

FAIR Mobility

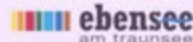
WP4 Replicability and Scalability **T4.3 Fair Mobility Catalogue of Design Principles**



ENERGIE



Université
Gustave Eiffel



Driving Urban
Transitions

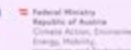




TABLE OF CONTENT:

Executive summary

Introduction

Principle 1: Work through trusted intermediaries before asking for participation

Principle 2: Move from consultation to durable governance

Principle 3: Plan beyond commuter flows, considering care chains and real routines

Principle 4: Design for perceived, social, and symbolic safety as well as physical safety

Principle 5: Treat lived experience as data

Principle 6: Use temporary public space and service experiments to reveal demand and test fairer alternatives

Conclusion

WP4 Replicability and Scalability

T4.3 Fair Mobility Catalogue of Design Principles



Principles for Fair Mobility



1. Reach Underrepresented Groups

Actively reach and include people most affected by mobility injustice.



2. Care Chains for Mobility Planning

Consider everyday mobility as connected care, work, education and leisure chains. Design solutions that support the full chain.



3. Improve Safety & Perception

Address both real and perceived safety barriers in physical, social and symbolic dimensions.



4. Value Lived Experience

Use qualitative and lived experience as valid data to inform decisions and complement technical data.



5. Ensure Inclusive Governance

Build durable governance with diverse representation, shared decision-making and accountability.



6. Test & Adapt Solutions

Use temporary experiments to test ideas, learn in real conditions and adapt before scaling up.



Towards Inclusive, Responsive & Equitable Mobility



EXECUTIVE SUMMARY

This document presents six transferable design principles for fair mobility planning based on the pilot actions and evaluation carried out in Creil (FR) and Ebensee (AT), under Tasks 3.3 and 3.4 of Work Package 3. The principles translate pilot experience into guidance for public administrations, associations, mobility planners, and local stakeholders seeking to make mobility systems more equitable and responsive to vulnerable communities. They address the social, institutional, and everyday barriers that shape access to mobility.

The six principles focus on: reaching underrepresented groups through trusted intermediaries; moving from one-off consultation to durable governance; recognising care chains and complex everyday routines; addressing perceived, social, and symbolic safety; treating lived experience as valid planning evidence; and using temporary actions to test needs and assess the acceptance of possible solutions. The main message is that fair mobility cannot be achieved through technical measures alone. It requires inclusive participation, long-term institutional commitment, attention to everyday mobility practices, and adaptable approaches that can be scaled or transferred to different local contexts.

INTRODUCTION

This document condenses the lessons learned from the pilot actions and their evaluation, carried out respectively through Tasks 3.3 and 3.4 of Work Package 3. Its purpose is to translate context-specific pilot learnings into a set of replicable, adaptable and scalable design principles for mobility systems. The principles come as an answer to real-life problems faced by public administrations and associations, focusing on providing more equitable access to mobility while recognising the practical, social, institutional, and spatial barriers that may affect vulnerable communities.

The section is organised around six problem-principle pairs. Each pair begins with a real-life contextualisation of the issue, followed by a clear core problem statement. It then draws on the experiences of the pilot activities in Creil and Ebensee, showing how the issue appeared in practice and what lessons emerged from the two pilot cities. Based on this, each subsection formulates a design principle and explains how it can be translated into action. Additional attention is given to the adaptability of each principle across different spatial and institutional contexts, as well as to its potential scalability beyond the original pilot settings.

Together, the six principles address key challenges identified through the pilot work: making participation more effective and durable; improving the visibility and consideration of care chains and everyday mobility routines; recognising subjective and lived-experience data, especially in relation to safety; and using temporary actions or activities to test needs, reveal barriers, and assess the acceptance of possible solutions.



From Pilot Actions to Design Principles

Lesson learned from pilot projects turned into adaptable & scalable design principles for fair mobility systems



Principle 1

Work through trusted intermediaries before asking for participation

Core problem statement:

How can public administrations and associations reach people who are directly affected by mobility injustice but are unlikely to attend conventional consultations?

Principle 1: Work through trusted intermediaries before asking for participation

Real-life context

Participative planning is a fundamental component of inclusive urbanism. As such, public administrations and associations often aim to involve residents through consultation formats with public meetings, surveys, workshops, online platforms, or information events as common solutions. While these formats can work well for people who are already organised or used to participating in planning processes, people most affected by mobility injustice are often the least likely to be reached through these means. This may include people with limited time, unstable working hours, caring responsibilities, language barriers, low institutional trust, limited digital access, or previous negative experiences with public authorities. As a result, the perspectives of those who depend most on accessible, affordable, and reliable mobility can remain underrepresented.

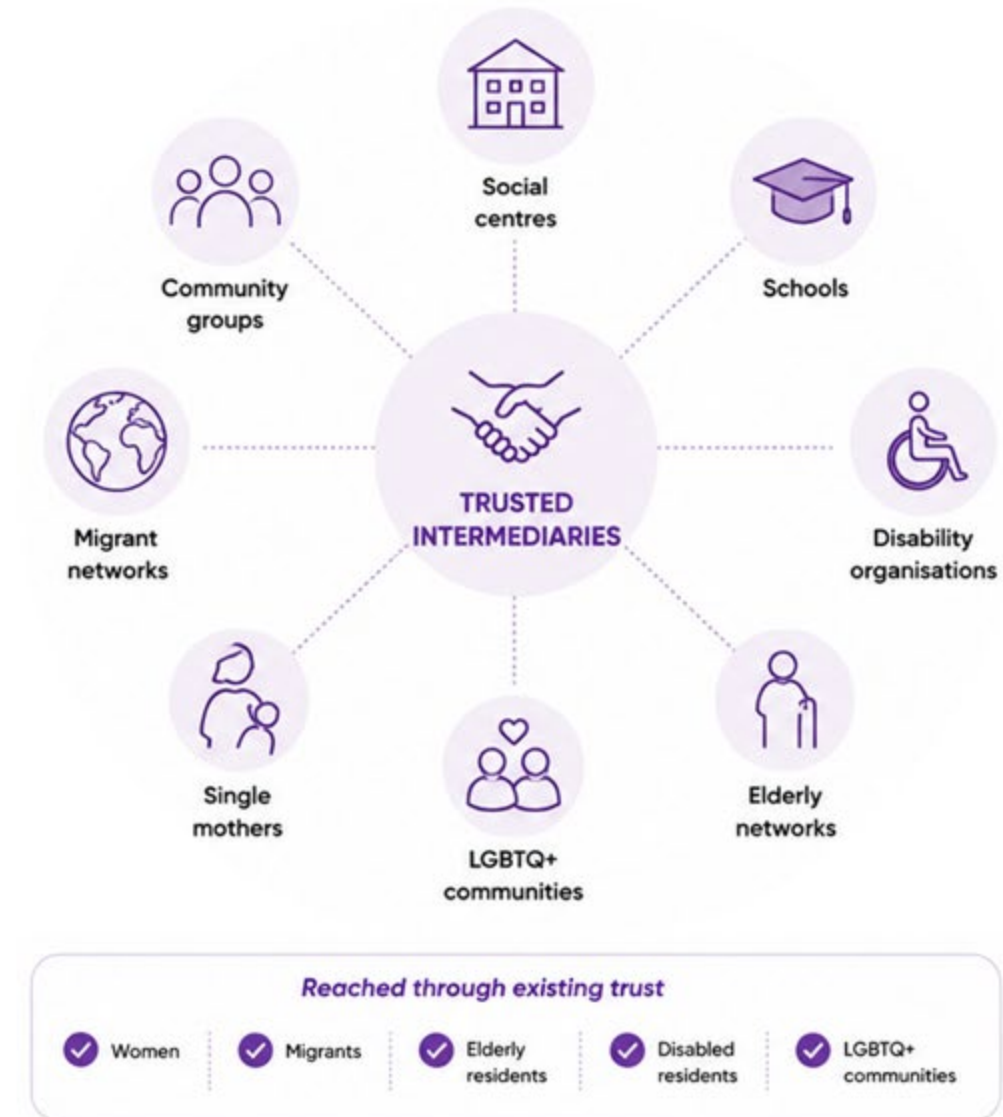


Principle 1: Work through trusted intermediaries before asking for participation

Pilot action experiences and takeaways

The pilot actions showed that direct outreach by public administrations is not always sufficient. In several cases, participation became more meaningful when administrations worked through actors who already had bonds with the target groups.

These included local actors such as the Eco-Citizen House, Le Cannet des Maures, the Gorges Brassens social centre, and the Geekees Brassens social centre, which helped build trust and reach women, migrants, single mothers, and people in precarious situations. Elderly residents were reached through senior networks, while disabled residents were involved through disability-related partnerships. In other contexts, migrant women's gatherings and LGBTQ+ community events offered more appropriate and familiar spaces for engagement than formal consultation meetings.



Principle 1: Work through trusted intermediaries before asking for participation

Core principle

Participation should begin by identifying the people and organisations that already have trust-based relationships with communities affected by mobility injustice, going beyond a simple public invitation.

Examples of trusted intermediaries include social centres, neighbourhood organisations, schools, community groups, migrant associations, disability organisations, elderly networks, local employers, care organisations, youth workers, or informal community leaders. Their role is to help shape the engagement process so that it is accessible, respectful, and relevant to people's everyday experience.

This principle recognises that trust is a precondition for meaningful participation. Where trust in institutions is low, administrations should refrain from expecting people to come forward immediately. A better approach is to listen to intermediaries, understand existing barriers, and co-design forms of engagement that fit the community.

THE APPROACH



Examples of trusted intermediaries



Pilot takeaways

- ✓ Reached women and caregivers
- ✓ Reached migrants
- ✓ Reached elderly residents
- ✓ Reached disabled people
- ✓ Increased participation quality
- ✓ Reduced distance to institutions

Principle 1: Work through trusted intermediaries before asking for participation

Translation into action: adaptability and scalability

To apply this principle, public administrations and associations can begin by mapping the groups that are likely to be affected by mobility injustice but absent from formal consultation. The next step is to identify organisations, services, or informal networks that already interact with these groups in everyday life. Engagement should then be organised in collaboration with these intermediaries. This may mean holding conversations in familiar places, using existing meetings or community events, offering childcare or flexible timing, providing translation, avoiding overly technical language, and compensating organisations or participants for their time where possible.

For the principle to be scalable, the role of intermediaries should be built into the planning process rather than treated as an optional outreach activity.

Public administrations can create long-term partnerships with local organisations, maintain a contact map of trusted actors, allocate budget for community-based engagement, and document which groups were reached, which groups were still missing, and why. Adaptability is important because trusted intermediaries will differ by context. In one area, a school or social centre may be the most effective entry point. In another, it may be a migrant women's group, a disability organisation, an employer, a religious or cultural association, or an informal community network. The core idea remains the same: go through existing relationships of trust before expecting participation in formal planning spaces.

Principle 2

Move from consultation to durable governance (Orgware)

Core problem statement:

How can underrepresented groups gain a sustained voice in mobility decisions after pilot activities end?

Principle 2: Move from consultation to durable governance (Orgware)

Real-life context

Participation in mobility planning often takes place through temporary formats: workshops, surveys, interviews, or other project-based consultations. These formats can inform project decisions and create opportunities for residents to express their needs. However, they often remain tied to a specific project, funding period, or pilot phase. This creates a risk that participation stops once the funded activity ends despite the benefits of continuous feedback. Feedback may be collected, but not institutionally embedded.

Pilot actions may create expectations among residents and local organisations, but these relationships can disappear if there is no structure to maintain them. As a result, underrepresented groups may be invited to speak without gaining a sustained role in shaping decisions over time.



Sustained voice. Stronger decisions. Fairer mobility.

Key outcomes

- ✓ Continuous voice for underrepresented groups
- ✓ Recommendations inform real decisions
- ✓ Implementation is monitored
- ✓ Participants are informed about outcomes
- ✓ Participation becomes part of how mobility decisions are made

Principle 2: Move from consultation to durable governance (Orgware)

Pilot action experiences and takeaways

The pilot action notes point to the importance of moving beyond one-off engagement formats. They frame the Mobility Board as a possible platform for representation and governance. Its purpose is to support ongoing recommendations and decision-making, while creating a longer-term structure through which underrepresented groups can remain visible in mobility planning.

The board is intended to be a long-term action for sustained participation. To ensure the proper functioning of this solution, participation should be measured by the influence of the participant's perspective on decisions after the pilot phase. A key takeaway is that participation needs an institutional home.

Without a recurring structure, consultation risks remaining episodic: people are asked for input, but there is no durable mechanism to ensure that this input enters municipal decision-making, is followed up, or leads to accountable change.



Sustained voice



Recommendations influence decisions



Underrepresented groups stay visible



More accountable mobility planning

Principle 2: Move from consultation to durable governance (Orgware)

Core principle

A fair and just mobility system requires continuous feedback. It needs governance mechanisms that keep affected and underrepresented groups involved over time. This means shifting from one-off consultation towards recurring and institutionally recognised forms of participation, such as advisory boards, regular local forums, co-management structures, or formalised feedback channels. These structures should allow residents and community representatives to raise issues, review proposals, monitor implementation, and understand how their input has influenced decisions.

From one-off consultation ...



1. One-off consultation



2. Collect feedback



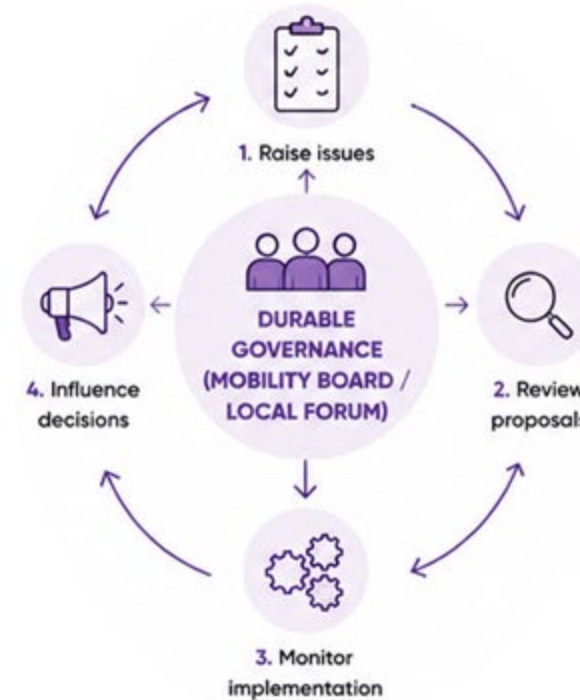
3. Project ends



4. Participation stops

Durable governance is especially important for groups who are often excluded from formal planning processes. Their participation should not depend only on temporary funding, individual project teams, or short-term pilot activities. Instead, public administrations and associations should create mechanisms that remain active beyond the project lifecycle.

... to durable governance.



Principle 2: Move from consultation to durable governance (Orgware)

Translation into action:
adaptability and scalability

To translate this principle into action, public administrations and associations can create advisory boards, recurring forums, or formal consultation mechanisms that continue after pilot activities end. These structures should define how recommendations enter municipal decision-making, how feedback is tracked, and how participants are informed about outcomes. Practical steps may include setting a regular meeting rhythm, ensuring diverse membership,

supporting participation through childcare, accessible venues, translation, and suitable meeting times, and assigning clear responsibility within the administration for maintaining the process.

For scalability, the model should be simple enough to be repeated in different municipalities, but flexible enough to fit local conditions. In some places, a Mobility Board may be appropriate. In others,

existing neighbourhood forums, social councils, senior councils, youth councils, disability committees, or community organisations may provide a better institutional base. The key point is that participation should not end with one workshop, survey, or pilot. It should become part of how mobility decisions are made, monitored, and revised over time.



Principle 3

Plan beyond commuter flows, considering care chains and real routines (Hardware, Software & Orgware)

Core problem statement:

How can mobility systems better support care-related, multi-stop, time-constrained everyday travel?

Principle 3: Plan beyond commuter flows, considering care chains and real routines (Hardware, Software & Orgware)

Real-life context

Mobility planning has been organised around the linear commuter trip, where a single person travels from home to work in the morning, and back again in the evening. This pattern shapes how networks are designed, how peak hours are defined, and how supply is matched to demand.

However, for many residents, daily mobility patterns and needs look very different. Women, the elderly, parents and caretakers tend to make journeys that combine several purposes and stops: dropping a child at school, going to work, picking up medication or groceries, as well as sometimes accompanying an elderly relative to an appointment. These journeys are fragmented, chained and time-sensitive, and they often take place outside the hours and corridors that conventional planning prioritises.

When transport systems are designed mainly around the needs of commuters, they often make everyday care-related travel harder. A connection that works well for a simple home-to-work trip may not work for someone who has to wait with a stroller, carry shopping across several transfers, or travel home with a child. Public space often adds to this difficulty when it is designed for movement rather than pause, with few opportunities to sit, shelter, or wait comfortably. As a result, those who already carry the heaviest care burden also face the highest mobility burden. In peripheral areas, this can translate into car dependency where households can afford it. The key challenge is therefore not only to improve commuter networks, but to make everyday infrastructure of care visible in the way that mobility systems are designed, scheduled and evaluated.

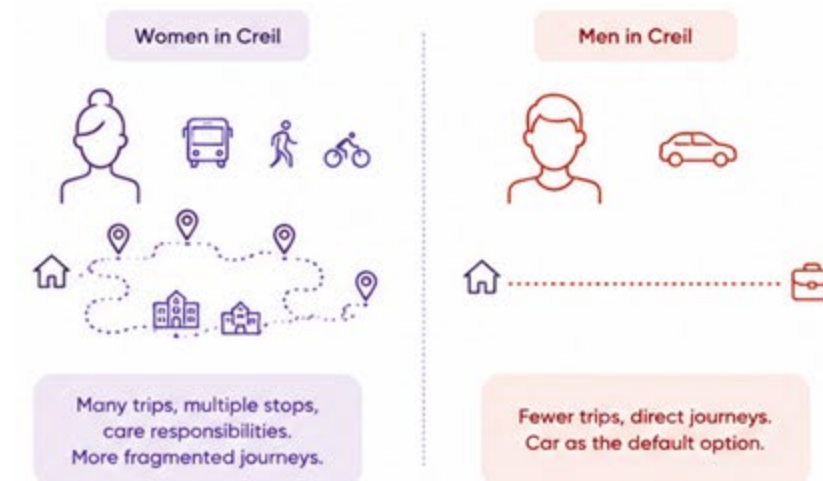
Principle 3: Plan beyond commuter flows, considering care chains and real routines (Hardware, Software & Orgware)

Pilot action experiences and takeaways

Experiences in both Creil (FR) and Ebensee (AT) reveal how care responsibilities shape complex mobility patterns. In Creil, women make up the majority of the public transport and active mobility modal shares, whereas men are the main users of private cars. This asymmetry in gender and modal split is sharpened by Creil's car dependency, which renders spaces less accessible and safe while also associating car ownership to freedom of movement. Women without a private vehicle therefore exhibit the most fragmented mobility patterns in an environment built around the mode they do not have access to.

The Café des Femmes workshop exposed how strict schedules and heavy loads make public transport usage difficult, particularly when travelling with children. The workshop succeeded in creating a deeper understanding of mobility needs by bringing together different perspectives, but lacked the presence of public administration representatives to better support a concrete path into action.

Different realities, unequal mobility



What we learned from the Café des Femmes workshop



✓ Care responsibilities must be at the heart of mobility planning to design fair, inclusive and real-life solutions.

Principle 3: Plan beyond commuter flows, considering care chains and real routines (Hardware, Software & Orgware)

In Ebensee, women's mobility is strongly tied to care activities: car ownership becomes a time management tool, especially in peripheral areas where public transport coverage is uneven and headway is long. The Women.Live.Ebensee process led to two interventions, the Parents' Stop and the Stroller Rally. These interventions helped make care mobility visible and temporarily reframed space as shared rather than car dominated.

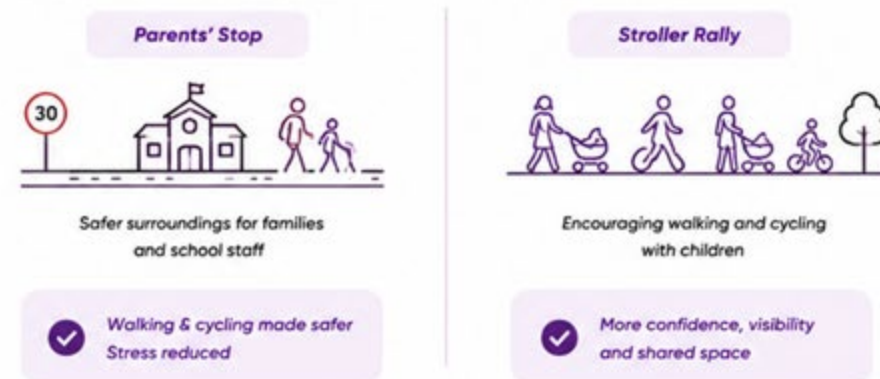
The Parents' Stop responded to a specific problem: a primary school sat on a busy road mainly crossed by through traffic, and around half the pupils arrived by bus and walked approximately ten minutes from stop to school. The morning traffic flow made walking and cycling to school unsafe and created a stressful environment for the children and the parents accompanying them, as well as for the school staff.

The intervention redirected traffic away from the front of the school, thereby making surrounding areas safer for families and staff who choose to walk or cycle. Because childcare responsibilities fall disproportionally on women, the time saving and stress reduction provided by this intervention benefited this target group in particular.

From car-dependent routines...



...to care-sensitive interventions



Principle 3: Plan beyond commuter flows, considering care chains and real routines (Hardware, Software & Orgware)

The Stroller Rally responded to a different problem, Ebensee's pedestrian infrastructure includes sidewalks in poor condition, without adequate slopes, often forcing parents with strollers to use the road where drivers generally do not concede space. The rally temporarily disrupted traffic to make this everyday situation visible and to challenge the assumption that streets belong to cars. A key learning from the action was the importance of framing, as organisers found that by focusing on shared community values and collective responsibility worked better than an adversarial framing of drivers versus pedestrians, that risks entrenching the division the action aims to resolve.

Core principle
Mobility planning should treat care-related travel as a primary use of the transport system, rather than an exception or an off-peak case.

This means recognising that many residents make chained, multi-purpose journeys, whose viability depends on factors that commuter-focused planning rarely measures. These include: the ease of transfer with children or heavy items (e.g. grocery bags), the availability of seating and shelter at intermediate stops, the frequency of services outside the morning and evening peaks, and the safety and comfort of waiting spaces.

Acknowledging care chains means accepting mobility is not only about the movement of workers between home and the workplace, but also about the daily organisation of households, the upbringing of children, the care of older relatives and the sustaining of community life. Each of these activities generates trips that the transport system either supports or makes more difficult.

Principle 3: Plan beyond commuter flows, considering care chains and real routines (Hardware, Software & Orgware)

WP4 Replicability and Scalability
T4.3 Fair Mobility Catalogue of Design Principles



Plan mobility systems around real daily routines and care chains, ensuring infrastructure, scheduling, and evaluation frameworks accommodate multi-stop and time-sensitive journeys.

Translation into action: adaptability and scalability

To apply this principle, public administrations and associations can start by studying routes associated with care work i.e paths that connect multiple points potentially including any of the following: home, school, daycare, grocery stores, health services, and the third spaces that connect these different stops. These routes are often dispersed across the local transport network and difficult to read from origin-destination data, which means that direct observations, route diaries and conversations with caregivers are essential. Testing and co-designing, therefore, should include all vulnerable communities from children, people with disabilities, caregivers and the elderly directly, since they are the most aware of their own mobility needs.

For this principle to scale, evaluation methods also need to change. Conventional evaluation indicators such as modal split, or peak hour ridership describe how the system performs for commuters, but reveal very little about whether they support trip-chaining. Planners should complement these measures with indicators that capture the caregiving burden, such as time to complete typical multi-stop journeys, the proportion of these journeys made under conditions of stress, and the degree of car dependency tied to a lack of transport alternatives (time by car VS time by public transport for common trips, public transport coverage and headway analysis, perceived safety surveys for active mobility by day and night etc).

Principle 3: Plan beyond commuter flows, considering care chains and real routines (Hardware, Software & Orgware)

WP4 Replicability and Scalability
T4.3 Fair Mobility Catalogue of Design Principles



Adaptability is important because care chains differ by context and by target group. In small towns and peripheral areas, the priority may be frequency and shelter along a handful of school, shopping, and health corridors; in denser settings, it is more often the coordination of modes, the integration of timetables, and the comfort of interchanges. The underlying shift is the same: planning starts from the chained, multi-stop reality of care, rather than the single-purpose commute.

1 Map real daily routines (care chains)



2 Measure care mobility, not only commuter mobility

Conventional indicators (not enough)



Modal split



Peak hour ridership



Care-sensitive indicators (what matters)



Time for typical multi-stop journeys



Car vs. public transport time for common trips



Public transport coverage & frequency



Perceived safety (day & night) for active mobility



Accessibility for all

3 Different contexts, same principle

Small towns / peripheral areas



- Frequency
- Shelter
- Coverage along key corridors (school, shopping, health)

Dense / urban areas



- Mode coordination
- Timetable integration
- Comfort & connectivity of interchanges



Plan from the chained, multi-stop reality of care – not the single-purpose commute.

Principle 4

Treat lived experience as data (Software)

Core problem statement:

How can subjective, sensitive and embodied mobility experiences become legitimate planning evidence?

Principle 4: Treat lived experience as data (Software)

Real-life context

Mobility planning often privileges technical data: flows, ridership, travel time, road safety statistics. This data is essential for understanding how a transport system performs in the aggregate, but they capture only a narrow part of what mobility actually involves. They tend to register movement itself, while leaving out conditions under which that movement takes place.

For instance: the fear that shapes which routes are used, the avoidance that removes specific demographics from the data altogether, the waiting that fills the gaps between trips, the bodily discomfort of carrying or accompanying.

They also miss the small daily improvisations through which people make a system that does not quite fit their needs, work for them anyway. These dimensions are difficult to capture through conventional transport data, as the collection of data is not designed to see them.

A bus stop that women avoid after dark generates no ridership at the hours it most fails its users. An infrastructure audit that meets every technical standard may miss the everyday experience of moving through the space it describes. As a result, the perspectives that would most usefully inform fair mobility planning often remain at the margins of the evidence base, classified as too anecdotal or subjective to count.

Principle 4: Treat lived experience as data (Software)

Pilot action experiences and takeaways

Both Creil and Ebensee developed methodologies that took condensed lived experiences into planning evidence, and in doing so created insights that conventional transport data would not have been able to bring up.

The first lesson is that the methods do produce evidence of a different kind. Creil's combination of interviews, focus groups, go-along interview, observation and counting at the train station, Sensible Marches and the Café des Femmes photolangage workshop yielded what the report describes as rich and sensible material that supported an intersectional reading of mobility issues.

In parallel, Ebensee's photo documentation work made accessibility barriers visible in a form that statistics could not (e.g missing curb cuts, neglected bus stops, missing signage at station forecourt) and the resulting exhibition in vacant shop windows reached many passerby. Neither finding would have surfaced through ridership data or infrastructure audits alone.



Principle 4: Treat lived experience as data (Software)

The second lesson is that qualitative material has to be translated into tangible guidelines and conclusions that planners can act on, otherwise it risks remaining outside of the process it was meant to inform. The Ebensee photo exhibition worked partly because it was paired with a clear advocacy address to municipal and provincial authorities. The youth mapping with Catholic Youth participants was structured from the outset for digitisation into the building department's planning database. Expression alone, however rich it may be, does not change planning decisions if the conclusion does not enter the same channel as technical reports would.

The last lesson is that these methods' degree of success, i.e. the quality and quantity of information obtained, depends on conditions that aren't always present. The Creil go-along interviews surfaced an account of harassment that shaped a woman's entire mobility pattern, but only because she felt safe enough with the researcher to share it.



1. FROM QUALITATIVE MATERIAL TO ACTIONABLE GUIDELINES

Lived experience is translated into tangible conclusions planners can act on.

If conclusions stay outside the planning process, they risk having no impact.



2. SUCCESS DEPENDS ON CONDITIONS

The quality of information depends on what is present: safety, trust, and the ability to share experiences.



3. RELATIONSHIPS MAKE SENSITIVE DATA POSSIBLE

Trust, ethical care and the willingness to give back are essential to gather meaningful insights.

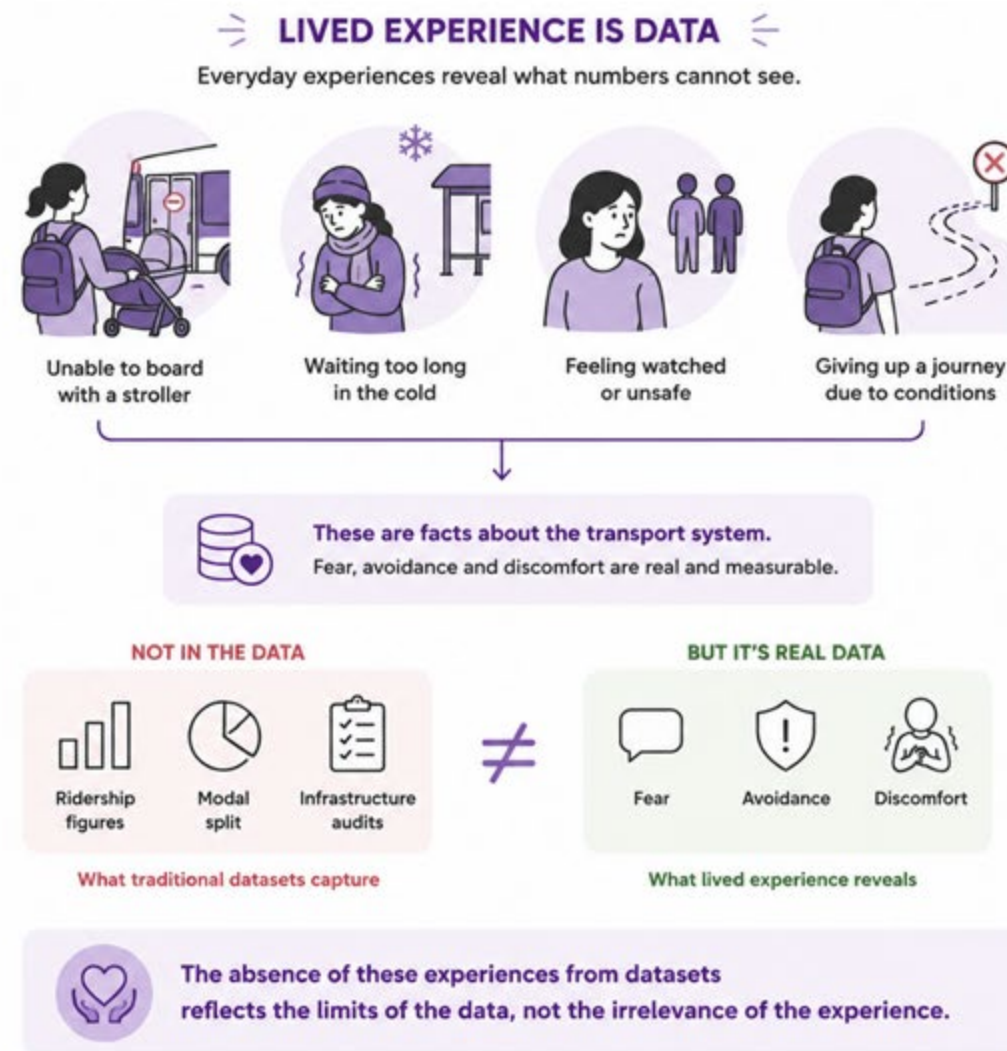
Principle 4: Treat lived experience as data (Software)

Core principle

Treat lived experience as data.

This principle recognises that qualitative accounts of those who use the transport system every day are a form of evidence. The experience of being unable to board a bus with a stroller, or of feeling watched or vulnerable at a particular stop, of giving up on a journey because the wait is too long or the space too cold, tells planners something that ridership figures alone cannot. It tells them what the system fails to do, for whom, and in what conditions.

Treating lived experience as data means accepting fear, avoidance and discomfort are facts about the transport system, rather than individual impressions of its users. Their absence from conventional datasets reflects their limitations rather than the irrelevance of the experience itself.



Principle 4: Treat lived experience as data (Software)

Translation into action: adaptability and scalability

To apply this principle, public administrations and associations can build qualitative assessment methods such as the Go-along interviews, photolangage, sensory walks into their standard planning toolkit to support quantitative approaches.

A useful early step is to map places that are avoided, feared, desired or informally used, as these maps highlight where qualitative evidence is most urgently needed. This in turn leads to the collection and translation of qualitative material into planning outputs such

as maps, hotspot lists, route typologies, design implications and recommendations. It is important to note that without proper translation, qualitative findings risk remaining outside the process they were meant to inform. Findings should also be validated back with the participants who produced them.

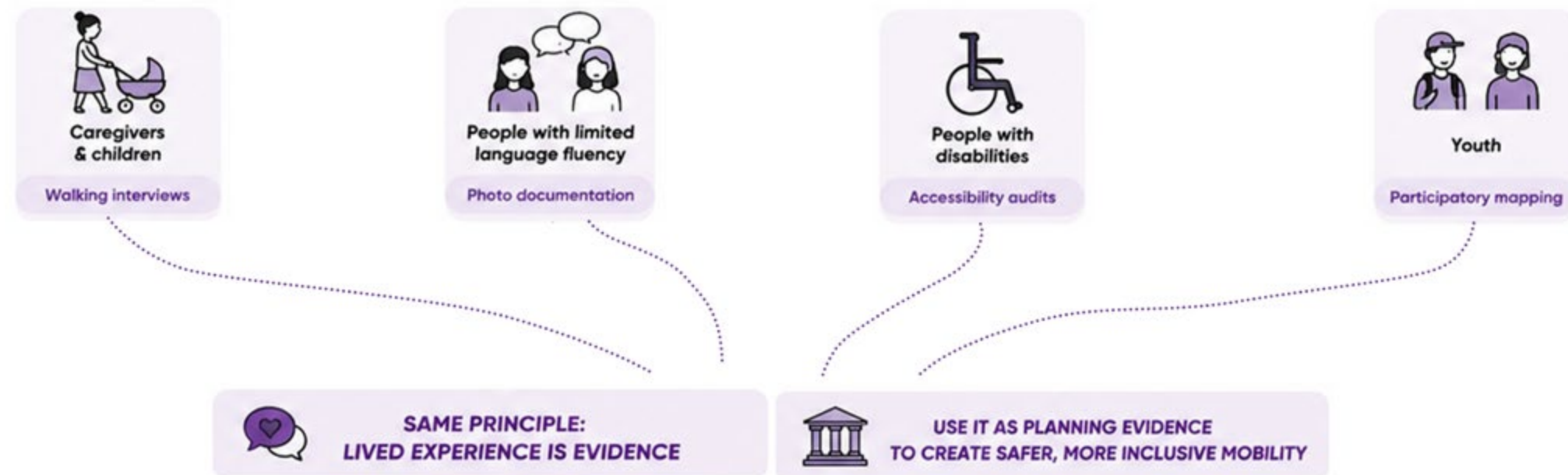
This is both an ethical requirement, as well as a methodological one, as it ensures the interpretations remain faithful to the experiences they describe, as well as sustaining the relationship of trust on which sustainable participation depends.



Principle 4: Treat lived experience as data (Software)

The adaptability of approaches matters because the most informative methods will differ across target groups and contexts. Walking interviews may work well with caretakers or children, photo documentation may help overcome language barriers, and accessibility audits with disabled users can outline issues unique to this assessment method.

The principle remains the same across these different options, i.e. that lived experience should be treated as a legitimate and necessary form of planning evidence, not as something to be added post-analysis. The next principle builds on this foundation, applying it to a domain where the gap between planning measures and what residents experience is widest: safety.



Principle 5

Design for perceived, social, and symbolic safety as well as physical safety (Hardware & Software)

Core problem statement:

How can subjective, sensitive and embodied mobility experiences become legitimate planning evidence?

Principle 5: Design for perceived, social, and symbolic safety as well as physical safety (Hardware & Software)

Real-life context

Safety in mobility planning is often defined through the absence of traffic accidents. Public administrations usually measure it through crash statistics and respond through physical interventions such as traffic calming, signage, lighting, or the separation of transport modes. These measures are important, but they do not capture the full experience of safety in everyday mobility.

For many residents, safety also depends on the social conditions of the places they move through. Women, LGBTQIA+ people, migrants, racialised people, older residents, children, and people with disabilities may assess a route or transport stop through questions that are rarely visible in standard safety data: whether the

space is well lit, who else is present, whether there is a risk of harassment, whether help would be available, and whether the atmosphere of the place makes them feel welcome or exposed.

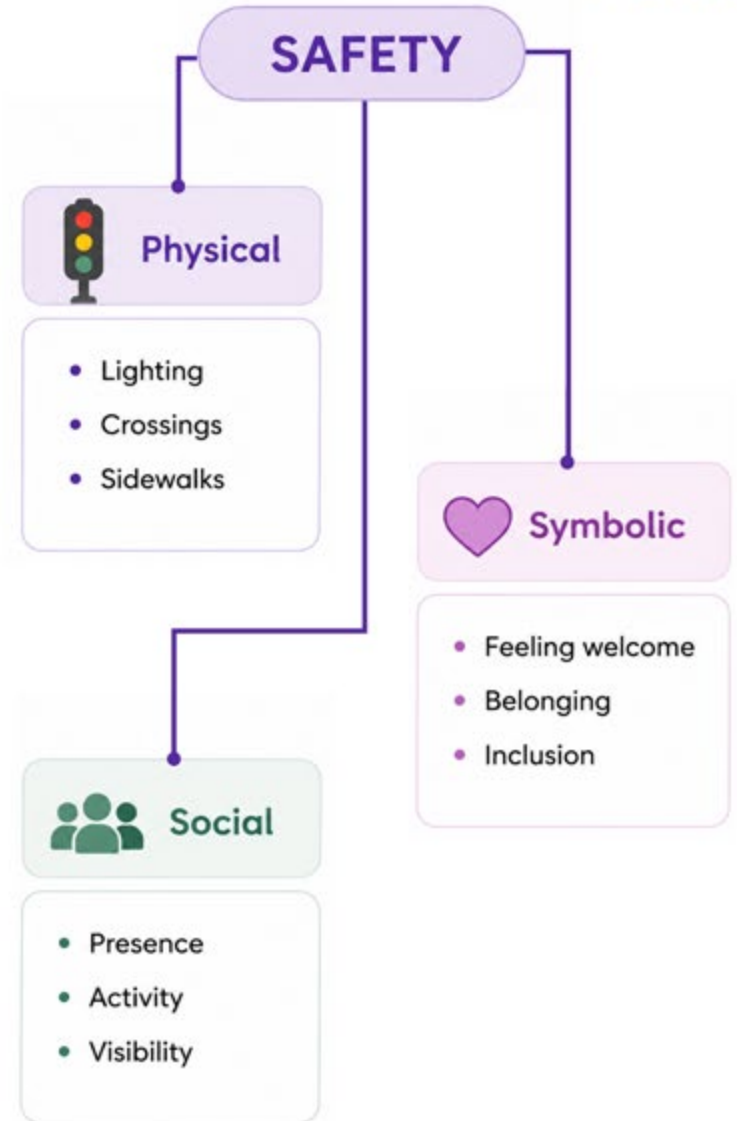
These experiences shape mobility behaviour. People may avoid particular streets, stops, squares, services, or times of day. They may change their route, travel with someone else, avoid waiting alone, or give up on public transport for certain trips. These adaptations often remain invisible in official data because they do not appear in accident records. Yet they are still mobility barriers. A route can be physically safe in technical terms and still be avoided by the people who feel unsafe using it.

Principle 5: Design for perceived, social, and symbolic safety as well as physical safety (Hardware & Software)

Pilot action experiences and takeaways

The pilot actions in Creil and Ebensee showed that safety concerns often fall outside the scope of conventional transport indicators. Both cases revealed situations where people's mobility was shaped not only by the physical condition of infrastructure, but also by fear, social exposure, harassment, and symbolic exclusion.

In Creil, women reported avoiding the square in front of the train station and the street connected to it, especially because groups of men occupy the space and because lighting is absent between 23:00 and 5:00. This was not a marginal detail. It shaped how women experienced access to the station and whether they felt legitimate in that public space. The wider fieldwork also showed how safety concerns intersect with racism, xenophobia, lesbophobia, transphobia, and islamophobia. One particularly severe example was the case of a transgender woman who was attacked on her way back from Paris and had been forced to move several times. These experiences are not recorded as transport failures in the usual sense, but they directly affect how, when, and whether people move.



Principle 5: Design for perceived, social, and symbolic safety as well as physical safety (Hardware & Software)

In Ebensee, women, queer people, and migrants raised safety concerns linked to alcohol consumption at social events and on public transport. Salzkammerqueer also showed that the absence of LGBTQIA+ visibility in rural space creates a safety issue of its own. When a group is not visibly recognised in public life, movement through public space can become more cautious, more hidden, and more dependent on informal strategies of self-protection.

The pilot actions also showed that responses to perceived safety do not always need to be large in scale to be meaningful. The Café des

Femmes workshop in Creil worked both as a diagnostic space and as a form of social safety. It allowed women to describe experiences of fear and harassment collectively, rather than leaving each person to raise these concerns alone. The Mobility Board then helped carry these findings into administrative discussion



treating fear as a legitimate planning input. In Ebensee, the Upgrading Bus Stops action improved three stops that had previously offered little more than a pole and a timetable. The added seating, weather protection, and visual improvements addressed the comfort and dignity of waiting, especially for school children and other bus users with few alternatives. The main takeaway is that perceived safety is not secondary to "real" safety. It is part of how the mobility system functions. If people avoid a service, a stop, or a public space because they feel unsafe, then the system is not accessible to them in practice.

Principle 5: Design for perceived, social, and symbolic safety as well as physical safety (Hardware & Software)

Core principle

Mobility planning should design for perceived, social, and symbolic safety alongside physical safety.

This means treating fear, harassment, exposure, discomfort, and avoidance as legitimate mobility barriers. A fair mobility system should not only ask whether people can move through a space according to technical standards. It should also ask whether different groups actually feel able to use that space, wait there, pass through it, or return home safely at different times of day.



MOBILITY PLANNING SHOULD DESIGN FOR MORE THAN PHYSICAL SAFETY



A FAIR MOBILITY SYSTEM ASKS:

Can people move through a space?

AND Do different groups actually feel able to use that space, wait there, pass through it, or return home safely at different times?



Safety is more than the absence of danger.

It is the presence of fairness and dignity.

Principle 5: Design for perceived, social, and symbolic safety as well as physical safety (Hardware & Software)

Translation into action: adaptability and scalability

To apply this principle, public administrations and associations can expand safety assessments beyond accident data and infrastructure audits. They should include perceived safety surveys, gender-sensitive audits, walking interviews, sensory walks, night-time observations, and participatory mapping of places that residents avoid. These methods should be carried out with the people whose mobility is most affected by fear and harassment, including women, LGBTQIA+ people, migrants, young people, older residents, and people with disabilities.

A practical first step is to identify where and when people feel unsafe. This means mapping not only dangerous crossings or poorly designed junctions, but also station squares, waiting areas, routes to schools, streets around nightlife venues, isolated pedestrian links, and public transport stops used in the evening or early morning. The aim is not to confirm planners' assumptions, but to understand how safety is experienced by those who use these spaces every day. Responses should combine physical and social measures.



Principle 5: Design for perceived, social, and symbolic safety as well as physical safety (Hardware & Software)

Physical measures may include lighting, clear sightlines, seating, shelter, maintenance, active ground-floor uses, accessible pedestrian routes, and better waiting environments. Social measures may include the presence of trusted staff or community actors, bystander training, clear reporting channels for harassment, better coordination between transport operators and social services, and support for community-based safety networks. Symbolic measures also matter. Visibility, representation, welcoming communication, and the absence of hostile or exclusionary signals can influence whether people feel that a space is meant for them.

This principle is adaptable because the geography of unsafety differs from place to place. In one context, the priority may be a station square after dark. In

another, it may be a rural bus stop, a school route, a pedestrian underpass, or the streets around events where alcohol consumption changes how safe people feel. The transferable point is that safety should be assessed from the perspective of those who feel least safe, not only from the perspective of technical compliance.



Lighting, sightlines, seating, shelter, maintenance, routes, waiting environment



Trusted staff, bystander training, reporting channels, coordination, community support



Visibility, representation, welcoming communication, no hostile or exclusionary signals

Principle 6

Use temporary public space and service experiments to reveal demand and test fairer alternatives (Hardware, Software & Orgware)

Core problem statement:

How can public administrations and associations test fairer mobility alternatives when existing data does not show the demand that current conditions suppress?

Principle 6: Use temporary public space and service experiments to reveal demand and test fairer alternatives (Hardware, Software & Orgware)

Real-life context

Mobility planning often relies on existing data, forecasts, and models. These tools are necessary, but they mostly describe visible demand: the trips people already make, the services they already use, and the routes already recorded by the system. They are less able to capture suppressed demand. Some people do not use a street, service, stop, or public space because it feels unsafe, inaccessible, uncomfortable, too slow, too expensive, or poorly connected to their daily needs. This creates a planning problem. If decisions are based only on current use, places and services that already exclude people may appear to have low demand. A bus stop that is uncomfortable, a walking route that feels unsafe, or a street dominated by cars may seem underused, even though people might use them differently if conditions changed.

Temporary interventions help address this gap. They allow administrations and associations to test changes under real conditions before committing to permanent investment. They can show how people behave when a street is calmed, when waiting conditions improve, when a school drop-off is reorganised, or when a public space becomes more accessible. In this sense, temporary actions are not only awareness-raising events. They are a way of producing evidence about what becomes possible when the conditions of mobility change.



Principle 6: Use temporary public space and service experiments to reveal demand and test fairer alternatives (Hardware, Software & Orgware)

Pilot action experiences and takeaways

The pilot actions showed that short-term changes can make hidden needs visible. In Ebensee, the Stroller Rally temporarily shifted the use of street space and made the everyday difficulties of moving with a stroller visible to residents, drivers, and decision-makers. When cars no longer dominated the street in the same way, parents and children could occupy the space differently. The action revealed how much existing infrastructure restricts everyday movement, especially where pavements are narrow, uneven, missing slopes, or treated as secondary to car traffic.

The Parents' Stop intervention addressed a different but related issue. By changing the organisation of school drop-off, the action reduced pressure in front of the school and improved the experience of children, parents, caregivers, and staff. Its temporary character was important because it allowed the municipality to observe how people

responded to a different arrangement before moving toward longer-term decisions. The intervention did not begin from an abstract model of school mobility. It tested a concrete change in the place where the problem occurred.

In Creil, smaller activities connected to workshops also functioned as social experiments. They created settings where residents could express needs that standard mobility data did not capture, especially around safety, accessibility, and everyday constraints. The insights generated through these activities fed into discussions within the Mobility Board and helped make planning conversations more grounded in lived experience.

Principle 6: Use temporary public space and service experiments to reveal demand and test fairer alternatives (Hardware, Software & Orgware)

The main takeaway is that temporary interventions can test three things at once: whether a spatial or service change works in practice, whether people respond to it positively, and whether local institutions are able to support it beyond the pilot moment. A temporary action should therefore not be treated as a symbolic event only. It should be designed as a test that produces usable evidence.

PILOT INTERVENTIONS TEST THREE THINGS AT ONCE



1

DOES IT WORK?

Does the spatial or service change work in practice?



2

IS IT WELCOMED?

Do people respond to it positively?



3

CAN IT BE SUSTAINED?

Are local institutions able to support it beyond the pilot moment?

TEMPORARY ACTIONS = REAL-WORLD TESTS



IDEA



PILOT



OBSERVE



EVIDENCE



DECIDE

Principle 6: Use temporary public space and service experiments to reveal demand and test fairer alternatives (Hardware, Software & Orgware)

Core principle

Use temporary public space and service experiments to observe actual behaviour, reveal suppressed demand, and test fairer mobility alternatives before large-scale implementation.

To apply this principle, public administrations and associations can use small, time-limited interventions to test specific planning questions. These may include temporary street closures, school street pilots, pop-up bus stops, improved waiting areas, temporary seating and shelter, trial changes to service frequency, flexible transport pilots, wayfinding tests, or temporary reallocations of road space. Each intervention should be designed around a clear question: who uses the space or service now, who is missing, what barrier is being tested, and what would count as improvement?

Data collection should combine observation, basic metrics, and user feedback. Useful indicators may

include the number and diversity of users, waiting time, route choice, dwell time, conflicts between users, perceived safety, comfort, accessibility, and changes in who feels able to use the space. Qualitative feedback is essential because it explains why people respond in a certain way. A temporary street closure, for example, may show more walking and cycling, but conversations with parents may reveal that the main benefit is lower stress, easier supervision of children, or a stronger sense that the street can be shared. Temporary interventions should also include a pathway beyond the pilot. This does not mean that every test must become permanent. It means that each test should be documented, discussed with stakeholders, and linked to a decision about whether to stop, adapt, repeat, extend, or formalise the intervention. Without this step, temporary actions risk becoming isolated events that generate enthusiasm but leave no institutional trace.

Principle 6: Use temporary public space and service experiments to reveal demand and test fairer alternatives (Hardware, Software & Orgware)

The principle is scalable because temporary testing can work at different levels of complexity. In dense urban areas, it may involve reallocating street space, improving interchanges, or testing safer walking routes around public transport nodes. In smaller towns or peripheral areas, it may involve testing school mobility arrangements, flexible transport to key destinations, or better waiting conditions along routes to schools, health services, shops, and community facilities. The form of the experiment will differ, but the planning logic remains the same: test changes in real conditions, learn from actual use, use the results to inform decisions, and use the results to support fairer long-term decisions.



DENSE URBAN AREAS



- Reallocating street space
- Improving interchanges
- Testing safer walking routes around public transport nodes

SMALLER TOWNS / PERIPHERAL AREAS



- Testing school mobility arrangements
- Flexible transport to key destinations
- Better waiting conditions along routes to schools, health services, shops, and community facilities

The six principles in this catalogue show that fair mobility depends on how planning processes are organised, beyond technical solutions. While infrastructure, services, and data matter, they become fairer when they are shaped by the everyday experiences of the people most affected by mobility barriers.

The pilot actions in Creil and Ebensee show that mobility injustice is often hidden in routine: routes avoided after dark, care-related trip chains, uncomfortable waiting spaces, unsafe school journeys, inaccessible pedestrian infrastructure, or participation processes that do not reach those most affected. These issues are not always visible through standard indicators such as ridership, travel time, traffic flow, or accident data. They require methods that build trust, listen to lived experience, and test alternatives in real conditions.

The principles therefore reinforce one another. Trusted intermediaries help reach underrepresented groups, while durable governance gives them a role beyond one-off consultation. Planning around care chains makes everyday routines visible. Treating lived experience as data broadens the evidence base.

CONCLUSION

Designing for perceived, social, and symbolic safety recognises fear and avoidance as real mobility barriers. Temporary experiments then allow administrations and associations to reveal suppressed demand and test fairer alternatives before making permanent changes.

For public administrations and associations, the key lesson is to make these approaches part of ordinary planning practice. This means resourcing community engagement, combining qualitative and technical data, assessing safety from the perspective of those who feel least safe, and ensuring that temporary actions lead to clear decisions about adaptation, repetition, scaling, or formalisation.

The specific solutions will differ between contexts such as Creil and Ebensee. What can be transferred is the planning approach: start from everyday barriers, involve those most affected, recognise forms of evidence that conventional data misses, and create institutional pathways through which these findings can shape decisions. As such, fair mobility is a continuous practice of making accessibility, safety, usability, and inclusion central measures of success.

FROM PRINCIPLES TO PRACTICE

A CONTINUOUS PROCESS FOR FAIR MOBILITY

