KPMG

Travel behavior change and modal shift

Opportunities for the new Government

—

July 2024

Introduction

The way we travel, like many of our life choices, is a mixture of habit, decision and intuition. Computer models assume that travel behaviour choices are rational and based on copious knowledge, but the reality is that many of us choose to travel based on limited and imperfect information – or we may not realise that we're "choosing" at all.

Our travel behaviour choices are built on a mixture of where we are travelling, what options are available at the time we want to go, and what the purpose of our journey is; but are also affected by a range of personal characteristics including socio-economic status, gender, age, disability, ethnicity and geography.

These factors vary from person to person, but also from journey to journey. For example, somebody who commutes to the office on a Thursday and takes their family to the park on Saturday is likely to think about those journeys differently.

We've put together this report to set out what a collaborative and innovative approach could achieve in the next five years.

01

First, we outline a series of current challenges to travel behaviour change: based on the factors described above combined with the policies and strategies which have led us to where we are today.

02

Second, we look at the characteristics of people which can, alone or together, affect the ability and willingness of someone to change their travel behaviour.

03

Third, we consider a set of possible interventions to change travel behaviour which could overcome barriers faced by particular groups and how they would address challenges in Government policy (including, but not limited to, transport).

04

Fourth, we propose a roadmap for action setting out who would do what, when; the timescales for interventions; a range of dependencies; and the key stakeholders.

05

Finally, we recommend some next steps based on how interventions could be feasible, funded, sponsored and presented to stakeholders. We finish by suggesting what "good" looks like for the field of travel behaviour change in the UK.

Chris Hillcoat is a recognised expert in the field of travel behaviour change, with documented experience of helping customers change behaviour through physical changes to the environment such as new cycleways or crossings; information and campaigns of Travel Demand Management; and technology and data including integrated ticketing, Mobility as a Service, and open data. He leads KPMG's work on travel behaviour change and has 15 years' experience advising clients and delivering projects.

01 Challenges for Government and Businesses

01 Temporary disruption to the transport network.

These could be short-term planned closures or works on the road or rail network, which can cause significant issues to people's journeys.

02 Congestion caused by an excess of demand over supply.

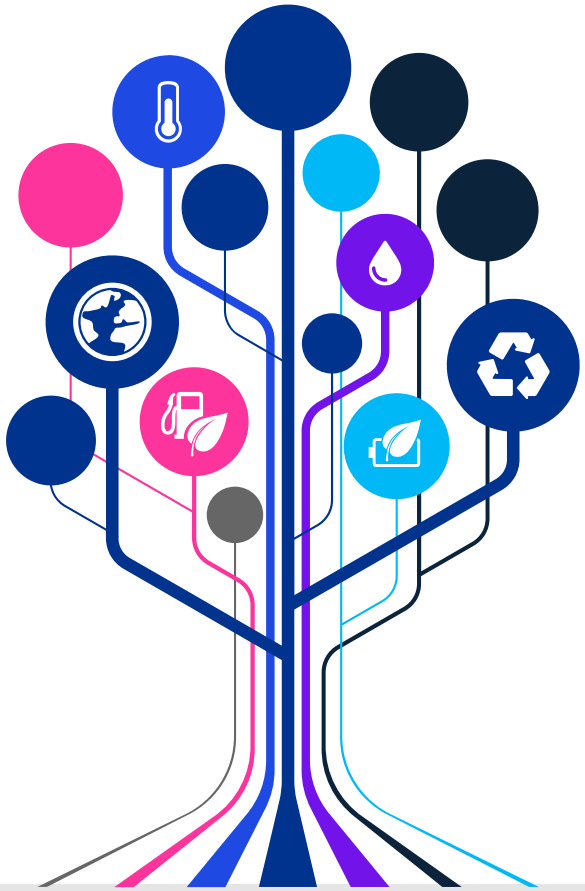
These are long-term issues at a series of predictable pinchpoints, which cause delays to people travelling.

03 A lack of resilience during unplanned incidents.

Both short-term incidents like strikes, fires or protests; and long-term incidents like the Covid pandemic require a resilience-led response.

04 Decarbonisation and a shift to more sustainable travel options.

Net Zero requires significant and sustained action to shift travel behaviour away from ICE-powered cars to public transport and active travel; it also requires businesses to report progress.



05 Inequality of groups' access to transport or employment.

There remain significant issues of inequality, affected by gender, ethnicity, geography or location.

06 Poor health and wellbeing and poor air quality.

Increasing obesity, lung disease and related illnesses are strongly correlated to people not getting enough exercise in their lives.

07 High cost of paying for employees' car use.

Many businesses provide facilities for car drivers: in parking, mileage allowances or "grey fleet"; at significant cost and resources.

08 Challenges in recruitment and retention for businesses.

Employees' expectations around wellbeing and benefits are increasing and one way to meet these is to provide an improved and sustainable package of options for travel and health.

Authorities and businesses face a complex and overlapping set of challenges, which can prevent or dilute behaviour change by people travelling. Achieving modal shift could help to address one or more of these challenges.

01 Challenges by travel mode

Bus

Initiatives like franchising, multi-operator fares and better service patterns enabled through Bus Service Improvement Plans and Enhanced Partnerships, and the £2 fare cap, are contributing to the growth in bus patronage.

Challenges of reliability, journey times and perception of quality mean that some drivers would rather stay at home than switch to the bus.

Air

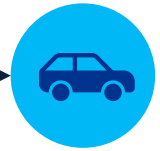
Evidence from around the world shows that air travel is not very price-sensitive, and that providing fast journeys by rail (under 3-4 hours) is the best way of persuading people to shift away from air.

France and Spain are introducing laws restricting domestic aviation, but their high-speed rail networks allow more comparable journey times between major cities.

Rail

The post-Covid recovery in rail has been stunted by industrial action, poor reliability and equipment failures, some of which are caused by extreme weather. Crowding on peak services is less serious now than before 2020.

The challenge for Rail is to be seen as a reliable mode for both local and inter-city trips, and to be affordable for the leisure trips which make up an increasing proportion of journeys.



Driving

The shift to EVs is critical to the UK's decarbonisation strategy, but is unevenly spread with 88% of EV drivers being men, typically with moderate to high incomes and access to off-street parking.

For many people, driving has the perception of control and reliability, and for larger groups it can be cost-effective. It is the default choice for many people.

Cycling and micromobility

It is well-evidenced that providing dedicated infrastructure which protects riders from collisions, feels safe and is well-lit and overlooked, will attract many more people to cycle – and a more even population.

E-scooters rented through DfT-approved trials are largely used by men, with around a third of journeys replacing car trips. Resolution of this policy is important for the future.

Walking

The safety and suitability of walking varies by time of day, place, feelings of safety for women and other minorities, and the person's interactions with others.

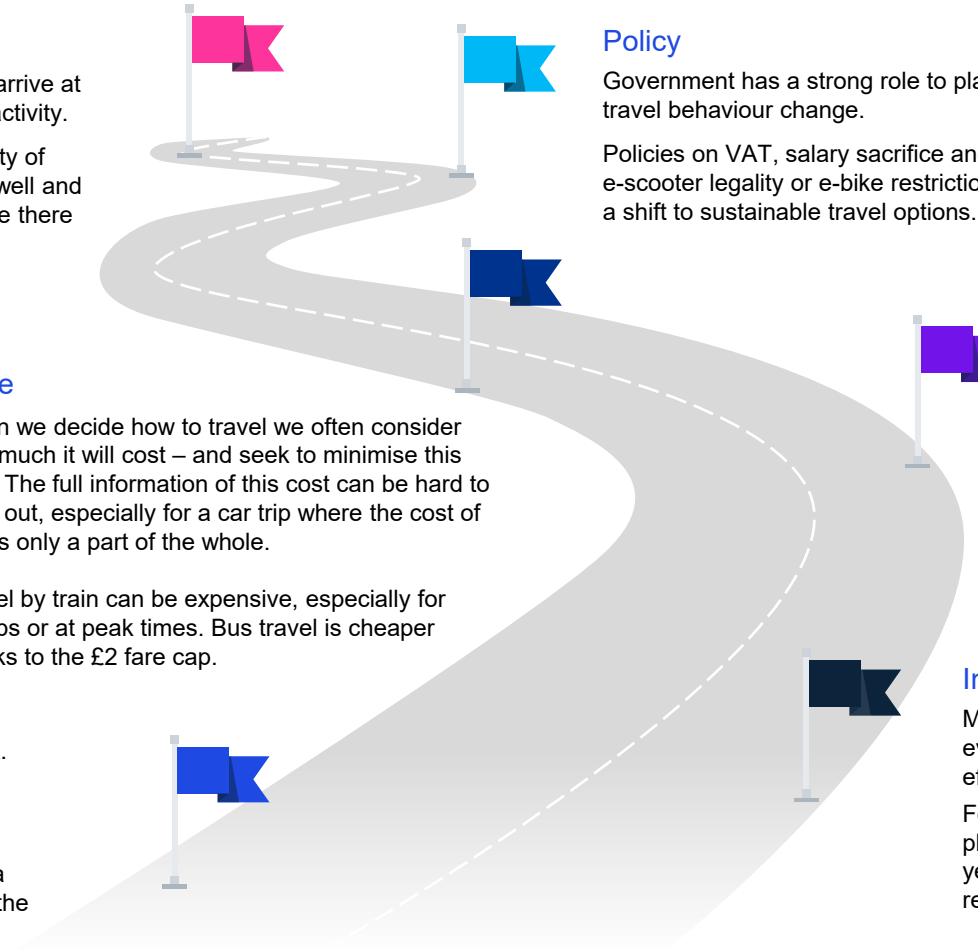
It is often challenging to provide well-lit and overlooked routes which avoid isolated corners, with dropped kerbs and smooth surfaces, and which are wide enough to use together.

01 Challenges to changing travel behaviour

Reliability

When we take a journey we want to know we'll arrive at the right time and place and ready for the next activity.

Cancellations, industrial action and poor reliability of transport services make it more difficult to plan well and can lead people to choose the car for trips where there are normally decent alternatives.



Policy

Government has a strong role to play in enabling travel behaviour change.

Policies on VAT, salary sacrifice and regulations on e-scooter legality or e-bike restrictions can slow down a shift to sustainable travel options.

Price

When we decide how to travel we often consider how much it will cost – and seek to minimise this cost. The full information of this cost can be hard to work out, especially for a car trip where the cost of fuel is only a part of the whole.

Travel by train can be expensive, especially for groups or at peak times. Bus travel is cheaper thanks to the £2 fare cap.

Safety

The way that our towns and cities are laid out can help or hinder a shift to sustainable transport. Many housing areas have few facilities or shops, forcing people to travel further to access them. Many streets don't have safe places to cycle or may be unlit at night.

The accessibility needs of people are not always met, or vary by journey type or purpose.

Habits

Each of us forms habits which are hard to break. Travelling a particular route, or in a certain way, can be one of those habits.

To change behaviour away from this default requires active thinking and decisions, often at a time when we're busy or stressed (trying to get the kids out of the door!).

Information

Most of us have only limited information on even our common journeys, for example what effect it would have to leave 20 minutes earlier.

For less common journeys we rely on journey planners' results to guide us far more than in years gone by. Can we trust the algorithms and results of these systems?

02 How people travel

The way people travel depends on their circumstances, characteristics and choices.

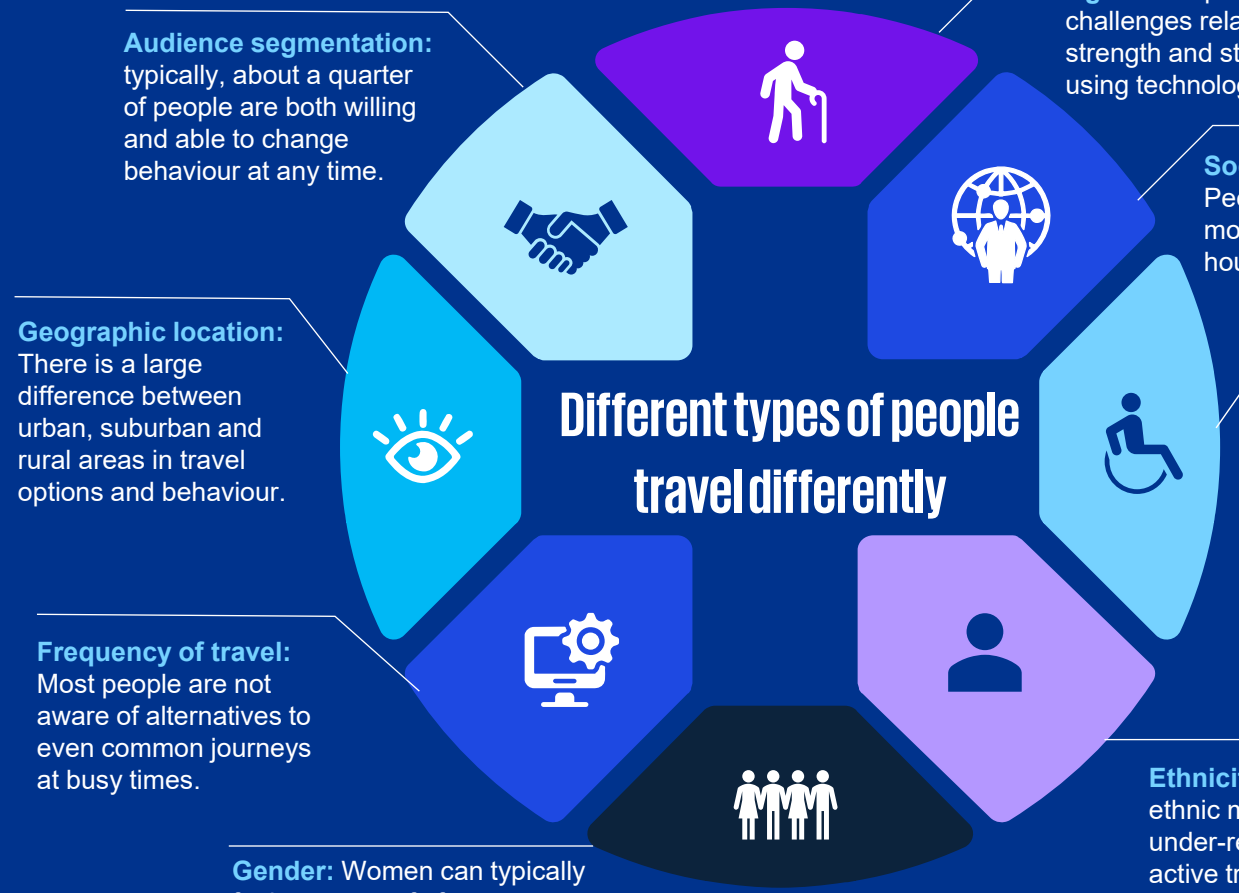
Some of these are conscious and some are innate.

Our characteristics including age, gender, disability, ethnicity and socio-economic status can have big effects on travel choices.

Similarly, the places we live and travel, and how frequently we travel affect the choices we make.

Finally, we can be placed into different audience segments depending on our attitudes and ability to change travel behaviour.

These challenges and characteristics have intersectional effects, which creates a huge variety in people's travel options and behaviour, and their ability and willingness to change.



Audience segmentation: typically, about a quarter of people are both willing and able to change behaviour at any time.

Age: Older people can face challenges related to eyesight, strength and stamina, and using technology.

Socio-economic status: People on lower incomes are more likely to work antisocial hours or be on shift patterns.

Geographic location: There is a large difference between urban, suburban and rural areas in travel options and behaviour.

Disability: Disabled people make 38% fewer journeys than non-disabled people, because of the restrictions of the transport network – and not only step-free access.

Frequency of travel: Most people are not aware of alternatives to even common journeys at busy times.

Ethnicity: People from ethnic minorities are often under-represented in active travel because of cultural perceptions among other reasons.

Gender: Women can typically feel more unsafe from poor lighting and safety on footways and on public transport.

02 Different types of people travel differently

01

Socio-economic status

A Bike Life survey found that 30% of those classed as semi/unskilled/ unemployed would like to start cycling, but 37% are concerned about safety and 26% are not confident cycling.

02

Disability

Disabled people make 38% fewer journeys than non-disabled people, which demonstrates the restrictions placed on them by the transport network and the change needed to enable access..

03

Disability and active travel

Sustrans research found that 33% of people with disabilities would like to cycle – for 3 quarters of cyclists with disabilities, cycling is easier than walking...

04

Gender

Women are 25% more likely than men to “trip chain”, meaning they are less likely than men to travel directly from home to work.

05

Ethnicity

People from ethnic minorities are often under-represented in public transport and cycling, because of cultural perceptions, discrimination and shift working (14.4%, compared to 9.4% of white workers).

06

Older people

Older people can face challenges related to eyesight, strength and stamina, and access to technology, with only 13% rating themselves “very good” with technology.

07

Younger people

Young people face challenges through licencing restrictions for cars, mopeds and e-scooters, allied to other restrictions.

08

Geography

People have different options for travel depending on where they live and travel. In rural areas people are more likely to need cars, or to be part of informal sharing networks.

03 Behavior change themes and interventions

So far we've seen the challenges faced by Government, across different travel modes and in changing behaviour.And we've described how different people have different needs and travel differently, both in groups, individually and from trip to trip.

Now we bring these ideas together into a range of potential behaviour change interventions, which we have grouped into themes.

On the next four pages you'll read about these themes, and for each theme we explore five angles:

What the theme includes.

Why the theme is important.

What interventions could look like.

Potential benefits.

Policy alignments.

Modal shift:

An explicit focus on encouraging and enabling people to reduce travel by car and shift to public transport and active travel.

Digital Tools and Products:

Using data and modelling to understand impacts as well as deliver direct benefits through new services.

Corporate and Private Finance:

Working with employers and investors to use levers of transformation to change operational models and create sustainable travel choices for employees and others.

Public policy:

Using Government levers to unblock innovation and behaviour change, at national and local levels – reducing regional inequality and improving the range and quality of travel options for people across the country.

03 Behavior change themes and interventions

What the theme includes

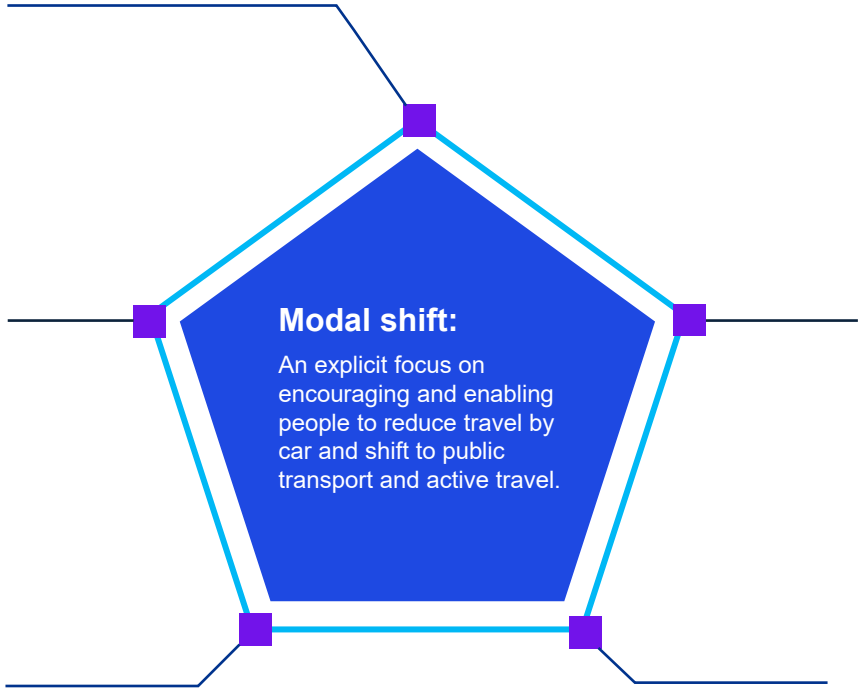
- A combination of physical, digital and regulatory changes to help people choose to travel by public transport, cycling and walking.
- Explicitly including the need for people to be safe, feel safe and have access to equipment, infrastructure and information to make travel choices.

Why the theme is important

- Evidence shows that many people travel by car because it is a default option, and for a range of reasons related to their personal characteristics and needs.
- Increasing mode share of public transport and active travel is possible but requires a commitment to change over an extended period of time.

What interventions could look like

- Mobility Hubs with accessibility focus.
- Improving active travel infrastructure.
- DDRT incorporating work transport.
- Lift-sharing demonstration / pilot towns.
- Public transport fares policy.
- MaaS platforms.



Potential benefits

- A greater range of people, including women and those from ethnic minorities, travelling by public transport and active travel.
- Reduced congestion and delays at transport network pinchpoints.
- Improved air quality, health and reduced CO2.
- More accessible infrastructure removes obstacles to travel.

Policy alignments

- Promoting social mobility.
- Tackling regional inequality.
- Delivering greener transport.
- Better integrating transport networks.

03 Behavior change themes and interventions

What the theme includes

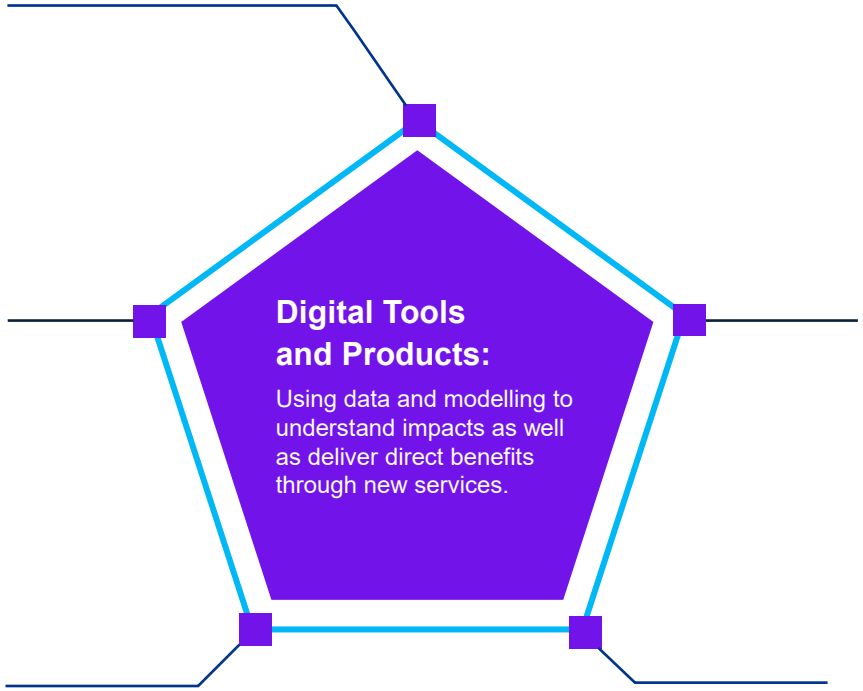
- Improving transport options and services through new and improved digital offerings: ticketing, information, guidance and integrations.
- Using digital technology as a means to make transport more accessible, simpler to use and more effective.

Why the theme is important

- Digital tools and enablers like open data, journey planners and contactless ticketing have made travelling quicker, easier and more reliable – but they are not equally accessible by all customers.
- The advent of AI and more data-intensive planning tools provides an opportunity to make tools better.

What interventions could look like

- Further development of open data and data standards including for Bus, Rail, Roads and ticketing.
- Data insights and machine learning to add richness to scheme evaluations.
- Footway and crossing accessibility.
- Digital Twin for Transport to provide investment cases for other interventions.



Potential benefits

- Standardised and high-quality data on all transport modes, widened in scope to include accessibility requirements and helping people feel safe when they travel.
- Calculating and feeding back benefits of transport schemes into business cases.

Policy alignments

- Driving forward rail reform.
- Improving bus services.
- Promoting social mobility.
- Tackling regional inequality.
- Better integrating transport networks.

03 Behavior change themes and interventions

What the theme includes

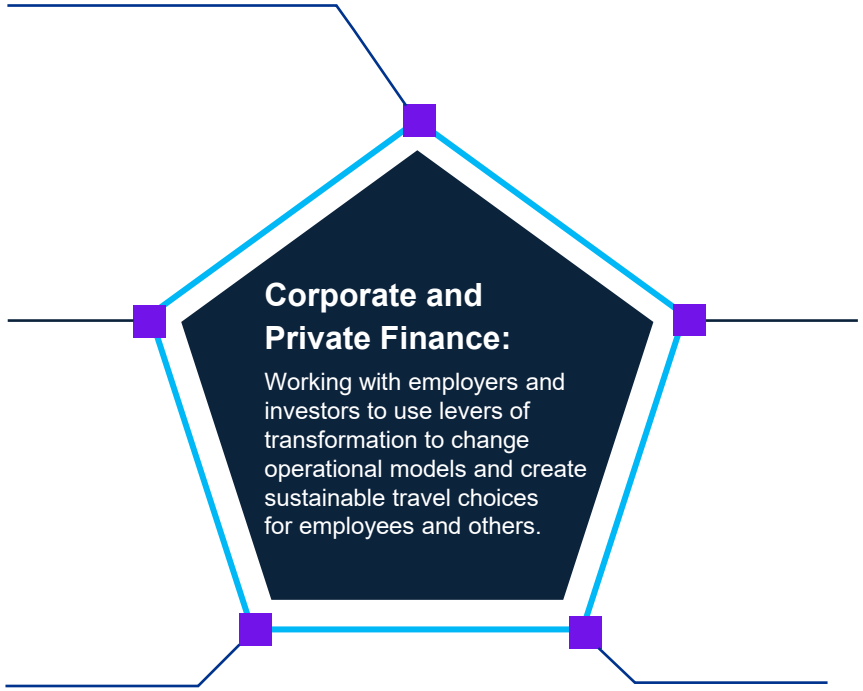
- Businesses have a huge role to play in enabling behaviour change which will benefit them, their employees and the wider society and environment.
- Private investors are seeking opportunities to invest in sustainable projects which demonstrate a valid return on investment.

Why the theme is important

- The challenges faced by businesses are significant and complex, but for many the travel of their staff and visitors is not considered an important issue.
- Government funding is constrained by the economic situation and partnering with private investors is a potential route to delivering projects more quickly.

What interventions could look like

- Mobility Credits for employees to encourage sustainable travel choices.
- Staff travel and commuting given greater focus with toolkit of measures.
- Commercial partnerships with investors and businesses for transport schemes.
- Private finance to cut cost of e-bikes for private ownership / leasing.



Potential benefits

- Employees are healthier and happier.
- Businesses can report on, and reduce, Scope 3 emissions towards Net Zero.
- Greater use of e-bikes reduces number of short car trips.
- Attracting private climate finance demonstrates UK's leadership at COP and other forums.

Policy alignments

- Transforming infrastructure to work for the whole country.
- Delivering greener transport.
- Better integrating transport networks.

03 Behavior change themes and interventions

What the theme includes

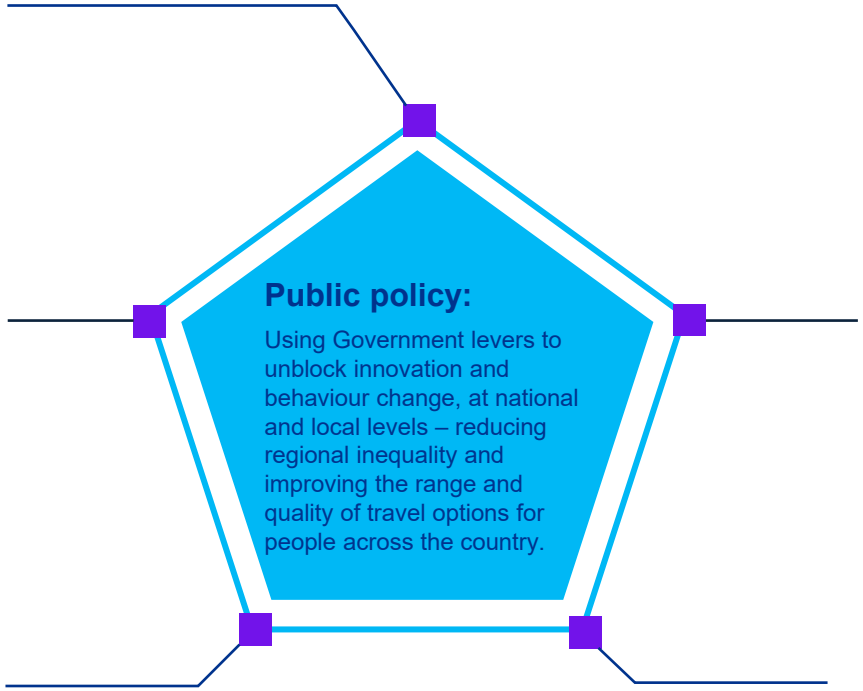
- As well as large investment projects and programmes to create transformative infrastructure, Government can also make a series of quick, low-cost changes which enable more travel behaviour change and policy outcomes.
- Partnerships between DfT, HMT, HMRC and combined authorities will be needed.

Why the theme is important

- Large differences in productivity and transport opportunities exist in the UK.
- Some of these result from historic decisions which could be changed.
- Most behaviour change will be delivered in local areas, so local decision making will lead to the best outcomes.

What interventions could look like

- Mobility Credits as employee benefits should be BIK-exempt (as for EVs).
- VAT cut or removed on bikes / e-bikes
- Local tax-raising powers to fund schemes (similar to French cities).
- Legalising e-scooters across the UK.
- Mobility as a Service governance, business models and regulatory reform..



Potential benefits

- Unlocking further development of future mobility including MaaS platforms, new modes and payment mechanisms.
- French-style investment in public transport schemes in a wide range of towns and cities, paid for through local schemes and delivered more quickly.

Policy alignments

- Transforming infrastructure to work for the whole country.
- Tackling regional inequality.
- Delivering greener transport.
- Better integrating transport networks.

04 A roadmap for intervention

What would it look like to put together a partnership for change across Government, local and regional authorities, employers and the private sector?
Each of the items on this page illustrates how combining the themes we identified together, across short and longer timescales, could contribute to modal shift and travel behaviour change.

Quick wins (2 years)	HMT and HMRC collaborate with DfT to create BIK-exemption for employee benefits, or VAT reduction on sustainable mobility.	● ● ●
	DfT legalises rental or private e-scooters and sets out governance and funding models for MaaS platforms.	● ● ●
	In partnership with investors, land owners, NHS and local authorities, begin to invest at larger scale in active travel infrastructure to create broader opportunities for transport, health and decarbonization.	● ● ●
	Establish larger-scale pilots of Demand-Responsive Transit and Lift-sharing, potentially as part of Future Transport Zones.	● ●
	Develop design guidance for Mobility Hubs, public transport routes and active travel infrastructure with MHCLG to be incorporated into new developments.	● ●
	Use AI and partnership working to generate open data on footway, lighting and crossing accessibility and availability, open to Journey Planners, to improve transport accessibility and safety for walking, cycling and public transport.	● ● ●
	Tackle inequalities in EV uptake by addressing barriers including on-street charging, accessibility of chargers and consistency of customer experience across different suppliers and capacities of charging.	● ●
Longer term	Rolling programme of active travel investment (including footways, crossings, lighting as well as cycle routes), following examples from Netherlands, Belgium and France. Goal for the majority of people to be within close distance of a high-quality network.	● ●
	Provide evidence base to enable authorities and private investors to deliver Mobility Hubs which incorporate travel options, ancillary services, housing and business uses, and EV charging – through a range of funding sources.	● ● ●
	Demonstrate economic and financial returns on investment in sustainable travel through digital technology including second-order and intersectional effects, helping to build the business case for further schemes.	● ● ●
	DfT to convene private finance investors to decarbonise the UK transport industry including wider rollout of e-bikes to be owned or leased.	● ● ●
	Employees to be able to access mobility credits via work to reduce use of Grey Fleet and company vehicle-kms.	● ● ●
	Investment in new public transport schemes which enable modal shift is accelerated through local payroll taxes as well as blended finance from public and private sources.	● ●

● Modal Shift ● Digital ● Corporate ● Public policy

04 Key dependencies, enablers and stakeholders

Dependencies

Interventions are dependent on:

- **A collaborative cross-Government approach** to revise policy, regulations and tax laws in certain areas, and to produce joint business cases.
- **Partnerships with businesses** to transition to a model of providing mobility credits and investing in sustainable travel for their own (employees') benefit.
- **Partnerships with transport operators** to develop and enhance transport provision to reach all types of customer groups.
- A focus on learning lessons, **monitoring and evaluation** of interventions to refine them.
- Detailed segmentation and **understanding of audiences** including protected characteristics and potential responses to behaviour change interventions.

Enablers:

Enablers of these interventions include:

- A **Transport Digital Twin** which could be used to benchmark and plan other schemes, and model changes for the economic and financial parts of the business case.
- A more mature and resilient industry of **transport providers**, including bus, rail and micromobility.
- **Integration between land-use planning and transport planning**, underpinned by nodes (Mobility Hubs) and links (better routes).
- **Delivery of more housing**, commercial and other development which is sustainable, accessible and affordable.
- **A healthier, more active and more resilient population**, across all groups and with fewer inequalities.
- **Savings on NHS budgets** through healthier living.

Stakeholders:

The interventions need support from:

- **Government departments and Ministers** who see the value of this joined-up approach.
- **Arms'-length bodies** including Active Travel England, Homes England and NHS England / Trusts.
- **Employers** and the business community, who would value a more engaged and active workforce.
- **Transport operators**, including micromobility and shared mobility.
- **People with lived experience** to inform policy and decision making.

04 Template delivery plan

01
Identify the problem

This could be congestion, decarbonisation, resilience; or temporary or permanent changes to the transport network.

02
Who is affected?

Which groups will be affected by this problem, and to what extent do their characteristics intersect with others? Use disaggregated data to break down those affected into groups.

03
Behaviour change identification

Use an appropriate framework like COM-B, EAST or Theory of Planned Behaviour to design the behaviour change structure.

04
Stakeholder management

Speak to politicians, businesses, residents and travellers to understand their views and put forward the benefits case.

05
Objective setting

Based on case studies, set out a set of SMART objectives for the project with audiences and outcomes in mind.

06
Project management overlays

Consider funding, risks, dependencies and reporting requirements.

07
Activity planning

Using a toolbox approach to build components from case studies; or developing a bespoke approach. Develop specific interventions to target the affected groups.

08
Activity delivery

Using a “single source of truth”, a combination of tools and products, comms and information, policy changes and pricing can be enacted.

09
Lessons learned

Evaluate the outcome of the project, the impact on ridership, reputation and finances, and what could be done better next time.

05 Next steps

Travel behaviour change is a big opportunity for the Government, not only to alleviate delays and congestion but to reach Net Zero, improve the health of the population and reduce inequalities, which are especially felt by groups including those from lower socio-economic groups, women, older people, disabled people and people from ethnic minority backgrounds.

By setting out the benefits of behaviour change across groups and including Government departments such as HMT, HMRC, MHCLG and DHSC, DfT can supercharge a shift to sustainable travel behaviour across the UK.

What does "good" look like for travel behaviour change? By 2030:

Towns and cities across the UK are being transformed to have high-quality, accessible and safe active travel infrastructure in line with international best practice. Most people should live close to a network of safe and attractive routes.

Government has harnessed private sector investment and partnership with employers to unlock £bns in funding for e-bikes and wider sustainable travel initiatives, demonstrating the UK's leadership in climate change finance.

A combination of better information driven by open data, with tools and products and policy changes, enables more people to avoid being stuck in delays by temporary works, everyday congestion or unplanned incidents.

01

Bus franchising, integrated ticketing, MaaS platforms, and new and accessible bus priority infrastructure, should secure the recovery of the bus industry and give customers genuine choice about using public transport.

02

03

The inequalities in travel options in the population will be substantially reduced, with all schemes and initiatives tested against their impact on inequalities across different characteristics.

04

05

Businesses can offer their employees an attractive range of benefits which keep them active and healthy, reducing sick days and cost, and helping recruitment and retention of staff.

06

KPMG has expertise in designing and delivering these kind of interventions. We would love to hear from you to hear more about your challenges and how we could work together to solve them.

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