



# Evidence Base Review of Business Travel Behaviour to Inform Development of a Segmentation of Businesses: EXECUTIVE SUMMARY

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## Key Findings

- A segmentation model of businesses related to their travel behaviour is both feasible and desirable. No such model exists in the literature.
- A meaningful segmentation will cluster businesses according to *why* they do what they do. Any model should be based on the *determinants of travel behaviour*, including the decision making processes within organisations, rather than the behaviours themselves.
- The wide range of business travel behaviours and their determinants means that a single model may not be able to cover all types of organisation or all types of behaviour.
- There is only partial and fragmented evidence on how business travel is incorporated into organisational decision making. For the vast majority, sustainable business travel does not rate among the top strategic considerations and tends to be treated as a means of balancing the costs of 'doing business'.
- The adoption of more energy efficient travel practices must be perceived by the decision-makers within businesses to have medium-long term competitive advantage, not merely short term impacts on "the bottom line". However, there is evidence that the 'greening' of business practice is increasingly being perceived as a source of cost reduction and competitive advantage. Environmental improvement is generally considered as a subsidiary benefit; creating a win-win situation that also addresses changes required by regulation.
- The evidence hints at key determinants of business travel behaviour. These include:
  - the size, sector and the interaction between the two
  - organisational structure and the decision making processes which underpin this
  - the corporate mission often expressed and manifested in senior management values and actions
  - the balance between centralisation and embeddedness of travel policy
  - the extent to which individual employees shape travel policy and have autonomy in decisions
  - the internal resources including skills built up through experience and learning.
- It is important to note that business travel in all its guises represents a very significant proportion of travel across the transport network. Therefore, any steps undertaken on the way to creating a segmentation model, as well as the model itself, will fill valuable gaps in the evidence base.

## **Background**

The purpose of this study is to review the existing evidence base on business travel behaviour and to evaluate the feasibility and desirability of developing a segmentation of businesses in relation to their travel behaviour. This study was commissioned in recognition of the lack of robust and systematic evidence on the decision making processes which underpin business travel behaviour. Furthermore, following on from the success of its segmentation of individuals <https://www.gov.uk/government/publications/climate-change-and-transport-choices-segmentation-study-final-report>, the Department of Transport (DfT) was keen to understand the feasibility of segmenting businesses in a meaningful way to inform policy design.

## **Approach**

To develop a business segmentation model, several stages of research and analysis, with associated Research Questions (RQs), were identified.

- 1. Define and categorise business travel:** this study took a comprehensive view of ‘business’ to include public, private and third sector institutions. To develop a business segmentation model of these, the first step is to develop a typology of the types of travel they generate. This can include a wide range of activities, including commuting, logistics and freight travel, customer travel and travel during the course of work. Each of these will involve different practices, decision making processes and have different policy drivers. *RQ1: How can business travel be defined and categorised?*
- 2. Identify business travel behaviours:** once a typology of travel generated by businesses has been developed, each category can be populated with the direct and indirect behaviours taken at the individual (e.g. car sharing, ecodriving) and organisational (workplace travel plans, driver training, expenses policy, procurement policy) levels. *RQ2: Which business travel ‘behaviours’ exist?*
- 3. Identify the determinants of these behaviours:** next, the decision making processes behind these ‘behaviours’ and how/why behaviour differs across the population of businesses need to be understood and measured. This includes the drivers of business growth more generally and sustainable business practice in particular. This study could not undertake this systematically for every behaviour, but a conceptual model to capture important determinants has been developed and evidence gaps identified. *RQ3: What are the key factors which determine business travel behaviours?*
- 4. Assess the feasibility of a segmentation model:** DfT’s segmentation model of individual travel behaviour has structured thinking around engagement and policy design targeted at individual behaviour. However, the diversity of actors, behaviours and determinants within business travel is arguably greater. Careful consideration is required to understand the objectives, focus and

practical feasibility of developing such a model. *RQ4: Is a segmentation model feasible and desirable?*

5. **Identify and fill knowledge gaps:** this study is just one part of the effort required to gain insight into business travel. Further steps are required to fill some gaps in knowledge before a segmentation model can be fully developed. *RQ5: What are the key evidence gaps that need to be filled before a segmentation model can be developed?*
6. **Design and undertake fieldwork to generate data for model development:** a final, though lengthy and iterative stage is the administration of a survey based on the prior research and co-design of model objectives that collects information on the determinants of business travel. This study did not undertake this task, but does provide a set of **Recommendations** to achieve it.

In order to address RQs 1 – 5, and to offer recommendations to reach Stage 6, two sources of data were synthesised in this study. Firstly, an Evidence Base Review (EBR) was designed to find studies that have their main focus on at least one of the research questions listed above. This included theoretical and empirical insights as well as seeking out datasets which may support these. Secondly, 15 telephone interviews were conducted with umbrella bodies (rather than individual commercial or public sector employers) to probe travel and transport-related issues and behaviours across the range of activities and sectors of interest to the EBR.

The remainder of this summary report will take each of the above stages in turn and conclude with recommended next steps.

## **Research Recommendations**

### **RQ1: How can business travel be defined and categorised?**

Business travel is commonly defined and referred to in the literature as ‘Briefcase Travel’, travel undertaken in the course of work for inter or intra company meetings . However, this study, took a broad definition of the term business travel to include all the flows of movement (of people or goods or services) for which businesses or organisations can be seen to be the ‘originator’ or can be regarded as responsible.

From the literature review, a bespoke typology of business travel was developed involving three dimensions. Firstly, four travel ‘domains’ were identified: Business, Commuting, Customer and Logistics. Secondly, each of these was further broken down according to whether the movement takes place between businesses, between a business and its customers, between the workers (i.e. home) and the business, or is cross cutting (relevant for passenger transport operations). Thirdly, whether the movement primarily involves people, services, goods delivery or passengers. This led to the definition of 9 types of business travel as shown in **Figure ES1**.

**Figure ES1: Typology of Business Travel Flows developed for this project**

Domain	Travel between ...	Movement of ...	Acronym	Description
Business	Business to Business	People	B2B_P	Personnel travelling to all types of meetings (intra-business and inter-business sometimes substituted by virtual meetings). Often called 'Briefcase Travel' (e.g. training, conferences, business meetings, sales meetings)
	Business to Business	Services	B2B_S	Personnel travelling to other businesses to perform services (e.g. maintenance engineers, training delivery, auditors, other types of contractors)
	Business to Customer	Services	B2C_S	Personnel travelling to customers to perform commercial or non-commercial services (e.g. plumbers etc. going to homes; mobile hairdressers; health visits to homes; breakdown recovery (= mobile workers)) including transport of government and public safety services (e.g. police, customs, fire service, emergency rescue services and civil protection)
Customer	Customer to Business	People	C2B_P	Customers to any type of business (public or private) (sometimes substituted by e-shopping) (e.g. shoppers to retail outlets; patients to hospitals; pupils to schools; visitors to tourist attractions; customers to restaurants)
Commuting	Worker to Business	People	W2B	Employee commuting; sometimes substituted by tele-working
Logistics	Business to Business	Goods deliveries	B2B_D	Supply chain activities (e.g. obtaining raw materials or components and distributing products to wholesale or retail outlets or other business customers). Could be undertaken in-house or by external (freight and logistics) contractors
	Business to Customer	Goods deliveries	B2C_D	Home delivery of shopping; Postal services
	Customer to Business	Goods deliveries	C2B_D	Return of mail order goods by customers (e.g. return of faulty goods or sending goods for servicing)
	Crosscutting	Passengers	X_PT	Transport of person(s) other than own personnel between origin and destinations (e.g. by bus, rail, taxi, air)

The use of these categories provides a framework to structure the evidence collation for the remaining research questions in this study.

#### RQ2: Which business travel 'behaviours' exist?

Fifty separate 'behaviours' were identified as being linked to the four domains of travel behaviour identified in our typology and then subsequently split into behaviours which apply at the organisational

versus the individual level<sup>1</sup> (Figure ES2). Organisational behaviours largely take the form of company policies or *procedures* which may apply directly to one or more of the four domains of business travel (e.g. travel planning or fleet management) or indirectly (e.g. working hours, expenses policy or health and safety policy).

In order to develop a segmentation of businesses, it is the determinants of these ‘behaviours’ which need to be understood and measured and these are the focus of the next RQ.

### RQ3: What are the key factors which determine business travel behaviours?

What is the relationship between business travel behaviour and economic growth?

Evidence on the relationship between business travel and growth is scarce. This study was interested in the role played by routine or essential business travel in business growth and the consequent environmental and social impacts of this travel. It also set out to understand the motivations for and impacts of *environmentally sustainable* business travel. However, this distinction is not always obvious as businesses may be motivated to implement environmentally sustainable practices (e.g. the installation of cycle parking) by factors other than environmental protection. Hence, it was necessary to understand the determining factors of business travel in all its guises and, from this, understand the degree to which environmental sustainability is a motivating factor in those business decisions.

There is evidence to suggest that, for most businesses, *sustainable* or *energy efficient* business travel does not rate in even the top 5 strategic considerations. This may be due to businesses viewing travel management as a means of balancing the costs of business travel with their need to fulfil their main activities. However, costs may only partially explain businesses’ view of travel. Cost-effective and low risk investments in all kinds of energy efficient measures are not widely undertaken in the private and public sectors (the ‘energy efficiency paradox’) and this demonstrates that the adoption of energy efficient practices involves additional factors to the consideration of profit or growth alone. Most importantly, energy efficient business travel will be associated with growth in the minds of business managers only to the extent that it is perceived as having long term competitive advantage. Thus, *long term* strategic advantage is more important than *short term* profit when a business has sufficient capacity, though sole traders and SMEs are likely to have to place more weight on the outcomes in the short term. This understanding that sustainable business travel ought to have some strategic value to be associated with growth is complicated by the fact that for some domains of business travel, it is not clear which organisation (or whether *any* organisation) is the sole ‘owner’ of the travel in question. For

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<sup>1</sup> In the creation of this list, decisions had to be made about the level of detail to include. For instance, ‘cycle facilities’ could include many separate measures including: cycle parking, cycle storage, showers, bicycle repair facilities, cycle information; ‘parking cash out’ could include payment for cycling to work etc; and ‘expenses policy’ could include the rate paid for business trips undertaken by different modes. Furthermore, this list is based on the evidence review and we would not claim this list to be exhaustive of business travel behaviours.

example, organisations generally do not consider commuting or customer travel as their responsibility. Travel planning, including workplace parking charges and telecommuting, is the only formal means of including commuting within business thinking.

**Figure ES2: Individual and organisational level travel behaviours and the travel domains to which they apply**

	Business	Commuting	Customer	Logistics
<b>ORGANISATIONAL PROCEDURES</b>				
Backhauling (filling empty loads on return journeys)				✓
Car sharing scheme	✓	✓		
Carbon management	✓	✓	✓	✓
Company car policy	✓	✓		
CSR Strategy	✓	✓	✓	✓
Cycle facilities	✓	✓	✓	
Cycle-to-work scheme	✓	✓		
Cycle 'pools' for work trips	✓			
Delivery policy			✓	✓
Delivery slots				✓
Driver training (incl. ecodriving)	✓	✓		✓
Driving hours				✓
Environmental Management System	✓	✓	✓	✓
EV charge points	✓	✓	✓	✓
Expenses policy (incl. mileage allowances)	✓			
Fleet management (incl. grey fleet)	✓	✓		✓
Flexible/remote working policy	✓	✓		
Public transport provision (free or subsidised)		✓	✓	
Free fuel	✓	✓		
Health and safety policy	✓	✓	✓	✓
Location (of offices/ outlets/ distribution centres etc.)	✓	✓	✓	✓
Logistics systems/ ICT			✓	✓
Omnichannel retailing			✓	✓
Opening hours		✓	✓	
Overtime policy	✓	✓		✓
Parking cash out		✓		
Parking management	✓	✓	✓	
Procurement policy	✓			✓
Providing mobile devices	✓	✓		
Relocation policy		✓		
Returns policy			✓	✓
Risk management policy	✓	✓	✓	✓
Season tickets		✓		
Stock management				✓
Supply chain management	✓			✓
Teleconferencing (investment in)	✓	✓		
Travel management company (use of)	✓			
Travel planning	✓	✓	✓	
Travel policy	✓			
Videoconferencing (investment in)	✓	✓		
Working hours (incl. shift work)	✓	✓		✓
<b>INDIVIDUAL BEHAVIOURS</b>				
Car choice (own or car pool)	✓	✓	✓	
Car sharing	✓	✓		✓
Ecodriving	✓	✓		✓
Flexible working		✓		
Internet shopping			✓	
Mode choice	✓	✓	✓	✓
Tele/Videoconferencing	✓	✓		
Teleworking		✓		
Vehicle / fuel choice	✓	✓		✓

Nevertheless, various energy and carbon reporting frameworks are now applied to private and public sector organisations and have the potential to define responsibility and influence organisations as business travel may be included directly or indirectly. Moreover, a firm's relationship to the natural environment is increasingly becoming a source of competitive advantage and the evidence does indicate increasing acknowledgement of a positive relationship between the bottom line and 'greening' of business practices.

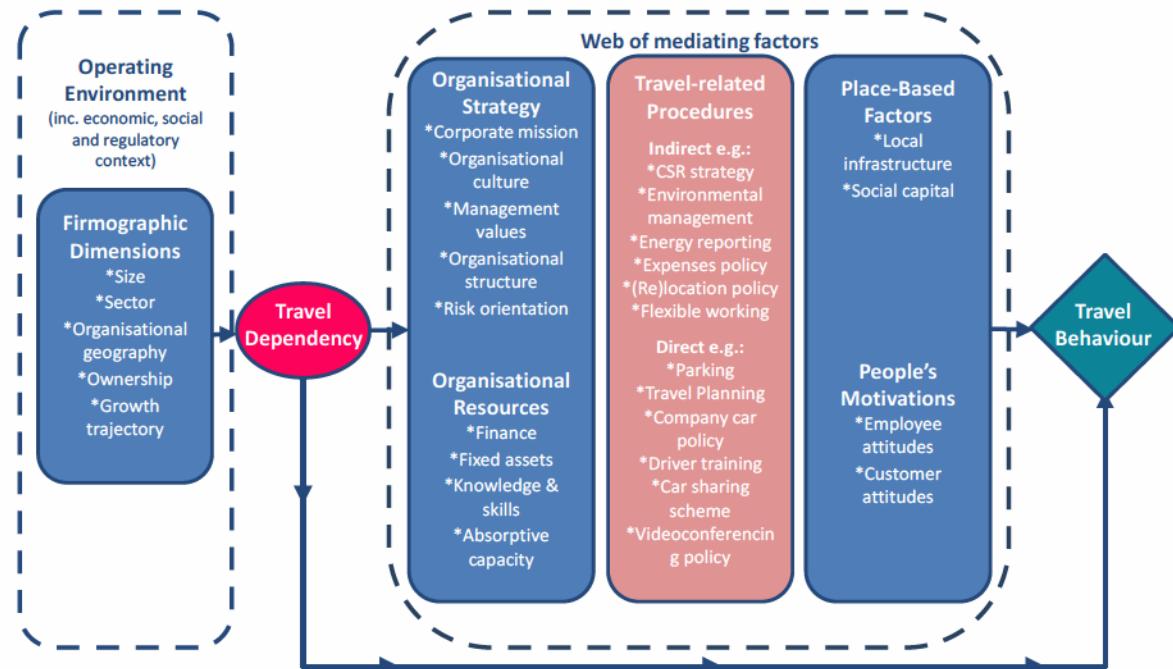
What are the factors influencing business decision making in relation to travel?

To build a meaningful segmentation model of businesses, it is vital to understand the factors influencing decision making on business travel behaviour and therefore a conceptual model (CM) was developed (Figure ES3). This model is based on the evidence relating to business practices, including travel, which suggests that the final amount of travel in each of the four domains (business, customer, commuting and logistics) in each organisation and its energy/CO<sub>2</sub> intensity is determined by:

- the nature of the 'business' undertaken and its operating environment (e.g. sector, size, position in supply chain, market location, regulation)
- many different organisational factors which determine the *procedures* an organisation adopts and the final *behaviours* undertaken by employees.

The model offers a framework that balances both the external foci of organisations with their internal and resource-based issues, whilst also paying attention to the fact that the amount of business travel may ultimately be dictated first and foremost by the nature of the business.

**Figure ES3: Proposed Conceptual Model of business decision making in relation to travel**



The CM reads from left to right, and shows the broad groups of factors which determine the extent of each travel behaviour a business undertakes. It can be described as a ‘dual path model’, with ‘travel dependency’ (i.e. how salient travel is to an organisation defined by the amount of travel undertaken as a proportion of turnover or carbon footprint) acting as a switch, or pivot, between the two paths which are not mutually exclusive, but their relative weight will vary from business to business. The bottom path goes straight from dependency to end behaviour, meaning that for all businesses, size, sector or other firmographics have at least some *direct* influence on the amount of travel in each domain (e.g. a haulier will always have a final travel profile dominated by logistics and a high travel dependency, the actual amount of which will be closely related to fleet size and sector).

The top path runs from dependency through all the other groups of factors to determine the final amount, timing, energy intensity etc. of travel behaviour (e.g. in the case of a haulier, these factors will have influence over vehicle choice, use of ICT, investment in driver training etc. which will all have some bearing on final energy, albeit potentially small in relation to overall total demand). These factors help to explain why organisations where the nature of the business is very similar can have very different final travel behaviours.

The main groups of factors and key conclusions about how they influence business travel include:

*The firmographic dimensions of a business (including its size and sector):* The diversity of business travel behaviours is patterned by size, sector and the interaction between the two. This in turn is strongly correlated with the travel dependency of an organisation. However, any segmentation relying solely on these dimensions would be too broad to be meaningful given the diversity in behaviours and determinants within them.

*Organisational strategy (e.g. the ‘reasons for being, organisational culture, structure, mission):* Organisational strategy, especially the corporate mission, structure of the organisation and management values, is more instructive than external factors to understand why *specific* businesses behave as they do. ‘Organisational culture’ is the pattern of shared assumptions within an organisation and captures ‘the way things are done’ and ‘corporate mission’ will determine orientations around profit and social responsibility. Regardless of the orientation, sustainable transport issues have to be supported by senior management. However, this support is itself related to organisational structure and is disproportionately more important in Small and Medium Enterprises (SMEs). Commuting and customer travel is typically seen by senior managers (and possibly commuters and shoppers themselves) as almost entirely outside the formal responsibility of the employer or business. Therefore, a sense of responsibility relating to these travel domains could be an important differentiator of businesses.

***Organisational resources (e.g. assets, capital, expertise):*** Organisations tend to be risk averse in approving investment in any new equipment which will deliver ‘gains’ and tend to devote more resource to avoiding losses. This means companies can fail to account for the true cost of avoiding sustainable transport investments (including low carbon vehicles and IT systems) if the advantages of doing so are framed incorrectly. Making energy use visible and salient is an important first step on the way to energy efficiency becoming a strategic objective and it follows that most emerging sustainable business travel trends are underpinned by developments in IT (e.g. decision support systems including travel information management, expenditure management, whole cost accounting, environmental management systems). These, in turn, require resources including finance, skills, knowledge, prior learning and networks.

***Travel-related procedures:*** These are the company policies, guidelines or ‘behaviours’ as identified in Figure ES2 that take place at the organisational level . They are either travel-specific (e.g. travel plans) or non-specific (e.g. recruitment or flexi-working policies) and they go on to shape the final travel behaviours and the carbon and energy intensity of them.

***Place based factors:*** This includes local infrastructure, history and socio-demographic characteristics of the location as well as digital connectivity. Transport-related factors are important in business location decisions but not the top factor, and appear to be diminishing in importance in favour of the local labour force, innovation culture, knowledge networks and quality of life. However, once a business has located somewhere, there is very little evidence that reveals the influence that local infrastructure and accessibility have on business travel. The relationship of business with its communities, being attuned to societal expectations and having good relationships with stakeholders which can include the local community, has been found to be an important determinant of the adoption of wider sustainability behaviours, but not travel.

***People's motivations (e.g. attitudes influencing the travel choices of employees and customers):*** In larger organisations, up to three quarters of employees might be responsible for choosing how they travel for business. If employees themselves decide which mode to choose for travel, the average distance per year increases. However, over rigid company rules can lead to non-compliance with policy. Thus, encouraging individuals in businesses to make sustainable transport choices requires a balance between allowing the discretion to act and centralising, formalising and embedding the travel policies. Nevertheless, whilst there might be both organisational and personal reasons for individuals’ behaviours, the values of employees are not independent of those of the organisation as the two ‘self-select’ and are not simply randomly assigned to each other.

The conceptual model is critical as it shows all the determinants which the evidence suggests apply to all the potential business travel and transport behaviours. Whilst the evidence base is patchy and there is uncertainty as to the strongest determinants as well as how they differ for each behaviour and how

they interact, the Conceptual Model is offered with some confidence that it provides a solid framework from which the feasibility and steps to segmentation can be based. If all the data on the determinants can be gathered into a single dataset, statistical analysis can be performed to identify the most important determinants on which to cluster businesses.

#### **RQ4: Is a segmentation model feasible and desirable?**

The simplest argument for developing a segmentation model of businesses in relation to their travel and transport-related behaviours is that there is no such model in existence. As such, the proposed model – covering organisations in all sectors in the UK, and in relation to all types of travel and transport-related behaviours – would fill an obvious gap. A segmentation model has the potential to build insight, help develop strategy, assist in the design of interventions, provide elements of evaluation frameworks, inform communication strategies and develop a common language for audiences.

This study recommends that DfT focus on building a model which shares insight and understanding of ‘what makes people/organisations tick’. A model based on *determinants* of travel behaviour, including the decision making processes within organisations, rather than the behaviours themselves, offers the most meaningful and stable way to produce a model with the potential to predict a wide spectrum of behaviours.

However, the wide range of behaviours and their determinants means that any single model may still not be able to cover all types of organisation, or all types of travel behaviours. There may need to be more than one model (potentially split by each ‘domain’ of travel, or by size or sector). This would mean that there are no redundant variables in the model for any firm (e.g. questions relating to logistics travel will not be relevant to all). It is also important that the segments represent variation within a single domain of business travel (rather than, say, membership of one cluster representing firms dominated by business travel, another by logistics travel etc.) Once further exploratory statistical analysis has been undertaken, however, it may be possible to find common key determinants which allow one ‘meta’ model to be developed.

In addition, this study has concluded that sufficient data does not currently exist to be able to build this model without new empirical data. In order to be able to quantify the segment sizes, and to be able to automatically allocate businesses to the segments in future surveys, it can be recommended that the DfT and other potential partners aim to develop a fully quantified model, based on bespoke survey data, which may also be linked to other business metrics (for instance, actual turnover data, taken from tax returns). However, even once new quantitative data is gathered, it still might not be possible to get all the way to a quantitative segmentation model. This will only be known once the final dataset is assembled and analysis begins.

Moreover, before a new survey is designed, there are a series of steps recommended to be undertaken before the ‘final’ survey and model development can take place. We outline these in the final recommendations.

#### **RQ5: What are the key evidence gaps that need to be filled before a segmentation model can be developed?**

The study identified gaps in the evidence that are especially relevant to developing an understanding of the decision making processes within organisations related to business travel. These include:

- Most data has been collected at the level of the individual employee or at an aggregated level, but not at the level of the *workplace*. There is only partial, fragmented and complex evidence for how ‘business travel’ is incorporated within the potential ‘decision-making framework’ of a business otherwise driven by issues of Research & Development, innovation, operations, customer service, finance, overheads, etc. In addition, much of the evidence focuses on external factors (such as regulation or broad sectoral differences) but the understanding of the role of internal factors (such as the attitudes and values of individual employees, corporate mission and decision making structures) is much poorer. A segmentation of businesses based on the determinants of travel behaviour will be a challenge without this insight.
- Business travel as defined in national statistics and in the majority of the literature concentrates on trips in the course of work for inter or intra company meetings of a variety of kinds. Evidence on the determinants of this travel behaviour is thin, but even scarcer for: other behaviours related to fleet management (including company cars, new technology and use of pool cars); expenses policy, supply chain management and procurement; substitution of rail by air, location policy and carbon reporting.
- Evidence on the current and potential range of businesses undertaking a behaviour and evidence on the environmental and growth impacts of travel behaviours is necessary to inform a prioritisation of behaviours to set the stage for further work on model development. Without knowing the potential reach (how many businesses are already adopting a behaviour and how many *could* adopt it) and the impact (how much travel/energy/carbon the behaviour generates or saves), and the relationship between the behaviour and growth, then it will be difficult for policy makers to target their engagement and interventions. Travel dependency is a concept that has emerged out of this study and does not exist in the literature in relation to businesses. We contend that it would be useful, alongside the typology of business travel produced here, to profile businesses in relation to the dependency or salience of different types of travel flow to their activities as this is likely to play a pivotal role in the degree to which the final travel-related outcomes

(particularly in terms of energy or carbon emissions) can be influenced. It will also identify which businesses may need to be most targeted precisely due to the significant contribution they make to final policy objectives.

- Evidence of the effectiveness of policy instruments to mitigate environmental impacts or business travel and support business growth would inform an understanding of business behaviour. This includes evaluating the impact that recently introduced policy mechanisms relating to carbon accounting are having on decisions relating to business travel.

How these gaps might be filled is incorporated into the recommended next steps below.

### **Recommended next steps**

This study has concluded that there are a number of stages yet to be undertaken before a segmentation model can be developed. **Figure ES4** outlines these steps.

#### **Step 1: Convene stakeholders**

**To convene a core group of relevant partners and stakeholders to build support for the model and agree on the broad model objectives and applications**

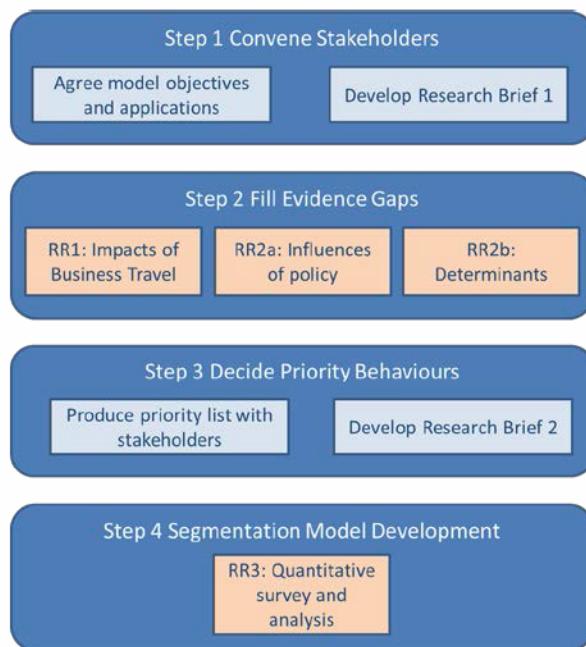
The results of this study suggest that it is too soon for the DfT as owner of any model to be developing a delivery-focussed model in any specific area of business travel behaviour. We recommend the first task should be to convene a core group of delivery partners and other stakeholders who are keen to co-produce a segmentation model which they can use to deliver targeted strategies. The idea is to build knowledge and support for the model as a mutually-acknowledged potential means of sharing insight and developing strategy across interested stakeholders. Initially broad model objectives and applications need to be agreed which will then be shaped further by Steps 2 and 3.

#### **Step 2: Fill evidence gaps**

**To refine the broad model objectives, evidence gaps need to be filled including exploring the reach and impact of business travel behaviour and investigating the determinants of business travel behaviours.**

In order to help focus the model objectives, develop a refined conceptual model and sketch out hypothetical segmentation models to inform development of survey questions and subsequent clustering, the evidence gaps identified above need to be filled. We pose a number of Research Recommendations (RR) to do this: **RR1:** investigating the reach and impact of business travel behaviours (desk based study); **RR2:** investigating the determinants of business travel behaviours (qualitative work) potentially split into (a) understanding the influence of policy instruments on business travel and (b) the organisational level determinants of business travel.

**Figure ES4: Recommended steps to a segmentation model of businesses in relation to their travel**



### **Step 3: Decide upon priority behaviours**

**To identify a list of behaviours which are most likely to achieve policy objectives.**

Given that multiple models are likely to be needed to capture the diverse set of determinants of such a large array of business travel behaviours in a way that will focus future engagement strategies, the long list of behaviours identified in [Figure ES2](#) will need prioritisation. The space constraint on future questionnaires also requires this. After the evidence gaps have been completed in Step 2, this will allow a list of priority behaviours to be identified collaboratively by the stakeholder group in line with policy priorities.

### **Step 4: Segmentation model development**

**To undertake a questionnaire survey to collect the data used as input in to a cluster analysis of businesses.**

The task of undertaking a quantitative business travel behaviour survey with a representative sample of UK businesses ([RR3](#)), whilst challenging, is of primary importance in the process of segmentation model development – and perhaps even more important than the model development itself because of the insight it can bring. When it actually comes to the statistical stages of clustering, different outputs may need to be tested until the ideal solution is found. In other words, flexibility needs to be built in to this process. We also recommend that a regular survey of business travel at the organisational level is considered as a worthwhile task in its own right.