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# **Invisible Barriers: How public attitudes affect inclusive travel**

## **Key Insights**

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



# About ncat

**The National Centre for Accessible Transport (ncat) works as an Evidence Centre developing high quality evidence, best practice and innovative solutions to inform future disability and transport strategy, policy, and practice 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 our website [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)

## Our consortium partners:



## Our funder:



# Why did we do this work?

**Disabled people make 38% fewer journeys using transport than non-disabled people, a statistic that has not changed for over ten years (Motability, 2022).**

This report is part of a series of research conducted by the National Centre for Accessible Transport (ncat) since its launch as an Evidence Centre in early 2023. Whilst this is a standalone report, we would recommend it is considered alongside other ncat research published from late 2024. As ncat progresses further, reports and insights will also be published on our website [www.ncat.uk](http://www.ncat.uk)

In 2023, ncat surveyed 1,195 disabled people about the barriers they experienced while travelling.

We found that 59% of disabled people experience negative attitudes from non-disabled people when travelling, across all modes of transport (ncat, 2023).

While research has been done to understand the negative attitudes and behaviours from non-disabled people, this project aimed to identify the most effective ways to change negative behaviours and attitudes of non-disabled people towards disabled people when travelling.





# What did we do?

**1,640 people completed a survey about public attitudes in travel settings and views on proposed interventions.**

Our research was broken down into 5 research tasks:

- 1. Conduct desktop review of existing literature and interventions**
- 2. Run focus groups with disabled people**
- 3. Develop list of interventions to focus on and test with disabled people**
- 4. Run survey with non-disabled people about the selected interventions**
- 5. Bring together summary of findings.**



# What did we find from the focus group with disabled people?

**There is a notable difference in the way disabled people are treated depending on whether their disability is visible.**

- ▶ The general public lacks an awareness and understanding of disability.
- ▶ Politics and news stories play a significant role in shaping negative attitudes towards disabled people.
- ▶ The accessibility barriers and negative attitudes that disabled people face when using transport have alarming implications on their mental health and confidence.
- ▶ Participants felt that many existing accessibility issues resulted from disabled people not being included in the design of transport and services.



# What did we find from the existing literature?

**There are several interrelated factors that shape the views of non-disabled people to disabled people.**

- ▶ People with more understanding of disability and regular, meaningful contact with disabled individuals tend to hold more positive attitudes (Wang et al., 2021).
- ▶ Attitudes vary depending on the type of disability, with some conditions perceived more sympathetically than others (Wang et al., 2021).
- ▶ Students in inclusive schools and those with strong moral identity show greater empathy toward disabled peers (Szumski et al., 2020).
- ▶ Seat-yielding behaviour on public transport is influenced by factors like health, crowding, and visibility of need; social discomfort often prevents action (Baig et al., 2022a; Baig et al., 2022b; TfL, 2019).
- ▶ Misuse of disabled bays and weak enforcement remain widespread problems (Disabled Motoring UK, 2022).

# What did we find from the real-life interventions?

## There is little to no evidence of long-term evaluation of schemes' impacts.

- ▶ 'Please offer me a seat' badge in London: A survey of badge users found that 84% of users have an invisible condition, 78% of users find it easier to get a seat, 75% are regularly offered a seat, and 95% of users are likely to recommend the scheme to a friend (TfL, 2018).
- ▶ Priority Seating Week in London: Raises awareness of priority seats through announcements and signs (TfL, 2024).
- ▶ Priority seating design: 3 in 5 non-users of priority seating on refurbished buses said they can recognise the benefits and importance of the new moquette for others who require them (TfL, 2023).
- ▶ Tackling Blue Badge Abuse: Local Resolution Order (LRO) in East Sussex educates offenders about the proper use of Blue Badges, with 100-150 LROs annually, increasing awareness and reducing re-offending (TransportXtra, 2022).
- ▶ BSL Travel Announcements: Customer information screens at Edinburgh Waverley and Glasgow Central stations display BSL travel announcements to raise awareness of deaf passengers' needs (Network Rail, 2024).



# Where should interventions be focussed?

1

Seating on public transport

2

Wheelchair spaces on public transport

3

Disabled parking

4

Street space





# Survey Methodology

**Respondents stated the importance of the topic and that completing the survey increased the respondents' understanding of the challenges.**

The survey consisted of 5 sections:

- ▶ **Travel patterns, disability awareness and interaction**
- ▶ **Attitude to Disability Scale (Power and Green, 2010)**
- ▶ **Attitudes and behaviours in key settings**
- ▶ **Impact of potential interventions**
- ▶ **Personal information questions (e.g. gender, age)**

# What did we find?

## Using the key areas to focus interventions we identified which interventions would be the most impactful

Following the survey we have identified 7 key findings:

1. People's characteristics and experiences with disabled people significantly impact their views on whether interventions will make an impact.
2. People agree that education could have a positive impact in teaching children and young adults how to support disabled people while travelling.
3. Videos on social media are viewed as the most impactful form of messaging about the role of service animals and carers and sharing street space.
4. Sounds when the ramp extends are viewed as more impactful than generic audio messages about access needs.
5. More luggage space by your seat could help free up priority spaces on public transport.
6. Fines are viewed as more impactful than messaging when it comes to keeping disabled parking bays free.
7. Divisive views on non-disabled people wearing an 'ask me for my seat' badge.

# Key Statistics

**84%**

of 'Please offer me a seat' badge users have an invisible impairment



(TfL 2018b)

**34%**

of non-disabled respondents were unaware the sunflower lanyard indicates a hidden disability



**83%**

of respondents think extra luggage space by seats would free up priority seats



**42%**

Non-disabled respondents believe people don't give up priority seats because they're unaware they're in them



**32%**

of non-disabled respondents felt having an injury or access need was a valid reason to park in a disabled space



**30%**

Stated that education for 4-12 year olds would be extremely impactful in changing public attitudes



# What conclusions did we come to?

## Conclusion 1: There is big potential around solving the luggage problem on public transport.

Disabled people told us that they have challenges with people storing luggage in priority places (e.g. priority seats and wheelchair spaces) and other spaces that impacts their ability to move around.

This causes conflict when they need to ask people to move their belongings to make space.

## Conclusion 2: Education is a very important tool that should be higher priority.

Disabled people told us that education and awareness raising through humanising disabled people is a key aspect of improving public attitudes.

They stressed the importance of having young people be aware of disability as a way of combating prejudice and ableism. It may also help them from asking awkward questions or feeling embarrassed to learn.

Educating young people can also enable them to pass on the learnings to older people (such as parents).



# What conclusions did we come to?

## (part 2)

### Conclusion 3: Public awareness campaigns should focus on videos on social media and on public transport.

Disabled people and non-disabled people agreed that public awareness campaigns are an important way to raise awareness and educate people on what to do.

Disabled people highlighted that consistency and repetition are key to getting people to build empathy and a better understanding of disabled people and their needs. They also emphasised the importance of including all impairments, including non-visible.

### Conclusion 4: Create better understanding and singular design behind badges and lanyards.

Disabled people told us that having a non-visible impairment creates an extra layer of challenge for disabled people as they need to justify their impairment to people.

This especially comes up around high conflict areas such as priority seats and Blue Badge parking.



# What conclusions did we come to?

## (part 3)

**Conclusion 5: Create bold emotive signage on seats or on the floor, and audio messages to help remind people about space on public transport.**

Disabled and non-disabled people agreed that signage and audio messages could help with creating space for disabled people on public transport.

**Conclusion 6: Give fines to enforce Blue Badge parking restrictions.**

Disabled people told us that parking in Blue Badge bays is a source of conflict with non-disabled people.

For example, there are instances when they are interrogated for using a Blue Badge when parking, as their validity was put into question.



# What conclusions did we come to?

## (part 4)

### Conclusion 7: Try combining interventions for most impact.

The most effective behaviour change interventions have information campaigns as well as “carrots” for good behaviour and “sticks” for bad behaviour.

What this means, is that there will likely be bigger success if different types of interventions are delivered at the same time.



# What should happen next?

**For change to happen, interventions need to be supported by disabled people and have larger impacts on non-disabled people's behaviours.**

There are 3 areas we have provided recommendations in:

- 1. People in the transport sector**
- 2. People in the public sector**
- 3. People conducting research**





# What should happen next in the transport sector?

## Recommendations for people in the transport sector:

- ▶ Prioritise robust Monitoring and Evaluation of the impact of interventions.
- ▶ Bus and rail manufacturers should explore how to increase luggage space.
- ▶ Private parking companies and local authorities should enforce Blue Badge violations with fines.



# What should happen next in the public sector?

## Recommendations for people in the public sector:

- ▶ Consider inclusive education in schools as part of the national curriculum and involve disabled people in planning.
- ▶ Support public messaging campaigns.
- ▶ Use the shift towards devolution and bus reform as opportunities for change.
- ▶ Support areas trialling interventions.
- ▶ Create an ombudsman and legal protections for making complaints.
- ▶ Consider guidance on penalties and repercussions for not helping disabled people.

# What should happen next for research?

## Recommendations for people conducting research:

- ▶ Study more interventions and other settings.
- ▶ Actively include disabled people in research from the beginning.
- ▶ Ensure fair and ethical research practices.
- ▶ Ensure research outputs are shared with decision makers and industry.
- ▶ Ensure research outputs are accessible to disabled people.



# How will ncat use these findings to achieve change for disabled people's transport?








## We have made recommendations for ncat and its future activities:

- ▶ **Raise awareness.** We will share the findings of this study on the ncat website and will present the outputs and conferences and industry events.
- ▶ **Share the data from this study.** We will share the data from this research with researchers and students who would like to do further analysis on the collected data.
- ▶ **Provide funding.** The data from this research and the Community for Accessible Transport panel will be used to inform ncat's grant funding programme (details on the ncat website).











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# Key insights

This report just gives key insights.

The Full Report as well as easy-read and BSL versions 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 (2025). ‘Invisible Barriers: How public attitudes affect inclusive travel’. Available at [www.ncat.uk](http://www.ncat.uk)’**

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ncat website: [www.ncat.uk](http://www.ncat.uk)



LinkedIn: [www.linkedin.com/company/ncat-uk](http://www.linkedin.com/company/ncat-uk)



Email: [info@ncat.uk](mailto:info@ncat.uk)