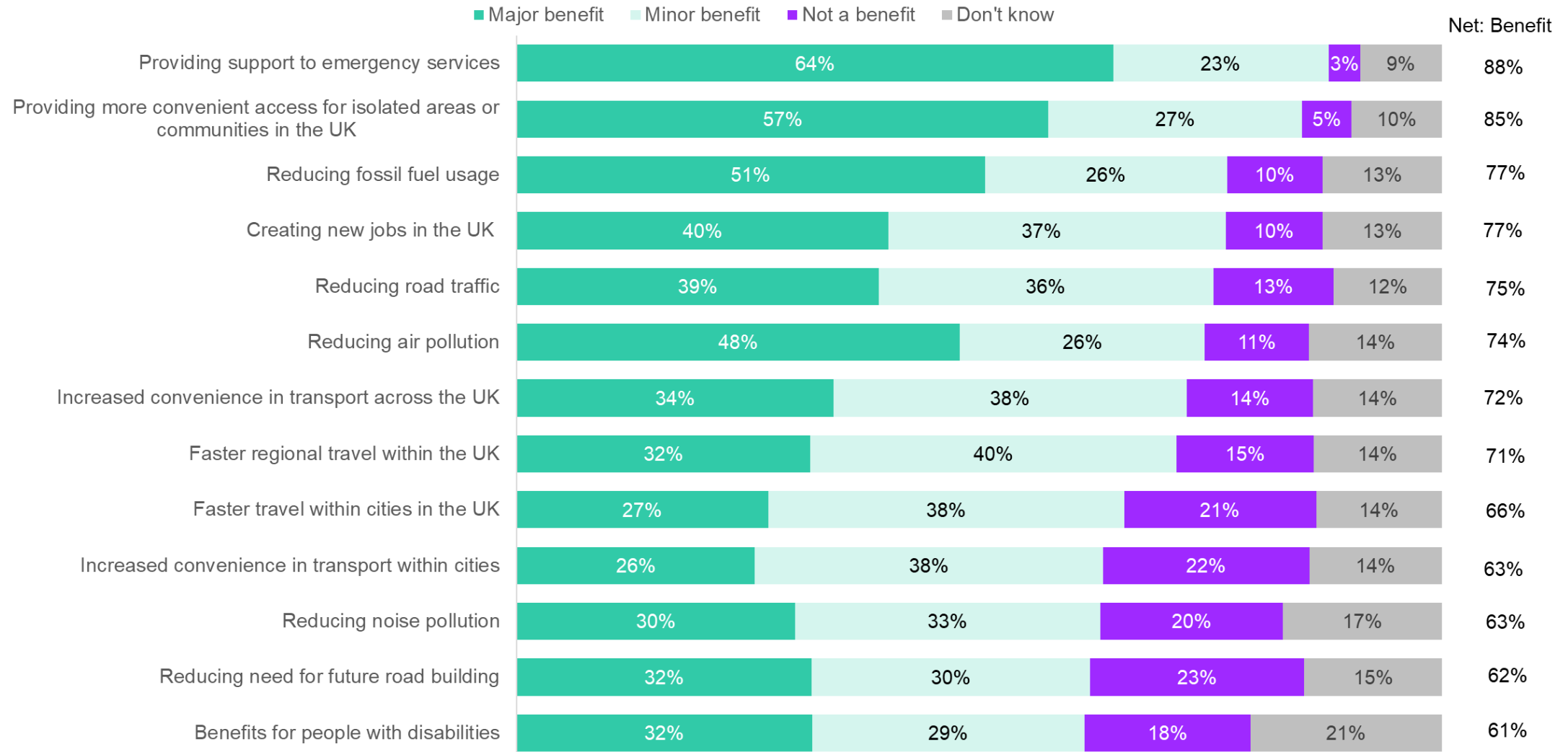
Dec 2024

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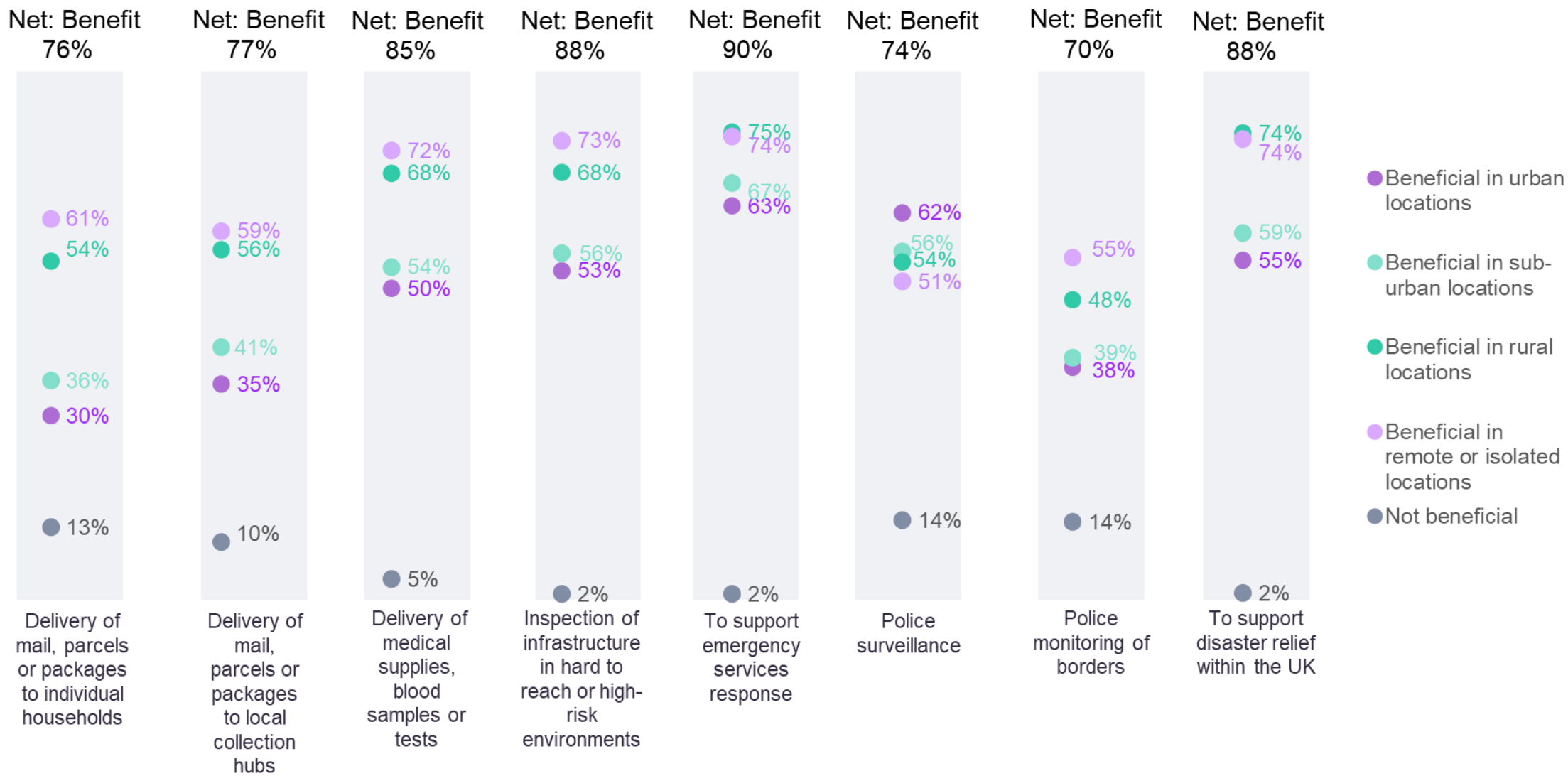
Future Flight National Survey and Public Dialogue

As part of a wider programme of social science research funded by the Future Flight Challenge, two studies of publics' views on Future Flight in the UK were commissioned:

- A deliberative dialogue, with 43 participants (reflective of the diversity of the UK) taking part in a series of 7 workshops between January–April 2024. The dialogue was supported by UKRI's Sciencewise programme and delivered by Thinks Insight & Strategy.

- A UK-wide survey conducted by YouGov between 28th March – 11th April 2024, among a nationally representative sample of 3,279 adults aged 18+ living in the UK. To ensure representativeness, quotas were set during fieldwork on age, gender, social grade, urban/rural status and region. A small boost was applied in Northern Ireland.

Public Perceptions of potential benefits of future flight technologies (Base: All (n=3,279)

Legend: ■ Major benefit ■ Minor benefit ■ Not a benefit ■ Don't know

Net: Benefit

Statement	Major benefit	Minor benefit	Not a benefit	Don't know	Net: Benefit
Providing support to emergency services	64%	23%	3%	9%	88%
Providing more convenient access for isolated areas or communities in the UK	57%	27%	5%	10%	85%
Reducing fossil fuel usage	51%	26%	10%	13%	77%
Creating new jobs in the UK	40%	37%	10%	13%	77%
Reducing road traffic	39%	36%	13%	12%	75%
Reducing air pollution	48%	26%	11%	14%	74%
Increased convenience in transport across the UK	34%	38%	14%	14%	72%
Faster regional travel within the UK	32%	40%	15%	14%	71%
Faster travel within cities in the UK	27%	38%	21%	14%	66%
Increased convenience in transport within cities	26%	38%	22%	14%	63%
Reducing noise pollution	30%	33%	20%	17%	63%
Reducing need for future road building	32%	30%	23%	15%	62%
Benefits for people with disabilities	32%	29%	18%	21%	61%

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YouGov

UKRI — Delivered by Innovate UK and ESRC

Public Perceptions of Potential benefits of drone use regionally All (n=3,279)

Net: Benefit 76%
- 61% Beneficial in remote or isolated locations
- 54% Beneficial in rural locations
- 36% Beneficial in sub-urban locations
- 30% Beneficial in urban locations
- 13% Not beneficial

Delivery of mail, parcels or packages to individual households

Net: Benefit 77%
- 59% Beneficial in remote or isolated locations
- 56% Beneficial in rural locations
- 41% Beneficial in sub-urban locations
- 35% Beneficial in urban locations
- 10% Not beneficial

Delivery of mail, parcels or packages to local collection hubs

Net: Benefit 85%
- 72% Beneficial in remote or isolated locations
- 68% Beneficial in rural locations
- 54% Beneficial in sub-urban locations
- 50% Beneficial in urban locations
- 5% Not beneficial

Delivery of medical supplies, blood samples or tests

Net: Benefit 88%
- 73% Beneficial in remote or isolated locations
- 68% Beneficial in rural locations
- 56% Beneficial in sub-urban locations
- 53% Beneficial in urban locations
- 2% Not beneficial

Inspection of infrastructure in hard to reach or high-risk environments

Net: Benefit 90%
- 75% Beneficial in sub-urban locations
- 74% Beneficial in remote or isolated locations
- 67% Beneficial in rural locations
- 63% Beneficial in urban locations
- 2% Not beneficial

To support emergency services response

Net: Benefit 74%
- 62% Beneficial in urban locations
- 56% Beneficial in rural locations
- 54% Beneficial in sub-urban locations
- 51% Beneficial in remote or isolated locations
- 14% Not beneficial

Police surveillance

Net: Benefit 70%
- 55% Beneficial in remote or isolated locations
- 48% Beneficial in rural locations
- 39% Beneficial in sub-urban locations
- 38% Beneficial in urban locations
- 14% Not beneficial

Police monitoring of borders

Net: Benefit 88%
- 74% Beneficial in rural locations
- 74% Beneficial in remote or isolated locations
- 59% Beneficial in sub-urban locations
- 55% Beneficial in urban locations
- 2% Not beneficial

To support disaster relief within the UK

Legend:
- Beneficial in urban locations
- Beneficial in sub-urban locations
- Beneficial in rural locations
- Beneficial in remote or isolated locations
- Not beneficial

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YouGov®

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Top 5 potential drawbacks:

- cyber-security,
- impacts on wildlife,
- safety,
- congestion in the sky,
- socio-economic exclusion,
- privacy,

	Urban		Suburban		Rural	
1	Cyber Security Threats	80%	Cyber Security Threats	81%	Cyber Security Threats	83%
2	Impacts on animals	79%	Safety of the technology	80%	Potential for skies to become crowded with aircraft	81%
3	Prohibitive expense of the technology Invasions of privacy	77%	Impacts on animals	79%	Potential for use in criminal activity	79%
4	Safety of the technology Potential for skies to become crowded with aircraft	76%	Collisions into ground or buildings	78%	Impacts on animals	78%
5	Habitat destruction Mid-air collisions with other aircraft	74%	The potential for use in criminal activity Potential for skies to become crowded with aircraft Mid-air collisions with other aircraft	77%	Safety of the technology Invasions of privacy Prohibitive expense of the technology Mid-air collisions with other aircraft	76%

Dialogue Principles - **Overarching principles:**

i.   **Future Flight technologies must be used for public good.**

ii.   **Research and testing must ensure policy/regulation is set up before roll-out and updated regularly**.

iii. **Development of technology and services must involve both specialists and public.**

iv.   **Developers and operators must be held to account by independent bodies.**

v.   **Technology and development must be transparent.**

vi.   **Roll-out and operation of technologies must be properly resourced to ensure human accountability – particularly in relation to safety, piloting and managing airspace.**

vii. **The UK as a whole must benefit from leading in these technologies and behave ethically (e.g. in ensuring international supply chains were ethical and sustainable).**

Dialogue Principles - **Topic Specific principles:**

viii. Technologies must be managed safely to appropriate safety standards.

ix. Flight paths must limit negative impact from noise pollution and visual congestion.

x. Vehicles and operations must be designed with accessibility in mind.

xi. Services must be affordable to the public.

xii. Negative impacts on wildlife must be avoided.

xiii. Job opportunities must be available in a fair and accessible way.

xiv. Using surveillance drones must match the level of threat, with clear guidelines and oversight for use.

Top level points:

Overall, there is an indication from UK publics that the benefits of future flight technologies could be perceived as outweighing the drawbacks. This is especially notable where Future Flight could:

- **Provide benefits to public services delivery** in terms of reducing cost and increasing efficiency.

- **Increase connectivity across the UK**, not only to rural, remote or isolated communities, but to larger population centres (e.g. transport between towns and cities) which are currently poorly served by public transport, road or rail connections.

- **Increase overall sustainability of UK wide transportation systems** and the reduction of fossil fuel usage within aviation and overall, as part of wider integrated green transport approach.

- **Increase economic opportunities for the UK** as part of a wider green economy and the creation of range of new skilled jobs across the UK (e.g. manufacturing, engineering, drone or eVTOL pilots, airspace management etc)

This is underpinned by strong support for greater levels of government involvement in the technology and transport sectors, as well as on climate change.

However,....

However, there are some important caveats to this support:

- **Socio-economic inclusion is a priority concern.** There is an appetite for better sustainable connectivity across the UK, but only if it delivers benefits to all UK citizens not just an elite few or wealthy groups.

- **Accountability and transparency are vital in building public trust** in Future Flight technologies, systems and services, with developers and operators being held to account by independent bodies that act as a bridge between government, industry and the UK public.

- **The dialogue highlighted concerns over the potential lack of overall or joined up oversight of the roll out of Future Flight technologies, systems and services.** This ties into concerns over the 'commercialising the sky' and that the roll out could be incoherent, with little leadership, regulation, national policy or strategy to guide its deployment leading to only wealthy elites benefitting.

- **The potential for negative impacts on biodiversity and wildlife was a priority concern for both survey respondents and dialogue participants.**

- **Top-level concerns overall relate to** cyber-security, impacts on wildlife, safety, sky congestion, socio-economic exclusion, privacy, accessibility and noise.

Noise was not in the top five concerns in the survey and was not one of the more pressing concerns raised in the dialogue – this may however change once services start to be rolled out.

An ideal future: participant visions of a successful and unsuccessful deployment:

- **In the best-case scenario,** participants hoped Future Flight services would deliver social, environmental and economic opportunities for all. They supported the opportunity for better connectivity across the UK, through affordable and more sustainable journeys. In addition, they saw Future Flight as an opportunity for more accessible travel, including those with disabilities, health conditions and those experiencing other barriers to access current public transport.

- **In a worst-case scenario,** participants worried that roll-out would be badly managed while diverting investment away from other modes of public transport. Concerns surrounded whether Future Flight services would be affordable to the public and safe to use, as well as risks to wildlife and jobs, and the potential for increasing noise and visual congestion. There was also scepticism around the sustainability and ethics of the manufacture and powering of Future Flight vehicles.

https://futureflightsocial.ac.uk/research/