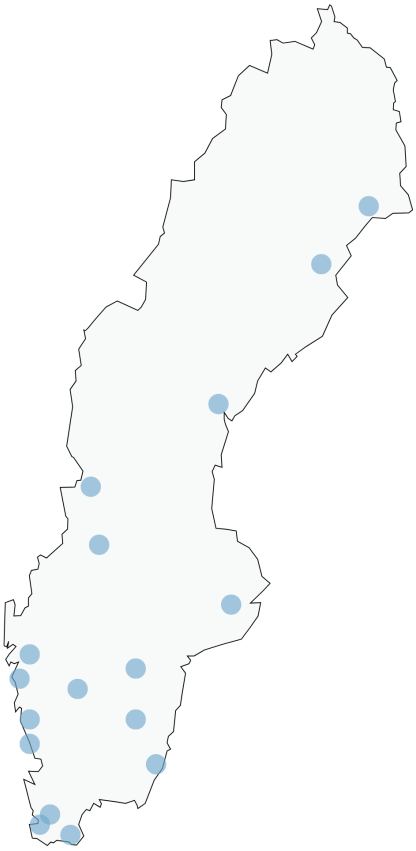

Foresight in urban planning

A study on the use of foresight in Swedish municipalities

Master's thesis in Industrial Ecology

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DEPARTMENT OF SPACE, EARTH AND ENVIRONMENT

CHALMERS UNIVERSITY OF TECHNOLOGY

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Cover: A map of Sweden marking out the municipalities that were studied in the report in some way.

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Abstract

This study aimed to investigate how Swedish municipalities use foresight in urban planning by studying the 23 grants granted within the *Framtidens platser* funding call. With this, the objective was to provide suggestions on how municipalities could possibly enhance their foresight work. Foresight is a relatively novel term in the context of Swedish municipalities, and their experiences of working with foresight have not yet been looked into thoroughly. Historically, urban planning has been based on statistical data for long-term planning and scenario development. To improve this, foresight is now being increasingly used in that field to broaden perspectives and create more robust planning.

The research methodology used was a literature study, interviews with municipalities participating in projects in *Framtidens platser* and a systematic analysis of the project plans. In addition, project-specific events were attended and observational research was conducted. The first main finding was that there is a lack of awareness of what tools are considered foresight tools. Second, a majority of municipalities studied perceive that foresight lacks connection to reality, which is challenging. However, foresight is also seen as a new way of thinking, which can be both a benefit and a challenge. Also, the importance of support and engagement from leadership and politicians was identified as an important success factor when using foresight. Lastly, for foresight to become increasingly used by Swedish municipalities, it was found that the process needs to be perceived as legitimate.

To address these five insights, the knowledge and purpose of foresight needs to be enhanced in municipalities. We propose a foresight forum where municipalities can learn from each other and share knowledge, as well as a certification of foresight facilitators to enhance legitimacy.

Keywords: foresight, strategic foresight, urban planning, long-term planning, municipal development.

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Abbreviations

CCFOR - Competence Centre on Foresight

CIFS - Copenhagen Institute for Future Studies

EEA - European Environmental Agency

EU - European Union

JRC - Joint Research Centre

NATO - North Atlantic Treaty Organisation

OECD - The Organisation for Economic Cooperation and Development

PBL - Plan- och bygglagen

SKR - Sveriges kommuner och regioner

STOA - Panel for the Future of Science and Technology

UN - United Nations

UNDP - United Nations Development Programme

UNESCO - United Nations Educational, Scientific and Cultural Organisation

WEF - World Economic Forum

WRR - Netherlands Scientific Council for Governmental Policy

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1 Introduction

Foresight is the structured approach and methods of exploring plausible futures to anticipate change in order to be better prepared (Popper, 2008). Foresight is not about making predictions, it is rather about developing the capacity to imagine alternative futures and consequences. Today, our world stands before an uncertain future, as many large-scale challenges are emerging, such as climate change and resource depletion. This was pointed out already in 1972 with the publication of "The Limits to Growth", emphasizing the need for long-term thinking in policy development regarding resource use (Meadows et. al., 1972). Fifteen years later, the Brundtland commission published "Our Common Future", defining sustainable development as "development that meets the needs of the present without compromising the ability of future generations to meet their own needs" (World commission on environment and development, 1987, p. 41). Both of these publications emphasize the importance of planning for the long-term future. Today we see megatrends such as climate change, changing demographics as well as urbanisation (Trask, 2020). All these occur in an interconnected system, possibly causing disruptions which have unforeseen consequences on other parts of the system (OECD, 2025). Due to this unpredictability, there is not only one possible future. This has been demonstrated in for example, the use of emission scenarios by IPCC since 1990 (Nakicenovic, N., Swart, R., et al., 2020). To deal with the unpredictability of the system, and to prepare for many possible futures, foresight tools can be used (OECD, 2024).

Foresight is currently used by some nations, where Finland, Singapore and the Netherlands are seen as predecessors (Sjöblom, 2024). However, Sweden still lacks tools and processes for managing and anticipating possible futures. By using foresight, Sweden could be more prepared for future uncertainties, enhance societal preparedness and innovation capacity. This is something the Swedish innovation agency Vinnova has recognised (Vinnova, 2025). In addition, Vinnova has identified the need for more foresight in regions and municipalities through the funding call *Residens framsyn* which they financed in 2023 (Vinnova, ndc). Here, five municipalities and one region got the opportunity to have financed in-house foresight competency for a period of time.

To further deepen the understanding of foresight in the municipal context, this study will explore experiences of Swedish municipalities working with foresight today. The importance of working with foresight has also been recognised by the Swedish innovation program ShiftSweden, financing projects to work with foresight through the funding call *Framtidens platser*, spanning over 2024 and 2025 (Vinnova, nda). In total, 23 projects have been granted and these will be the basis of this study. More specifically, the municipalities involved in the projects or where the projects take place will provide the context of the study.

This study provides an overview of the experiences of Swedish municipalities working with foresight. It identifies challenges and barriers, and provides discussions about how they can be overcome. In addition, the potential value contribution from foresight in the municipal context is given and a suggested way forward is pointed out for municipalities aspiring to integrate foresight in their strategies.

This thesis will introduce the purpose and research questions of the study, as well as the limitations. In addition, it will give an extensive background, synthesizing the current literature on the topic of foresight and foresight tools. The research methodology is presented and delimitations are discussed. Next, main findings are presented and discussed. The thesis is concluded with main findings presented and further research directions suggested.

2 Aim and research questions

The following sections will explain the aim of this paper and present the research questions that will be investigated. Lastly, limitations to the study will be described. This project investigates how foresight tools are used in local urban development and planning processes in Swedish municipalities. In addition, the purpose is to understand the use or not use of foresight in Swedish municipalities as well as giving suggestions on how to possibly enhance foresight work within municipalities.

2.1 Aim

More specifically, this project aims to study the 23 projects granted in the ShiftSweden funding call *Framtidens platser*. It will investigate how foresight is used both within and outside these projects by the respective municipalities. In addition, it aims to investigate why foresight is used in the municipalities or why it is not. Here, the aim is to gather thoughts and opinions about the experiences and challenges to work with foresight as well as synthesise literature on that topic. The aim is also to use that knowledge to provide some suggestions for how Swedish municipalities could work in a more structured long-term way with foresight.

2.2 Research questions

The research questions are structured in three overarching questions and in total five sub questions connected to two of the overarching questions. These overarching research questions and sub questions are:

1. How do the municipalities granted in the ShiftSweden funding call *Framtidens platser* work with long term planning using foresight tools?

    (a) How do the municipalities work with foresight within their project in the ShiftSweden funding call *Framtidens platser*?

    (b) How do the municipalities work with foresight outside of their project in *Framtidens platser*?

    (c) How would the municipalities like to work with foresight and what is needed to do so?

2. Why do/do not the municipalities granted in the ShiftSweden funding call *Framtidens platser* use foresight in local urban planning?

    (a) What are the benefits and drawbacks of working with foresight in local urban planning?

    (b) What are the challenges and barriers of working with foresight in local urban planning?

3. How can municipalities leverage foresight more successfully in their processes?

2.3 Limitations

This report will focus on municipalities that are part of the projects granted in the ShiftSweden funding call *Framtidens platser*. This work will therefore be limited to the views and opinions

of the municipalities represented in these projects. However, some municipalities might be indirectly involved in the projects, for example in the form that the project takes place within their borders, but they are not an actor that was part of applying for the grant. In that case, these municipalities are excluded from answering research questions 1b, 1c and 2 since they are not active in applying the foresight and may have no knowledge about it.

In addition, the projects granted in *Framtidens platser* are currently being carried out while this thesis is written, and will not be completed until after this thesis is finished. Due to this, there is no possibility of evaluating the outcomes of the ShiftSweden funding call nor the specific projects within. Hence, the report is limited by the phase in which the projects currently are in while this thesis is written, and the aim is not to perform a complete evaluation of them. Rather, using them as case studies and a source of data and information. The limitation will consequently be that the projects are studied in the phases before launching and the running phase. Therefore, knowledge obtained about how the projects work with foresight within their projects (research question 1a) is limited to what information is provided in the project plans. Except for two projects within *Framtidens platser* called *Framhall* and *Framtidens stationsmiljöer*, where we participated in workshops and therefore got access to additional information on how these projects work with foresight in the running phase.

As a consequence of the project plans being the main source of information for research question 1a, these will be interpreted consistently and literally. Eventual pilot studies and planned follow-up studies associated with the projects in *Framtidens platser* are not included.

Regarding the concept of foresight, some aspects will be excluded. Technology assessments are not considered within the scope of this work as well as pure speculative methods such as science fiction. Strategic foresight will be the main focus of this thesis. However, speculative methods, such as Speculative design, will be included to some extent since they are used in some of the projects.

Another limitation is that Sweden will be the area in focus, since this is where the projects take place. However, by using experience from the literature and examples from around the world of working with foresight, an international context to the foresight tools will be applied. In addition, the geographical spread of municipalities investigated will be tied to what municipalities were granted in the ShiftSweden funding call and eventual spatial over- or under-representation will be a limitation of this study.

3 Foresight context and tools

The following section will give a background to the foresight concept, context and tools. The first part elaborates on foresight in general and the history of how it emerged. Following, examples from around the world of leading organisations and countries using foresight are presented. Then, the context of foresight use in urban planning is described followed by the Swedish context. The fourth section explains and presents the most common foresight tools. Lastly, a literature review is provided on common benefits, drawbacks, and challenges connected to foresight, as well as success factors when using it.

3.1 Foresight history

Foresight is a concept that involves thinking about the future in a systematic way and developing strategies in the present accordingly. It involves more than only looking at past and present data and projecting this, known as forecasting. Instead, foresight also explores a range of possible futures by broadening the perspective by looking at trends and weak signals, for example. By using foresight actors can be more prepared for the unforeseen and understand how current strategies might respond to disruptions (OECD, 2025; European Comission, Joint Research Center, 2025; Copenhagen Institute for Futures Studies, 2025).

Humans have been planning and thinking about the future long before foresight became a research field, as a consequence of the human brain being complex enough for higher-order consciousness (Slaughter, 1997). In the late 1960s, the view that there are many possible futures emerged, also referred to as a pluralistic view, which is a foundational idea of the field of foresight today (Gidley, 2017). This have during recent decades been manifested both in the publication of "Limits to growth" by the Club of Rome for long-term thinking in policy development and resource use, and "Our common future" in their definition of sustainable development that emphasizes the needs of future generations (Meadows et. al., 1972; World commission on environment and development, 1987). Before that, thinking about the future also occurred in more speculative approaches such as science fiction and dystopian futures portraying, for example, George Orwell's 1984 from 1949 (Gidley, 2017). Thinking about the future has existed for a long time, but more recently it has become a research field.

Even though there is no set date on when foresight became a field, a possible time expressed is at the end of the second world war in 1945 (Hines, 2020). Before that, President Hoover of the United states of America had created a research committee on social trends in 1929 (Gidley, 2017). Their mission was to use past statistics to chart trends and extrapolate to the future (Gidley, 2017). Later, the second world war had created the need to think differently about the future and to be better prepared to respond to rapid technological and political changes (Sjöblom, 2024). Also the Cold War that followed created a desire to anticipate future challenges and use long-term planning. At the same time, Project RAND was launched, working with research and development to utilize civilian knowledge to create a science of war (RAND, nd; Hines, 2020; Crews et al., 2017). This later lead to Herman Kahn's scenarios regarding the Cold War. Following this, the oil company Shell famously handled the 1973 oil crisis due to their previous foresight work (Shell, nd). The company had already looked into the uncertainties of the future and imagined scenarios. Because of this, they were prepared when the fuel shortage occurred and thus were not as impacted as many others. In the 1990s, more countries began to establish formal units for strategic foresight to create more flexible and proactive strategies (Sjöblom, 2024). Since then, more organisations and countries have followed and successfully implemented foresight in their strategies.

3.2 Leading countries and organisations

Foresight methodologies are present in the work of several countries and organisations, and have been for some time. The following sections will present examples of some of the leading countries and organisations and describe their work with foresight. Currently, some countries and organisations are more prominent in the use of foresight than others. The nations often mentioned are Finland, Singapore and the Netherlands (OECD, 2025; Sjöblom, 2024) which will be described further in this section. Organisations that will be elaborated on are the European Union (EU), North Atlantic Treaty Organisation (NATO) and United Nations (UN). Examples of organisations that will not be elaborated on in this section but that nonetheless work with foresight and therefore are worth being mentioned are The Organisation for Economic Cooperation and Development (OECD), World Economic Forum (WEF) and Copenhagen Institute for Future Studies (CIFS).

3.2.1 European Union

The EU has integrated foresight at several levels in their organisation. The motive is that foresight helps the EU anticipate and prepare for possible futures and opportunities, as well as help policy makers take actions towards achieving the desired future outcomes (European Commission, ndc). To fulfil the purpose, they have appointed a Commissioner for Intergenerational Fairness, Youth, Culture and Sport who is responsible for strategic foresight. His or her mission is to work with strategic foresight to identify trends or developments that will have an impact on future generations (European Commission, ndb). In addition, there is a Competence Centre for Foresight (CCFOR), which launched in 2018 (European Commission, nda). CCFOR is part of the Joint Research Centre (JRC) that provides independent and evidence-based knowledge and science to support EU policy development. CCFOR's mission is to support the integration of strategic foresight in EU policymaking by, for example, working towards increased future literacy and performing in-depth foresight processes (European Commission, 2024). They focus their work in three thematic areas which are future risks, technology foresight, and sustainability transitions.

Every year, the Commission releases a Strategic Foresight Report. The report has different themes from year to year, to reflect what are believed to be future challenges (European Commission, ndc). The purpose of the report is to inform the Commission Work Programmes and multi-annual programming exercises. The 2020 Strategic Foresight Report announced the launch of an EU-wide foresight network. Its goal is to develop synergies that draw on public administration foresight capabilities from all member states and the European Commission to enable strategic exchanges and cooperation. As part of this network, all member states have appointed a Minister for the Future. Their mission is to discuss key issues that are relevant for the future of Europe.

The European Parliament also has several units working with foresight. One of these is the European Parliament Research Service's Strategic Foresight and Capabilities Unit (Prítyi et al., 2022). They mainly focus on trends and broader issues. One of their missions is to produce material for the members of the Parliament on relevant global economic and social trends and their implications at the EU level. Another is the Panel for the Future of Science and Technology (STOA) (European Parliament, nd). They mainly deal with technological and scientific matters, and their purpose is to inform the people of the Parliament. Members of the Parliament can ask STOA for specific foresight work to be fed into debates at the Parliament. They then provide independent, high-quality and scientific studies and information taking the role of an honest broker. They focus their work in specific prioritized areas, and by November 2022 STOA decided to prioritize their efforts in the topics of quality of life, public health, green deal, climate

change, digitalisation, and AI.

3.2.2 NATO

Another organisation that recognises the importance of foresight is NATO. In 2018, the NATO Strategic Foresight Branch started conducting a strategic foresight analysis of regions that are important to them and has released several reports thereafter (NATO, nda). The purpose of these reports is to contribute to a better understanding of the future security environment and to uncover drivers behind emerging trends to understand the development. In 2022, the Strategic Concept defined a new era in which they recognized the systemic challenges that had risen recently (NATO, ndc). The Strategic Concept is a document that states the values of NATO and continuously assesses its security environment (NATO, ndb). Within this context, the Allied Command Transformation started a new strategic foresight cycle to take into account recent disruptive events, for example, the Covid-19 pandemic, the Russian war against Ukraine, and major climate disruptions (NATO, ndc). The strategic foresight cycle uses a three-horizon approach and therefore needed to be reevaluated to take these events into account. The Allied Command Transformation is NATO's strategic warfare development command. Their mission is to preserve the peace, security, and territorial integrity of the member states by leading the strategic warfare development. As mentioned, NATO's strategic foresight uses the three-horizon approach as a tool to assess how present underlying changes can affect the future security environment. The 2023 Strategic foresight analysis report also used, for example, scenario development and artificial intelligence-assisted horizon scanning as foresight tools combined with large workshops and dialogues (NATO, 2024).

3.2.3 United Nations

A third organisation that has realised the potential of foresight is the United Nations (UN). Originally with the aim of supporting the fulfilment of Agenda 2030, an informal foresight network was created in 2019 as a pilot project (UN system Chief Executives board for Coordination, nd). The foresight network, led by United Nations Educational, Scientific and Cultural Organisation (UNESCO), supported and promoted foresight capacities across the UN system and fostered collaborations with the goal of finding solutions to contribute to the achievement of Agenda 2030. The work contributed to inform on duties to the future, long-term planning and intergenerational thinking across the UN system. In March 2023, it was decided that the foresight network should be transitioned into a more open UN foresight community of practice. This should be led by the UN futures lab and coordinated by UNESCO, while being a part of the initiative UN 2.0. The UN futures lab is a network started in 2023 with the objective to encourage the UN system and other actors to use futures thinking and strategic foresight in planning, decision-making and policy-making (United Nations Futures Lab, nd). The aim of UN futures lab was to be better prepared for major global risks, be more anticipatory as an organisation and ensure that policy decisions consider potential impacts on future generations. UN 2.0 is an initiative that seeks to accelerate the work toward reaching the 2030 Agenda goals by combining data, innovation, foresight, and behavioural science (UN 2.0, ndb). By amplifying their foresight capabilities, they hope to be able to help member states navigate rising uncertainties and enhance support the sustainable development goals and future generations (UN 2.0, nda).

3.2.4 Singapore

Moving over to leading countries within foresight, Singapore began their future planning efforts in the late 1980s, back then as a part of the Ministry of Defence (Centre for Strategic Futures, nd). Today, this has evolved into the Centre for Strategic Futures which focus on strategic plan-

ning, coordination and development at the governmental level. In addition, several Government agencies have begun integrating foresight into their work and established specific teams, placing foresight work at various levels of the governmental structure. The goal and purpose of the organisation is to build a navigation capacity and responsiveness in a fast-changing and complex environment. Moreover, they aim to develop the ability to anticipate and manage risks as well as communicate their insight to decision-makers to integrate the foresight into policy planning.

3.2.5 Finland

Another leading country in foresight is Finland, which has one of the most elaborate foresight systems in the world (Prítyi et al., 2022). Their focus on foresight began after an economic crisis in the early 1990s, in combination with increasing security concerns connected to Finland's geographical position. Now, their foresight work has evolved and foresight networks exist in academia, civil society, the private sector, and the national and regional government. The work with foresight at the governmental level aims to understand and anticipate the potential changes that the future holds, and support decision-making in connection to them (Finnish Government, nda). They aim to encourage participation and cooperation to explore possible futures and the challenges or opportunities they could bring. Foresight activities are done in several ministries and in a joint working group. Every fourth year since the 1990s, with the start of each new administration, the government releases its Futures report. In addition, there is a National Foresight Network supported by the Government Foresight Group which brings together foresight data producers. Its purpose is to function as a discussion and coordination forum for foresight practitioners and coordinate events (Finnish Government, ndb). The independent Finnish innovation fund Sitra is a future-oriented fund that encourages actors to make changes and create solutions (Sitra, nd). They work towards strengthening future thinking and foresight to promote the wellbeing of Finland and respect the nature's carrying capacity.

3.2.6 The Netherlands

The Netherlands has been a pioneering actor since they started to establish formal units for strategic foresight within government and politics in the 1990s (Sjöblom, 2024). For example, the Environmental Outlooks by the Dutch environmental agency later inspired both the United Nations and the European Environmental Agency (EEA) to perform foresight activities (van't Klooster et al., 2024). The Environmental Outlooks are reports that describe the future environmental quality based on current environmental policy (Hoogervorst et al., 1991). Today, a formal unit for strategic foresight is the Netherlands Scientific Council for Governmental Policy (WRR), which is an independent body that advises government policy (The Netherlands Scientific Council for Government policy, nda). Their purpose is to provide science-based advice on strategic issues that are likely to have significant social and political consequences, making future studies and integral part of their work (The Netherlands Scientific Council for Government policy, nda,n). WRR do not focus on specific policy areas, but rather on cross-cutting issues that require policymaking across domains (The Netherlands Scientific Council for Government policy, ndc). They also have a focus on long-term aspects of public policy, rather than short-term issues. Examples of such long-term aspects can be, for example, infrastructure projects and urban planning.

3.3 Foresight in urban planning

This section describes the use of foresight in the context of city and urban planning. The primary goal of urban planning is to promote citizens' wellbeing and improve their living conditions (Islam, 2011). This is achieved through projects that design grey infrastructure, which can be buildings, roads, pavements etc. as well as green and blue infrastructure, for example,

water bodies or vegetation (Puchol-Salort et al., 2021). Traditionally, planning for transportation system is done by developing forecasts of transport demand and expected traffic loads (Trafikverket, 2024). These forecasts are used to create different scenarios based on potential actions being implemented or external developments. By quantifying future demand, the capacity of the infrastructure system can be estimated and potential environmental impacts can be assessed. In addition, backcasting is sometimes used to investigate what actions are needed to reach a preferred future state. However, scenario planning has been criticized for generating a limited impact on decision making and providing vague guidance for policy-making (Klein et al., 2022).

Cities and infrastructure are systems that are very slow and costly to develop (Ravetz and Miles, 2016). Therefore, urban planning ought to work towards a long-term future based on strategic policy knowledge. However, urban planning is often hindered by political disagreements, disconnection from citizens and a lack of financial resources. This suggests that foresight can play an important role in urban policy and planning, if being implemented as an integrated strategy. Successful implementation will build capacity for anticipatory governance in the long-term perspective in urban planning. There is a growing interest in urban planning to move towards a more exploratory approach, rather than traditional forecasts, but the planning field has lacked guidance on how to integrate this more adaptive planning technique (Machiels et al., 2023).

Due to rising challenges such as climate change or shifting demographics the city's role and responsibility has been extended to not just providing the physical environment but also to designing it so that these challenges are addressed. As a response to potential challenges, some cities have launched projects to integrate foresight into urban planning and governance. Strategies suggested are to incorporate scenario planning, urban visions and future generations' needs into present work (Inayatullah, 2011; Gall and Allam, 2022).

One example of foresight at the city/region level is the Manchester 2040+ project, which is part of the UK Foresight Future of Cities program. The project is led by University of Manchester and aims to initiate discussion between different sectors and policy themes, include different viewpoints, understand how Manchester can navigate a changing future and establish links from scenarios to current policy. The horizon of the project is the year 2065 with an intermediate summit at 2040. The spatial scope is the Manchester area and adjacent areas where people commute from. The foresight tools being used are backcasting, success pathways, and identification drivers of change and uncertainties connected to them in order to map out possible futures. Among these futures, they want to select preferred ones that they call "success scenarios" and identify possible actions and strategies to work towards realising them. In addition, potential challenges and opportunities will be identified in connection to the scenarios. In doing so, the ambition is to link the local future perspective to the national picture of the United kingdom, and future decisions. So far, a trend that was identified is related to ageing, which poses both challenges and opportunities that the region has started to address. These can be, for example, to develop a local research focus in age-friendly design and appointing a responsible official to identify opportunities of an increase in elderly citizens (GM2040, nd; Government Office for Science, 2016).

Another region that used foresight for urban planning purposes is the region of Helsinki-Uusimaa in Finland. As a token of their efforts, the European Committee of the Regions awarded them for demonstrating great entrepreneurial foresight and an intelligent growth strategy (Helsinki-Uusima Regional Council, 2021a). Their work with foresight includes, for example, a project that ran from 2020 to 2021 where they identified three long-term scenarios for the region in 2050. The scenarios described different developments for climate change, population structures,

economy, employment, the regional structure and the social atmosphere. The scenarios were later used as material for the Regional Programme for 2022-2025 to help prepare for the future and influence its direction, both for the purpose of decision making and regional development. The region conducted the study in collaboration with a Finnish think tank (European Committee of the Regions, 2023; Helsinki-Uusima Regional Council, 2021b; Helsinki Smart Region, 2024).

These cases show that a number of factors influence the potential success of such a project. The city must not just map out a preferred future, but critically examine multiple futures in order to agree on a preferred one. In addition, there needs to be awareness that foresight does not assume the existence of one single future, but many possible futures. Involving and including a diverse group of actors is also key in order to shed light on how the city can work towards long-term visions within a short time frame, such as an electoral cycle. A wide range of stakeholders of various ages with diverse knowledge and experience is crucial, in order to ensure that all perspectives are captured but also that the result will be implemented and used in practice. Foresight must also be a systematic process, in order to bring measurable benefits. For example, by monitoring the effects of implemented foresight results (Inayatullah, 2011; Szpilko, 2020).

Urban planning has traditionally relied on classic tools for public city management, where engagement of experts is the standard (Szpilko, 2020). However, public participation in decision processes is increasingly promoted through ratification of, for example, the Aarhus Convention which the EU has adopted (Regeringen, 2005; Zhao and Butcher, 2022) or that some cities even require citizen participation by law, for example, Ontario, Canada or Victoria, Australia (Legacy, 2016). The Aarhus Convention promotes citizens' rights to contribute to decision processes regarding the environment, as well as rights to access to justice (Regeringen, 2005). Foresight brings the possibility to gather opinions and knowledge from a wider range of actors than traditionally is done, and can benefit the society more (Szpilko, 2020). When a city uses a foresight strategy, the ability of citizens and employees to work toward a desired future is enhanced which will further benefit the city in the long run (Inayatullah, 2011).

3.4 The Swedish context

Regarding the Swedish context, there are multiple examples of foresight being used. Starting in the corporate context, one example is IKEA, motivating in their 2023 Life at Home report the need to use foresight both due to the uncertain future and the possibility to move towards a wanted future (IKEA, 2023). The authors point out that even though the future is uncertain, it brings many opportunities if intentional work is done today on which direction to go. In this report, IKEA uses foresight to explore three possible future scenarios in 2030; Home on the go, Resilient communities, and A nurtured home. To develop these scenarios, four uncertainties of extremes were identified which are then reflected in the scenarios. In each scenario, the reader experiences the scenario through a persona and learns about their living situation in 2030. Another example of foresight use in Swedish companies is Volvo Group (Xu, 2024). In a news post on the Volvo Group website from 2024, a senior foresight manager expresses how and why they use foresight. She expresses that foresight can help in setting a vision and navigate an uncertain future to accomplish this vision. Five years prior to the post, Volvo Group developed five future scenarios in the area connectivity-empowered transportation landscape 2035/2040. At the time of the post, they have seen proof of multiple aspects of the scenarios in reality.

In addition to the corporate context, the Swedish agency for innovation, Vinnova, express the importance of working with foresight due to the fast societal development and large challenges that it brings (Vinnova, 2025). Vinnova has financed research projects which focused specifically

on foresight, such as "Residens framsyn" during 2023/2024, granting funding to municipalities and regions to have foresight competence in-house (Vinnova, ndc). In addition, Vinnova is also involved in the innovation programme Impact innovation together with the Swedish energy agency and Formas (Impact Innovation, nd). Within Impact innovation, there are five programmes with different focus areas. Two of these programmes are Water Wise Societies and ShiftSweden, focusing on water and mobility and built environment respectively. During 2024/2025 Water Wise Societies are financing projects aiming to use foresight to reach sustainable water use (Vinnova, ndb). During this period, ShiftSweden also finances projects focusing on foresight in their funding call *Framtidens Platser* (Vinnova, nda).

3.4.1 ShiftSweden and *Framtidens platser*

As a programme within the innovation programme Impact innovation, ShiftSweden aims to transition the Swedish built environment and mobility towards sustainability (ShiftSweden, nd). To accomplish this, the programme focuses on three shifts, aiming at specific areas within this transition. The shifts are:

1. From resource-intensive linear construction processes to sustainable and value-creating circular business models.

2. From unsustainable transportation to a new freedom reform with competitive alternatives to individual car travel.

3. From planning, developing, producing and implementing in silos to innovating by bringing the built environment and mobility into the same system.

In May of 2024, ShiftSweden opened the funding call *Framtidens platser* which aims to stimulate the use of foresight in the imagination of future societies in terms of urban planning and mobility (Vinnova, nda). In addition to this, the projects should aim to create discussion about future societies. To receive funding, the project had to meet certain requirements. It needed to address at least two out of the three ShiftSweden shifts, with one being number three focusing on integrating the built environment and mobility to one system. Furthermore, it had to include at least two actors, one of them experienced with foresight tools. In addition, the project needed to focus on a specific location within the built environment. In this funding call, 23 projects received funding and these projects are the main focus of this study. The projects will run from the end of October 2024 to the end of September 2025. Since the projects needed to focus on a specific location in the built environment, this makes the local context important. In Sweden, municipalities are often the local actors taking care of and owning streets, parking lots, side walks, and parks (Lunds kommun, 2025).

3.4.2 The local municipal context

The Swedish municipalities are run by politicians elected by the citizens (Sveriges Kommuner och Regioner, 2024). Out of these citizen elected politicians, 97% are not full-time politicians. Hence, they perform their political mission on their free time and generally have other commitments such as studies or jobs. These politicians make up the municipal council (Swedish: "Kommunfullmäktige") that makes decisions regarding the municipality. For example, they decide on the municipal budget as well as how the municipality operates.

Swedish municipalities have numerous responsibilities in connection to local planning and development. These are regulated in the Planning and Building Act (Swedish: Plan- och bygglagen or PBL) stating the terms for long-term planning in the public sector (SFS 2010:900). It reg-

ulates, for example, the obligation to have a comprehensive plan (Swedish: Översiktsplan) in place. The purpose of the plan is to determine the direction of the long-term development of the physical environment and water bodies. However, the plans are not legally binding and there is no requirement regarding the temporal scope of the planning horizon. The comprehensive plan should serve as a guiding document for decisions regarding how properties and water bodies are to be used, and where the built environment can be developed, utilized, and / or preserved (Boverket, 2024b).

Moreover, the PBL states, for example, that the municipality is obligated to consider public and individual interests, as well as the health and wellbeing of people and potential risks of events such as flooding or erosion (Boverket, 2024a). Regarding planning, they should also provide a more specific plan by having a detailed development plan (Swedish: Detaljplan) or specific plans for certain areas at a detailed level (Swedish: Områdesbestämmelser). In these types of plans, the purposes and locations of water bodies, properties, and built environment are legally binding. Apart from spatial long-term planning, Swedish municipalities are also required by the Municipal law (Kommunallagen (2017:725)) to have a long-term strategic perspective in how they use their economic resources (Stark and Heed, 2024). In other words, they are to consider the perspective of future generations by not producing a loss consecutively and use their resources responsibly.

3.5 Foresight tools

Coming back to foresight, there are numerous foresight tools that can be used to think about the future in a structured way. Multiple foresight tools are often used together in different combinations to provide insights (Copenhagen Institute for Futures Studies, 2025). Here, the output when using one tool might be used as an input when using another tool. Hence, each tool might have a different function in the foresight process. However, similar tools that have similar functions might appear with different names. Despite this, there are a few ways to structure different tools. One way of structuring these tools is with the six pillars of future studies where Inayatullah (2008) presents the pillars mapping, anticipation, timing, deepening, creating alternatives and transforming. Furthermore, United Nations Development Programme (UNDP) makes a similar division in their foresight playbook (Krishnan et al., 2022). Here, the tools are divided into the categories of Exploring the Future, Creating alternative futures, Reimagining the future, Sensemaking, Transforming the future and Future proofing strategies.

One of the most recent attempts to structure foresight tools is EU's foresight menu (European Commission, 2025). Its purpose is to help understand which tools are the most suitable for a specific goal and to provide the corresponding foresight activities. The foresight menu identifies six pillars, with a number of goals and foresight tools connected to each. The pillars are change today, change over time, assumptions and world-views, alternative futures, preferred futures, options and strategies. In table 1 an overview is provided with the six pillars and examples of what the associated goals and foresight tools could be for each of them.

Pillar	Example of goals	Foresight tools
Change today	Identify and map drivers of change, trends and narratives in the present that could impact the future	Trend analysis, Horizon scanning, Delphi, Futures triangle
Change over time	To discover and understand possible changes and developments over time and consider their impacts	Futures wheel, Three horizons, Emerging issues analysis
Assumptions and worldviews	To deepen the understanding of our images of the future by exploring worldviews and underlying assumptions	Causal layered analysis
Alternative futures	To explore, create and experience alternative future possibilities and narratives	Scenario building, Futures triangle, Experiental futures, Speculative design
Preferred futures	To identify preferred futures and develop actions in the present to move towards those futures	Backcasting, Roadmapping, Visioning
Options and strategies	To test policy options and strategies against different possible future scenarios to assess adaptability and resilience	Wind tunnelling, Stress testing

Table 1: Overview of the six pillars in the EU foresight menu, what goals they can serve and what foresight tools are associated with which pillar.

Further in this section, a summary of common foresight tools will be given, as well as some that are occurring in the projects of the funding call *Framtidens platser*. Hence, there exist more foresight tools than are presented in this thesis. In general, the tools have in common that they are designed to be used in a group of more than one person. There is no preferred order in which foresight tools should be used (Copenhagen Institute for Futures Studies, 2025). Instead, they are designed to complement each other and can be used in large-scale extensive projects or more small-scale informal purposes. In that way, the tools are adaptable and flexible to the situation in which the user wishes to utilize them. All tools can help the user prepare for different possible scenarios and be tailored to the specific needs of the situation (European Comission, Joint Research Center, 2025).

3.5.1 Horizon scanning and environmental analysis

Horizon scanning is used to identify signals of change that could potentially have large impacts in the future (Krishnan et al., 2022). These signals are the first indicators of change, an example of the future in the present, and are often weak and hard to detect. Mainly, this tool is used to collect information about changing environments that could potentially impact the actor (Government Office for Science, 2024b). In addition to this, environmental analysis is similarly used to identify factors that can impact the organisation today (Sjöblom, 2024). Horizon scanning is sometimes referred to as signal scanning, but the tools are identical (Krishnan et al., 2022).

3.5.2 Trend identification and analysis

A trend is a general tendency or direction that increases or decreases in the frequency of observation (Tõnurist and Hansson, 2020). Trend analysis is used to understand and adapt to these changes in the environment (Kohler, 2021). This tool focuses on established dynamics, in contrast to horizon scanning which is concentrating on weak signals. There is no set method for how to perform trend identification. The search can be driven by a hypothesis or more exploratory. However, trends are usually identified through data bases, literature reviews or expert workshops. They can also be selected based on their expected impact or relevance for the organisation or group using the tool.

3.5.3 Futures triangle

The Futures Triangle is a foresight tool used to construct a vision of the future while also exploring how it is shaped by the past and the present (Krishnan et al., 2022). To achieve this, three dimensions are explored, the pull of the future, the push of the present, and the weight of the past. Regarding the pull of the future, it can differ between individuals or groups that have different visions of the future. The push of the present is however, made up of current trends and drivers. The weight of the past is determined by historical events or "set" structures in society possibly inhibiting desired futures. These three forces work together and pull from three different directions, meaning that if one intensifies the others lessen.

3.5.4 Delphi

A Delphi study is a collaborative foresight tool built around collecting and iterating experts' opinions on a series of future hypotheses and propositions. The Delphi method was originally developed by RAND cooperation to forecast the effect of technology on warfare. Its objective is to obtain the most reliable opinion from a group of experts, by performing individual questioning repeatedly in rounds, while avoiding the experts speaking to each other. During rounds, responses are provided to participants while it is unknown who said what to ensure groupthink is avoided. Usually, the participants move towards consensus after a few rounds, or a high level of uncertainty becomes clear (Dalkey and Helmer, 1963; Copenhagen Institute for Futures Studies, 2025).

3.5.5 Three horizons framework

The Three Horizons Framework is a tool used to connect the present to the future, and see how the present can be impacted by emerging trends (Krishnan et al., 2022; Government Office for Science, 2024b). By starting in horizon one, the participants define the current state and what is today within the area discussed. Moving on, horizon three is investigated in the next step. Here, the participants look at the future, by looking at what is emerging today. What is seen here will be in the form of emerging trends or weak signals. In the next step, horizon two will connect the present with the future by seeing what changes in horizon three will impact what aspects in horizon one.

3.5.6 Futures wheel

The futures wheel is an approach where the consequences of an event, signal or trend are explored and identified (Government Office for Science, 2024a). The chosen focus, for example the trend, is placed in a circle creating the center. From this trend, the first-hand consequences are identified and written out in multiple circles surrounding the center. These consequences then make up a first circle around the center. Moving on, the second-hand consequences are identified and written out in a second circle surrounding the first.

3.5.7 Causal layered analysis

Causal layered analysis is a foresight tool aiming at discovering and analysing deeper dimensions of complex issues. It is based on the assumption that the way one frames a problem changes the policy solution. It can help reveal internalised assumptions and create narratives that facilitate changes. It focuses on understanding underlying factors influencing change by looking at four different levels of reality (some argue that it can be simplified to three levels). The first level is observable, quantitative trends and day-to-day realities. The second level is concerned with social causes including cultural, economic, political and historical factors (e.g. rising birthrates). The third level, is concerned with deeper structures and the world-view that supports it (e.g. lack of women's power or population growth). The fourth and last layer is the level of the deepest mindsets and values that shape our world-views and perceptions. This could be myths or unconscious dimensions of the problem (Inayatullah, 1998; Copenhagen Institute for Futures Studies, 2025).

3.5.8 Scenario planning

Scenario planning is often used by actors to prepare for different alternative futures (Leney et al., 2004). This is done by using other foresight tools, such as trend analysis, to identify trends and drivers and then constructing multiple scenarios exploring the uncertainties of these drivers (Krishnan et al., 2022). Within scenario planning, multiple methods can be used, where a common method is the 2x2 matrix. Here, the drivers are investigated and the most uncertain and critical ones are chosen, one placed on the x-axis and the other on the y-axis. These drivers are then used to create four different scenarios, all impacted by these particular drivers. Scenario planning is also a method which is commonly used in transport and urban planning (Gall et al., 2023; Neumann et al., 2019), for example, in modelling different scenarios for traffic volumes or travel time. However, these approaches are commonly more quantitative and modelling-based than the scenario methodology associated with foresight described above.

3.5.9 Speculative design

Speculative design is a methodology used to open up the mind to new perspectives by using multiple foresight tools and portraying the results (Vinnova, 2023, 2022). It is commonly constructed in the six steps of Discover, Explore, Challenge, Develop, Experience, and Evaluate. Within these steps, other foresight tools are used, such as looking for trends and signals in the Discover step and development of scenarios in the Challenge step. To communicate these futures, the steps Develop and Experience include the portraying and sharing this portraying with others.

3.5.10 Futures bazaar

The method of Futures bazaar focuses on experiential futures and participatory design (Cuttica and Candy, 2022). With this tool, the participants brainstorm on artifacts in different futures as well as their implications. In addition to this, the participants also construct the artifacts and label them. It can be a useful tool to expand horizons, explore ideas and develop capacities for creativity and storytelling. The method consists of multiple steps: imagine and design a future in groups, explore the implications of the future, create future artifacts and set up a station, and experience the other groups' results.

3.5.11 Future forecasting cone

Among others, Voros (2017) visualises the future in the shape of a cone, known as the Futures Cone. The cone shape is smaller in the present and wider in the future, showing the larger space

of futures the further away we get from the present. Within this cone, four types of futures are often identified. These are the possible, the plausible, the probable, and the preferable. However, there are newer versions of Future Cone that include more future types, for example preposterous or projected. In addition, Voros points out that there are more futures even outside the cone by using the metaphor of a car headlight. The cone is a light which visualises the imaginable, and is darker at the edges. However, we cannot imagine what is beyond the edges, but that does not mean that there is nothing.

3.5.12 Backcasting

Backcasting is a tool that starts in the future, most often a preferred future, and connects it to the present (Copenhagen Institute for Futures Studies, 2025; Krishnan et al., 2022). This is done by identifying steps, actions and events that need to occur to achieve this preferred future backward in time to the present. In addition, by mapping out the events that need to occur, the actors needed to be involved will also be identified. With this, the organisation conducting the backcasting will be able to identify what is within their control, as well as what is not. The tool can also be used to identify steps, actions and events that could lead to an undesirable future, and thus should be avoided.

3.5.13 Wind tunneling

By using the Wind tunneling method, actors can stress test policies against multiple scenarios (Krishnan et al., 2022; Government Office for Science, 2024a). The tool is mainly used to see if the policies are robust in the alternative futures and identify if there is a need for modifications of the policies. To conduct this exercise, participants either develop scenarios beforehand or are provided with scenarios where the policies should be applied. The goal is for the actor to be more prepared for and agile in the future.

3.5.14 Visioning

Visioning is the process of developing a plan for the future - a vision. It is a participatory tool where participants gather to develop a shared image of the preferred future and then often commit to work towards it. Visioning helps shift the focus of what we expect the future to entail and rather focus on what we would like it to bring, making transformational or aspirational futures more tangible. It is a useful tool to make participants understand their aspirations for the future and foster a stronger commitment towards shaping the future in the present. There are a number of approaches to visioning. It can be done in a more analytical way, while some do it more unconstrained and experimental. Once the vision is created, it can be further analysed, for example, by stress testing it or doing backcasting (Krishnan et al., 2022; Copenhagen Institute for Futures Studies, 2025).

3.6 Foresight: benefits, drawbacks, challenges and barriers

As mentioned earlier, using foresight tools can bring benefits to organisations. However, it is not always easy to know how to use them to get the most out of the foresight process. The following section will give an overview of the existing literature on foresight. It will present benefits and drawbacks, as well as identify challenges and barriers when using foresight in different contexts. Lastly, it will present how foresight has been and can be used to get the most successful results.

3.6.1 Benefits and drawbacks of using foresight

Foresight can be considered a beneficial tool for organisations in many different ways. Firstly, it is adaptable to the particular needs of the country or organisation, regardless of the political

or cultural situation (Habegger, 2010). Once implemented, it can stimulate the creation of innovation initiatives and help challenge current innovation development, leading to a shift from dominant mental models to more beneficial mindsets for the organisation (Iden et al., 2017). By scanning broader for change than the organisation normally does, they move away from an internal focus and eventual reinforcement of only factors that may have brought success in the past (Rohrbeck and Schwarz, 2013). Therefore, the level of uncertainty can be reduced and more informed decisions can be made.

Furthermore, foresight allows the practitioner to use current trends and signals to explore what their future operating environment might look like and thus take advantage of that in their planning (Tõnurist and Hansson, 2020). These insights can be used to create more robust and high quality policies (Monteiro and Borgo, 2023). In a public policy setting, this can be done by using a foresight exercise to explore scenarios that enable interaction and communication among participants. Eventually, this type of exercise can lead to increased understanding of the visions and preferred futures of each other, helping policy makers to make more informed decisions and improve their political responsiveness (Habegger, 2010). Focusing on the future can then establish a common ground among stakeholders, by helping to enable understanding of different perspectives (Monteiro and Borgo, 2023). By doing so, foresight can enable collaboration and shifting focus from the politics to the actual problem. It has also been shown that governments that have used foresight have managed to break down current organisational silo-structures as well as increased knowledge sharing and collaboration (Tõnurist and Hansson, 2020). However, by using foresight the focus is on the future risking to neglect urgent and present issues that is in need of decision making (Tõnurist and Hansson, 2020)

It is a weakness of the foresight practice, that it is difficult for decision makers to use foresight to improve contemporary policy and show instant results (Reilly-King et al., 2024). One aspect of this, is that the phase in which results and findings from foresight processes are incorporated and acted on in public policy often gets neglected, resulting in no or minor influence over current policy making. Then, it will appear as foresight processes are conducted, but no visible change is created due to the gap between foresight processes and the policy action being conducted (Wilner and Roy, 2020).

Many foresight processes have the risk of being biased and not capturing everyone's interest. Some foresight tools, like backcasting, require a shared vision and therefore shared problem definitions and long-term goals (Eames and Egmose, 2011). As a consequence, backcasting and similar tools may pose a risk of blocking out differences in people's living experiences, particularly of marginalised and socially excluded groups. Alternative problem framings may not be visible and normatively derived views presented as the common view. In other words, foresight processes can be restricted to a limited group of e.g. experts and industry actors, posing a risk of capturing only particular interests and framings. One aspect of this, is the risk that foresight within an organisation is used for certain ends, and for example, focused on immediate priorities instead of long-term thinking (Reilly-King et al., 2024). Then the process has shifted from neutral to being biased and serving specific agendas.

Another problem with foresight is that it often lacks clarity in its objectives and purpose (Iden et al., 2017). This can be exemplified by that one study found that 75% of studied foresight programs had set clear goals (Daheim and Uerz, 2008). This points towards a lack of clarity on what foresight brings, and a lack of connection to reality. In table 2, an overview of benefits and drawbacks mentioned in this section is provided.

Benefits	Drawbacks
Adaptable to specific needs	Risk of neglecting the present
Stimulate innovation	Scarce instant results
More informed decision-making	No visible change
Prepare for the future	(Sometimes) require a shared vision
Can improve policies' robustness	Biased process
Enable collaboration	Lack of purpose
Increase knowledge-sharing	

Table 2: Table to summarise the benefits and drawbacks of working with foresight mentioned in this section.

3.6.2 Challenges and barriers of using foresight

Foresight is a concept that when used properly, can bring several possibilities and benefits to an organisation, a company, a municipality etc. However, there exist challenges and barriers to applying foresight tools in the most efficient way.

One barrier to using foresight at its full capacity is connected to short-termism and having a narrow future horizon. Especially policy foresight was examined in Finland, where it was concluded that narrow future horizons were used most frequently (1-10 years) which relied on future knowledge that was accessible in the immediate environment (Pouru-Mikkola et al., 2023). This resulted in the fact that the outer horizon of knowledge was not explored, but rather the immediate operating environment. Short-termism is a deeply embedded characteristic of policy making culture, which creates an adverse environment for foresight (Monteiro and Borgo, 2023). Adopting a short-termism mindset prevents thinking strategically beyond the short time horizon, but it also hinders foresight to be part of the culture in the organisation. Yet another aspect of short-termism is that foresight practices in corporations generally take place during a short period of time, which then is replaced with a longer period with no foresight (Hines and Gold, 2015). In doing so, an opportunity is missed to work with foresight continuously and being adaptable and open to long-term solutions (Hines and Gold, 2015). Another challenge mentioned in the literature is related to the structure and institutional arrangement. Organisations built in a sectoral structure with little knowledge, personnel, and skills shared horizontally or vertically can foster a lack of awareness of foresight work (Pouru-Mikkola et al., 2023). This is sometimes referred to as silo-thinking, where each unit within an organisation is aware of what happens in their realm of specialisation and responsibility, but not what is going on in the other (Monteiro and Borgo, 2023). This can create restricted access to resources and hinder the exchange of knowledge in foresight.

Moreover, a challenge connected to foresight use is the cognitive barriers that humans sometimes adopt. Human beings are inherently resistant to change (Slaughter, 1990). We often use simplified mental models of our environment, leading us to apply stereotypes and not see any room for novelty in the organisation. The mindset is that there is no reason to change procedures that have worked in the past and therefore the lack of mental models and cognitive barriers hinders the implementation of foresight (Mortensen et al., 2021). For example, mental silo-thinking can be a widespread concept that is hard to neglect for some. In addition, even well-constructed foresight findings can be of small relevance and use, if the organisational capacity to absorb them is poor (Volkery and Ribeiro, 2009). For example, if there is no political support for the foresight findings, they will likely not be taken into account in the policy. Likewise, a shared view on a preferred future is rare in public policy, since stakeholders often have diverging interests and priority issues in public policy (Habegger, 2010). Therefore, it can be challenging

to do a scenario exercise in a policy setting where no interests should be favoured before another.

But there are not only challenges that can occur when working with foresight. A barrier to start using foresight tools is that they might not generate benefits and increased profit in the immediate future (Rohrbeck et al., 2018; Mortensen et al., 2021). Although users may know the long-term benefits, it can be hard to convince management to invest time and effort in using foresight. Without support from stakeholders in the organisation, foresight work will not happen. Making management realize the value of seeing beyond the immediate future is key to profit of thinking about the future, and using foresight.

Moreover, it can be challenging for foresight practitioners that the impact of the work is not measurable (Mortensen et al., 2021; Reilly-King et al., 2024). This can cause a lack of confidence in the method and a lack of clarity of the value it brings. It is hard to know if an organisation benefitted from anticipating futures that did not happen at all, if it had an impact on the policy or if it was a waste of time. In table 3 a summary of the challenges and barriers identified in this section is provided.

Challenges & barriers
Short-termism
Establish long term foresight
Silo-thinking
Cognitive barriers
Resistance to change
Lack of implementation of results
Lack of support for results
Lack of shared vision
No immediate profit
No support from management
Impact is not measurable

Table 3: Table to summarise the challenges and barriers of working with foresight mentioned in this section.

3.6.3 How to use foresight to benefit from it

For organisations to use foresight in a beneficial way, some factors are pointed out as critical. The importance of pluralism and different perspectives is highlighted, emphasising the value contribution of multiple perspectives in contrast to viewing perspectives as competing views (Galvin, 2025). The process should not exclusively include governmental professionals, but also include private businesses, the academic sector, and think-tanks to broaden the perspectives included in the process (Habegger, 2010). This was proven beneficial in the cases of the United Kingdom and Singapore, using public outreach programs. Connecting to this is the importance of understanding the present to be able to have a successful foresight process (Iden et al., 2017). In addition, the process should occur in a safe space where iterative and experimental processes are supported and where feedback channels are provided (Monteiro and Borgo, 2023). However, the importance of including top management to create a bigger impact after the foresight process is concluded is also expressed (Iden et al., 2017). In connection with this, certain administrative factors are important to facilitate the process. The stakeholders involved need to be consciously selected, and there need to be incentives for them to stay in the process. Here, continuos communication among the participants is important as well as administrative support.

In addition to this, legitimacy is sought. To achieve legitimacy, it is considered important that the foresight work is well informed (Galvin, 2025). It needs to be guaranteed that the knowledge and evidence used in the process is credible (Habegger, 2010). In addition to this, a qualified facilitator is needed as well as a trusting relationship between the practitioner and the client (Iden et al., 2017). The available capabilities and skills, such as foresight expertise and the availability of relevant and tailored tools and methods are then also important (Monteiro and Borgo, 2023; Iden et al., 2017). Here, futures literacy is important and should ideally be spread across the organisation, but at least in certain teams. Futures literacy is a capacity and can be compared to reading, but instead is about the ability to explore how the present affects the future (Miller, 2007). Like reading, future literacy can be improved with practice. Another cognitive factor in the foresight process is applying innovative thinking (Iden et al., 2017).

As an additional important factor, the need for individual acceptance and understanding of the value of foresight is expressed (Heo and Seo, 2021). To gain acceptance, and thus increase the chances of successful use, education should be provided to both officials and the public. Also, processes for public participation should be in place for the foresight process to be successful. In addition to general individual support, the support from leadership and senior policy makers is crucial (Habegger, 2010).

To deal with the current issues of short-termism, it is important that there is sufficient budgetary means for foresight activities (Monteiro and Borgo, 2023). With this, it should also be both consistent and long-term. Adding to this, it is important that the processes and methods have strategic relevance to the organisation(Iden et al., 2017).

To further facilitate the use of foresight in policy making, cross-sectoral coordination is an important factor (Monteiro and Borgo, 2023). Learning from the case of the Finnish policy foresight system, it is suggested that the system needs operational models and more robust orchestration to overcome communication and alignment challenges within the organisation (Pouru-Mikkola et al., 2023). Furthermore, the need for clearly defined ownership and mandate for the practitioner of foresight is important (Monteiro and Borgo, 2023) To deal with these challenges, ecosystem mapping can be performed to identify capabilities both within and beyond the organisational borders. To complement, and to make the ownership clearer, a coordination role within the ecosystem could be appointed. To achieve cross-cutting foresight, it is important to find a balance between centralised forms of methods, and decentralised expertise within the organisation (Habegger, 2010). Furthermore, it is important to provide spaces and incentives for collaboration across borders (Monteiro and Borgo, 2023). Table 4 provides a summary of the factors mentioned in this section on how to use foresight to benefit from it.

How to benefit from foresight
Multiple perspectives
Safe space
Include stakeholders
Incentives for participants to stay
Legitimacy
Evidence-based
Qualified facilitator
Availability of foresight expertise
Adapted methods for the situation
Futures literacy
Apply innovative thinking
Individual acceptance and understanding
Public participation
Support from leadership
Budget provided for foresight
Coordination and collaboration
Define ownership
Balance in expertise of participants

Table 4: Summary of how to use foresight to benefit from it.

3.7 Summary

To summarise, this section has provided a brief history of how foresight emerged and evolved. Furthermore, leading countries and organisations were presented, followed by sections of foresight in urban planning and the Swedish context. Next, a section describing the most used foresight tools and their purposes followed. Lastly, an extensive literature review identified challenges, barriers, drawbacks, and opportunities of integrating foresight in organisations as well as advise on how to use foresight to get the most out of it.

4 Methods

The methodology of this research project consisted of three different parts. Systematic analysis of project plans, literature review and interviews. Each method contributed differently to answering the research questions, as outlined below.

4.1 Literature review

The literature review was an iterative process. The initial search for background information for the project helped inform the creation and processing of the research questions. The literature review was provided in the chapter on foresight context and tools, and partly answered the following research questions:

- 2a: "What are the benefits and drawbacks of working with foresight in local urban planning?"
- 2b: "What are the perceived challenges and barriers of working with foresight in local urban planning?"
- 3: "How can municipalities leverage foresight more successfully in their processes?"

To find the literature, databases such as Scopus, ScienceDirect, and Google Scholar were used. Some key words such as "Foresight", "Urban development", "Strategic foresight", "Benefits", "Drawbacks", "Barriers", and "Urban planning" were used, and often in combination. To structure the literature review, Excel was used. The literature was then used in connection with the results from the analysis of the project plans and the interviews to fully answer the research questions.

4.2 Systematic analysis of project plans

To find answers to research question 1a, "How do the municipalities work with foresight within their project in the ShiftSweden funding call *Framtidens platser*?", a systematic analysis of the granted projects' project plans was performed. The project plans were received directly from the ShiftSweden board or from Vinnova by request. To systematically collect data from the project plans, the following areas were searched for in each project plan and compiled in an Excel file:

- What foresight tools they are planning to use
- What problem they aim to address
- What the purpose and goals of the project are
- What actors will be actively involved

In figure 1 a map of where the 23 projects take place is provided. Note that there are not 23 points on the map, simply because several of the projects took part in the same city. See table 5 for guidance. Note also that the project *Framhall* is located in two cities.

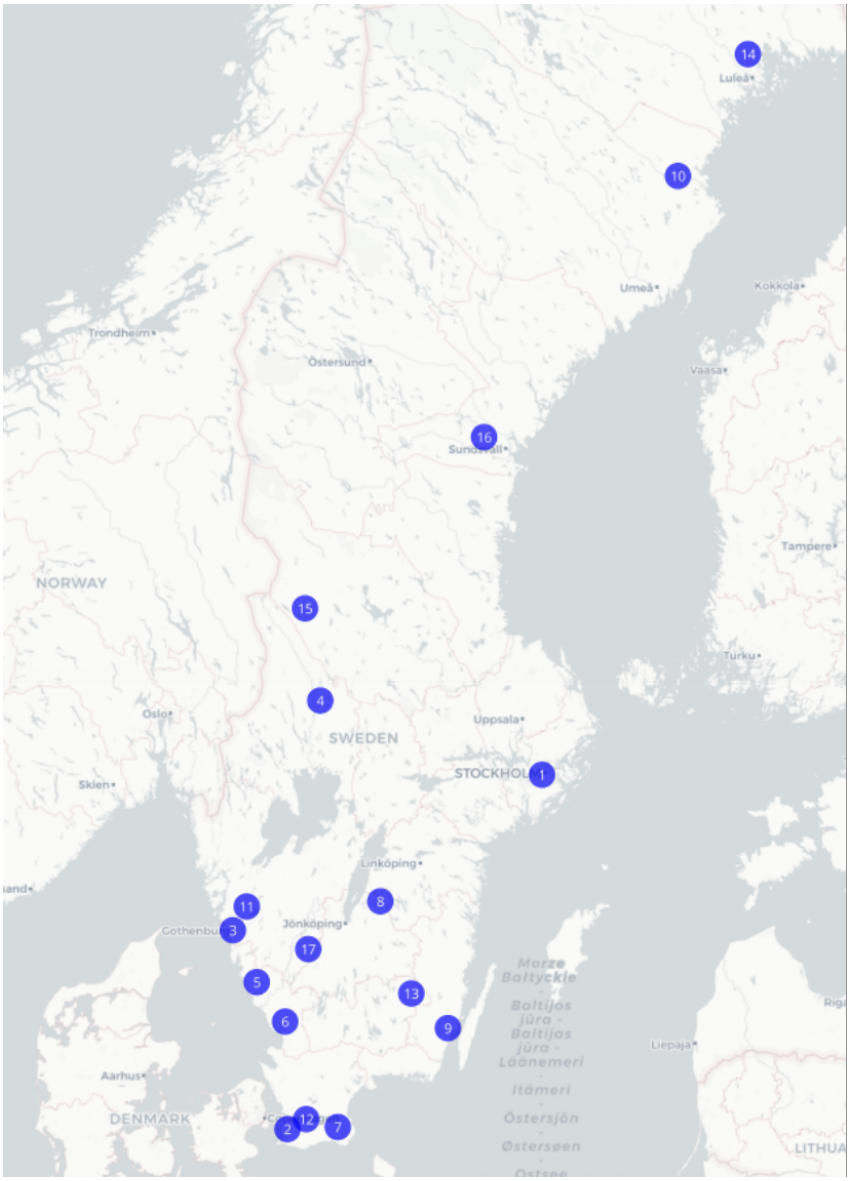

Figure 1: Overview of where the projects granted in *Framtidens platser* takes place.

Number on map	Location of project	Project name
1	Stockholm	Andrum, SUPER LINES
2	Malmö	Framtiden är här, Framtidens kvarter, Från källare till kök, Förbrukningsmönster under transformation i Varvsstaden, Gatulabba 2045
3	Göteborg	Framtidsförvaltningen, Hur vi skapade framtidens samhällskris, Värdet av välbefinnande
4	Hagfors	Bruksort 2.0
5	Varberg	FramHall
6	Halmstad	FramHall
7	Tomelilla	Framsyn genom munkmodellen
8	Tranås	Funktionen av en stadskärna
9	Kalmar	SURE Kalmar
10	Skellefteå	Vi går igen - en del av Wasteland Re:search
11	Ale	Framtidens stationsmiljöer
12	Lund	2039 - Lunds stadskärna efter den mobila Skiftersreformen
13	Uppvidinge	Framtidsbyn
14	Luleå	Re:Think Youth Lab
15	Sälen-Malung	Din resa till framtiden, din resa i framtiden
16	Sundsvall	FORMEL 1
17	Tranemo	Something in common

Table 5: Overview of locations of the projects in *Framtidens platser*.

To keep the data collection consistent, delimitations on where information was collected needed to be made. This applied to the purpose, goal, and actors. The purpose and goals of the project were retrieved solely below the heading "Purpose, goal and vision". Similarly for the actors, only the actors mentioned below the heading "Actors" were considered. When counting the total number of actors in each project the actors had to be mentioned specifically to be counted. Hence, if a project plan only stated that companies in the area would be included, this was counted as one actor. If it instead mentioned a number of specific companies, these were counted specifically and thus leading to a larger total number of actors for that project. Regarding the remaining questions, the information was collected from the entire document. To analyse the data collected, an inductive thematic analysis was performed. Hence, categories were created based on the collected data and not on previously decided themes (Braun and Clarke, 2006). This was done for the above questions separately. Once the initial categories were created, some of them were aggregated into new categories based on similarity, while the meaning was preserved.

The final categorisation resulted in the following number of categories for each area:

- Foresight tools: 22

- Tools: 17
- Problem: 9
- Purpose and goals: 9
- Actors: 18

The results were analysed and visualised in connection to these categories. For the foresight tools, an analysis was performed of the types of foresight tools that were used. The purpose of this analysis was to investigate the types of foresight tools used by the projects. This was based on the categorisation obtained from the EU foresight menu, explained in the background section 3.5. However, to make the analysis more concentrated and simplified, the six pillars of the EU foresight menu were aggregated into three new categories. The meaning was still preserved in these broader categories.

Pillars one, two, and three (Change today, Change overtime and Assumptions & worldviews) were merged into a new one called Scanning and understanding the present and future consequences. Pillar four (Alternative futures) was kept called Imagining alternative futures. Lastly, pillars five and six (Preferred futures and Option & strategies) were aggregated into a new called Action and transforming. In that way, the categorisation of foresight tools were simplified but the meaning of the pillars was still preserved. If a foresight tool was mentioned as an example in connection to a pillar in the EU foresight menu, it was placed in the corresponding new category. However, if a tool was not mentioned explicitly, an evaluation was made and the tool was placed in the most suitable category based on information on how the tool is used and for what purpose. Some foresight tools can be used in a way that they suit more than one category. In that way, they are represented in more than one category.

To deepen the analysis of the project plans, a categorisation of the projects was performed according to Sveriges kommuner och regioner (SKR) classification of Swedish municipalities (Sveriges kommuner och regioner, 2023). The SKR-groups used were A, B and C (Metropolitan and peri-metropolitan municipalities, Larger cities and municipalities near major cities, Smaller towns/cities and rural municipalities). The categorisation of the projects according to SKR was used to investigate whether there were differences in the problems or goals that municipalities in different SKR-groups plan to address in the projects. Since there were not equal amounts of projects in the SKR-categories, the number of projects stating a certain for example, problem was divided by the number of projects in that category. When a municipality was an owning party in the project, the corresponding municipality was used. In the event that no municipality was an owning party, the municipality where the project was to physically take place was selected.

4.3 Interviews

The majority of the research questions (except question 1a) were to some extent answered by semi-structured interviews. Hence, the interviewees were asked a decided set of questions, as well as additional follow-up questions based on the topics raised by the interviewee (Gill et al., 2008). The interviews were conducted digitally using Microsoft Teams and recorded and transcribed with the built-in tool. The transcriptions were also manually checked to ensure their accuracy with the recorded interview. Municipalities stated as an actor in the project plans were contacted and asked to participate in an interview. If the same municipality was involved in more than one project, they were only contacted once in connection to only one

of the projects. In total, 13 municipalities were interviewed which corresponded to 12 of the projects (since two municipalities were part of the same project) as seen in table 6. In addition to the municipal interviews, one interview with an external foresight consultant was conducted, as well as one with a representative from Vinnova. This was to receive an external perspective and broaden the view. Hence, a total of 15 interviews were conducted. The interview questions can be found in the appendix A.

Municipalities interviewed	**Project name**
Lund	2039 - Lunds stadskärna efter den mobila Skiftersreformen
Stockholm	Andrum
Hagfors	Bruksort 2.0
Halmstad	FramHall
Varberg	FramHall
Tomelilla	Framsyn genom munkmodellen
Härryda	Framtidens stationsmiljöer
Uppvidinge	Framtidsbyn
Göteborg	Framtidsförvaltningen
Tranås	Funktionen av en stadskärna
Luleå	Re:Think Youth Lab
Kalmar	SURE Kalmar
Skellefteå	Vi går igen - en del av Wasteland Re:search

Table 6: Overview of which municipalities interviews were conducted with, as well as within which projects.

To analyse the interviews, the transcriptions were first colour coded in correlation to four main interview questions. These questions and their corresponding sub-questions were:

- How do you use foresight outside of your *Framtidens platser* project?
- Why do you work with foresight?
  - What benefits do you see working with foresight?
  - What drawbacks do you see working with foresight?
  - What barriers do you see to work with foresight?
  - What challenges do you perceive when working with foresight?
- How would you like to work with foresight today if there were no limitations?
- From your perspective, what is needed or needs to be done to make it possible to work with foresight in the way you describe?

Once the interviews were coded in the above way, they were further separated into the following areas and structured in an Excel file:

- How the actor works with foresight

- Benefits of using foresight
- Drawbacks of using foresight
- Challenges when using foresight
- Barriers to using foresight
- How the actor would like to work with foresight
- What needs to be done for the actor to work with foresight in the way they wish

Within each of these areas, an inductive thematic analysis was performed. Hence, the interview material was sorted into categories based on themes found in the material itself, and not into predefined themes (Braun and Clarke, 2006). This first set of themes was very narrow, leading to a second round of thematic grouping. Due to close similarity in themes found in challenges and barriers and difficulty to determine whether the interviewee meant one or the other, these two areas were grouped into one area, "Challenges and Barriers" for the second categorisation. Similarly, the areas "How the actor would like to work with foresight" and "What needs to be done for the actor to work with foresight in that way" were grouped into the area "How the actor would like to work with foresight and what is needed" for the same reason. The second round of categorisation resulted in the following number of themes for each area:

- How the actor works with foresight: 5
- Benefits of using foresight: 4
- Drawbacks of using foresight: 6
- Challenges and Barriers: 9
- How the actor would like to work with foresight and what is needed: 12

4.4 Observation research

Due to RISE being directly involved in the two projects *Framhall* and *Framtidens stationsmiljöer*, the authors could participate in activities within these projects. The authors actively participated in workshop activities together with the participants in the projects. During these events, information was collected that complemented the project plans. The information gathered concerned which foresight tools were used in the project. If foresight tools were used in these activities that were not mentioned in the project plans, they were added to the analysis of the project plans. The following events were attended:

- **Framhall**
  - 3 webinars
  - 2 physical workshops
- **Framtidens stationsmiljöer**

- 1 physical workshop

4.5 Ethical considerations

Since this work is partially based on interviews, the ethics of these were considered. Each interviewee received information before the interviews regarding the purpose of the study, informing that participation was voluntary and could be withdrawn at any time. The interviewees received the opportunity to ask questions about their participation before agreeing to participate. After the opportunity to ask questions, verbal consent was given from the interviewees to participate.

The identities of the participants in the interviews remain anonymous. The municipalities interviewed will be mentioned in this thesis, but neither the persons' position at the municipalities nor details about their identities will be disclosed. The results from the interviews were not mentioned in combination with specific municipalities. The interviews were recorded and saved at a password-protected location.

5 Results

This section will answer the research questions and is structured by method with subsections of the research questions. Sections 5.1.1, 5.2.1, and 5.2.2 will answer research question 1 and sections 5.2.3 and 5.2.4 will answer research question 2. Research question three will be partly answered in section 5.2.5 but more extensive answers to this one will be given in the Analysis and discussion section (section 6). Below, figure 2 gives an overview of the structure of the results section.

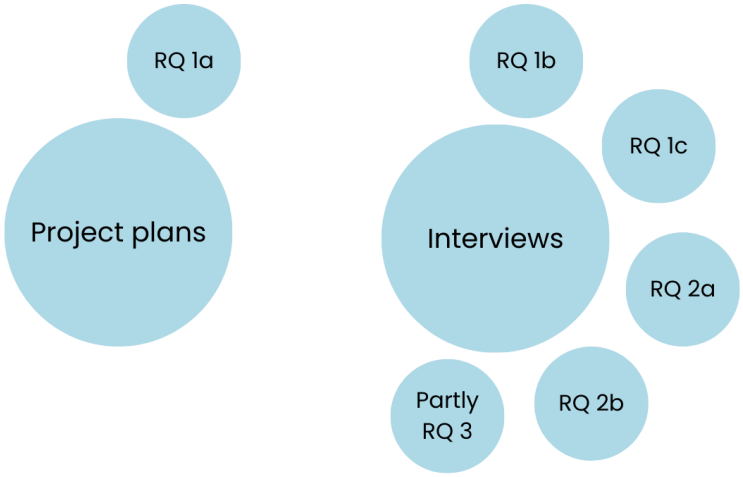

Figure 2: Overview of the structure of the result section.

5.1 Project plans

Below, results from the systematic analysis of the project plans are presented and organised by research question.

5.1.1 How do the municipalities work with foresight within their project in the ShiftSweden funding call *Framtidens platser?*

In table 7 the foresight tools used by the projects are shown and ordered by occurrence. A total of 19 different foresight tools were used. Of these, nine were used by only one project and ten occurred at least twice. The most commonly used foresight tools were some kind of scenario development as well as horizon scanning and environmental analysis with 18 projects each. Following these two, Speculative design was used in 13 of the projects. All of these three occur in the first or second category presented in table 8.

Foresight tools	Frequency
Scenarios	18
Horizon scanning and environmental analysis	18
Speculative design	13
Backcasting	5
Trend identification and analysis	4
Futures wheel	4
Prototyping	3
Visioning	3
Futures triangle	2
Design fiction	2
Three horizons framework	1
Future forecasting cone	1
Forecasting	1
Futures Bazaar	1
Experiental futures	1
Utopiatyping	1
Narratives of futurity	1
Windtunneling	1
Create visions	1

Table 7: Overview of foresight tools used in the projects.

As mentioned in the Method section 4.2, the foresight tools used by the 23 projects in *Framtidens platser* were categorised. Each tool was placed in one or more of the three categories shown in table 8. These categories are simplified from the EU foresight menu. In the first and second category, eight and ten different foresight tools occur while in the third category, only four tools appeared in the project plans. Hence, there are fewer tools in the third category and figure 3 show that fewer projects use tools in the third category as well. Foresight tools that were not used in any project but still presented in the EU foresight menu are not displayed in the table below.

Scanning and understanding the present and future consequences	**Imagine alternative futures**	**Action and transforming**
• Horizon scanning and environmental analysis • Speculative design • Backcasting • Trend identification and analysis • Futures wheel • Three horizons framework • Forecasting • Futures Bazaar	• Scenarios • Speculative design • Prototyping • Futures triangle • Design fiction • Future forecasting cone • Futures Bazaar • Experiental futures • Narratives of futurity • Create visions	• Backcasting • Visioning • Utopiatyping • Windtunneling

Table 8: Overview of foresight tools used in the projects and corresponding categorisation based on the EU foresight menu.

The categorisation of foresight tools into three categories based on the EU foresight menu in relation to foresight tools used by the projects resulted in figure 3. Tools in the category Scanning and understanding the present and future consequences occurred in 22 projects and tools belonging to Imagine alternative futures occurred in all 23 projects. However, the tools associated with Action and transforming occurred in only seven projects. In table 9 the specific projects and pillars of foresight tools they are using are shown.

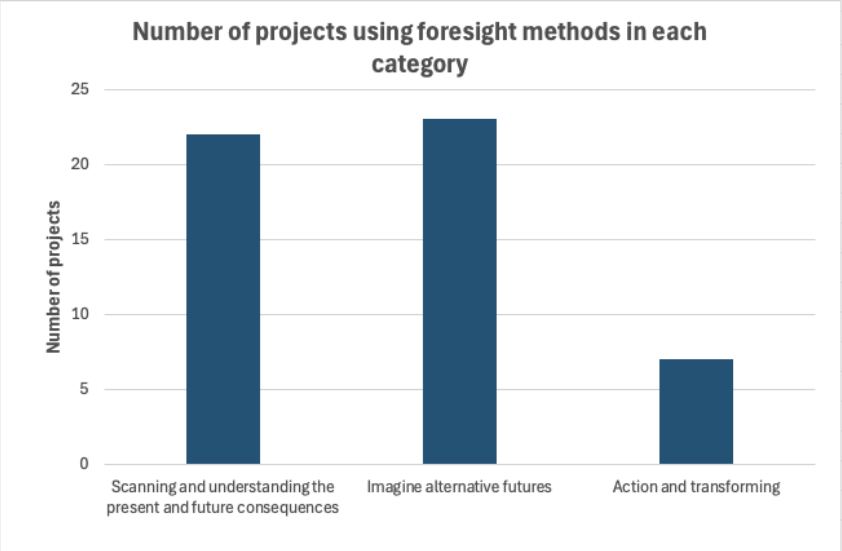

Figure 3: Overview of the number of projects using at least one tool in the three categories of foresight tools, based on the EU foresight menu.

Pillar / Project name	Scanning and understanding the present and future consequences	Imagine alternative futures	Action and transforming
2039 - Lunds stadskärna efter den mobila Skiftesreformen	■	■	
Andrum	■	■	■
Bruksort 2.0	■	■	
Din resa till framtiden, din resa i framtiden	■	■	
FORMEL 1	■	■	■
Framhall	■	■	■
Framsyn genom munkmodellen	■	■	
Framtiden är här	■	■	■
Framtidens kvarter	■	■	
Framtidens stationsmiljöer	■	■	
Framtidsbyn	■	■	
Framtidsförvaltningen	■	■	
Från källare till kök	■	■	
Funktionen av en stadskärna	■	■	■
Förbrukningsmönster under transformation i Varvstaden		■	■
Gatulabba 2045	■	■	
Hur vi skapade framtidens samhällskris	■	■	
Re:Think Youth Lab	■	■	
Something in common	■	■	
SUPER LINES	■	■	
SURE Kalmar	■	■	■
Vi går igen	■	■	
Värdet av välbefinnande	■	■	

Table 9: Overview of which projects use foresight tools within each category, based on the EU foresight menu categorisation.

The problem categories that the projects plan to address can be found in table 10. Below the table, explanations for the categories created are provided. Each project can have multiple problems they want to address, hence the total in table 10 is more than 23. The most common problems formulated were ""Environmental and climate challenges" and "Car dependency", mentioned by six projects each. Following, "Systemic and structural challenges" were mentioned by five projects.

Problem category	**Number of projects**
Environmental and climate challenges	6
Car dependency	6
Systemic and structural challenges	5
Unsafe environment	4
Value based	4
Lack of inclusion	3
Demographic change	2
Lack of communication/collaboration	2
Skills shortage	1

Table 10: Overview of the problem categories for the projects.

- Environmental and climate challenges: Climate change related issues such as increased risk of flooding.
- Car dependency: The environment is planned for cars, the presence of cars makes it unsafe for other transport means.
- Systemic and structural challenges: Barriers within systems that hinder the sustainable transition or implementation of new processes.
- Unsafe environment. Perceived feeling that the environment is unsafe. Due to, for example, lack of people in the surroundings, lack of lighting, etc.
- Value based: The values of the future people are unknown. What will be considered a good life in the future? We do not know the function of a city centre in the future or what will be considered aesthetically pleasing in the future.
- Lack of inclusion: Certain groups in society are under-represented, lack of rural representation.
- Demographic change: More people move into the city, or negative population growth in the area.
- Lack of communication/collaboration: Lack of dialogue, there is a lack of collaboration and holistic perspective in strategic planning.
- Skills shortage: A demanding competence supply leads to a scarcity of skills.

The problem categories were analysed in connection to SKR-groups. The percentage of the projects stating a specific problem within each SKR-group is presented in table 11. Hence, it is a percentage of the projects within that SKR group and not of the total number of projects. The number of projects within each SKR-group is presented in the table as n = number of

projects. Group A corresponds to metropolitan and peri-metropolitan municipalities, group B to larger cities and municipalities near major cities, and C to smaller towns/cities and rural municipalities. Since each project can have multiple problems, the percentages add up to more than 100% within each SKR-group.

Problem type | SKR-group	**A n = 11**	**B n = 7**	**C n = 6**
Environmental and climate challenges	36.4%	28.6%	16.7%
Car dependency	18.2%	28.6%	50.0%
Systemic and structural challenges	27.3%	14.3%	16.7%
Unsafe environment	18.2%	28.6%	0.0%
Value based	27.3%	0.0%	16.7%
Lack of inclusion	0.0%	42.9%	0.0%
Demographic change	0.0%	14.3%	16.7%
Lack of communication/collaboration	9.1%	14.3%	0.0%
Skills shortage	0.0%	0.0%	16.7%

Table 11: Percentage of projects with a specific problem per SKR-group. Here, n is the total number of projects within the specific SKR-group

From table 11, it is worth noting that the projects belonging to SKR-group A are not stating problems belonging to the categories at the bottom of the table: lack of inclusion, demographic change, lack of communication/collaboration or skills shortage. These categories are not that common in the other SKR-groups either, but they are present. However, at less than 20% for all categories except Lack of inclusion for SKR-group B.

Moreover, the goals of the projects can be found in the following table 12. Some projects had several goals, but at least one was detected for each project. The most common goals expressed were to create future visions in some way and to create engagement and dialogue. These were mentioned by 14 and 13 projects respectively. In addition, nine projects expressed that they wanted to develop some kind of method which could be applied and shared with other projects and organisations. Connected to this, six projects also had goals related to "Foresight skills and development". Both of these categories implicate that the foresight knowledge aims to be applied in more spaces than the granted projects. The meaning of the categories are explained below.

Goal category	**Number of projects**
Create future visions	14
Engagement and dialogue	13
Methods development and sharing	9
Equity and inclusion	7
Foresight skills and development	6
Create transition capacity	5
Community health and safety	5
Utilize already built environment	3
Create incentives for behavioural change	3

Table 12: Type of goals and frequency of the goals for the projects.

- Create future visions: The project explicitly aims to visualise the future in some way. This could be either by creating a common vision together with citizens or showing a

vision/visions to the citizens.

- Engagement and dialogue: Make efforts to create interest among several groups in society and bring them into the process, encourage them to participate.

- Methods development and sharing: Create some kind of model or way of working that can be applied in other areas of the organisation or other organisations. Should be useful beyond the actors within the project.

- Equity and inclusion: Make sure all perspectives are considered in decision making processes regarding urban planning. Putting this category in contrast to the category engagement and dialogue, this does not necessarily need the participation of several groups. It only requires that their will is considered in the decision making process in some way.

- Foresight skills and development: Develop some sort of knowledge that will be used internally. The goal could be to after the project have foresight as a strategy, or to use foresight and sometimes to integrate it in current processes.

- Create transition capacity: Create a will to contribute to the sustainability transition. Investigate how the project can contribute to creating a more sustainable society.

- Community health and safety: Create environments that are perceived as unsafe safer, shift from favour cars in urban planning, and increase public health.

- Utilize already built environment: Shift the norm of how we use already built environment, repurpose what is already built.

- Create incentives for behavioural change: Through the project stimulate people to adjust or change their behaviour. The incentives can be varied, for example economic or sustainability related.

In the following table 13, the percentage of projects that state a specific goal, are presented for each SKR-group. The number of projects within each SKR-group is stated in the table as n. Each project can have multiple goals, hence the percentages adds up to more than 100%. In the table, there are slight but no significant differences, making it hard to draw any conclusions from it.

Goal type | SKR-group	**A n = 11**	**B n = 7**	**C n = 6**
Engagement and dialogue	54.5%	42.9%	66.7%
Foresight skills and development	9.1%	42.9%	33.3%
Equity and inclusion	18.2%	42.9%	33.3%
Methods development and sharing	27.3%	57.1%	50.0%
Create transition capacity	36.4%	0.0%	16.7%
Create future visions	45.5%	71.4%	66.7%
Community health and safety	27.3%	14.3%	16.7%
Utilize already built environment	18.2%	14.3%	0.0%
Create incentives for behavioural change	18.2%	0.0%	16.7%

Table 13: Percentage of projects with a specific goal per SKR-group.

16 types of actors were identified as active parts in the projects, see table 14. Here, foresight expertise was present either in-house at some of the actors or were taken in specifically as foresight consultants. Further below, table 15 show both the total number of actors and the number of different actors in each project. For many projects, the number of different actors is close to the number of total actors, hence many projects do not include multiple actors of the same kind. The mean number of different actors is 4.61, the median is 5 and it ranges between two to nine actors per project.

Actors	**Frequency**
Municipality	15
Portraying/Design agency	15 (2 with foresight expertise)
Foresight consultant	13
Education unit	12 (1 with foresight expertise)
Company	11
Property operator	10
Non-profit organisation	8 (1 with foresight expertise)
Citizens	6
Government agency	4
Region	3
Non-profit association	3
Consultancy	2
Policymaker engagement	1
Foundation	1
Municipal utility services	1

Table 14: Overview of types of actors that are involved in the projects.

Project	Number of different actors	Number of actors
2039 - Lunds stadskärna efter den mobila Skiftersreformen	6	7
Andrum	5	5
Bruksort 2.0	5	8
Din resa till framtiden, din resa i framtiden	3	6
FORMEL 1	6	10
FramHall	7	8
Framsyn genom munkmodellen	2	5
Framtiden är här	6	18
Framtidens kvarter	4	4
Framtidens stationsmiljöer	9	15
Framtidsbyn	6	6
Framtidsförvaltning	6	6
Från källare till kök	4	4
Funktionen av en stadskärna	3	4
Förbrukningsmönster under transformation i Varvsstaden	3	4
Gatulabba 2045	2	5
Hur vi skapade framtidens samhällskris	2	3
Re:Think Youth Lab	3	3
Something in common	5	8
SUPER LINES	7	8
SURE Kalmar	5	5
Vi går igen - en del av Wasteland Re:search	3	4
Värdet av välbefinnande	4	5

Table 15: Overview of how many total and different actors are involved in each project.

5.2 Interviews

The results from the interviews are presented in this section. The interviews were conducted with 13 municipalities and two foresight experts. The foresight experts have answered the questions about municipalities from their perspectives as experts, but the results are here combined in all sections except section 5.2.1. Regarding this section, the interviews with the foresight experts are excluded. Overall, neither category can be double counted, hence if one interviewee mentions two things that after aggregation belong to the same category, the category is only counted once. Each category can then be counted only once per interview, but each interview can have multiple categories.

5.2.1 How do the municipalities work with foresight outside of their project in *Framtidens platser*?

In table 16 the degree of how much foresight is used within the municipality outside of the *Framtidens platser* projects are shown. A total of five categories were identified. The only category that can be combined with other categories is "Previously funded research project". It can apply to projects which are in all categories except "Never heard of or used foresight of any

kind". Most commonly, the municipalities where the interviewees work have used foresight of some sort without calling it foresight. This was expressed in eight of the interviews. Commonly, the interviewee mentions that they do not use foresight but used methods such as horizon scanning or scenario planning, which are interpreted as foresight tools in this thesis. Only one municipality mentioned that they have foresight knowledge in-house. The municipality having in-house foresight knowledge had one person tasked with part-time investigating and identifying emerging trends, and how they could potentially affect the municipality.

How do the municipalities use foresight	**Frequency**
Uses foresight tools without using the term foresight	8
Previously funded research project	2
Never heard of or used foresight of any kind	2
Known and slightly used	1
Have in-house foresight knowledge	1

Table 16: Categorisation and frequency of how municipalities have used foresight before start of the project in *Framtidens platser*.

- Uses foresight tools without using the term foresight: The term foresight is not known or used but foresight tools have been used without knowing they are foresight tools. Most often scenarios, horizon scanning and environmental analysis.

- Previously funded research project: The municipality has been granted previously to work with foresight in some way. This category can be combined with multiple of the other categories.

- Never heard of or used foresight of any kind: The project within *Framtidens platser* is the first encounter the municipality had with the term foresight and foresight tools.

- Known and slightly used: The municipality uses foresight in some way and knows that it is foresight they use.

- Have in-house foresight knowledge: Foresight knowledge is available at the municipality to some extent. For example, there are people responsible for environmental/external analysis.

5.2.2 How would the municipalities like to work with foresight and what is needed to do so?

Table 17 gives an overview of the identified themes regarding how the municipalities would like to work with foresight and what they believe is needed to do so. Here, the opinions of the experts are also included with the perspective of how they believe municipalities should and could work with foresight. In total, 12 themes were identified and multiple of the themes can be relevant for the same interview. The two most common ways the municipalities would like to work with foresight is through citizen engagement and through integration in the municipal work, expressed in ten and nine interviews respectively. Following this, eight interviewees mentioned the importance of support from leadership and politicians as well as the need for knowledge and purpose enhancement.

How they would like to work with foresight and what is needed	Frequency
Citizen/actor engagement, participation and inclusion	10
Integrate foresight in the municipal work	9
Support and trust from leadership/politicians	8
Knowledge and purpose enhancement	8
Share foresight experience	6
Collaboration within and between municipalities and regions	5
Depth in participants	4
Easy access to foresight competence for the municipality	4
Allocated time and resources	3
Dialogue facilitated by external actor	3
Create common vision	2
Should be more connected to reality	1

Table 17: How the municipalities would like to work with foresight and what is needed to do so.

- Citizen/actor engagement, participation and inclusion: To use foresight as a collaboration tool and include a large width of participants. It should be something that creates trust between municipalities and citizens.

- Integrate foresight in the municipal work: Foresight should be applied to local projects and there should be a method when, where, and how to use foresight.

- Support and trust from leadership/politicians: The importance of leadership both supporting and believing in the foresight process as well participating in it. Trust from politicians and leadership is sought for as well as their continuos engagement.

- Knowledge and purpose enhancement: The purpose of foresight needs to be well explained and spread both within the municipality and to the stakeholders. Also, the foresight knowledge should be spread and there should be given opportunities to try on the methods.

- Share foresight experience: Municipalities should inspire each other by sharing successful examples of foresight usage simply for the common benefit.

- Collaboration within and between municipalities and regions: Collaboration between different parts of the municipality is seen as important but also with municipalities within the same region. It is seen as beneficial to work together in larger planning projects.

- Depth in participants: The participants active in the foresight process should include people from every level of the organisation from operational to leadership.

- Easy access to foresight competence for the municipality: The foresight knowledge should be easy to access for the municipality. It could be due to in-house knowledge or procurement.

- Allocated time and resources: Time and resources should be prioritised for the municipal workers to be able to perform the foresight work. This also applies to the relevant participants and not only the people who facilitate the process.

- Dialogue facilitated by external actor: The foresight process should be facilitated by an external actor to keep it neutral.

- Create common vision: To use foresight to create some kind of common vision about the future or a belief in a good life in the future.

- Should be more connected to reality: More connection to reality is expressed as a need to be able to work with foresight. Here, it is important that for example scenarios are seen as possible, and not only imaginative.

There are different opinions on how foresight should be available to the municipality. Some express the need for in-house knowledge while some believe it is sufficient to be able to procure it. Both foresight experts and one municipality expressed that the dialogue should be facilitated by an external actor to make the process more neutral. In addition, it is seen that many interviewees want to gain more foresight knowledge as well as sharing foresight experience between municipalities.

Five interviewees express that they would like to work more in collaboration both within and between municipalities and regions. One interviewee specifically mentioned that municipalities of the same size or close to each other most likely will be affected by the same trends. Hence, they could benefit from performing certain foresight processes together and then taking the result and applying it to their specific municipality.

There are also different opinions on who should be involved in the foresight process. Some specifically express the depth in participants, hence both leadership and people working operational in combination. However, eight interviewees specifically mention the support from leadership and politicians as important. In addition, a majority of the interviewees mention the citizen/actor engagement as important making that the most common category.

5.2.3 What are the benefits and drawbacks of working with foresight in local urban planning?

In this section, the perceived benefits and drawbacks identified by the municipalities and the foresight experts are shown in table 18 and 19. For the benefits, four categories were identified with similar occurrences during the interviews ranging from eight to ten. However, the most common category expressed by ten interviewees was that foresight contributes to deeper understanding and the possibility to create more robust plans. Below the table, explanations to the categories follow.

Benefit category	**Frequency**
Deeper understanding and more robust planning	10
Possibility to explore futures, consequences and new perspectives	9
Collaboration, inclusion and engagement	9
Common vision creation and achieving	8

Table 18: Perceived benefits for a municipality of working with foresight.

- Deeper understanding and more robust planning: Makes the actors more informed about the present and the future and they can thus make better decisions today regarding the future. The decisions can also be legitimised.

- Possibility to explore futures, consequences, and new perspectives: Provides a new, more creative and explorative way of thinking which opens up to explore more futures.

- Collaboration, inclusion and engagement: Creates spaces for multiple actors to collaborate and discuss otherwise difficult questions.

- Common vision creation and achieving: Makes it possible to reach consensus both about the present and the future and to work towards it.

Regarding the drawbacks, six categories were found that range in occurrence from one to six. Here, the most common drawback was that foresight is seen as diffuse and lack connection to reality. In connection to this, five interviewees expressed that foresight might not produce a visible change, which was seen as a drawback. It was mentioned that there is a risk that expectations increase that something will change, but foresight might not produce a visible change. Moreover, one interviewee specified that foresight was experienced as diffuse and vague, therefore it could be preferred to use methods traditionally based on statistical data instead. Below in table 19, the categories are explained further.

Drawback category	**Frequency**
Foresight is diffuse and lacks connection to reality	6
Foresight might not produce a visible change	5
Time and resource intensive	4
The process can be biased	2
No standardisation or certification	1
Hard to communicate the process	1

Table 19: Perceived drawbacks for a municipality of working with foresight.

- Foresight is diffuse and lacks connection to reality: The concept of foresight itself is diffuse and difficult to connect to reality.

- Foresight might not produce a visible change: It is difficult to create a visible change, and creating scenarios might create expectations that cannot be met.

- Time and resource intensive: The processes require both time and resources that are spent on futures that may not happen.

- The process can be biased: If the participants are not diverse or if the process is not done properly, the process and result can be biased.

- No standardisation or certification: There is no certification or similar to ensure that the person facilitate/perform the foresight is legitimate.

- Hard to communicate the process: Both the result and the process are important, but the foresight process is hard to communicate to the outside.

5.2.4 What are the challenges and barriers of working with foresight in local urban planning?

Ten themes of perceived challenges and barriers were identified during the interviews. These as well as how many interviewees expressed each challenge or barrier are presented in table 20.

Most commonly, ten interviewees mentioned challenges related to the municipal structure and mission. In addition to this, lack of resources and limited foresight knowledge were mentioned by eight and seven interviewees respectively. Explanations to the categories follow below the table.

Challenges and Barriers	**Frequency**
Challenges related to the municipal structure and mission	10
Lack of resources	8
Limited foresight knowledge	7
Difficulties related to the method and the way of thinking	6
Lack of time	6
Obstacles to engage target actors	4
Lack of political support	4
Lack of understanding about how foresight contribute	4
Gap between the foresight process and reality	3

Table 20: Perceived challenges and barriers for interviewed municipalities.

- Challenges related to the municipal structure and mission: Foresight is difficult to prioritise in the current municipal system where other issues are more pressing. There are often old set ways of working and it is also often difficult to think longer than one four year term of office.

- Lack of resources: There are no people or money available to perform the foresight process.

- Limited foresight knowledge: Practical knowledge about how to use foresight is limited. But also knowledge about when foresight can be used and where to find the tools and knowledge to use it.

- Difficulties related to the method and the way of thinking: The foresight tools and processes propose a new way of thinking that many people are not used to, which can make it difficult to work with. It is hard to adapt to this non-linear and imaginatiFeeve way of thinking.

- Lack of time: There is a lack of time to perform the methods and to bring up everything that is seen as important during those occasions.

- Obstacles to engage target actors: It can be difficult to engage an diverse enough group of actors, as well as if there are any particular actors that are needed. It is also difficult to get the politicians to participate. This could be for multiple reasons, for example lack of time. But this category is from the perspective of the facilitator, hence lack of time is categorised as an obstacle to engage in this case and not simply as lack of time.

- Lack of political support: Here, this could mean that politicians do not support and budget for this kind of work or that they already have a vision. It could also mean that it is sensitive to explore futures that have not been approved by politicians.

- Lack of understanding about how foresight contributes: There is a lack of belief in what these methods can contribute to the municipality.

- Gap between the foresight process and reality: The processes focus on long time periods

and it is difficult to connect the foresight process to reality and create visible change. When something is visualised it is also easily interpreted as desired or decided which is not always the case in the foresight process.

Challenges and barriers related to knowledge in some way occur multiple times. Seven interviewees express that the actual foresight knowledge is limited, there is not enough knowledge about how and when to use foresight. One interviewee also mentions that there is not enough knowledge on where and how to find foresight guidance and information. In addition to this, four interviewees mention that there are a lack of understanding about how foresight can contribute. Moreover, six interviewees say that they have experienced difficulties with the new way of thinking that foresight implies. Interviewees mentioned that many people are used to thinking very linearly, which is different from the often iterative way of thinking during foresight processes.

5.2.5 How can municipalities leverage foresight more successfully in their processes?

This research question is answered more thoroughly in the Analysis and discussion section, but in table 21 is a brief overview of key success factors to leverage foresight more successfully. These are elaborated on in the Analysis and discussion section 6.

Key success factors	**Explanation**
Increased awareness and knowledge	Raise knowledge about foresight tools in the organisation, when it is suitable to use them and what the purpose of foresight is
Leadership involvement	Involve leadership and politicians in the foresight process and create incentives for them to stay in the process
Legitimacy of process	Ensure that the foresight process is as legitimate as possible and perceived as so

Table 21: Key success factors for implementing foresight more successfully in municipal processes.

6 Analysis and discussion

In this section, the findings of the analysis of project plans and interviews will be integrated and connected to the literature. They are presented and discussed in five main findings of the study. Then follows a discussion about the method choices and possible impacts on the results.

6.1 Unconscious use of foresight

As shown in table 16, a majority of the interviewed municipalities use foresight tools without using the term foresight (8 out of 13 interviewees). Therefore, the term foresight is not considered established in Swedish municipalities. There is a lack of awareness about what is defined as foresight tools and the actual tools within the field that can be utilized. If more people knew that it is foresight that they are using, this would give them access to more tools in the field and therefore provide an opportunity to choose more suitable tools for the task at hand. With this, they could possibly utilize foresight in a more beneficial way. Not knowing that it is foresight tools that are used could potentially impact the result of the exercise in the way that, for example, you miss opportunities to use tools in combination or sequence, and deepen the understanding. There are many foresight tools that may be unknown to the inexperienced user. Hence calling the process by "foresight" will further establish that it is tools from the foresight field that are used, and the chance of having a more beneficial foresight process increases. By using foresight methods consciously, municipalities could potentially broaden their perspective on how they plan for the future. The decisions they make will possibly be more substantiated and the planning more robust. This is also something that the municipalities point out as a benefit of foresight, as seen in table 18.

At the same time, six interviewees (40%) mentioned that they would like more sharing of foresight experience and five interviewees ask for more collaboration within and between municipalities or regions, see table 17. This could be done, according to the result, by enhance sharing of experiences from working with foresight in the municipal context. For example, successful examples and common pitfalls can be shared. This could possibly be facilitated by a platform for municipal foresight practitioners to share their knowledge and communicate problems they run into, in order to discuss possible solutions. Similar to the Finnish National Foresight Network mentioned in the background section. In that way, the full toolkit of foresight will be displayed and communicated to municipalities, contributing to them realising that it is foresight tools they are using and raising awareness of the entire toolkit. This could contribute to more beneficial foresight work in the future. This is supported by Monteiro and Borgo (2023) who points out that it is important to provide forums and incentives for collaboration across borders when working with foresight.

6.2 Lack of action taken and disconnection from reality

A majority of the projects (16 out of 23, corresponding to about 70%) only use foresight tools belonging to the first two categories in the categorisation based on the EU foresight menu. Namely, Scanning and understanding the present and future consequences and Imagine alternative futures. These two categories are characterised by explorative tools, understanding the present and imagining what can possibly happen. Simultaneously, eleven interviewees identify the drawbacks that foresight lacks connection to reality, or that it might not produce a visible change (see table 19). Moreover, three interviewees pointed out the gap between the foresight process and reality as a challenge (table 20). These drawbacks and challenges have the common theme that it is an obstacle to foresight usage that the process might not be entirely connected to reality or produce a tangible result.

However, category three of the tool categorisation provides tools to achieve connection to the present and reality. It is in the third category that actions towards achieving a future are developed, and strategies' resilience are assessed. When skipping the third category of tools, as 70% of the projects do, there is a risk that the tools where the foresight is connected to reality are missed. This was also identified as a drawback with the foresight process by Wilner and Roy (2020). They identified that the foresight methodology present an inherent risk of neglecting the phase when the findings from foresight process should be acted upon and incorporated into the policy. There is therefore a possibility that foresight could be perceived as more reality connected if tools in the third category were utilized to a greater extent. Then the theoretical becomes more connected to the present. To overcome this challenge and incentivise usage of tools in the third category as well, spreading awareness and knowledge could be a solution. This could be to raise awareness about the specific tools in that category, or spread knowledge about when it is appropriate to use the tools and how they can be used.

6.3 The importance of leadership and political support

During the interviews, 10 out of 15 (67%) mentioned that they experience challenges in connection to the municipal structure and mission in some way. In addition, five of the projects express systemic and structural challenges, such as organisational inertia, as a problem in their project plans. The municipalities are politically lead organisations, hence what they work towards needs support from the politicians. Regarding this, eight of the interviewees mentioned that leadership and politicians specifically needed to support and/or participate in the process, see table 17. This is also found in the literature by Iden et al. (2017) in the sense that leadership is important to increase the chances of creating impact, and by Habegger (2010) who states that support from leadership and policymakers is crucial. In addition, both urban planning in general, and foresight processes are long-term commitments showing results on a long time scale. If not supported by politicians, there might also be a risk of losing connection to reality as discussed in section 6.2. The importance of aligning the foresight work with stakeholder values is also expressed by Avin and Goodspeed (2020). Here, they saw that scenarios that were supported by stakeholders were more likely to result in plans. It is important that the scenarios are connected to already set goals. However, only one project within *Framtidens platser* specifically mentioned in their project plan that they were going to engage policy makers, see table 14. Not including policymakers pose the risk that the foresight work done will not create a lasting impact, which then is a possibility in most of the projects. If foresight does not produce a lasting impact, there is a risk that people perceive it as unnecessary and a waste of time and resources. By involving policy makers to a greater extent, municipalities could potentially experience less challenges in connection to the municipal structure and mission, and create a longer lasting impact.

Connecting to this, a drawback mentioned in five of the interviews was that foresight might not produce a visible change (table 19). Also, a challenge mentioned was that there is a gap between the foresight process and reality. This gap and lack of visible change could potentially be connected to the lack of political support and engagement which was expressed as a challenge during four interviews (table 20). If politicians support and are engaged in the foresight process, the chances of the foresight producing a visible change might increase, since politicians typically have power to make changes affecting citizens. For foresight, the process and participation in the process is as important as the result that comes out. By involving stakeholder directly in the exercise, the foresight process has the potential to be more connected to the work stakeholders do, and therefore has the potential to produce a visible change. Therefore, to get the most out of the process, active participation from stakeholders and politicians is important. This is in contrast to other traditional processes where politicians do not have to be directly involved but can still act on the result.

The reason for low political support or engagement can be due to multiple reasons which have been expressed. Firstly, the foresight tools might be considered too diffuse or too theoretical/abstract and are therefore hard to comprehend. As mentioned in the background section, most of the politicians in municipal councils are not full-time politicians and therefore these types of exercises can be perceived as too academic and unnecessary. In addition, foresight inherently works with exploring multiple futures, hence none of them being the decided future. There is then a fear of marketing a potential future since it can be interpreted as wanted or desired, which is not necessarily the case and might reflect badly on certain political parties. Since preferences within urban planning are sometimes connected to political ideologies (Klein et al., 2022), it is a risk that a future leans towards a political opinion. To create more support among politicians and thus more impact, it is again important to inform about the purpose of foresight and be clear about the fact that the displayed potential futures are not necessarily desired.

In addition, the literature suggests that there needs to be incentives for participants to stay in the foresight process (Iden et al., 2017). This could count for both stakeholders and other participants, such as operational employees and citizens. To ensure that diversity and different views are present throughout the process, it is important that participants stay in the process. As discussed before, a diverse group of participants is important for the foresight process to produce as non-biased results as possible.

6.4 The challenge of adapting to a new way of thinking and understanding the purpose

In 60% of the interviews conducted (9 out of 15), the possibility to explore futures, consequences and new perspectives were expressed as a benefits, see table 18. The literature also shows that one of the benefits of foresight is that it can challenge mental models and thus one can move outside the organisation and take more informed decisions (Iden et al., 2017). However, six of the interviewees express some sort of challenge related to the methods and way of thinking, see table 20. Hence, the majority consider this new way of thinking something that foresight methods can contribute with, while many also consider the very same thing a challenge. Building on the difficulties in way of thinking, Mäntysalo et al. (2023) conducted a study regarding explorative scenarios where they organised workshops. In theses workshops the participants had a much easier time relating to the scenarios based on forecasts rather than the explorative scenarios also pointing to the challenges mentioned by the interviewees. During the interviews, it was expressed that many of the current urban planning processes are very linear and often influenced by silo thinking. Using foresight to break up these mental models that are seen as a problem could potentially benefit the municipalities and contribute to more successful planning processes, by viewing the municipality as part of a broader context.

Additional challenges mentioned were lack of understanding about how foresight can contribute, mentioned by four, as well as limited foresight knowledge, mentioned by seven, as seen in table 20. In the literature, seeing and understanding the value of foresight is mentioned as an important factor for the foresight process to be successful (Heo and Seo, 2021). In addition to this, futures literacy is also important and should ideally be present across the organisation (Iden et al., 2017). This suggests that work needs to be done to enhance both the foresight knowledge and clarify the purpose of foresight usage. This was also identified by eight of the interviewees, see table 17, who asked for more foresight knowledge and purpose enhancement. This suggests that a majority of the interviewees are open to learn more about foresight. For instance, sharing of foresight experience within and between municipalities is suggested by six of the interviewees. In addition, nine of the projects express in their project plans that they

aim to develop some kind of method that can be shared and used by others. By doing this, successful examples of foresight usage can enhance both the knowledge and purpose of foresight in the municipal context.

6.5 Legitimacy of the foresight process

One interviewee mentions that it is a drawback that there exists no standardisation of the foresight process and that there is a lack of certification for foresight practitioners, see table 19. The lack of certification and standardisation can negatively impact the legitimacy of the foresight process, if it is perceived as based on no established methods. Creating legitimacy is identified as an important success factor by both Galvin (2025) and Habegger (2010) in the literature. A solution to this could be to introduce certificates or standardisation of foresight practitioners. It is also mentioned in the literature by Iden et al. (2017) that a qualified facilitator of the foresight process is needed to create legitimacy. This could be done by using an external foresight facilitator, as asked for in three of the interviews. However, out of these three, only one is a municipality and the other two are foresight experts. Therefore, this request can be a bit biased. If the foresight process is seen as legitimate, it could potentially encounter less resistance from politicians and therefore easier be applied to long-term projects which often is the case with urban planning. Four interviewees also ask for easy accessibility to foresight competence for the municipality, without specifically stating whether it should be an external or internal actor (see table 17). Out of these four, three are municipalities and one is a foresight expert.

Moreover, a drawback mentioned in the literature by Reilly-King et al. (2024) is that the foresight process can possibly be biased and serve specific agendas. This was also identified by two interviewees, see table 19. This is related to the importance of pluralism and the inclusion of multiple perspectives, identified by Galvin (2025) in the literature as a key factor for a successful foresight process. Multiple of the interviewees are also recognising the importance of diverse actors, both by including citizens but also by ensuring depth by including everyone from leadership to operation in the foresight process, see table 17. Building on this, Legacy (2016) emphasises that decisions in urban planning are very political. If these types of decisions are made without listening to the public opinion, it will possibly raise resistance in the form of other political engagements, such as activism. The risk of the foresight process being biased could potentially be smaller when including as many different actors as possible. In addition, this might be seen as extra important since it will be applied to develop public places using tax payer money, hence it is important that all perspectives are considered.

6.6 Method and limitations

There is, as always, a risk that the limitations have impacted the result of this work. For example, the sample size of 23 projects can have impacted the significance of the results. However, the results can still serve as an indication of what direction the results point towards, or bring forward some conclusions that potentially still hold for the majority of Swedish municipalities. Therefore, this study still brings value even though the sample size is small. Expanding the scope would however have brought more trust and results that could be generalised to a greater extent.

Another limitation that potentially impacts the result is that the project plans have been interpreted by the authors, without directly speaking to the owners of the projects. There is then a risk of misinterpretation that can potentially impact the result in one direction or another. Directly communicating with all of the projects, not just the ones with a municipality as an owning actor, would have decreased the risk of miscommunication or misinterpretation

occurring and the results would have been more robust. However, due to the time constraint of this work, that was not possible.

Regarding the method of the study, semi-structured interviews were carried out spanning for 30-45 minutes each, thus limiting the number of responses possible to collect. In addition, the results from the interviews were mainly derived from what the interviewee discussed in the moment with respect to the few set of questions. This could potentially have meant that the interview went down certain tracks and missed others. Other methodologies would have possibly changed the result, for example, gathering data via a survey would have made it possible to collect more answers and enabled the interviewees to have more time to think about their answers.

Both for the project plans and the interviews, thematic analyses were performed to find themes from the information collected. Hence, there were no pre-defined themes. If the analyses instead had been carried out with pre-defined themes, the results would have differed and possibly had been more concrete. However, many findings would have been missed.

In addition, the interviews were limited by the phases that the projects were in when the interviews were conducted. Many of the projects had not yet started or were in the early stages. Because of this, many of the interviewees could not fully elaborate on challenges when performing the foresight process. If the interviews had been conducted in retrospect to the projects, the interviewees most likely would have had more insights regarding the interview questions, thus making the results more comprehensive. However, this was not possible due to the time constraint of this thesis writing.

6.7 Summary

The five main findings presented are also connected to each other in many ways. Common themes reoccur in multiple of them, as well as common solutions. Knowledge and purpose enhancement were asked for during the interviews and apply to four of the above mentioned findings. As it seems, knowledge spreading, awareness raising and education about foresight can solve many of the challenges identified. The trust in foresight as a tool from both the citizen and the politicians is important in many ways and connects strongly to the legitimacy of the process. This then directly affects how successful the foresight process is seen as. This is also related to the possibility to create a visible change and connect the process to reality. If a visible change is created, trust from citizens in the process will be enhanced and politicians will be more prone to allocate time and money for foresight processes.

7 Conclusion & recommendations

This study aimed to investigate how foresight tools are used in local urban development and planning processes in Swedish municipalities. Specifically, by looking closely at the projects granted in the funding call *Framtidens platser* by ShiftSweden. In addition to this, it investigated why or why not municipalities use foresight today and how they would like to use foresight moving forward. This was done by gathering thoughts on its benefits, drawbacks, challenges and barriers. By doing 15 interviews, a literature review and a systematic analysis of the project plans, five key insights were found. Figure 4 gives a graphic representation of the main insights that will be further described in this section.

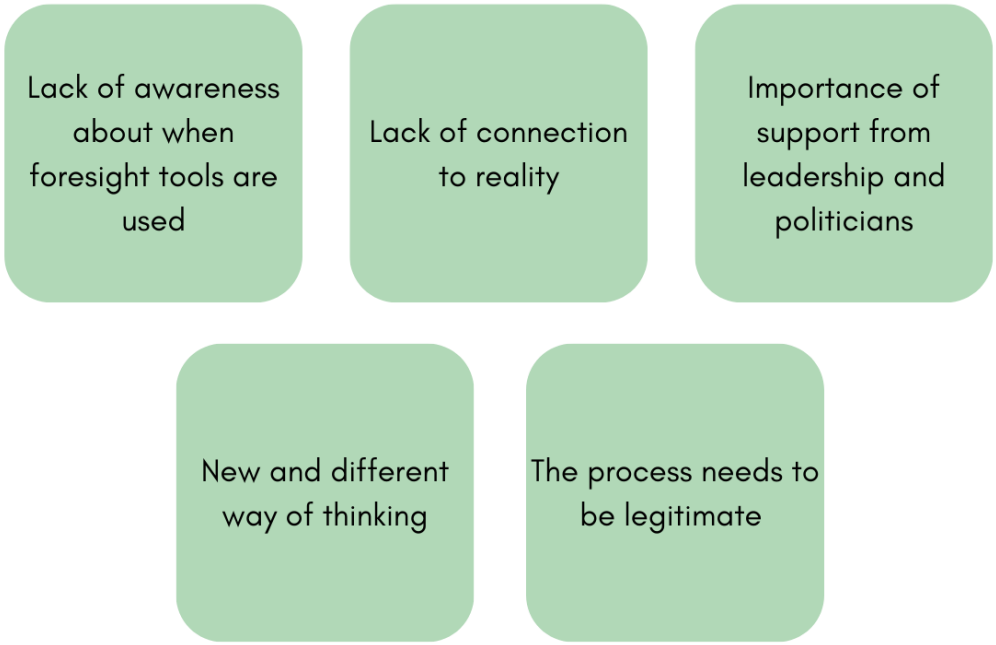

Figure 4: Graphic description of main insights in this section.

The first main insight was that there is a lack of awareness about when foresight tools are used, and that the term foresight is not established in Swedish municipalities. This implies that the full potential of foresight is not utilized, since one typically does not know that it is foresight tools that are used. If knowledge and awareness are raised, the potential to use foresight in a more successful way can be unlocked.

The second key insight was that foresight is perceived by municipalities to lack connection to reality and is often unable to produce a visible change. However, this could be due to the fact that the majority of the projects only uses foresight tools belonging to the first two categories of the categorisation based on the EU foresight menu. If more municipalities used tools in the third category, Action and transforming, they would probably experience foresight as more reality connected and produce more tangible results. However, to be able to use foresight tools belonging to the third category, the municipalities need to have knowledge about which foresight tools belong to this category as well as how to use them. By educating about the purpose of foresight in general as well as the specific tools, the municipalities have the possibility of utilizing more tools in this pillar.

The third finding identified the importance of support from leadership and politicians. The Swedish municipalities are politically led organisations, and multiple interviewees identified the support from politicians and leadership as necessary to perform foresight processes. The literature also expressed the need for leadership to be involved in order to create impact. A scenario that is anchored in a set goal and aligns with the values of leadership is more likely to become a plan. In addition, incentives for the leadership and politicians to participate need to be created since they are the ones who ultimately make decisions. Furthermore, there needs to be education on the purpose of foresight, which could contribute to being an incentive itself.

The fourth insight relates to the benefits and challenges that foresight brings with its new and different way of thinking. Both the literature and many of the interviewees identify that this is an inherent benefit of foresight. At the same time, others perceive it as a challenge and find it difficult to see how foresight can contribute. Again, this calls for additional education both regarding the purpose of foresight and how it is used.

Lastly, the fifth key insight identified the lack of standardisation and certification as a potential obstacle to the legitimacy of the foresight process. Creating legitimacy and a non biased process is pointed out as important for the foresight process to be successful in both literature and interviews. This means that when moving forward, municipalities that wish to use foresight need to be extra careful who they involve in the process and what actor is facilitating the foresight process. A diverse set of actors and stakeholders is important as well as a knowledgeable and trusted facilitator.

Based on this, it is evident that the efforts needed to overcome the current challenges for using foresight in the Swedish municipal context are interconnected. Many of them can be addressed by implementing knowledge sharing and developing actions. This can enhance the purpose of foresight, and ensure that it is used to its full potential. Therefore, we propose two concrete actions to asses the mentioned insights and make it easier for municipalities to leverage foresight in their processes. Firstly, a forum where municipalities and other actors can share experiences and discuss problems connected to foresight. This is in order to learn from each others' work with foresight and thus increase their own knowledge. In that way, the methods used and how they are used will be made more visible. Secondly, to address both the issue of legitimacy and lack of clarity in purpose, we suggest some sort of certification of foresight facilitators. This has the potential to ensure the legitimacy of the foresight process, minimize the risk of biases, and make it easier for municipalities to motivate their use of foresight. If foresight facilitators were certificated, it would be easier for the municipalities to spend time and resources on it. Who the certifying body could be has not been looked into in this thesis, but we suggest that they need to be credible and that the certification is commonly acknowledged as trustworthy.

For further research, it would be interesting to interview municipalities that are not granted in *Framtidens platser* as well. Both municipalities that use foresight and those that do not. Especially, the possibility to look for municipalities that have worked with foresight and choose to discontinue would be interesting. This would have added more insights about the experiences from working with foresight at the municipal level and deepened the understanding, but also added additional perspectives of why one might not work with foresight. Also, for further research, the projects could be evaluated in another phase, for example, when they are concluded in September 2025. This would enable a comparison of what was stated in the planning reports and what activities were actually carried out.

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A Appendix

Interview questions - Swedish version

Hur kom det sig att ni sökte finansiering för det här projektet inom Framtidens platser?

Hur länge har ni arbetat med framsyn?

Hur använder ni framsyn utanför ert projekt i Framtidens platser?

Varför arbetar ni med framsyn?
Vad upplever ni är fördelarna?
Vad är nackdelarna?
Vad upplever ni att det finns för trösklar för att börja arbeta med framsyn?
Har du några tankar om hur tröskeln kan sänkas?
Vilka utmaningar upplever ni?

Hur skulle ni vilja arbeta med framsyn idag om det inte fanns några begränsningar?

Från ditt perspektiv, vad behövs eller behöver göras för att göra det möjligt att arbeta med framsyn på sättet som du beskriver?

Interview questions - English version

How come you applied for funding for this project within Framtidens Platser?

How long have you worked with foresight?

How do you use foresight outside of your project in Framtidens Platser?

Why do you work with foresight?
What do you perceive as the benefits?
What are the disadvantages?
What do you perceive as the barriers to starting to work with foresight?
How can you lower the threshold to start working with foresight?
What challenges do you experience?

How would you like to work with foresight today if there were no limitations?

From your perspective, what is needed or needs to be done to make it possible to work with foresight in the way you describe?

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