# The
# Little
# Book of
# MOBILITIES
## in the city

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# Acknowledgements

# Contents

# What this little book tells you

This little book tells you about research we did as part of the Liveable Cities programme, looking into 'Mobilities in the city'. Through our research, we hope to communicate the following messages:

- We need a new way of thinking about Mobilities, not only to better understand but also change 'Mobilities in the city'.

- When thinking about Mobilities, we need to consider the greater diversity of movements and the 'web of practices' that make us move the way we do.

- To really understand Mobilities, we need to pay more attention, not only to why certain things happen or worked, but also why they do not happen or did not work in certain cities.

- Listening to local people is important if we want to change 'Mobilities in the city' in ways that can speak to people's real world needs.

- To change 'Mobilities in the city' requires an understanding about, and addressing of, wider political, economic or infrastructural developments that shape and change Mobilities in cities.

- Challenging people's main perceptions of certain mobility practices – for example, driving as fast, comfortable and safe versus bus commuting as slow, uncomfortable and unsafe – is essential for changing 'Mobilities in the city'.

- Changing 'Mobilities in the city' is also about changing other things in cities, such as infrastructures and governance structures.

- Changing Mobilities is not just about moving differently, but also thinking about movement differently.

By encouraging us to think about Mobilities differently, this Little Book is, therefore, intended to help us better understand, but also change, the way we and others move, now and in the future.

# 1. Introduction
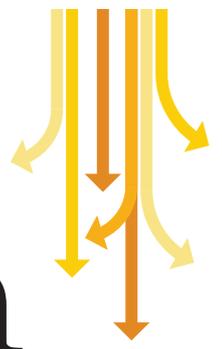
'Mobilities is an essential element of our everyday lives. People, things, information and ideas are constantly moving. In his book, Mobilities (2007), John Urry said: 'it sometimes seems as if all the world is on the move' (p.3). So, can you imagine if the world stopped moving? What would be the implications of such a prospect for societies, their economies, the environment? This little book aims to introduce you to a different way of thinking about Mobilities in John Urry's sense of the word: not only by encouraging us to think differently about *how* we move, but also *who* and *what* we need to consider when thinking about movement. By doing so, it is hoped that we will contribute to developing more sustainable mobility systems for more liveable cities.
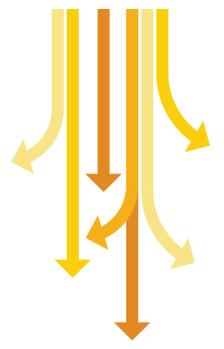
# 2. So, what is Mobilities?

In this chapter, we look into a range of city typologies in order to understand how the context of a city might be framed. Of the typologies that exist, the most frequently used over recent decades has been related to sustainability, but increasingly liveability and intelligence have come to the fore (Moir et al., 2014 ), as shown in Figure 1.

## 2.1. What is on the move?

Contemporary lives are very much dependent on movement. In many ways, moving is an integral element for the accomplishment of a lot of everyday practices that contribute to human wellbeing and flourishing – both in terms of meeting basic human needs, as well as other, more pleasure-seeking experiences of everyday life. For example, as part of our everyday lives, most of us need to move in order to get to work, to do our shopping, to visit the doctor, to get to school or get our children to school, to go for a walk or take our dog for a walk, to go to cinema or participate in other leisure activities, including going on holiday, etc. Such examples also make us also think of the ways movement relates to our needs and the needs of others to move. But, it also helps us think about the ways that our movement can influence or determine the movement of others, like children and dogs, and the ways that others' movements might also have an impact on the way we live and move. For example, shopping deliveries bringing food and other goods to our doorstep and midwives visiting women in their houses are types of movement that have an impact on other people's wellbeing and movement. Thus, a person's movement can have a manifold impact on another people's movement: it can facilitate, change, impede or reduce their capacity or need to move.

Immobilities (or non-movement) is also a massive area that we need to consider when thinking about movement. However, in the context of immobilities, we

should not only think of the way people may influence each other's movement, but also the role of other immobile objects and infrastructures and the way *they* can impede as well as facilitate people's movement. For example, gas and petrol stations, airports, garages and car parking spaces can facilitate or provide an obstacle to our movement, depending also on the way we want to move. And, of course, we should not forget there are a lot of different ways we can move – for example, some people prefer to move by car, whereas others choose to move on a bicycle, bus or on foot.. Others might also choose to not use their bodies in order to move, but just travel imaginatively – for example by using the Internet – in order to visit places, attend work meetings, or just work. The above examples encourage us to consider not only *who*, but also *what*, is moving - such as things, information and ideas, like in the case of imaginative travel through digital technologies. When thinking about Mobilities, it is important to not just think about people moving but also things that are on the move, which either help us move (e.g. cars, buses, bikes, ferries, etc.) or which fulfil other human needs that are not directly related to our capacity to move, such as, goods, food, water, clothes, etc.

## 2.2. The double-sided effect of movement

However, all this movement of people, things, information and ideas comes at a cost. In its essence, the whole world is constantly moving, but this movement also needs to be fuelled – a fact with severe environmental implications in terms of both depleting existing resources and the impact of using of such resources. Globally, mobilities account for about 19% of global energy use – primarily based on consumption of oil and oil products – and 23% of energy-related carbon dioxide ($CO_2$) emissions (Sims et al, 2014). In this context, mobilities mainly refer to the transportation of people and things, although it is hard to obtain clear percentages of contribution to $CO_2$ emissions by each category, as most available statistics primarily focus on $CO_2$ emissions per means of transport. For example, of the 23 per cent of global $CO_2$ emissions from the transport sector, road transport accounts for 73 per cent, followed by international shipping and international aviation (Sims et al, 2014; EEA, 2014). Interestingly, digital technologies are not considered as a mobility system (e.g. indicating flow of information), nor are they included as a separate economic sector contributing to global $CO_2$ emissions. This might be related to the difficulty in measuring their consumption of energy and production of $CO_2$ emissions: they are currently hidden behind a number of other economic sectors (e.g. electricity

and buildings) (see EPA, 2014; IPCC 2014) and measurement can take place at different levels, from an individual household to Silicon Valley. However, existing studies challenge the acclaimed energy efficiency of the digital sector, by pointing our attention to the fact that our I-phone might consume more energy than our refrigerator (see Walsh, 2013)!

Such facts definitely encourage us to think of Mobilities more holistically and consider the double-sided effect of Mobilities to our liveability: on the one hand, movement is central to the fulfilment of our needs; on the other, our movement will have an impact on the conditions under which we, and future generations, lead our lives. Such aspects also encourage us to reframe our approach to movement, re-think or think more carefully *how* we move, ask *why* we move the way we move, and help us identify ways of moving *differently* – questions that will be at the centre of this Little Book. However, before we start getting into the details of such questions, at this stage, drawing on the above, it makes sense to better define what we mean by Mobilities.

## 2.3. Mobilities beyond transport

The above examples provide some clues to the complexity, multiplicity and diversity of movement that we need to take into consideration when thinking of Mobilities. As indicated above, people, things, information and ideas are on a constant and mutually dependent and reinforcing movement: a movement that is not just reduced to physical movement; a movement that is not just reduced to the movement of people. Such aspects have been pivotal inspirations in the work of John Urry and his Mobilities Paradigm, which aimed to encourage a more complex framework for thinking about movement.

Most times, when people are asked to think about mobilities, they associate it with different transport options. However, as seen above, Mobilities is much more complex. It includes different types of movement, both physical and virtual. Through his Mobilities Paradigm, John Urry (2007: 47) has provided a typology that identifies five different, but interdependent, ways of movement that constitute central elements of our everyday lives:

- *Corporeal* – referring to the travel of people for work, leisure, family life, pleasure, migration and escape, etc.
- *Physical* – referring to the movement of things to producers, consumers,

retailers, etc.

- *Imaginative* – describing the travel effected through the images of places and people via print and visual media.

- *Virtual* – describing the travel in real time that can cross geographical boundaries, often also through the use of digital technologies.

- *Communicative* – relating to travel through person-to-person messages via texts, letters, telephones, mobiles, social media, etc.

This typology encourages us to move beyond a narrow association of mobilities with transport and helps us understand the urgency of asking not only '*who* is on the move' and '*what* is on the move', but also '*how* do we/people/things move', '*why* do we/people/things move the way we do', '*what makes* us move the way we do' and 'could we move differently'?

Such questions also become central in our analysis below. In order to move towards Mobilities for a more liveable city, we need to understand what makes us move the way we do, learn from this and try to change it towards a more sustainable direction. But we also need to place Mobilities in a wider context that will help us realise that our current patterns of movement are tangled up in a wider system of practices that might not be mobility practices but nevertheless determine the way we move. The work of Elisabeth Shove and colleagues (2012) is pivotal in approaching mobility as a practice but also understanding such practice as part of a wider web of practices that determine everyday life. Let's take the practice of 'cycling' as an example. Cycling is a practice that people do as an end in itself – for example, for leisure purposes or for exercise (see also Figure 1 below):
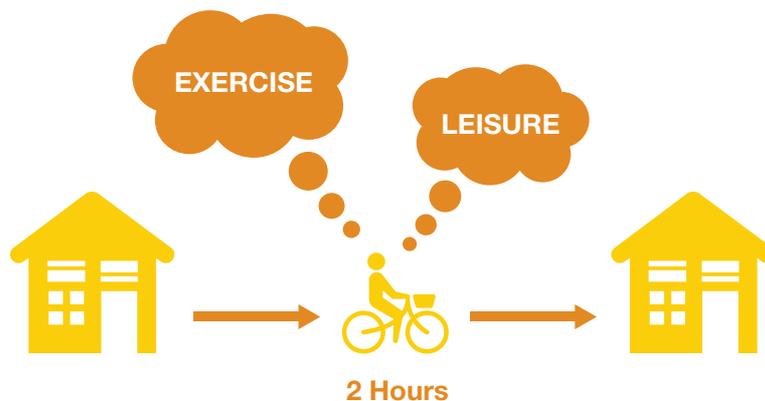


*Figure 1.* Cycling as a Practice (Focus Group 1, 2014)

However, it can also be a means to other ends, which makes it part of a wider 'web of practices' —for example, somebody might choose to cycle in order to do their shopping (see also Figure 2 below):
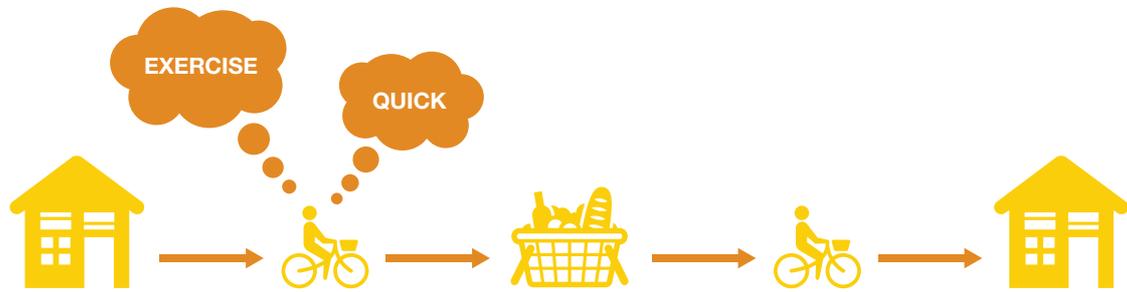


*Figure 2.* Cycling as part of web of practices (Focus Group 1, 2014)

However, cycling can also be part of a wider 'web of practices' in other ways – for example, people might choose to drive in order to cycle, because they have a preferred location, which is more picturesque, or safer or less busy (see also Figure 3):
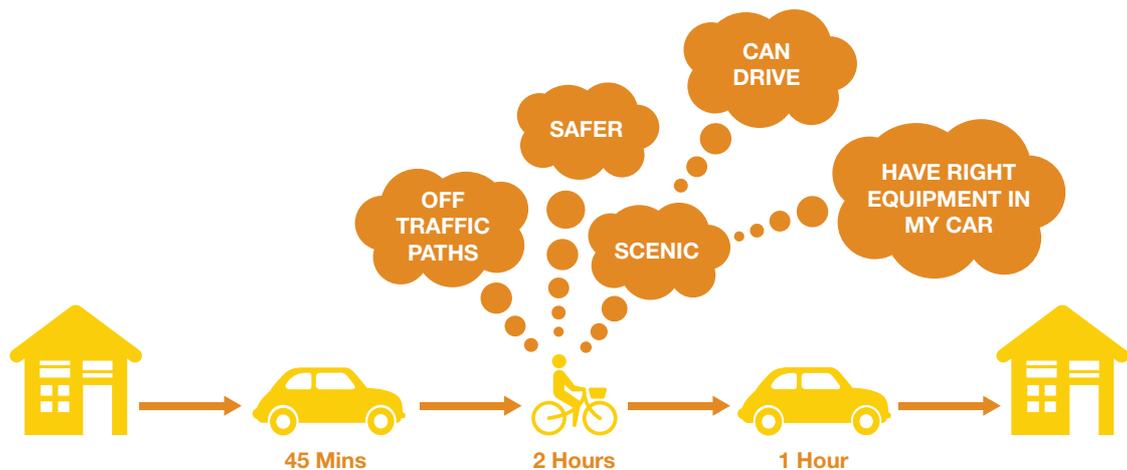


*Figure 3.* Cycling as web of other mobility practices (Focus Group 1, 2014)

In all these examples that come from our Liveable Cities research, we observe that a mobility practice can be part of a web of practices, but there are certain reasons that make people do or choose to do things the way they do, where they do them, etc. For example, in the case of cycling, people choose to cycle for *exercise* and *leisure*; but then also choose to drive in order to cycle because of *safety* or aesthetic reasons or *convenience*; but also because they *are able* to drive a car and because they have the right *equipment* that would help carry their bike on top of their car (see also Image 1).

The words in italics help us further identify what Elizabeth Shove, Mika Pantzar and Matt Watson (2013) call the '*elements*' of practice that play a pivotal role in the way we may end up doing things. These are divided into three categories:

- Materials – referring to things, infrastructures, tools, etc.

- Meanings – that is, what this practice means for you, what purpose it serves for you, etc.

- Competences – that is, a person's skills, capabilities, know-how etc., indicating whether a person can do something or not.



*Image 1.* Drive to Cycle Car Equipment (Interview AG210613)

Both the frameworks and typologies we spoke about earlier provide some key threads of thinking that can help us understand why we move the way we do, but also how we could move towards alternative ways of movement. As such, they have also been very useful tools in our research in Birmingham, which explored the potential to move to alternative mobility systems) for cities. However, why are we interested in Mobilities in cities? And, why Mobilities in Birmingham in particular?
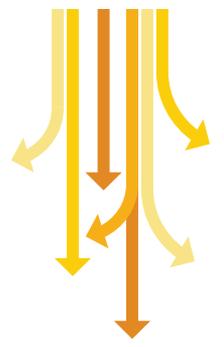
# 3. So, why Mobilities in the city?

## 3.1. Why Mobilities in cities?

There is no doubt that more and more people tend to live in cities. This fact not only makes cities sites of increasing social, political and economic significance; it also significantly transforms cities into places of constant movement. They are places that host, facilitate and impede our movement. They are aimed to cater for our needs and thus enable or disable different types of movements that will make our lives better and happier (Charles Montgomery, 2013). However, they can also be places that can facilitate the movement of some people more than some others, which contributes to the production of new physical and social immobilities within cities. For example, some people might have better access to transport options and infrastructures that make employment opportunities easier and more plentiful for them.

The more cities become important hubs for economic development, the more people live, work and pass through the cities; the more goods move into, out and through the cities; the more information, knowledge and ideas emerge and flow through cities; and, crucially, the more energy is depleted and $CO_2$ emissions are produced. According to the UN-HABITAT's Cities and Climate Change report on Human Settlements (2011), the world's cities are responsible for 75% of global energy consumption and up to 70% of harmful greenhouse gases. More specifically, according to IPCC data, out of 69% of the urban-based greenhouse gas emissions – including combustion of fossil fuels, for electricity, cooking, mobility and industrial production – globally, mobility is responsible for about 23% of total energy-related greenhouse gas emissions, and 13% of global greenhouse gas emissions (in the UK,

it has a 19% contribution to the total carbon footprint of UK cities) (Arnold Tukker et al. 2006). At an EU passenger transport level, the car was the dominant mode of transport, comprising on average 81% of all passenger transport; bus transport comprised an average 13% of all passenger transport and the average share of rail transport was around 5% (EEA, 2014). Despite the fact that cities are enablers of digital connectivity in both private and public spaces, the environmental cost of such activities still remains unclear.

Thus, cities appear to contribute to our liveability in contrasting ways: on the one hand, they enable or disable different types of movement that can decrease or increase the levels of our wellbeing; on the other hand, they are carriers of $CO_2$ emissions and the social, environmental and economic cost that might come with it. Thus, researching urban movement and better understanding what is hidden behind them is pivotal for 'designing liveable cities' for all (Rachel Cooper et al, 2009). And, Birmingham has been an interesting city for such an exploration.

## 3.2. Why Mobilities in Birmingham?

Birmingham is the second city in the UK, with a population of approximately 1.1M and 2.5M in the wider conurbation. Historically, Birmingham was economically dependent on manufacturing, and, more specifically on the motor industry. Thus, for Birmingham, the car has not only been a mode of transport, but a source of economic regeneration and employment opportunities for the region – a fact which also had an impact on the city's wider organisation and planning – including transport planning and infrastructural developments – around the car (Gordon E. Cherry, 1994). Our research participants have also variously made such observations. As said by one of our interviewees:

> *'So in terms of a modal split, public transport still has a relatively respectable share in Birmingham, but some of the decisions that have been made in the past... Birmingham City Council had choices to develop a light rail system in 1947, 1956 and that was at a time when the car industry was seen as a new growth thing and it was going to be Birmingham's contribution to the world, really. Certainly it was the centre of the UK car industry...*

*So this is what was different between Birmingham and, say, Stuttgart was that in Birmingham, there was a kind of link made between, well, we make cars so we want our local transport system to be car based. They didn't actually see that you can make cars and sell them to the rest of the world, but you don't actually have to have a local transport system that assumes that all journeys are going to be made by car. I think that's what has kind of happened in Birmingham. There is still a legacy of that kind of thinking going on'.* (Interview LD110713)

Despite its declining role, the car is still considered the mobility system that dominates Birmingham's mobility landscape (Centro, 2011). Although Birmingham is ranked as the eighth least car-dependent city in England, car use still amounts to 42.2% of daily journeys, followed by bus with 29.2%, rail 27%, metro and cycling, with less than 2% (Centro, 2011). This modal split provides evidence of the high-carbon, fossil-fuel and road-based mobility carbon footprint of the city, estimated at 25% of Birmingham's total carbon footprint (Birmingham City Council, 2013a). Such contrasting aspects, alongside an increase in the alternatives to car use across the city, make Birmingham an interesting place for investigating Mobilities in the city.

The poor liveability levels of the city add another layer of interest to our investigation within the 'Liveable Cities' project. According to the 2010 Index of Multiple Deprivation, Birmingham is the most deprived city on both income and employment measures, with 40% of its population living in the 10% most deprived areas in the UK (Birmingham City Council, 2013b). Of course, such figures are not unrelated to the city's historic economic and employment dependence on the declining motor industry (Gordon E. Cherry, 1994). Despite a continual increase in car ownership, with more households having more than one car and fewer households having no cars, fuel and transport poverty (along with rising prices of oil and public transport fares) remain massive indicators of inequalities and immobilities - both physical and social – across the city (Birmingham City Council, 2013c).

So, the rest of this little book focuses on the city of Birmingham. We believe that understanding how the mobility system of a city like Birmingham works can help us learn some valuable lessons for other cities facing similar experiences and challenges. However, through our analysis, we aim not to follow the traditional route

of understanding why things happen or worked, but focus on understanding why things do not happen or did not work in certain places. We believe this approach is central in gathering the useful information that can help us change 'Mobilities in the city' towards a more sustainable and liveable direction. So, as evident in the following section of this Little Book, we switch our question 'Why in Birmingham' (as done in this section) to **'Why not in Birmingham?'** and attend to the voices and opinions of local people – both key stakeholders and citizens – to answer this question.

# 4. Researching Mobilities in Birmingham
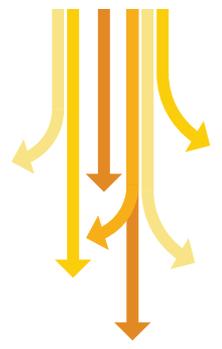
## 4.1. Our research – attending to local people's voices

In order to research Mobilities in Birmingham, we used a series of methods that would help us hear local people's voices and experiences, but also provide the opportunity for them to be heard. We started with a series of interviews with key stakeholders that, one way or another, were experts on the field of Mobilities. For example, we interviewed representatives from the local authorities, national and local non-governmental and civil society organisations, transport bodies, independent transport and policy planners, local business and social enterprises, etc. Bringing those stakeholders together seemed a useful next step for facilitating the exchange of knowledge, ideas and strategies towards a more sustainable mobility system. Thus, with the support of Birmingham City Council, we held an expert workshop that was focused on exploring the potential opportunities for decreasing levels of car use across Birmingham. However, we also believed that it was important to pay more attention to the everyday experiences of local people. In order to do this, we organised a series of focus groups with local residents from different wards of Birmingham. We specifically focused on wards with contrasting levels of deprivation, as we believed this would help us better understand the connection between physical and social (im)mobilities; that is, we wanted to understand the link between levels of deprivation and mobility options in different parts of Birmingham. We looked at two wards and had two focus groups in each ward, each of which was held at a different community space. The following sections are based on the input we received from all above stakeholder groups.

## 4.2. Why not in Birmingham? A stakeholders' perspective

This first section aims to offer a view of the city through the eyes of its citizens that are also experts at Mobilities in Birmingham. Much of the stakeholders' discussions revolved around other cities that have been successful in introducing alternative mobility patterns. London, Copenhagen, Hong-Kong, Bristol, Hanover, Stuttgart, Cambridge, Los Angeles, Leicester are some of the cities that people compared Birmingham with. This perspective provides an interesting layer to our analysis that helps us better understand Birmingham's mobility system through the lens of other, more 'innovative cities' and of why certain things have not been happening in Birmingham as opposed to those cities.

### 4.2.1. 'Disruptive' events and charging 'triggers'

London was one of the cities that attracted a lot of stakeholders' attention. For some, extraordinary phenomena and events can have a disruptive effect that can help people change their mobility habits and choices. The London bombings in 2005 was given as one reason that might have increased the popularity of cycling across the city:

> 'In London after the bombings on the buses and also in the tube stations; that was another trigger. It was an extreme event but it initiated a lot of people to move to travelling by bicycle. That maybe like a drastic or an extreme event that makes people think of a different way of transport because I don't feel safe on the bus or I don't feel safe on the train.' (Interview MP200613)

However, congestion fees and parking charges have also been identified as another category of 'triggers' that might have encouraged people to switch to more sustainable travel patterns. Again, London was used as the example city:

> 'Like everything, it's a combination of carrots and sticks, isn't it, that you've got to put the carrots in? A few years ago, there was talk about doing a congestion charge to come into the City Centre as you've got in London, which doesn't force people to cycle but it suddenly makes cycling or using public transport a lot more acceptable. Even that, politically, was never acceptable to start charging people to drive into the City Centre; even that wasn't acceptable'. (Interview GA200613)

## 4.2.2. Political power

Different forms of political power have been identified as central in understanding why some things don't work in certain places, whereas they might work somewhere else. So, on the one hand, the presence of powerful local governors has been seen as a significant factor for reinforcing change:

> *'One thing… it's not a particularly a transport thing… but some UK cities now have elected Mayors who have more decision making powers and that can act as a focus of course for changing the political dynamic; it can act as a focus for ideas and also a faster decision-making process. Boris Johnson is the obvious example in London but there is also an elected Mayor in Bristol, one in Leicester and several other places. So that can affect the transport decision-making process'.* (Interview LD110713)

However, the voters' political power was also perceived as a very strong factor influencing political decision-making, especially when such decisions were challenging the most popular transport option, that is, the car system:

> *Nationally, we are not great and I would go as far as saying we are not great at re-allocating road space and, as a motoring nation, most parties that want to get elected and probably the one group of people you notice in this country with regard to travel, they tend not to want to annoy motorists. Five weeks before a general election nobody puts 25p on a litre of fuel so there will always be a motoring lobby that will be catered for'.* (Interview MS180713)

Political interests have also been discussed as central for the privatisation and the successive poor performance of the UK's public transport system. In this context, London's exemption from the rule was considered as its reason for success:

> *One of the major things, which has bedevilled bus operation, not just in Birmingham, but most other cities in the country, though not London interestingly, is the 1985 Transport Act; it was the marketisation of buses by the Conservative Government. Everywhere except London, they said let the*

*market rule; anybody who wants to set up a bus company can do it and they can all slug it out on the street. The result was absolutely horrendous; bus usage declined rapidly everywhere, except London. London was excluded from the scope of the 1985 Transport Act, which meant that it continued to be a planned system that the buses and the tubes were done in a planned way.* (Interview AWS180713)

### 4.2.3. Landscape developments

Stakeholders described the natural topography of certain cities as a factor that has facilitated the use of low-carbon alternatives in those places. So, for example, the flat streets of London and Cambridge make it easier for people to cycle there than in cities like Birmingham:

> *'Some areas are quite hilly as well, aren't they, which detracts from cycling. It's not the flattest City; it's not like the centre of London, which is generally pretty flat, and it's not like York or Cambridge or places like that. If you look at the cities which are seen as cyclable like York, Cambridge and Bristol, they tend to be quite flat and they tend to be quite compact as well in that most people are living within a cyclable distances; whereas Birmingham the majority of people who are likely to cycle probably lives further out.'* (Interview GA200613)

Human-induced landscape interventions have also been instrumental for the successful implementation of low-carbon alternatives. On the one hand, parking can play a role in determining people's mobility choices. The existence of plentiful and cheap parking options in Birmingham encourages people to carry on using the car, as opposed to places like London:

> *'Another one that we have tried to use is parking as well. Parking in the city centre [of London] is quite expensive so that makes it more viable for people to cycle or cheaper to use public transport. The problem that we have with that in the last few years since the recession there are a lot of sort of derelict sites, which are privately owned, and people set up cheap car parks on those sites. It sort of undermined that a little bit that the restriction*

*of parking in the city centre to encourage people not to drive in has been undermined by private companies opening up their car parks on the edge of the city centre'.* (Interview GA200613)

On the other hand, pedestrianisation was discussed as a motivation that would not only discourage people from driving, but also encourage them to walk and cycle more. As said, the more people use public spaces, the more public spaces feel safer, the more they are finally used:

> *'The only time in my life I've ever felt completely liberated and I didn't understand what it was, was when I first went to Hong Kong... I was out and about at night and it didn't worry me; because the streets are safe and the reason why the streets are safe is because they are full of people. Streets that are full of people are safe and not just that they are safe; they also feel safe'* (Interview KC270613)

Retrofitting cycling in existing infrastructures was another issue that was discussed as a limitation but also as an opportunity for switching to low-carbon alternatives. So, on the one hand, as opposed to Danish cities, Birmingham's infrastructure can only retrofit cycling and walking into the existing car-based infrastructures:

> *'It's been a very strong car culture in the City and so what you are doing now is retrofitting design of cycling and other modes of transport...So you are trying to break down what it was effectively a very well built city for car transport and then trying to fit in cycle lanes – I don't think there are very many cycle paths going in, but there is a difference according to the Danish model. It's trying to fit these things in to what was primarily built for car transport'.* (Interview MP200613)

On the other hand, retrofitting bicycle racks into existing bus infrastructures was also described as a success story of transport integration that is already taking place in Los Angeles:

> *'I don't know if it's completely related but when I was over in the States recently in LA, on a lot of their buses they have bike racks on the front of the bus. I think you can only fit 2 or 3 bikes in the*

*front, but essentially, if you want to take a bike now on a bus you would be very hard pushed, particularly if it was a busy route that you were using.*

*But essentially the bus would pull up and you would put your bike onto the rack at the front and just get on the bus. Get off at your stop and take your bike off. It appears to work well in LA, which obviously is a massive City like Birmingham is built for the car and with a massive population, so if it can work there then there is potential for it to work here. So I think that could be something that could help.* (Interview MP200613).

## 4.2.4. Financial support

However, for all above to take place, financial support is key. Local stakeholders underlined not only the need of efficient funding, but also the careful use of such funding when it becomes available. More specifically, they gave the example of Seville (Spain) and other European cities and suggested the urgency to re-orient investment to infrastructural rather than promotional activities:

*'Cities on the continent and so on and one thing that we found was that most of the cities we looked at were spending about 95% of their cycling budget on infrastructure and 5% on promotion. Whereas recently in the UK it's been about 50:50; so there was a feel that more needed to be spent on infrastructure and, in fact, the Government had been taking on that message at the same time…*

*Seville in Spain, between 2008 and 2012, had a very heavy investment in dedicated cycle lanes in the city. The modal share of cycling increased from 0.6% to 6%…So, over a very short period of time and they spent almost nothing on promotional measures. I think they did have a cycle hire scheme they introduced, but very little on promotion. They simply built dedicated infrastructure for cycling… They have since had a change of political control and the budget has been dramatically reduced for cycling, but the job's been done, the infrastructure is there largely (*Interview LD110713).

## 4.2.5. Summary

Comparing Birmingham with other cities can help us better understand why things happen or do not happen in certain places, but also start thinking of ways that could move things and people differently. Based on the key stakeholders' views for the city of Birmingham, there needs to be a combination of triggers that could motivate people to start considering using alternative means of transport as part of their everyday lives. However, in most cases, such triggers are about some large-scale political, economic or wider landscape developments that need to take place. And, in most cases, such developments are not happening in isolation from each other but need to be thought in conjunction in order to understand what can hinder or make them happen. Parking is an interesting example that can make us understand such complexities. On the one hand, parking can be considered as part of the wider infrastructural developments that have been developed around a mobility system that prioritises the car. Decreasing their availability by using such spaces differently, or rising the prices of parking fees across the city, were suggested as methods of getting people to commute differently. However, such changes might come with a political cost for local politicians, as it might reduce their popularity amongst the local electorate body or other powerful economic actors whose interests might lie with the existing car-dominated system. Retrofitting other mobility patterns into the existing infrastructural system can be another, less costly avenue. However, overcoming financial barriers, as well as making sure that they use the available funding appropriately, are also significant aspects that can determine the final success of a low-carbon mobility initiative. Of course, parking only constitutes an example that demonstrates such complexities. However, what it definitely shows us is that moving towards a low-carbon mobility system is not just about developing the right infrastructure, either by re-engineering the infrastructure of the city or by retrofitting it into its current form. It is also about the wider political, economic and financial developments that can facilitate or hinder such developments. For example, political power or leaders can mobilise change; however, political power of lobbyists or the political voting power of the electorate body can influence political decision-making. Money – in the form of funding or of political influence – can also help maintain the status quo, but also fund alternative mobility visions. Thus, bringing people centre stage is important for engineering mobility infrastructures toward a lower carbon direction. And, attending to their voices and needs is a first step towards such a direction.

## 4.3. Why not in Birmingham? A citizens' perspective

As part of the Liveable Cities research, we also organised a series of focus groups in wards of high and low deprivation of Birmingham. As explained above, we believed this distinction would help us better understand the connection between deprivation, mobility and wellbeing – that is, how people's perceptions of 'the good life' are affected by the mobility options that are accessible to them and the areas they live in. We specifically asked people that live in wards with different levels of deprivation what things they do and they like doing. We were also interested in finding out where they do these things, how they get there, why they get there this way and whether they would consider doing these things differently. In other words, our aim was to focus on journeys that people do in order to conduct different practices that contribute to their experience of a 'good life'. By focusing on these journeys, we wanted to not only know more about the conditions under which they travel, but also understand the conditions under which they would consider travelling differently in order to do those same things.  Here, approaching mobility as a practice with its own elements (meanings, materials and competences – for details, see section 2.3), but also a part of a more complex set of practices, has played a significant role in understanding why people travel in certain ways and what would motivate them to do things in other ways.

Research participants provided us with a long list of practices that are linked to their experiences of 'the good life'. These can be divided into three categories:

- Everyday practices linked to their livelihoods (e.g. work, doing the school run, going to school/other classes; shopping, etc.)

- Everyday/common leisure practices conducted frequently in the city (e.g. going out for coffee, visiting the library, attending sports/dance or other activities, going to cinema or concerts, drumming, jogging, cycling, etc.)

- More unusual practices linked to their experiences of 'the good life', and going beyond the boundaries of the city (e.g. visiting family in other cities, travelling elsewhere for bird-watching, photography, butterfly-watching, going on holiday, etc.)

In many cases, the car was the dominant way of travelling to do things. Interestingly, the reported percentage of car use has been much higher in areas of low deprivation, despite the citizen's environmental concerns and low-carbon aspirations. On the contrary, residents of areas with higher levels of deprivation used low-carbon

alternatives more (especially the bus), despite their aspirations to own and drive a car. Here, affordability has been a key factor influencing people's mobility choices. The high insurance fees associated with areas of higher deprivation – also because of its linkage with higher levels of criminality – has been an interesting finding that seems to be playing an important role in people's current aspirations to obtain the social status that is associated with the ownership of a car. On the other hand, in low deprivation areas, cleanliness, convenience, and comfort were given as reasons for people opting for the use of the car rather than the bus. Many participants described bus travelling as uncomfortable, dirty and unsafe, not only while travelling but also while waiting to get on the bus.

However, in many cases, people gave us examples of cases that would do the same car-dependent practices differently. The rest of this section focuses on an investigation of such practices. First, it focuses on understanding the reasons that make certain people use the car in order to do specific things that are linked to their perception of 'the good life'. Second, it focuses on the very same practices and explores the reasons that have motivated people to travel differently. More specifically, we focus on four distinct practices: getting kids to school; working (accompanied with shopping); visiting family elsewhere; and going on holiday. We first look at the car journey and outline in a diagram the different parts of their journey, as well as the reasons that made them use the car. We then provide a second diagram of an alternative mobility option through which people choose to travel in order to conduct the very same practices. We believe this comparison is important in helping us better understand what is needed or what needs to be put in place in order to get people to start moving differently.

### 4.3.1. The school run

Getting to, or collecting kids from, school has been one of the most common practices that people documented as part of their everyday lives. For one of the residents of the low deprivation ward, lack of time and the urgency to be fast were key reasons that made her use the car in order to collect, but also drop off, her son to the next school-related activity. In this case, the school run was described as part of a wider set of practices, picking up from school, getting them home to have tea, driving them to the next school-related activity:
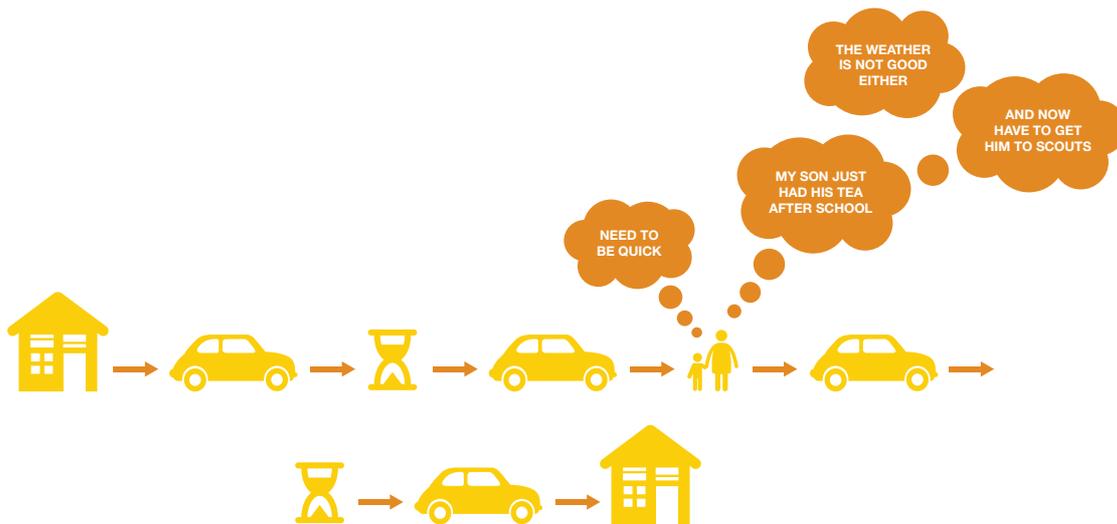
*Figure 4.* The school run by car (Focus Group 1, 2014)

Getting kids to school has also been described as part of a wider set of practices by one of the residents of the high deprivation area that is used to walking his children to school. However, in this case, we see that practice of 'walking the kids to school' is also combined with another practice, this of 'walking the dog'. So, in this example, again saving time is an important factor that made the parent opt for this mobility pattern. As seen in the diagram below, working from home is another significant aspect that affects the person's urgency to move quickly as they do not have to make an additional journey to go to work:
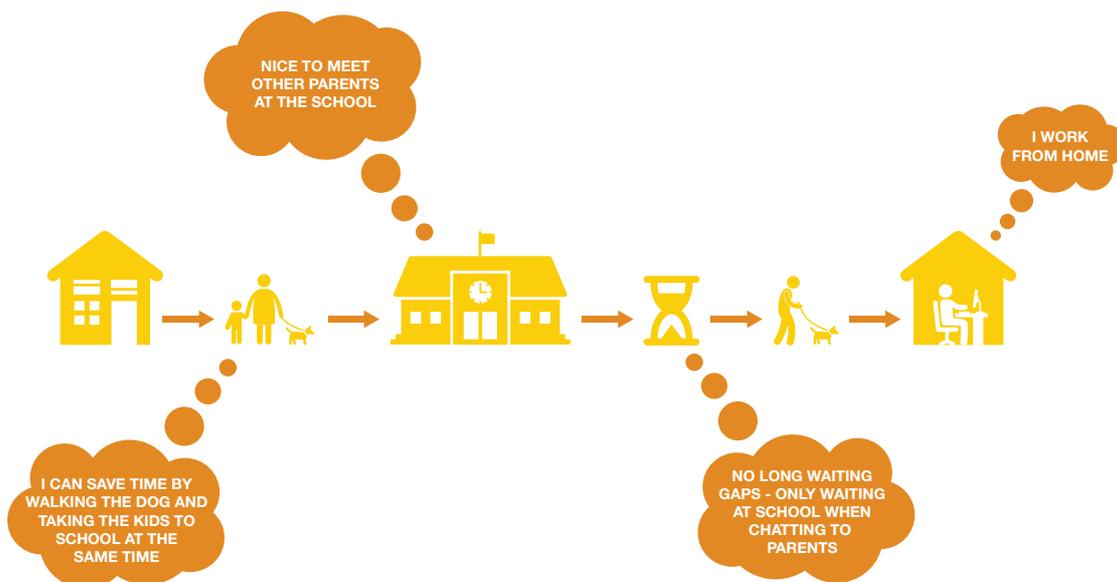


*Figure 5.* The school run on foot (Focus Group 3, 2014)

## 4.3.2. Work and shopping

Work has been another, well-discussed activity for our research participants. Again, we see that thinking of work as part of a wider bundle of practices that may precede or follow is important for driving to work. However, here, the existence of plentiful and cheap or free parking spaces is pivotal for choosing the car, not only to go to work but also to link it with these other practices that become part of the journey, such as shopping. As seen below, the reasons that make a person choose to shop from a supermarket become also part of the bigger picture of their car journey to work. The convenience offered by the availability of a great diversity of products in one shop only, the lower prices of the products in question, as well as the capacity to carry them in the car help us better understand the reasons a person might choose to opt for the car for their shopping journey, which also becomes part of their work journey:



*Figure 6.* Driving to Work (Combined with Shopping) (Focus Group 1, 2014)

However, in the high deprivation areas, a participant described two alternative ways of getting to work: on foot and by bus. Working close to where you live was an important reason for choosing to walk. In this case, walking was actually described faster than taking the bus, which was described by the same person as the preferred option in cases of bad weather. In this case, time was not seen as wasted, as the participant described it, but as time to listen to music, relax or even get ready for work:
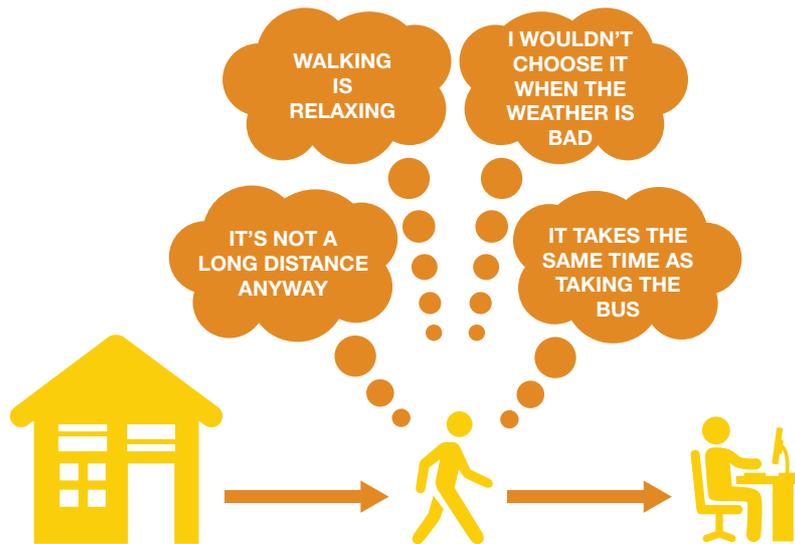
*Figure 7.* Walking to work (Focus Group 4, 2014))
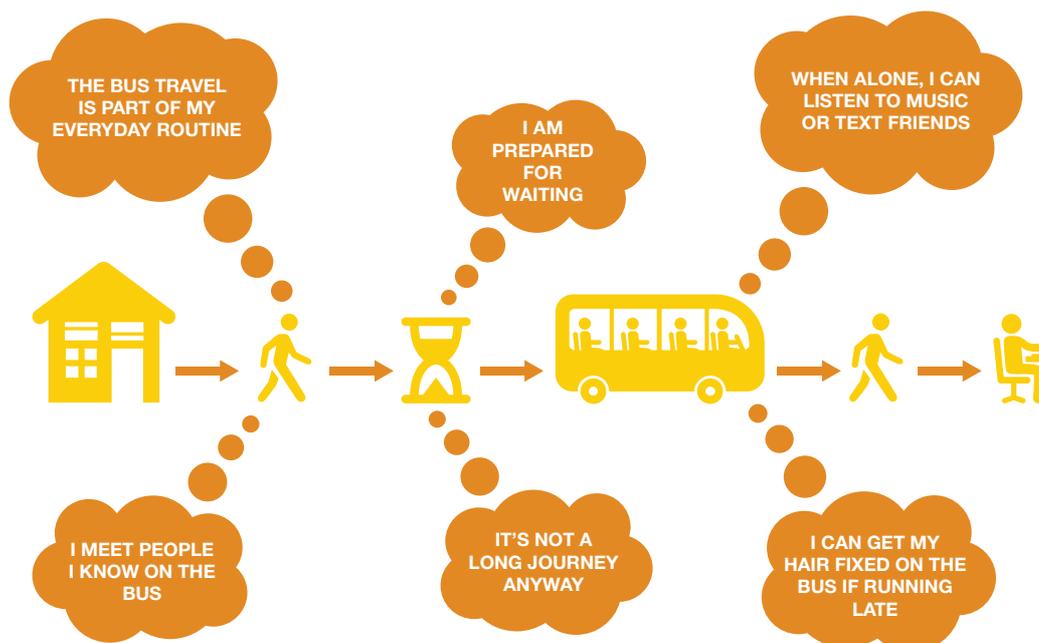


*Figure 8.* Taking the bus to work (Focus Group 4, 2014)

The bus was also the preferred alternative way of doing shopping, which, in this case, appears as a separate activity. In the low deprivation area, one of our retired participants explained the reasons that 'saving time' was not a motivation for him. He also described waiting as a positive experience that would give him the opportunity to meet people he knows or that he gets to know because he is a frequent bus traveller. So, for him, both shopping and travelling are sociable practices that

are also linked to a wider set of practices, like going for coffee, visiting the library, reading the paper, etc.:

NO NEED TO RUSH FOR SHOPPING WHEN RETIRED

WAITING DOES NOT MAKE MUCH DIFFERENCE ANYWAY AT MY AGE

KNOW THE TIMETABLE SO THAT I DON'T HAVE TO WAIT

WHEN SHOPPING NEAR OUR WARD, I CAN MEET UP WITH OTHERS FROM MY AREA

GOOD BUS LINKS NEAR MY HOUSE

I CAN COMBINE VARIOUS THINGS - SHOPPING, GOING FOR COFFEE AND TO THE LIBRARY

*Figure 9.* Going for shopping on the bus (Focus Group, 1)

### 4.3.3. *Visiting family elsewhere*

Apart from the everyday practices, people gave us examples of other practices that they consider important for having a 'good life'. Visiting family who lives elsewhere was one of them, with again residents of wards with different levels of deprivation giving us contrasting approaches. Using the car has been the preferred way for one of the residents of the low deprivation area. Convenience was a key factor in his choice of the car: moving independently, saving time from waiting in stations, saving money, being constantly on the move and the ease of parking at the end destination are all important factors influencing his travel choice:
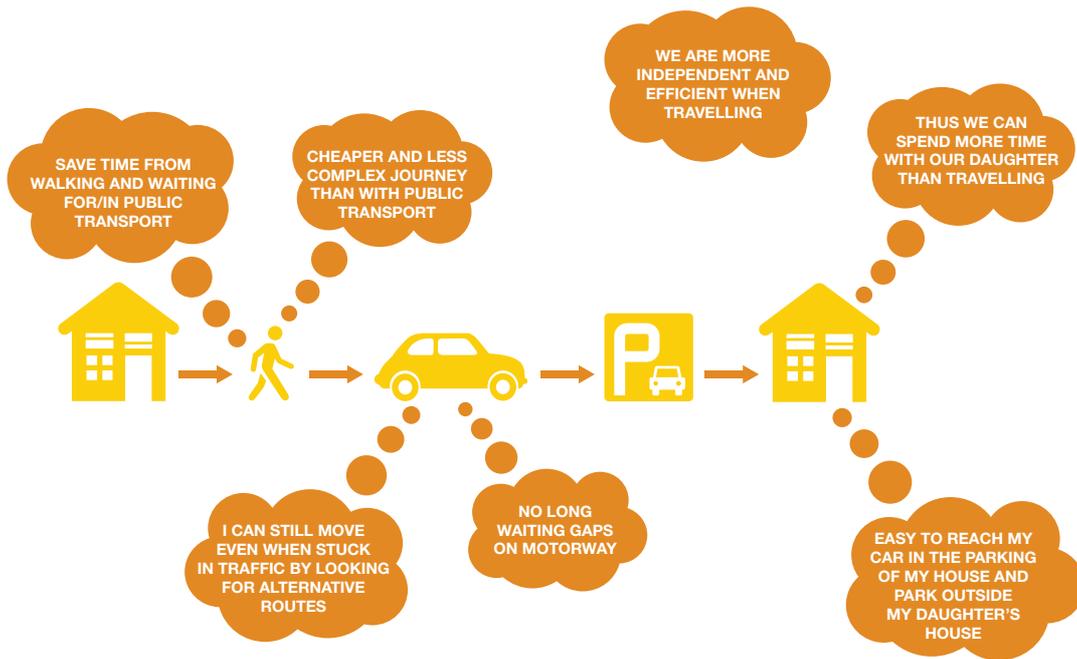
*Figure 10.* Visiting family elsewhere on the car (Focus Group 2, 2014)

For the resident of a high deprivation area, the train journey becomes part of a wider experience of leisure. First, waiting is not perceived as 'wasted time', but time filled with different practices, such as looking around shops, listening to music, etc. The expectation of other practices that will also be part of her visit at the end destination, like shopping or going out, also changes the whole experience of the journey, which is perceived as a more worthwhile experience:
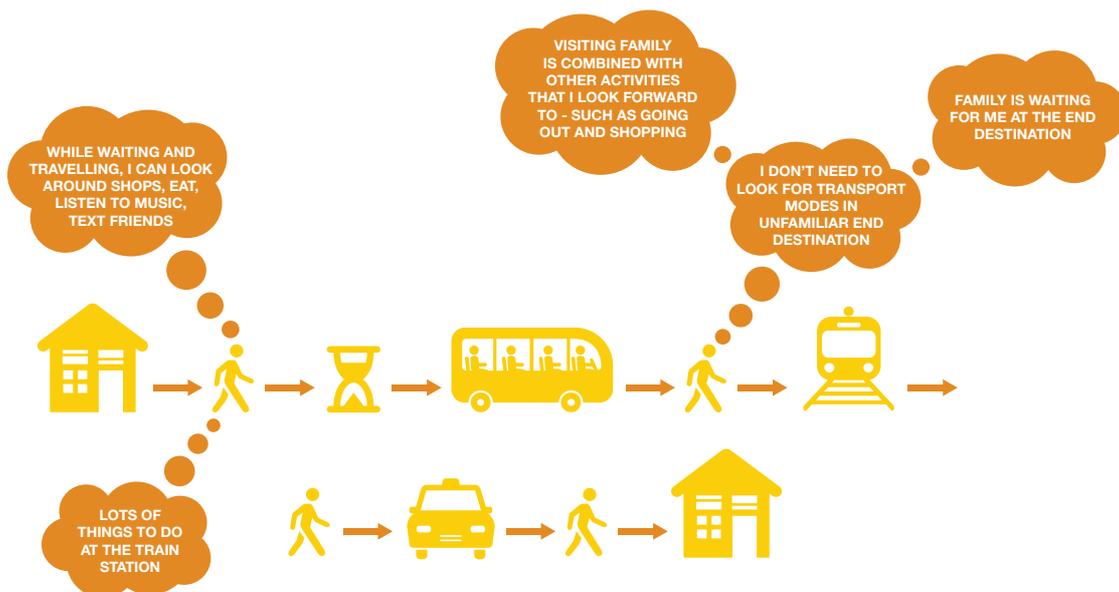


*Figure 11.* Visiting family on the train (Focus Group 4, 2014)

### 4.3.4. Going on holiday

Similar observations can also be made for the journeys that people do in order to go on holiday. Despite the common use of the aeroplane, it was interesting to observe a difference between high/low deprivation areas in terms of their preferred mobility options to get to the airport. In both cases, waiting is not considered as part of the experience of the journey. However, there is a difference in what is considered as expected waiting for a journey abroad. In the case of the train-based journey (see Figure 12), the participant described the whole experience of travelling as part of the holiday and waiting as time for fun and family bonding.
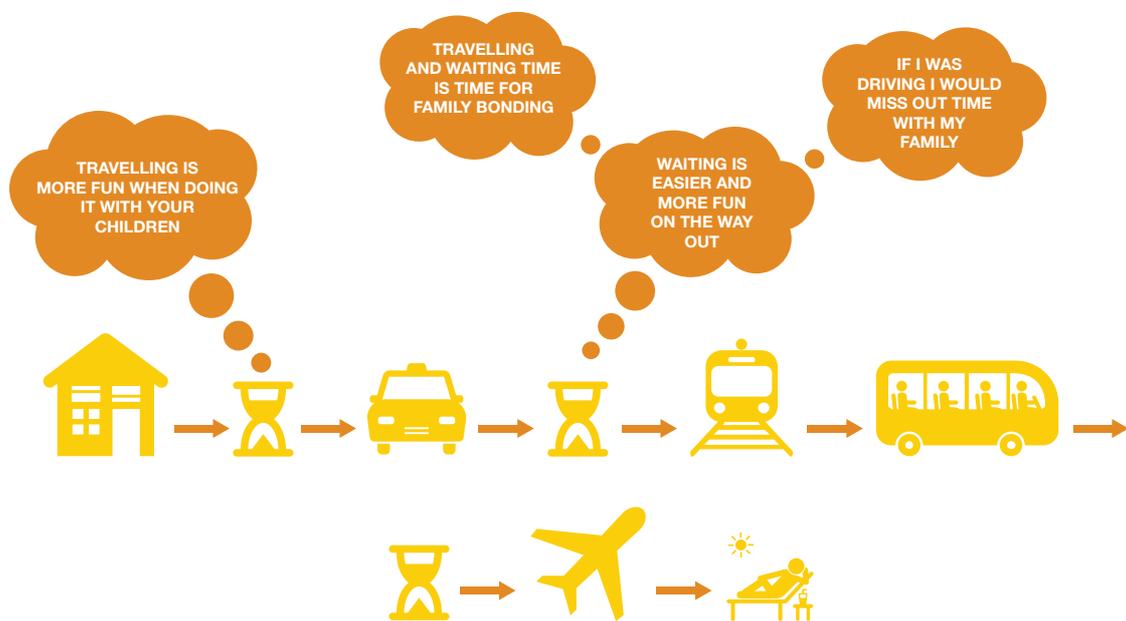


*Figure 12.* Taking the train to the airport to go on holiday (Focus Group 3, 2014)

In the car-based journey, waiting was an expected part of the journey only within the airport premises. In this second case, the prospect of a holiday compensates for the 'lost time' while waiting. In this equation, we also need to consider the lack of alternative transport choices as a significant parameter for the compromise. The availability or lack of relevant infrastructure and services also become significant parameters that motivates people to drive. On the one hand, the lack of available flights from the closer airport made the person travel to an airport further away and thus use the car in order to get there. On the other hand, the existence of plentiful and inexpensive parking makes it easier and more convenient for people to get on the car than the train to get to the airport (see Figure 13).
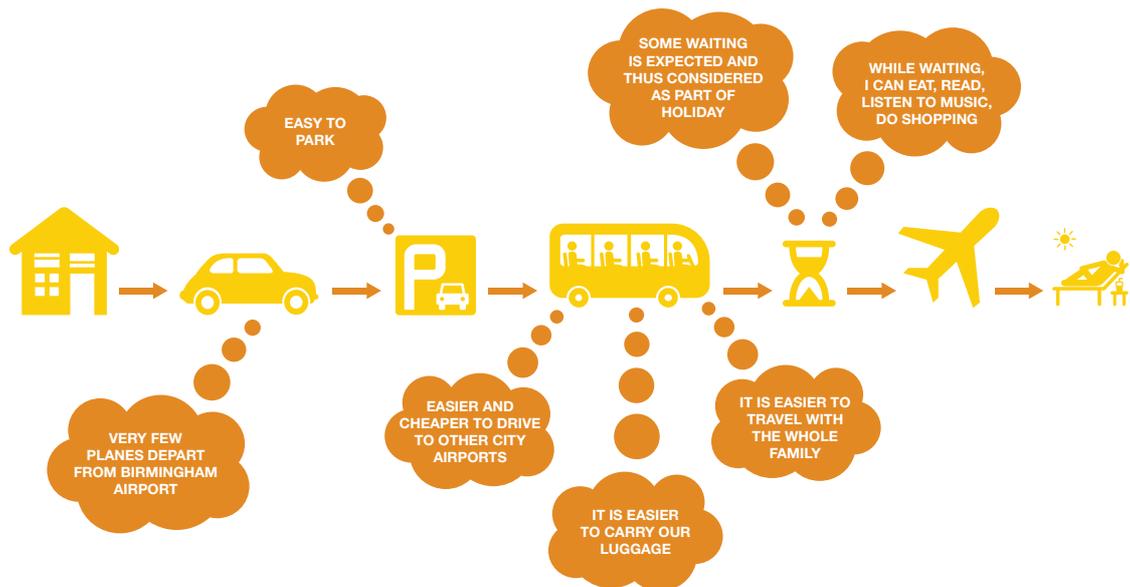
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*Figure 13.* Driving to the airport to go on holiday (Focus Group 1, 2014)

## 4.3.5. Summary

In a nutshell, the combination of a lot of practices and parameters are important in understanding what makes people travel in certain ways and opt for the low-carbon alternatives or not. Thinking of a mobility practice as a means to an end (that is, to do some other practices), but also as an end in itself (that is, as a positive experience during which we can do other things) is actually an important way of understanding but also motivating people to do things differently. For example, understanding that while travelling you can also do other things – e.g. work, read a book, relax, socialise –can contribute in different ways to your perception and experience of 'a good life'. Thinking of other, everyday or more unusual practices (like the ones described above) as part of a wider and more complex set of practices is also important in understanding what makes people opt for their preferred mobility options but also in changing mobility patterns towards more low-carbon directions. For example, linking work to food shopping as part of a car journey versus linking walking the dog with walking kids to school with working from home as part of a walking journey. In all cases, 'saving time' is also an important factor that can motivate people to drive or do things differently, depending on what they perceive as the best way of 'saving time' for them (for an analysis on 'time', see also Katerina Psarikidou, forthcoming 2017). The existence of different infrastructures can make people opt for driving or alternatives. For example, parking appears an important factor that makes it easier

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for people to drive in order to do things, like go to work, for shopping, to the airport. On the other hand, the existence of shops and cafés in stations encourages more people to opt for the experience of travelling by train or bus. Offering a feeling of comfort and convenience has also been an important factor that can make people move differently. Low prices of transport and other services has also played a role in people's transport choices – for example, free car parking and low petrol prices could encourage people to use the car more often. Appreciating the sociable experience of travelling and highlighting the pleasant aspects of low-carbon options, like meeting people, bonding with family and friends and relaxing, can also help change people's travel choices towards a more low-carbon direction.

## 4.4 Changing Mobilities in Birmingham

Our research found that Birmingham is also a city with a lot of opportunities for *changing* Mobilities (see also Katerina Psarikidou, 2015). For example, walking and cycling are increasingly popular across the city, with new funding resources becoming available for the delivery of different 'slow travel' schemes, including 'Walkable Birmingham', 'Big Bike Birmingham' and 'Brompton Bike sharing'. There is also an expanding number of 'sharing schemes' across the city. These include both formal and informal car-sharing schemes –car clubs and Car2Go schemes – as well as more informal arrangements amongst friends and colleagues. Sharing of space and other resources are also becoming increasingly popular in the city. For example, more and more people are involved in food sharing initiatives developed around local food growing projects. And there is an increasing number of information sharing schemes, facilitated through online networks and digital technologies, such as online networks for crowdsourcing information about cycling routes and local food shopping, mobile apps for cycle and bus route planning, etc. Such 'digital schemes' have been pivotal not only for facilitating people's movement, but also for reducing people's need to move, for example, by creating the conditions for people to work from home or other public spaces near their homes, or for accessing their food and other goods via online shopping.

Such examples underline the need to think of Mobilities in a more holistic way, for example, by not only thinking of the physical movement of people and things, but also the movement of information across cities. They also underline the need to think of Mobilities in a more integrated way; that is, by not only thinking of each of these types of movement separately, but also by trying to think that each of these

movements both influence and are influenced by each other.

## 4.4.1. Overcoming conflicts of interests

Pedestrianisation is an interesting case that indicates the significance of overcoming possible conflicts of economic interests that large-scale organisations might have in the city centre. In many cases, pedestrianisation is approached as an obstacle to the economic flourishing of the city centre. Interrupting accessibility by car has been one of the main concerns expressed by stakeholders and local businesses as an obstacle to their economic profitability (Interview MS180713). However, in the long term, pedestrianisation proved to have a very positive impact on local economic regeneration activities. It encouraged more people to walk more often around the city centre, a fact that increased the number of visits to the surrounding shops and their economic profitability, and thus changed the local businesses' initial negative reactions to such infrastructural developments (Walking Tour, 2015).

## 4.4.2. Changing infrastructures: challenging dominant perceptions

Pedestrianisation as well as other projects of infrastructural development can be pivotal for changing dominant perceptions that might discourage people from using low-carbon alternatives. In previous sections (e.g. section 4.3), people described various reasons that may make them feel unsafe when using the bus or walking or cycling across the city. Time, and especially 'saving time', was also an important reason people gave for not using lower-carbon mobility options (see also Katerina Psarikidou, forthcoming 2017). Thus, challenging such perceptions can be key for getting people to move differently. The examples of safety and speed are given below.

### 4.4.2.1. Perceptions of safety

Local stakeholders underlined the significance of pedestrianisation in changing people's feelings of safety across the city. The more pedestrianised areas across the city, the more people use public spaces across the city, the safer people feel to walk and cycle across the city. Smart technologies can also play a complementary role in making people feel safer in public spaces. Remote lighting columns as well as apps for crowdsourcing antisocial behaviour in public spaces were described as pivotal for

increasing people's confidence in using public spaces and public transport options.

Platinum Bus was another example of the way changes in infrastructure and services could help increase levels of safety associated with the use of public transport. In this case, such changing perceptions were achieved again by getting more people to use buses by making them more attractive to non-traditional bus users. For example, high quality leather seating, sheltered bus stops and Wi-Fi connectivity were all available in order to get more people from more diverse economic backgrounds to use the bus, and thus feel safer on it (Birmingham City Council Workshop, 2015).

### 4.4.2.2. Perceptions of Slowness

Platinum Buses were also given as an example of changing people's dominant perceptions of slowness associated with the use of low-carbon options. In this case, not only the introduction of priority bus lanes, but also multi-door boarding and a cashless payment system, have been suggested as key for speeding the experience of bus travelling, and thus meeting people's need to 'not waste' or even 'save time' while travelling (Birmingham City Council Workshop, 2015). Smart technologies for ticketing (e.g. e- and mobile-tickets, contactless payments and swift cards) and online information sharing (e.g. real-time information, route planning apps) have also been helpful ways of saving time: by shortening the process of payment or by providing advice on how to choose the shortest possible cycle or walking route or where and when is the next closest available bus or train.

## 4.4.3. Changing governance structures: increasing funding

Lack of funding has been discussed as one of the key obstacles to developing the necessary smart and other infrastructural developments that would support an alternative mobility system. However, political bravery and re-allocation of political power to local government bodies was suggested as a possible solution to the problem. The prospect of a Combined Authority in Birmingham has been identified as a way to move towards more independent and more powerful local governments in terms of both local decision-making and funding. By bringing together the departments of transport, housing, employment and skills, it would help develop joined-up policies that would also be capable of bringing more independent funding to support such initiatives (Centro Meeting, 2015).

# 5. Conclusions
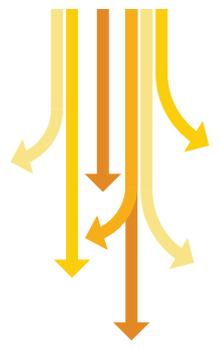
This book has suggested that a new way of thinking about mobilities is essential for not only better understanding but also changing 'Mobilities in the City'.

Contemporary cities are cross-cut by many different types of movements. In many cases, this movement is usually associated with the physical movement of people. This book has suggested that, in order to move towards mobilities for liveable cities, we need to develop a more holistic understanding of Mobilities in the city, by considering the greater diversity of movements – of people, things, information and ideas – and complexity of practices that make us move the way we do. It has encouraged us to consider not only *who* but also *what* is on the move, and not only *how* people, things, information, ideas move, but also *why* they move this way and how they can move *differently*.

Such questions have been central in this book. However, we attempted to address them by following an alternative route that would not just focus on understanding 'why things happen', but also 'why things do not happen'; not only 'what has worked' but also 'what has not worked and why'. And, we believe that Birmingham would be an interesting case that would help us answer these questions, and provide lessons that would be useful for other cities that face similar mobility challenges. We also believed that attending to the voices and experiences of local people – both key stakeholders and  citizens – would be pivotal for developing such a perspective in our understanding and thinking of 'Mobilities in the City'. We realised that comparisons can be a strong tool towards such a direction, for example, for understanding Birmingham's mobility system through the lens of other cities, but also by understanding people's mobility practices through the lens of different journeys that people might take in order to conduct the same practices.

More specifically, our discussions with key stakeholders helped us understand the significance of 'landscape developments' in changing 'Mobilities in the City' (see Frank Geels and Johan Schot, 2007). They have helped us understand that there needs to be a combination of triggers that could motivate people to move differently. However, such triggers are often about some large-scale political, economic or wider infrastructural developments that, in most cases, do not happen in isolation from

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each other. We have learnt that moving towards a low-carbon mobility system is not just about developing the right infrastructure – either by re-engineering the infrastructure of the city or by retrofitting it into its current form. It is also about the wider political, economic and financial interests and developments, for example, from congestion and parking charges to political power of both leaders and voters to availability and wise investment of funding.

Our discussions with citizens helped us better understand the role of 'the everyday' in shaping and changing 'Mobilities in the City'. They helped us realise that in order to encourage people to do things differently, we need to pay more attention to the practices that are linked to people's wellbeing. We noted that time, safety, comfort and convenience all influence people's mobility choices. However, we also realised that, despite most people associating them with the use of a car, all above can also be pursued through the use of other mobility options. Thus, challenging such dominant perceptions and making people realise the ways they can be fast, save time, feel safe and comfortable while moving differently is essential for getting people to change their mobility practices (see also Katerina Psarikidou, forthcoming 2017).

In all the above cases, we have understood that changing 'Mobilities in the City' means changing other things, such as the infrastructural and governance mechanisms that support mobility systems. Our discussions with local stakeholders helped us understand that changing people's perceptions and economic interests also depends on changing infrastructures, including digital infrastructures, like the ones we've already mentioned in the book. Changing financial support to such initiatives also depends on changing existing governance structures, and allocating more power and independence to local authorities.

Above all, this little book has helped us realise that changing 'Mobilities in the City' is about changing the way we think about Mobilities. Changing Mobilities is not just about moving differently, but also thinking about movement differently. And, that moving differently means moving towards a more holistic and integrated approach through which we can also be more creative and imaginative in the way we move.

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