

Travel in Britain in 2035

Future scenarios and
their policy implications

Charlene Rohr
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Our scope



2035

Focus on 2035 on
technologies that are
already being developed



Technologies that
influence transport
efficiency



No new
infrastructure

We first identified 6 technologies that could impact travel demand, network capacity or traveller productivity



Autonomous vehicles



Internet of Things



Next Generation ICT
connectivity /
telecommuting /
telehealth



Advanced manufacturing
/ 3D printing



User apps / Big Data /
intelligent processing



Novel materials and
embedded sensors in
infrastructure

Our scenarios are based around activities

Influencing Areas are Key Activities that Generate Travel



Work/
business



Retail



Healthcare



Long
distance



Freight

We identified critical factors for each activity

Literature review, Cross-Impact analysis



Work/ business

Telework
Commute distance
London-centric
development
In-person meetings
Real-estate prices



Retail

Total consumption
On-line sales
Person-to-person
sales
High street retail



Healthcare

Health of nation
Elderly living at home
Medical visits
Healthcare centralisation
Non-traditional settings



Long distance

Leisure time
Attitudes
environment
Attitudes security



Freight

Package delivery
Disintermediation
Warehousing
strategy
Reshoring
Port capacity

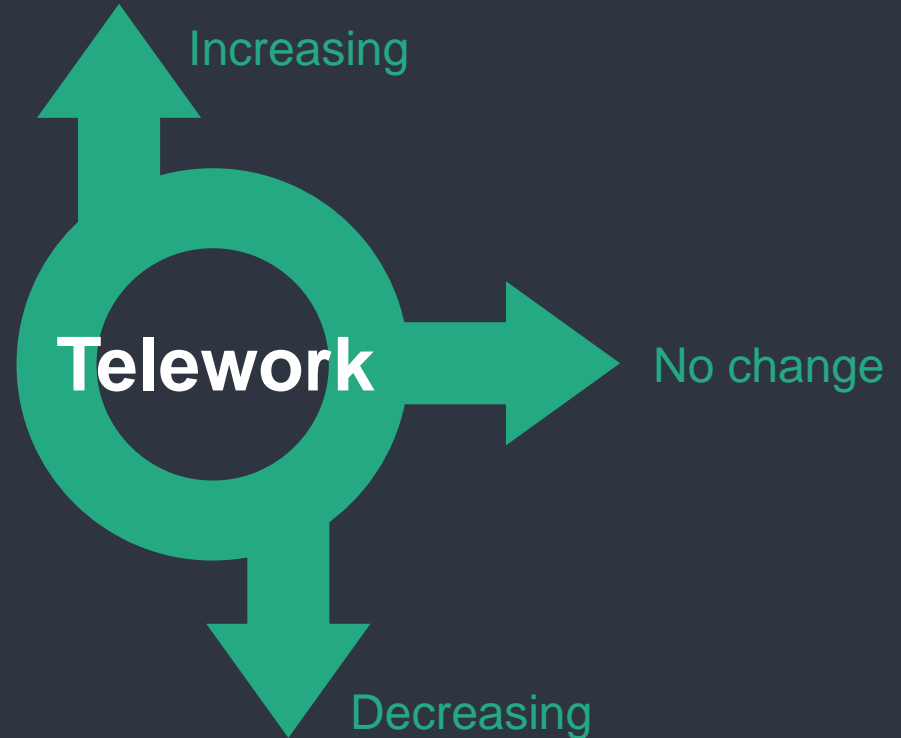


Common

GDP growth
Population growth
Proportion of the elderly
Strength of sterling
Cost of travel
Travel time / convenience

The scenarios are built from projections by experts

- Projections on specific factors
- Projections on common factors
- Impacts of technologies
- Impact on travel



Our three scenarios



Governments cannot ‘pick the winner’, but should invest in technologies that are robust across scenarios



Next generation ICT connectivity

- Be aware of the quality of ICT services that are necessary to support new technologies
- Ensure these services are available, across all geographies

Governments cannot ‘pick the winner’, but should invest in technologies that are robust across scenarios



User Apps / Big Data

- Support development of frameworks to address data governance, value, privacy and security
- Contribute to brokering discussions on issues related to data ownership and sharing
- Support Open Data initiatives, where focussed on societal benefits
- Regulatory balance between beneficial uses of data and consumer protection

Governments cannot 'pick the winner', but should invest in technologies that are robust across scenarios



Real- world testing / pilot testing of innovative solutions

- Particularly those that bring societal benefits

Policy implications of the scenarios

- **Demand management:** AVs could lead to increases in road use, because people will be able to do other things while travelling
- **Uneven distribution of benefits:** Benefits of new technologies are unlikely to be evenly distributed across society, there will be winners and losers
- **Training and up-skilling of workers:** New technologies may replace (low-skilled) jobs, e.g. lorry drivers, taxi drivers, etc.
- **Maximising technology benefits:** Policymakers need to evaluate the possible benefits of new technology to society, taking account of potential multiplicative effects of multiple technologies, e.g. ICT & AVs

Policy implications of the scenarios

- **Demand management:** AVs could lead to increases in road use, because people will be able to do other things while travelling

Government needs to think about how technologies can provide maximum benefit to society

- **Maximising technology benefits:** Policymakers need to evaluate the possible benefits of new technology to society, taking account of potential multiplicative effects of multiple technologies, e.g. ICT & AVs

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Future scenarios and their
implications for technology
innovation

Charlene Rohr, Liisa Ecola, Johanna Zmud,
Fay Dunkerley, James Black, Eleanor Baker

Read the full report here:

www.rand.org/t/rr1377





EUROPE

