





Getting around Leigh

Social research with older and disabled people

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November 2023





The Sustainable Housing & Urban Studies Unit (SHUSU) is a dedicated multidisciplinary research and consultancy centre in the School of Health and Society at the University of Salford. It brings together researchers drawn from a range of disciplines including social policy, housing, mobility, urban geography, environmental management, psychology, social care, and social work



Healthy Active Cities is a research group at the University of Salford that was formed in 2018 to bring together researchers and stakeholders to develop research on transport in Greater Manchester and beyond. The group has a particular interest in sustainable and active travel technologies and practices.



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TfGM helps people and places thrive by enabling seamless, safe and sustainable journey for all and is planning for a more sustainable future by improving Greater Manchester's transport system so that growth will not increase overall motor-vehicle traffic.

TfGM is delivering the Bee Network, Greater Manchester's vision for a fully integrated, London-style transport system joining together buses, trams, cycling and walking by 2024 with rail incorporated by 2030.

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Cover illustration: This image conveys our experience on a research visit to Leigh. The participant (P25) took us around Firs Park on his all-terrain mobility scooter. This is an area of greenspace that includes a lake and is close to residential properties and half a mile from the town hall. While passing through, he stopped to talk to local fishermen who he evidently knew.

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Foreword

I welcome this timely report on mobility at the neighbourhood level. Sustainable neighbourhoods which make walking, wheeling and cycling the first choice for local travel and accessing public transport for longer trips are central to our ambitions for delivering the Bee Network in Greater Manchester, including our aim for half of trips made by Greater Manchester residents to be made by walking, cycling and public transport by 2040.

Every journey starts at a local level, and our Bee Network will be reliant on having attractive, accessible local streets to support local active travel trips and trips to access the public transport network. We know from local travel diary data that half of trips made by Greater Manchester residents are 2km or shorter, and many of these shorter trips will happen in local neighbourhood settings. At present 39% of these trips are made by car. This is concerning because these trips have a negative impact on local areas, making streets noisier, busier, less safe and less healthy, putting people off travelling actively and contributing to high levels of inactivity. We are not against car ownership but want to ensure appropriate use, making the street environment better for everyone and ensuring space for travel by car for situations where it is really needed. However we also recognise that access by car or other private vehicle is for many with mobility issues equally important.

We also know that there are inequalities in how people access and experience the transport system. For example, we know that older and disabled people travel less often and are less satisfied with their experience when they do travel than younger or non-disabled people.

Dr Richard Nickson Programme Director

Transport for Greater Manchester



With an ageing population and over half a million

disabled people in Greater Manchester (around 1 in 5 of the population), it's important that we design local areas that meet the needs of these groups. This report enhances our understanding of what we need to do to achieve this as we move to deliver the Bee Network and address inequalities in travel.

We are working to deliver a universally accessible active travel network, and our Streets for All Strategy aims to make streets welcoming and safe places for all people. By designing streets that meet the needs of these older and disabled people, we will create streets that benefit everybody. We are already doing a lot to make active travel more inclusive in Greater Manchester, for example by making it easier to cross busy roads with new and improved crossings, and lobbying for legislative changes that would enable us to stop obstructive pavement parking and introduce low-cost high-impact side road zebra crossings in local areas.

The findings of this report will help us refine this work. They are not policy or our strategy but they emphasise the need to think more holistically about local travel, going beyond reliance on technical design standards and considering the person in the wider environment. This is not just about transport, but liveability. TfGM may have commissioned the work, but the implications go much wider. Thank you to the University of Salford for this thought-provoking piece of research.



Executive Summary

Context

There is increasing interest in approaches to mobility that focus on the local neighbourhood level. Low Traffic Neighbourhoods, active neighbourhoods and School Streets are examples that seek to address the social and environmental challenges associated with transport by making changes to public spaces where people live. Another example, the 15-minute neighbourhood concept considers the location of shops and services with a view to enabling people to easily access what they need on foot.

Older and disabled people

Older and disabled people face particular challenges in relation to mobility, and these can limit their potential to fully participate in society. As people become older, they are more likely to experience impairments to their mobility and may have to change their routine, potentially losing their driving licence or needing support to walk or cycle. At a time in life when vulnerability increases and car ownership declines, walkable neighbourhoods become more integral to quality of life, as does having shops, libraries, cafés and other social infrastructure within walking distance. Taking a Universal Design approach means seeking to identify the elements of public space that act as barriers to some parts of the population and, rather than providing adaptations on a case-by-case basis, responding with designs that are inclusive of the whole population.

Social infrastructure

Social infrastructure is the places and spaces that enable people to make social connections and communities to thrive.

Transport planning is closely related to social infrastructure. Firstly, transport provision shapes places and can make social interactions more, or less, likely. Secondly, transport provision, including public transport, walking and cycling, is a major factor in enabling people to access squares, parks, cafés, community centres and other community and social places. Since older people and children are likely to spend more time in their locality, local social infrastructure becomes particularly important.

Third places, differentiated from the first and second places of work and home, are therefore important sites of interaction.

Car dependency

Mobility challenges at the neighbourhood scale can be understood in the context of car dependency, which describes the extent to which people rely on cars to access what they need. Approaches such as active neighbourhoods and 15-minute neighbourhoods attempt to address car dependency by creating places in which people feel more comfortable walking and cycling and seeking to provide shops and services closer to where people need them. School Streets are another example, at a smaller scale, of initiatives that restrict where people can drive and park in order to make walking and cycling more attractive.

Method

Our research focused on the town of Leigh in Greater Manchester. The conurbation comprises ten Greater Manchester councils and the Greater Manchester Combined Authority, with a population of over 2.8 million people. Leigh, in Wigan Borough, has a population of 43.300.

Our research is qualitative and explorative. We have asked open questions, encouraged people to speak in an open way about how they get around Leigh and invited them to guide us around the area and talk about how they feel about places along the route. The research consisted of

- semi-structured qualitative interviews with nine stakeholders involved in policy and advocacy connected with older and disabled people,
- a workshop with transport policymakers in Greater Manchester,
- a drop-in workshop in Leigh Library with 19 local residents, and
- walking interviews with eight residents, three of whom had also attended the workshop.

The interviews were transcribed and analysed thematically, and the workshops were recorded through detailed notes and a set of maps, on which participants indicated points of interest in the discussions around mobility and social infrastructure.

Findings

Leigh: A changing town

Leigh has a rich history as an industrial town, with coal mining and textile manufacturing bringing industry to the area through the 19th and 20th centuries. As the nature of industry changed, most of the collieries and textile mills closed in the 20th century, leaving behind remnants in the form of railway lines, footpaths, pitheads and placenames. The closure of the two rail stations in 1954 and 1969 left Leigh the largest town in Greater Manchester without a railway station. Our participants felt that there had been a gradual decline in the fortunes of the town, losing trade from industrial workers as well as elements of the transport infrastructure that went with it, the network of bus routes being an example. Participants commented on less tangible changes relating to the vibrancy of the town: 'Leigh town centre was buzzing'.

Like many other towns, Leigh has been subject to wider economic trends, including the closure of high-street stores, the growth of online services and an increase in retail and services outside the centre. Our participants felt that the shopping experience had declined and that empty units, takeaways and charity shops were increasingly dominating the town centre. Whilst they also reflected that opportunities to access entertainment, arts and culture were, in their view, poor, they also mentioned more positive features such as the market and the greenspaces around the town, such as the canal and Pennington Flash with its new café. There was a sense that shops and services were increasingly to be found in locations outside the town centre, in two retail parks in particular. These locations were difficult for participants without cars to get to.

Their perceptions and experiences aid understanding of the ways in which changes in the configuration of urban space affect walkability. In discussions about the ways in which people get around, the quality and appeal of the public realm is an important factor.

An environment for walking and wheeling

It is important to participants that they can access social infrastructure and the shops and services they need. Their relationship with walking was varied and complex. Some participants would walk for miles in and around Leigh for leisure on a regular basis but would be less likely to consider walking to the shops. Some would walk to get out of the house and to feel part of the community. In comparison with the greenspaces around Leigh, the urban environment was less appealing. Having more social infrastructure would help to make the town centre more appealing; having places to stop and visit along the way would make it more appealing to walk around the area.

Barriers to walking and wheeling

Participants described elements of the public realm that concerned them, made them feel unsafe and in some cases deterred them from walking in some areas. Whilst

many of these barriers will be familiar to policymakers in this field and would apply to the general population, the impact upon older and disabled people tends to be more pronounced and more likely to act as a literal barrier. These barriers include obstructive and inconsiderate pavement parking, poorly maintained pavements, inconsistent dropped kerbs, junctions and roundabouts with multistage crossings, including one 'kamikaze roundabout'.

One participant, for example, described an instance when the presence of a vehicle parked on the pavement meant there was insufficient space to safely mount the kerb in their electric wheelchair. Weather and seasonality are important considerations: an example being a particular intersection that became so muddy that it was impassable and required a longer detour around a multistage crossing.

Whilst these issues relate largely to mobility impairments, it is also important to consider the experiences of neurodivergent people and people with sensory impairments. There is a challenge here in providing an environment with ample facilities that is at the same time not overly complex and overstimulating.

Personal safety and comfort were also a significant issue, with participants concerned about the presence of groups of people around which they felt unsafe. Participants valued places to sit and rest en route, use the toilet and get refreshments, and for some the extent of these facilities meant the difference between making a journey or not.

Whilst not all of these aspects of urban space are parts of the conventional transport planning toolbox, they highlight a close relationship between walkability, public spaces and social infrastructure.

Public transport

Public transport was an important part of participants' lives, and they were aware that they would be likely to become more dependent on it as they aged. Some services, such as the V1 bus, linking Leigh and Manchester City Centre, were seen in a mostly positive light, but on the whole participants felt that the quality of public transport services had declined in recent years, making journeys more complex and challenging.

Accessibility is an issue that applies to older and disabled people in particular. This relates not only to being able to board buses and have space for wheelchairs, although this is clearly important, but also to the reliability of the services and the information available. Disruptions in services are particularly problematic for people who need to take time over their journeys, manage energy budgets carefully and/or seek out particular services to ensure that they have adaptations for mobility impairments.

There are opportunities to improve the ability of public transport to link people with social infrastructure by better connecting the town centre with the out-of-town shopping locations and providing orbital services that connect neighbourhoods.

The neighbourhood scale

The research has implications for those considering mobility at the scale of the neighbourhood. It highlights the importance of the quality and attractiveness of the public realm. In this sense, active neighbourhoods should be about more than traffic calming and rerouting. They should also include enhancements in walkability and the creation of places that people can enjoy.

Distance and scale are important components of such approaches, and the views of older and disabled people highlight the complexity in applying them. Not only will some groups need longer to cover distances, but a lack of amenities in the public realm can make even the shortest distances difficult. This means that those basic facilities like benches, toilets and refreshment stops are an important part of making everyone feel welcome in neighbourhoods and district and town centres.

Walkability is important not only where people live but also in areas people visit, in this case Leigh town centre. Although our discussions with Leigh residents initially focused on neighbourhoods and the neighbourhood scale, they highlighted the extent to which people relied on other areas such as greenspaces and district and town centres. To some extent this indicates a limitation of a focus on neighbourhoods, but it also highlights the importance of connectivity between neighbourhoods and other centres of activity where social infrastructure is available. It is important, therefore, to think about what can be reached on foot from public transport nodes, such as Leigh Bus Station, and to ensure that public transport is available to connect neighbourhoods with such centres. Such approaches can reduce car dependency by making it easier to get by without a car and giving people the opportunity to enjoy journeys by walking or wheeling.

Recommendations

Recommendations are provided in Chapter 8, and structured into the following sections:

- how we think and talk about places;
- how we create sociable places;
- how we plan for older and disabled people;
- how we provide transport services.

1. Introduction

There are many reasons for those who make decisions about neighbourhoods to be interested in transport and mobility. People rely on transport provision to get around. Whether crossing the city to get to work or making a quick trip on foot to the local shop, their journeys will be shaped by decisions about a wide range of local issues.

Some of these – like speed restrictions, pavement parking, public transport fares and routes – are understood to be 'transport' decisions. Other issues, such as anti-social behaviour, the quality of the public realm, and the location of shops and services, may seem like nothing to do with transport but they nevertheless have an impact on how people get around and whether they can access what they need.

The public realm, and the social infrastructure it hosts, is tightly bound up with provision for transport and mobility. Cafés, community centres and places of worship are of limited use if people cannot access them, whether that's because the bus does not go there or because people do not feel safe walking in the local area. Even if a neighbourhood is 'walkable', this is only as useful as there are places to walk to. Where traffic flows, how fast it moves, and where it is parked are all factors that shape places and affect how much people want to spend time there.

It is for these reasons that the neighbourhood has become a focus for transport planning and, as we will discuss, concepts like Low Traffic Neighbourhoods, 20mph zones, 15-minute neighbourhoods and School Streets have been prominent in public discourse.

Transport policy is also of national and international concern. It is a major contributor to environmental issues and these, in turn, impact upon health and social inclusion. At 24%, road transport is the largest sector in terms of UK

Greenhouse Gas emissions (Department for Transport, 2022). In relation to air quality in Greater Manchester, transport contributes 65% of nitrogen oxides and 79% of particular matter (Greater Manchester Combined Authority, 2016). The potential for policies enacted at the neighbourhood level to reduce these impacts on the global and local environment is another reason for policy makers to be interested in mobility at this scale.

In designing and planning neighbourhoods it is important to think about the difficulties particular groups may face in getting around and our previous research (Larrington-Spencer, Sherriff and Price, 2021) highlighted the importance of understanding the ways in which older and disabled people may find urban environments unwelcoming and difficult to navigate. In this report, we detail research conducted in Greater Manchester, including a case study in Leigh in the Borough of Wigan. Our discussion draws on stakeholder interviews, drop-in workshops in Leigh library, and walkalong interviews with older and disabled residents of Leigh.

We begin (Chapter 2) with an exploration of the particular challenges faced by older and disabled people in getting around, and place these within the context of car dependency and neighbourhood approaches to mobility. We then present (Chapter 3) a thematic analysis of our stakeholders interviews. Over the next three chapters, we report our research in Leigh, starting with an overview of the area and the data collection (Chapter 4), discussing the ways in which Leigh has changed and the implications for mobility and social infrastructure (Chapter 5), and considering the factors that shape the extent to which the town facilitates walking and wheeling (Chapter 6). We discuss cross-cutting themes (Chapter 7) and provide a set of recommendations that follow from our research (Chapter 8).

2. Context

2.1 Older and disabled people

For older and disabled people there are important considerations in relation to mobility, how these groups experience it, and the subsequent impact on quality of life.

There are currently 12.5 million people in the UK over the state retirement age of 65 (Office for National Statistics, 2019), around a sixth of the population. There are 16 million people with some form of disability. Older people (over the state pension age) are more likely to be disabled, with 45% of this cohort classed as disabled in comparison with 23% of the working-age population (Kirk-Wade, 2023), and 59% of those aged over 80 are classed as disabled.

Not including those made by 17-20-year-old, people over 70 make the fewest trips as a driver (Department for Transport, 2023b). Despite local public transport being free for them to use, 31% of over-65s in England never use public transport and 27% only use it once a month or less often (Holley-Moore and Creighton, 2015).

When it comes to getting around, disabled people face particular challenges. In all age groups, disabled people drive less than non-disabled motorists and disabled people are more likely to be passengers than non-disabled people (Department for Transport, 2023a). Car ownership amongst disabled people is lower than that in the general population, and car trips are more likely to be made as passengers. Those in the lowest income quintile, which includes a higher proportion of disabled people, have less access to a car, with 40% having no access. This figure compares with an average of 20% across all households (Lucas et al., 2019). Whilst less likely to drive than the general population, older and disabled people may rely on cars in other ways: carers may call on them or provide transport for certain shopping, healthcare, and other trips.

For older people, physiological decline can result in 'subjective perception of physical vulnerability and a sense of fragility at the psychological level' (Bandini and Gasparini, 2021, p561). At a time in life when this sense of vulnerability increases and car ownership begins to decline, the importance of walkable neighbourhoods becomes ever more integral to quality of life.

A recent review article found that disabled people make fewer trips (estimated at 10-30% fewer) and that these trips tend to take more time and cover shorter distances (Park et al., 2023). The severity of the disability and of conditions relating to age, they found, tend to accentuate these outcomes, and, overall, people with disabilities drive less and walk less and are more likely to rely on

ride sharing, getting lifts, public transport, paratransit and taxis. Although they are more likely to rely on public transport, issues with service provision such as expense and reliability can make it difficult to use. These challenges relate not only to physical disabilities but also to visual and cognitive impairments (Park et al., 2023).

For Zhang et al (2023), there are implications for how we create liveable cities for healthy ageing, including cognitive health. They highlight a set of issues that include practical and spatial considerations, such as locating facilities within walking distance, as well as issues with design of the public realm, noting the potential for cognitive overload to be problematic in relation to complex street networks. Getting around can take higher levels of planning and effort, and there is a need to carefully consider evaluation, rights of way, accessibility of paths and distance to public transport (Park et al., 2023).

Conversely, there are public health opportunities related to the development of active travel. An increased use of motor vehicles for local journeys is associated with more sedentary lifestyles and an increase in health-related conditions such as obesity, diabetes and hypertension (Saunders et al., 2013). A switch to active modes of transport can improve these outcomes, while the related reduction in traffic can reduce air pollution and related respiratory conditions, along with reductions in injuries and deaths as a result of road traffic collisions (Douglas et al., 2011). As older and disabled people may be more susceptible to health-related issues and road traffic danger, promoting low-traffic measures in residential areas where older and disabled people live can provide a range of benefits for health and enable people to feel safe in their neighbourhoods.

In considering the needs of older and disabled people, then, it is important to consider the ways in which places are designed and planned. Universal design is an approach that seeks to provide buildings and infrastructure in line with the needs of the whole of society. It arguably responds to two primary challenges: legal challenges to discriminatory practices and market-driven responses to ageing societies (Preiser and Smith, 2010). While the exact terminology, otherwise referred to as 'inclusive design' or 'design-for-all', amongst others, and the scope of universal design may be contested, the basic premise is to create 'products, environments, programmes and services to be usable by all people, to the greatest extent possible, without the need for adaptation or specialized design' (Preiser and Smith, 2010, p34). This approach is built on seven principles: equitable use, flexibility in use,

simple and intuitive use, perceptible information, tolerance for error, low physical effort, and size and space for approach and use.

2.2 Social life and social infrastructure

In our exploration of mobility at the neighbourhood level, we are interested in the neighbourhood as a social world and the potential for roads, streets and other transport infrastructure to influence and shape this world. In considering this, we link to and build upon literature around social infrastructure and third spaces.

There are (at least) two dimensions to the relationship between transport and social infrastructure. Firstly, the ways in which transport provision shapes places and renders them more, or less, sociable – or makes social interaction more, or less, likely. Secondly, the potential for transport to provide access to social infrastructure such as squares, parks, cafés, and community centres. Before considering these, we provide brief descriptions of social infrastructure and third spaces.

Social infrastructure is the places and spaces that enable people to make social connections and communities to thrive. Klinenberg (2018) describes it as the physical conditions that determine whether people have opportunities to develop social capital. Social capital is a concept commonly used to measure relationships and personal networks. 'When social infrastructure is robust,' he argues, 'it fosters contact, mutual support, and collaboration among friends and neighbours' (Klinenberg, 2018, p5).

Yarker (2022) considers the relevance of social infrastructure to older people. She argues that social infrastructure is particularly important for children, older people and those with limited mobility, since they are more likely to spend more time in their locality. Changes in a locality and the loss of social infrastructure, she continues, can be keenly felt by older people: they may have lived in that place for long periods and hold particular memories of the place. Closure of infrastructure – whether churches, community centres, parks, pubs, post offices or community centres (Jeffres et al., 2009) – is about more than a loss of amenity; it is also about connections to place and a loss of that 'scaffolding that enables us to build and be part of a sense of community where we live' (Yarker, 2022).

A related concept is the 'third place', something developed by Oldenburg in 1989 and differentiated from home and work, the first and second places. The term describes places in which people have opportunities to socialise and expand their networks (Alidoust, Bosman and Holden, 2019). Although social infrastructure and third spaces are often used interchangeably, not all elements of social infrastructure are third spaces. In order to be third spaces, venues need to be accessible. When thinking about accessibility, location is important, but it is not the only consideration. Yarker points out that urban change and

processes of gentrification can lead to a spread of new establishments that could act as third spaces, but older people can sometimes feel culturally excluded from these new commercial spaces (Yarker, 2022).

To Klinenberg, transport spaces are unlikely to be social infrastructure. He argues that transport systems are planned to promote efficiency and tend to discourage interaction. He acknowledges, however, that public transport can be a form of public space and sees potential for transport infrastructure to be more sociable. Roads and streets, he points out, could be made 'vibrant social infrastructures for pedestrian activities' (Klinenberg, 2018, p21).

Prytherch (2022) builds upon this idea, inviting us to imagine a social infrastructure street, referring to Bröemmelstroet's notion of taking a 'living room perspective' for 'people and places rather than flow' (te Brömmelstroet et al., 2017, p11). He points to growing movements for safe and equitable access for all users and increasing 'liveability'. The logic of a focus on vehicle throughput, he argues, is being called into question as both people and investors 'discover the urban core' (Prytherch, 2022, p697). He gives examples whereby streets have been reconceptualised, re-engineered for multiple modes, temporarily 'tak[en]-over for conviviality', or transformed into public social spaces. Latham and Layton invite us to think about the 'social dimensions of functional spaces such as bike lanes and sidewalks' (2019, p14), including them in the list of public spaces to be studied as social infrastructure.

These points all relate to the potential for transport and mobility spaces to be a form of social infrastructure. There is also a wide-ranging literature about transport-related exclusion and transport justice. These concern the ways in which transport provision, in its broadest sense, enables people to access what they need: that is, the potential for transport to facilitate access to social infrastructure.

Transport-related exclusion is an important consideration when thinking about social infrastructure: if there is ample social infrastructure, can everyone make use of it? Even if there are many community centres, libraries and affordable cafés, they are of limited use if people cannot get to them, whether due to poor walking and cycling infrastructure or expensive public transport. For older and disabled people, as we explore in this report, there are other factors that relate to accessibility and determine whether a journey can be made on foot. These include the provision of toilets, places to rest, and sources of water en route (Baldwin and Stafford, 2019).

2.3 Car dependency

The notion of car dependency provides a lens though which to view the challenges described above (Newman and Kenworthy, 2000; Hickman and Banister, 2014). Commentators point to a vicious circle in which urban form is shaped around motor traffic, sometimes dubbed 'carchitecture' (Schiller, Bruun and Kenworthy, 2010) or

referred to as car-centric planning. As a result of the roads being dominated by cars, vans and lorries, walking and cycling can become less attractive and public transport stuck in the same queues as the car. As out-of-town locations with free parking become more attractive to those with access to a car, smaller, local places for shopping, entertainment and leisure struggle to stay financially viable. As increasing numbers of journeys become difficult or impossible without private transport. the car, it is argued, can 'create the conditions of its own necessity' (Watson, 2012, p492).

There are clear environmental and social implications. Firstly, society becomes increasingly locked into patterns of travel that are energy-intensive and contribute substantially to climate change and local air pollution. Secondly, there are high levels of road deaths and serious injuries associated with road traffic. Thirdly, those without access to a car may struggle to access what they need to participate in society. This latter situation is referred to as transport-related social exclusion. Research has demonstrated that those who are least likely to have access to the benefits of private car ownership are most likely to suffer from the worst impacts of the transport system: they are both 'less travelled' and more 'travelledupon' (Sustainable Development Commission, 2011, p5).

Perhaps less tangible but no less important are the ways in which high levels of car use and dependency on motor vehicles appear to make society more forgiving of the impact of car use. Sloman argues that the pervasiveness of the car instils a cultural acceptance of its costs (Sloman, 2006). Walker, Tapp and Davis (2022, p16) term this 'motonormativity', following a study that demonstrated that 'driving automatically receives systematically biased treatment across society so as to favour the needs of a majority'.

Whilst the notion of car dependency is compelling, an over-reliance on the concept could mask some of the complexity behind how people make decisions about transport. It prompts questions around what counts as dependence and what instead reflects preference and habit - 'car use is associated with both instrumental and affective emotions' (Steg, 2005, p153), i.e. people drive because they have to but also sometimes because they want to. After all, much modal shift policy and research is premised on the understanding that people make journeys by car that they could otherwise make by public transport or active modes (Scheepers et al., 2014).

Notwithstanding this complexity, there are instances where car dependency is particularly pronounced and leads to what has been referred to as forced car ownership, an issue particularly associated with those on low incomes who retain a car even though this may mean compromises in other areas of the household budget. Curl, Clark and Kearns (2018) observe that this is often evident in relatively deprived urban areas and especially amongst those with children, who face challenges around multitasking and multiple responsibilities. Klein, Tran and Riley (2020) note that householders who experience

precarity in employment and housing have an incentive to retain the flexibility of car ownership, especially if public transport is expensive. We have already noted that older and disabled people can be reliant on cars, whether directly or in the form of lifts from friends and family or visits from carers.

2.4 Neighbourhood approaches to mobility

There has been growing interest in approaches to mobility focused at the scale of the neighbourhood. The idea of working at this scale to reduce motor traffic and promote active travel has precedents in the Dutch 'Woonerven' of the 1970s (Steinberg, 2015), Newcastle-upon-Tyne's 'environmental areas' (Watson, 2021) around the same time, and the UK 'Home Zones' in the late 1990s (Larrington-Spencer, Sherriff and Price, 2021).

Here, we discuss three examples of such approaches and place them in a Greater Manchester context: Low Traffic Neighbourhoods (LTNs), 15-minute neighbourhoods, and School Streets. We also comment on the role of public transport.

Low Traffic Neighbourhoods

LTNs have become more common in the UK, and in London in particular, over the last ten years. In 2014, 'Mini Hollands' in London involved the allocation of budget to support making places more attractive for walking and cycling, and this included the placement of modal filters on residential streets with the intention of stopping rat running. These are seen as a template for the development of LTNs in London and other cities (Dudley, Banister and Schwanen, 2022).

In Greater Manchester they have been referred to as 'active neighbourhoods', and the Greater Manchester Transport Strategy 2040 refers to these filtered neighbourhoods. An aspect of the Bee Network, they are now being implemented in districts across Greater Manchester. They are an important element of TfGM's broader transport strategy, Streets for All, a sub-strategy of the 2040 Transport Strategy. The Streets for All strategy is based on the ambition that 'our streets are welcoming, green, and safe spaces for all people, enabling more travel by walking, cycling and using public transport while creating thriving places that support local communities and businesses' (TfGM, 2021b, p5). It is built around a typology of streets, allocating them as Motorways and Strategic Roads, Connector Roads, High Streets, Active Neighbourhoods, or Destination Places. Each has a particular focus, and policy priorities are matched to spatial scales. Connector Roads, for example, have particular policies that relate to traffic flow. The aim is for active neighbourhoods to provide 'new cyclable and walkable areas [that] will contribute to the wider Bee Network plans, creating a joined-up cycling and walking network for all residents across the city-region' (TfGM, 2021c).

In Greater Manchester, active neighbourhoods have been proposed in a number of locations. Of the 20 schemes listed under TfGM's Bee Network, four have been completed, 13 are in development, with two planned and one under construction. The schemes have attracted both support and criticism from local residents (Slater, 2023). Objections tend to reflect a number of concerns, including longer journey times and increased congestion on local roads near schools. In some cases traffic calming measures, such as planters, have been vandalised as a result (Tweed, 2023), and schemes have been cancelled (Statham, 2021).

The extent of implementation of LTNs has been greatest in London. A study of schemes implemented during the Covid-19 lockdowns found that they were leading to reduced car use and increases in walking (Aldred and Goodman, 2020). Some research indicated that residents of Lambeth started driving less once their area became an LTN (Goodman et al., 2023). Researchers found that the first wave of London LTNs had been 'broadly equitable' (Aldred et al., 2021). They did find, however, that the district-led approach had left a third of London districts without any LTNs and noted that these were the most car-dependent and car-dominated areas with lower public transport accessibility. Research focused on health in the outer London schemes found that living close to Mini-Holland interventions was consistently associated with an increased duration of active travel in the preceding week, with most of the increase coming from walking (Aldred, Woodcock and Goodman, 2021).

One of the concerns expressed about LTNs is that they could divert traffic, and therefore pollution and congestion, into neighbouring areas and, relatedly, that they are often placed in wealthier areas (Dudley, Banister and Schwanen, 2022). Politically speaking, the schemes have revealed divisions, commonly resulting in what Dudley et al refer to as a 'dialogue of the deaf' between those arguing that people have the right to drive on public roads and, on the other hand, proponents of walking and cycling, who argue that active travel becomes more attractive.

Given these concerns, there has been some debate around whether LTNs prompt traffic displacement or evaporation. Displacement implies that traffic is redistributed to neighbouring streets, rather than reduced. Evaporation indicates an overall reduction in traffic. If LTNs largely displace traffic, then, we might expect a negative impact upon neighbouring areas and boundary roads. Research on schemes that reallocate road space to walking and cycling, rather than LTNs per se (Cairns, Atkins and Goodwin, 2002) established that traffic tends to decrease and found that pre-scheme predictions tended to be 'excessively pessimistic'. Writing more recently and looking at LTNs in particular, Yang et al (2022) used air pollution and traffic data to establish that LTN implementation can reduce NO2 levels and traffic volumes within LTN boundaries, as well as on boundary roads.

15- and 20-minute cities

There has been increasing interest in chrono-urbanism, a concept more familiar in its recent guise as variations upon 15- and 20-minute neighbourhoods and cities. Interpretations and applications vary, but the basic premise is that what people need should be available within a short distance on foot (Calafiore et al., 2022).

The idea has gained popularity amongst planners, arguably related to experiences during Covid-19, which highlighted the amount of time spent on commuting and the lack of amenities at the local level (Pozoukidou and Chatziyiannaki, 2021). Although the concept is arguably a reversal of zoning approaches, which sought to separate business and residential areas, it is not in itself a radically new idea and can in fact be understood as a continuation of long-established planning principles (Papas, Basbas and Campisi, 2023). Examples of applications of the concept include the Superblocks of Barcelona, the 'quarter-hour city' of Paris, and the complete neighbourhood of Portland (Pozoukidou and Chatziyiannaki, 2021). They also feature in Plan Melbourne 2017-2050, which includes the aim of 'giving people the ability to meet most of their everyday needs within a 20-min walk, cycle or local public transport trip of their home' (Pozoukidou and Chatziyiannaki, 2021, p14).

The idea has been subject to some criticism from the public, and there is some 'populist', even conspiratorial (Carmona, 2023), rhetoric around potential restrictions on freedoms and unfounded claims that the plans will involve confining residents to prescribed areas and, in the extreme, issuing travel permits (Campbell, 2023). Even the UK Government, in its 'Plan for Drivers', alludes to stopping councils using 'so-called "15-minute cities", such as in Oxford, to police people's lives' and promises to 'restrain the most aggressively anti-driver traffic management measures' (Department for Transport, 2023c). There is no evidence that 15-minute neighbourhoods are being used in this way, and it is certainly not part of the concept as it was originally proposed (Moreno et al., 2021). Loader (2023) associates these protests with what is popularly referred to as the 'war on motorists' and the 'normalised dominance that the car has assumed over the city' (Loader, 2023, p61). These reactions from activists notwithstanding, policy and research commentators have expressed some concerns about the concept.

How, asks Campbell (2023), given market forces, can it be arranged for everyone to have the opportunity to live in a community offering a full range of amenities? How do we decide what is included amongst the basic amenities, and how do we allow for differences in priorities between, for example, younger and older people (Moreno et al., 2021)? To Hewett and Koksal (2023, p108), variations in measures, demography and services make the topic a 'slippery ideal' akin to sustainability, a concept whose 'malleability' has not aided consensus and application.

Other commentators discuss how to ensure that the neighbourhoods, or cities, are inclusive. Dunning et al. (2023) have conducted modelling to show what happens to assumptions about service accessibility when people cannot walk as fast and therefore cover as great a distance in 10 minutes. Hewett and Koksal (2023, p108) echo this, arguing that a focus on distance might be at the expense of concerns relating to quality and safety. They therefore question whether planners should be using average speeds and distances, given the likely implications of this in terms of excluding older people and those less mobile. Anna Zivarts of Disability Rights Washington (Zivarts, 2021) raises concerns about the impact on disabled people of a focus on journey time, as it 'puts us in the mindset of prioritising efficiency... valu[ing] speed over access'. MacIntyre (2022), writing with a feminist perspective, emphasises the importance of place over efficiency, noting that her research participants valued relaxation, socialisation and feelings of community cohesion.

None of these concerns question the value of having shops and services in easy reach as part of a walkable neighbourhood or city. They relate to how to apply the concept in a way that is fair and inclusive and how to talk about the approach in clear and unambiguous ways.

School Streets

School Streets can provide a hyperlocal solution to enable active travel to school for school-age children. School Streets are schemes that temporarily close roads outside schools to motorised traffic, while allowing pedestrian and cycle access. They may be used in conjunction with other interventions such as walking buses or 'park and stride' and can be used to encourage active travel at the neighbourhood level. They may also provide a common ground between opponents and proponents of other schemes, such as active neighbourhoods (Larrington-Spencer, Sherriff and Price, 2021). Within Greater Manchester there is an aim to create 50 School Streets in order to reduce the number of short journeys made to and from school by car (TfGM, 2021a).

There are, however, issues relating to the inequitable application of School Streets and the resulting impact on the potential for them to be maintained. Many of these schemes rely on volunteers to monitor compliance; in essence they act as gatekeepers to closed roads. As such, there is a need for the volunteers to be available at the start and end of the school day, and we may therefore see unequal provision across Greater Manchester, where parents in less affluent areas may have less capacity to volunteer (Larrington-Spencer, Sherriff and Price, 2021). While the increasing use of Automatic Number Plate Recognition (ANPR) may provide a potential solution to this inequity, the cost of such solutions may be prohibitive for local councils.

Public transport services

Integration of active travel with public transport is seen by TfGM as an essential part of the development of the Bee Network in Manchester (TfGM, 2021c). In TfGM's Streets

for All policy, it is encouraged that active neighbourhoods have public transport links to connect the neighbourhood to the wider region (TfGM, 2021b). Older people and people with disabilities are less likely than the general population to be car drivers, and therefore a reliable public transport network is essential in enabling mobility for these populations.

Andy Burnham, Mayor of Greater Manchester, has seen public transport as a key component of the Bee Network and brought buses in Greater Manchester back under public control to reverse the deregulated system that had been in place since 1989. In doing so, it is hoped that the public transport system will better reflect the needs and priorities of the residents of Greater Manchester. As part of this franchising programme, TfGM aims that by 2030 buses running on orbital routes will operate every 12 minutes, while providing 90% of the GM population with a public transport link to a service that runs every 30 minutes on weekdays that is within 400m of their home (TfGM, 2023a). Additionally, a partnership with Network Rail has resulted in an agreement to improve the integration and accessibility of Manchester and Salford's rail stations, while a longer-term goal exists to make all stations within the city-region accessible by 2025 (TfGM, 2023b).

2.5 Terminology

Throughout this report we have endeavoured to use terminology that reflects how people would prefer to be referred to, that is inclusive, and that faithfully and accurately represents their views. Various people with a range of lived experiences participated in our research, and we refer to them appropriately (Disability Unit, 2021).

Therefore, we use the preferred term 'disabled people' in line with government guidance on inclusive language, and we use the term 'non-disabled' rather than alternatives like 'able-bodied'.

While 'walking, wheeling and cycling' and 'active travel' have often been used to refer to non-motorised forms of transport, we use the term 'walking and wheeling'. This is in line with the guidance provided by Sustrans following their consultation with charities led by disabled people (Brice, 2022).

In recruiting participants for the research, we invited them to self-identify as older and/or disabled people. We did not specify a minimum age nor ask people to provide details of their disability. In talking about their experiences, they shared details about themselves when they were comfortable to do so. Rather than focusing on specific impairments and challenges and the responses associated with them, our approach was more akin to universal design. That is, we explored the complexity of experiences of older and disabled people and identified the ways in which social infrastructure and the public realm could better reflect their needs. In doing so, we recognise that this cohort includes a wide range of life experiences and conditions and that, taken together, these can inform the development of inclusive places for all.

3. Social and walkable neighbourhoods

In this chapter we consider the views of a selection of stakeholders who work with older or disabled people as part of their professional lives, or as advocates for these groups. Some of the stakeholders, being older or disabled themselves, have lived experience.

Our findings from discussions with stakeholders relate to how older people and disabled people relate to, use, and contribute to neighbourhoods. We begin with an exploration of social spaces and the ways in which people feel part of, and excluded from, neighbourhoods and communities. We then consider issues of design and configuration that determine the extent to which people can freely move around their local areas and consider the impact this has on those individuals. In referring to our discussions with stakeholders we use the markers S1 to S13. Brief details about the stakeholders are provided in Appendix B.

3.1 Sociability and third spaces

We discussed with interviewees how people made use of their neighbourhoods. Aside from mentioning access to essential services and amenities such as shops, healthcare, and others, many discussed greenspaces as well as other third places and community spaces. As outlined in Chapter 2, the 'third place' is a sociological concept relating to social places that are not the home (the first place) or work (the second place). These may be hairdressers, pubs, or coffee shops, and, for those with limited financial means, other less commercial spaces can be places to be sociable and build social capital, such as libraries or post offices where people access local amenities and services. These places create feelings of community and social inclusion that could encourage older and disabled people to feel part of their neighbourhoods and encourage mobility and access to their community. Our stakeholders described how people rely on third places to build social capital and avoid feeling socially isolated:

It's somewhere outside of the work and the home that's distinct: a space of sociability, to put it essentially. I think somewhere like that, wherever that might be, I think that would be pretty integral to sit within their 15 minutes. (S2)

The idea of third places generated a lot of discussion, particularly from those interviewees with a sociological or older-age focus. They felt that it is important to have social infrastructure within walking distance from homes.

S2, for example, discussed their work with older people who volunteer in charity shops and noted the importance of the sociable element of this: 'many people that I spoke to that were either leaving the volunteer role for multiple reasons felt holed in the house; that was their full reality' (S2).

Issues of social isolation can be heightened for disabled people, such as those who are neurodivergent, where the external environment can present additional challenges:

So, we know that a hell of a lot of autistic people spend far, far too much of their time sat on their own, in their own bedroom, or in their own flat, or in their own house. Is that good for us? No. Autistic people yearn for the same social interaction and friendship groups as everyone else, and, if we isolate any human being, it's not good for emotional wellbeing, for mental health. You spiral into cycles of depression, of disconnectedness; anxiety becomes heightened. (S8)

Removal of third spaces can therefore result in social exclusion for those that are reliant on them for social interactions. Some stakeholders reflected on the enduring impact of the Covid-19 pandemic upon transport habits and our communities at the local level. This was evident partly in a drop in public transport use and concerns that it may take time for patronage to return to pre-pandemic levels, as noted in the local press (Griffiths, 2021). This also applied to places in the community; some older people were fearful of returning, even on foot, to familiar places, as \$5 outlines:

They [older people] certainly didn't consider themselves like a frail or vulnerable older person, but they have been made to feel more frail and vulnerable because of the pandemic. So, their confidence about going out to spaces, again, that they used to be involved with before has diminished for some people. I think a lot of people are saying it will take them 'Quite a bit to build up to revisiting the spaces' they had been using before, and that wasn't always to do with physical access. In some cases, it was, and some cases people had lost mobility during the pandemic, but in a lot of cases it was more a psychological thing, I think. (S5)

These interviews were conducted through the latter part of 2022 into 2023, when the impact of the pandemic was still being keenly felt. The situation may not feel quite as stark for people now, although Covid-19 remains a serious health threat to the more vulnerable.

It was also felt that the exclusion many feel within their communities is in part due to increasing commercialisation and gentrification. These may result in the removal of third spaces or in seeing them being replaced with more expensive commercial spaces:

So often, you see that there is a provision there that people can use. Some of them, obviously, if you go to the posher end of town, £30 for a cup of coffee - slight exaggeration, but you know what I mean! (S6)

That kind of closing down of public place which has happened, you've got the gentrification, but you've also got neglect. (S1)

So, places like Chorlton and Didsbury where often people feel they don't have the right to be in the neighbourhood because of the nature of gentrification, because it's reshaped the whole nature of the neighbourhood itself. (S2)

Relatedly, S5 discussed the importance of local places in building community and allowing people to build social capital. These may be banks, libraries, doctor's surgeries, or post offices:

Spaces that might not even have like a social remit necessarily, but, particularly for older people, those really mundane spaces, like the post office, like a branch in a bank, sometimes, are the only spaces they go in a day if they're particularly isolated or have mobility issues, things like that. So, they are the only spaces that they will actually see people, and so they're the only spaces they will have an interaction with someone on the desk or maybe bump into. (S5)

Given the current cost of living crisis, particularly around fuel bills, these spaces have a value in addition to their role as social spaces. They become increasingly important in allowing older people and disabled people to access warm and comfortable spaces:

Having somewhere to go, and we're having a lot of conversations at the moment, with the cost of living crisis, things like libraries and places that, particularly, older adults can go where they don't have to have the heating on during the day. They can just go and sit in there and know that they're going to be warm and dry and safe, is really, really important in the concerns of older adults.

As S5 elaborates, these are not simply trips for practical considerations; they are about marginalised communities having the chance to build social capital by engaging with others from similar backgrounds, even if this necessitates travelling beyond the immediate neighbourhood if the

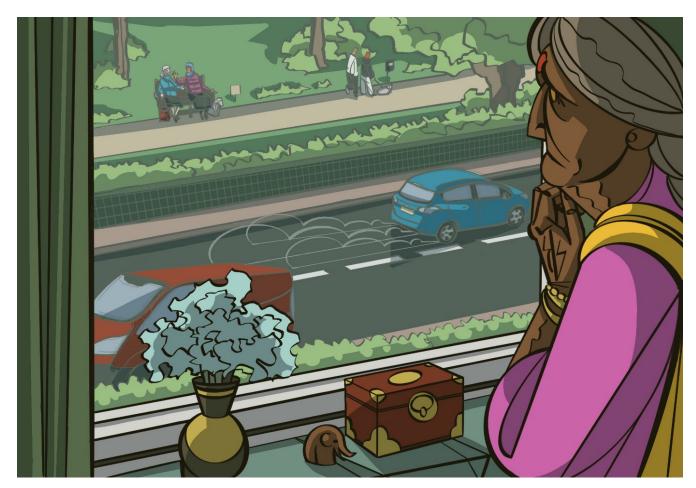


Figure 1 Social isolation amongst older people

places do not exist in their locality. Some people will rely on a car for these journeys and will see this as something that enables them to participate in society:

So, and it's recognising that people want to travel to those spaces because that's where they have social interactions as well. It's not just about accessing food and different products. It's about meeting people from their own community and meeting friends and things like that and feeling some sense of familiarity in them. (S5)

These places are important in fostering a sense of community and of being able to build social capital. S5 gave the example of bank closures, arguing that 'when they close banks, they need to be aware that they are closing a vital space of social infrastructure' (S5).

Taking account of these spaces therefore gives us an opportunity to think more broadly about neighbourhoods, look beyond specific active travel schemes, and consider how we might encourage and develop more active lifestyles, a sentiment echoed in the workshop with GM transport planners.

3.2 Greenspaces as third spaces

As part of the conversation around third spaces, greenspaces were frequently mentioned as places people wanted to access:

I don't think there will be anything unique to the population that we work with beyond what mainstream populations would want: shops, parks, and green spaces. (S6)

That would be my – having greenspace, access to leave that 15-minute area and go further afield, all the fundamentals, and then places to be, really, I guess places to socialise and to participate and contribute. (S2)

This desire notwithstanding, interviewees either did not feel those spaces were designed with older people in mind or felt that accessing them was difficult: 'Greenspaces. I know of older adults; a lot of research has been done that they don't necessarily feel like green spaces and big parks are for them' (S3). By saying 'not for them', participants were referring to their perception that greenspaces are being built, planned, or maintained for specific groups such as families or young people. Local parks may have play areas for children, football pitches, basketball courts, or, increasingly, community gym equipment. There may be opportunities for less strenuous activities, such as bowls, but interviewees felt that there can be little opportunity to just be in that space and that this can affect older people:

Parks and green spaces you're speaking about, but yes, I think a lot of people, older people maybe do feel that certain spaces are maybe not even for younger people but more for families, which obviously implies younger people but not just children. (S5)

When you're an older person, why would I go to a park? It was really interesting that they started talking about, 'God, I haven't been to this space for 20, 30 years. I used to come here as a child.' You start to get all those rich stories coming out. Again, it's about older people taking back those spaces as age-friendly. (S6)

This may apply in winter in particular, when there is less light and warmth, and this can mean that social community spaces need updating to provide a more accessible space.

Interviewees saw value in a programme to raise awareness in those populations so that they can see where those spaces are and that they can use them to build social capital:

Well, there are things, it's just that they didn't see those spaces until somebody started to work with them and helped them to understand those spaces (greenspaces). (S6)

Part of the work that we do as a charity is trying to bring back and love some of our public green spaces and our walkways and our rivers so that people want to use them again ... It's how we get people to use them positively. (S4)

This would come with the caveat of ensuring such places are perceived to be safe places. S4 implied, for example, that antisocial behaviour may be an issue in these spaces, which may require lighting, passive surveillance, or enforcement to ensure people can use them safely. In order to prevent antisocial behaviour in greenspaces, local authorities have sometimes installed barriers that limit access to spaces. These are designed to prevent motor vehicles, including motorbikes, from accessing spaces due to the width of the barrier. Unfortunately, they may prevent access for disabled users, as S8 outlines, and therefore prevent people from accessing greenspace that can be beneficial for physical and mental health:

I have a step-granddaughter who's a wheelchair user. There are lovely riverside paths in Stockport that we can't take her and the family for a walk along because they've got horse traps along them. We can't lift an electric wheelchair over it, so. (S8)

3.3 Cycling

Whilst our interviewees indicated that cycling is not something they actively consider, we were able to explore its potential for older people and disabled people. It was noted, for example, that the bicycle could act as a mobility aid for those that would otherwise feel excluded:

Again, that idea of a bicycle being a mobility aid is something really powerful, I think. I think it's something that I increasingly feel myself personally... But you could also utilise other stuff that are mobility aids like bicycles, like a scooter. (S1)

For example, for the handheld bikes or the handcycles you can get something that you put on your wheelchair; it's not ideal, but you can stick it on your wheelchair, and it acts as a handcycle. Yes, I think people would prefer to transfer off and be on a proper handcycle, but I don't know, and it's a starting point for me. (S6)

Give me the option, and I'd get on a bike tomorrow, right? Let's make no mistake about that. Give me an opportunity, be sure I can be safe, and I'll get on an e-scooter tomorrow. I would. (S7)

However, some interviewees do not see the bicycle as relevant to their mobility needs: 'we constantly told people it was so people could cycle. Well, if I'm 70, I'm not cycling, am I?' (S4).

Our stakeholders suggested that the reason cycling does not feature in discussions around neighbourhood mobility is the lack of both opportunity and support. This precludes groups of older people and disabled people from using bicycles as a mode of transport. This may be in part due to key stakeholders viewing all disabled people's mobility needs as though they are 'pedestrians':

We had these discussions a few years ago with TfGM when they were talking about how to get more disabled people cycling. Well, actually, they wasn't talking about cycling; they was saying how can we keep the streets safe for disabled people. We were saying, well, some disabled people want to cycle, so didn't necessarily consider disabled people as cyclists, it was always pedestrians. (S6)

This perception can be compounded by a lack of attention given to infrastructure that, in turn, makes neighbourhoods less attractive for older people and disabled people to cycle. A lack of suitable infrastructure can prevent walking and cycling from being realistic forms of mobility, particularly for disabled people, and may induce car dependency: 'I've advocated for it in the past, and I still do. I still think the provision for walking and cycling needs to be better to... More people with disabilities could walk and cycle if the infrastructure allowed it to' (S6).

As with other social groups, safety was an important issue, with segregated infrastructure being seen as an enabler of greater participation in cycling:

Actually, the main reason I didn't cycle to work more was fear. I'd have liked the exercise. I'd have liked to not leave a snot trail of carbon footprint behind my car as I drive into Stockport, but I wasn't willing to risk my life on dark winter mornings and nights dicing with death of drivers, who, most are great, and we've seen driving standards improve. (S8)

Interviewees had, however, observed some infrastructure for cycling across Greater Manchester that, while welcomed, was inconsistent:

So, we're all doing the same stuff, so we've not got brilliant cycle lanes in Wigan and then we've got different ones in Stockport, sort of thing, or we've got brilliant accessibility on parks in Salford and we've not necessarily in Trafford. At the minute, it's dependent on who you speak to and what's available in your area. (S6)

As S8 notes, even barriers that apply to some extent to all social groups can be magnified for people with mobility issues. In this example, there are protected parking spaces near the entrance of the supermarket, but the bike parking is located further away:

I'd like good cycle parking. One of the challenges when you take your bike somewhere is securing it, and it fascinates me. My GP surgery has parking for 20-odd cars. There's nothing for bikes. There's no, 'We have padlocks in the surgery. Nip in and borrow a padlock.' My local supermarket, Asda, you can access this one as well. Humongous car park. Vulnerable users. So, people with blue badges, parents, they have protected parking spaces near to the entrance doors, quite rightly.

What have they done with the bike rack?... They put it in the very furthest corner of the car park. So, not only do I need to cycle to the shop, take a padlock with me, take a hefty padlock, which is awkward to carry, I then need a pair of hiking boots to change into to walk what feels like a mile and a half into the supermarket. These are changes I'd like to see. (S8)

Commenting on these barriers to cycling, S8 noted that the further marginalisation of cyclists means that for those already conscious of the stigmatization of their condition, they feel further marginalised:

It doesn't, whether it's a physical disability or whether it's some sort of hidden form of disability, some form of neurodivergence, and you're just dealing with the anxiety, possibly even with the anger, at having to sort of being minoritized [sic] and stuck in the far distant corner and then having to walk all the way back. (S8)

Further to this discussion on infrastructure provision, interviewees gave examples of the advantages of adapted and power-assisted cycles that may increase uptake: 1 think if there was an increase in things like accessible trikes and also imagery might change that. Particularly, TfGM, when you see them talking about cycling and things like that, it's always younger people on bikes' (S3).

They also noted challenges with availability, particularly of non-standard cycles such as tandems and trikes, and that this can prevent those with mobility issues from using bicycles as a form of transport. The relatively specialised nature of these cycles means that even in shops that sell bicycles these non-standard types are often not readily available:

We've got a local cycle shop near us [name removed], and they've got standard cycles, and they've got some alternatives, like cargo bikes and stuff like that as well, but there's no trikes, there's no tandems, there's no handcycles. (S6)

Even if they are available locally, it can be difficult for people to access these cycles. They may need support to access schemes, particularly if they require multiple steps to set up access:

You've always got to rely on someone else. To a degree, what you need is, you need a pair of eyes on the front of the bike. You need technology. (S7)

Actually, I think e-bikes would be a real positive for older people, perhaps younger older people, but because they're just another thing that's there in the city, and they don't really understand it, and nobody's had those conversations with them, they're not likely to go and register and use one. (S4)

I think the walking grant is a really good example of how we can enable deaf people to participate in new initiatives and what's going on. It's like, if we can get money to fund staff, then we can run projects that introduce deaf people to cycle routes and whatever it is that's been designed. I think that's really just a point to make for policy really, that it's not just about, necessarily just about, the consultation. (S11)

For S6, the support people might need to use adapted bicycles means that they would (currently) need to travel out of their locality: 'so it's having that provision available locally as well, because at the minute, if disabled people want to access that provision, you've got to go down to Eccles, or at least near us, and cycle round a track' (S6). This can mean disabled people having to source adapted or non-standard bicycles through an organisation that provides access, rather than purchasing them directly through a retailer. Whilst there are government-funded schemes to support purchasing equipment, such as 'Access to Work', S1 described barriers they had encountered when attempting to use this particular scheme.

As discussed here, beyond the physical infrastructure that facilitates this, there are wider, social factors that should be considered to encourage the most vulnerable to continue to participate in their communities. These relate, in part, to perceptions that cycling is not something that older people do or are able to do:

This needs to be in a genuine co-productive way and pointing out the massive advantages to older people/disabled people of doing this, and children, to be honest, as well. (S1)

One of the secondary benefits of enabling access to active travel is that, if more people walk and cycle, we would hope to see participation increasing. In line with Bandura's model of social learning (Bandura, 1978), a person's behaviour is influenced by their environment and people learn through observing the behaviour of others, which they may then imitate. This is referred to as modelling:

We know from research that modelling is really important for older adults. Making sure that those stories of people that are still being active, actively travelling and accessing their neighbourhoods, making sure that they're visible and giving opportunities to older adults to mirror that behaviour. (S3)

If one person changes their behaviour, does that help other people to change their behaviour that then changes the behaviour of a community and makes a community different, so better? (S4)

3.4 Walkability

Walkability is a difficult concept to define, since what is 'walkable' will vary across the population and some more vulnerable people may feel excluded from areas that the general population finds walkable. This is an important consideration when thinking about neighbourhood approaches like Low Traffic Neighbourhoods and 15-minute neighbourhoods. If amenities and ongoing transport links are within 15 minutes for younger and non-disabled people, then this does not necessarily mean that they are in reach for older people or disabled people:

Yes, so if you're an older person with limited mobility, then 15 minutes is actually a long way. If you've got a long-term condition that means you're maybe housebound, then, actually, two minutes to the end of your garden is your neighbourhood in a lot of ways, and it's what does that look like and how do you get there? (S4)

As we discuss in this section, distance and endpoints are not the only consideration: comfort and facilities en route are also important. Are toilets or benches readily available to facilitate journeys for those who might need them en route?

Another consideration when thinking about approaches at the neighbourhood scale is that it can be challenging to provide everything that a diverse community might need. There may be a need, for example, for particular parts of the community to access international stores, places of worship and other cultural infrastructure:

So, for a lot of the minority ethnic communities that we've worked with, their preferred shops or markets that cater for their cultural needs might not be within walking distance at all. They might have to drive to them or get public transport, and that's just not going to change. You can't have ethnic food markets on every street corner necessarily. (S5)

This is also relevant to disabled people where others that they have social connections with may not live in close proximity to each other:

I mean, one of the things that might be relevant is that deaf people, particularly moderate to profoundly deaf people, can be quite geographically spaced. You can't necessarily expect there to be another sign language user in a particular area. For deaf people to socialise with each other, usually they are going to need to travel. (S9)

Nevertheless, the idea of neighbourhood approaches, in this case the 15-minute neighbourhood, represents an opportunity to look across and consider the different challenges that a diverse population experiences:

I think, with the recent changes to CCGs [Clinical Commissioning Groups] and the integrated care stuff, I think there's opportunity there for that kind of joined-up thinking around those 15-minute neighbourhoods, because I know from conversations I have with them – you talk to some policymakers and commissioners and things like that - it's not necessarily something that they're considering or thinking about. (S3)

This brings together so many different topics, and they're not neatly ring-fenced and live separately. They all interact. (S8)

For our stakeholder interviewees, it was important to think about walkability: being able to move safely around the neighbourhood to access amenities and being able to do this safely and confidently. This can be particularly problematic for blind and visually impaired people: stakeholders cited pavement clutter, foliage, and pavement parking as the biggest barriers to access. Relatedly, the older age group are concerned with secure footing and trip hazards such as raised paving stones or dropped kerbs being blocked. These barriers to safe travel can result in some opting to stay at home rather than venturing out into their communities, leaving them feeling isolated:

A lot of the roading around these areas, around here, just isn't suitable for it. It feels unsafe to them. Often, if they've had one fall or one trip on that pavement, then that's it. It really scares people off to do it again. (S2)

While some of the challenges are historical and feel part of the 'fixtures' of a neighbourhood, such as wide roads through neighbourhoods, others are more transient, such as overgrown foliage or bins left blocking pavements. This can mean people are reluctant to attempt to navigate through their communities:

One of the most scariest things in the world is to ao outside, right. I've walked along this street 50 years. Now I don't know. What don't you know? There's a kerb 100 metres up the road. Yes, but it's unpredictable. I don't know if there's going to be a car parked on the pavement. I don't know if there's going to be a bin in the way. Again, going back to the PIP thing, the question is, is are you able to walk a familiar route? When you leave your house, for someone who's blind or partially sighted, there's no such thing as a familiar route, because there could be roadworks, there could be a bin. (S7)

Overgrown foliage can also prevent the visually impaired from moving easily around neighbourhoods or at least makes journeys difficult to manage. As the foliage often appears at head height, those using any sort of mobility aid such as a cane or guide dog may be unaware of the obstruction until it literally hits them in the face: 'ves. so I think pavement parking and overhanging foliage in residential areas [is a problem], whether it be on individuals' properties or street trees' (S7).

Pavement parking has a particular impact on disabled people's mobility, as it reduces the width of pavements and can limit wheelchair use or obstruct the movement of visually impaired people and their guide dogs. It is also an issue for older people with limited mobility. The people we interviewed highlighted the unpredictability of journeys that these obstacles created, with street furniture a further challenge to navigate: 'saying before around are the walkways clear? Have they got a lot of obstacles like posts, signs, people sticking trees in the middle of pavements?' (S6).

Being able to clearly see junctions and approaching traffic is also crucial, particularly when crossing roads. Cars parked inconsiderately at junctions can limit visibility. Furthermore, a reduction in traffic can be beneficial for those with sensory processing issues, not only when they are moving around their neighbourhood but also when they are in their homes:

I used that piece of information and showed, shared the documents with my local councillors, and that helped them make their minds up on the Low Traffic Neighbourhood trial. I found that hugely beneficial because I suddenly had much less traffic going past my house. My quality of sleep improved. I wasn't being woken at 7.30 by cars hooting at each other, trying to get both ways on... That road has ended up now being made a permanent one-way street, which is a huge improvement for me in my quality of life.

The speed of cars creates a perception of danger when attempting to cross roads, particularly for those with reduced mobility or vision. This can result in older people or disabled people being unable to access parts of their communities due to the severance created by roads and heavy motor traffic. As signalised crossings are less prevalent in suburban housing areas, older people and disabled people find it more difficult to cross the street, and this can limit their ability to access local amenities:

In the work that I do at the moment, having a conversation yesterday with a lady who's, she's got a park across the road from her but doesn't feel that she's able to access it, because she's a bit unsteady on her feet and she can't get across the road quickly enough. There's no safe crossing for her within a reasonable distance for her. (S2)

While for those with issues with their sight there are barriers to walking on pavements, for those with hidden disabilities the impact may be harder to understand without drawing on their lived experience:

You're dodging lampposts and bus shelter posts and bins, and there's places where you can't actually, you couldn't walk through two abreast. So, all of those things come into it, they impact anyone trying to avail themselves of active travel, to walk somewhere, or to push a pushchair somewhere. They impact autistic people, heightens our anxiety, all the pavement looks blocked. I guess the absence of safe cycling provision. I'd love to cycle more. (S8)

For older people and disabled people, safety is therefore an important consideration in accessing the neighbourhood. Safety and access can be improved if the experiences of the more vulnerable in our communities are taken into account, and the physical environment can be constructed to enable journeys for all if we are mindful of their needs: 'whether it be making streets less cluttered, whether it be making environments brighter and more audio description or audio signalling at bus stops, all of it really' (S6).

Walkability, then, is a difficult concept to define, since what is 'walkable' will vary across the population and some more vulnerable people may feel excluded from areas that the general population finds walkable. This is an important consideration when thinking about neighbourhood approaches like Low Traffic Neighbourhoods and 15-minute neighbourhoods. If amenities and ongoing transport links are within 15 minutes for younger and non-disabled people, then this does not necessarily mean that they are in reach for older people or disabled people:

Yes, so if you're an older person with limited mobility, then 15 minutes is actually a long way. If you've got a long-term condition that means you're maybe housebound, then, actually, two minutes to the end of your garden is your neighbourhood in a lot of ways, and it's what does that look like and how do you get there? (S4)



Figure 2 Challenges to walkability in neighbourhoods

As we have discussed, distance and endpoints are not the only consideration; comfort and facilities en route are also important. Are toilets or benches readily available to facilitate journeys for those who might need them en route? There are also specific needs of different groups.

Another consideration when thinking about approaches at the neighbourhood scale is that it can be challenging to provide everything that a diverse community might need. There may be a need, for example, for particular parts of the community to access international stores, places of worship and other cultural infrastructure:

So, for a lot of the minority ethnic communities that we've worked with, their preferred shops or markets that cater for their cultural needs might not be within walking distance at all. They might have to drive to them or get public transport, and that's just not going to change. You can't have ethnic food markets on every street corner necessarily. (S5)

This is also relevant to disabled people where others that they have social connections with may not live in close proximity to each other:

I mean, one of the things that might be relevant is that deaf people, particularly moderate to profoundly deaf people, can be quite geographically spaced. You can't necessarily expect there to be another sign language user in a particular area. For deaf people to socialise with each other, usually they are going to need to travel. (S9)

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For neurodivergent people, there is an additional challenge relating to creating environments that are not overstimulating:

In that many of us find the world around us overwhelming, and that's at a sensory level. You walk along Manchester Road here, and it's noisy as hell. I'd prefer to walk to Asda, but sometimes it's too noisy, and I get in the car and drive there. We don't think about that. The soundscape, the smells, all of the, some of it's organisational. (S8)

Noisy environments may also be challenging for people with hearing loss, particularly as hearing aids tend to amplify all noise and this makes it difficult for people to filter for relevant stimuli.

It is not only in street environments that this might be challenging, but also in interactions with transport services and staff. S8 discussed buying train tickets, noting the complexity of the process from the point of view of neurodivergence:

I remember standing at Piccadilly Station one day a few years ago, wanting to get a rail ticket back out to Stockport. You'd think, how hard can it be? There were six different ticket machines. There was a ticket machine from Northern, there was a ticket machine from TransPennine Express, and was one from Virgin, and they were all different prices. There's all these signs saying, well, 'Now it's £100, you will be fined if you get on a train with the wrong ticket.' (S8)

There has been much debate in the public domain on the complexity and variation in ticket pricing for rail travel, and, as S8 explains, this is a particular problem for people who may not process information in the same way as a neurotypical person. They argued that consistent realtime information and supportive staff that understand the challenges that disabled people face in using public transport would reduce their anxiety:

I'd love to see training across transport staff. We are starting to see it come in. I do still meet transport staff who don't know what a sunflower lanyard is. So, that all helps. Understanding that people can have heightened anxiety through travel, through using a new or different route, if they're going to visit Auntie Claire. That helpfulness, which I do normally see and find, but it's such an important thing that we should acknowledge it and, yes. (S8)

We felt hard done to when the digital signage went to, 'There is a fault. Please look on the website.' We don't even get that any more. So, yes, but I think the serious point behind that autistic people, we're systemisers. There's this executive functioning stuff. We want to know, you know? If you have the ability to take an informed decision. 'Next bus is 12 minutes.' You think, well, I know there's a train in a couple of minutes. I'll just hoof up to the station. Then you can take that informed decision. (S8)

They continued, discussing the sensory experiences of those who are neurodivergent and relating them more generally to the urban environment and public spaces:

I think there's something about making those environments better for neurodivergent people, not making them better for neurodivergent people at 7.30 to 8.30 on a Saturday morning. What are the issues? We know there's issues with loudness, with clutter, with people banging into you, walking down the different aisles. One minute, you've been outside. It's freezing cold. In winter, you come in. It's warm. You take your hat off. You unzip, and the next thing, you've walked past the bread aisle, and then you're in the chilled goods aisle, and you're absolutely frozen. That's a big issue. (S8)

It is important to note that walking is something that should be understood in the context of other modes. Stakeholders noted the importance of having good-quality, reliable public services and also gave examples whereby car access was likely to be particularly important to older and disabled people.

Although these examples indicate that traffic can act as a barrier to mobility and have an impact on wellbeing in a broader sense, it is also clear that cars can play a positive role in the lives of some older people and disabled people. Restrictions on car use can have an impact on those who are unable to walk or cycle sufficient distances or who, for whatever reason, feel that these modes of travel are not for them:

For example, reducing car access to Manchester, although it's good from a CO2 perspective, has reduced access for some disabled people who will never be able to cycle, never be able to walk, and never be able to get in via any other means. (S6)

It is also important to consider the needs of carers working with older people and disabled people:

Say, for example, you've got care provision. At the moment, it's [really] atrocious, and you've got people doing like 15-minute slots. They drive between these 15-minute. They don't get paid for the time they're travelling, so you've got both the client and the support worker are going to be deeply inconvenienced by discouraging car travel. That's not even being thought of, but it's not a reason; there are wider overriding reasons here. We need to actually think about this. (S1)

4. Case study: Leigh

4.1 Leigh

Our research focuses on the town of Leigh in Greater Manchester. Greater Manchester as a conurbation comprises ten Greater Manchester councils and the Mayor's office, serving a population of over 2.8 million people. As one of the ten local councils, Wigan is located in the west of Greater Manchester and includes the town of Leigh with a population of 43,300 from the Census 2021 data, which incorporates the areas of Leigh West, Leigh South, and Leigh Central and Higher Folds (Office for National Statistics, 2023).

Wigan Council had identified an area of Leigh to the west of the town centre as being suitable for an active neighbourhood due to a number of factors thought to be causing issues for local residents. This is an area of high-density terraced houses interlaced with streets and alleyways and also includes four primary schools in close proximity. Wigan Council's view was that the volume of traffic warranted intervention in order to reduce traffic in the area and therefore reduce pollution, noise and congestion, while making the area safer for children to walk and wheel to school. Initially, a School Street had been implemented around the two primary schools on Walmesley Road. As a development of the scheme, modal filters had been proposed on Windermere Road, Walmesley Road and Boughey Street in order to reduce rat running in the area. Other measures including improved crossings, two-way cycling on one-way streets, and improved greening and public realm, were proposed to enhance the experience of walking and cycling in the area. Following consultation and analysis of traffic data the Leigh Traffic Reduction scheme was designed, and implemented in the area. As of June 2023, the latest plans involved installing crossings on busy roads bordering the neighbourhood, junction treatments to reduce speeding, improvements for walking such as dropped kerbs, footway surfacing and side roads crossings. In addition there have been changes to road layouts that include making some

roads one-way to help with traffic flow, lane closures outside schools to provide more space for active travel and an extension to the school street scheme already in place. (Wigan Council, 2023).

4.2 Participants and scope

Our fieldwork in Leigh comprised two stages: 'drop in' mapping workshops in Leigh Library followed by a series of walking interviews conducted in the area. Our recruitment strategy is detailed in Appendix A. We drew on a convenience sample for the mapping workshops, and three of the participants also took part in the subsequent walking interviews along with a further five people.

Additional recruitment for the walking interviews was conducted through social media, local support groups and third-party contacts. Participants had a degree of mobility: they were either visiting the library in Leigh or were able to meet the researcher in the area. Others who are not able to travel to the library were not able to be captured in this data, a reflection of both the challenges faced by local authorities in engaging with harder-toreach communities and the mobility issues faced by local residents. These challenges were reflected in the recruitment for the second phase.

Nineteen individuals (N=19) took part in the mapping workshops (13 female and 6 male), and seven participants identified as disabled. For the walking interviews (N=8), six participants were female and two male, with three identifying as disabled. With regard to transport, eight of the workshop participants used a motor vehicle regularly. either as a driver or a passenger. Others used public transport or walked. None cycled on a regular basis. Six of the eight walking interview participants had access to a motor vehicle, either as a driver or a passenger. All participants were residents of Leigh.

Our initial plan was to focus on the area around the 'Leigh Active Neighbourhood' proposed by Wigan Council. This area is bordered by Kirkhall Lane to the north, Leigh Road to the east, Twist Lane to the south and Atherleigh Way to the west. However, as there are few amenities within the proposed active neighbourhood itself, we then considered a second, wider geographical area that included the main shopping areas of the town centre to the southeast and Parsonage Retail Park to the west (Figure 3).

As the research progressed and we began discussing mobility patterns with people in the mapping workshops, we quickly found that limiting ourselves to this area would exclude pertinent aspects of day-to-day mobility patterns. From the second mapping workshop onwards, we broadened our focus to encompass mobility and related social infrastructure across the whole of Leigh (Figure 4). This incorporates a roughly rectangular area from Lowton and Golborne in the southwest up to Atherton in the northeast.

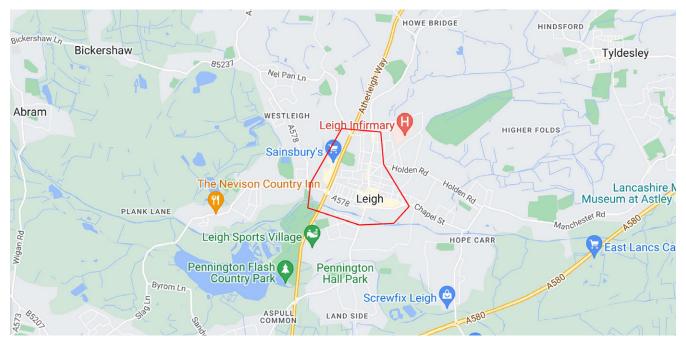


Figure 3 Area of focus in Leigh

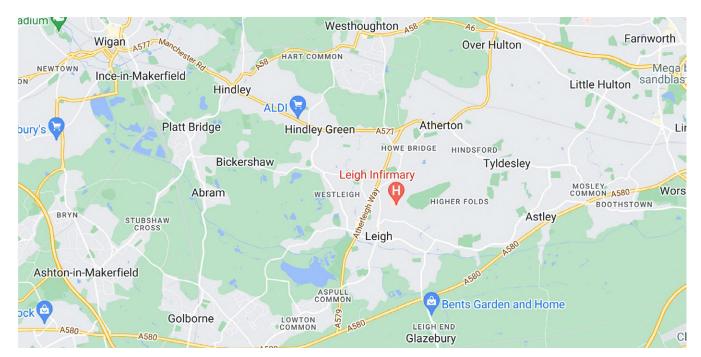


Figure 4 Wider geographical area of Leigh

During the mapping workshops we asked participants to place coloured stickers on paper maps that corresponded to five categories (Figure 5). The first comprised green dots fo? r places that were good for walking or wheeling, while red dots represented places that were not good for walking and wheeling and where improvements could be made. Orange dots were used to represent places they often visited, while blue dots represented places they wanted to visit but found hard to reach.

When we consolidated the data from all the participants into one map, we noticed that the categories indicated patterns. The green dots, for places that were good for walking and wheeling, tended to be correlated with greenspaces such as parks, the canal, or along the all-weather path by the guided busway. The positioning of red dots was less consistent and spread over a wider area of Leigh. Orange dots clustered around the centre of town with the pedestrianised section of Bradshawgate at its centre. Blue dots tended to be away from the town centre on its periphery.

Considering these patterns, the good places for walking or wheeling are away from the town centre, and yet it is in the town centre that people spend more of their time

visiting locations. The spread of the red dots – places that are not good for walking and wheeling - reflects a range of issues that present challenges to the residents of Leigh. The peripheral nature of the blue dots demonstrates that mobility and sociability may be linked. There are clearly places away from the town centre that people would like to visit, but mobility issues or distance may prevent them from doing so.

There are challenges in accessing some locations, particularly for those reliant on public transport or walking. If we take the civic square where the library sits as our starting point, Parsonage Retail Park and the retail area containing the cinema are approximately half a mile away, while the sports village is approximately a mile to the south. In line with the principles of a 15-minute city, whereby locations are expected to be accessible within a 15-minute walk, the 0.5 miles, or ten minutes, to Parsonage Retail Park or the cinema appears manageable.

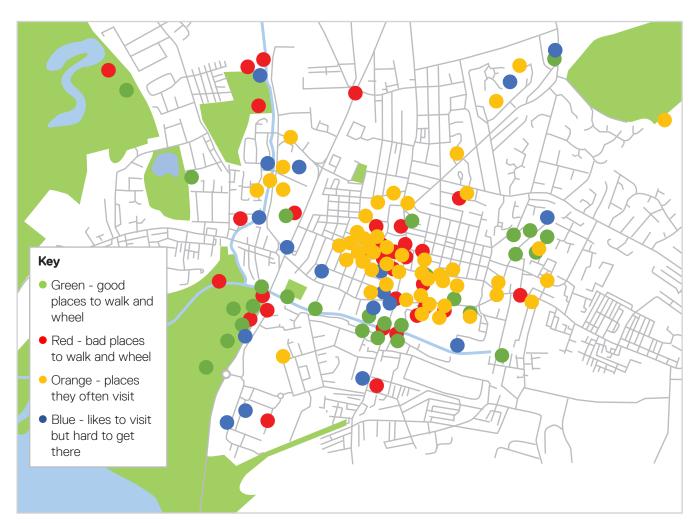


Figure 5 Locations (see key) provided by participants during mapping workshops

In referring to our discussions with participants in the workshops and walking interviews (Figure 6) we use the markers P1 to P24. A summary of the demographic characteristics of the interviewees is provided in Appendix B.



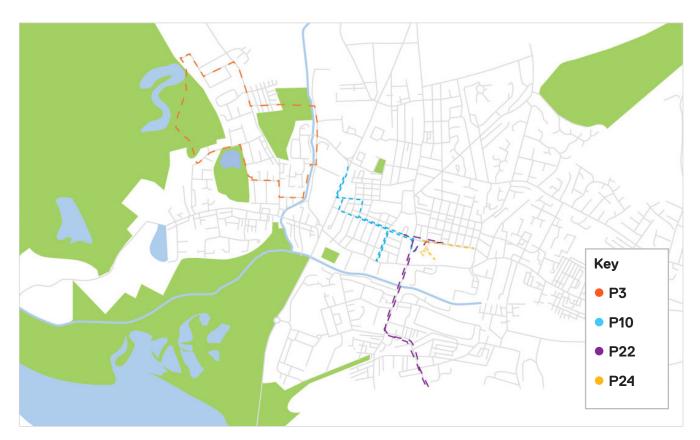


Figure 6 Route of participants during walking interviews

5. Leigh: A changing town

Leigh has a rich history as an industrial town, with coal mining and textile manufacturing bringing industry to the area through the 19th and 20th centuries. As part of the Lancashire coalfield, the Parsonage Colliery in Leigh produced coal from 1921 until its closure in 1992, at which time it employed around 2000 people. At a number of mills in the region, textile manufacturing employed thousands of local workers producing woven silk. As the nature of industry changed, most of the collieries and textile mills closed during the 20th century, leaving behind only remnants of the past in the form of railway lines, footpaths, pitheads and placenames such as the Parsonage Retail Park, which stands on the site of the old Parsonage Colliery. Participants reflected on this history during our walking interviews, referring to the mining history of the area and the type of town Leigh was before the mines shut, which seemed to remain strong in their memories:

Yes, oh yes, there'd be a coal mine here. Well, over here Cotton Street used to run down to the bridge all across Lea Brook, but the coal mine is on the left and it was like a dirt track all the way through to where we're going to cross the road.

You see how that sticks out there? That used to be a railway going all the way across the pit... All this was full of railways and... What's the other one called? Mineral lines... That used to be across to the pit. They'd criss-cross here. (P23)

Alongside the industrial past, there were other aspects of Leigh that participants recalled. These, they felt, used to make the town a more interesting place to live and include the now-derelict college that used to have cooking nights. This interviewee noted the blue plagues marking the birthplaces of notable people:

Well, there's the hospital. Now, strangely enough, in the hospital there's a plaque to Edith Cavell. She was a nurse and she was in Belgium, and World War One started, and, being a nurse, she would nurse sick soldiers, but the thing was she nursed German as well as English soldiers, but the German soldiers went back to the regiment, but she helped smuggle the English soldiers back to their lines and get them to, back to England. It was all done with canal barges. Then they'd send her a postcard to say, 'I'm very well and granny has recovered', and that 'granny has recovered' was a secret signal to say that they'd arrived back in England safely. (P10)

Some of the history of Leigh is captured in the town's archives (Figure 7), located inside the town hall (Figure 8).



Figure 7 Leigh Archives window display on Market Street



Figure 8 Leigh Town Hall and Archives on Market Place

The return of the archives to Leigh from Wigan in 2021 was seen as a positive change: 'I think it's really good that they've got the archives now at Leigh Town Hall, because there was always a history shop in Wigan, which covered Leigh, but now we've got our own' (P21).

One of the more notable aspects of Leigh's history – and of particular interest given our focus on mobility – was the closure of the train stations in Leigh. Westleigh railway station closed in 1954 and Leigh railway station closed in 1969, leaving Leigh as the largest town in Greater Manchester without an operating rail station. The line that used to run to Manchester has since been converted into a guided busway running from Leigh via Salford and into Manchester. Many participants pointed out the lack of a train or tram station in the town and commented on how this impacts their travel around the area:

So, Atherleigh Way, it was a mainline railway line that went, I think, to Bolton or to Manchester because Leigh centre there used to be a railway station, but we don't have a railway station any more. We don't have a railway. (P10)

A common theme for our participants was that, following the industrial decline in Leigh and the closure of the mines in particular, the town had changed and there had been a decline in the fortunes of the town. As a result, Leigh lost trade from workers that used to commute into the town, and the participants felt it had lost its vibrancy. There was also a direct impact on public transport provision:

The biggest thing that in Leigh was when the pit shut. When the pit shut all the mills shut. There were towns where people bused to and towns where people worked. They all bused into Leigh. There's no buses into Leigh like there used to be any more, because your cable work, pits; no industry. All that went, so Leigh went downhill fast... I keep thinking about it: what it used to be and what it is now. When I was growing up it was completely different. It was buzzing. Leigh town centre was buzzing. (P23)

5.1 A changing high street

Participants often framed their observations in terms of what was missing: on how many amenities and facilities had closed during the time they had lived in Leigh (Figure 9). This included banks and bigger retail brands alongside smaller businesses and local services. Walking around Leigh was a journey that captured how the area had changed over time: 'That was a fish shop, fresh fish shop next door that's all boarded up. Then you've got your charity shop that used to be a pub, the Globe.' (P21).

Participants gave examples of the changing urban landscape. Specialist shops had closed: an example being a haberdashery shop that P12 used to visit. She now travels into Liverpool or Manchester instead. Banks had closed, and there was previously a jeweller's that attracted visitors from a wider area: 'They used to come from all over. Then there was a jeweller, Andrusyak Jewellers'

(P10). There was also a perception, mentioned during our mapping workshops, that the quality of the market has declined, making it less appealing to visit (P12, P15, P17).

These closures should to some extent be understood within a wider social and economic context and reflect a change in consumer trends. The closure of high-street banks and a general trend towards online services are not specific to Leigh:

Yes, it's not [only] Leigh. Especially, small places, but you see, have a bank. Atherton, I don't think they have a bank any more. They may have one Tyldesley. So, people who would come into Leigh from the surrounding areas to use the banks because theirs have closed because they're smaller, they don't come in either any more. But that was our bank for... (P21)

Some brands have either gone into administration or restructured and reduced their presence on high streets, affecting provision not only in Leigh but also in nearby Wigan: 'Yes, but they've closed. Debenhams closed in Wigan. BHS certainly closed because nationally they went... M&S, I think M&S is meant to be closing in Wigan' (P21).

As a result of these changes to businesses and services, many participants felt that Leigh was lacking in social infrastructure:

Somebody caring about that [town centre] and probably getting more of that night-time economy so that it's not all boarded up at night. What would you come into Leigh for? Because there's nowhere open. (P21)

While P21 did not use the words 'social infrastructure' in articulating the loss of local businesses, she commented on the lack of destinations and emphasised the role that a healthy local economy can play in providing opportunities for residents to spend time in their towns.



Figure 9 Closed shops on Bradshawgate

As there appeared to be a desire to spend time in Leigh and to have the ability to be sociable within the community, we asked whether having more opportunities to do so would result in participants spending more time in the town. We found there was an Artisan Craft Fair running on a monthly basis that generates the type of busy high street many participants wished to see (Figure 10). While P16 told us she would be sociable irrespective of the shops and activities available to her. P22 agreed that having more opportunities would be a factor in her wanting to spend more time in Leigh:

I would if there was something else on offer and if I felt more safe, do you know what I mean? I know people, ladies, that have lived. A lot of them are divorced, and things like that, so they're in the same predicament that all the single people are, really. (P22)

Many residents felt that the experience of shopping in the centre of Leigh could be improved upon, primarily due to the lack of variety in the types of shops, with charity shops dominating the area (P1, P12, P16): 'Another charity shop: they're literally everywhere. As soon as a shop closes down, it's usually a charity shop that comes into it, because they don't pay rates, I don't think' (P21). Takeaways and charity shops attracted particular focus, as they were perceived to dominate the retail spaces in Leigh: 'Just full of takeaways, isn't it?... That used to be a car showroom... All these were independent shops down here, like you're saying' (P23).

Figure 10 Bradshawgate during the Artisan Craft Fair

There was also a focus on how many empty retail units there are in Leigh (P1, P10, P11). Some felt that the centre of Leigh would benefit from a return of popular brands and talked about stores and items they would like to access:

Yes, Primark would be great for the young ones, brilliant for - it would. We don't have bia stores. We've never had an M&S, other than we got an M&S Food, but that's years later. We've never had a BHS when BHS - we were asking for them, British Home Stores, we were asking for them for years. (P21)

There were some signs of changes in Leigh, such as Home Bargains reopening on the main pedestrianised

This has just reopened after, it must be a year. It's a listed building. It was the Co-op. It's a beautiful building, and it was Home and Bargains for many years, but it was really tatty, really grotty, and they started having leaks, water ingress, or something serious up there that nobody bothered about, and then they closed it, and thank goodness they've refurbed the whole... It's been shut for months and months, but it's open today... (P21)

For those that could not travel to the out-of-town shopping locations, the reopening of an established brand on the high street was welcomed, providing an example of the type of different offering that residents desired (Figure

Although some people had raised concerns about it, Leigh's market was considered to be, on the whole, a strength, a positive for the town, given that nearby towns had reportedly seen a decline in their markets, arguably to the benefit of Leigh:

That Leigh wasn't any different in that respect. But the fact that there is a market does bring people into town from places like Hindley, because Wigan's not got much of a market any more. Atherton doesn't have a market any more, Tyldesley. So, Leigh's still got that draw. (P21)

Others spoke in positive terms about the market and mentioned visiting it regularly (P11, P13, P14, P17, P18). This was particularly true of some specific local stalls: 'A lot of people come for this. The Fish Man butcher, they do online stuff as well, they're brilliant' (P21). Similarly, a local baker was seen in a positive light: 'I'm all for that. A reason I go to Leigh, I get my cooked meats off the market and my bread from Waterfield's. You know, old shops' (P23). As with other comments from our participants about how life in Leigh has changed over time, there is a desire for tradition and quality in the retail experience in Leigh. As an example, P21 told us about the opening of a family-run travel agent in Leigh, which she saw as offering a more personal service than many online operators. There appears to be a demand not only for variety in the type of shopping experience but also that tradition, quality and a personal touch add a uniqueness. These aspects reinforce our exploration as social

infrastructure being more than simply functional. They allow people to build social capital by providing places where people can spend time and interact with others.

Notwithstanding these points about having the right mix of retail, amenities and other facilities, this is only one of the qualities that enable residents to build social capital. Accessibility is a key aspect of reducing social isolation, particularly for disabled people, and this applies to both the journey to the shop and their time moving around inside the shop: 'I did initially have a mobility scooter because I figured I could leave that outside, but then I realised that actually the majority of shops you can't get round, you just can't get round them' (P20). This comment is a reminder that accessibility is not just a product of the built environment but something that also occurs within buildings and institutions. As seen with the accessibility of toilets or public transport, there are still limitations in accessibility for disabled people, even when there appears to be provision for their needs in the external environment.

The lack of retail provision within Leigh town centre is compounded by the presence of out-of-town shopping areas, an issue raised by our participants. There is Parsonage Retail Park to the west, another site to the southeast containing a supermarket and cinema, and to the south an area containing another supermarket and the

sports village. The sports village is a collection of facilities including a sports stadium and athletics track, youth hub and swimming pool. It also houses a GP surgery, pharmacy, supermarket, pub and hotel.

Participants commented on the extent to which the combination of a decline in the district centre and an expansion of the out-of-town developments made access without a car difficult: 'these things now have all become out-of-area, drive-to areas' (P3). As discussed below, there are also issues around access to greenspace and amenities that, due to their location, may reinforce car use. Participants told us about these and other amenities and places that, through a combination of location, poor or unofficial walking routes (Figure 12), or poor public transport provision, mean that a level of car dependency is further embedded. This was expressed explicitly by P12: 'everything is out of town'.

To reach some of these locations using public transport can be challenging, particularly given the criticism of public transport in the area from many participants. For example, P5 told us there used to be a direct bus service to Parsonage Retail Park, which does not operate any more. For P19, this change means that travelling to the retail park is now reportedly a three-stage, two-hour journey from her home.



Figure 11 Newly opened Home Bargains on Bradshawgate



Figure 12 Unpaved ground by a road showing a clear pedestrian desire line

5.2 A changing governance context

Some of these changes to amenities or services were attributed to decisions made by local government. Echoing several others, P21 and P23 felt that the relocation of various services and facilities to Wigan had contributed to an erosion of the sense of community in Leigh: 'Well, they've taken your community off you. They took Leigh out. They expect you to go to Wigan for everything' (P23). P21 commented:

Oh massively. My mum wasn't from the north. She was from Norwich. My mum and dad met in the war. So, she came to Leigh from the city and thought it was, back of the hand, a wooden train station, apparently, she nearly didn't get off, but she grew to love it, because she always called it a proud little hard-working town, and it's lost that pride. It's lost its sense of identity, certainly since local government reorganisation in 1974, which has gradually eroded our sense of pride in our own community and our own environment by putting Wigan on everything, doesn't help somebody in Leigh at all... I think we've got a great civic square, but everything says Wigan on it. (P21)

The recent success of the town's rugby league team, Leigh Leopards, in winning the challenge cup demonstrates how the identity of the town can be brought to life in the town (Figure 13). This illustrates the sense of community that people tell us they feel is important to them.

In discussing the library in Leigh, P3 implied that cost cutting has resulted in the building becoming a mixed-use space. Located next to the town hall, the building acts as a library for both adults and children, a community space, an art gallery, and a life centre operated by Wigan Council (Figure 14). While this is not explicit in P3's comments, we infer that she felt that reduced spending means that the library must serve multiple functions for residents. Whilst there are benefits to a multipurpose building such as the library, she found it problematic:

When we met in the library, that doubled up as the town hall, and it had a billiard table on for the kids. If you were an academic, how can you go sit there and study when people are there doing chitchat and snooker and somebody is asking you about the Council Tax? You can't have these multipurpose things. They're no good. Kids need a big play area, and to stick it in a library where people want peace and quiet to read and study.



Figure 13 Promotion for the Leigh Leopards Rugby league team in the town square



Figure 14 Leigh library

While the decisions around centralisation and the funding for local services are beyond the scope of our report, residents of Leigh would like to be able to discuss local issues with representatives of their council:

It used to be a town hall. All the services were there. People could go in and talk to town hall staff. Where can you talk to town... Where can you talk to housing staff or council staff any more? (P23)

There's a few in the library, yes, but not so many. Housing used to have up to 20 staff in there. They're just working all from home now, or else they've got rid of them partly. (P23)

The desire to 'talk to town hall staff' is tangible and demonstrates not only the importance of having services within the town but also that third places provide opportunities for people to interact with others while carrying out day-to-day activities.

Participants also raised challenges relating to accessing healthcare; something that seemed to be related, in part, to the focus on Wigan. One of the services that was recently closed is Healthy Routes, a council service that remains open in Wigan:

No. This is really busy, and, like I say, I came up before, but I did only go to Tesco's, but I felt I did come into the town centre. That Healthy Routes that opened and was doing free scans, and things like that, that's been shut for about three years. (P21)

Notwithstanding these concerns about wider changes, one local facility that was popular with local residents was the local hospital: 'Yes. We had to go there for – and we still now, with the hospital situation, we've got a fantastic hospital at Leigh – Leigh Infirmary – with new builds, because there was space' (P21).

5.3 Community, culture and sport

In relation to the loss of industry, services and amenities, our participants discussed various aspects of everyday life that they felt were difficult for them to access and, if made more readily available, could improve their quality of life:

It is entertainment and stuff like that, really. I don't know. It's hard to say, because a lot of older people are probably set in their ways and wouldn't want to really go out much in the evening, but, like I say, my brain doesn't work like that. I like to go out and enjoy myself, and everything, but it's a bit difficult because there are not many places. (P22)

Whilst participants told us about places where they socialised in Leigh, there was a feeling that neighbouring towns had been successful in maintaining a lively nightlife:

Now Atherton has revitalised the whole town centre with the night-time economy, with bars and restaurants. (P21)

Everybody goes out of Leigh. If you want to go for a dinner, they go out of Leigh. They go to Bents. They go to the garden centres. They go to Warrington. Why is nobody coming into Leigh? (P3)

P21 did tell us about places in Leigh she liked to visit:

We never do now. In fact, we're going out tomorrow night to the retail park where Tesco's is. There's an Italian, and we're meeting friends there. That's nice. There's a Nando's and the cinema, and that's brilliant. We'd always come into Leigh for the cinema, but we avoid this area [Bradshawgate], unless you want watch batteries or fish, but the market does have a very widespread appeal... (P21)

The cinema that P21 mentioned is a further example of the type of social infrastructure that residents of Leigh desire. P10 enjoyed the film society's offering of more classic films:

Anyway, so, recently the Leigh and Wigan Film Society, they moved into this building, and I went for the first time in January to watch a film based on a novel – The Railway Children – and the film was The Railway Children Return. So, I went there to watch that one Sunday afternoon and had a pint while I was watching it. It was very nice. (P10)

In addition to cinemas and restaurants, cafés and coffee shops were also places that participants commonly visited. Despite P3's insistence that there is not a 'nice coffee shop', others discussed various cafés they visited. P24 regularly visited a branch of Costa Coffee, welcoming the accessible toilets, and P21 took us to a café within the market, a place she had wanted to visit but avoided the town centre: 'Because, like I say, I wouldn't come up socially any more to meet anybody' (P21). P22 took us to a café on Railway Road that she visited regularly.

This café (Figure 15) provided late-night entertainment in addition to being a coffee shop during the day. P22 often visited at night:

Yes, meeting friends, go on to the evenings, and that's really good. It goes on till about 12 o'clock of a night, so, old 60s music and whatever just blaring out everywhere. Nobody complains about it. It's probably tucked away, really, do you know what I mean? Just trying to think if there was anything else. (P22)

The café provides an example of how social infrastructure can enable people to build social capital through their interactions with staff and other patrons.

There are other ways to build social capital, so, while cinemas, cafés and restaurants provide physical places to spend time, for some the ability to walk around Leigh and absorb its history can be a fulfilling way to pass the time. As a former history teacher, P10 was interested in Leigh's history and spent much of his time walking around the area and researching its past.

Community groups and spaces were also seen by older residents to be particularly important places for them to build social capital. Nearly all the participants who took part in the workshops visited the library at some point, but the purpose of their trips varied and reflected the multipurpose nature of the building.

P16 described a strong sense of community in her street. along with comments about the people in the area being 'lovely' (P9). In order to engage with her community, P16 volunteers at the local Pensioners Link, spending spare



Figure 15 The Coffee Stop café on Railway Road

time working to help support over-50s. Our participants were proud of Leigh and its past and wanted to improve the area in order to feel a greater sense of pride and community:

(Interviewer) I do get that sense that you've seen other places, you make that comparison a little bit.

Yes, but we've got this connection, familial connection, because both my husband and myself grew up here, but it's not...

(Interviewer) Not what it used to be.

Where is? I don't know. (P21)

Other participants were members of organisations, and through these groups they were able to spend time in their communities:

It's [scouting] brilliant, and, on the days when I feel really flat and I'm totally immobile, it's that that kind of keeps me going. So, I think there needs to be more accessibility and more options for people to get about. (P20)

While there are community assets for some groups at Higher Folds Community Centre (P11) and the youth hub at Leigh Sports Village (P16), our participants' accounts suggest that on balance there is an absence of community spaces for older people. P3 felt that there were no community spaces for the 'over-70s', and P22 commented that: 'Which probably brings us to something that there's not a lot of things happening in Leigh, as far as I can see, for retired people' (P22). To P3 and P16, there was a lack of community facilities for young people, and they suggested that more such facilities could help to reduce antisocial behaviour:

They do. I think you're all right when they're in school. There's less chance of you being knocked down by kids. Why don't they build somewhere for kids to play anyway? Why is there not a skatepark or a motorbike dirt track? (P3)

There's nothing in the town centre for kids or adults like here. (P16)

P22 also suggested that families with children also felt that there was a lack of social infrastructure:

To be honest with you, I don't think there's much for younger people anyway, really. My daughter, she would say - oh, that was lucky - she's the mid-range group, and they've got a child now, so they don't tend to go out so much, and I don't think there's anything on offer for families, either. (P22)

This sense of frustration around the lack of community spaces was a common theme. There were, however, clearly some community activities and organisations, and these could complement what was provided by the public sector. An example is the church:

Well, it would be nice if somebody would, or even if the council provided some more groups for people so they could be sociable, without getting, how can I say, that it's safeguarded at the same time... That's good, because that's run by volunteers, and they do a lot in the community. When it was the jubilee last year, they put on a big spread there, and they had lots of activities going on, but now we've lost the vicar. (P22)

Generally speaking, though, our participants shared their concerns about a shortage of community activity. Participants felt Leigh lacked a sense of community and left them feeling isolated (P3, P11). The loss of community spaces has been exacerbated by the Covid-19 pandemic. It is not only public transport patronage that appears to have suffered following the UK-wide lockdowns; this also applies to community groups and other social infrastructure:

I've got a few friends up here that I've met since just before Covid for a group called the Meet and Mingle, which was run by some lady who set the group up for people regardless of age or marital status so they could mix and find friends that way, but because of Covid that has not really happened any more. (P22)

Some suggested alternatives to the town hall archives, such as walks that showed people the past face of Leigh: 'They could do things more like heritage walks that would open people's eyes to look up at the buildings that we've still got. They could do more pleasurable stuff like that' (P21). P9 shared a similar sentiment, and P3 reflected that the local culture is often not celebrated.

There were cultural aspects to Leigh that residents did enjoy, such as Umbrella Arts on Bradshawgate, visited by P24. This is an arts, health and wellbeing organisation particularly supportive of disabled people: 'The inclusive art that we do. There's an inclusive art centre that do paint or pottery and all of that, and it's really good fun. I just come to get out of the house, mainly on a Saturday' (P24).

For older and disabled people, the accessibility of sports and exercise facilities is twofold: there is the physical accessibility in terms of how easily they can reach the location, and there is the extent to which the facility itself is designed to be inclusive. P14 wanted to be able to swim more but reported that he could not access the facility in Leigh due to its location in the sports village. For P24, who could travel there by car, the swimming pool in Chorley, a town 17 miles north of Leigh, provided the most accessible environment for swimming. Features such as a ramp with a handrail and the small, ankle-deep pool made it possible for her to use the site.

6. An environment for walking and wheeling

Our participants raised a range of issues that tended to limit their ability to access amenities and services. These reflected how accessible the area is for walking and wheeling. When talking about walking and wheeling, we include wheeled mobility aids such as wheelchairs. whether electric or manual.

6.1 Why walk?

Walking to avoid social isolation

There appear to be a number of reasons why our participants walked or wheeled. Firstly, our participants felt a need to be present in the community in order to avoid social isolation. For some participants on some journeys, there was no functional or directly social motive for being outdoors; they simply wished to be out of the house and feel part of a wider community.

This link was sometimes stated explicitly, with P3, P11 and P13 telling us they would walk for large parts of the day to 'pass the time' (P13). 'Early morning. Not necessarily the same days. It depends how much food I need and got through. Basically, it's to fill the days, isn't it?' (P3). This is particularly important for those living alone, who do not have the daily human interaction that living with a companion brings: 'Well, if they're living



Figure 16 Start of the guided busway at Bond Street

with somebody that takes the edge off it. doesn't it?' (P23). Whilst there may be a destination to a journey, this is not necessarily its primary purpose, which could be getting out of the house: 'Well, it's all things, isn't it? It's thinking I've spent the morning inside. I'm not going to see this wallpaper this afternoon. I'm going to go out. I'll go to the library' (P10).

For some participants, particularly those without mobility issues, their estimates of how far they would walk may be defined not by time or distance but simply by how far they are willing to walk or wheel to occupy their time during the day (P2). For others, such as those with mobility issues, barriers in the local environment may prevent them from being able to spend time in their communities even if they are otherwise very active:

Yes, it is. Like you say, I am fairly independent, so I'm self-employed. I volunteer for scouts. Within that remit, I'm a shooting instructor, do axe throwing, all different bits and pieces. Oddly enough, a lot of the time I find it easier to get around a scout campsite than I do to get from my house to here. (P20)

Walking for leisure

In other cases, walking was viewed as a leisure activity. Although there is likely to be some overlap, this is subtly different from the type of walking described above in that it is focused on enjoying the activity of walking rather than 'getting out of the house'. In this case, walking is an activity undertaken along specific routes, which form a network of formal and informal walking routes. Many of our participants told us about enjoyable routes along the Leeds and Liverpool Canal, which were often described as a 'good walk' (P1, P2, P3, P6, P11), or along the wide shared space that runs along the guided busway - see Figure 16 (P2, P11, P17).

These leisure walks were commonly undertaken in greenspaces away from the urban centre of Leigh: 'If I do walk it would be the Flash, or Pennington Park, or Lilford Park, so not really anything in the town centre' (P21). It is notable that the greenspaces P21 referred to are all away from the town centre. Pennington Flash with its new café (P2, P15, P16) was a particular favourite, as were walks along mineral lines towards Atherton (P2, P17) and Lilford Park, with further links to walking and cycling 'looplines' around Worsley. The mineral lines are illustrative of the mining history of the area, with former rail lines that transported minerals now being used as footpaths.

The desire for greenspace was mentioned by many of our participants, who were aware of the more pleasing environments around Leigh: 'It's nice. I've got nice countryside around here' (P22). In addition to the awareness of these spaces that are available to them in Leigh, participants also told us that they had the desire to spend time in those spaces.

Spending time in greenspace appears to be not just about habitat, greenery and space but about the ability to connect with wildlife. Considering the proximity to a busy urban centre with large roads and heavy volumes of motor traffic, there remain large areas of parkland that host a range of wildlife: 'My normal route in the morning is five and a half miles on this. I go down here, come back on to canal. You see people. You see animals. You see deer, birds. It's full of herons down here' (P23). Additionally, there are places closer to the town centre where participants walked, which they chose because they knew they would have a more pleasant experience: 'It could be, it could be lovely. There's some little robins usually here as well' (P3); and 'Oh, look, Orange Pekoe' (P3). For P3, navigating the area on foot, rather than in the car, meant that she could take in and pay attention to more of the area: 'They all drive, and they've all lived here 30 years, and I've just arrived here, and they don't know the names of any of these streets because they just stick to a car route.'

6.2 Accessing greenspaces

It is within the town centre that participants wanted to see more of a focus on creating a pleasant environment, as P22 noted as we walked towards the town: Yes, it's just like it's a different part of the city. You can't call it a city, can you, but it is different. There's nothing. No, they dug all the trees up down the avenue... (P22)

Took all the trees up, I don't know why. I know it's ridiculous, but you need trees for the planet, don't you, do you know what I mean? (P22)

Having knowledge of the local area and the ability to discover pockets of interest within the town was mentioned as a potential way to access greenspace closer to the town. While P12 noted that within Leigh there are lots of terraced houses but no greenspaces or gardens, for some who walked on the boundaries of the town centre some more pleasing aspects could be found: 'It's beautiful, isn't it? We could be in Japan, couldn't we?' (P3).

The location P3 refers to above, Firs Park (Figure 17), is to the west of Parsonage Retail Park. While not quite as far out as Bickershaw Country Park, it is still away from the town centre, although the participants demonstrated that this is a matter of perception. P23, for example, commented 'Fantastic. It is in town' (P23), while P21 felt that there is no greenspace in the town centre since Firs Park is a 1.2 mile or 25-minute walk from where she parks at Tesco. This may be at the edge of her capabilities, given that she told us she could walk for up to half an hour, and it is more than likely that once there she would not have the physical capacity to walk back.

Participants also described cases where physical barriers had been put in place, particularly those that make access to leisure routes challenging for those using powered mobility aids: 'Look at this. All this here. Barriers. Did anyone tell you about that?' (P23). Despite using an all-terrain mobility scooter, P23 had challenges in accessing some leisure routes due to the width of some barriers.



Figure 17 Firs Park



Figure 18 Entrance barriers on the Leeds - Liverpool canal

These are physical barriers designed to prevent antisocial behaviour on leisure routes as they restrict access by off-road motorbikes (Figure 18).

Access to country parks and greenspaces can be challenging for those with mobility issues. Barriers that aim to reduce antisocial behaviour along walking and cycling routes can prevent those with mobility aids from accessing these spaces. For P20 the barriers, due to their size and complexity, prevent her from accessing certain spaces in her electric wheelchair:

And you've got the little side bit that, in theory, you can get to, but you do need to have eight arms, and quite often those bits aren't payed. So, ironically, people on dirt bikes actually find it easier to go round them than I do to get through, and I can't go round them because... it's too uneven...

... whereas I'm kind of stuck, and some of them are so small that I can't reach back to move it behind me. I can't move forward. Again, there are some routes that I just don't take. (P20)

P23 told us, however, that barriers on 'the rooks', old slag heaps that have now been reclaimed and form part of Bickershaw Country Park, are inadequate in preventing people on off-road bikes and quad bikes from riding around the country park but nevertheless restrict his movement:

So, they built it up again. Now, they just use it as a ramp to get over... stop me from getting on there.

(Interviewer) They built a ramp to stop the quads, or for the quads?

They put concrete blocks down to stop them. They've knocked them over slightly, so they can use them as a ramp.

(Interviewer) You can't get through, but they still can.

Yes. That's the problem. (P23)

The current approach of using physical barriers along these routes does not appear to be deterring antisocial behaviour, and yet it excludes disabled people from accessing certain routes and greenspaces (Figure 19 and Figure 20). The images provided here are of a location on the Transpennine trail in Lymm. While this is away from Leigh, they were provided by a participant who used an all-terrain mobility scooter and covering the distance between the two towns was a regular occurrence for them. P23 spent many hours in greenspaces, spending his time admiring the views and the wildlife that inhabits these places, and yet for some these places will not be accessible, as wheelchair user P20 mentions here:



Figure 19 A group on mobility scooters faced with access barriers at Whitbarrow Road, Lymm



Figure 20 Access to greenspace through accessible barriers at Whitbarrow Road, Lymm

Yes, there are like some really nice walks. In theory, you could walk from Pennington to Abram or Bamfurlong, but in a chair you can't, and I get it, the canals are old, but they've not made any allowance in the width of certain spaces, and some of them are just so badly maintained that, even if you could physically get through, the likelihood is you'd end up in the canal because it's so uneven. (P20)

6.3 A pleasant urban environment

While functional walking and walking for leisure may be considered to be distinct endeavours, where our participants noted issues that could improve the experience of functional walking in urban settings these echoed comments relating to leisure routes. In order to have a more pleasant experience while walking, participants would, for example, prefer to be able to take routes away from busy roads:

(Interviewer) Just while we're walking along here, does this not bother you, walking near the road?

No. Well, not so much. You don't think about it, because I'm just going into town, but you can smell the fumes, and stuff like that.

(Interviewer) Is that why you would take the other route if you can? [as mentioned earlier in the conversation]

Yes. Yes, it's a bit more peaceful. (P22)

As with the leisure routes, having routes away from traffic and the associated pollution (P1, P2, P12, P17) would provide a much more pleasant experience. P12 suggested that roads themselves could be improved if trees were planted along them. Relatedly, P21 commented on the area around the cenotaph: 'They've had to remove all the lovely trees... There used to be lovely trees and bushes' (P21). There was acknowledgement, however, that there are some pleasant places in the town centre. P16 and P21 noted the square outside the town hall: 'It's peaceful near the town hall square' (P16); 'It's a square. Not everywhere has a square' (P21). P10 also mentioned that along some roads parallel to Railway Road residents had spent time improving the local environment, and for this reason he would opt to take this route rather than an alternative (Figure 21):

So, the reason I come down here is they make a fuss of the gardens, and at various times, like, say, it's Halloween, there will be lots of Halloween displays. Christmas there will be Christmas lights and Christmas trees. (P10)

The shortage of greenspace in the town centre may in part be a product of high-density development. This may be desirable from a planning perspective: mixed use in urban settings tends to be more compatible with approaches such as the 15-minute neighbourhood, with commercial properties alongside residences. However, our participants were concerned that development should not be at the expense of providing access to greenspaces:

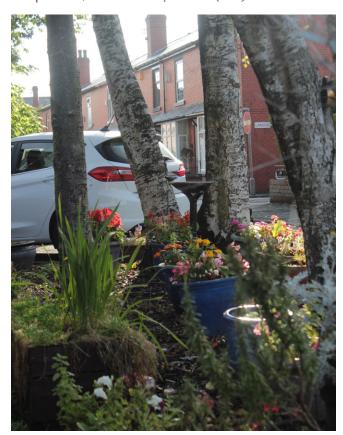


Figure 21 Community gardens on Walmesley Road



Figure 22 Mural depicting Leigh's history on Clifton St.

What they've done here is they've sold off bits of land, so they've built - can you see how they've fenced this bit on? This might be the next bit and the next bit, and then, eventually, we'll have no greenery whatsoever. (P3)

In addition to the gardens, greenery, and other environmental features, participants welcomed areas of art and other decorations that helped to make the area more attractive. One example was a mural along the wall, which captured some of the history of Leigh and acted as a memorial to the Manchester Arena bombing (Figure 22).

Another example of art in the public realm was pointed out as we walked alongside Pennington Flash. Old railway sleepers had been turned into sculptures of books (Figure 23): 'It's bookends. All these benches, they used to say Northern Soul, but they've all worn away. That's what that... It's like, it's really, when you look from this side, it's an open book' (P23).

Safe and pleasant walking and wheeling environments were therefore clearly important in both greenspaces and urban environments. While participants did not explicitly state that it would put them off walking, the presence of litter and instances of fly-tipping and generally unpleasant environments clearly had a negative effect on walking experiences in urban settings: 'There's a general litter problem, lots of litter, lots of overgrown vegetation' (P16).

While it was felt that littering and fly-tipping were issues that should be targeted at the individual level, it was also felt that the council could do more to help improve the

public realm regarding the cleanliness of the area. P16 had tried to report fly-tipping issues but had found the council system difficult to use, being given contact numbers to ring rather than being reassured that action would be taken.

Participants also commented that 'the backs' - alleyways providing access to the backs of terraced houses - were often full of rubbish (P5, P17). The issue is not limited to backstreet alleyways, with litter being reported near the canal, along Wigan Road, and in the town centre (P1, P5, P11, P16), and P11 describing some areas in the town centre as 'shocking' and a 'disgrace'. Participants also reported rubbish in areas that they often walk in (Figure 24). P1 often walks for leisure along the canal and noted that litter can be an issue, and, while only reported by one participant (P16), fly-tipping can be seen.

Basic cleanliness also appears to be an important issue, with some shops described as 'scruffy' (P17): 'Railway Road used to be so lovely, now is a dump' (P16). While Railway Road attracted particular criticism, this appeared to be due to its downturn relative to its more affluent past: 'There were verandas across here; you know, proper shopping things, all different. Made it into a nice place' (P23).

While these changes were felt to reflect societal change, there was also a sense of a general lack of care and investment: 'The town, yes, I think it needs sprucing up a lot, and to offer something that the outskirts have got on offer for people that can't get transport' (P22). This quote returns us to earlier points about investment



Figure 23 "Unlock" sculpture at Pennington Flash

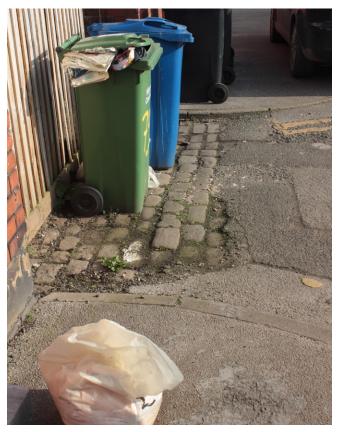


Figure 24 Pavement blocked by rubbish, bins and a parked car on Chadwick Street

often being directed towards out-of-town developments, rather than being focused on the town centre where people who are less mobile are likely to spend more time.

6.4 A walkable public realm

Distances

The distances that participants were able or prepared to cover on foot varied and to some extent were related to the nature of the activity and the purpose of the trip. Whilst P1 would walk up to four or five miles for leisure, for example, she would choose to drive for many of her functional trips to places in Leigh, such as supermarkets. In our walkalong interviews the greatest distances covered were by those using powered mobility aids (see Figure 6). In their case the barriers to mobility were less about distance per se; they were focused on the nature of the built environment, including surfaces and dropped kerbs. As we have already noted, the provision of facilities such as benches, drinking water and toilets en route is also a consideration and can have a bearing on the length of time people can spend making a journey on foot. The location of such facilities is therefore a practical aspect of route planning, as are factors such as cleanliness and affordability.

Toilets

P24 explained why access to toilets is crucial in enabling her to remain independent.

Well, what I would say is there do need to be more shops with toilets, because, as well as all my conditions, I've got diabetes insipidus, so I can literally need to go at any point! [laughs]

(Interviewer) There aren't that many in Leigh, are there, that you can just access?

No, there's some in the bus station. There's some in Costa, and there's some in, obviously, Caffe Dolce, but I can't get into them.

(Interviewer) Oh, because they're upstairs, yes, of course.

There's also some in Tesco – there's some across the shop, but when I'm in the town centre, I'd rather go to Leigh town centre.

(Interviewer) Tell me about the Tesco – is that too far for you to walk?

Yes, at times, yes. (P24)

Her comorbid conditions mean that being able to find and use accessible toilets is a priority, and yet this is a challenge in Leigh. The distance she could therefore walk is severely limited, and the lack of public toilets that are clean and accessible for anyone with disabilities only further limits their ability to spend time in public spaces. In another example, P24 highlighted the value of public water fountains for herself and others with diabetes: 'and I also think there should be water refill points for... Yes,

I've got diabetes insipidus. So, when I want a drink, it means I have to go and find somewhere that will do! [laughs]' (P24).

The design of the built environment can evidently limit mobility, especially for those with particular conditions. P24, for example, is partially sighted, in addition to being diagnosed with dyspraxia, and her multiple conditions present additional challenges when navigating a surface, even one that a disabled person might consider a good surface:

(Interviewer) That's why the flat surface is important to you?

Yes, because of my visual impairment, if there's a change of colour unexpectedly on the floor, I'll just step...

(Interviewer) Just because you think there's something there?

Yes. (P24)

Car use and access

As a result of these multiple factors, the distance P24 can travel is severely limited, and she often relies on being driven or using public transport. The issue of car access being important for disabled people was explored briefly in the interviews with stakeholders in chapter 3 but is also expressed here through discussions with a number of participants. In the first of these quotes, P22 is referring to the way her fibromyalgia symptoms can fluctuate. On some days she can walk around the town, but on others this would be too painful and she would need to use her car instead:

No, not at the moment. I suffer from fibromyalgia, so there are some days when I couldn't do this, and I would be reliant on my car. (P22)

Yes, I either go somewhere to do something for me, so it might be I'll nip out, but invariably it ends up with [my partner] taking me in the van, because just nipping out to get something can take longer to get there and back than it really needs to, so it's quicker, even with traffic, to jump in the car. (P20)

While access to a car can therefore enable older people and disabled people to access certain locations, the ability to walk and wheel unaided remains important: being reliant on the car can present problems for people as they age.

Surfaces and dropped kerbs

P24 did comment, however, that, in her experience, the relative flatness of surfaces in Leigh is preferable to those in nearby Wigan and that this makes it comparatively easier to get around and not have to rely on her parents:

[In] Wigan, I've actually fallen getting out of shops and nearly ended up in hospital with broken bones, because it's very, very hilly and very slippy in the rain. In Leigh it's nothing like that: it's flat and easy to get around. (P24) This example relates to spaces in the town and therefore relates primarily to functional journeys. Similar issues related to routes used for leisure, as P20 outlined in the case of a canal route:

Yes, there are like some really nice walks. In theory, you could walk from Pennington to Abram or Bamfurlong, but in a chair you can't, and I get it, the canals are old, but they've not made any allowance in the width of certain spaces, and some of them are just so badly maintained that, even if you could physically get through, the likelihood is you'd end up in the canal because it's so uneven. (P20)

As P20 mentions below, the inconsistent placement of dropped kerbs is also a factor that can limit mobility for some. Along with other examples of the built environment that presented challenges for her, she described the way it limits the potential for her daughter to enjoy independent mobility. Figure 25 shows the stretch of road she referred to:

As I say, it's frustrating because my daughter is 14 and I would really, really love to be able to say to her, 'Go, explore the world.' You see here there's a very distinct lack of dropped kerb.

(Interviewer) Yes.

There's one there.

(Interviewer) On the other side, but there's not one on this side.

But to get to it, I've got to go on the road, on the roundabout. Yes, it's nice, isn't it? (P20)

As a result of some of these inconsistencies, she feels forced to take certain routes:

No, I mean there is an alternate route, but there are lots of places like down there, where, ridiculously, there is a dropped kerb one side, but then, when you get there, you can't get anywhere because there isn't one to get off. (P20)

Weather and seasonality

In poor weather many routes that people would normally take become difficult to use. In the case of both leisure and functional routes, during periods of poor weather some footpaths become inaccessible. One of the examples given is towards Atherton (P2), where paths run along old mineral lines, rail tracks used to transport coal when the mines in the area were operating. Additionally, P22 would normally walk by the river but recently, due to heavy rain, had to take an alternative route: 'but, because it's really rainy and muddy, that's going to be really muddy' (P22). P3 articulated a similar issue, as the direct routes from her home into Leigh are not paved footpaths. As a result, the alternative routes use tarmacked pavements that are less prone to weather-related issues but take longer on foot. With people needing to take indirect routes as a result of the weather, the issues relating to accessibility are compounded:

It is limiting because you find yourself having to take longer routes or routes that involve far more crossings than there needs to be, which just means you're sitting there getting soaked quite a lot. Again, here you're very much at the mercy of cars deciding to let you out. (P20)

Even hard surfaces in urban settings can become problematic due to the weather. P11 noted that the block paving outside Leigh Town Hall was notorious for pooling water in heavy rain (Figure 26). This reflects a wider issue with pavements in urban areas, particularly for older people.



Figure 25 Inconsistent dropped kerbs on Parsonage retail park



Figure 26 Uneven block paving on the civic square outside Leigh Library

Participants noted that they had concerns about walking in Leigh due to falls in the past that they attributed to a lack of sweeping or gritting (P5, P8). Similarly, wider pavements were seen to be an important design feature (P8, P17). While no participants elaborated on this point, we assume that wider pavements reduce conflict and that, in doing so, people walking would be able to navigate around any potential hazards such as patches of ice and therefore feel safer (Figure 27). These barriers to walking may prevent people from accessing social infrastructure where they can build social capital. The implication of these issues is that, if resolved, this would enable more disabled people to spend time outdoors in their communities. Currently, these barriers to mobility and the inconsistent installation of features that are designed to make it easier to get around can be both demotivating and excluding for disabled people.

6.5 Personal safety

A major barrier to mobility in Leigh, particularly for older and disabled people, is a concern about personal safety when walking around. There is a general conflation of homelessness, begging, drug use, alcohol use, crime and antisocial behaviour that makes people feel uncomfortable, and these issues were raised with regularity (P1, P3, P4, P5, P6, P7, P9, P10, P11, P16, P17). Participants did not agree on all aspects of this issue and tended to differ in terms of the groups they were concerned about: as someone who lived in the centre of Leigh, for example, P16 associated antisocial behaviour with young people. This is our participants' reporting of their perceptions, and, while we are not suggesting that any particular groups are related to antisocial behaviour or drug use, it is important to acknowledge and reflect the concerns of Leigh residents. In addition to locations



Figure 27 Wide pavement between Atherleigh Way and Parsonage retail park

around shop entrances, participants tended to avoid both the war memorial and the town hall. P3 also told us that she felt that the underpass from Morrisons through to the car park at Pennington Flash was unsafe for women in particular.

For those with reduced mobility, concerns around personal safety are exacerbated. P4 articulated this particularly strongly, describing how her lack of mobility due to poor health means that she is increasingly concerned for her safety when coming into Leigh. In her view, people are loitering outside entrances to shops in pairs and, as a result, she will drive directly to her destination and not spend time browsing in shops. We experienced this issue first-hand during the walking interview with P24. As we walked towards Bradshawgate, there were a group of people sat on one of the benches drinking alcohol. They had a powerful-looking dog with them, and, as we walked towards them, the dog became aggressive towards someone in the group. This visibly upset P24, given her limited vision, and resulted in us returning to the bus station. The exchange below captures a couple of moments after this incident:

(Interviewer) Right. Shall we walk back this way?

Yes.

(Interviewer) Okay. So, I'll walk you down to your bus stop, and then I know you're safe.

Yes. That's why I'm not allowed to come at night as well. (P24)

As P24 stated, issues around antisocial behaviour may be magnified at night. This means that certain areas popular for walking may not be used outside daylight hours. This can be a feeling relating to the area more generally (P9, P17) or can be at specific locations such as the canal, as mentioned previously (P6, P10): 'No, I used to do. I don't do it a lot since we had a murder.' P10 was responding here to our question around using the canal during the walking interview, which he noted runs parallel to the road we were walking along.

On our walk around Leigh, P16 discussed antisocial behaviour and how this affected her. At her request, we made handwritten notes rather than using an audio recorder, and the quote is therefore not verbatim, but she articulated that she does not go to 'night mass' because of safety fears.

Whilst these examples apply to walking, such concerns can limit use of public transport insofar as they affect journeys to public transport interchanges. P11, for example, mentioned walking to the guided busway and was conscious of the alleyway used to access the busway, fearing it is unsafe. P16 had, however, mentioned that this area had been improved through improved lighting.

These concerns about personal safety may result in a greater dependency on car use, irrespective of other issues. P21 was adamant that her journeys into Leigh were limited to driving into supermarket car parks rather than spending time in the town centre, attributing this to the latter being 'unpleasant' and her feeling 'intimidated':

I usually park here on Tesco's, but I have to go in for a prescription after, so that's why – I knew I had to get into Tesco's at some point, and I don't go into Bradshawgate and places like that very often unless I need it for an eve test at Specsavers.

(Interviewer) Why is that?

I've been up a couple of times on my own and felt intimidated by different groups in different places. It's very unpleasant. (P21)

As a result of the intimidation P21 feels, she relies on being able to drive into Leigh and park away from the town centre to perform any functional tasks she needs to. Concerns about personal safety therefore not only limit the potential for social interactions but may reinforce car dependency, as people will try to limit the amount of time spent walking in urban environments where they feel threatened.

6.6 Road safety

Participants raised concerns about road safety, an issue they implied could affect their decisions to walk and wheel. On balance, although both aspects of safety were evidently of concern, participants appeared to be more concerned about issues relating to personal safety than they were about those relating to road safety.



Figure 28 "Kamikaze roundabout" at the junction of Atherleigh Way and Twist Lane

A time when road safety was of particular concern was when crossing roads, related to either the width of the carriageways or the speed and volume of traffic. For example, P10 was wary of crossing some of the busier roads:

Yes, well this is here, and you have to now because it's so busy. It's not a good idea to try and dodge the traffic because big lorries come down here. You'd be surprised on the heavy goods vehicles that come down. (P10)

This concern about issues of road safety has an impact on participants' readiness to walk or wheel in the area, with some taking alternative routes to avoid the busiest locations. Where they do walk and wheel, they are acutely aware of the inherent dangers of a road system they see to be poorly designed:

We've walked from there to the retail park once, but it was a nightmare, because you get to that what they used to call the kamikaze roundabout, what is now the most ridiculous gridlocked... It was a roundabout; it worked really well. (P21)

P21 was describing a particularly complex junction at the intersection between Atherleigh Way and Twist Lane (Figure 28). This junction attracted comments from several participants in both the workshops and the walking interviews. Its apparent notoriety as a difficult junction to navigate meant many would try to avoid it if possible. As with other issues around safety, this is magnified for disabled people, as P20 outlines below during our walking interview:

Now they've stopped, yes, but the number of times, if I'm sitting this side, cars go through when it's in my favour. Because they come round that bend, they don't see the lights in time, and, if they don't see you, I don't think they panic, they just think, well, I'm committed. So, I'll just sit there and wait until something stops, because they come round at a fair speed, and it would hurt. (P20)

P20 and P21 were describing the same junction, but the visibility of P20 as a wheelchair user to people driving cars is particularly poor at that junction due to the design of the junction. As a result, she may be forced to wait longer than expected until she is convinced it is safe to cross. The route she took around this junction involved navigating six crossings.

While P23's mobility scooter may allow him to use the road and not rely on crossings and pavements, as a relatively slow road user he experiences a similar level of vulnerability to cyclists: 'I try and keep out of the road because if a driver, and it's actually get it wrong, don't they? You know when they're overtaking you. You stop there.' (P23).

6.7 Parking

Parking is a complex issue. Well-placed affordable parking can help those with mobility issues to access what they need. On the other hand, a lack of enforcement to limit pavement or other inconsiderate parking can hamper walkability for many in our communities.

Even in those spaces in which people should feel safe to walk or wheel, such as pavements and crossings, there were instances where participants noted a lack of care from those driving and felt that this made them feel unsafe. P3 pointed out one area where residents park on the pavement outside their homes and drive through the pedestrian crossing to access the carriageway: 'Like there, where you've just got off the bus, they just drive at you' (P3). While framed by P3 as a safety issue, this leads to discussions around the specific challenge of pavement and dangerous parking, which further affects walkability at the neighbourhood level.

Pavement parking is a pervasive issue in urban areas and, for our participants, is related to walkability, particularly in relation to functional journeys. As discussed previously, increased car volumes can reduce social interactions, and in a similar manner parking on pavements and in dangerous locations can make access to social infrastructure difficult. Although P3 was critical of the dominance of cars in society – 'Yes, I think I would ban

Figure 29 Vehicle blocking dropped kerb, junction of St Helens Road and Ainscough Court

all cars from anywhere. I'm very anti-car' (P3) – she was not alone in criticising pavement parking. She commented on pavement parking and the associated practice of driving on pavements: 'The worst thing is people who drive on the pavement. Can you see that?' (P3). She was conscious of not only the effect of pavement parking on people, whether disabled or not, but also the damage caused by parking on grass verges.

The presence of pavement parking was a particular issue for disabled participants. In one example, as P20 needed her electric wheelchair to move at a speed high enough to overcome the lip of the incline of a kerb, the position of a parked car meant that she almost collided with it (Figure 29). While she was able to negotiate the hazard on this occasion, there were other locations where this might not be possible: 'The problem being that they not only overlap the dropped kerb, but Halfords actually park their customers there while they do car seat fitting. So, you get there and then you can't get off' (P20). Issues like this present additional challenges to mobility for disabled people that, in P20's own words, may result in social isolation:

Because, again, all it takes is, if I'm going to go a certain route, all it takes is for a car to be blocking the kerb, and then I'm stuffed and it's basically a case of give up and go home. (P20)

P22 reflected on why pavement parking might be common and why people might see the practice to be acceptable. The roads on the relatively new estate that P22 lives on appear to be narrower than one would expect, and P22 clearly sees this as a factor that may encourage pavement parking. She also gave the impression that there might be some confusion over the extent to which pavement parking is permitted. She mentioned some confusion around coloured kerbstones, for example, which, whilst there is no evidence to suggest that this arrangement is in place, may indicate some misunderstanding around the issue:

Yes, the roads are narrow, so people are forced to park on the path. Somebody told me the other day – I don't know how true this is – see the kerbstones?... On the [unclear words] they're different colours, and somebody says, 'Oh, no, you can park on the path when they're that colour.' I'm thinking I've never heard that before. (P22)

To some extent, concerns about pavement parking fit within a broader discussion about the availability of parking space. P12 noted that there was an issue in Platt Bridge over a lack of available parking, and P16 discussed parking restrictions not being enforced outside her home. Some participants suggested that more parking should be free in the town centre to encourage visitors and trade (Figure 30):

But I think there should be free parking in Leigh: the council car parks at Spinning Gate, that would make a massive difference to footfall, and people using the town centre more. Because you're watching for time if you're on a paid car park. (P21)

The availability of parking in suitable locations can be important for disabled people, who may not be able to walk further than a few hundred metres. For some who need to carry shopping, the proximity of car parking relative to shop entrances may also encourage them to spend time in the town centre: 'As long as I haven't got heavy shopping to do, then I can do this walk, but if I was to have heavy shopping to do I would have to take the car, which would be the same route' (P22). P22 also noted that café owners had commented to her that parking restrictions outside their premises led them to be concerned that their customers would feel rushed.

6.8 Public transport

Participants felt that there had been a general decline in public transport provision over their time living in Leigh. They felt it was now harder to access neighbouring towns and also more difficult to get around Leigh itself. P9 told us about services to Bolton, Manchester, Liverpool and Wigan that once operated from the 'top of my road'. P19 also described to us how the direct bus route



Figure 30 Banner displaying free weekend parking outside the Town Hall

she used to be able to take to Leigh from her home in Mosley Common is now a two-stage journey. One of the connecting services does not always take a route through the estate she lives on, meaning she can be left isolated, and this compounds her poor personal mobility.

This apparent shortage of local services meant that walking was often the only way of reaching out-of-town shopping and events, even for people who considered it to be too far to walk: 'But you do see when Leigh is playing - they play tonight - you'll see loads of people walking, loads walking, because it's not served by buses, really badly served' (P21). Several participants mentioned a desire for more local services, as evidenced here by P16: 'Needs a little bus running to the sports village and down through estates as well' (P16). Such a service, they suggested, could run on an orbital basis, something they associated with provisions in Manchester. Community transport could also play a role here and offer some flexibility: 'Community transport do a lot of different things here. You know, during the day. That could be taking them to the youth hub there' (P23).

It appears, however, that some of the challenge here might relate to information and communication instead of, or as well as, the extent of service provision. Although some participants told us that there was no bus service to the sports village, while walking and wheeling around that area with P23, a bus passed us, and he pointed out that this was a circular bus service that ran between the hospital and the sports village. The 597 service runs on a circular route between the sports village and Leigh Infirmary. While this may not include all the stops or routes that participants would like to see, there clearly is an orbital service to some of the more remote locations. This raises questions about how well routes and services are communicated and promoted to residents.

Some routes were viewed more positively: in particular, the V1 service, which runs between Leigh and Manchester City Centre via Salford (P2, P3, P12, P19) along a guided bus route, taking 50 minutes to reach the city centre. As a result of the directness and reliability of this service, people are happy to use it as an alternative to driving. Participants evidenced, however, that bus services can only compete with car use if they are easy to access and users feel safe: P19 noted that walking from the V1 stop to the hospital involved a steep uphill section. and P3 said she would not use the V1 service to return from Manchester at night due to concerns about personal safety.

For disabled people, the clarity of timetabling and communication around services is particularly important in ensuring they can access services. P24 walked down to the bus station at the end of our interview to board a bus that was due and saw that it was departing ahead of schedule. This prompted P24 to comment on the lack of live tracking for bus services, which would provide further support for those with disabilities. It would inform her

where the bus is in real time while providing reassurance to her parents when she is on the bus so they would know where she is:

Yes, my mum doesn't like the fact that it doesn't [show any single bus], and...

(Interviewer) It doesn't?

No, and it's meant to have a large map, but the bus, it doesn't show you the bus moving.

(Interviewer) Yes, I'm with you.

It will tell you when it's either coming up to a stop or going from a stop but won't tell you in between where it is, what road it's on. (P24)

Enhancements to announcements by providing live tracking in addition to both auditory and visual cues would aid navigation for everyone. These are already available on the V1 service: 'Announcements on the V1 helps to navigate (these are audio and visual)' (P16). Another issue relevant to older people and disabled people in particular was whether drivers lowered the step to enable them to board and disembark safely. P24 implied that she cannot rely on drivers to do this: 'Getting off a bus in the dark when the buses don't lower the step even, but they should, even though it should flash up on my bus pass, it's a bit of a nightmare' (P24).

These issues present a challenge for P24 and other young disabled people in maintaining their independence. Younger people who are disabled want to take part in society as much as their peers: 'I think there needs to be a bit of a shift in mentality, that there are a lot of younger wheelchair users and we do want to be functional in society' (P20).

While these issues were raised primarily in relation to buses, train stations also present accessibility issues to disabled people. Given that Leigh no longer has a train station, people have to travel to neighbouring towns where train stations have poor disabled access, as P20 discusses here:

But you are very limited in where you can go because you couldn't both jump on a bus to Manchester. Trains, depending on where you are, I can't get a train from any of my local stations because they're not accessible. (P20)

The issue of inaccessible train stations can be compounded by the limited capacity for wheelchairs and other mobility aids on buses. Even if a station has disabled access, it may be difficult to board a bus to the station. As a result of there being no space for her on buses, P20 has had experiences where she has been transported by other means, in this case a taxi, to an accessible train station in order to make her onward journey:

Yes, I think they definitely need to look at a bit of common sense, and I don't know that they're ever going to redesign buses so that more than one disabled person can get on, but, in the event that they're not, I think they could certainly do with putting more services on, because, as I say, there are times when I've had to cancel an appointment because I just haven't been able to get on a bus. I went to a concert at the M.E.N. [in Manchester City Centre] – it's not called that now, is it? - but I went to a concert there, and, as it was Network Rail or whoever, I had to get to Hindley Station in my chair and they had to provide a black cab to get me to Victoria, because otherwise it would have been a cab to one accessible station, on that train for two or three stops, then off into a cab to the next accessible station. (P20)

This reflects a wider problem relating to the ability of disabled people to use public transport: 'because if there already happens to be a wheelchair user on there I can't get on. In order to not miss my appointment, I have to allow a lot of extra time. Otherwise, I'm just stumped really' (P20).

6.9 Cycling

As we developed this research from previous work on active neighbourhoods, we were interested in understanding views and experiences relating to cycling as a way of getting around and as an alternative to the car. It is fair to say that there was little enthusiasm for cycling amongst our participants. P3 and P12 said they used to cycle - 'I have a cycle, but I don't use it because I nearly got knocked off it a couple of times now' (P3). P16 stated she would never cycle and only mentioned cycling in relation to e-bikes and the danger she saw them to present when ridden on pavements. Only P2 expressed any intention to cycle, and this was with the caveat that he would not cycle on the road. Our discussions suggest that cycling on busy roads is not something older residents of Leigh would readily consider. This related in part to concerns about road safety, as well as some practical issues such as where to securely park a bike and how to carry shopping (Figure 31):

Like I said, with the bike thing, unfortunately it's so limited as to where you could leave your bike, and then you've got to be physically strong enough to carry whatever it is that you've bought on your bike, which I wouldn't be confident with at all. (P21)

When considered as a recreational activity, there was a little more openness to cycling. The greenspaces, particularly Pennington Flash due to its flat and expansive nature, provide opportunities to cycle for people who prefer to cycle away from traffic: 'Oh yes, I cycle too, but I cycle just for health, not to get from A to B, because... No, I would feel very unsafe. [Laughs] Death by lorry' (P21). This participant's husband has cycled recreationally but had found it difficult to cycle for errands, highlighting that recreational activity does not necessarily translate into functional use:

Well, my husband's a very keen cyclist. He cycles about 50 miles a week at least, but to cycle from A to B to get shopping or go to work, it's a nonstarter. We don't have the weather for it most of the year, and where do you leave your bike? He went for a card for me on his bike, because I had the car, and he went to Home Bargains, or he went for something to Home Bargains which is on the Parsonage Retail Park when this one was closed, and he took his bike in, and he was told you can't bring your bike in. (P21)

Interestingly, P21 saw cycling to be a sociable activity in which she can make social connections. She alludes to this here in relation to her husband: 'But they love the social aspect, which is really important. He does cycle on his own, but he much prefers the... We've always been keen cyclists as a family. I've just got more nervous about the roads' (P21).

P23 had also been keen on cycling in his youth. He had always focused on the social aspects of cycling rather than speed or time, as he still does when out on his daily journeys around the greenspaces of Leigh:

Well, I've never been that fast, but, you see, all they do when they go on bikes these days is want to go as fast as they can. I never did that. I was like this. I'm almost eight mile an hour, stopping, talking. (P23)

Although there is very little interest in cycling amongst the participants, there is some evidence that this is something they can do and enjoy doing. That people are accessing areas like Pennington Flash for enjoyment may be an indication that they would be more open to cycling for functional journeys if concerns about road safety and the quality of the public realm could be addressed. For this population, however, there are additional practical issues that need to be considered, and the solution might be a combination of improved infrastructure and the availability of adapted cycles. P24, for example, had previously used an adapted bike, although, due to difficulties with balancing, she was not able to use it as frequently any more.



Figure 31 Cycling on the pavement by Atherleigh Way

7. Discussion

Our research with residents in Leigh and stakeholders working in policy and advocacy has revealed a range of issues related to mobility at the local level that connect with social infrastructure and social life. Simply put, mobility and social infrastructure are hard to disentangle. When considering how to facilitate modal shift towards walking and cycling and bring about a reduction in car dependency, it is vital to think about the availability and accessibility of places in which people can enjoy social interactions and form connections.

Our research is qualitative and explorative. We have asked open questions, encouraged people to speak freely about how they get around Leigh and invited them to guide us around the area and talk about how they feel about places along the route.

Although not focused on particular approaches to planning, the findings prompt some insights on how to approach mobility at a local level. They relate to concepts such as active neighbourhoods, Low Traffic Neighbourhoods and 15/20-minute neighbourhoods.

They also connect with day-to-day considerations in transport planning such as the provision of public transport and the design and location of walking and cycling infrastructure. In discussing social infrastructure and the public realm, we are reminded of the importance of wider planning considerations, even if these sit outside the usual scope of transport planning. Whilst the availability of shops and services, the attractiveness of the local environment, and the extent of antisocial behaviour are not 'transport decisions', they have a substantial impact upon the transport-related choices people make.

7.1 An environment for walking, wheeling and socialising

Our discussions with Leigh residents reinforce the value of understanding walkability in the context of broader societal changes. It is not only practical considerations – such as crossings, dropped kerbs and benches – that affect how likely people are to walk, but also the quality of the local environment and the extent to which the places and services that people need are available within walking distance. Broad societal changes can have a substantial impact on the potential for walking and wheeling. It is therefore important to understand the ways in which places have changed over time and the impact that this has had on the public realm and socioeconomic profile.

Walkability in a changing Leigh

In the late twentieth century, the decline in industry meant profound changes to Leigh, not least the closures of textile mills and coal mines. There was an associated reduction in the workforce coming into the town, and this, residents told us, had a detrimental effect on the town's vibrancy and on the provision of not only shops, pubs and cafés but also public transport. These amenities once supported the workers in the industries in Leigh.

Like many other towns, Leigh has also been subject to wider economic trends, including the closure of high-street brands and the growth of online services for, amongst other things, banking, government services and retail. To some extent, the Covid-19 pandemic had also contributed to closures and reductions in services.

Our participants felt that the shopping experience had declined and that the town centre was increasingly dominated by empty units, takeaways and charity shops. They also felt that the opportunities to access entertainment, arts and culture were poor and that there was a lack of organised community activities. These concerns about changes over time should of course be balanced with other, more positive, features of Leigh. People commented favourably on the market and some of the smaller businesses – some of which are unique to Leigh – and mentioned the friendly and personal service. Our participants also enjoyed the greenspaces around Leigh, particularly the canal and Pennington Flash with its new café.

Reaching social infrastructure

For our participants, the implications of any decline related not only to practical considerations such as their ability to access grocery shopping and banking; the decline also affected their ability to go out, meet people and form connections. In this sense, the lost facilities were operating as social infrastructure. The loss of places such as shops, banks or healthcare facilities means that people have fewer places where they can build social capital, even if that socialising is, to an extent, incidental: an outcome of trips into town, rather than the primary purpose.

It is important not only that people have places to go; it is also vital that the public realm does not present barriers to people when trying to get to these places. Viewing walkability through a social-infrastructure lens highlights the contextual, and perhaps less tangible, factors that make an area walkable. It is about not simply the practical barriers to walking but also what there is to walk to, the attractiveness of the local environment, and the people you meet along the way.

Our discussions also highlighted the multifarious nature of 'walking'. People spoke a lot about walking for leisure, particularly in the greenspaces around Leigh. They also talked about walking for functional trips to shops and amenities. This distinction notwithstanding, there was

some blurring of these categories, with participants wanting to be able to enjoy walking to shops and other social infrastructure: in a sense, making functional trips more enjoyable and leisurely.

A third category of walking was less purposeful and guite difficult to pin down. It tended to be associated with 'getting out of the house' and could be described as strolling or, perhaps, pottering. It contrasted with 'going for a walk', which tended to involve a destination or purpose, such as getting exercise or walking the dog. For those 'getting out of the house', a lack of social spaces and retail choice made Leigh less attractive as a place to 'mill around': more a place for functional activities than a place to dwell and, according to our participants, less vibrant than it used to be. This highlights the scope for district and town centres to be social infrastructure. It emphasises the importance of attending to the physical and social environments in which people walk and of looking at how they can be made pleasant and welcoming, rather than assuming that older and disabled people are unable or unwilling to walk.

Our participants suggested a number of ways in which social infrastructure could be improved in Leigh to enable them to spend time in the community. These included the provision of community spaces where groups can meet, walking groups and heritage trails. Additionally, the revival of a night-time economy, leisure and community facilities, a range of quality retailers and places where people can go and interact with others would create an environment where people can make functional trips and combine these with being sociable or spending leisure time in the town centre. While the sports village to the south seems to be difficult for many to access, the arrangement of leisure facilities, youth hub, pub and supermarket, along with a GP surgery and pharmacy, creates a collection of amenities and facilities within a short walking distance of each other. One of the challenges appears to be reaching the sports village from the town centre. These challenges are recognised in TfGM's Streets for All strategy under its 'supporting sustainable economic growth' theme.

7.2 Older people and disabled people

Our discussions with older people and disabled people highlight the ways in which the public realm can present barriers to mobility. Whilst they want to leave the house and spend time in communities, and social infrastructure provides opportunities for them to interact, there are physical aspects of the built environment that make journeys difficult and, ultimately, can result in social isolation. We have noted that these journeys are not necessarily 'functional' in the ways in which transport modellers might see them. Whether the journeys themselves are for leisure, recreation or simply 'getting out of the house', they have important implications for health and wellbeing.

Barriers

To some extent, the barriers faced by older and disabled people are the same as those that apply to the general population. These include the lack of provision of pedestrian crossings, poor maintenance of pavements, inconsiderate parking on pavements, and concerns about road safety and personal safety. However, to those with mobility impairments or other issues that affect how they get around, these barriers can be magnified and act as a greater deterrent. Rather than simply being annoyances, they are potentially reasons not to leave the house.

Traffic and parking

We saw, for example, that the restricted pavement space left by a parked van made it impossible for a disabled person in an electric wheelchair to use a dropped kerb to manoeuvre themselves up onto the pavement. These observations build upon the principles outlined in TfGM's Transport Strategy 2040, which includes an aim for inclusive and comfortable streets for people of all ages. We saw another example where dropped kerbs on one side of a road were not matched on the other, making it impossible for the person in an electric wheelchair to cross the road safely.

Multi-phase crossings may present a particular difficulty as it takes longer to navigate junctions. Some crossings are inherently dangerous for disabled people due to the lack of visibility, to drivers, of the person using the crossing. Participants implied that they felt that the flow of traffic has been prioritised over the ease of movement of people walking or wheeling. These barriers can be experienced differently on dark nights and during wet weather, with places sometimes becoming impassable and people having to take lengthy detours and cross difficult junctions. This variability can make it difficult for people to plan their journeys and their routines.

Personal safety

The personal safety of older and disabled people is also a concern, and for some it was a more pressing issue than road safety. Our participants often reported feeling intimidated by the presence of certain groups within the town, and, as they felt vulnerable due to their poor mobility, their concerns about personal safety were exacerbated. This, they commented, would prevent them from spending time in the centre of Leigh, where they perceived there to be a particular problem.

Public space

Older and disabled people also have particular requirements for the public realm in terms of amenities. They are more likely to need places to rest, such as benches, and to need to be able to use toilets and buy refreshments en route. In the absence of these amenities, journeys might need to be carefully planned and limited to specific routes and areas.

Amenities

Across the two sets of interviews, our stakeholders and residents were in agreement on much of the above. This is encouraging in that it indicates that those working in policy and advocacy have a good understanding of the needs of older and disabled people. Both sets of interviewees recognised the importance of relatively mundane aspects of the built environment such as the provision of toilets, water and places to rest and the avoidance of pavement obstructions and inconsistent infrastructure. Residents provided examples from their day-to-day experiences that brought to life some of the observations of the stakeholders. This was particularly the case with concerns about antisocial behaviour. The residents provided a vivid picture of the ways in which this and other aspects of life in the town centre could affect their enjoyment of the space, sometimes to the extent of deterring them from visiting it.

Cycling

One issue the stakeholders and residents disagreed on is the potential for cycling to enable older and disabled people to be more mobile and to access what they need. Whilst the stakeholders saw cycling to have a role as a financially inclusive means of transport that could help people overcome mobility difficulties, residents did not see cycling as an option for them. They did not consider cycling as a mode of transport for them. The majority of the participants would not cycle in Leigh, and the few that did would only cycle in greenspaces away from motor traffic. What the stakeholders and residents agreed on is that cycle infrastructure is inadequate for the needs of older and disabled people; the difference is perhaps that the residents were reflecting on their day-to-day mobility practices whereas the stakeholders were exploring policy options. While stakeholders were more focused on active travel, residents placed greater importance on public transport when discussing the mix of modes available to them.

7.3 Mobility at the neighbourhood scale

The starting point for this project was the concept of the active neighbourhood, equivalent to a Low Traffic Neighbourhood and related to some extent to the 15/20-minute neighbourhood concept, School Streets and historical approaches such as Home Zones. These are all related by a sense that mobility is something that is shaped in the neighbourhood or, at least, that the neighbourhood is one of the places in which the myriad challenges of decarbonisation and transport-related social inclusion can be tackled. They are also linked by a recognition that how we plan for mobility makes and shapes places, and that includes the places where people live, work and play.

What is a neighbourhood?

We started with the intention of working within the dimensions of an active neighbourhood planned for Leigh, but this approach was not possible within the timescales of the research. Removing this spatial boundary afforded us some flexibility, and we therefore approached discussions with residents in quite an open way. When we asked workshop participants to draw their neighbourhood on a map, we did not provide a definition of what a neighbourhood is. It is interesting that people visualised 'their neighbourhood' in quite different ways, some seeing it to be their street and a couple of other streets and others drawing a larger area that included places they tend to walk to and visit.

The 15-minute neighbourhood concept proposes having amenities, services and public transport links within a 15-minute radius as a way of reducing car dependency and creating attractive areas in which to live. There has been no explicit intention to make Leigh a 15-minute neighbourhood, so it is unsurprising that our participants did not feel they could reach what they needed within 15 minutes. This would be the case in most urban areas. The centre of Leigh, containing a cluster of shops and services, was generally more than a 15-minute walk from their homes. Greenspaces were also located away from the town centre and generally required more than a 15-minute walk, especially for people with mobility issues. Where such places are not accessible by walking, wheeling or public transport, there would be a tendency for car dependency to be increased and for some individuals to simply not have access to them.

Thinking about distance

Whilst not focused on this concept, our research highlights some tensions in the development and application of the neighbourhood approaches, and the 15-minute neighbourhood concept in particular.

Firstly, the relationship between duration and distance is not simple and varies across the population. Older and disabled people may not be able to cover the same distance in 15 minutes as the general population can, and this means that shops and services need to be closer than they might otherwise need to be if the 15-minute criterion is to apply.

Secondly, distance and time are not the only considerations: the public realm plays an important role. Whilst this is true of the general population, we have seen that barriers to walking and wheeling are often more pronounced for older and disabled people. They may, for example, have more difficulty crossing roads and getting around pavement parking. The provision of accessible toilets, benches and drinking water also appears to be an important consideration. These concerns also apply to those who use mobility scooters, for whom distance may be a lesser issue when compared with barriers such as circuitous routes, the inconsistent use of dropped kerbs, and a lack of enforcement regarding pavement parking and other pavement obstructions.

Thirdly, the principles behind a neighbourhood with shops and services may be at odds with other aspirations and priorities people have for where they live. Specifically, a participant commented that they would not like to have residential and commercial properties close to each other, preferring instead to have a greenspace buffer. This implies a need to consider the trade-offs between the urban density implicit in the 15-minute neighbourhood concept and the benefits of having greenspaces and quiet residential areas.

This is not to say that distance is not an important consideration in planning how people access shops and services. If anything, it emphasises its importance whilst placing it within a broader context in which it is considered alongside nuances such as personal mobility and the quality of the public realm.

One of the ways in which our participants talked about distance related to the layout of the district centre once they had reached it by public transport or car. It may be that the 15-minute measure may be as usefully applied to district and town centres as to residential neighbourhoods. Bearing this in mind, it is important to consider the connectivity of neighbourhoods to district centres and other places where there are clusters of shops and services. It makes sense, therefore, to think carefully about the locations of bus stops and other public transport nodes and to think about the extent to which these facilitate access to areas in which services can be reached on foot.

It is also the case that the likeness of specific distances being considered walkable is related to journey purpose. Those participants walking for leisure or 'to get out of the house' covered quite considerable distances, sometimes walking for hours at a time. It is not necessarily distance. per se, that deters people from making longer trips; it is also the extent to which urban areas and greenspaces differ in their ability to make people feel comfortable and safe and to offer a pleasant environment to spend time in. Clearly, it is also likely to relate to perceptions around what is an appropriate duration for different activities: two hours is a brief leisure walk but a long trip to buy bread.

7.4 Car dependency and public transport

During the course of our research, we considered whether many of the issues that had been raised, such as poor public transport, poor walking and wheeling experiences, and out-of-town shopping, were embedding a car-dependent culture in Leigh.

As discussed in Chapter 2, in car-dependent cultures a need to use private motor vehicles is reinforced through systemic biases in local planning design, one of which is the location of social infrastructure. It results in people being reliant on private cars, and those who, for whatever reason, do not have access to private transport struggling to access what they need and risk becoming excluded. Neighbourhood approaches are amongst a set of possible responses that try to reduce car dependency.

Out-of-town locations

There are several out-of-town locations in Leigh that include retail stores and other amenities such as sports facilities and restaurants. These include Parsonage Retail Park to the west and the sports village to the south. While these are seemingly within walking distance for younger or non-disabled people (Google Maps estimates that the sports village is 22 minutes from Leigh Library on foot and Parsonage Retail Park is 10 minutes), the mobility issues experienced by older people and disabled people presented problems in accessing these locations when they were reliant on walking or wheeling. Issues such as the road layout, including the number of crossings, as well as traffic and pollution levels, meant that people were often deterred from trying to reach out-of-town locations.

Public spaces

Perceived issues with antisocial behaviour also deter people from walking and wheeling, and we heard from some participants that they would drive as close to their intended location as possible to avoid encountering this. We also heard that people were making relatively short journeys by car in order to avoid some of the challenges they encountered in the walking environment. As a result, people who can access these locations are more likely to be people who can drive and have access to a car. This creates a divide in society: access to a car enables some to access shops and services and build social capital, whilst others may struggle to make similar journeys by walking, wheeling or using public transport.

Car dependency was of particular concern to older people, with some remarking that, while they currently used a car when they needed to, there would be a point in the future where they would not be able to drive any more. They would then be reliant on walking, wheeling or public transport for mobility. The issues around car dependency they currently encounter would therefore be exacerbated through older age.

Many of the factors that reinforce car dependency may be alleviated through a well-designed public transport system that provides an alternative to the car in accessing a range of locations safely and in a timely fashion. Older and disabled people may already rely on public transport and often find that public transport is inaccessible or difficult to use.

Public transport

Connecting public transport to facilities and amenities located out of town is therefore important, and, if public transport does not serve this need, we are likely to see a greater reliance on the car for local mobility. Interviewees felt that, as a whole, public transport services in Leigh

have declined in recent years. The loss of train stations and bus routes means journeys may now be more complex or even impossible.

It was clear from our discussions that, alongside the provision of good-quality and reliable services, information and communication is important. This should include clear and accessible information about what services are running, as well as real-time information so that people can plan their journeys. For those who need to take more time over their journeys and/or manage energy budgets carefully, live information about the network is particularly important.

These concerns link with the TfGM Transport Strategy 2040 under the spatial theme of connected neighbourhoods and are central to the Greater Manchester Bus Strategy, which aims for 'comprehensive and frequent bus services'.

7.5 Concluding remarks

By engaging residents in conversations about their area, their lives and how they get around, we have provided insights into mobility challenges in and around neighbourhoods. Leigh is an area that has changed and continues to do so. In living memory, it has lost industry and, with it, transport connectivity. Like many other areas, it is seeing a decline in the high street and the relocation of shops and amenities to outside the centre.

We have seen that the quality of public spaces is important in giving people confidence to be able to walk and wheel. Issues with pavements, crossing points and inconsiderate parking are particularly likely to make walking unappealing. For older and disabled people, good infrastructure can be the difference between venturing out and staying indoors. Levels of confidence can vary

greatly throughout the year: the local environment can be quite different at night and in wet weather, and this is difficult for those who need to plan their journeys carefully to avoid the barriers they experience. For those with conditions where they need to carefully manage energy levels and physical pain, day-to-day fluctuations in health can mean the urban environment is welcoming on one day and inhospitable on the next.

The changing shape of Leigh, with its out-of-town shopping centres and the reported decline of the high street, means that it can be difficult to make journeys on foot. This, combined with some frustrations around public transport services, means that residents can feel dependent on their cars. For those who can currently drive and have access to a vehicle, this is still concerning, and they are aware that they will not be able to continue to drive as they get older.

Walkability is about more than these mundane, yet important, features of the locality; it is about having somewhere to walk to, places that are enjoyable to walk through, and access to spaces to meet people and create social connections.

These observations emphasise the importance of place and the public realm in discussions about boosting active travel and reducing car dependency. They also highlight the importance of considering leisure trips to the park or canal alongside functional journeys to shops and services and of understanding that these are not distinct practices.

Our research highlights the importance of a holistic approach that sees transport and mobility practices as part of a social world, influenced not only by decisions about transport services and infrastructure but also by the quality of the public realm and the social infrastructure available within it.

8. Recommendations

Our research highlights the importance of thinking holistically about the ways in which both public space and social infrastructure influence mobility practices. We have looked in particular at the implications for older and disabled people whilst noting that the experiences of these groups inform a broader understanding of how to design and plan spaces that are more inclusive for everyone.

The findings therefore have implications in planning for active travel, which includes walking, wheeling and cycling. Wheeling includes assisted modes such as mobility aids and electrically assisted devices. Electrically assisted devices include electric bicycles, scooters, mobility aids and powered wheelchairs. The findings also relate to public transport and transport planning in a broader sense, as well as approaches to land use planning. Given this breadth, the recommendations are not aimed exclusively at transport authorities: they are likely to be of interest to local authorities and the voluntary and community sector.

Our recommendations are informed by our discussions with residents of Leigh. The findings from this case study are likely to be relevant to other areas, in Greater Manchester and beyond, that face similar challenges. They provide a steer for those seeking to plan walkable urban areas and to account for the needs of older and disabled people. For some of the recommendations, we provide specific context from Leigh and draw connections with aspects of policy in Wigan and Greater Manchester.

We note that throughout the findings and subsequent discussion there are a number of policy areas where tensions are evident. These may be between the aims of policy and the desires of the general public or between apparently contradictory needs of the public. For example, many participants spoke of the desire to be able to walk in pleasant places away from the noise and pollution of motor traffic, and vet some wanted more space for parking and, specifically, free parking in the town. The provision of free parking that encourages more journeys by car, and the related rise in noise and pollution, could make it more difficult to plan pleasant places away from the noise and pollution of motor vehicles.

Another area of tension relates to how antisocial behaviour is addressed. Whereas the removal of access control points (see Figures 19 and 20) on walking and cycling routes is seen by some as inclusive and enabling active travel, other residents and ward councillors want these barriers to remain in place in order to provide protection against antisocial behaviour such as motorbike use in greenspaces. While people would like to see more places to rest and spend time in urban centres, retail parks and greenspaces, they are also conscious that benches and other street furniture can attract groups that can make them feel uncomfortable.

We present these recommendations under four themes: thinking about place, creating sociable places, meeting the needs of older and disabled people, and providing transport. We then share some thoughts on future directions for research.

How we think and talk about places

1. Recognise the value of social infrastructure and how this can be developed in urban contexts.

As part of planning and local decision-making, carefully consider the ways in which the provision of social infrastructure fits with the development of places and integrates with transport provision so that people can access the shops and amenities they need. Social infrastructure has previously been neglected in discussions around urban mobility, and yet it appears inextricably linked to travel patterns. The Streets for All strategy (TfGM, 2021b), which forms part of the GMCA's refreshed Transport Strategy 2040 (GMCA, 2021), includes the aspiration that active neighbourhoods, high streets and 'destination places' in particular should be places where 'space and priority is given on these streets to people who walk, play, socialise, and relax, and people can easily cross the street' (TfGM, 2021b, p56). While there is no explicit mention of social infrastructure in Streets for All, we build upon the strategy by recommending greater consideration of how transport links to social places.

2. Consider how the ways in which urban areas are branded and talked about can shape a sense of place and foster community spirit, as well as a sense of belonging.

A particular example is the image of Leigh as a part of Wigan – as part of a wider conurbation rather than a town in its own right – and what this means for how residents may experience and identify with the town. There are opportunities to foster community spirit in the town that draw on the sense of community and shared history. One approach is for local authorities to develop stronger relationships with local groups and entrepreneurs in order to develop community links and identity in Leigh in a way that ensures the town continues to meet the needs of its residents and is able to respond to changes and challenges.

Account for limited mobility and the implications this has for the relationship between public realm, distance and journey time.

Older and disabled people may find it difficult to cover even short distances to reach local shops and services. If pavements are of poor quality, cars and other obstructions are in the way or there is a lack of amenities such as toilets, water and places to rest, then this population may be deterred from making such journeys. In considering the application of concepts such as 15-minute neighbourhoods and Low Traffic Neighbourhoods, it is therefore important to take account of the ways in which different groups experience walkability at the local level.

4. Begin with the premise that any development at the neighbourhood scale should be able to be accessed by a person using a wheeled mobility aid.

By starting from this viewpoint, we are providing space for all in our communities in line with principles of universal design in order to make the built environment accessible to all. A secondary benefit of this approach is that developments are likely to appeal to a broader population, given the focus on accessibility for all rather than cycling. The latter can often be seen to be something that benefits particular groups. In relation to active travel policies, such as TfGM's Bee Network and Streets for All strategies, it may therefore be fruitful to conceptualise neighbourhood approaches as accessibility projects. This would also challenge any perceptions that TfGM focuses solely on public transport and cycling.

How we create sociable places

5. In planning urban areas, consider the mix of retail, greenspace, amenities and facilities that older and disabled people need in order to be able to spend time within the town, fostering relationships and developing social capital.

Foster a diverse mix of retail in the town: specifically, ensuring that one particular type of operation does not dominate and encouraging bigger brands and local independent traders to create a thriving and interesting town centre that encourages people to spend more time in the town centre. We recognise the complexity in encouraging development of this kind

Enhance the public realm such that it is a more pleasant environment for people to spend time in, through improved maintenance and the greening of public spaces.

Places should include comfortable, pleasant locations to dwell and interact socially away from the noise and pollution of roads. Wigan Council, for example, has run a programme of works to improve the public realm across the borough. Entitled 'Our Town', this involves

cleaning, rubbish removal and painting of much of the public realm to improve its appearance (Wigan Council, 2023).

7. As part of the process of creating a greener urban realm, build more parks and greenspaces within urban centres.

This means that older and disabled people can enjoy parks as part of their regular activities rather than considering them to be destinations that require additional trips. We would also suggest mandating the allocation of greenspace as part of all new housing and commercial developments.

8. Provide places to mix and dwell within the town centre that allow people to spend time away from the home, including accessible amenities, benches and community spaces.

People should be able to spend time in the town and be able to access places to sit, use toilets and have drinks without the need to access expensive commercial spaces. This could include, but is not limited to, community centres. These are usually found in locations outside town centres, and locating additional community centres centrally could make it easier for people to access them using public transport or to call in when visiting the town. The location of such facilities in relation to public transport networks and walking and cycling routes is therefore an important consideration. One approach would be to provide these as part of public transport hubs and other public amenities.

9. Ensure that key social infrastructure is well connected by walkable routes.

In the case of Leigh, for example, consider how the library, town hall and town square could be better connected to the pedestrianised space on Bradshawgate, thereby linking these public spaces and services with the commercial sector of the town. These places provide links to current council services that provide people with a sense of community and would enable the development of the town centre as a place where people can access a range of amenities and facilities.

How we plan for older and disabled people

10. Recognise and account for the needs of older people and disabled people and, in particular, for the ways in which they may differ from the social and functional needs of the general population.

In many cases barriers will be common across the population, but there are some that apply to older and disabled people in specific and more pronounced ways. For example, it is important to assess places in relation to the provision of benches and other places

to rest, toilets and affordable refreshments, as these amenities are likely to be of particular value to older and disabled people.

11. Ensure the built environment reflects the needs of older and disabled people by creating safe and accessible places and ensuring surfaces and paths are safe, even and easy to navigate.

This would include the creation of safe walking routes to existing greenspaces or upgrading routes across less developed greenspaces. An example that is particularly relevant is the consistent and coordinated provision of dropped kerbs, something that the general population may think little about but a lack of which might deter older and disabled people from accessing some areas. The radius of side road junctions might also be considered, as wide junctions that enable motorists to navigate junctions at higher speeds can be difficult for those with limited mobility to cross safely. Compared with junctions with tighter bends that force motor vehicles to slow down, wider junctions put pedestrians in a vulnerable position for longer.

12. Engage with local law enforcement and related agencies to challenge antisocial behaviour and other issues related to personal safety to ensure that older and disabled people feel safe in the town centre.

Note that concerns around personal safety are exacerbated for these social groups, due in part to their limited mobility, and, in allowing antisocial behaviour to go unchallenged, we risk making urban environments intimidating for older, disabled and other vulnerable people.

13. Greater enforcement with regard to illegal parking and more consistent information and guidance on inconsiderate parking in urban areas that may create obstructions for those using pavements.

Pavement parking can prevent people from making journeys within their towns and neighbourhoods and in extreme circumstances can prevent people from leaving their homes entirely. It can also damage walking surfaces, resulting in trip hazards and the pooling of water in heavy rain. Illegal and inconsiderate parking is particularly problematic for disabled people, those with mobility issues or those that need additional space on pavements, such as parents with buggies. While this may need to be considered on an area-by-area basis, it is a hugely important topic for many people and should form part of policies that support active travel.

14. Review communication channels that are available to residents and ensure that these are not limited to online platforms.

While many people are digitally literate, some find online systems difficult to navigate, and, depending on their needs, older and disabled people may not

be able to access digital channels. As a result, some may not respond to consultations or be aware of events and services available to them. It is therefore important to develop a range of ways to communicate events, services, information and important notices through traditional methods such as leaflets, newspapers and stronger links with local community groups and advocates. Further to this point, there is clearly a great deal of work at a local level that is going unnoticed by residents, and developing communications about this work by local authorities and strategic partners may help with engagement and activation.

15. Develop accessibility plans that take account of experiences of neurodiversity and sensory impairment and understand the role that sensescapes have in creating accessible environments.

Neurodivergent people (a broad term capturing multiple conditions including, but not limited to, sensory processing difficulties and attention deficit and hyperactivity disorder) and those with sensory impairments (e.g., hearing loss and sight loss) can find urban environments challenging. These conditions can mean that people may be excluded in less tangible but nonetheless important ways that relate to the complexity of the urban environment and difficulties in engaging with services. For people with sensory processing difficulties and/or hearing loss, noisy environments can be difficult to cope with. There is a challenge here in providing an environment with ample facilities that is at the same time not overly complex and overstimulating.

How we provide transport services

16. The design of the road system should prioritise walking, cycling and other forms of active travel over the movement of motor vehicles.

This requires the provision of wide pavements and direct pedestrian routes between locations. The focus should be on crossing points to ensure safe movement of pedestrians, reducing the number of stages required to cross a road or junction and ensuring that people crossing are visible.

17. Walking routes should be separated from busy traffic and be direct routes with wide, evenly surfaced pavements and dropped kerbs.

Those walking and wheeling would prefer that the impact that other modes have on their journey is reduced. This can be achieved through segregation of motor vehicles and pedestrians, through the use of protected cycle lanes or through the provision of trees, sustainable urban drainage and other features that offer a degree of protection from faster modes of transport and the associated pollution and noise.

18. Continue to develop a network of walking routes in open spaces.

As we have seen with the success of previous schemes such as the path alongside the Leigh guided busway and the looplines around Salford that extend towards Leigh, there is considerable latent demand for walking and cycling routes that can increase opportunities for physical activity. Linking these to walking and cycling routes in urban centres would further develop the interconnectivity of neighbourhoods and districts.

 Perform an audit of public transport so that services reflect the needs of residents, providing routes and timetables that meet local needs.

Assess the extent to which public transport services are accessible, affordable and easy to use. Specifically, consider whether more circular bus routes, or routes through peripheral neighbourhoods, would better enable mobility around the town, taking account of the impact of traffic flow on the performance of services. The new franchise model for buses in Greater Manchester will facilitate a greater level of control and coordination.

20. Ensure that older and disabled people can fully access and benefit from public transport provision by building accessible interchanges and stations and ensuring that transport staff recognise and understand diverse accessibility needs.

For example, if bus entrances should be lowered to allow people to board safely then ensure that this is consistently carried out by bus drivers.

21. Develop cycling routes and support residents to try cycling.

We are conscious that many will not consider cycling unless there are accessible cycle routes that are segregated from motor vehicles. It is therefore important to build wide segregated routes into and around town, particularly to out-of-town locations such as retail parks and greenspaces. People would benefit from the development of links with groups that can provide equipment and support services for those with limited ability or confidence to cycle on their own. In some cases, a generic package of information and training would suffice, but others may require specialised equipment and support that responds to particular mobility challenges.

22. Where possible, remove barriers to greenspace, particularly when these have an impact on particular groups, such as those with mobility aids and adapted cycles.

Although these barriers are often intended to restrict quad bikes and off-road bikes that are associated with antisocial behaviour, the barriers prevent many other people from accessing and enjoying greenspaces. Whilst removing these physical barriers is important,

this does not negate the potential for antisocial behaviour to act as a barrier, as we have noted in relation to the centre of Leigh.

Future research

In building upon the foundation this research has established, there are opportunities to further explore the relationship between mobility and social infrastructure. To some extent this relationship plays out within neighbourhoods and district centres, but it is also important to think about the ways in which transport facilitates connections between places. The extent and reach of this connectivity has implications in relation to access to shops, services and amenities and, in a broader sense, to the social worlds that people inhabit on a day-to-day basis.

- R1. Further exploration of the complex relationship between transport planning and social infrastructure, understanding the ways in which the public realm can foster social interactions and transport infrastructure and services can enhance access to social spaces.
- R2. Conceptual development of chrono-urbanism (an example being the 15-minute city concept) to better account for the diversity of places and services people visit, to reflect the variance in distances vulnerable groups can cover, and to appreciate the ways in which the quality of the public spaces has an impact on walkability and wheelability.
- **R3.** Development of frameworks and methodologies to enhance understanding of the ways in which neurodiversity affects experiences of public spaces and transport infrastructure, towards the creation of an evidence base that informs policy development for the creation of inclusive spaces.
- **R4.** Case study research to identify best practice in reducing antisocial behaviour in public spaces, including controls relating to the use of motorbikes and similar vehicles in greenspaces.
- **R5.** In-depth research into the barriers to cycling experienced by older and disabled people, adding to the evidence base on effective approaches that enable these cohorts to benefit from the health and accessibility benefits of cycling.
- **R6.** A living lab considering the impacts of changes to carriageway and pavement width, along with reconfigurations of pedestrian crossings and other interventions to prioritise the movement of people travelling by active travel and public transport over general traffic.
- R7. Longitudinal study of the impact of franchising on service provision across the Bee Network that considers accessibility, network connections and journey planning in terms of how these features impact passenger numbers and public perceptions of public transport.

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Appendix A - Method

Phase one: Stakeholder interviews

In the initial phase of developing this approach, we interviewed experts connected with older adults and disabled people in order to explore existing concepts, such as the 15-minute neighbourhood, active neighbourhoods, and Streets for All. This involved conducting semi-structured interviews that explored their understanding of, and their ideas around, how these groups want to be able to access their neighbourhoods. We have taken an approach that accomplishes Greater Manchester's aims of reducing car use and increasing active travel whilst also being inclusive of marginalised social groups. This approach stresses the importance of working with these particular groups, who often felt excluded from discussions and consultations.

We interviewed nine experts who work either with or on behalf of older age or disabled groups, either in specific communities or at a strategic level. Some are older or disabled themselves, and we are therefore not only providing expert testimony but also drawing from lived experience. This is a small sample of experts, and rather than providing findings that are representative of views across Greater Manchester it is intended to provide insights into the issues and themes that are pertinent to this debate. Interviews were conducted online using Microsoft Teams, with audio recordings transcribed and analysed for prominent themes. To protect their anonymity, all participants are referred to using codes.

We also conducted a workshop with transport planners in Greater Manchester. The workshop was conducted as we began to conceptualise this piece of work. It provides valuable insight around current policy and practice, in addition to observations on current active travel schemes within Greater Manchester. In this report, we label interviewees P1, P2, and so on, and we label workshop participants WP1, WP2, and so on. We provide a breakdown of the participants in Appendix B.

Phase two: Mapping workshops

In the second phase, we conducted four workshops with residents of Leigh to understand their mobility patterns and the relationship of these to social infrastructure. Recruitment included social media posts and posters in local shops to stimulate interest. Three workshops were held in the library in Leigh, a space that provides a multifunctional service to residents. One further workshop was held at Wharfdale sheltered accommodation in Leigh as part of a question-and-answer forum for residents.

A total of 19 participants took part in this phase (see Appendix B for full details). Seven people identified as disabled. Thirteen participants were female, and six were male.

Confidentiality was upheld through the use of codes for each participant within the transcripts and subsequent report. In line with university policy on data storage for research purposes, all paper records were scanned and stored.

Demographic data was collected from participants, as well as information on their common mode(s) of transport and whether they identified as having a disability.

Using a paper map of Leigh (shown in Chapter 4), we initially asked the participants to map their neighbourhood by circling on the map where they considered their neighbourhood to be. We then asked participants to place stickers on the map according to the following coding structure. Participants were asked to mark good places to walk/wheel with a green sticker. Poorer places to walk/ wheel (and places where improvements would be valued) were marked with a red sticker, places they often visit with an orange sticker, and places they like to visit but are hard to travel to with a blue sticker. Finally, yellow stickers were used to indicate anything else they would like to see in Leigh related to mobility or social infrastructure. Notes were made for each sticker location on an additional data sheet. The research team took handwritten field notes to capture additional information.

The data was analysed by combining the geographical locations of the colour-coded themes with the themes of the participants' comments to identify common issues and challenges with mobility in Leigh.

Phase three: Walking and wheeling interviews

In the third and final phase of this research, we recruited residents of Leigh to take part in walking or wheeling interviews. Recruitment was publicised using a combination of social media and posters in various locations around Leigh and through informal networks. A £10 payment was made to participants to say thank you for their time. Recruitment resulted in a group of eight participants, as detailed in Appendix B. In brief, three classified themselves as disabled, with two using electric mobility aids. Six of the participants were female, and two were male.

Walking interviews are a qualitative research method where the researcher conducts a semi-structured interview while walking alongside the participant. In this case the participants had the option to walk with or without any mobility aid or to wheel if they used a mobility aid such as a mobility scooter. Participants were offered the opportunity to rest or have a break for refreshments if required.

Semi-structured interviews were conducted and involved the researcher walking around Leigh with the participant. The structure of these was based around responses collected in phase two, focusing on common themes raised by the residents. Participants were asked to walk a regular route - one they were familiar with and one that would provide an understanding of their experience of walking or wheeling in Leigh. The interviews were

recorded using a handheld microphone, with the audio recordings transcribed and coded in NVivo software for common themes. One participant opted not to be recorded (P16). In this case, the notes were handwritten by the researcher during the interview and as such represent a close representation of the participants' responses, although not verbatim.

Additionally, the routes were recorded by the researcher using Strava. Strava is a publicly available online service for tracking physical exercise. It is commonly used for tracking walking and cycling using the Global Positioning System (GPS). The route data was hidden from public view in the researcher's Strava account.

Appendix B - Participants

Participant data

Stake	Date	
S1	Disabled themselves and works for an organisation that advocates for disabled rights and access, particularly through the social model of disability.	30/3/22
S2	Academic researching older people in the community in a volunteering capacity. Also working with students in creating interdisciplinary teams in care homes.	27/7/22
S3	Works at a strategic level with organisations that deal in policy working with older adults.	3/8/22
S4	Works for a charity that does work around people and place. Regarding the elderly, they have been commissioned to work with older cohorts about what it means to age in place.	5/8/22
S5	Academic researching ageing in the community, particularly ageing ethnic minorities.	21/9/22
S6	Visually impaired person and CEO of an organisation that tries to make places more accessible for disabled people to lead healthy active lives.	22/8/22
S7	Blind and visually impaired person who works as a campaigns manager for an organisation representing blind people.	16/8/22
S8	Translator and autism awareness trainer. Diagnosed as autistic in later life. Active travel advocate.	23/2/23
S9	Staff member at the Manchester Deaf Centre supporting senior management in developing bids and project work	27/4/23
S10	Transport Professional	4/4/22
S11	Transport Professional	4/4/22
S12	Transport Professional	4/4/22
S13	Transport Professional	4/4/22

Table 1 - Stakeholder participants with participant code and description of role

Participant	Gender	Disabled	Age	Walking or wheeling interview	Date of workshop	Date of interview
P1	F	N	76-85	N	18/03/2023	N/A
P2	М	N	46-55	N	18/03/2023	N/A
P3	F	N	66-75	Υ	18/03/2023	24/04/2023
P4	F	Υ	46-55	N	23/03/2023	N/A
P5	F	Υ	66-75	N	23/03/2023	N/A
P6	F	Υ	46-55	N	23/03/2023	N/A
P7	М	N	46-55	N	23/03/2023	N/A
P8	F	Υ	46-55	N	23/03/2023	N/A
P9	F	Υ	76-85	N	23/03/2023	N/A
P10	М	N	66-75	Υ	23/03/2023	16/05/2023
P11	F	N	76-85	N	05/04/2023	N/A
P12	М	Ν	66-75	N	05/04/2023	N/A
P13	F	Υ	46-55	N	05/04/2023	N/A
P14	М	N	46-55	N	05/04/2023	N/A
P15	F	N	26-35	N	05/04/2023	N/A
P16	F	N	66-75	Υ	05/04/2023	11/05/2023
P17	F	N	66-75	N	05/04/2023	N/A
P18	М	N	Over 85	N	05/04/2023	N/A
P19	F	Υ	76-85	N	05/04/2023	N/A
P20	F	Υ	46-55	Υ	N/A	26/05/2023
P21	F	N	66-75	Υ	N/A	26/05/2023
P22	F	N	66-75	Υ	N/A	20/06/2023
P23	М	Υ	66-75	Υ	N/A	21/06/2023
P24	F	Υ	18-25	Υ	N/A	13/07/2023

Table 2 – Research participants with participant code and demographic information.

Across the two phases there were varying amounts of car ownership. Seven out of the nineteen participants in the mapping interviews and four out of the eight participants in the walking interviews still drove.





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