SMALL Insights #3

Exploring policy pathways for inclusive shared mobility

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SMALL | Interreg North Sea

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About SMALL

SMALL is a European collaboration of municipalities, research institutes and companies who want to make sustainable shared mobility options inclusive and accessible for all users, including those with reduced mobility.

Our project stands for **Shared multimodal Mobility Accessible for ALL (SMALL)**.

As the name suggests, SMALL came to life for one specific purpose: to support the development and implementation of shared mobility solutions that are readily accessible to everyone in the European North Sea region. While at first this might seem straightforward for a project on sustainable mobility, our mission is quite unique, as it aims to fill a significant gap that exists in the current shared mobility context: to make these novel services accessible to everyone, including people with reduced mobility.

This category includes a number of individuals, such as families and children, the elderly, and people with physical disabilities, who hold specific mobility needs, yet are not taken into consideration in the design of sustainable shared travel solutions.

Our work is co-funded by **Interreg North Sea**.

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Introduction

Purpose of this paper

Once seen as the fresh and unconventional addition to the mobility ecosystem, shared mobility has steadily proven its value as a dependable complement to public transport. Since its origin, it has been perceived as the more adventurous, cool, care-free, but reliable little sibling of public transport: quick to adapt, fun to use, but not always taken seriously. And yet, there has always been more to it: more value, more complexity, and plenty of untapped potential.

To achieve that full potential, shared mobility needs compatibility. The real challenge has not been its connection with public transport, that one is a strong bond. The real challenge lies in how it has been perceived, often as a solution for niche situations like urban environments, strikes, or young-adult mobility. This limited view has held back its broader potential. To thrive, shared mobility needs the right conditions: long-term support, integration into urban planning, and a shift in how it is positioned within the transport system. Only then can it grow into a service that works for more people.

This was the purpose of the third roundtable event that the SMALL project organised in May 2025 in Varberg, Sweden. This event marked a key moment in our ongoing work. After more than two years of collaboration and development, our partners are now moving from planning to action, rolling out pilot projects across multiple sites. This roundtable brought together stakeholders for a full-day event focused on how we can embed the lessons learnt so far into long-term strategies. It was designed to help participants take the next step: turning short-term experiments into lasting change by integrating accessible shared mobility into the strategic planning of their cities or organisations.

The goal of the event was not just to share progress, but to equip participants with practical tools and approaches. A core focus was learning how to advocate for SMALL-related topics at the public authority level, ensuring that accessibility and shared mobility become part of the high-level conversation about urban development and sustainability. Attendees explored ways to encourage adoption and examined what kind of resources and support are needed.

This insight paper is a summary of the key themes and discussions that took place during the third SMALL roundtable. It is structured to inspire cities and organisations through the process of integrating accessible shared mobility into long-term planning.

The first chapter introduces sections from the SMALL Topic Guide, launched during the roundtable by our partners at Rupprecht. This guide is an adapted version of the SUMP (Sustainable Urban Mobility Planning) framework, specifically reworked to support the planning and implementation of inclusive, accessible shared mobility solutions. It offers actionable guidance for policymakers and planners navigating this transition.

The second chapter highlights real-world examples from cities, León and Madrid, that are already integrating inclusive mobility practices into their strategic approaches. Drawing from these good practices, we explore what has worked, what challenges remain, and how others can build on these successes in their own contexts.

The third chapter takes a closer look at behavioural change from the perspective of decision-makers. Traditionally, behavioural change efforts focus on users or the general public. Here, we shift the lens to those shaping mobility strategies and explore methods for supporting and engaging decision-makers in driving sustainable transformation.

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Chapter 1: Strategic planning for inclusive shared mobility

What is a Sustainable Urban Mobility Plan (SUMP)?

The concept of a Sustainable Urban Mobility Plan (SUMP) originated from a desire to transform urban transport systems and improve quality of life through sustainability. A decade ago, cities began asking what infrastructure, innovations, and organisational changes were needed for such a transformation. This question remains at the heart of SUMP processes today.

A SUMP is an integrated, strategic, and long-term approach to transport planning. Its primary aim is to improve accessibility and enhance the quality of life in cities and their wider functional urban areas. At its core, a SUMP is built on three defining principles:

- **Sustainability:** The plan should address the mobility needs of both current and future generations at municipal and regional levels.
- **Strategic vision:** It requires going beyond policy statements by establishing a well-defined process paired with a concrete action plan.
- **Integration:** It should ensure cohesive planning across spatial areas, sectors, and timelines.

To be effective, SUMPs must be well integrated into already existing local and regional planning frameworks: they should align with municipal strategies, regional development plans, and broader urban policy objectives.

While the final output of SUMP processes is not always referred to as a SUMP itself, it typically results in a strategic document tailored and branded according to local contexts. Indeed, in some cases, cities may brand their SUMP under a local name (e.g. “Good Move” in Brussels), but the underlying principles and structure remain consistent with the broader SUMP methodology.

These documents draw on existing plans and frameworks and are meant to guide broader sectoral planning in areas such as housing, health, and energy.

The SUMP process: A 12-step methodology

The development of a SUMP follows a structured 12-step methodology. Each step ensures that planning is inclusive, evidence-based, and aligned with urban development goals. More information on each step is provided in the following visual.

Image 1: The 12 Steps of Sustainable Urban Mobility Planning (2nd Edition) A decision maker's overview. Credit: Rupprecht Consult

To support these steps, various topic guides have been created. These guides are not meant to replace the SUMP, but they provide essential complementary material to support its effective integration and implementation.

The SMALL Topic Guide: Fostering inclusive shared mobility

One such guide is the envisioned SMALL Topic Guide on inclusive shared mobility, developed under the umbrella of and for the purposes of the SMALL project. This guide focuses on embedding inclusivity and accessibility into every stage of urban mobility planning. Its goal is to ensure that all transport systems:

- **Serve everyone, irrespective of age, income, physical ability, or circumstance**
- **Prioritise accessibility, equity, and adaptability**
- **Support sustainable, inclusive, and human-centred mobility solutions**

Building a SMALL Topic Guide: Key definitions

To understand and apply inclusive shared mobility effectively into a city's SUMP, several key concepts must be clearly defined beforehand. At the SMALL roundtable, the SMALL consortium and external experts discussed these definitions for the purposes of the project, as it was agreed that setting clear definitions in the guide would be crucial to manage expectations and establish a shared understanding across stakeholders.

- **Inclusive mobility** refers to transport systems designed to be accessible, equitable, and reliable for everyone, including individuals with varying abilities and circumstances.
- **The phrase "People with reduced mobility"** is a broad category that includes:

- Individuals with permanent disabilities
- Individuals with temporary limitations (such as injuries)
- People experiencing situational barriers, such as carrying heavy loads or pushing strollers

→ This approach acknowledges that all individuals will experience reduced mobility at some point in their lives.

- **Shared mobility** includes services that are on-demand and not privately owned. This encompasses:
  - Ride-hailing and ride-sharing platforms.
  - Car-sharing schemes.
  - Micromobility options like bike and scooter sharing.
  - Demand-responsive transport (DRT) systems, which are flexible in both time and routing.
- **While some participants suggested using the term 'people with extra mobility needs' to better frame inclusion, others argue for sticking with widely recognised terms to maintain clarity.** Importantly, definitions should leave space for local adaptations and be accompanied by checklists to guide practical implementation.

Purpose of the SMALL Topic Guide

The SMALL Topic Guide aims to offer a practical framework, supported by methodologies, tools, and phased activities tailored to both planners and policymakers to help cities embed inclusive shared mobility within their SUMP processes. It includes a checklist and walkthrough covering four main planning phases.

The guide is structured around the SUMP cycle but with a strong focus on inclusive shared mobility. It includes four main stages:

1. Preparation and analysis

This stage involves collecting disaggregated data, mapping stakeholders, and identifying barriers to inclusive mobility.

2. Advancing inclusive shared mobility through planning

Planners are encouraged to co-create a shared vision with communities, establish equity-driven goals, and develop future scenarios that reflect inclusivity.

3. Co-designing and implementing solutions

Strategic goals are translated into actionable, user-centred initiatives. Special emphasis is placed on involving underrepresented communities in the design of shared mobility services.

4. Monitoring and evaluation

Inclusive Key Performance Indicators (KPIs) are developed, alongside participatory evaluation methods, to ensure continual learning and improvement.

The first two phases were discussed in detail:

Phase 1: Preparation and analysis

This phase's objective is about building a strong foundation and laying the groundwork for mobility planning. To do so, cities need to:

a. Map & engage stakeholders... and **include marginalised** communities in stakeholder mapping

b. Assess the current mobility system... and disaggregate data to reflect the needs of people with reduced mobility

c. Identify challenges & opportunities... and identify accessibility barriers in infrastructure and services

Each phase has different steps. The first, namely the Context Analysis & Stakeholder Mapping, was discussed by participants in two aspects:

I. Bringing the right voices to the table

This aspect emphasises the importance of inclusive participation, ensuring that the right voices are present and actively engaged in shaping mobility decisions. A key concern for cities should be identifying who is being left out of these processes and how to ensure that all relevant stakeholders, especially those affected most by mobility decisions, are heard. It is not enough to include participants passively; their input must genuinely inform and guide outcomes.

This theme sparked a rich discussion amongst participants. One example provided involved the testing of peer-to-peer models for shared vehicles through co-creation events involving city representatives: while local-level engagement was strong, a significant gap emerged, due to decision-makers not being involved. Without their participation, the outcomes of grassroots initiatives risk lacking the support needed to effect long-term, systemic change. This highlighted a broader challenge: how to ensure that insights from the field can reach those with the authority to implement lasting solutions.

The need to differentiate communication strategies between planners and politicians was brought up as a matter of discussion. Often, planning documents and questions are designed for technical staff, but political leaders also require clear, tailored messaging. There is a broader question of whether planners should be equipped to translate technical insights into language that resonates with political priorities. It was also emphasised that any mobility strategy needs a compelling narrative for politicians, such as demonstrating how an initiative could support their re-election goals. Without aligning with political incentives, well-designed policies risk being overlooked.

In line with this, the role of legislation was also discussed. It was noted that politicians are more likely to support actions that are either legally required or demonstrably beneficial to their strategic goals. Therefore, using binding regulations and demonstrating alignment with formal plans and measurable outcomes can be powerful tools to secure political backing. Particularly in polarised political environments, legal frameworks and data-backed results offer a neutral ground for decision-making.

Additionally, the exclusion of service providers was identified as a common oversight. Although citizens and government actors are often central to co-creation processes, private providers may be left out. Involving them early on is crucial to ensure that initiatives are both socially meaningful and economically viable. One suggested solution was the creation of a representative panel to serve as a filter for proposed projects and initiatives. This approach would help ensure that a diverse set of perspectives is incorporated from the outset, increasing the legitimacy and effectiveness of planning efforts.

Attention was also brought to the need to include future generations and less visible users in the planning process. Long-term strategies must consider the needs of those who will inherit the outcomes. Similarly, current processes often amplify only the most outspoken voices, while more hesitant or marginalised individuals are left unheard. Reaching these quieter participants remains a key challenge for truly inclusive planning.

The final challenge identified is the existence of silos within city administrations. When departments work in isolation, bottlenecks and misalignments can hinder implementation. Promoting interdepartmental collaboration was suggested as an essential step in avoiding these inefficiencies.

II. Building a (inclusive) baseline

Participants then discussed the challenges of defining a baseline due to issues with data availability and quality. In some cases, a clear baseline is difficult to establish because the necessary data simply does not exist or is not easily quantifiable. Others noted that while they have access to large volumes of raw data, the challenge lies in knowing what to include and how to manage or interpret it effectively. With so much information available, determining what is most relevant for establishing a baseline requires both clarity of purpose and technical support.

A key point raised was the potential value of data in shaping compelling narratives for decision-makers, an important aspect mentioned earlier. For example, data showing how many people with reduced mobility are also active voters could help make a stronger political case for inclusive mobility policies.

There was agreement on the need to first identify what data is actually needed, both quantitative and qualitative: only then can gaps be recognised and addressed. A structured approach to identifying, collecting, and interpreting the right data is essential for setting a meaningful and actionable baseline.

Furthermore, it is important to address policy planning and governance framework. As important as it is to identify and map the relevant stakeholders and the context in which they operate in order to guide the SUMP planning process, it is equally important to plan and design governance structures that establish the legal foundation for a strong vision and strategy. This, in turn, should lead to the definition of clear targets and indicators that support the selection of appropriate inclusive mobility measures.

This second step of the phase was clearly illustrated by the two expert roundtable guests, Spanish city representatives from Madrid and León, who presented how their municipalities have structured inclusive and accessible mobility strategies based on legal documents, such as strategic mobility plans, accessible mobility plans, action plans, and dedicated inclusive mobility measures.

A brief summary of these legal instruments is presented in phase 1 of the SUMP planning process for both Madrid and León, while a more in-depth information on the cities' accessible and inclusive mobility strategy development, measures implemented, and monitoring processes will be presented in the subsequent SUMP planning phases.

Madrid's governance structure and binding documents are the following:

- **Madrid's strategic mobility plan (SUMP)** - Madrid 360 SUMP: Outlines the city's overall mobility strategy with a focus on social sustainability.
    - **Madrid's Accessibility Office:** Promotes accessibility in a transversal way through a centre of command, control, and coordination.
        - Accessibility Committee: Group of representatives from all areas of government, districts, EMVS, EMT, municipal political groups, groups of elderly and people with disabilities.
        - Strategic plan for universal accessibility: Strategic document that defines accessibility priorities based on analysis of previous decisions/cases.
        - Action plans: Inclusivity and accessibility measures across several urban planning areas.

See Chapter 2: Madrid (p17)

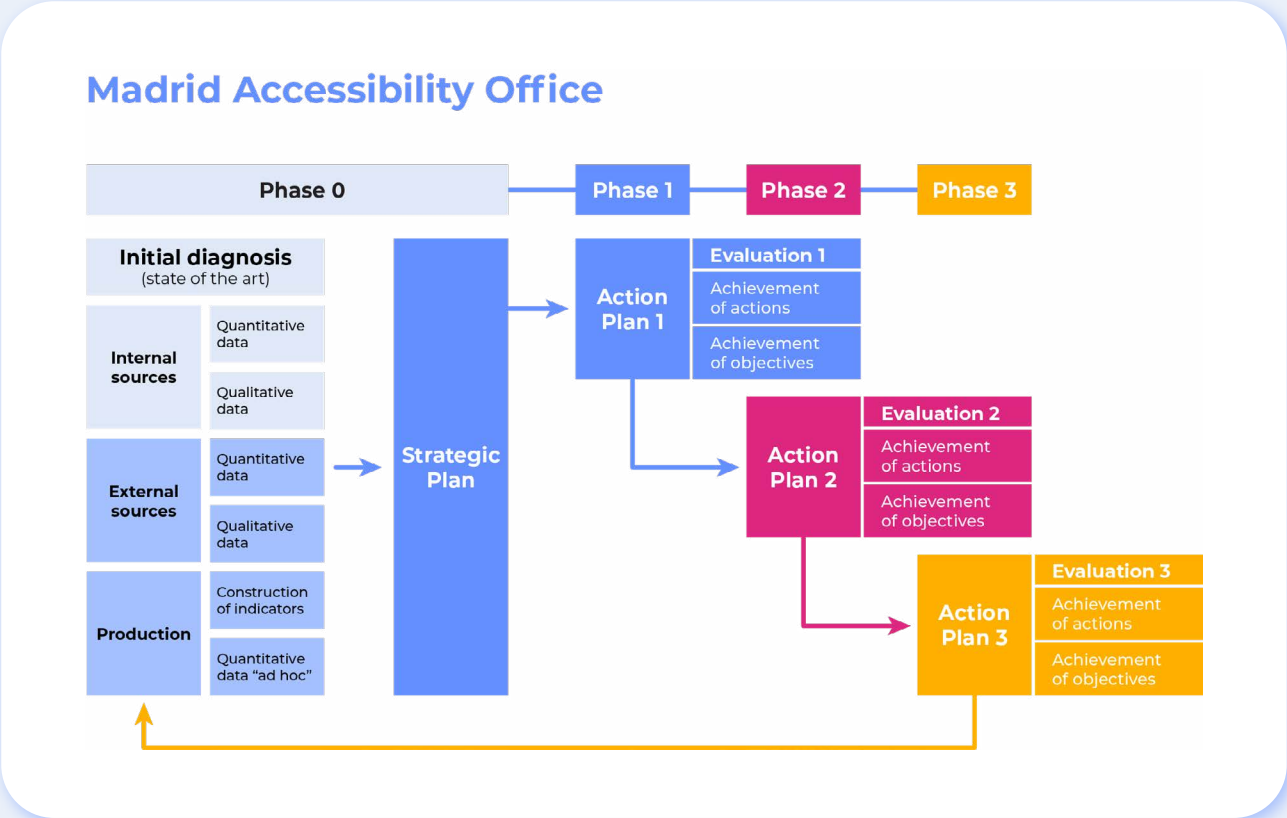


Image 2: Madrid Accessibility Office

León's governance structure and binding documents are the following:

- **General strategic mobility plan based on the SIMPLA (Sustainable Integrated Multi-sector Planning) methodology.**
  - Local SUMP harmonised through continuous implementation of EU-funded sustainable urban mobility initiatives and projects.
  - Inclusive and accessible mobility measures.

In the rest of this chapter, the document follows the SUMP planning process' steps to identify Madrid's and León's accessible and inclusive mobility strategy development, the measures implemented on the ground, and the monitoring processes and performance evaluation of their interventions.

See Chapter 2: León (p19)

Phase 2: Strategy Development

This phase's objective is to:

I. Develop a vision and a strategic direction for the cities to define their mobility transition goals

II. Explore and evaluate future scenarios

III. Establish key performance indicators to track progress and allow for the right selection of inclusive and accessible mobility measures to be implemented.

Key actions on how inclusive shared mobility approaches can be implemented in this phase include:

- **Formulating goals explicitly including accessibility, equity, and affordability.**
- **Thinking of scenarios including/ prioritising inclusive solutions for users, especially people with reduced mobility.**
- **Elaborate KPIs that include specific indicators for accessibility and inclusiveness**

Both best practice cities, Madrid and León, have included an inclusivity approach starting from their governance and legal framework structures all the way down to the specific inclusive and accessible mobility measures. Below is a breakdown of how both cities are building their inclusive mobility strategy.

Development of Madrid's inclusive and accessible mobility strategy

Madrid has developed an inclusive and accessible mobility strategy within its Sustainable Urban Mobility Plan (SUMP). At its core is a strategic goal that states *"The quality standard desired for public space and for each mode of transport must fulfil the universal social right to mobility"*. This guiding principle sets the foundation for ensuring that all residents, regardless of their circumstances, can enjoy equitable access to transportation and public space.

To achieve this, the city has established a dedicated governance structure through the creation of the Accessibility Office and its associated committees. As defined by Madrid City Council, "the Accessibility Office created by Madrid City Council has the mission of promoting accessibility in the city from a transversal, sustainable approach and for all people." This office coordinates a wide network of stakeholders through Madrid's Accessibility Table, which brings together representatives from all areas of government, the city's districts, the Municipal Housing and Land Company (EMVS), the Madrid Transport Authority (EMT), municipal political groups, and organisations representing elderly people and people with disabilities. The Accessibility Table is responsible for analysing and monitoring accessibility levels, coordinating between stakeholders, and contributing to the design of strategic and action plans.

Following an initial diagnostic phase, the Accessibility Office developed the city's universal accessibility strategic plan. This plan is built around three key mobility priorities: guaranteeing accessibility in all modes of transportation, improving the connection between these transport modes and pedestrian routes, and promoting sustainable and safe urban mobility. These priorities underpin Madrid's first Action Plan for Universal Accessibility for the period 2024–2027. The plan contains specific measures addressing urban planning, transport, public buildings, information and communication technologies, culture, and citizen participation. All measures are selected based on findings from earlier diagnostic studies and are later presented to the public through information sessions in the districts where interventions are planned.

The process begins with detailed diagnostic studies on the accessibility of school environments, environments for the elderly, and cycling environments. It continues with the publication of mobility studies and proposals aimed at improving universal accessibility in urban areas. The city also takes part in events and shares best practices that strengthen accessibility conditions, while regularly organising district-level information sessions to present targeted mobility studies and proposed improvements.

In the next phase, referred to as measure planning, the focus shifts to the detailed design of accessible and inclusive mobility measures for Madrid. The remainder of this phase will also examine the inclusive and accessible mobility strategy developed by the city of León.

Development of León's inclusive and accessible mobility strategy:

León has developed its inclusive and accessible mobility strategy within the framework of its Sustainable Urban Mobility Plan (SUMP). The city has harmonised its SUMP through the implementation of the Sustainable Integrated Multi-Sector PLAnning (SIMPLA) methodology, which provides local authorities with an innovative and comprehensive approach to integrating energy, transport, and mobility planning into broader urban development.
This methodology is built on six key pillars: establishing a shared strategic vision within the local authority, fostering greater interdepartmental and multidisciplinary cooperation, ensuring broad participation of local, public, and private actors in decision-making, applying a shared methodology based on common data sets, improving multi-level governance, and securing qualified leadership to guide the process.

Image 3: Urban mobility pyramid priotirisation employed by the city of Léon. The descending order indicates the priority that should be given to each level in the mobility system design (higher levels have greater priority). Credit: IDAE

Building on this methodology and drawing from the experience gained through participation in several EU-funded projects, León has set out a series of mobility transition goals to guide the implementation of inclusive shared mobility measures. These goals include reducing polluting emissions by 40% by 2030 and achieving climate neutrality by 2050, improving the modal split to 48% non-motorised versus 52% motorised transport, increasing road safety, and implementing safe school routes that are sustainable over time. The city also aims to strengthen inclusive mobility by ensuring accessibility for all and guaranteeing quality, affordable public bus transport for every citizen.

Following the identification of these goals, León assessed the barriers and challenges that could hinder the successful integration of inclusive shared mobility measures. These include ensuring effective citizen participation, respecting “kiss and goodbye” areas, maintaining designated parking spaces for people with reduced mobility (PRM), complying with speed limits, removing urban barriers, and promoting the perception of the bicycle as a legitimate mode of transport among all citizens.

In the next phase, the inclusive and accessible mobility measures for both cities, Madrid and León, will be analysed, highlighting the key messages and approaches to inclusive shared mobility.

Phase 3: Measure planning

In this phase of the SUMP process, the objective is to define and implement concrete measures to achieve strategic goals. Key activities in this process include planning concrete measures and actions for mobility improvement, allocating resources to ensure effective implementation, and designing implementation strategies for long-term success. But how can inclusive shared mobility aspects be integrated into this phase? Below, there are some key actions that can be implemented:

- **Design measures with inclusivity at the core, prioritising accessibility.**
- **Ensure shared mobility services are accessible to people with reduced mobility.**
- **Adapt infrastructure and services to meet the needs of users, especially those with reduced mobility.**

When it comes to implementing inclusive and accessible mobility measures, both Madrid and León have introduced concrete measures, not only related to shared mobility and transportation, but also in broader sectors such as urban planning, public buildings, information and communication technologies, culture and citizen participation. Below, we present several measures from each city highlighting its inclusive and accessible mobility approach.

Madrid’s inclusivity and accessibility measures

Madrid has introduced a wide range of inclusivity and accessibility measures aimed at ensuring that mobility services and urban spaces meet the needs of all citizens, including elderly people, those with visual impairments, and other vulnerable groups. In the field of accessibility and digitalisation, several actions have been taken to make digital mobility solutions such as apps and online portals more inclusive. Municipal portals and official apps, including the **Transport Authority’s app**, have been adapted to **digital accessibility**

criteria (WCAG). Training initiatives such as **Digital Volunteering for Seniors** have been implemented, and pilot projects have been developed to test sound narratives, intelligent signage, and app-based guidance for visually impaired users. Madrid has also developed **accessibility manuals**, which are technical documents that set out the basic conditions of accessibility and non-discrimination for accessing and using urbanised public spaces. These manuals cover several areas, including public streets—addressing circulation on sidewalks, vertical movement on ramps and stairs, location of street furniture, signage and lighting, squares, parks, and the installation of street cafés. They also cover interaction with means of transportation, such as accessible pedestrian routes, entrances, access to public transport, and reserved parking spaces. Construction works on public roads are addressed through guidelines for signalling, protecting, and maintaining work areas, while the adjustment of existing infrastructure provides definitions and standards for upgrading existing urban spaces.

In addition, participatory processes have been developed to involve vulnerable groups in decision-making on programmes related to inclusivity and accessibility.

Image 4: Decide Madrid is an online platform for public participation in decision-making, launched by the Madrid City Council. Credit: Madrid City Council

The Decide Madrid platform has been improved to encourage greater citizen engagement and now serves as a benchmark for participation, with over 500,000 users, 5,000 debates, 30,000 proposals, and 230,000 comments. User data shows that 17% of participants are over 65 years old, 6% are under 30, and the largest group falls within the 30–45 age range. Building on these insights, Madrid has launched specific participation programmes for children and young people, as well as for the elderly and other vulnerable groups, including training workshops on the Decide Madrid platform and on the use of **digital mobility apps**. All citizen service centres have been adapted for people with reduced mobility and for those using hearing aids. Participatory processes have also been extended to economically vulnerable groups. Guided by diagnostic studies on the economic and social situations of specific target groups, the city has identified needs and adopted tailored measures. These include subsidies for housing adaptation, large-scale projects for building adaptations, and urban development interventions that apply accessibility criteria.

Urban development measures have included the remodelling of boulevards, parks, and squares; retrofitting curb spaces to improve pedestrian mobility; and improving access to and within schools. On the topic of **shared mobility**, Madrid has introduced **mobility hubs** and expanded options through both public systems and private operators under licence agreements. The city's public bike-sharing system, **BiciMAD**, has been expanded to cover all districts, adding new stations and testing **adapted vehicles such as tricycles and hand bikes for inclusion in the fleet**.

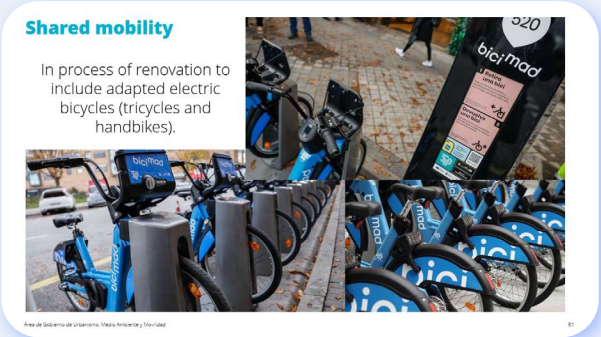


Image 5: BiciMAD is Madrid's public electric bicycle service, currently in the process of adding adapted electric bicycles to their offering. Credit: Madrid City Council

On-demand transport has also been strengthened through the Madrid Taxi Accessible system, which offers vehicles adapted for people with reduced mobility. This service is available not only in central areas but also in peripheral districts. Accessibility measures have been applied across the city's main public transport

systems—Metro, Tram, and buses—which form the backbone of mobility in Madrid. Initiatives include volunteering programmes such as **"We Believe in Your Independence"** to support people with cognitive disabilities in using buses, the introduction of buses with accessibility features, stations adapted for people with reduced mobility, and geolocation systems at major stops with LED panels and voice announcements. Metro stations and wagons have also been adapted to meet diverse mobility needs, and accessibility considerations have been extended to major events.

Image 6: Through the "We believe in your independence!" project, started in 2008, EMT began to design training for people with intellectual disabilities so that they could use EMT buses autonomously and safely on their regular journeys. Credit: EMT Madrid

León's inclusivity and accessibility measures

León has introduced a range of inclusivity and accessibility measures designed to improve pedestrian mobility as part of its major urban renovation projects. These measures include curb space reallocation and street retrofitting, improvements at bus stops such as upgraded pavements, areas reserved for people with reduced mobility, perch-type seating, and single platform stops. Additional interventions have added new ramps, adapted sloping ramps, lowered pavements, and introduced soil texturisation for blind people. An acoustic system for traffic lights, operated via remote control, has been installed to assist blind and visually impaired pedestrians.

Parking spaces designated for people with reduced mobility have also been expanded. Improving mobility to and within schools has been a particular focus. Actions have included awareness campaigns during the European Mobility Week, the creation of a transport plan for Ponce de León public primary school, and the establishment of safe school routes for both Ponce de León public school and Discípulas school. Plans have been developed for safe school transportation in the historic centre of León, covering five schools. Complementary initiatives include promoting child-friendly commerce and stores, implementing a "school metro-minute" tool, creating "kiss and goodbye" areas, and applying tactical urbanism measures close to schools. Speed sign panels have been installed around school areas, and free public bus transport has been made available for children under 14.

Cycling mobility has been supported through the introduction of a bicycle-sharing system (Smart Bikes) with 44 stations, an electric bicycle-sharing system with 11 stations, and 30 safe parking lots for bicycles and e-scooters. Additional measures include providing bike tips, creating new bike lanes and 20 km/h cycle lanes, supplying 60 balance bikes to municipal kindergartens, and offering free bicycle repair workshops.

Public transport measures have also focused on improving accessibility. León now has 24 smart bus shelters, a new accessible bus station, and a new accessible ADIF train station. Pedestrian connections have been established between bus and train stations, and the FEVE narrow-gauge train station area has undergone pedestrian rehabilitation. The city's bus fleet has been upgraded to include 22 electric buses, which now make up 71% of the total fleet.

Phase 4: Implementation and monitoring

The objective of this phase is to track the effectiveness of the measures and adapt them based on performance. Key activities include monitoring progress against goals, evaluating outcomes and impacts, conducting satisfaction surveys, and making necessary adaptations to ensure the measures are long-lasting.

But how can we incorporate an inclusive shared mobility approach in this phase? Some key activities include:

- **Using monitoring frameworks with inclusive indicators**
- **Tracking accessibility and affordability for people with reduced mobility and including their feedback**
- **Continuously adapting to uphold inclusion and equity**

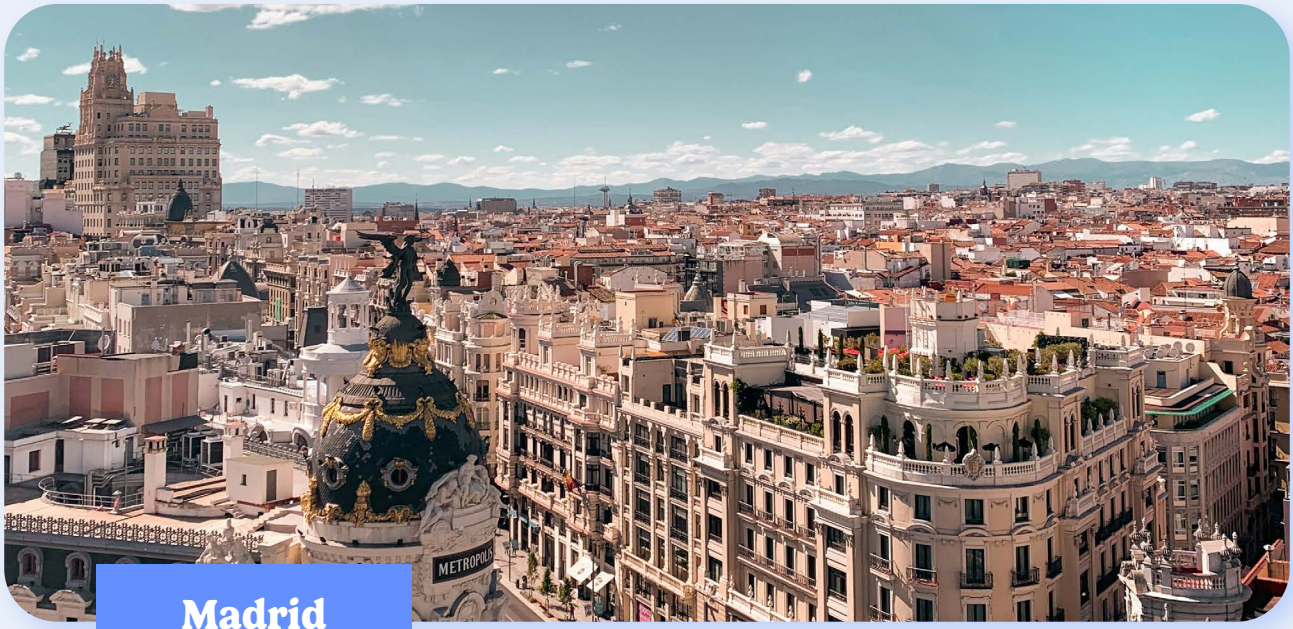
Both Madrid and León have relied on the set of key performance indicators developed during the strategy phase to measure the performance and progress of their initiatives . These indicators are a key aspect of the diagnostic studies used to formulate inclusive and accessible mobility measures, as well as to assess their benefits and acceptance by citizens.

Although ex-post evaluation results are not yet available for either city, León conducted preparatory actions during the strategy development phase, including citizen participation surveys for building its SUMP. Meanwhile, Madrid has carried out several satisfaction surveys to measure the acceptance levels of newly pedestrianised areas.

Finally, the SUMP planning process includes a monitoring scheme through the introduction of Urban Mobility Indicators (UMIs) within the framework of the revised Trans-European Transport Network (TEN-T) regulation. These indicators cover the areas of sustainability, safety, and accessibility, and are designed to support the implementation of SUMPs in urban nodes by tracking progress toward the policy priorities and measures outlined in the TEN-T regulation—including, in alignment with the SMALL project's objectives, increasing accessibility and connectivity between urban and rural areas, and access to smart, sustainable, and affordable transport .

The above overview of the SUMP planning steps brings together the key actions taken by both cities to design, implement, and evaluate their strategic mobility plans. The following chapter will showcase Madrid's and León's best practices in inclusive and accessible mobility planning through visually engaging infographics that summarise and condense the information presented here.

Chapter 2: Best practices of inclusive mobility and strategic planning



Madrid

Phase 1: Preparation and analysis

- **Madrid 360 SUMP**
- **Madrid's Accessibility Office**
  - Accessibility Committee
  - Strategic plan for universal accessibility
  - Action plans

Phase 2: Strategy development

- **Strategic vision:** Madrid's SUMP prioritizes mobility as a universal social right, setting inclusivity and accessibility as fundamental goals
- **Governance & structures:** Madrid established an Accessibility Office and the Accessibility Table (multi-stakeholder committee), promoting cross-sector coordination and user participation
- **Planning tools:** Universal Accessibility Strategic Plan, culminating in the 2024–2027 Action Plan, using indicators for inclusive urban planning and transport as KPIs
- **Scenario development:** Diagnostic studies targeted school zones, elderly environments, and cycling routes to identify priority actions

- **Public engagement:** Local districts participated in accessibility assessments and public information sessions

Phase 3: Measure planning

- **Digital accessibility:** Mobility apps and platforms (e.g. Decide Madrid, EMT apps) were adapted for accessibility, along with initiatives such as digital volunteering and smart signage for visually impaired users
- **Technical guidance:** Accessibility manuals were created to guide urban design, construction, and infrastructure retrofitting
- **Inclusive participation:** Programmes are tailored to different age demographics and abilities, with a focus on children, elderly, and economically vulnerable groups
- **Urban development & transport:**
  - Urban redesign of boulevards, parks, and school surroundings.
  - Expansion of BiciMAD with inclusive vehicles (tricycles, hand bikes).
  - Madrid Taxi Accessible and shared mobility hubs introduced city-wide.
- **Public transport accessibility:**
  - Inclusive buses, metro, and trams with geolocation tools and support for cognitive disabilities
  - All services comply with accessibility standards for PRM
- **Event accessibility:** Major event mobility plans include accessibility provisions

Phase 4: Implementation and monitoring

- **Monitoring tools:** Uses Urban Mobility Indicators (UMIs) aligned with TEN-T priorities (accessibility, safety, sustainability)
- **Citizen feedback:** Satisfaction surveys assess pedestrianisation and mobility changes
- **Continuous improvement:** Adaptive strategies based on KPI tracking, especially in high-impact zones (such as schools and public spaces)shared mobility hubs introduced city-wide.
- **Public transport accessibility:**
  - Inclusive buses, metro, and trams with geolocation tools and support for cognitive disabilities
  - All services comply with accessibility standards for PRM
- **Event accessibility:** Major event mobility plans include accessibility provisions

León

Phase 1: Preparation and analysis

- **General strategic mobility plan based on the SIMPLA (Sustainable Integrated Multi-sector Planning) methodology.**
  - Local SUMP harmonised through continuous implementation of EU-funded sustainable urban mobility initiatives and projects
  - Inclusive and accessible mobility measures

Phase 2: Strategy development

- **Strategic framework:** León's SIMPLA methodology integrated mobility with energy and urban planning under six pillars (shared vision, interdepartmental cooperation, broad participation, shared data, multi-level governance, and leadership)
- **Mobility goals:**
  - Reduce emissions by 40% (2030); achieve climate neutrality by 2050
  - Shift to 48% non-motorized modes
  - Improve safety, school mobility, accessibility, and affordability
- **Barrier identification:** Early diagnosis revealed key challenges like citizen engagement, respecting PRM parking, traffic speeds, and promoting cycling acceptance
- **KPIs and citizen input:** Participatory surveys helped shape goals and guide future monitoring

Phase 3: Measure planning

- **Pedestrian mobility:** Curb space redesign, textured pavements, accessible crossings, PRM parking, acoustic traffic signals
- **School mobility:** Introduced safe routes to school (e.g., Ponce de León School), "kiss and goodbye" zones, awareness campaigns, and child-friendly commercial zones, as well as free public transport for children under 14.
- **Cycling infrastructure:** 55 Smart bike-sharing stations, 30 secure parking areas, new bike lanes, and free bike workshops, balance bikes for kindergartens and educational initiatives like "bike tips."
- **Public transport accessibility:** New accessible bus and train stations, smart bus shelters and improved pedestrian connectivity between transport hubs

Phase 4: Implementation and monitoring

- **Preparatory surveys:** Conducted during Phase 2 to establish baseline perceptions and needs
- **Monitoring framework:**
  - KPIs based on accessibility and inclusion developed through the SIMPLA methodology
  - Integrated with UMIs under the TEN-T framework, focusing on urban-rural accessibility, sustainability, and smart transport
- **Feedback loops:** Mechanisms in place to assess and adapt policies as implementation progresses
- **Cycling infrastructure**: 55 Smart bike-sharing stations, 30 secure parking areas, new bike lanes, and free bike workshops, balance bikes for kindergartens and educational initiatives like “bike tips.”
- **Public transport accessibility:** New accessible bus and train stations, smart bus shelters and improved pedestrian connectivity between transport hubs.

Chapter 3: Influencing policymakers' behaviour towards inclusive mobility

Influencing policymakers' behaviour to implement inclusive mobility measures
An interview with Katharina Paoli from NUDGD on bringing behaviourally informed tools into city strategy.

Introduction:

Since the start of the SMALL project, we have been working on raising the importance of topics such as accessibility and inclusion when creating new shared mobility solutions. We have learnt that there is an important distinction between using the voices of people with reduced mobility to focus on solutions and doing so to focus on urban and strategic planning.

Now the question to ask is: what if the limited people-centric design and planning were the consequence of suboptimal communication among decision-makers, city departments, politicians and planners?

When Esen Köse, Project Manager at Mpact (Flanders, Belgium), attended a workshop on behavioural change with citizens, she noticed how many Flemish city representatives were ready to learn more about nudging their citizens towards more sustainable behaviour. However, while the workshop was running and everyone was working on real-life cases, Esen heard those same city representatives being hesitant to suggest their own (often great) solutions, fearing that decision-makers or politicians would reject them. It was then that Esen started wondering whether it was the citizens that needed to be nudged or whether the problem was actually decision-makers opting for unsuitable decisions.

To explore this idea, we spoke with Katharina Paoli, CEO of Nudgd, a behavioural design company that helps cities apply behavioural science in practical, scalable ways. Drawing from projects across Sweden and Europe, Katharina shared how small changes, can make a big difference in building city systems. Even seemingly minor elements, such as how to run a meeting or how to structure the process for obtaining a permit process can make city services more inclusive and accessible.

SMALL: Katharina, what motivated you to start NUDGD, and how does behavioural science fit into that mission?

Katharina Paoli:
I started NUDGD because I was frustrated by how many well-meaning policies failed to create real change because they ignored human behaviour. There were plenty of technical solutions and infrastructure investments, but the results didn't follow, simply because people forgot how crucial behaviour is in making change happen. At the same time, I had been working in the Silicon Valley and saw how companies used behavioural psychology to influence people, often for commercial goals. That made me wonder what would happen if we used the same science to drive climate action. That's how NUDGD was born, using behavioural insights to bridge the gap between good intentions and real results.

SMALL: People commonly associate behavioural science with nudging citizens. Do you think there is a potential for using the same approach within city institutions, maybe even going beyond just nudging?

Katharina Paoli: *Absolutely. Administrations often come to us to explore how to nudge their residents toward sustainable behaviour. But what we commonly discover is that the real friction is internal: Departments are in limited communication with each other; people defer responsibilities to third parties, waiting for someone else to make the first move. Opportunities are missed because systems are fragmented, not because people are uninterested. This leads to a gap between good intentions and real action in policy. In this context, one of the toughest challenges is internal buy-in. I have witnessed cities with progressive, inclusive mobility goals being held back by outdated infrastructure, political shifts, or time constraints. Behavioural science can help bridge that gap by making the next steps clearer and more aligned with how people make decisions. The potential is huge, but it is still underused. Even when people working with citizens recognise the value of using it internally, there is often no budget, mandate, or clear responsibility to do it.*

SMALL: That internal resistance sounds like a major barrier. Have you seen any cases where a city managed to overcome that kind of friction and apply behavioural insights effectively?

Katharina: *Gothenburg is a good example and one of the first cities we worked with in NUDGD. Their city architect back in the day was particularly fascinated with Nordic-style design, which is smooth and aligned with Scandinavian colours. When we came up with a solution together with the traffic department, the architect was very much against it because it went against the city's branding. However, the traffic department decided to go ahead regardless and allow us to put up very colourful, humorous nudge messages at tram stops in the city centre. Upon measuring the impact of our campaign, we discovered that this method was 70% more effective than the city's traditional way of communicating. Since then, Gothenburg has become livelier and more colourful in its urban design. All in all, it does take courage to change a city's way of designing and planning.*

SMALL: What about the relationship between planners and politicians? It often seems to stall progress.

Katharina: *That is indeed an issue. Improving internal communication is often a crucial first step. Behavioural insights can help clarify both what needs to change and how to do it. For example, many departments struggle with permitting processes; they are often slow, unclear, and full of friction. Using behavioural techniques to simplify and streamline those processes could be a game-changer across the board. These methods can also help structure planning meetings and improve collaboration. This would allow people to stop waiting on each other and start working more proactively. Change takes time, of course, but these small, practical tools can create real momentum. That is why I believe every city team should be trained in the basics of behavioural psychology. It would lead to more efficient structures and faster progress across departments. We often hear city staff claim they have great ideas that politicians would never approve, but when we turn to the politicians, we realise that they do not feel part of the discussion at all. Creating shared spaces where both sides can take time in listening to each other is the first step to move away from such standstills.*

SMALL: Can you describe what those spaces look like?

Katharina: *Absolutely. I just got back from a week on Gotland, a Swedish island in the Baltic Sea, where we hold our annual "politicians' week", a major Nordic event that brings together around 30,000 people, including politicians, lobbyists, NGOs, and policymakers. Over just a few days, we plan thousands of seminars, but what makes this event so unique is how open the atmosphere is. Anyone can speak to anyone, including the prime minister. I have actually done so myself several times over the years, but it was only possible because of how the event is framed. It is commonly understood that the event is meant to*

be a week of democracy, listening, and exchanging ideas. This is not an easy feat nor a common occurrence in everyday settings. I think the main takeaway is that we need to create more of these spaces, even on a smaller scale. We need spaces where openness is at the core and dialogue is encouraged. This framing alone can make a huge difference in how ideas are received.

SMALL: That is an interesting example of how context can shape interaction and openness. When you work on designing those kinds of enabling spaces, what behavioural frameworks help you understand and influence both citizen and institutional behaviour?

Katharina: *The first step should always be behavioural analysis. Before jumping into solutions, it is crucial to map out both the psychological and physical barriers that are preventing change from the perspective of both citizens and internal decision-makers. We often use the COM-B model (Capability, Opportunity, and Motivation). It is this approach that aids us in asking an important question: does the target group have the ability, space, and drive to act? Whether that is a resident applying for a permit or a planner trying to implement a policy, the same logic applies. Behaviour is not just a matter of willpower; it is about removing friction. Once you understand these frictions, you can design much more targeted and effective interventions.*

SMALL: You mentioned earlier that timing matters. Can you elaborate on that?

Katharina: *Yes. Cities often call us at the end of a project, asking us to add some nudges. Unfortunately, by then the strategy is set already. We can help, but it would be more effective if behavioural insights were part of the planning, from training staff to building internal capability, as well as integrating behavioural tools into the strategy phase.*

SMALL: How do you get decision-makers to be on board with that?

Katharina: *Testimonials work really well. People are heavily influenced by what others are doing, whether they are neighbours, colleagues, or even other cities. If you can show decision-makers that a similar city has already taken action and seen results, you can tap into a kind of healthy competitiveness. That sort of framing can be just as powerful for internal change as it is for engaging the public. Politicians trust peers: if they hear other mayors or ministers talk about the benefits of using behavioural tools, they will be more likely to try it.*

SMALL: Do you have some final thoughts to share for cities that are interested in taking the first step?

Katharina: *Dare to be different. Behavioural science is not just fluff. It is fully evidence-based. If cities made an effort to apply it early, with creativity and structure, they could build systems that are both efficient and truly inclusive for everyone involved.*

Photo from the NUGD workshop during the SMALL Roundtable in Varberg, Sweden.

Conclusion

The roundtable conversations highlighted both the progress of shared mobility and its potential if supported with the right resources and long-term planning. Pilot projects, as shown during the SMALL roundtable, can inform lasting strategies, ensuring shared mobility becomes part of the wider transport system rather than a temporary experiment.

The SMALL Topic Guide, introduced in Chapter 1, offers city representatives a practical starting point for embedding inclusivity and accessibility into planning.

Examples from León and Madrid demonstrate that integration is both possible and effective, whether in a small historic city or a large capital. Their success stems from visionary decision-makers whose choices, even if not always visible, have lasting impact. Supporting such leadership through behavioural change approaches, practical tools, and advocacy at the public authority level is crucial to making inclusivity and accessibility central to mobility planning.

Inclusivity remains the core theme of the SMALL project. Shared mobility will only reach its potential if it is accessible to all, regardless of age, ability, or socioeconomic background. The SMALL Topic Guide, together with lessons from cities, provides concrete ways to design services and spaces that remove barriers and expand opportunities.

These insights give cities a foundation to move from experimentation to implementation. The tools developed through the SMALL project draw on two years of collaboration between cities, operators, and users—experience that is as valuable as formal evidence.

This paper points the way forward. It is now up to readers to share these insights and to cities to turn them into lasting action that embeds inclusive, accessible shared mobility at the heart of urban transport planning.

Contact

Are you interested in joining our community and working on inclusive shared mobility ? Contact us!

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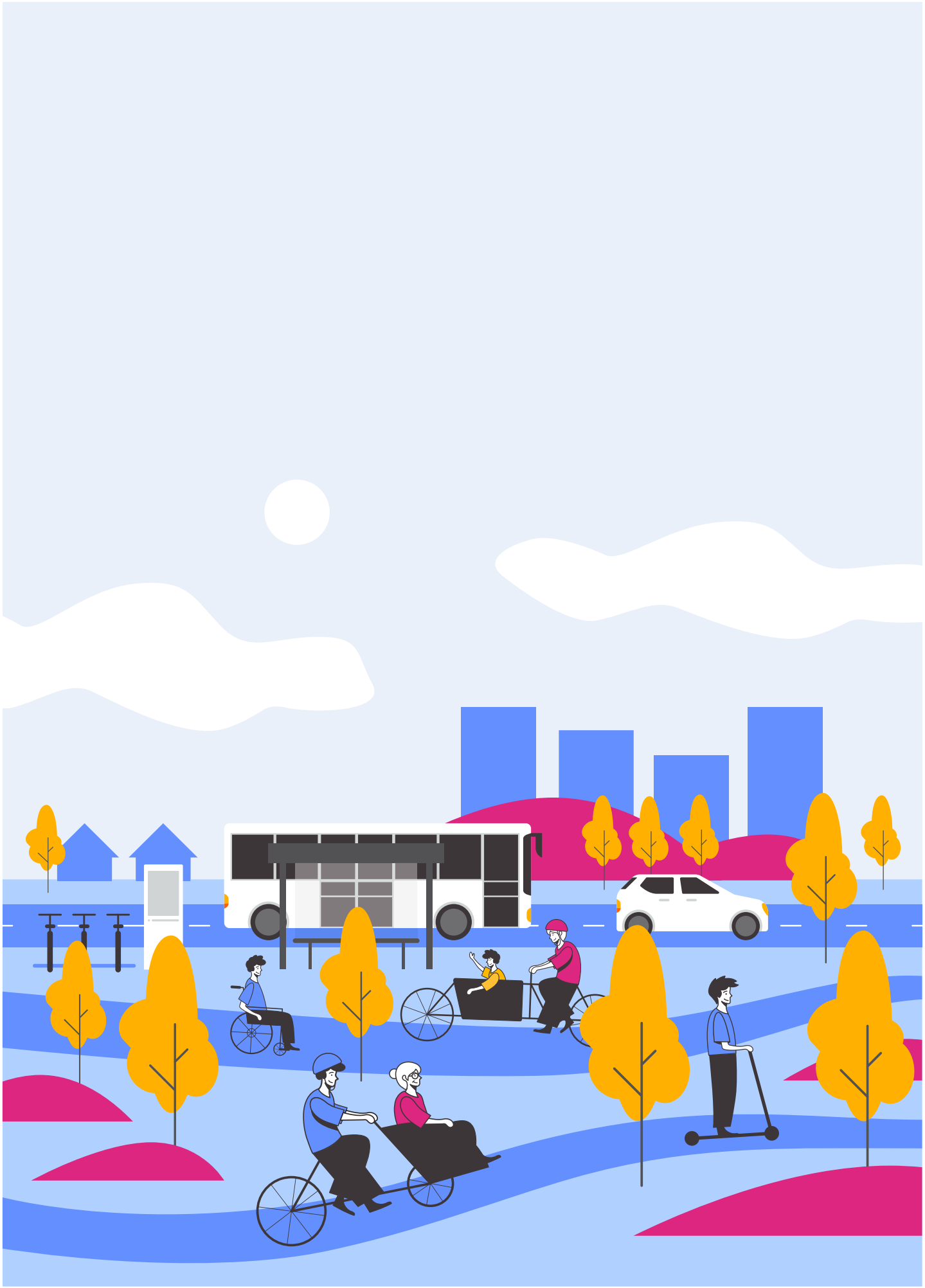

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