Bachelor's thesis

Energy and environmental engineering

2024

Meri Hoffren

Participation in the sustainable urban mobility plan of the city of Turku

Lessons learned from Tampere and Hamburg

TURKU AMK
TURKU UNIVERSITY OF APPLIED SCIENCES

Bachelor's Thesis | Abstract

Turku University of Applied Sciences

Energy and environmental engineering

2024| 28

Meri Hoffren

Participation in the sustainable urban mobility plan of the city of Turku

Lessons learned from Tampere and Hamburg

This thesis studies participation methods in sustainable urban mobility plans (SUMPs) by comparing Tampere and Hamburg. The goal was to determine the ideal amount of participation and the most cost-effective ways to increase participation in sustainable mobility planning.

The research was made by using a semi-structured interview method with SUMP experts from Tampere and Hamburg. This approach gave a view of each city's participation methods and how resources were used. The interviews highlighted each city's strengths, challenges and cost-related aspects of participation, which gave a clear picture of their participation practices.

Analysis of the interviews and literature indicates that both cities' participation strategies are designed to target their own goals and resources. The results highlight that the level of participation is important for understanding target groups and the quality of participation is essential for successful participation.

For future SUMP updates in Turku, it is recommended that participation methods are targeted to various groups and stages of the planning process. Future studies could explore how digital tools and new methods can address challenges.

Keywords:

Sustainable urban mobility plan, participation, emission goals

Opinnäytetyö (AMK) | tiivistelmä

Turun ammattikorkeakoulu

Enegia- ja ympäristötekniikka

2024| 28 sivua

Meri Hoffren

Osallistaminen Turun kestävän kaupunkiliikkumisen suunnitelmassa

Oppeja Tampereelta ja Hampurista

Tässä opinnäytetyössä tarkastellaan kestävän kaupunkiliikkumisen suunnitelmiin (SUMP) liittyviä osallistamismenetelmiä vertailemalla Tampereen ja Hampurin kaupunkeja. Tavoitteena oli selvittää, mikä on ihanteellinen osallistamisen määrä ja mitkä ovat kustannustehokkaimmat tavat lisätä osallistamista kestävän liikkumisen suunnitteluun.

Tutkimuksessa käytettiin tutkimusmenetelmää, jossa aineisto kerättiin puolistrukturoiduilla haastatteluilla Tampereen ja Hampurin SUMP-asiantuntijoilta. Tämä näytti, millaiset osallistamismenetelmät ja resurssit molemmissa kaupungeissa oli. Haastattelut toivat esiin kummankin kaupungin vahvuuksia, haasteita ja kustannuksiin liittyviä tekijöitä osallistamisessa.

Analyysi haastatteluista ja kirjallisuudesta osoitti, että kummankin kaupungin osallistamisstrategiat on tehty niiden omien tavoitteiden mukaisesti. Tulokset korostivat, että osallistamisen määrä ei ole ainoa tärkeä tekijä, vaan kohderyhmän huomiointi ja osallistamisen laatu ovat olennaisia. Tulevia SUMP-päivityksiä varten Turussa suositellaan, että osallistamismenetelmiä kohdistettaisiin eri kohderyhmille ja suunnittelun vaiheille.

Asiasanat:

Kestävän kaupunkiliikkumisen suunnitelma, osallistaminen, päästötavoitteet

Content

1 Introduction **6**

2 SUMPs in the European context **7**

2.1 What is a sustainable urban mobility plan 7

2.2 SUMP in Turku 8

2.3 Why participation is important 8

2.4 European Union emission goals 9

3 Methology **10**

3.1 Semi-structured interviews 10

3.2 Data collection 11

4 Participatory processes in Turku **12**

4.1 Previous participation 12

4.1.1 Surveys and survey-type participation methods 12

4.1.2 Public events and workshops 14

4.1.3 Interactive map services and digital tools 15

4.1.4 Resident meetings and community spaces 15

4.2 Participation in Turku's SUMP 16

4.2.1 The SUMP survey 16

4.2.2 Business workshop 17

4.2.3 Internal workshop 18

5 Results **19**

5.1 SUMP experiences from Tampere & Hamburg 19

5.1.1 Engagement methods 19

5.1.2 Costs and resources 20

5.1.3 Challenges and development suggestions 21

5.2 Key findings 22

6 Conclusions and discussion **24**

6.1 Ideal amount of participation 24

6.2 Most cost-effective engagement methods 26

References **28**

1 Introduction

This thesis explores the methods and effectiveness of participation in the sustainable urban mobility plan, SUMP, comparing the cases of Tampere and Hamburg. Both cities have made their sustainable urban mobility plan but their approaches to participation, stakeholder engagement and resource allocation are different. The goal of this thesis is to analyze how these cities have approached participation, what challenges they faced and what lessons can be learned for the future sustainable urban mobility plan update in the city of Turku. This study has been done in collaboration with the city of Turku in connection with the development of the city's first sustainable urban mobility plan.

Urban mobility is an important part of sustainable urban development as cities face increasing challenges with traffic congestion, climate change and pollution. The sustainable urban mobility plan is a key tool for European cities to create more efficient and environmentally friendly transportation systems. The SUMP's aim is to reduce private car use, promote public transportation, cycling and walking, in other words supporting greener modes of travel. (European Commission 2023.)

The European Union encourages cities to make sustainable urban mobility plans and provides guidelines that encourage stakeholder engagement and public participation as essential parts of the planning process. Participation gives citizens and stakeholders the opportunity to express their views, which helps to ensure that mobility plans meet the needs of the citizens. (Rupprecht Consult 2019.)

This research is guided by two key questions:

What is the ideal amount of participation in a sustainable urban mobility plan?

What are the most cost-effective participation methods?

By answering these questions, this thesis aims to provide recommendations for improving participation in Turku's future SUMP update.

2 SUMPs in the European context

2.1 What is a sustainable urban mobility plan

A sustainable urban mobility plan (SUMP) is a strategy aimed to address the transportation needs of people and businesses within cities and their surrounding areas. The focus of the plan is to improve quality of life of the people by offering more sustainable and accessible options for transport. SUMPs build on existing planning frameworks while integrating different modes of transportation, involving community participation and monitoring the process. (European Commission 2023.)

The sustainable urban mobility plan is based on a vision for developing transport and mobility on the whole functional urban area. It includes all modes of transport and different types of movement: private and public transport, passenger and freight traffic, motorized and non-motorized transport and parking. It also includes an implementation schedule and budget, as well as a clear division of responsibilities and an assessment of required resources. (European Commission 2023.)

The SUMP helps develop all modes of transport in a balanced way but focuses more on sustainable options. A comprehensive and long-term SUMP is the most effective for achieving potential benefits. It needs a long-term commitment and helps to avoid uncertainty and it provides indicators for progress towards the goal. The SUMP requires cooperation between different government units and levels. This teamwork brings together organizations that might not have worked together before and this makes political decision making more efficient. (Rupprecht Consult 2019.)

The sustainable urban mobility plan shows how transport connects to important political goals like employment. This ensures that the role of transport is understood more broadly. Involving different stakeholders, both inside and outside the government, strengthens support for mobility actions, increasing the

chances of success and political approval. The SUMP is a tool to guide change effectively and encourage new ways of thinking. (Rupprecht Consult 2019.)

2.2 SUMP in Turku

The city of Turku is developing a sustainable urban mobility plan for the years 2025-2029. This plan combines the measures decided in the city's transport-related programs and documents. The plan's activities focus on four key topics: carbon neutrality, health, safety and equality in Turku. It also provides new measures to help Turku achieve the goals of the Turku Climate Plan 2029. These new actions are developed by evaluating changes in the measures and the city's transport and mobility patterns.

The city's goal is to increase the share of walking, cycling and public transport to 66% of all internal trips in Turku by 2030. Another aim is to reduce greenhouse gas emissions from road traffic in Turku 50% from 2015 levels by 2029.

The sustainable urban mobility plan reduces environmental impacts, supports residents' well-being and improves the vitality of the city as a residential and tourist destination. In line with the EU's TEN-T regulation, the sustainable urban mobility plan also supports the transport system plan of the Turku region and promotes its implementation in the city of Turku.

2.3 Why participation is important

Participation is an important part of successful urban planning as it ensures that multiple perspectives are taken into account in decision-making. Engaging different stakeholders, such as local residents, businesses and organizations helps planners to understand the needs and challenges that different groups face in their everyday lives. Through inclusive participation, planners can gather feedback that leads to more sustainable solutions for urban planning. (Sampo 2020.)

Participation promotes a sense of ownership and trust among community members. When people are involved early in the planning process, they are more likely to support the final results, as they feel like their voices have been heard and their concerns have been taken into account. This can lead to increased approval for projects and smoother implementation processes. Early stakeholder involvement also allows planners to anticipate and address possible conflicts between different groups. (Sampo 2020.)

A key factor in good participation is communication. Stakeholders are more likely to contribute meaningfully when the communication methods used are accessible and tailored to their need, whether through workshops, surveys or digital tools. This helps to build trust and ensure that the results are practical and widely accepted. Planners are supposed to create a welcoming environment that encourages dialogue and supports the collection of feedback. For example, the use of visual aids can help participants understand complex data and scenarios and this makes the process more efficient. (Sampo 2020.)

2.4 European Union emission goals

The European Union's climate policy sets measures aimed at reducing greenhouse gas emissions and adapting to climate change both at the level and within individual Member States. This policy is takes shape through international agreements such as the United Nations Framework Convention on Climate Change, the Kyoto Protocol and the Paris Agreement (EU Climate Policy, n.d)

The EU is committed to reducing its net greenhouse gas emissions by at least 55% by 2030 compared to 1990 levels. This goal has been delivered to the UN under the Paris Agreement. The European Union's goal is to achieve climate neutrality by 2050. Climate neutrality means a balance between emissions and removals. These long-term climate goals are in the European Climate Law, which also anticipates setting an additional goal for 2040. (EU Climate Policy, n.d.)

3 Methology

This thesis uses a qualitative research approach. It explores the experiences, views and insights of professionals involved in sustainable urban mobility planning. A qualitative method is well-suited for understanding topics such as public participation and the resources needed for sustainable urban mobility plans.

3.1 Semi-structured interviews

I selected semi-structured interviews as the data collection method as they allow flexibility in responses while still covering themes that are relevant to the research questions. This interview format gave structure and allowed interviewees to express their thoughts openly. I conducted individual interviews with two experts, an expert from Hamburg, Germany, and an expert from Tampere, Finland. Both interviewees work in urban mobility planning.

As part of the preparation for the interviews I reviewed Turku's internal documents from the urban mobility solutions unit's Microsoft Teams platform. These documents included previous participation methods that Turku has used in its SUMP process and in other projects. This showed what has worked and challenges have come up in Turku's mobility planning. The background work helped to plan the interviews for this research and gave me clearer idea of Turku's current participation methods, resources and the possible areas for improvement.

These interviews took place in September 2024 and each of them lasted around an hour. The interviewees were chosen because Tampere and Hamburg each have SUMPs and they both provide examples of engagement in different urban settings. Tampere represents a Finnish city with experience of SUMP planning. Tampere is a relevant national example. Hamburg, which is a larger European city, gave insights from a more resource-rich context. Comparing these cities

helped to understand how resources, engagement methods and stakeholder inclusion vary in different environments.

3.2 Data collection

The interviews were recorded with permission of the interviewees and then transcribed for analysis. Participants were informed about the purpose of the research. During these interviews, I focused on letting the participants share their insights without directing their responses. The questions were:

1. How has participation been implemented in your city's SUMP?

2. What have been the costs of the participation methods, and can they be estimated if they haven't been calculated?

3. What do you think is the ideal amount of participation?

4. On what basis should the participation methods be selected?

5. How would you approach participation differently in the next SUMP update?

The approach allowed comparison of the participants' insights, which are presented in the Results section.

4 Participatory processes in Turku

The following section present the different participatory methods applied in Turku in the past years in the context of urban mobility planning. This review was made by examining internal documents available on the City of Turku's Microsoft Teams platform, specifically within the Urban Mobility Solutions unit. These documents provide insights into the various engagement approaches used to involve residents, stakeholders and other relevant parties in the planning process.

4.1 Previous participation

Participation has been an essential part of Turku's urban planning and development processes. It has been implemented in many different ways in different projects. The goal has been to ensure that the views and needs of residents, entrepreneurs and other stakeholders are heard and taken into account in decision-making. In this way it can be ensured that the planned measures correspond better to the everyday life of the citizens.

Participation has been implemented using different methods that enable the participation of different target groups. Surveys, public events, workshops and interactive map services have been important tools in gathering information. Citizens have had the opportunity to express their views on, for example, traffic and services, through these methods.

4.1.1 Surveys and survey-type participation methods

Surveys have been a key method in involving residents and stakeholders in Turku's urban planning processes. They allow the city to gather diverse opinions and prioritize actions based on public input. This ensures that future decisions reflect the needs and preferences of the community.One example is the Turku 2029 Survey, which aimed to collect input on long-term urban

planning strategies. This survey allowed citizens to share their views on topics such as transportation infrastructure, land use, and development of public places. A special feature of this survey was the use of Maptionnaire. It is a map-based tool that allowed participants to mark areas on a digital map where they saw a need for improvement, for example better cycling routes or more accessible public transport. This approach made the survey more interactive and also provided valuable data for planners.

The Turku zoning program survey played an important role in gathering feedback on how land use and zoning policies could support sustainable growth in the city. Respondents were asked to evaluate different land-use strategies, particularly those that would integrate public transport, cycling, and pedestrian areas into new developments. This type of engagement let residents influence decisions about the structure of the city and how transportation systems could be improved to meet future needs.

Another significant survey was the Resident Survey on Traffic Planning, which focused on how people move around the city. This survey gathered information about popular modes of transport, the challenges faced by different commuters, and suggestions for improving traffic flow and safety. The feedback was instrumental in identifying gaps in the current infrastructure, such as the need for more dedicated cycling lanes and improved pedestrian safety.

These surveys collected quantitative data through multiple-choice and rating questions and also allowed respondents to provide qualitative feedback through open-ended comments. This combination of data types helped city planners understand not only what the public wanted but also why these changes were necessary from the residents' perspective.

By employing survey-based methods, Turku has been able to engage a wide range of participants, including both active mobility advocates and those who may not typically engage in public forums. The results from these surveys have provided critical insights into how the city can evolve to meet the transportation and mobility needs of its population while ensuring inclusivity in the decision-making process.

4.1.2 Public events and workshops

Public events and workshops have been an important tool for engaging citizens in Turku's urban planning and traffic projects. These events give residents an opportunity to participate in discussions about the future of the city and its infrastructure.

One example is the Turku General Plan 2029 public events, which invited residents to take a look at the city's long-term development strategies, including transportation planning. These events gave a platform for participants to learn about proposed projects and tell their opinions on different challenges such as mobility, land use, and urban planning. The interactive nature of these events enabled a two-way dialogue between city planners and the public. This gave the city planners real-time feedback on different proposals.

Besides large-scale public events, city planners arranged more focused urban planning workshops to get detailed input on specific planning issues. These workshops often had smaller groups of stakeholders working together to solve particular issues. For example, participants might be tasked to address traffic congestion in specific areas or improving pedestrian access. These workshops helped to get solutions that balanced the city's development goals with the needs of its residents.

Another form of engagement came through Traffic Survey Public Forums, where the results of previous surveys were shared and discussed. These forums allowed for in-depth deliberation on the findings, enabling participants to help shape future transport policies. Discussions covered a range of topics, from public transportation improvements to cycling infrastructure and road safety. The forums encouraged active participation, ensuring that residents had a meaningful role in shaping decisions that directly affected their mobility and quality of life.

Overall, these events and workshops are effective in involving the community in urban planning. They provide a space for open dialogue and ensure that a wide range of voices contribute to the decision-making process. By involving the

public early and often, Turku has shown its commitment to transparency and inclusivity.

4.1.3 Interactive map services and digital tools

Interactive map services and digital tools allow for more dynamic and spatially informed engagement, where residents can provide feedback on specific locations and suggest improvements directly on a map. This participation method brings a new level of precision because it enables city planners to see where the citizens think the biggest need for changes is situated.

One of the tools used in Turku's engagement activities is Maptionnaire, an online platform that allows residents to interact with digital maps. Participants have been able to pinpoint areas in the city where they believe infrastructure needs to be improved. Residents can, for example, use Maptionnaire to indicate areas where they feel unsafe walking or cycling, providing city planners information and hence enabling them to address specific concerns about mobility.

The Turku 2029 idea map is another example of using digital tools to engage citizens. Through this interactive map, residents could leave their ideas for the future of the city by marking locations on a digital map and leaving comments. These suggestions ranged from improving green spaces to developing new public transport hubs. The ability to see the suggestions on a map helped residents and planners to see how individual suggestions fit into the wider urban context.

4.1.4 Resident meetings and community spaces

Resident meetings are in-person engagement and they provide a more personal setting for discussing local concerns, sharing information and gathering feedback on urban development projects. Resident meetings often take place in accessible community spaces, for example libraries, local schools

or civic centers, where residents can come and discuss mobility-related issues. These meetings typically include city planners, transportation officials and sometimes local political representatives, who present upcoming projects and listen to concerns or suggestions from the people who attend.

Community spaces have also been used as workshops where residents can work in small groups to think of solutions or improvements to the city's mobility challenges. These workshops encourage active participation because attendees are invited to brainstorm, discuss, and prioritize ideas together. By using local spaces that are familiar to residents, the city creates a more welcoming and comfortable environment for engagement.

4.2 Participation in Turku’s SUMP

The participation process of Turku’s sustainable urban mobility plan included different methods that were used to collect feedback and views from the public and from different stakeholders. The main goal of participation was to ensure that residents, companies and internal city stakeholders can influence the measures and the development of the plan. The participation methods included a survey for residents, a workshop for companies and a workshop for the city employees.

4.2.1 The SUMP survey

Residents, entrepreneurs and elected officials in Turku were able to participate in the development of Turku’s SUMP by responding to a survey. In the survey, respondents prioritized traffic development measures. The respondents were able to choose their preferred options from randomly presented pairs of measures. The measures included in the survey were derived from the city’s current programs.

The results of the survey show strong support for measures that improve cycling and pedestrian infrastructure. The most popular measures were increasing the safety of walking and cycling routes, expanding the network of cycling lanes and improving streetlights and visibility at intersections. Respondents favored also improving winter maintenance to ensure year-round safety. Measures related to reducing car usage received mixed responses. Some respondents highly supported reducing car traffic in the city center and increasing car-free areas, but other respondents wanted to improve traffic flow and more parking for private cars. This tells that there is a divide between those advocating for sustainability measures and others prioritizing convenience for private car users.

Despite promoting the survey via a social media campaign, the response rate was lower than expected with 1077 respondents. Promotional videos were posted on Instagram, Facebook and LinkedIn. Among other factors, social media algorithms may have influenced the visibility of the survey. The topic of the survey, even though it is important, may not have gained wide interest among the citizens. This could have contributed to the lower response rate. These insights underline that there is a need for more strategic campaigns when engaging residents.

4.2.2 Business workshop

The city of Turku organized a workshop as part of its SUMP engagement process and brought together local entrepreneurs to discuss sustainable transportation and logistics. The workshop covered topics such as traffic arrangements in the city center and mobility services designed for businesses.

Participants raised several important points. The need for better public transport was highlighted for employee and customer mobility, for example development of the tram network, regional trains and better bus services. The group also mentioned the importance of good cycling infrastructure and secure bike parking. Challenges of electric scooters were mentioned, especially parking and

safety issues. The need for traffic education to improve sustainable transport behavior was seen needed to mitigate conflicts between different modes of transportation.

4.2.3 Internal workshop

Turku organized an internal workshop with the purpose of bringing together employees from various units of the city of Turku to contribute their insights. The aim of the workshop was to gather diverse insights and recommendations to improve sustainable transportation in the city.

The workshop resulted in a set of actions and initiatives that were categorized into different areas. Key themes included improving transportation hubs and intermodal connections, particularly by increasing bicycle and car parking near important public transport stops. Participants highlighted the need to address gaps in cycling infrastructure with a focus on the city center. Other prominent suggestions included improving the infrastructure for public transportation, such as adding bus lanes and prioritizing traffic lights for public transport. Participants emphasized expanding traffic education to encourage safe and sustainable commuting, especially for schoolchildren.

According to the feedback collected, the workshop was considered successful and its outcomes were seen as valuable. Participants liked the opportunity to collaborate with colleagues. Several comments mentioned the productivity of the group work and table discussions, which generated new ideas and perspectives that enriched the planning process.

Some participants felt that the tasks were a bit unclear or the content was too heavy, but the overall atmosphere was praised. Feedback also showed an interest for more similar events in the future for further cooperation and networking between different city departments.

5 Results

5.1 SUMP experiences from Tampere & Hamburg

This section focuses on the sustainable urban mobility plan experiences in two cities: Tampere, Finland and Hamburg, Germany. These cities were selected for analysis due to their distinct approaches to sustainable urban mobility planning, which offer valuable insights.

Tampere was chosen as a case study because it is a Finnish city that has already developed a SUMP. Its urban mobility challenges and solutions provide a relevant point of comparison for Turku's sustainable mobility planning. Tampere's experience offers a Finnish perspective on how SUMP principles are applied within the national context, particularly in a city of similar size to Turku.

Hamburg represents an international example of a larger city that has made a comprehensive SUMP. Hamburg is one of the most populated cities in Germany, which makes it an ideal case for examining how large-scale participation and stakeholder engagement are integrated into the planning process. Analyzing Hamburg provides insights into how SUMP principles can be scaled to accommodate diverse stakeholder groups and the financial and logistical demands of a major European city.

By comparing these two cities, the aim is to identify common challenges and successful strategies in their SUMP development processes. The lessons learned from Tampere and Hamburg will serve as a foundation for making recommendations to improve the engagement methods and participation processes for future SUMP updates in Turku.

5.1.1 Engagement methods

Based on interviews conducted in Tampere and Hamburg, it becomes clear that both cities have used a combination of methods that target public participation, stakeholders, and internal municipal departments.

In Tampere, engagement was mostly conducted through workshops and public consultations, which included open forums and feedback platforms where residents could share opinions on mobility projects. Workshops gave a platform for city planners and residents to discuss upcoming projects. According to city of Tampere representative, workshops were effective in bringing together residents, especially when the issues were directly related to their local environment, for example new transportation solutions or traffic safety measures. The overall amount of engagement was somewhat limited due to limited resources.

Hamburg had a more extensive engagement process that included stakeholder workshops, public surveys, and consultations with various business sectors, such as logistics companies. A notable difference in Hamburg's approach was the involvement of external consultants that organized participatory events and gathered feedback. This external support helped expand the amount of engagement, particularly in stakeholder interactions. While public engagement in Hamburg faced challenges in generating new ideas from the general public, city of Hamburg representative told that stakeholder participation had a key role in ensuring that different groups were involved throughout the process.

Despite differences in amount of participation and resources between the two cities, both experiences highlight the importance of tailoring engagement methods to the specific target groups. Both representatives from Tampere and Hamburg noted that future SUMP updates would benefit from collaboration with different municipal departments beyond the mobility sector and external partners, especially when having complex issues like changing mobility behavior.

5.1.2 Costs and resources

During the SUMP processes in Tampere and Hamburg both cities faced some challenges. In Tampere, one of the biggest problems limited personnel and it led

to that the amount of participation was smaller than expected. The city of Tampere representative mentioned that the resident's participation could have been done more systematically, but the city's small core team and limited resources prevented wider participation.

In Hamburg the financial and personnel resources were bigger, but the challenge was the lack of citizens participation. According to the city of Hamburg representative, public events and workshops did not produce all new ideas or a wider public discussion. The city of Hamburg representative also explained that certain stakeholder groups, such as environmental organizations and senior groups, were included later in the process, which may have limited the scope of their contributions.

In both cities it has been suggested that future inclusion could benefit from communication to reach the target groups more effectively and involve them from the beginning.

5.1.3 Challenges and development suggestions

Tampere and Hamburg will consider in their future SUMP updates how participation could be further improved. In Tampere, the city of Tampere representative told that inclusion should be made more widely in cooperation with different sectors, for example schools and companies. The city of Tampere representative mentioned that working with schools in particular could help reach a younger population and long-term changes in traffic behavior.

In Hamburg, the city of Hamburg representative mentioned that for future participatory processes, it would be valuable to identify and involve key stakeholder groups from the beginning to ensure their contributions fully inform the planning stages. The city of Hamburg representative also suggested that the role of political representatives in participation could be reconsidered to keep discussions more open and less influenced by political agendas.

Both cities shared the idea that inclusion should be targeted more precisely and made more accessible. The city of Hamburg representative also mentioned that

methods of online participation should be developed further, so that even in situations like a pandemic, interaction with residents could be continued.

5.2 Key findings

The interviews of Tampere and Hamburg representatives have provided insights into the strengths and challenges associated with implementing sustainable urban mobility plans. Both cities had limitations, but their experiences also highlighted opportunities for improving future engagement.

In Tampere, the small team and limited budget constrained the amount of public engagement. Although workshops and public consultations were held, more systematic participation would have required additional resources, such as a dedicated interaction planner. Future updates to the SUMP would benefit from expanding engagement efforts across multiple sectors, including education and private companies. This would foster a more holistic approach to the SUMP.

Hamburg had challenges in having meaningful public participation. While stakeholder involvement was solid and supported by external consultants, public engagement efforts did not generate as much new input as expected. The city's stakeholder involvement was seen as a key factor in ensuring that diverse interests were considered throughout the process.

Reflecting on these findings, it is clear that both cities could improve their participation processes. They could have deeper cross-sector collaboration and finding ways to engage the public more effectively. For future SUMP updates in Turku, the experiences from Tampere and Hamburg offer valuable lessons. The importance of tailoring engagement to specific groups, managing resources effectively and ensuring that participation is meaningful and not just symbolic are all critical things to consider.

While public consultations and stakeholder workshops are vital, their effectiveness depends on how well the gathered feedback influences actual policies and strategies.

In Turku, the initial SUMP participation was noted to be somewhat limited, particularly in terms of engaging the public through surveys, where response rates were lower than expected. Future participation efforts could be strengthened by addressing these challenges. This means ensuring that methods are adapted to better engage specific groups and by exploring new, more interactive methods to have better public involvement. Turku can learn from both Tampere and Hamburg by enhancing cross-sector collaboration and improving stakeholder engagement to make the participation process more inclusive and impactful.

As highlighted by city of Tampere representative, participation should not be too abstract or focused on high-level goals. Citizens are more likely to engage with issues that directly affect their lives rather than broad targets. City of Tampere representative used the example of park planning, where citizens are more interested to participate when the outcome directly impacts the park in their own neighborhood. This insight underlines the importance of doing participation with practical and relatable topics that resonate with the public.

In conclusion, the next update of Turku's SUMP should prioritize expanding participation and also ensuring that the processes are strategically aligned with broader city objectives. By learning from the experiences of other cities, Turku can adopt more inclusive, resource-efficient, and impactful engagement strategies.

6 Conclusions and discussion

As presented in the previous chapter, the main findings of this research are two points: the importance of focusing on high-quality, targeted participation in urban mobility planning and the need to use resources to support these efforts. This study has shown that well-planned, targeted engagement leads to greater acceptance of sustainable urban mobility plans. This study also points out potential themes for future research, such as examining methods for involving specific groups or sectors and studying the long-term effects of high-quality engagement. These topics could help cities like Turku improve their own participation strategies in sustainable urban mobility planning.

6.1 Ideal amount of participation

The ideal amount of public engagement in a sustainable mobility plan depends on how well the engagement process is planned and resourced. Examples from Tampere and Hamburg show that the most important matter of engagement is its quality. In Tampere, engagement was somewhat limited due to resource constraints. While Tampere's experience shows the limitations imposed by budget constraints, it also highlights the potential for strategic, targeted engagement. As the city of Tampere representative noted, expanding participation to include schools and other sectors impacted by urban mobility could bring valuable perspectives to the next SUMP update. This approach aligns with literature that underscores the benefit of engaging specific target groups directly influenced by mobility measures to foster support and reduce conflict (Regional Council of Southwest Finland 2017).

In Hamburg, a larger budget allowed wider engagement, but it didn't result in as much new feedback from citizens as expected. This tells that the ideal amount of engagement is not only about the number of participants, but also about ensuring that engagement is meaningful and effective.

In both cities, the importance of targeted engagement was highlighted to ensure that it effectively supports the plan's objectives. The best results are achieved when multiple engagement methods are combined, such as public workshops, online surveys, and stakeholder meetings, which collectively reach a wide and diverse audience. According to the city of Tampere representative, targeted and well-designed interactions can pay off by fostering more widely accepted plans and reducing resistance in the decision-making process.

The number of methods in engagement can vary significantly depending on the scope and goals of the planning process. Studies indicate that the ideal level of engagement depends on both the target audience and the phase of the plan (Regional Council of Southwest Finland 2017). As the interviewees highlighted, it is crucial to consider what kind of engagement is required for each phase. In Tampere's SUMP process, stakeholder involvement was highlighted. In Hamburg, involving stakeholders was seen as an important way to integrate feedback representing different interest groups, such as political parties and transport industry experts. This aligns with prior literature, which highlights the value of using multiple engagement methods at different stages of the planning process (ibid.).

Literature also highlights that the focus should not be merely on increasing participant numbers, as the quality of engagement plays a major role in the acceptance and sustainability of plans. A mix of various methods is recommended, as they help reach a broader audience and bring forward different perspectives. Well-designed interaction not only enhances plan acceptance but also reduces complaints and objections as the plan progresses. (Regional Council of Southwest Finland 2017.) This finding is also in the interviews, where it was pointed out that the role of engagement is to improve project efficiency and reduce conflicts.

A challenge in public engagement is "engagement fatigue", as highlighted in the interviews. Engagement is important but overly complex and constant engagement processes can lead to some target groups opting out. Engagement planning should consider which methods to use and how often, to ensure

engagement remains meaningful (Involve 2024). As a solution, interviewees suggested selecting and effectively targeting methods based on specific groups.

6.2 Most cost-effective engagement methods

Identifying the most cost-effective engagement methods involves targeting the chosen methods with project goals and target groups. Both interviews and literature mention that cost-effective engagement methods depend on project goals and the target groups. Accurately defining the target groups and having a clear understanding of the objectives are important for cost efficiency. According to the report by Regional Council of Southwest Finland 2017, engagement methods should be integrated into the whole planning process to maximize benefits with minimum resources. In the interview, the city of Tampere representative highlighted that resources could be used more effectively if engagement is included in the early stages of planning. This observation is consistent with previous studies, which indicate that the quality and effectiveness of engagement can be maximized when it is continuous and well-structured (Involve 2024).

Research shows that cost-efficiency in engagement increases when the chosen methods are part of a comprehensive approach that spans the entire planning process. This allows feedback to be gathered and integrated during the whole project (Regional Council of Southwest Finland 2017; Involve 2024). This agrees with city of Tampere representative's suggestion that resources are best utilized when engagement is structured.

In both cases, a mix of various engagement methods was noted to be the most effective way to optimize both costs and engagement outcomes. The engagement methods should be selected based on their relevance to specific groups. Combining methods, such as targeted social media campaigns for younger audiences and in-person workshops for local businesses, allows for a broader, cost-efficient reach without overburdening any single group or platform.

These findings demonstrate that engagement should be flexible and well-structured. The best results are achieved by combining many methods and ensuring that different groups can participate in ways that suit them. Engagement should emphasize high-quality dialogue, which increases acceptance of plans and reduces later conflicts.

References

City of Hamburg representative. 2024. Interview. Interviewed by Meri Hoffren. Turku 19.9.2024.

City of Tampere representative. 2024. Interview. Interviewed by Meri Hoffren. Turku 19.9.2024.

European Commission 2023. Sustainable urban mobility planning and monitoring. Referred 4.10.2024. https://transport.ec.europa.eu/transport-themes/urban-transport/sustainable-urban-mobility-planning-and-monitoring_en

Involve 2024. Costs of public participation. Referred 16.10.2024. https://www.involve.org.uk/resource/costs-public-participation

Ministry of environment, Finland. n.d. EU climate policy. Referred 6.10.2024. https://ym.fi/en/eu-climate-policy

Regional Council of Southwest Finland 2017. Interactive and participatory methods in transport system and traffic planning. Referred 17.10.2024. https://varsinais-suomi.fi/wp-content/uploads/2021/09/Lusenius-H.-2017.-Selvitys-vuorovaikutteisista-ja-osallistavista-menetelmista.pdf

Rupprecht Consult (editor) 2019. Guidelines for developing and implementing a sustainable urban mobility plan, Second Edition. Referred 29.9.2024 https://urban-mobility-observatory.transport.ec.europa.eu/document/download/87adaa0c-cd13-4ce0-9a15-d138ea31bb2c_en?filename=sump_guidelines_2019_second%20edition.pdf

Sampo, Anna (editor) 2020. Handbook for participatory urban planning. Referred 6.10.2024, 2024. https://www.yumpu.com/en/document/read/64824734/handbook-for-participatory-urban-planning