

# The barriers to streetscape access

The experiences of disabled people in the UK

Key Insights,  
September 2024

**\*ncat**  
National  
Centre for  
Accessible  
Transport



# About ncat



**The National Centre for Accessible Transport works to ensure that no disabled person faces challenges arising from poor access to transport by:**

- Engaging with disabled people to better understand their experiences and co-design solutions
- Amplifying the voices of disabled people in all decision making
- Collaborating widely with all transport stakeholders
- Demonstrating good practice and impact to influence policy

ncat is delivered by a consortium of organisations that includes Coventry University, Policy Connect, The Research Institute for Disabled Consumers (RiDC), Designability, Connected Places Catapult, and WSP. It is funded for seven years from 2023 by the Motability Foundation.

For more information about ncat and its work please visit [www.ncat.uk](http://www.ncat.uk)

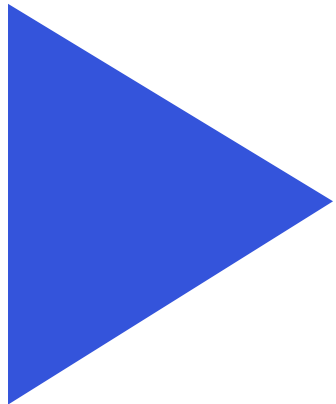
To contact ncat, either about this report or any other query, please email [info@ncat.uk](mailto:info@ncat.uk)



# Why did we do this work?



**Disabled people face significant barriers to participating in society, reporting higher anxiety, limited access to education and lower employment prospects than non-disabled people.**



In 2023, the National Centre for Accessible Transport (ncat) was set up to help reduce this transport accessibility gap. ncat works with disabled people and people in the transport industry to understand how to improve transport.

To ensure that ncat is led by the views of disabled people, an anonymous survey was developed. It aimed to find the barriers that disabled people face while travelling.

When we talk about the streetscape, we mean all of the things that make up the outdoor environment, such as pavements, benches, trees, electrical cupboards, parked cars, and more.

These streetscape barriers must be addressed to create a more accessible society. Our work engages disabled people to provide clear policy and practice recommendations, placing them at the centre of decision-making—something previously lacking in street design.

# What did we do?

**A two-part investigation, involving over 400 disabled people from around the UK.**

## What was the aim of the investigation?

1. Understand the barriers disabled people face when using the streetscape.
2. Understand why changes are not being made to the streetscape
3. What the impact on a disabled person's life is because of the inaccessible streets
4. Prioritise the actions that should be made to improve the streetscape

## Who responded to the research?

We used a two-step approach to understand streetscape barriers.

First, we interviewed **26** disabled people across the UK for **40-60 minutes**, via phone, Microsoft Teams, or Zoom, based on their preference.

Next, we conducted an **online survey** with **408** disabled people, facilitated by the Research Institute for Disabled Consumers (RiDC). The survey, accessible by phone or video relay, took **15-20 minutes** and was carefully designed to be fully accessible.

Both studies focused on participants' experiences with the streetscape, major barriers faced, interactions with local authorities, and how changes impact their journeys.

# Part 1 – Streetscape Interviews

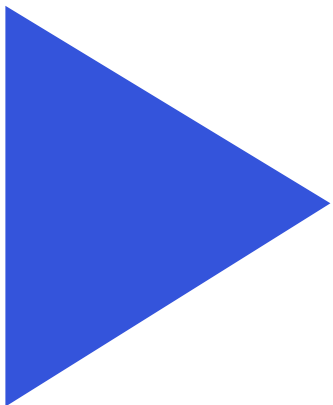


# What did we find from the interviews?

## (part 1)

**Disabled people feel invisible, are burdened with having to adjust to society and are exhausted by the unpredictability of their street journeys.**

Street barriers are numerous and have a significant impact on a disabled person's life.



From the interview study, these 9 themes were evident:

1. The ways in which society is designed is bad for accessibility
2. Pavement pose numerous barriers
3. Behaviour from the public increases risks and barriers
4. Street furniture continue to pose unpredictable barriers
5. Navigating the streetscape is time-consuming and challenging
6. Roadworks add to the unpredictability of streets
7. Street design negatively impact disabled people's navigation, health and behaviour
8. Issues are not being addressed and communication is poor
9. New modes of transport are creating concerning trends for the future of streets.

# What did we find from the interviews?

## (part 2)

**How society is designed... is bad for accessibility.**

**Most disabled people experience barriers when accessing streets.**

- The biggest issue raised was **societal design**, where disabled people's needs were often **overlooked**, leading to **inconsistent streetscape design** and implementation.
- Participants highlighted **inadequate facilities**, such as **poorly placed street signs** and **disabled parking without nearby dropped kerbs**.
- Some **new designs worsened accessibility** by removing essential crossing points.



Why would you put a whole road of disabled spaces, or even just one disabled space, and then there's no dropped kerb nearby?

Participant 6 | Powered wheelchair, Mobility



I don't think they [LA] think enough about the positioning of it at times, there's that. The street signs themselves are a damn nuisance.

Participant 26 | Carer



# What did we find from the interviews?

## (part 3)

### Pavements pose numerous barriers.

#### The second most common streetscape challenge

- Disabled people highlighted **poor pavement surfaces**, lack of **dropped kerbs**, and **problematic pavement camber** as major accessibility issues.
- Shared spaces caused **anxiety**, while **poor maintenance**, inconsistent surfaces, **tree root damage**, and **weather effects** further worsened accessibility.



There are so many bad ones. Very few, or less, nice, I can easily navigate, but there are so many that are broken or they don't have much textile.

Participant 5 | White cane, visual impairment



Oh my goodness, these are things that you don't realise are there until you start using wheeled things on. The camber fools you.

Participant 17 | Powered wheelchair, Mobility



# What did we find from the interviews? (part 4)

## The behaviour from the public increases risks and barriers.

Public behaviours negatively impacting disabled people  
in streetscapes.

- **Pavement parking** was identified as a major barrier, making street navigation difficult for disabled people.
- Participants reported facing **public aggression** and **frequent collisions with distracted pedestrians**, often using their phones



It's safer for me to go onto the road than it is to actually approach somebody directly now because of the mentality.

Participant 11 | Crutches, Hearing

# What did we find from the interviews?

## (part 5)

**Street furniture continues to pose unpredictable barriers.**

Moveable street furniture was particularly highlighted

- **Bins, especially after collection,** were a common issue, with some left out by residents, **obstructing pathways.**
- **Unpredictable street furniture,** like outdoor dining setups and advertising boards, created additional navigation challenges for disabled people



Wheelie bins are a nightmare, I mean I know obviously the design of them is good for lots of other things, they're out in the streets on collection days, but some people keep them out there.

Participant 2 | Powered wheelchair, Mobility



Street furniture or signs or things that you may use as a landmark to help you may all of a sudden be changed or moved so you have to find more reliable landmarks. Participant 9 | White cane,

Visual & Hearing

# What did we find from the interviews?

## (part 6)

### Navigating the streetscape is time consuming and challenging

Accessible routes were often longer and less convenient than non-accessible ones

- People with visual impairments provided twice as many comments, highlighting the challenges they face in navigating streets with fewer barriers.
- Key issues included the lack of contrasting colours for crossings, kerbs, and cycle lanes, as well as the problematic design of zig-zag crossings with central refuge islands.



...to reach one of the bus stops, it's only going to take five minutes and I'll be choosing the 20 minutes way, because I know the other way, there are not many barriers. Participant 5 | White cane, Visual

# What did we find from the interviews?

## (part 7)

### Roadworks add to the unpredictability of streets.

#### Disabled people described difficulties navigating temporary paths

- Participants highlighted the **dangers of poorly marked roadworks**, emphasizing the unpredictability and difficulty in navigating them.
- Missing or incorrectly designed **ramps**, often too **steep**, were also common issues, with **better communication** about roadworks seen as essential for helping disabled people manage disruptions.



They might have like taped off areas around the holes. I just find that really quite scary, because as I'm approaching, I can never really know what is going on until I get really, really close.

Participant 14 | White cane, Visual



If there is any work going on, I should be aware of that and I don't know how.

Participant 5 | White cane, visual

# What did we find from the interviews?

## (part 8)

### Street inaccessibility negatively impact disabled people's navigation, health and behaviour

A major impact for disabled people was being forced onto the road due to inaccessible pavements, increasing anxiety and risk

- Streetscape barriers often caused delays, forced disabled people to turn back, or led them to avoid certain areas, sometimes relying on costly transport like taxis.
- These challenges required greater physical and mental effort, often resulting in pain or injury.
- Disabled people frequently limited outdoor activities and sometimes had to wait for assistance to continue their journey.



There are times when I've tried to get out, but I can't get past the cars with the drop kerbs so I've just gone home again.

Participant 6 | Powered wheelchair, Mobility



There's sometimes when I've got late lectures in the day and I could really do with just quickly running into town and getting something, but I'm like, "Oh, I'm not going to be able to park, I'm going to have to put that off for another day." Participant 10 | Crutches, Mobility

# What did we find from the interviews? (part 9)

## Issues are not being addressed and communication is poor

Disabled people were asked about their experiences raising streetscape challenges with local authorities. In all cases, complaints were directed to the relevant local councils.

- Most disabled people found the complaint process time-consuming and exhausting, with many hesitant to report issues due to fears of being perceived as troublemakers.
- A general feeling of disengagement from authorities, with complaints often receiving no action or being dismissed, leading to discouragement and a sense of ineffectiveness in the process.

“

I think a lot of people don't want to complain and can't be bothered. They feel they're going to be a troublemaker if they complain.

Participant 18 | Manual wheelchair, Mobility

“

I did try and make some change and I felt like I was getting somewhere when they agreed to meet me, but then nothing happened.

Participant 4 | Manual wheelchair, Mobility

# What did we find from the interviews?

## (part 10)

### New modes of transport are creating concerning trends for the future of streets

#### Future transport trends are changing the streetscapes

- Concerns about **electric vehicles** were minimal, mainly due to their relative rarity; however, some disabled individuals noted **difficulties hearing them approach**, raising questions about the adequacy of regulations on electric vehicle noise.
- Disabled people expressed **strong negativity toward scooters and bikes on pavements**, particularly e-scooters, citing **dangerous riding behaviours** and issues with **improperly parked scooters**, which they felt burdened them to adapt without proper enforcement.



Too quiet. I haven't got the best hearing and I've nearly been run over a number of times.

Participant 18 | Manual wheelchair, Mobility



Yes. Well, people riding them on the pavement and because they're quite fast, some of them, I've been knocked over a few times. I've been clipped and had the living daylights terrified out of me and my guide dog.

Participant 15 | White cane, Visual



# Part 2 – Streetscape Questionnaire



# What did we find from the questionnaire?

Following the advanced statistical modelling of the questionnaire, we found that the following factors have the most significant impact on a disabled person's life.

Note, that significant impact is measured statistically. This means the factors of e-scooters, public behaviours and information about streets were all found to be statistically insignificant. These are the results from this survey's statistical analysis and further work will be required to explore why these were not found to be significant. While some results have been deemed statistically insignificant, we acknowledge that they may still hold importance for individuals.

From the interview study, these 5 streetscape factors were found to be the most statistically impactful on a disabled person's life:

1. Pavement needs
2. Street furniture
3. Previous experiences of streetscape barriers
4. Local authorities
5. Roadworks

# What did we find from the questionnaire? (part 2)

## Pavement Needs

Was about both the physical design aspects of pavements, as well as perceptions as to whether disabled people's needs are considered in the design of pavements.

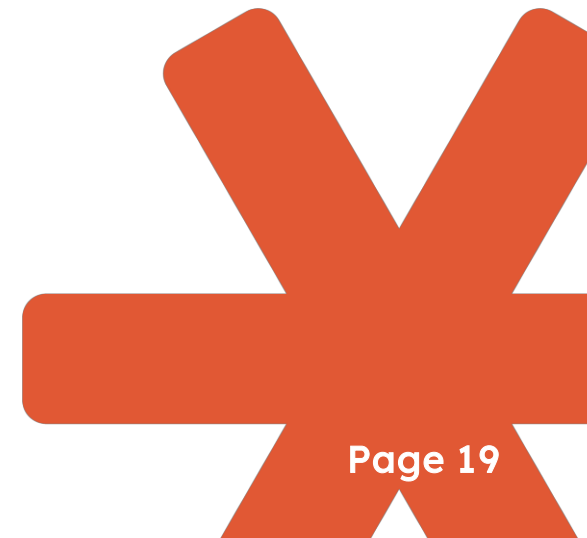
- Needs were not considered in pavement design, with **75.6%** feeling overlooked, especially by local authorities.
- Quality, camber, and width of pavement surfaces were identified as critical factors, with approximately **87%** of respondents strongly agreeing that their needs were unmet.

# What did we find from the questionnaire? (part 3)

## Street Furniture

Street furniture was the next significant streetscape related impact on a disabled persons life.

- The main barriers for disabled individuals were **advertising boards and pavement parking**, affecting **65% of respondents' navigation**.
- Outdoor dining, wheelie bins, and overgrown hedges also posed challenges, with **85% noting worsened access after wheelie bin collection**.
- **Improved public awareness and education** are needed to address these accessibility issues effectively.

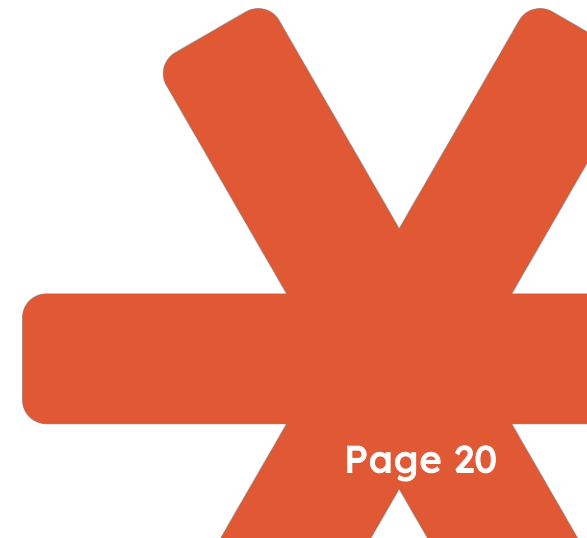


# What did we find from the questionnaire? (part 4)

## Previous experience of streetscape barriers

Previous bad experiences have a significant impact on a disabled person's life.

- **92%** of respondents reported having to turn back due to barriers in the streetscape.
- **97%** had to travel on the road because of inaccessible pavements.
- These experiences indicate that various factors contribute to overall accessibility issues, suggesting that **inaccessible streetscapes have a lasting impact on disabled individuals.**



# What did we find from the questionnaire? (part 5)

## Roadworks

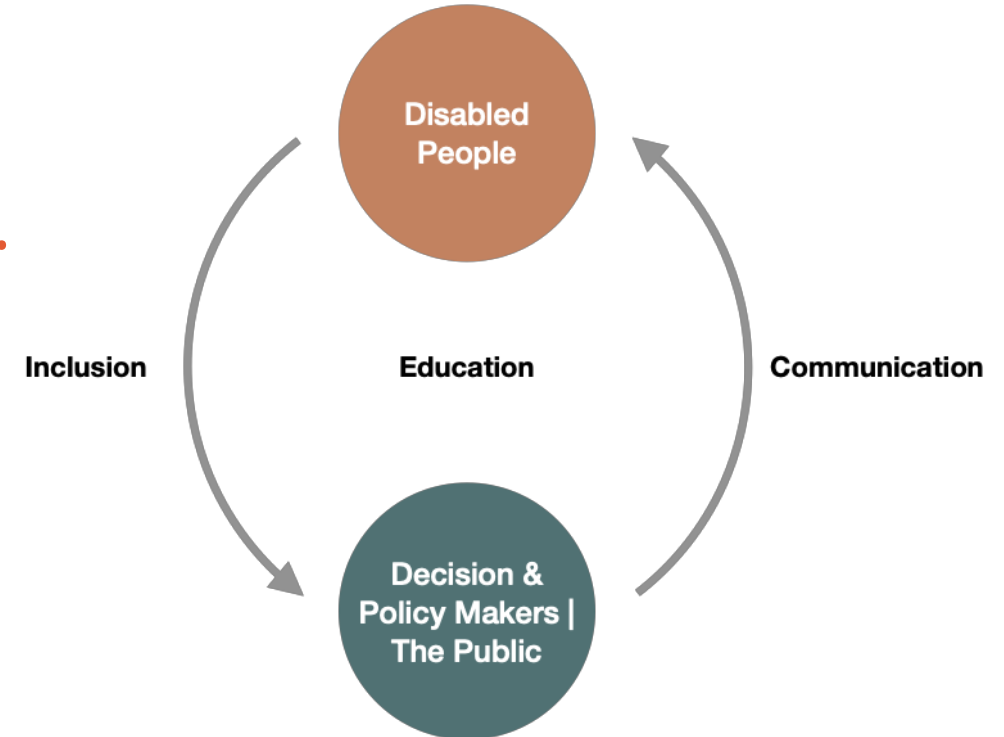
Significant impacts on life caused by roadworks.

- **94%** of respondents said they had challenges navigating the temporary paths around roadworks
- **84%** highlighted the temporary ramps as challenging.

# What conclusions did we come to?

The work highlight the significant barriers disabled people face in accessing UK streetscapes.

- **Inclusion:** Engaging disabled people in decision-making about infrastructure, public spaces, and policy is essential to addressing barriers they face.
- **Communication:** Improved communication from decision-makers, especially local authorities, would help alleviate existing barriers, even if not all issues can be resolved.
- **Education:** A focus on education is vital for both inclusion and communication, as many challenges, like unsafe e-scooter use and poorly placed street furniture, stem from a lack of awareness.





# What recommendations do we put forward?

Based on this two-part investigation,  
this is what we need to do:

- **Prioritize the maintenance and improvement of pavement surfaces, especially near key locations like GP practices and shops.**
- **Legislate for the inclusion of disabled people in new street space designs and ensure feedback is acted upon.**
- **Ensure adequate maintenance of facilities for disabled people to keep them usable.**
- **Revamp issue reporting to local authorities to improve feedback processing and communication about actions taken.**
- **Establish an accessible streets ombudsman to ensure proper processing of complaints from disabled individuals.**
- **Legislate standards for temporary paths and ramps at roadworks, and notify residents of disruptions to aid planning.**
- **Implement public awareness campaigns to educate the community on disabled people's needs and promote better behaviours regarding pavement use.**

# What should happen next?

**There is a critical need for change.**

**Failures occur at every stage of streetscape development.**

## What will ncat do?

- **Work with others to identify tangible changes.** Together, we will identify changes for the key issues identified in the survey. A roadmap for change and grant funding programme will be shared on the [ncat website](#).
- **Share the data from the survey.** The data from this survey will be shared publicly, and we will track how things change.
- **Raise awareness about transport barriers using the experiences shared in this report.**

## What can people working in the transport sector do?

- **Use the data and insights from this survey and from existing industry research into accessible transport to make transport decisions.**
- **Ensure disabled people are decision makers.** Disabled people need to be decision-makers in the transport industry. From the very start of projects, co-produce projects to identify changes, work out what needs to happen, and implement changes.
- **Advocate for accessible transport.** Share this report, and other research you come across with your colleagues, to raise awareness of the transport barriers faced by disabled people.

# Key insights

This report just gives key insights.

The Full Report as well as Easy-Read and BSL version of the highlights are available at [www.ncat.uk/what-we-do/projects](http://www.ncat.uk/what-we-do/projects)

ncat encourage you to freely use the data available in this report for your research, analyses, and publications. When using this data, please reference it as follows to acknowledge ncat as the source:

‘ncat (2024). ‘The barriers to streetscape access’. Available at [www.ncat.uk](http://www.ncat.uk)