

# The Transport Accessibility Gap

**The opportunity to improve the accessibility of transport for disabled people**



## Foreword

At Motability, we know that transport opens the door to so many things - access to work, education, family, friends, social activities, and much more. During the past two years, as a result of Covid-19 we have all experienced how it feels to be denied access to what matters the most to us. Yet, as our research and dialogue with disabled people demonstrates, struggling with inclusion in a largely inaccessible world remains the norm for too many.

The creation of Motability Scheme in 1978 has helped to address the disadvantages disabled people face when it comes to accessing transport. Our focus for the past 44 years has been on supporting those eligible for the Scheme through our grant making activities. This report and our wider initiatives in the evidence generation space are part of our strategy to do even more to support and empower disabled people, including those with less visible disabilities, to gain the same access to public and private transport as everyone else.

To understand the transport needs of disabled people, and thus effect change, it is imperative that we are guided by those who have lived experiencing disability. This has provided the cornerstone for this report, in which we have consulted a wide range of individuals and experts across the disability community. We have also sought input from leading academics and key stakeholders within the transport sector.

This report provides new insights into the long-standing issues around transport accessibility and, crucially, quantifies the social and economic benefits that could be generated by a more accessible transport network. The findings are compelling.

With the new evidence that underpins this report, we hope to continue contributing to tangible progress and cross-sector collaboration in this important area.



**Charles Manby MBE**  
Motability Chairman

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## Purpose

This report is intended to demonstrate the need and opportunity to improve the accessibility of transport for disabled people, with particular focus on the United Kingdom. The report incorporates relevant analysis and insights to support dialogue and decision making across a wide range of stakeholders, including academia, policy makers, the disability community, and transport operators. The report builds on the existing literature and presents new analysis which sets out the economic and social benefits that could be generated by a more accessible transport network.

This report is intended to contribute to the growing body of evidence in this area and stimulate tangible action.

This report focuses on the macro-level impacts of disability and transport accessibility. There are several limitations to the existing evidence base on the travel behaviour of disabled people. While there is a substantial body of knowledge regarding how the travel behaviors of disabled people differs from that of non-disabled people, there is limited evidence on how this varies within the population of disabled people - by level and type of disability, by age, and by the interaction of these characteristics. We also know that too often, the voices and experiences of disabled people are not prioritised in evidence. Further research is required to investigate the relationship between different types of disabilities and the accessibility of transport.

For more information on the range of activities Motability is engaged in to improve the accessibility of transport, please visit [www.motability.org.uk](http://www.motability.org.uk)



## Introduction and abstract

The relationship between transport accessibility and social outcomes is significant, however, until now, often overlooked.

In the UK those with disabilities (as defined under the Equality Act 2010<sup>1</sup>) take 38% fewer trips than those without, a figure which has not changed over the period for which we have data, 2007-2019.<sup>2</sup> While this ‘transport accessibility gap’ is driven by many factors, a significant proportion is due to the current provision of transport, both public and private, not adequately catering for the needs of disabled people.

This in turn contributes to wide ranging socio-economic disadvantage, such as disabled people being almost twice as likely to be unemployed and nearly half of everyone in poverty in the UK either being disabled or living with a disabled person.<sup>3</sup>

The ubiquity of digital technology and the transition to electric, connected, and autonomous vehicles is driving a paradigm shift in our transport ecosystem. Indeed, new transport products and services, explored further in this report, could provide improvements which move the dial on transport accessibility for the first time in decades.

There is also a very real risk of rapid change occurring without consideration for the needs of disabled people and thus creating further exclusion. For example, ensuring that the transition to net zero considers the accessibility of electric vehicles and charge-points for disabled people is both key to supporting the UK’s environmental objectives, and to ensuring that disabled people benefit from the shift to greener modes of transport.

There is extensive ongoing work across public, private and third sector organisations which aims to improve the accessibility of transport for disabled people. Despite this a significant transport accessibility gap remains, thus highlighting the need for new dialogue, approaches, and solutions which deliver tangible change.



Additional annual economic benefit of **£72.4bn** could be generated if the entire transport accessibility gap were closed for disabled people in the UK. This is the equivalent of almost the entire UK public sector spend on education per annum.\*

Improving disabled people’s access to transport widens access to healthcare, employment, education, and social activities. Our analytical approach, set out in this report, estimates that the addressable socio-economic benefit of completely closing the transport accessibility gap for disabled people in the UK would deliver benefits in the region of £72.4 billion per annum.

Our approach quantifies the economic and welfare impact of improved transport systems on disabled individuals in the UK who are currently unable to undertake all the travel they desire directly as a result of transport currently being inaccessible to them. This new analysis combines widely accepted data points to develop an improved understanding of the types, scale, and distribution of economic and social impacts that could be generated by an accessible transport network.

Research indicates that derived benefits from improvements to the accessibility of transport arise across a much broader cross-section of society beyond disabled people. However, we have taken a cautious approach to the analysis and the economic benefit valuation only accrues benefits directly attributable to disabled people and does not consider the potential positive impacts obtained from wider society.

To drive change, it is crucial to build further understanding of disabled peoples’ lived experience of transport, highlight systemic issues, and identify opportunities to better serve the inclusive transport market. This presents an opportunity to transform the lives of disabled people, closing the transport accessibility gap and unlocking significant socio-economic value.

We hope that this analysis stimulates an inflection point, supporting stakeholders across the disability community, transport, academia, and policy makers to play a leading role in orchestrating and governing the change.

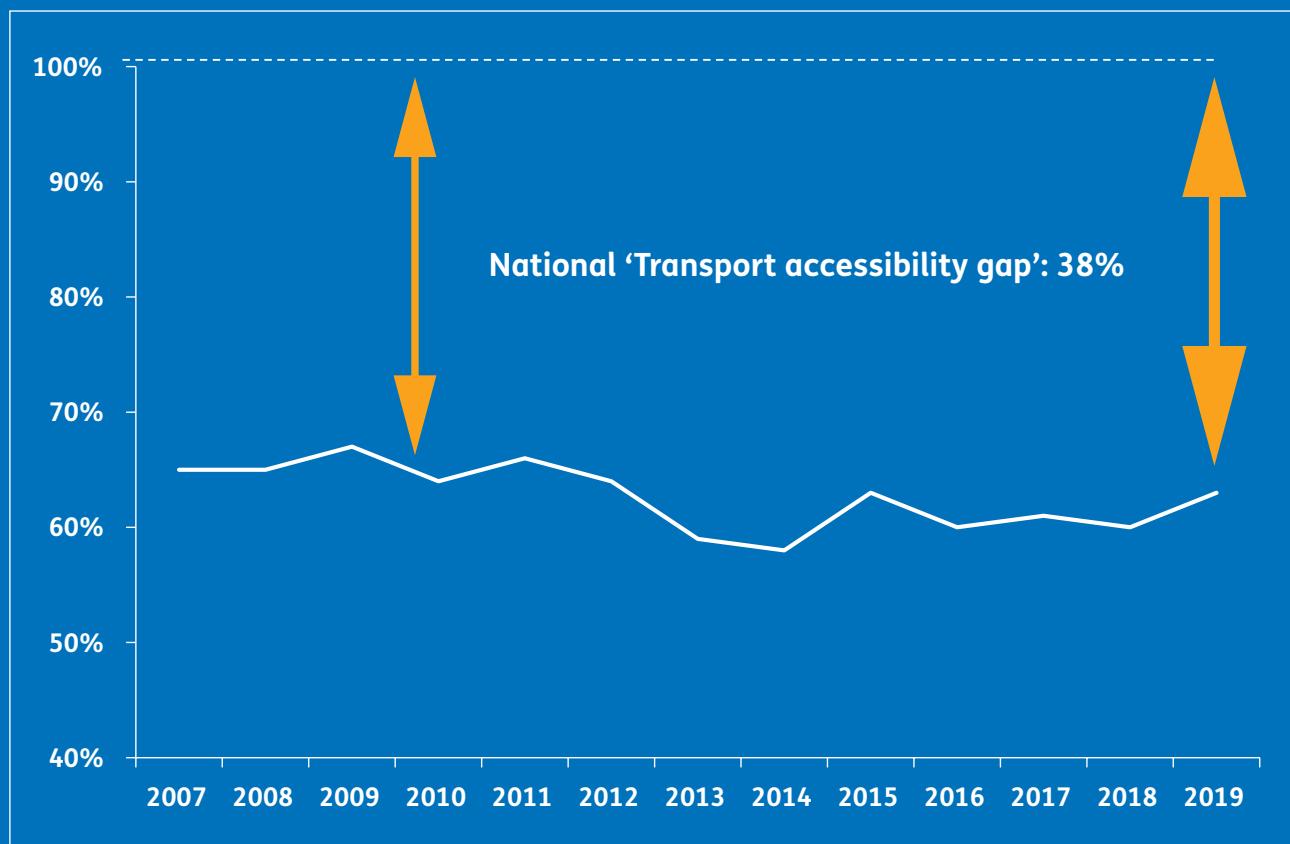
\*Office for Budget Responsibility (OBR), 2021-22 forecast.

## Transport accessibility gap

In the UK the transport accessibility gap currently stands at **38%**, which means that disabled people (as defined under the Equality Act 2010) take **38%** fewer trips than those without disabilities.<sup>4</sup> This is a figure which has not changed for over a decade.

**Figure 1**

Proportion of trips by individuals with disabilities compared to those without.



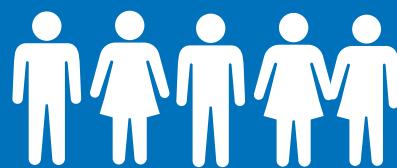
Even though this is a well-recognised issue, and there has been significant policy steps taken in this area, there has been no improvement to this figure over the previous decade...

## Understanding the transport accessibility gap

While this accessibility gap is driven by several factors, a significant proportion is due to the current provision of transport, both public and private, not adequately catering for the needs of disabled people.



**COVID-19**  
Even before the COVID-19 pandemic, nearly one in three disabled people said they simply didn't make some journeys due to problems with transport.<sup>5</sup>



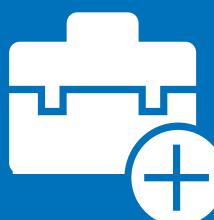
**1 in 5** disabled people are unable to travel due to the lack of appropriate transport options.<sup>6</sup>



**40%** of disabled people often experience issues or difficulties when travelling by train in the UK.<sup>7</sup>



A wheelchair users' commute can take up to **5 times** longer than that of a non-disabled person in London.<sup>8</sup>



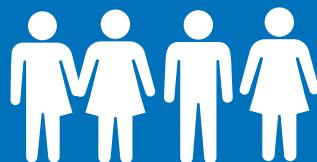
Disabled people are **4 to 5 times** more likely to be injured as a pedestrian than non-disabled people.<sup>9</sup>



Disabled people report **twice to three-times** more difficulties when traveling than non-disabled people.<sup>10</sup>



**40%** of disabled Londoners felt they would use public transport more often if it were easier to obtain travel information.<sup>11</sup>



**1 in 4** disabled people say that negative attitudes from other passengers prevent them from using public transport.<sup>12</sup>



**30%** of disabled people say that difficulties with public transport has reduced their independence.<sup>13</sup>



I have lost count of the number of times I've had difficulties travelling because transport is not accessible to me. This has been traumatic, such as when I have been stranded on platforms due to lifts not working. These experiences have meant I've lost confidence and feel very anxious whenever I leave the house.

**Ali, wheelchair user, 37 years old**

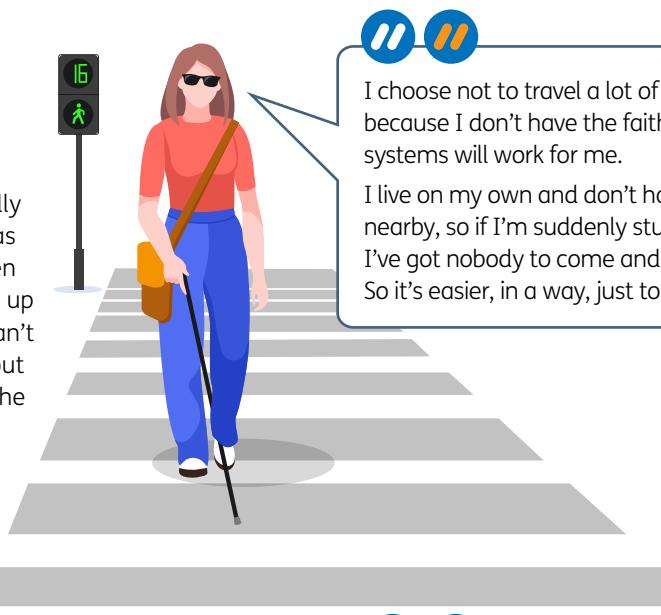
## Case studies

The following case studies show the impact of inaccessible transport systems on disabled peoples' daily lives.

### Anna, Motability charitable grants beneficiary

Anna lives in a rural area. Her sight is partially impaired, but she is grateful that she still has some peripheral vision which helps her when going out. She dislikes taking taxis: they eat up too much of her money and because she can't see the meter or the driver, she worries about people taking advantage of her. However, she has no real choice because her area is so poorly served by public transport.

Anna is considering relocating to improve her quality of life.

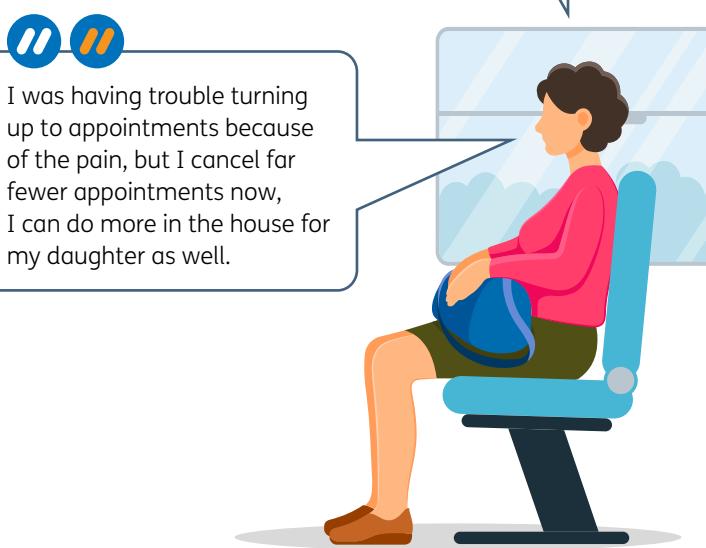
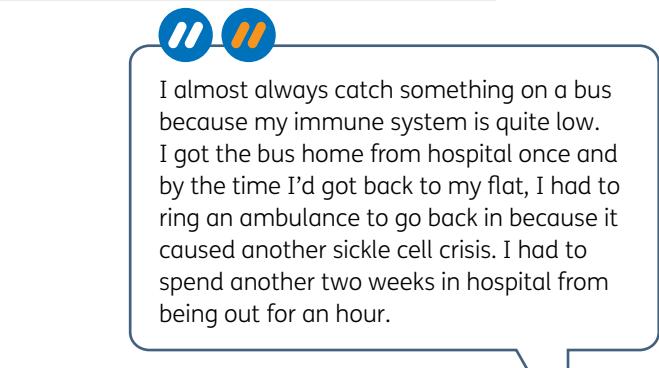


### Denice, Motability charitable grants beneficiary

Denice has sickle cell disease and hypermobility, but she has often missed health appointments in the past because she was dependent on public transport.

Denice has better access to healthcare and better health overall because she was able to get her driving licence and car with help from Motability.

Having the car for short journeys also reduces her pain levels, which has a positive impact on her overall energy.



## Experience of Ben, a wheelchair user, flying from London to New Zealand.

**Ben is a wheelchair user. He enjoys travelling in the UK and abroad and predominantly depends on his Motability vehicle to do so.**



I am not by any means a regular flyer due to the large pieces of equipment I have to travel with and a poor experience in the past. However, I had always wanted to travel to New Zealand, so I began contact with the airline a year before my flight and received a lot of support and information on the services available to make the trip accessible. The airline reassured me that a new piece of technology called the Eagle Hoist would be available and that it would lift me from my wheelchair to my seat on the plane.



My arrival and check-in was smooth, as expected. However, on arrival at the gate I was informed that the Eagle Hoist was not available for my use and I would need to be manually lifted from my chair by the ground staff. This was extremely disappointing and much less dignified than using the specially designed hoist.

This also made me anxious for the rest of my journey, but fortunately the Eagle Hoist was available and worked as described for my transfers and at my final destination airport. This provided a significantly better experience than my departure.

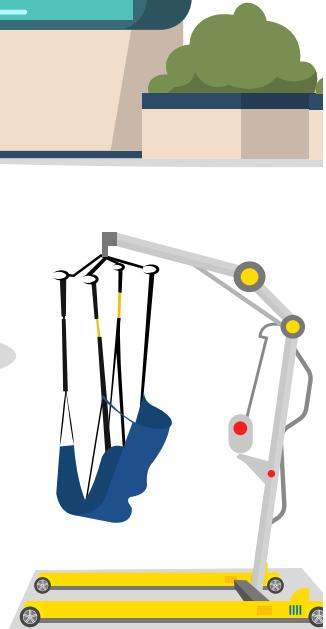


However, when returning from my trip to the UK I was once again told that the Eagle Hoist was not available for my use and I would again need to be manually lifted from my seat to my wheelchair, which after the past 4 experiences of using the Eagle Hoist felt extremely undignified. To top things off, after disembarking from the plane I could see the Eagle Hoist sitting idle at the top of the ramp.

At this point I was quite agitated and upset, I questioned as to why the Eagle Hoist hadn't been used even though it was clearly available. The airport staff told me they didn't feel comfortable using the Eagle Hoist as no one was trained sufficiently to operate it.

This felt hollow as I had been given inaccurate expectations from the airline during my journey planning due to the false information provided by the airport and the capabilities of their staff.

This highlighted the disconnect between the airport, airline operators, and the service standards that are practiced. All in all, it again left me with lost confidence in air travel and I have not traveled by air since.



# Transport accessibility across different modes

There are different challenges with accessibility across all modes of transport.

## Rail

Two in five (40%) people with physical or hidden disabilities frequently experience difficulties when travelling by train.<sup>14</sup>



I've turned down training opportunities that would be really useful to my career because the idea of travelling alone on public transport outside of my local area is just too stressful.<sup>15</sup>

**Rachel, visual impairment, 33 years old**



I look at my major local station and it reinforces all of my fears and resentments at being disabled. It represents the equivalent of a marathon for me. I would love to go in the shops and cafes but there is nowhere for me to hang on to. It is exhausting.

**James, physical disability, 18 years old**



## Buses

Whilst disabled people are more likely to travel by bus than other modes of public transport, issues often arise as a result of poor journey planning information.



I find getting on and off buses and trains impossible without assistance. I do have a mobility scooter, but it is not possible to use this on public transport, so I am still not able to travel out of my own area.

**Anna, cognitive and physical disability, 44 years old<sup>17</sup>**



My journeys have to be more planned and I struggle to rely on the available information for this.

**Eve, speech impairment, 28 years old**



## Road

Disabled drivers represent five per cent of the driving population, which is around two million people. Car travel remains the most popular form of transport among disabled adults and around a third of these journeys are made as a passenger.



I have been able to access adult education classes which were otherwise difficult to get to. Having the car has enabled me to use previous skills to participate in voluntary work.

**Ronan, cognitive disability, 41 years old**



A lot of public toilets (on 'A' roads) have closed down which makes driving long distances impossible.

**Sarah, physical disability, 50 years old**



## Air travel

Across the UK, it's been reported that 57% of disabled people find using airports or flying difficult, with 33% of people saying they were unhappy with the opportunities provided when it came to asking for assistance at the booking stage.<sup>16</sup>



I haven't flown in 18 years after a traumatic experience of travelling from London to Scotland. My wheelchair, which was kept in the hold on the plane, was not handled correctly and broken in the process. This has led to extreme anxiety and choosing road travel over air, which has limited my choice of holiday destinations.

**James, wheelchair user, 39 years old**

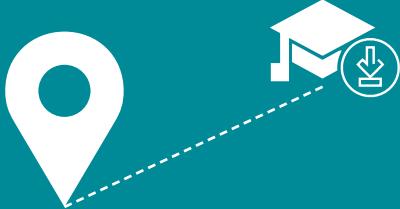


# Impact of the transport accessibility gap

Challenges related to the accessibility of transport impact a significant section of the UK population and have major implications for individuals, society, and the economy.

Disabled people make up 21% of the UK population, equating to 14 million people.<sup>18</sup> Of this figure, 1 in 5 disabled people reported that they are unable to travel due to the lack of appropriate transport options, which represents 1 in every 20 people living in the UK.<sup>19</sup>

**Leading to several additional obstacles for disabled people to overcome...**



**10%** of disabled people in the UK state that inaccessible transport is a key barrier to their education.<sup>20</sup>



## One Quarter

of working age disabled people cite inaccessible transport as a key barrier to participation in employment.<sup>21</sup>



Being able to do a simple journey, travelling comfortably and safely, gives a sense of liberty. It lifts your mood; makes you feel more excited about getting outside and trying to interact in social settings. It makes me enjoy life more and feel less trapped.

**Jane, Motability beneficiary**

**This in turn contributes to wide ranging socio-economic disadvantages...**



Disabled people on average apply to

## 60 percent

more jobs than non-disabled people, yet are almost twice as likely to be unemployed.<sup>22</sup>



## Nearly half

of those in poverty in the UK are either disabled or live with a disabled person.<sup>23</sup>



Disabled people are **twice** as likely as other citizens to have no recognised qualifications, and over one third of all those without any formal qualifications are disabled.<sup>24</sup>



Disabled people's

## living costs are 25% higher

than those of non-disabled people.<sup>25</sup>

The World Bank states that transport is a crucial driver of economic growth, poverty reduction, and achievement of key development goals and targets. It states that the transport sector must be more responsive to create long-term skilled employment.<sup>26</sup> This is a clear indicator that shifting the dial in transport accessibility is a way to tackle not only well-being and equality divisions in society, but also bolster the economy through new growth opportunities from education attainment, skills development, and improved labour market capacity.



Not being able to use transport limits my ability to work and live an independent life.

**Ali, wheelchair user, 37 years old**

# The socio-economic opportunity of improving transport accessibility

Our new analysis estimates that the annual socio-economic benefit of closing the entire transport accessibility gap for disabled people in the UK would deliver benefits in the region of £72.4 billion annually to the UK economy. This figure represents the potential addressable benefit from making transport accessible for disabled people.

This is derived from three main sources:



Our approach quantifies the economic and welfare impact of improved transport systems on disabled individuals in the UK who are currently unable to undertake all the travel they desire directly as a result of transport currently being inaccessible to them.

For these individuals, better transport accessibility does not mean a “marginally better” journey: it means an entirely transformational intervention, giving them the freedom to access opportunities and services that would have otherwise been precluded.

The analysis uses and adapts the economic appraisal principles from HM Treasury Green Book (as outlined in the Appendix). These principles provide guidance and techniques to quantify user benefits, non-user benefits, and benefits accruing to operators, the public sector and the broader economy (figures shown in the Appendix) and are generally used by public and private operators to determine cost benefit analysis of particular schemes or initiatives. This is the first time that this approach has been adapted to provide a valuation of eliminating the transport accessibility gap across all transport modes across the whole of the UK.

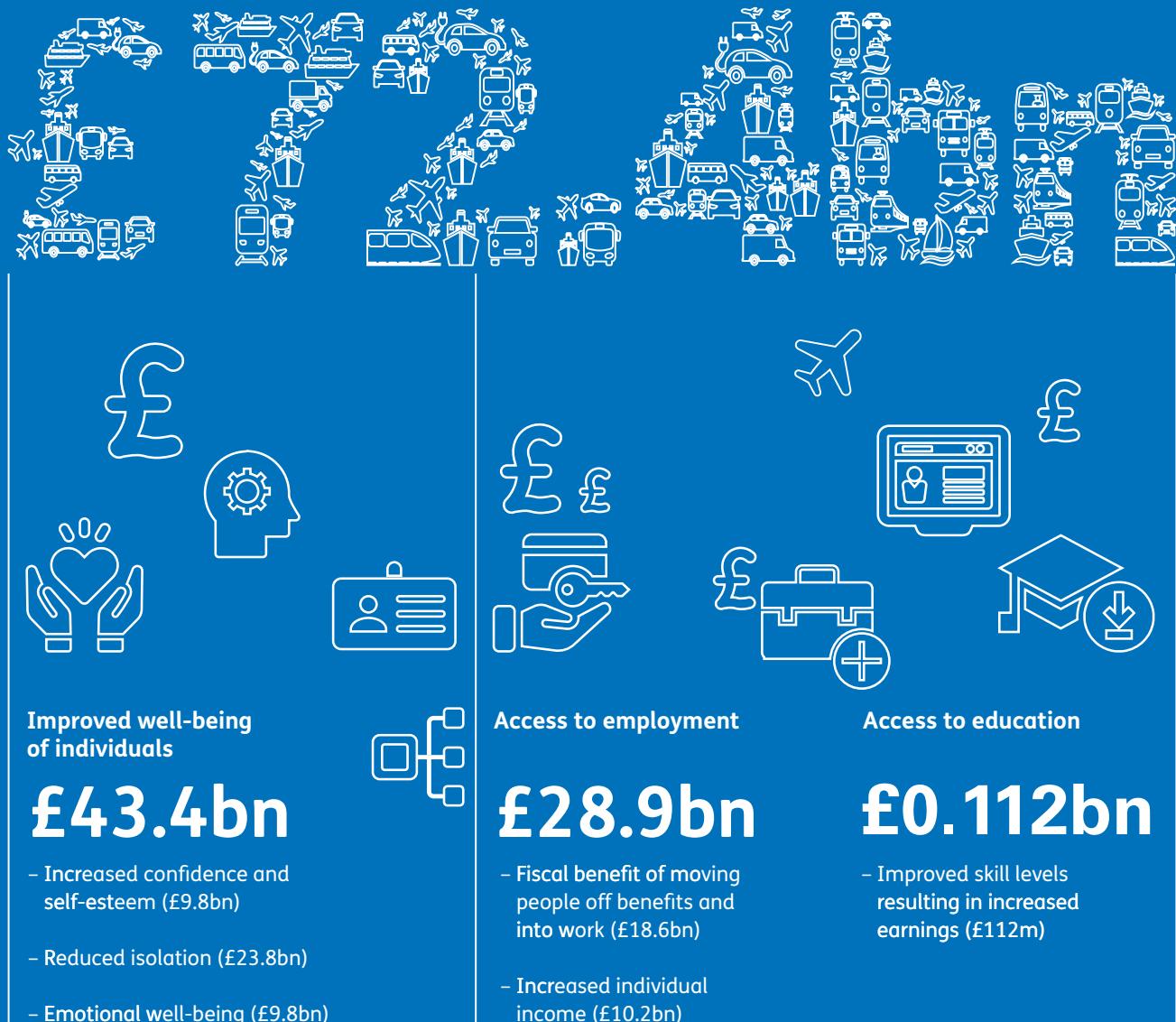
Our analysis follows a conservative approach to the valuation of the economic benefits of closing the transport accessibility gap and has been supported by external econometric experts. Research indicates that derived benefits from improvements to the accessibility of transport arise across a broader cross section of society than solely disabled people. However, our analysis only accrues benefits directly attributable to disabled people and does not consider the potential positive impacts obtained from wider society.

Key to our approach was the collection and use of robust and widely accepted travel statistics and cost conversions. These were collected through a combination of primary and secondary research, stakeholder consultations, data from Department for Transport travel surveys, WebTAG guidance, and valuations by the Office for National Statistics and other government departments (further details and breakdown of assumptions included in the Appendix). Our new analysis combines these widely accepted data points to develop an improved understanding of the types, scale, and distribution of economic and social impacts that could be generated by an accessible transport network.

Economic benefits were aggregated across the three categories outlined above, resulting in a total of £72.4bn of foregone socio-economic benefits throughout the UK economy per annum. This analysis demonstrates that the forgone socio-economic benefits of a more accessible transport network across the UK are substantial and far reaching.

This “size of the prize” presents an unarguable requirement to consider accessibility when planning and delivering new schemes and solutions. It also highlights a compelling reason for further investment in research, development, and innovation to solve accessibility issues across our existing transport network. There is an opportunity to calculate additional direct benefits through further primary research, further analysis of direct commercial benefit to transport operators, and the significant complementary benefits for improved accessibility to transport for non-disabled people.

## Annual economic benefit of improving transport accessibility in the UK



There are a range of additional benefits which require further primary research to quantify and attribute to addressing the transport accessibility gap at this stage. These are set out in the Appendix and demonstrate there is potential material upside to the £72.4bn figure (base year 2021).

The well-being of individuals considers the direct links between access to transport, the ability to partake in social, cultural, and healthcare related activities, and the impact on physical and mental health. The financial apportionment is based on analysis carried out by the highly regarded New Economy Manchester, which calculates the fiscal impact of depression and anxiety across the domains of wellbeing in this study (see the Appendix for further information).



# The opportunity for transport operators and providers

There is a risk that transport accessibility is considered as an afterthought for transport operators. However, as transport networks recover from the unprecedented changes brought about by COVID-19 and embark on the systemic changes required to achieve climate targets, there is an opportunity for operators to unlock the financial benefits delivered by improved accessibility.

The 14 million disabled people in the UK represent a significant potential customer base for transport operators.<sup>27</sup> Improving accessibility has the potential to generate higher revenues for operators and potential cost savings from retrofitting infrastructure and service offerings in the future. Disabled travelers would ideally like to travel more frequently than they currently do, on all journey types, generating additional revenue across all modes of transport. Providing accessible transport services therefore presents significant commercial and financial opportunities.

 Survey results show disabled individuals travel nearly 50% less often than they would like to for business.<sup>28</sup>

 The ‘purple pound’ (disabled people’s spending power) is currently worth £274 billion annually to UK businesses.<sup>29</sup>

 ‘Purple’, an organisation dedicated to reducing levels of inequality between disabled and non-disabled people has shown that transport providers are missing out on over £500m per year due to poor accessibility of their services.<sup>30</sup>

 22% of disabled people wanted to utilise public transport more but were unable to do so because of accessibility issues.<sup>31</sup>

It is also widely recognised that the benefits of accessible transport services and facilities are not limited to disabled people but benefit all travelers, improving overall journey experience for the entire population.

## Electric vehicle charge-point case study

Motability commissioned a report into the different aspects that may form barriers for disabled drivers to charge plug-in electric vehicles. The study noted that up to 50% (1.35 million) of all drivers or passengers with a disability (c.2.7 million) are expected to be reliant on public charging infrastructure by 2035.<sup>32</sup> Yet, sufficient thinking hasn’t yet been undertaken to:

- Inform disabled drivers which charge-points are accessible to them
- Design universal standards in the UK charging infrastructure that ensure access for disabled users
- Ensure charging cables are functional for disabled users

Charge-point operators have identified the opportunity to develop accessible charging sites and the potential risks associated with not considering accessibility from the outset. It is technically and commercially unviable to retrofit existing charging units based on new accessibility standards.

Connected Kerb, a major EV charge-point provider is focused on ensuring that their sites are accessible.

**CEO Chris Pateman-Jones says,** “Providing accessible charging facilities is essential if the UK is to deliver a full societal transition to EV. Striving for greater accessibility for EV charging infrastructure is at the core of what we try to do at Connected Kerb; we want to remove the barriers to adopting an EV across society and believe that greater accessibility is positive for all drivers, with or without disability.”



It is no coincidence that one of the most successful products in the world, the iPhone, is also one of the most accessible. The same logic applies to all products, including transport.  
**(Martyn Sibley, CEO Purple Goat, and leading disability advocate)**

## Seizing the opportunity

Now is the time to act. The ubiquity of digital technology and the transition to electric, connected, and autonomous vehicles is driving a paradigm shift in our transport ecosystem, providing a unique opportunity to address systemic issues and tackle the transport accessibility gap.

However, there is also a very real risk of rapid change occurring without consideration for the needs of disabled people and thus creating further exclusion. We must seize the opportunity to ensure that these broader shifts are part of the ‘revolution in mobility’ and improve, rather than further diminish, the accessibility and reliability of transport for disabled people.

For example, it is imperative that we ensure the transition to net zero considers accessibility from the outset. This is key to supporting the UK’s environmental objectives and ensuring that disabled people are benefitted by the shift to greener modes of transport.

**Improving accessibility is a priority for government and closely aligned with a range of key policies and strategies.**

The Future of Mobility: Urban Strategy, launched in March 2019, states that transport innovations must be accessible by design in order to empower independent travel. This echoes the 2018 Inclusive Transport Strategy which states that advances in technology should provide opportunities for all members of society and be used to improve accessibility for disabled people. These key strategies indicate that mandatory regulations regarding accessibility could soon be in place for transport operators and manufacturers of original equipment. It is therefore imperative to get ahead of this curve to reduce retrofitting costs in the future.

There is also a clear opportunity to utilise best practice and build on existing work in this area, for example:

- Alongside Government, public sector organisations such as Network Rail and National Highways are focusing on improving transport accessibility.
- Leading academic institutions are investing in research and development in this field.
- Private sector transport operators and start-ups are developing new products and services aimed at making transport more accessible.
- Disabled People’s Organisations and charities have also generated excellent research and recommendations which provide valuable insights to inform policy and decision making.

Critically, disabled people must have a voice in the decision-making process, informing transport policy makers in the early stages of transport infrastructure, product, and service development.

**Several factors mean that progress towards closing the transport accessibility gap has been challenging to date:**

1. **Difficult to measure the impact of accessibility investments** – it is easier to quantify the costs than the benefits.
2. **The commercial benefits for transport operators and providers are often overlooked** – while this message has been shared by several excellent campaigns and studies undertaken by Disabled People’s Organisations and charities, accessibility is still often considered a ‘nice to have’.
3. **Lack of awareness** – with stigma, historic segregation, and a limited number of disabled individuals in senior decision-making roles across the industry.
4. **Considered difficult and costly** – especially investments and retrofitting physical infrastructure such as step free access.
5. **Difficulties in system level thinking** – with lack of communication and interaction across transport modes and operators.



**The needs of older people, and those with visible or hidden disabilities, must be at the heart of all new modes of transport.**

**Future of Mobility Minister Jesse Norman**

## Example opportunities to improve the accessibility of transport



### Accessible mobility services

Ride hailing services (such as Uber) and car sharing options provide limited accessibility options, whilst the Public Service Vehicle Accessibility Regulations (PSVAR) only apply to vehicles with a capacity exceeding 22 passengers – not those that are being introduced in new Demand Responsive Transport schemes. Improving this could offer significant potential benefits as disabled people are 33% less likely to hold a driving license.



### Realtime journey planning

There have been major advances in the journey planning applications, such as Google and WAZE, but there is limited data sharing from transport authorities on the status of lifts and escalators as identified in the (2019) KPMG-sponsored Infrahack.

Improved journey planning has the potential to improve accessibility as one of the greatest barriers to disabled people using transport is uncertainty and poor information. It is also essential for integrating transport and enabling multi-modality.



### Automation

Deployment of fully Autonomous Vehicles presents obvious benefits for those without a driving license. However, widespread deployment is likely to be some way off.

In the near term, driver assistance features, such as lane keep and parking assistance, offer tangible benefits to all drivers, improving vehicle safety and ease of operation. This has the potential to make driving easier and safer for those with restricted mobility, hearing impairments and a range of other disabilities.



### Measurement and appraisal

There is limited ability within appraisal frameworks such as the Department for Transport's WebTAG framework to measure benefits associated with improved transport accessibility.

This has implications for decision makers in both prioritising accessibility investments relative to non-accessibility investments, but also in understanding the benefits associated with different types of accessibility projects.



### Data and 5G technology

Technological developments over the past decade have created an abundance of transport data and the ability to communicate this in real-time. 5G and AI technology can be harnessed to pro-actively identify customer needs and prepare for them, improving journey planning and reliability, while also having direct contact with customers through instantaneous feedback channels. Enhanced customer requirements data is also key to enabling the accessible design of new products and services.



### Improved evidence gathering

Research shows that disabled people face an entrenched disadvantage when accessing transport, and that this disadvantage impacts their mobility, wellbeing, economic contribution, and quality of life. A wide range of public and charitable programmes aim to address these challenges, but there is a lack of specific and robust evidence of 'what works,' particularly for new and emerging modes of transport, what solutions are needed for different people across different transport modes, and what existing best practice should be scaled.

## Conclusion

There is a unique opportunity to leverage new insights and technology advancements in transport to deliver a step change in accessibility. This in turn has the potential to drastically improve the lives of individuals and generate unprecedented social and economic benefits.

The lack of improvement in the equality of transportation accessibility over the past decade has maintained social barriers faced by disabled people. This can be seen through the significantly greater proportion of disabled individuals who are unemployed or experiencing a life in poverty.

While there is significant ongoing focus to improve transport accessibility, several factors have hindered progress to date. A lack of awareness in society of the adversity disabled individuals must overcome has resulted in limited meaningful dialogue between disabled people and key decision makers. This is exacerbated by a lack of specific and robust evidence of what solutions are needed and challenges around measuring the impact and corresponding benefits of accessibility investments to individuals and to society.

This report shines a light on the current challenges and opportunities related to transport accessibility, as well as highlighting the unprecedented benefits to society which could be realised through action and change.

Motability exists to support and empower disabled people by improving their access to transport.

We are proud of our history and the way in which the Motability Scheme and our grant making has impacted millions of people's lives. And with our Endowment, and the resilience that it gives us, we are now able to do even more.

Our vision is that no disabled person shall be disadvantaged by poor access to transportation. Our research with disabled people demonstrates that there is a long way to go to achieve that vision and that Motability will therefore have a crucial role in supporting disabled people with their mobility for years to come.

We are exploring new and innovative ways to empower disabled people with greater access to transport. This includes launching a competition to fund an inclusive transport evidence centre, which aims to transform nation-wide understanding of disabled peoples' lived experiences of transport problems, convene decision makers across the transport and disability sectors to drive system level change and ensure that disabled people's voices are a part of the mobility revolution. This presents an opportunity to ignite new collaborations across sectors to deliver meaningful change and we invite you to join us on this journey.

To find out more about our strategic plans, please visit [www.motability.org.uk](http://www.motability.org.uk)



Being able to get around is essential for me, it enables me to have a normal life, see my friends and family, go to the shops, and go to work. It is not right that because of my disability I should have my basic freedom restricted and often I feel that people do not understand that.

**Steve, physical disability and hearing impairment, 23 years old**

Since receiving my Motability vehicle, my mental health has significantly improved. It was extremely depressing having no or little independence. Relying heavily on aid to travel, even for short journeys, makes you feel like a burden.

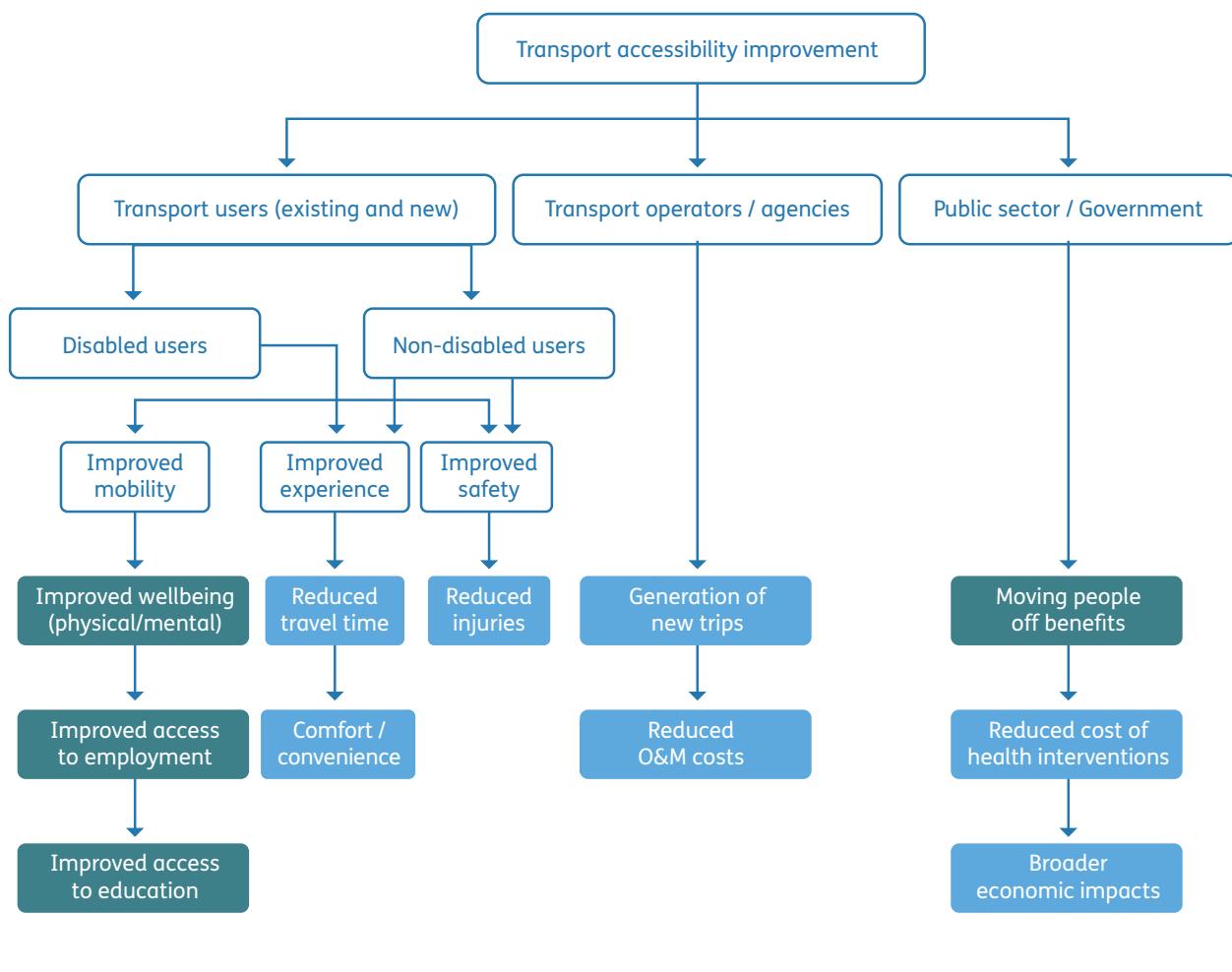
**Charlotte, Motability beneficiary, wheelchair user, 44 years old**



## Appendix

### Quantifying the opportunity

Accessibility improvements benefit all users of transport, private transport operators and the public sector. The following diagram presents a high level view of the beneficiaries and benefits of improved transport accessibility.



 Included in current analysis

 Excluded in current analysis

Desktop research was conducted to identify the key benefits resulting from improved access to transport. Representatives from a range of central government departments have supported the development process of the Greater Manchester Cost benefit model in use and accompanying resources. This also draws on extensive research and analysis conducted by Oxford Economics.

Our approach included the identification of benefits to disabled people that could be indirectly realised through closing the transport accessibility gap. We have indicated which Benefits were included in our quantification, with the others being displayed to provide reference to further benefits that could be achieved and measured for in the future.

<b>Benefit</b>	<b>Beneficiary</b>	<b>Overview</b>	<b>Included in analysis?</b>
Improved well-being/health	Disabled user	Improved sense of health and wellbeing.	Yes
Improved access to employment	Disabled user; UK government	Increased ability to work and pursue a career.	Yes
Improved access to education	Disabled user	Increased ability to access education and training.	Yes
Improved access to people and places	Disabled user	Increased ability to access people and places using transport.	No
Increased choice and control	Disabled user	Improved independence and control to make decisions.	No
Increased social connections	Disabled user	Increased social connections and relationships.	No
Reduced travel time	Disabled user	Limited data across all transport modes/ geographies and disability types.	No
Comfort/ convenience	Disabled user	More comfortable and improved transport experience.	No
Reduced injuries	Disabled user	Limited data across all transport modes.	No
Generation of new trips	Transport operator	In case of public transport, this does not necessarily result in increased revenue, as new trips made by disabled users will qualify for concessionary travel.	No
Reduced O&M costs	Transport operator	In the case of private travel and air travel, there is limited data to inform robust assumptions.	No
Reduced cost of health interventions	NHS	More accessible transport modes enable disabled users to access facilities/services independently. For example, introduction of low floor buses reduces bus dwelling and boarding time.	No
Indirect broader economic impacts	Wider economy	Not relevant for improved privately owned transport modes.	No
Reduced cost of health interventions	NHS	Increased employment leads to improved health outcomes. However risk of double counting health benefits.	No
Indirect broader economic impacts	Wider economy	Risk of double counting and over estimation of benefits as some of the broader impacts have already been considered.	No

## Greater Manchester cost benefit analysis model

The Greater Manchester Combined Authority (GMCA) Research Team (formerly New Economy) has pioneered the development of a cost benefit analysis (CBA) methodology that has become nationally leading in its approach to articulating the fiscal, economic and social value of interventions.

The methodology has been subject to an ongoing process of development since it was initially developed in 2011 and was adopted as supplementary guidance to HM Treasury's Green Book in 2014. Representatives from a range of central government departments have supported the development process, and remain engaged in further refinement of the model and accompanying resources. This also draws on extensive research and analysis conducted by Oxford Economics.

CBA has become a central element in the development of business cases for new and innovative ways of working. The CBA model is used to understand the value of money provided to an intervention and the extent to which new delivery models might generate savings and improved outcomes compared to the previous norms. The model also enables the wider 'economic case' or public value to be articulated, quantifying economic benefits that accrue to individuals and businesses, and social benefits in terms of improved individual health and well-being.

The CBA model is used extensively across the country by public, private and voluntary and community sector partners with the cost and benefit figures drawn from national sources, including government reports and academic research. All of which have been quality assured by the GMCA Research Team with oversight from relevant central government departments.

## Socio-economic analysis

The table below outlines the methodology taken to derive the population segments impacted and the public benefit figures as taken from the Greater Manchester CBA model.

Impact	Methodology
Improved well-being	<p>Improved mobility improves disabled people's overall physical and mental health by allowing access to better services, increasing their ability to participate in society, providing a greater level of independence and improving their social connections.</p> <p>The population affected by this impact category was assumed to be 2.8m based on research conducted by the DWP revealing that 1 in 5 disabled people believe that inaccessible transport is a key barrier in their participation in employment, education, social, and cultural activities in the UK.<sup>33</sup></p> <p>Impacted population = Number of disabled people in the UK (14m)<sup>34/5</sup>.</p> <p>The impacted population numbers were populated in the Greater Manchester Cost Benefit analysis tool with 0% deadweight assumption. The tool calculates the monetizable benefit based on (i) increased confidence; (ii) reduced isolation; (iii) emotional well-being. The unit cost assumptions are derived from a bespoke analysis carried out by New Economy Manchester, based on apportioning the willingness to pay value for the QALY impact of depression (£35,400 per annum) across all the domains of wellbeing as set out in the National Accounts of Wellbeing.<sup>35</sup></p> <ul style="list-style-type: none"> <li>i. The annual benefit to the individual and the public in monetary value per individual of increased confidence / self-esteem is £3,500.</li> <li>ii. The annual benefit to the individual and the public in monetary value per individual of reduced isolation is £8,500.</li> <li>iii. The annual benefit to the individual and the public in monetary value per individual of emotional well-being is £3,500.</li> </ul> <p>These figures were then applied to the population group affected to calculate the total benefit to the whole economy if the transport accessibility gap was closed and these individuals were able to travel every time they desired to. Therefore, improving their mental health, confidence to participate in the economy and undertake activities under their own accord, to name a few benefits.</p>

Impact	Methodology
Improved access to employment	<p>Improved transport accessibility opens up new opportunities and options for the disabled population in the job market and provides them with improved prospects that were once inaccessible due to transport. This analysis outlines the population impacted and the proportion of those that state transport has prevented them from undertaking employment due to inaccessibility.</p> <p>The population affected by this impact category was assumed to be ~970k based on the research conducted by the Equality and Human Rights Commission revealing that inaccessible transport is a key barrier to participation in employment for a quarter of working age disabled people in the UK.<sup>36</sup></p> <p>Impacted population = Number of unemployed working age disabled people in the UK (3.89m)<sup>37</sup>/ 4.</p> <p>The impacted population numbers were populated in the Greater Manchester Cost Benefit analysis tool with 0% deadweight assumption. The tool calculates the monetizable benefit is based on (i) fiscal benefit of moving people off benefits and into work; and, (ii) increased income. The unit cost assumptions from the Greater Manchester Cost Benefit Analysis tool have been used, which are derived from unpublished DWP modelling work.<sup>38</sup></p> <p>i. The annual fiscal benefit to the public of moving an individual off benefits and into work is £19,153.</p> <p>ii. The annual increased income to the individual from employment is £10,504.</p> <p>These figures were then applied to the population group affected to calculate the total benefit to the whole economy if the transport accessibility gap was closed and these individuals were able to gain employment.</p> <p>This calculation does not include the potential positive health impact on disabled people entering employment. This benefit has been discounted from the analysis to ensure that health benefits are not double counted across the analysis.</p>
Improved access to education	<p>Improved transport accessibility opens up possibilities for disabled individuals and the skills and education they would like to obtain. This analysis outlines the population impacted and the proportion of those that state that transport has deterred them from pursuing additional skills and education.</p> <p>The population affected by this impact category was assumed to be around 250,000 based on the research conducted by the Office for Disability Issues revealing that inaccessible transport is a key barrier to education for 10% of the disabled people in the UK who hold no formal qualifications.<sup>39</sup></p> <p>Impacted population = Number of disabled adults in the UK with no formal qualification (2.52m)<sup>40</sup>*0.1.</p> <p>The impacted population numbers were populated in the Greater Manchester Cost Benefit analysis tool with 0% deadweight assumption. The tool calculates the monetizable benefit based on the increased earning amongst residents achieving Level 2 NVQ. The unit cost assumptions from the Greater Manchester Cost Benefit Analysis tool have been used, which are derived from research conducted by BEIS.<sup>41</sup></p> <p>i. The annual public benefit of improving an individual's skill level by achieving a Level 2 NVQ is £443</p> <p>This figure was then applied to the population group affected to calculate the total benefit to the whole economy if the transport accessibility gap was closed and these individuals were able to gain this qualification.</p> <p>Our analysis does not include the impact of disabled people re-entering the education system to gain further educational qualifications, continued professional development qualifications, etc. due to lack of available robust data at this point.</p>

## Key assumptions

Our approach to the economic benefit valuation only accrues benefits directly attributable to disabled people and does not consider the potential positive impacts obtained from wider society.

Qualitative and quantitative research demonstrates that addressing accessibility issues in the transport system results in benefits for the non-disabled members of society as well as the disabled members.<sup>42</sup> An accessible environment is essential for about 10% of the population, necessary for about 20 to 40% of the population, but creates comfort for all.<sup>43</sup>

The analysis provides annualised socio-economic benefit of improving transport accessibility for disabled people to the UK with a base year of 2021.

The analysis does not consider potential additional economic benefits arising due to corresponding increased spending in the economy by disabled people because of improved access to transport, for example increased tourism.

The access to employment analysis is based on the pre-Covid-19 scenario and does not consider the shift to remote working and corresponding impact on access to employment. This requires further analysis and consideration to understand.

Our approach quantifies the economic and welfare impact of improved transport systems on disabled individuals in the UK who are currently unable to undertake all the travel they desire directly as a result of transport currently being inaccessible to them.

Our analysis does not provide a timeline to accrue these benefits as this will be highly dependent on the nature, quantity and time taken to implement new policies and technologies.

The analysis does not consider population changes within the disabled community in the UK. It aims to present the missed economic benefit at this point in time from not serving the needs of disabled people in the UK.

The accuracy of the Greater Manchester Cost Benefit analysis tool has not been verified. The methodology used within the tool is based on HM Treasury's Green Book and has been adopted as supplementary to the Green Book. Representatives from a range of central government departments have supported the development process and remain engaged in further refinement of the model and accompanying resources.<sup>44</sup>

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