

Model for experimenting with active mobility measures

Version 1.0

SUMPs for BSR - Enhancing Effective Sustainable Urban Mobility Planning for Supporting Active Mobility in BSR Cities



Imprint

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Project note

SUMPs for BSR project supports cities shifting their planning practices towards people-centered sustainable urban mobility planning focusing on active mobility modes to fight the climate crisis. The project aims to increase the uptake of Sustainable Urban Mobility Plans (SUMP) as a strategic tool for sustainable mobility planning by developing tools and offering extensive capacity building for local authorities, especially in small and mid-sized BSR cities. A common framework on monitoring and evaluation for sustainable urban mobility planning will be developed to set up sound local processes suitable to smaller cities. Together with a unified model for testing and experimenting with innovative mobility solutions, it will help to evaluate the performance of the local mobility system and to provide crucial information for planning and decision making.

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1. Introduction

1.1. Small-scale measures for big benefits

Implementing large-scale infrastructure measures is slow and very costly. However, improving the quality of public spaces, and conditions for cycling and walking, can be done locally and relatively quickly with small investments (Helsinki Region Transport 2020). Small-scale measures can also be used to test the viability of permanent solutions before expensive and extensive infrastructure changes are made. These small-scale measures or pilots can result in unexpected solutions that can be scaled up and replicated in different areas in the city. Low-cost measures can be especially important and effective for small and medium-sized cities with limited resources.

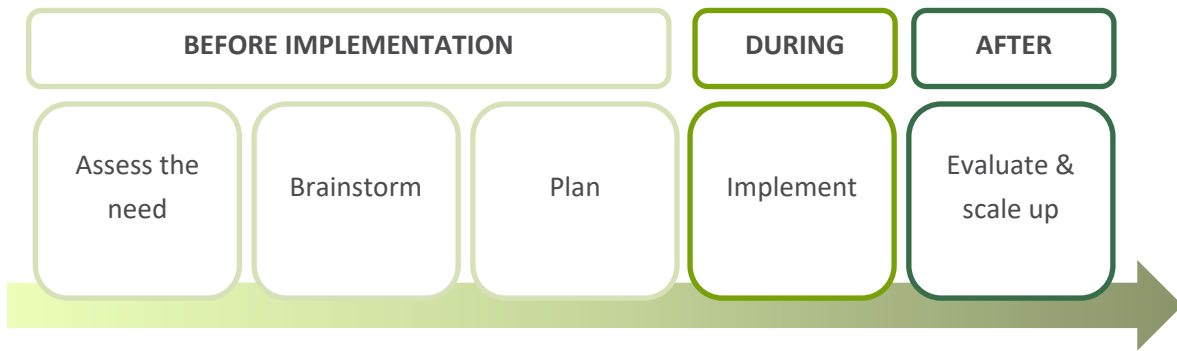
It is often difficult to introduce measures targeting to improve public space as there might be opposition to measures that restrict access for cars. Pilots can help to find new ways to support the use of sustainable modes, such as walking and cycling, and fight against car dominance. Examples of small-scale measures improving public spaces and thus, the conditions for walking and cycling, are calming traffic with speed bumps, narrowing the street, making the street space more attractive or increasing the quality of urban space for different activities, introducing summer streets with bans for driving through or temporary cycling lanes.

The promotion of active modes has positive impacts on citizen's health, and it supports the development of a more inclusive mobility system. Even small improvements in the walkability of public spaces increase people's activity and walking increases health benefits and decreases death rates (Helsinki Region Transport 2017).

Small-scale measures can also bring visibility to the sustainable urban mobility planning (SUMP) process, by testing measures that might raise public opposition and highlighting the positive results in the environment to gain public and political support. Piloting helps to bring agility to the public sector and to respond better and faster to emerging challenges in the transport environment. They are also a great way to involve the public and local stakeholders in the planning of bigger investments.

1.2. Planning for successful experiments with active mobility measures

There is an unused potential to integrate piloting and temporary experiments as part of cities' planning practices. **The model for experimenting with active mobility measures** is targeted at local public authorities and cities willing to promote active mobility and test their ideas on a small scale. The model will guide through the different stages of a pilot planning process with key questions to reflect upon, focusing on the characteristics of active mobility measures. The model, describe in picture 1, is divided into three stages: before, during and after implementation. It has got inspiration from existing materials and guides for small-scale piloting or experimenting with active mobility measures from Forum Virium (2020), Helsinki Region Transport (2020), Motiva (2020), and the City of Turku (2020).



Picture 1. Modified based on the process steps from experiments to scaling up model (presented in Kokeilusta skaalaan - pelikirja) developed by Motiva (2020).

The model for experimenting with active mobility measures has been developed within the SUMP for BSR project, co-funded by the Interreg BSR programme. The project aims to increase the uptake of Sustainable Urban Mobility Plans (SUMP) as a strategic tool for sustainable mobility planning by developing tools and offering extensive capacity building for local authorities, especially in small and mid-sized BSR cities. This first version of the model will be tested by the project partner cities in their pilot planning processes and by other BSR cities through co-creation activities. Based on the feedback, it will be further developed and validated to help Baltic Sea Region cities plan for successful experiments with active mobility measures.

2. Planning phase (before implementation)

Thorough planning is crucial for successful piloting. These key questions will help planners to navigate through the piloting and prepare in advance for the commonly known pitfalls.

2.1. Need assessment & strategic relevance

This is the first step to address when beginning the pilot planning. Describe the challenge, and how is the pilot linked to the city's strategies, existing sustainable urban mobility plan, transport plan or similar, and planning of wider measures.

- What is the challenge you plan to address?
- Is the pilot connected to the city's strategic objectives?
- Is it in line with the planned activities in the city's SUMP or mobility plan?
- Is it connected to the planning of wider measures?
- Who can benefit from the pilot?

2.2. Brainstorm & description of the pilot

Answering the challenge, describe your solution, aims and actions. In the planning phase, expected results are listed but note that something unexpected might arise in implementation that might change the perception.

- What is the solution to your challenge?
- What will be done?
- What is the key aim of the pilot?
- What kind of results are expected and what are the benefits for the key target groups?

2.3. Plan

Once the solution, aims and actions are clear, the plan needs more concreteness. An action plan with a realistic timetable, and financial and human resourcing needs to be made. Depending on the location, pilot planning might be closely linked to risk analyses and permissions needed. Description of the pilot location will help both in the planning phase but also when deciding on the future actions and possibilities to replicate the pilot elsewhere.

At this stage, it is important to understand what kind of data can be collected during the pilot and how. Decisions about data collection and the selection of indicators go hand in hand. It is wise to plan the monitoring and evaluation of the pilot well, as that is needed when concluding the results and findings from the pilot before a decision on the continuation is made.

The involvement of stakeholders and key target groups in the planning stage can have a prominent impact on the success of the pilot. It would not only gain the support and the commitment from decision-makers, but also help to minimise opposition. The involvement of stakeholders is closely linked to planning for communication strategy for the pilot, as both require identification of the key target groups and the methods of reaching them. In addition, it is crucial to plan how and who will address the feedback and inquiries from the media if necessary.

It is recommended to conduct a risk analysis and identify various types of potential risks related to the implementation of the pilot. Comprehensive planning and risk analysis enables the development of mitigation measures and fast reaction to changes, paving the way to successful piloting and the decision to continue after the piloting phase.

Resourcing

- Prepare a resourcing plan for your pilot both in terms of financial and human resources.
- Who is responsible for the implementation?
- What kind of budget do you have?

Timeline

- What is the timeline of the pilot? How long the pilot will continue?
- Will there be sufficient time to be able to evaluate the impacts?

- In which season do you plan to implement it? Winter, summer? Will holidays impact the results?

Location

- What is the location of the pilot?
- Are there some risks related to this specific location?
- How does the pilot impact the traffic arrangements?
- Are there similar spots in the city where the pilot could be replicated if it proves to be successful?

Permissions

- Will you need any permissions for the pilot implementation?
- Whom would you need to discuss this with? Could they be involved in planning from the beginning?

Involvement of stakeholders in planning and evaluation

- Which target groups are relevant and should be involved in planning?
- How do you plan to involve stakeholders in planning the pilot?
- How do you plan to interact with them? (Surveys, workshops, info events)

Planning monitoring and evaluation

- How will you monitor the implementation?
- What kind of data will be collected?
- What kind of indicators are selected for monitoring?
- Who is responsible for collecting and analysing the data?

Planning communication

- What are your target groups and who is impacted by the pilot?
- How do you plan to communicate about the pilot?
- What kind of communication channels could be used? (e.g., press releases, info signs on the spot, information on the website)
- How are you going to collect feedback during the implementation?

Risk analysis

- What could be the potential risks related to the implementation?
- What types of risks can be recognised? Are they related to technical issues? Are they related to public feedback and thus lack of political support? Are they related to the flow of traffic?
- How could you mitigate the risks: communication, preparing FAQ, comprehensive communication about the pilot in the early stages?

3. During Implementation

3.1. The division of responsibilities

During the implementation phase, the key is to follow the plan and have a clear division of responsibilities:

- Who is responsible for the technical implementation?
- Who is responsible for the communication and responding to feedback?
- Who is monitoring the implementation and how?

4. After implementation

4.1. Evaluation

Evaluation of small-scale pilots is crucial for understanding their impacts and analysing their potential replication elsewhere and is based on the analysis of selected indicators and feedback. The evaluation of impacts should be as comprehensive as possible but, at the same time, easy to implement.

Helsinki Region Transport has prepared a table for evaluating the impacts of pilot activities that focus especially on the promotion of active mobility (table 1). The evaluation of impacts is divided into three parts:

1. Mobility & behaviour
2. User satisfaction and experiences
3. Success of the implementation process, interaction, and communication

While conducting traffic counting, it is important to consider that other factors such as weather, events and holiday seasons may impact the amount of traffic besides the implemented pilot measures. When evaluating the impacts, it is also worth noticing that the satisfaction of people can be a low-hanging fruit but changing people's mobility behaviour and encouraging them to use sustainable modes more may require more substantial effort than a small-scale pilot. Table 2 suggests additional impacts to be analysed if resources allow it.

The SUMP for BSR project partners will use table 1, based on the Helsinki Region Transport table, as a base for the evaluation of their local pilot activities and it will be updated based on testing and feedback from project partners.

Table 1. Summary on the most important impacts and recommended methods how to evaluate them. The meaning of numbers in the applicability column: 1. improved safety of pedestrian crossings, 2. traffic calming, 3. improved conditions for walking, 4. improvement of underpasses & underground tunnels, 5. improvement of stops (busses, trams etc.), 6. cycling paths, 7. park-and-ride facilities (based on a table developed by Helsinki Region Transport 2020).

RESEARCHED TOPIC		SPECIFICATION	METHOD	APPLICABILITY
Impacts on mobility	1. Traffic volume before and after the pilot	Walkers	Manual/ automated counting	1, 2, 3, 4, 5
		Dwellers	Observation	(2,) 3
		Cyclists	Manual /automated counting	1,2, (3), 4,6,7
		Car transport	Manual/ automated counting	2, (3), (6)
2. Speed before and after the pilot	Car transport	Speed detecting radar	1, 2, (3), (6)	
Impacts on user experiences	3. User experiences before and after the pilot	Satisfaction from change	Survey/ interview on-site, online survey, postal household survey	all
		Changes to sense of safety	Survey/ interview on-site, online survey, postal household survey	
	4. Changes in mobility behaviour, users' own view	Frequency of mobility	Onsite/ online survey	all
		Choice of routes	Map survey (e.g., Maptionnaire)	
Process	5. Costs	Planning	Online survey sent to the person responsible for implementing (works also as a check list). Monthly follow-ups and final reporting.	all
		Investment		
		Maintenance (estimation)		
	6. Interaction	Collaboration with different stakeholders		Mapping of stakeholder network (as picture)
		Citizen engagement		Who participates, how did it go?
		Communication		Who, where, when, received feedback
	7. Timetable & Resources	Estimated and realised time resources		What was left out and why?
		Human resources		Unexpected factors
	8. Permissions	Required permissions		Check list for permissions
9. How did it go?	Implementors satisfaction	Own evaluation of successes and failures		

Table 2. Suggestion for additional impacts to be included in the evaluation, if resources allow, and recommended methods how to evaluate them. The meaning of numbers in the applicability column: 1. improved safety of pedestrian crossings, 2. traffic calming, 3. improved conditions for walking, 4. improvement of underpasses & underground tunnels, 5. improvement of stops (busses, trams etc.), 6. cycling paths, 7. park-and-ride facilities (based on a table developed by Helsinki Region Transport 2020).

RESEARCHED TOPIC		SPECIFICATION	METHOD	APPLICABILITY
Impacts on mobility	1. Traffic volume before and after the pilot	Changes in groups of people	Observation/ Machine vision counting	3, 4, 6
		Changes in time distribution	Automated counting	3, 4
		Comparison	Manual/ automated counting	3, 4, 6
	2. Speed before and after the pilot	Car transport	Speed detecting radar	2, (6)
		Cyclists, pedestrians	App for tracking speed along the whole route	2, 6
	3. Safety	Close call situations	Observing the use of space	1, 2, (6)
	4. Use of space	Observing the use of space	Observation/ video shooting (drone)	3
5. Functionality in winter conditions	Observing the use of space	Observation/ video shooting	1, 2, 3, 6, 7	
6. Choice of route	Cyclists, pedestrians	App for tracking the routes	2, 3, 4, 5, 6, 7	
7. Changes in vandalism		Observation, maintenance statistics	3, 4, 6	
Impacts on user experiences	8. User experiences	Same as in the priority 1.	Smaller sampling, but representation of all user groups and random sampling → more representative result	all
		Empirical/ experimental knowledge	Interviews via residents' association, schools, etc.	all
		Change in willingness to participate in development of the neighborhood.	Survey	2, 3, 4, 5
		Functionality in winter conditions	Survey	2, 3, 6, 7

4.2. Decision about the continuation – scaling up

The future actions are decided based on the evaluation of impacts. It may lead to the planning of a more permanent solution, replicating the pilot in another season or a different place, continuing piloting in a different direction or simply quitting the pilot. Even if the evaluation shows a limited impact or leads to quitting, the learnings from the pilot offer valuable insights that could have a significant influence in determining the direction of future actions.

It is worth noticing that the replication of pilot actions causes costs. To support the efficient use of resources and to acknowledge that change in mobility behaviour requires time, the continuation plan should be linked to long-term goals. The learnings from the pilot should be tailored to suit permanent solutions. This means considering the durability of street furniture and structures, suitability to the cityscape and if applicable, the operational suitability (e.g., seasonal maintenance).

Key questions to consider when scaling up:

- How can you evaluate the final impacts?
- Were the targets reached?
- What will happen with the experiment?
- Will it be replicated elsewhere/made permanent?
- What can be learned from the pilot?

4.3. Communication about the results

It is as important to evaluate the impacts of the pilot, as it is to communicate about the lessons learned and results of the pilot. The communication of the real impacts of implemented measures is key in ensuring public and political support for their continuation, especially, for measures that raised concerns about negative impacts prior to their implementation. It is also good to highlight the reasons why certain measures have not reached the desired goals. There should be clear communication about why the pilot is being continued or discontinued to increase transparency and openness about the planning processes.

Key target groups to reach out to are:

- planners and other experts who may benefit from the results and use the knowledge in planning similar measures
- decision-makers and municipal leadership who can influence advancement of the replication of the measure or making it permanent securing resources and political support
- citizens and stakeholders who were influenced by the measure or had concerns prior to the implementation.

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