

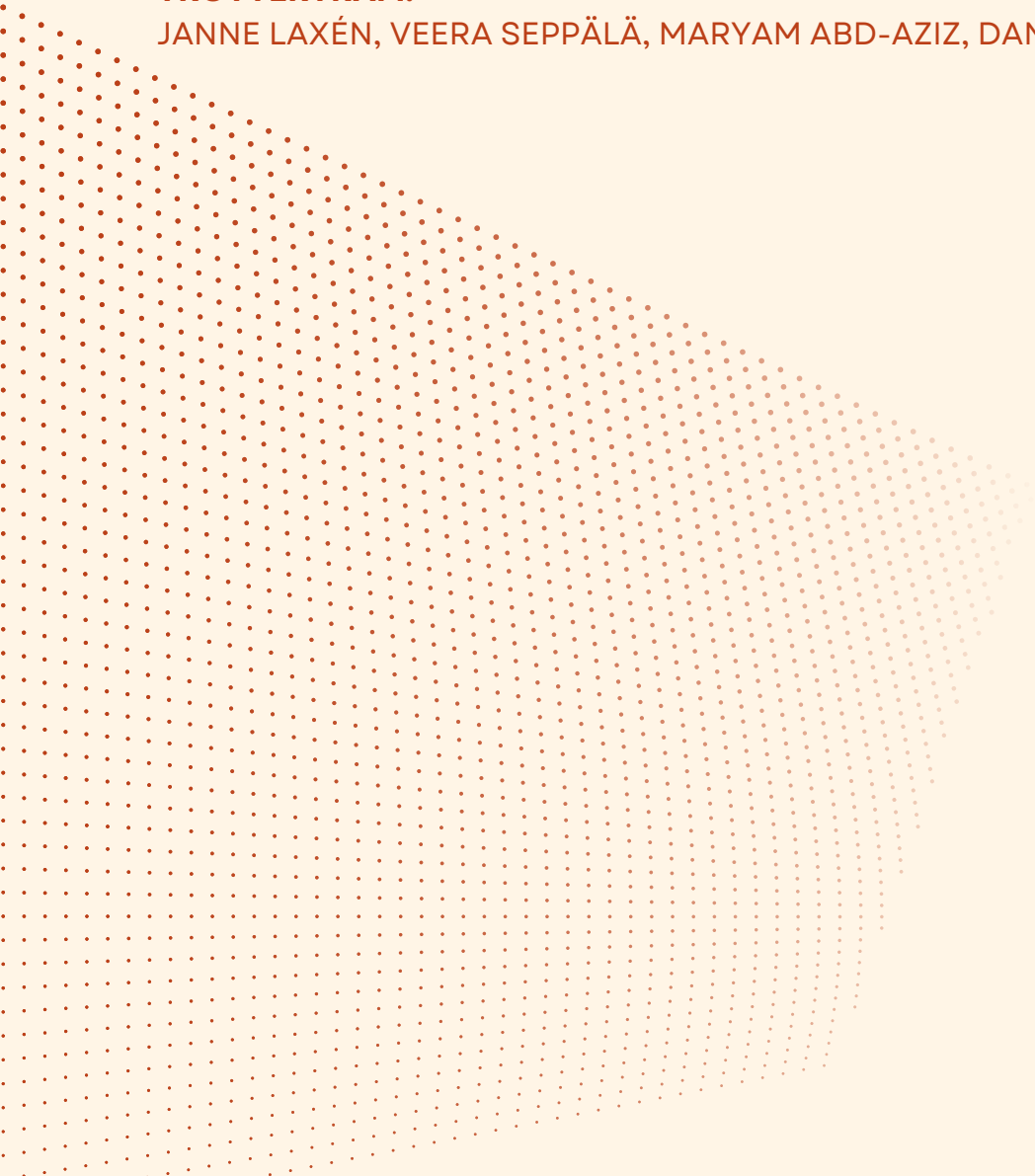


# POLICY BRIEF

## Addressing Diverse Mobility Needs in Teivo-Mäkkylä

### TROTTERTRAM:

JANNE LAXÉN, VEERA SEPPÄLÄ, MARYAM ABD-AZIZ, DAN VU, TRANG-ANH BUI



This policy brief is a student work related to course Urban Lab 2: Planning Policy and Infrastructure organized by Tampere University's Bachelor's degree program Sustainable Urban Development

TROTTER  
TRAM

 Tampere University



# OVERVIEW

“Teivo-Mäkkylä – a new residential area by the ridge and extensive public transport”

-City of Ylöjärvi-

## PROBLEM

Teivo-Mäkkylä is planned as a mixed-use district that integrates housing, services, nature, and mobility within a well-connected urban environment. Its location by the ridge and strong public transport network position places it as an accessible and attractive area for a wide range of users, including residents, commuters, and students. The area is expected to bring in 5000 new residents and 500 new jobs.

As activity in the area increases, so does the diversity of movement patterns and transport needs. This creates **diverse mobility demands** within the same space and challenges the ability of the current planning approaches to serve all the users effectively. Besides, the urban form of Teivo-Mäkkylä is highly arterial [1], with two main roads and a train line running parallel with each other, cutting the area and reducing the cross-movement between the east side and west side. We regard to this situation as an incohesive mobility.

If not addressed, this problem will lead to multiple negative consequences for both the transport system and the users.



## CONSEQUENCES

**The immediate effect** include conflict between transport modes when competing for the same space or interfering with one another (e.g. cyclists and pedestrians sharing narrow paths or heavy traffic delaying buses or trams). This may lead to congestion and delays, which decrease the ease and reliability of daily travel. Underuse or overuse of transport services may also occur, with routes or facilities on the main roads becoming overcrowded while other less connected routes remain inefficiently utilized.

**In the long term**, these issues may contribute to inequality, as some users benefit more from the transport system than others. Continued inefficiencies can produce an inefficient transport system that requires higher costs and delivers lower performance. Ultimately, poor mobility conditions may lead to a reduced attractiveness of the area, making Teivo-Mäkkylä less appealing for residents, businesses, and future investment.

**For users**, these system pressures cause the barrier effects (infrastructure or traffic levels are seen as barriers separating local communities physically or psychologically), e.g. difficulties in crossing and detours, which can alter travel frequency, destinations, and mode choice [2]. Safety concerns may rise in poorly designed or congested spaces, especially for vulnerable users like children, seniors, and people with disabilities. Repeated delays, inconvenience, and unclear travel conditions can also create frustration and dissatisfaction. These factors reduce social interaction, negatively affecting social cohesion, health, and well-being.

## METHODS OF ANALYSIS

First, the problem was preliminarily identified with the photovoice collected from the site, forming a challenge statement. The group members reviewed academic literature, policy documents, and city planning to surface different aspects relevant to the challenge. Benchmarking was used to get inspired by other similar global examples. For example, the case of Bergen in Norway was analysed, with their tram line extension project in a similar population density area; the Dutch concept of *woonerf* from Delft inspired to shift the ownership of roads and streets from cars to pedestrians. These benchmarks gave valuable insight to guide our group's solutions to improve the policy and planning process in Teivo-Mäkkylä.

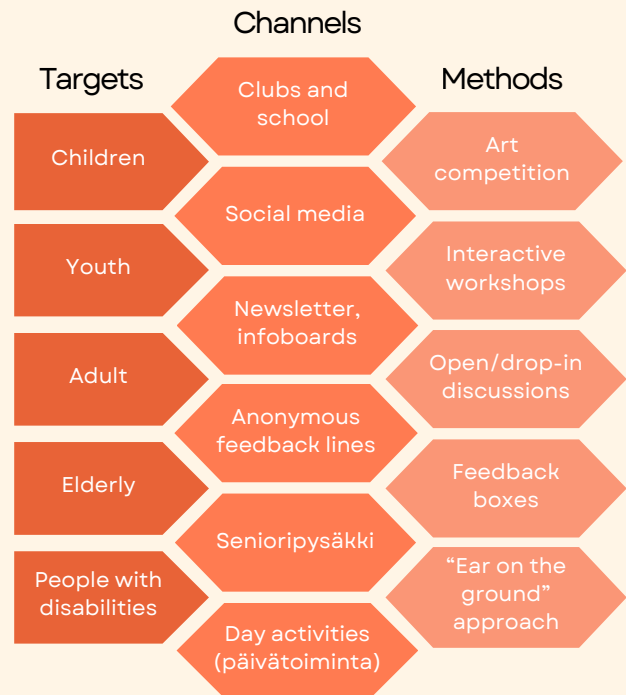
# SOLUTIONS

Co-creation and participative planning ensure that everyone's voice is heard, and their needs are taken into account. This approach enables an inclusive framework that addresses the viewpoints of those who are often sidelined from the planning processes, such as children, people with disabilities, elderly people, and individuals with lower incomes.

Partaking all target groups in the planning is indeed not an easy task, because informing people requires intensive efforts and **multiple channels** to communicate with a diverse demographic. We suggest that compared to formal methods, such as letters, press releases, and meetings, **informal methods**, such as drop-in info sessions and social media posts are more encouraging and flexible, and that they should be promoted alongside formal methods.

**Co-planning** is another factor in this solution. It is an iterative planning cycle, continuously self-correcting in response to changing circumstances. First, it is important to identify and prioritise the needs of user groups, then narrow down the discussion to a manageable level. Next, the chosen topics are explored collaboratively by the participants and planners using diverse methods, such as storytelling or map-based approaches, with a specific agenda and steps for proceeding [3].

## Improve Communication with Participatory Methods



## Inclusive and Accessible Mobility Design

The challenge of incohesive mobility is exacerbated for vulnerable groups such as people with disabilities, children, and elderly people. Teivo-Mäkkylä needs a mobility system that is both inclusive and accessible for all the different user groups. Our next solution is inspired by the practices of creating inclusively designed cities [4] to make an **inclusive and accessible mobility design** for Teivo-Mäkkylä.

This solution aims at implementing **inclusive and accessible design** in the mobility plan to promote continuous accessibility. Inclusive design is a tool that helps to create safe and accessible environments for everyone in a fair and equal way. This can be achieved by ensuring the mobility plan is user-centric with continuous accessibility. For the target group, this means trips are accessible throughout the journey from the origin to the destination and back, regardless of the mode of transport. Besides, the impact of big events like Kuninkuusravit or festivals on traffic flow must also be considered in the mobility plan. ICTs integrated in services ensure that residents can access real-time information in a format accessible to all, for example, information on changes in bus schedules or maintenance works.

In addition, the major roads, i.e. Vaasantie and Mikkolantie, should have landscaped buffers and other forms of physical separation between vehicular traffic and pedestrian areas to improve the perceived safety of the roads. It is, however, important to consider the visibility of drivers in the choice of the buffers. The plan also needs safer, conflict-free crossings for different modes to connect transport corridors in the area. This not only improves the accessibility and the East-West connectivity, but also improves the safety of the area, especially for vulnerable groups such as children and people with disabilities.



# RECOMMENDATION

## PACKAGE

## MEASURE

## IMPACT

**Improve communication with Participatory methods**

### **Engage with target groups in the planning process**

Gathering perspectives of target groups on mobility infrastructure and design, with a particular attention to people with specific needs in Teivalanharju environment (e.g. increased risks of slipping in winter conditions). Early connecting in the planning process ensures these opinions are included into the development of the area.

**Timeline: 2026-2028**

Keeps Teivaalanharju accessible and inclusive for all residents, boosting social sustainability and fostering independent mobility.

### **Place feedback/idea boxes physically or digitally (QR-codes) in public areas or marketplaces in Ylöjärvi**

This measure is very easy to implement. Although gathering data and adapting policy are work-intensive, the results will be cumulative and more concrete long term.

**Timeline: 2026-**

Identify opportunities to bridge the potential gap between planners and end users in the municipal planning processes. While the a divide between creators and users may persist, it aims to establish an ongoing, trust-based relationships.

### **Interactive co-creation workshops**

It is important to ensure the power balance, e.g. expert ideas are suggesting, not dictating. Moreover, this measure should extend beyond the planning phase and act as a constant engagement between stakeholders, integrating into the culture of governance.

**Timeline: 2027-**

End users being able to create a transport system that reflects their lives with the help of planners. The goal is to create agency and sense of belonging for the residents in their direct environment.

**Inclusive and accessible mobility design**

### **User-centric design with continuous accessibility**

There are often gaps between accessibility on paper and in practice, which can be narrowed with user-centric design. Reviewing the plan with target groups ensures continuous accessibility, and their needs are taken into account.

**Timeline: 2026 - 2035**

Residents' engagement reveals daily travel experiences that planners might overlook. This brings the ease in travelling and greater attractiveness of Teivo-Mäkkylä as a residential area.

### **Safe, conflict-free pedestrian (and other modes) crossings and underpasses**

As Teivo-Mäkkylä is a highly arterial area with transport corridors, it is necessary to have more safe crossings, underpasses, and conjunctions for east-west connection of the area.

**Timeline: 2026-2035**

Improving crossing safety reduces exposure to fast-moving traffic and mitigates conflicts between non- and motorized users, supporting daily active mobility and feeling of safety [6].

### **Landscaped buffers / physical separation**

High speed on roadways can increase feelings of unsafety for pedestrian and cycling lanes. [5][6]

**Timeline: June 2026**

Having physical barriers can increase feelings of safety among all mobility users. [6] Planting trees with residents increases community engagement which results in greater sense of belonging and ownership.

# CONCLUSION



Instead of relying on large-scale infrastructure investments, these solutions emphasise process-oriented and governance-based interventions that are financially efficient. By strengthening communication among all user groups and implementing inclusive & accessible mobility frameworks, the recommendations directly address potential consequences of incohesive mobility while fostering new shared values. This approach effectively supports improvements in overall safety, accessibility, and user experience through co-creation and shared understanding, especially for

vulnerable groups such as children, the elderly, and people with disabilities.

This collaborative mobility approach aligns with Teivo-Mäkylä's core vision strategy 2026-2036, which is to magnificently smooth everyday movements [7]. Co-creation planning through effective communication fosters a sense of belonging and a pleasant environment for future residents, while inclusive & accessible mobility design ensures overall safety, inclusivity, and sustainability for the residents and the area.

## References

- [1] Marshall, S. (Ed.). (2005). *Streets & Patterns: The structure of urban geometry* (1st ed.). Spon.
- [2] van Eldijk, J., Gil, J., & Marcus, L. (2022). Disentangling barrier effects of transport infrastructure: Synthesising research for the practice of impact assessment. *European Transport Research Review*, 14(1), 1. <https://doi.org/10.1186/s12544-021-00517-y>
- [3] Galappaththi, E. K., Ilangarathna, G. A., & Jayasekara, S. M. (2026). Co-planning community-based research: Evidence, steps, and strategies. *Current Opinion in Environmental Sustainability*, 80, 101624. <https://doi.org/10.1016/j.cosust.2026.101624>
- [4] Patrick, M., Muldowney, A., Gupta, S. and McKinnon, I. (2024). *Delivering Inclusive Design in Cities: A Global Action Report*. Prepared by the Global Disability Innovation Hub and partners for the UK Foreign, Commonwealth and Development Office. Available at [www.at2030.org/inclusive-cities](http://www.at2030.org/inclusive-cities)
- [5] Chou, K.-Y., Paulsen, M., Møller, M., & Fjendbo Jensen, A. (2025). Cyclists' mobility and subjective safety in shared urban spaces—A simulator study. *Transportation Research Part F: Traffic Psychology and Behaviour*, 115, 103321. <https://doi.org/10.1016/j.trf.2025.07.031>
- [6] Wangzom, D., White, M., & Paay, J. (2023). Perceived Safety Influencing Active Travel to School—A Built Environment Perspective. *International Journal of Environmental Research and Public Health*, 20(2), 1026. <https://doi.org/10.3390/ijerph20021026>
- [7] Aro, T. (2026). Ylöjärvi & Urban Lab kick off [Lecture slides]. SUD.210 Urban Lab 2: Planning Policy and Infrastructure, Tampere University.