



# **The Resource Collection**

**Summary of work and findings**

**Highlights Report, November 2024**



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)

ncat encourage you to freely use the data available in this report for your research, analyses, and publications. When using this data, or quoting any comments, please reference it as follows to acknowledge ncat as the source: 'ncat (2024). 'Resource Collection'. Available at [www.ncat.uk](http://www.ncat.uk)

## **1 Why did we do this work?**

With the Resource Collection project, the National Centre for Accessible Transport (ncat) aimed to map and bring together the United Kingdom's current 'resource landscape' or 'knowledge' of accessible transport.

In this project, when we talk about 'resources', we mean explicit 'knowledge' that is captured and shared using more formal formats, such as reports, Government policy documents, White Papers, journal papers, books, or data spreadsheets.

When this project started, there was no comprehensive collection of the information and evidence (or 'resources') that existed about accessible transport in the United Kingdom (UK). Without such a collection it can be harder to find the information and evidence needed to improve transport accessibility and understand what knowledge is missing.

Initially this mapping was to identify existing resources in relation to ncat's first planned research projects. However it became clear quite

quickly that by expanding the search to all map as many resources as possible, this would be a valuable resource for anyone working in the area of transport accessibility.

We therefore had two goals with the work:

1. To map and document as much information and evidence on accessible transport as possible, so it can form the basis for a public platform where anyone interested in transport accessibility can find relevant information and evidence.
2. To explore critical resource gaps and needs, so that ncat can better prioritise and decide what challenges to focus on in the future.

This initial evidence gathering started in August 2023 and finished in March 2024. The project outputs are a report of findings and a 'Resource Collection' spreadsheet.

## **2 What did we do, how did we do it, and who did we work with?**

### **How did we design the research?**

The project consisted of two main activities.

The first activity was to map accessible transport resources focused on the UK. Specifically, we searched for resource documents and projects across the following categories:

- Research
- Policy and Regulation
- Evaluations and Learnings

- Strategy
- Technical documentation (such as standards, guidance documents or best practices)
- Data sets.

We used different techniques to search for resource documents and projects. To find academic research, we used pre-agreed search terms<sup>1</sup> and filters to search the Scopus<sup>2</sup> database and Google Scholar<sup>3</sup> for relevant documents. We limited these searches to material published after 2015. A benefit of the approach is that it is transparent, making it easy for others to understand exactly what we searched for and what we did not, so that they can carry out new searches without risking duplicating ours.

To find other types of resources, such as research produced outside of academia, policies, strategies, and similar materials, we needed to use a more flexible and organic approach, which involved searching through the websites of individual organisations for relevant material. We began by exploring the websites of resource producers/funders we were already familiar with, as well as the websites of accessible transport organisations identified in previous ncat work. Often, searching one website would give us ideas for where to search next. While we did not have a strict timeframe for these searches, resources produced before the year 2000 were generally not included.

---

<sup>1</sup>[See Section 5: Other available resources, and limitations](#)

<sup>2</sup>[www.scopus.com](http://www.scopus.com): Empowering discovery since 2004

<sup>3</sup>[Google Scholar](#)

As part of the resource mapping activity, we also took note of organisations involved in creating this ‘knowledge’, as well as different resources available to support knowledge generation in the UK, such as research groups, living labs, funding schemes, and others.

We recorded each document, project, organisation or other resource that we discovered in our ‘Resource Collection’ spreadsheet and gave them labels describing the themes and topics they covered (see table below for examples).

<b>Journey Stage</b>	<b>Transport Type</b>	<b>Topic</b>
Planning/Preparation/ Payment	Train	Hearing
Cancelling travel/reporting issues	Tram/Light Rail	Vision
First or last mile travel	Rapid Transit	Mobility
Waiting and interchanging	Bus/Coach	Dexterity
Boarding or alighting	DRT/Community Transport/Dial-a-ride	Learning
Travelling	Ferry/Hovercraft	Socially or behaviourally
Information	Cycling	Memory
Communication	Walking & Wheeling	Diet
Unspecified	Unspecified	Communicating
End-to-end (All phases)	Private car	Mental health
Parking and Charging	Motorcycle	Appearance
-	Private hire taxi/Ride hailing	Stamina/Breathing/ Fatigue
-	Micromobility	Continence
-	Aviation	Non-visible
-	Mobility as a Service	Pan-impairment
-	Public Transport	Complex
-	Multimodal	-
-	Connected and Automated	-

-	Electric Vehicle	-
-	Other	-

For instance, for each document, we indicated the impairment areas, transport modes, journey stages and geographical areas in the UK they concerned. A central limitation of the resource mapping activity was that we could not review each identified document in full, but instead relied on the information included in the provided summaries or abstracts. As a consequence, the labels we applied to identified documents are not as precise as they would have been if we had read each document in full.

### **Who else responded to the research?**

The second activity was to explore the resource gaps and needs that are impacting the delivery of accessible transport in the UK. Besides looking at the content in our ‘Resource Collection’ to see what topics and themes appeared over- and underrepresented, we interviewed ten professionals in the field of accessible transport to capture their views on these resource or knowledge gaps and needs. We recruited these interviewees by reaching out to relevant contacts from different types of knowledge-producing organisations, such as academia, third sector, government, and transport organisations. Although we did not directly ask about their personal circumstances, six of our interviewees told us they have a lived experience as a disabled person.

We conducted a thematic analysis of the interview data to identify patterns in knowledge needs and gaps. Additionally, we examined how the knowledge we mapped into our ‘Resource Collection’ spreadsheet was distributed across different types, themes, and topics and compared that to the interview data, where relevant.

## **What did we exclude?**

In our mapping, we did not include documents and projects:

- Exclusively focused on non-UK contexts, regardless of relevancy.
- That do not address specific issues faced by disabled and older passengers, such as resources focused on transport availability more generally or on disabled transport staff.
- On how transport causes or alleviates accessibility needs, for example, about how active travel may improve mental health or about long-term illness following traffic accidents.
- Of a more informal character, such as blog posts, letters, news articles, and some high-level case studies.
- Written exclusively for a passenger audience, such as passenger information leaflets.
- That are withdrawn but still available to access online, such as withdrawn standards or policies.
- That we considered to be too specific and non-generalisable, such as documents evaluating the accessibility of a particular station or discussing technical accessibility requirements for a specific train carriage model.

## **3 What did we find?**

Through our first activity to map accessible transport resources focused on the UK, we found:

- 626 resource documents and projects, including research, strategies or policy-related documents and projects
- 366 organisations that make, fund or commission knowledge on transport accessibility, (and we've collectively called these 'stakeholders')
- 54 hubs, such as research groups, living labs, funding schemes, and others, (and we've collectively called these 'resource capabilities' where a 'capability' describes the ability by one body or hub or to gather information, generate new knowledge, disseminate, and then apply and share these resources

Through our second activity to explore resource gaps and needs, we found that:

- **There is a need for more strategic and purposeful approaches to resource production that:**
  - Are holistic and forward-looking, particularly in relation to:
    - The complexity of disability
    - The end-to-end journey
    - Evolving transport technologies and how to ensure they will align with societal visions for accessibility
    - The overall customer experience (as opposed to merely focusing on accessible experiences)
  - Help integrate knowledge on specific accessibility challenges into a broader narrative about how to improve transport accessibility, for example, through meta-analyses and reviews of existing knowledge.
  - Encourage greater ownership and accountability for implementing knowledge in practice to address accessibility issues.



- Prioritise resource production that best motivates industry to change, such as impact and cost-benefit analyses.
  - Carefully consider how knowledge needs differ depending on the challenge to be solved. Much of the resources on accessible transport are being produced without a clear understanding of desired outcomes, leading to replication of knowledge and poor overall impact.
- **There is a need to make better use of existing resources to address accessibility needs.** Currently, much of the resource that exists is not driving the right change. This could be because:
    - It doesn't sufficiently **motivate** people in the transport industry and related sectors to take action.
    - People in the transport industry do not **understand** how to implement knowledge in practice.
    - People working to improve transport accessibility lack **awareness** of the resources that exist.
    - People working to improve transport accessibility are not able to **access** these resources and knowledge.
    - Reports should include formal **recommendations**, practical guidelines for implementation, and suggestions for quick wins (if they exists).
- **There is a need to improve the processes by which knowledge is produced, and solutions are generated.**
    - Disabled people must be better involved in all stages of knowledge generation and solution development. Specific issues include:

- Devaluing of knowledge produced by the disabled community.
  - Inadequate compensation for disabled people's contributions.
  - Practitioners not using appropriate methods and techniques when engaging disabled people in projects, which may lower the quality of data and lead to participation fatigue.
- The true needs and requirements of users must always be the central starting point in knowledge and solution generation. Issues include:
    - Biased and assumption-based approaches generating a false understanding of the needs of disabled people, ultimately leading to interventions and solutions that are not fit-for-purpose.
    - Solution generation is often driven by technology or business needs, rather than what users need. This lowers the chances that solutions make a real difference to disabled people.
  - There is a need for greater collaboration within the transport sector as well as between the transport sector and other industries. Knowledge, resources and solutions are often produced in industry siloes, reducing their overall usefulness and impact. Collaboration is particularly crucial when exploring and developing new solutions to wider transport accessibility challenges.

## 4 What should happen next?

What we learned about knowledge needs and gaps in resources has since been used to help shape ncat's future priorities. Additionally, we have now made available the publicly accessible 'Resource Collection' based on the information and evidence we mapped during this project.

Our goal is to update the Resource Collection annually, to ensure it remains current and includes new evidence and information.

We will also invite other knowledge and resource developers to submit their own resources, either existing or as they are newly developed, into the collection. There will be a link on ncat's website inviting people to suggest new resources for inclusion.

We will also carry out new searches to expand on the Resource Collection's content. For instance, we may look to include information and evidence from countries other than the UK that could still be valuable for those working to improve transport accessibility in the UK.

**Recommendations are also taken up by ncat for its future activities, where ncat will:**

- **Use and share** these findings to inform future research in conjunction with priorities identified through the voices and experiences of disabled people.
- **Work with partners** and stakeholders to make these findings available for them to use, and robustly evidence the issues faced by disabled people when accessing transport.

- **Work with policy makers**, transport providers and industry to translate these findings to influence future policy and to develop solutions, products and services to reduce the transport accessibility gap.

## 5 Other available resources, and limitations

The publicly accessible Resource Collection will make available, through a simple searchable database available on the ncat website, the 626 resources initially identified through this project, searchable through the use of key words, or through a series of filters and sort options. As outlined above, the intention is the collection will expand over time.

Additionally, for those researchers who would like the ability to interrogate the database further, the full spreadsheet, which includes analysis of stakeholders and resource capabilities, a fuller breakdown of search terms and methodologies, and also guidance pages for their use, will be available as a downloadable excel file, via the ncat website or by request to [info@ncat.uk](mailto:info@ncat.uk)

### **What were the limitations of the project?**

As we wanted to map as many documents and projects as possible within the project's timeframe, we were limited in how much time we could spend reviewing each document or project. Therefore, documents and projects included in the map have not been:

- **Assessed for quality**. This means that we have not made any judgment calls about whether documents and projects are 'good' or 'bad,' and we did not use a certain quality standard to determine

if a document or project should be included or excluded in our map. For example, we did not assess the robustness of methodologies or representativeness of samples used in the research we included in the map.

- **Tagged and categorised based on a full review of the document.** Instead, each document/project has been categorised and tagged based on information given in abstracts or summaries, limiting the precision with which we could apply these labels. For instance, a report that discusses mental health will only have been tagged for 'mental health' if this was explicitly mentioned in its summary.
- **Categorised by type of publication** (such as conference proceedings, journal article, book chapter, and so on). This may impact the user's ability to themselves assess the nature and quality of an included document.

Additionally, some documents, particularly academic journal papers, are not publicly freely available in their entirety, but accessed instead through formal academic platforms, for instance ScienceDirect.com or Elsevier.com. So, whilst the abstract, or formal summary of the paper may be available to view, the full paper is behind a paywall, which is a limitations of the Resource Collection itself.

Therefore, use of the Resource Collection accepts these caveats and limitations, and ncat's inclusion of a resource does not give any endorsement of the resource, its author or its contents, nor should any be implied.

## 6 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 [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)



## 7 Terms used in this report

**Abstract** — A short summary of a paper or report, typically included at the start of the document. It is a term that is often used in academic research papers.

**Impairment Area** — An impairment area refers to an area of physiological or psychological function impacted by certain impairments, such as mobility, vision, or hearing.

**Journey Stage** — By journey stage, we mean a distinct part of a trip. This includes activities undertaken to plan and prepare for a trip, different types of touchpoints during the trip (such as getting on and off transport, travelling on transport or parking and charging), and any activities a person does after they arrive at their destination that still relates to the trip (such as reporting an issue or claiming a refund).

**Resource** — In this project, when we talk about a resources or resources, we mean explicit knowledge that is learnt or produced, and then captured and shared using more formal formats, such as reports, journal papers, books, or data spreadsheets.

**Resource Capability** — A physical or virtual hub, or asset, or other thing that can aid or improve knowledge production, including (but not

limited to) research, design or innovation centres, groups or units, forums, panels or networks, other knowledge banks, funding schemes, and test facilities (such as living labs and simulators).

**Thematic Analysis** — Thematic analysis is the method of identifying, analysing and interpreting patterns of meaning (or "themes") within qualitative, or descriptive (so nonnumeric) data.

**Transport Mode** — Transport mode refers to the means used for travelling, such as private car, bus, train, walking or wheeling. When categorising knowledge by transport mode, we also included information about certain characteristics, such as whether a mode is electric or automated.