



GUIDELINES FOR INCLUSIVE PUBLIC TRANSPORT



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The close relationship between socio-economic dynamics, accessibility and the use of Public Transport (PT) remains poorly understood. To address this research gap, the European research Project CARIN-PT explored the relation between social inequalities and PT. The project was particularly invested in exploring the social justice dimensions related to the framing of PT policies and programmes, their delivery and the overall development of the topic. This included the understanding of who decides about PT development and **how (participation)**, **whose** needs are considered in this process (**recognition**), and **who** benefits from its outcome (**distribution**). The research examined social and spatial inequalities related to PT in terms of needs, capabilities, decision-making, accessibility and the built environment, both in a quantitative and a qualitative manner. It co-produced understandings on how urban and transport planning can be oriented towards a just framework on resilience and inclusion through studying the following four themes and their relevance for a nuanced discussion on PT: **micromobility, fare structures, flexible on-demand PT and transit-oriented development (TOD)** in the urban regions of Tallinn (Estonia), Flanders (Belgium), Stockholm (Sweden) and Oslo (Norway).

The project delved into these four themes to bring about a shift in how mobility policies and services can be developed to become more inclusive. To this end, the project developed **a set of ten guidelines and a subset of relevant strategies for each guideline**. These guidelines are a culmination of lessons learnt in the four case study regions. Still, they are universal in their appeal and importance for bringing about a shift in the overall framing of PT design and delivery from a justice perspective.

The initial set of guidelines and strategies were presented to relevant stakeholders, researchers and policymakers in a series of workshops, subjecting the initial version to a robust filtering process for quality assurance. This step also assured that the final version was relevant in a wide array of contexts.



TALLINN UNIVERSITY



Transportøkonomisk institutt
Stiftelsen Norsk senter for samferdselsforskning



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Guideline 1: Prioritize captive users: Design PT services with a primary focus on meeting the needs of users who rely on PT as their main mode of transport

Strategy 1.1	Understand the users: Begin by spatial and quantitative surveys to collect and maintain relevant data about (potential) PT users, including socio-demographic information. Data can be recursively supplemented with qualitative data to mitigate selection/omission biases skewness through targeted interventions throughout the ULL processes.
Strategy 1.2	Analyze user needs: Analyze data on travel purposes, contextual factors such as urban structure, user experiences and attitudes, and their level of dependence on PT services. Make Travel Behaviour Surveys easily available for research purposes.
Strategy 1.3	Gather stakeholder perspectives: gather and analyze planning authorities and transport providers perspectives on perceived weaknesses and improvement potentials identified by users.
Strategy 1.4	Identify and remove barriers: Evaluate and address potential obstacles such as the distance to bus stops, physical accessibility, availability of digital and physical information, ease of trip planning, digital platforms, ticketing processes, bus stop design, infrastructure provision etc.
Strategy 1.5	Focus on vulnerable groups: Prioritize the needs of the most dependent and vulnerable user groups when planning and designing services.

Guideline 2: Embrace diverse knowledge: Incorporate a variety of perspectives, including lived experiences of users, into public transport planning processes.

Strategy 2.1	Understand user experiences: Gather insights into users' lived experiences with public transport, through experimental approaches, ULL, and meetings to identify challenges and opportunities.
Strategy 2.2	Integrate behaviour and satisfaction data: Include data on travel behavior and user satisfaction to inform service design and improvements.
Strategy 2.3	Address safety concerns: Map and proactively resolve safety and security issues identified by users.

Guideline 3: Ensure seamless integration of the public transport system: Fully integrate different modes into the broader public transport system to create a cohesive and accessible mobility network.

Strategy 3.1	Incorporate options like micro-mobility and DRT in planning tools: Ensure different modes and services are included in the planning applications of public transport systems.
Strategy 3.2	Integrate fares and ticketing: Harmonize ticketing and fare systems across public transport, DRT, and micromobility services.
Strategy 3.3	Support vulnerable users: Provide tailored information and assistance to vulnerable groups to facilitate their use of public transport.

Guideline 4: Extend the approach of inclusivity to the mobility system: Develop a mobility system that offers inclusive alternatives to ensure equitable access for all user groups, through prioritizing accessibility analysis at macro-, meso- and micro- levels.

Strategy 4.1	Encourage active mobility: Facilitate active mobility by providing safe walking and biking conditions. Include safe bike parking and accessible public transport stops (Facilitated by Macro level accessibility analysis).
Strategy 4.2	Prioritize vulnerable users: Design safe walking and cycling infrastructure that meets the specific needs of the most vulnerable groups (Facilitated by Micro level accessibility analysis).
Strategy 4.3	Overcome barriers to micromobility: Address challenges preventing equitable access to shared micromobility options. Refer to findings on differentiated access created due to gender, age, disability, income, access to digital solutions etc.
Strategy 4.4	Standardize assessments: Develop and apply standard indicators to evaluate inclusivity and accessibility in transport systems. Provide requisite data to routinely update these indicators.

Guideline 5: Foster proximity: Enhance accessibility by supporting the proximity of essential services and public amenities within communities.

Strategy 5.1	Incorporate proximity in planning: Integrate the location of basic services and public amenities into the planning strategies of local and regional governments. Create Shared spaces and Shared Mobility opportunities.
Strategy 5.2	Bring services closer: Ensure public services are accessible, even in smaller communities, by minimizing travel distances. Finding alternative and creative meeting points for different services.
Strategy 5.3	Support local economies: Encourage the growth of local shops and service providers to enhance community accessibility.

Guideline 6: Improve mobility on a regional scale: Enhance coupling between regional and local scales.

Strategy 6.1	Provide multimodal transport possibilities: This is equally important for first and last mile journeys and complementing and increasing the service of public transport connectivity at the regional scale as well. E.g., Enable parking for bikes and cars in connection to public transit hubs that offer frequent and direct connections to key destinations.
Strategy 6.2	Facilitate door-to-door travel: This strategy needs to be approached by using more sustainable modes of transport across a city region through collaboration between different mobility providers and governmental levels. Promote co-creative processes.
Strategy 6.3	Create knowledge on travel patterns in suburban and rural municipalities: This will lead to a more robust analysis for implementing solutions like DRT, fare-free, and other kinds of demand-based solutions.

Guideline 7: Promote 'safe', 'secure' and 'connected' built-environment and mobility system: Plan for independent mobility of diverse (and particularly marginalized) groups.

Strategy 7.1	Understand, map and incorporate a needs-based approach in PT and built-environment planning: for example, through enabling children's independent mobility on a local level is also of crucial importance, which can not only be facilitated with better public transport connections but needs more collaborative approaches.
Strategy 7.2	Integrate gender and age perspectives in PT planning: Design PT and built-environment keeping age and gender in mind.
Strategy 7.3	Bring together research and practice: Universities can provide valuable support through targeted research projects, and through involving scholars and students to address capacity and resource gaps, assist in organizing meetings, and introduce innovative workshop formats. Such partnerships should be planned over an extended timeline to ensure comprehensive engagement, preparation, and evaluation.

Guideline 8: Experiment with soft measures: Promote a culture of creativity to check issues related to acceptance, affordability, availability, and acceptability (4As) of solutions targeting inclusive PT. Run pre- and post-pilot studies.

Strategy 8.1	Be innovative, Experiment with pilots and measures and launch experiments: These can of various forms, such as temporary ticketing solutions etc. Innovative approaches through experiments etc. present opportunities to include inhabitants in the policy-making process and raise awareness about more sustainable travel modes and existing possibilities. Experiments can also help to assess if and how travel behaviours can be altered.
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Guideline 9: Be proactive and adapt: The gig economy, shift work, co-working spaces etc. are on the rise, that need to be recognized and planned for **but with keeping active look on justice implications.**

Strategy 9.1	Create shared micromobility services as an integrated and vital part of PT design and delivery: To plan for accessible PT supported by micromobility, market-complementary solutions for commercially shared micromobility services need to be established. Otherwise, these services will be serving already highly public transport supported areas as they follow business logic and opt for economically sustainable business. Transport governance needs to be proactive in dealing with such developments, as these developments cannot be left exclusively to the market.
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Guideline 10: Plot interactions between built-environment, mobility behaviour, PT provision, and socio-economic ramifications: There are multiple ways in which these interactions take place. It is important to continuously monitor and plot these interactions to design suitable policies and programs.

Strategy 10.1	Collate data to study, plot and monitor the interactions between built-environment, mobility behaviour, PT provision, and socio-economic ramifications: Use research analysis to design policies and programmes to combat social exclusion and promote inclusive design.
Strategy 10.2	Create inter-sectoral workgroups: There are strong interactions between PT provision and different sectors like housing, education, social welfare etc. It is important to continuously map and monitor these interactions and work on them to provide enabling designs.

HOW TO MAKE PUBLIC TRANSPORT INCLUSIVE?

-  Guidelines
-  Strategies



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