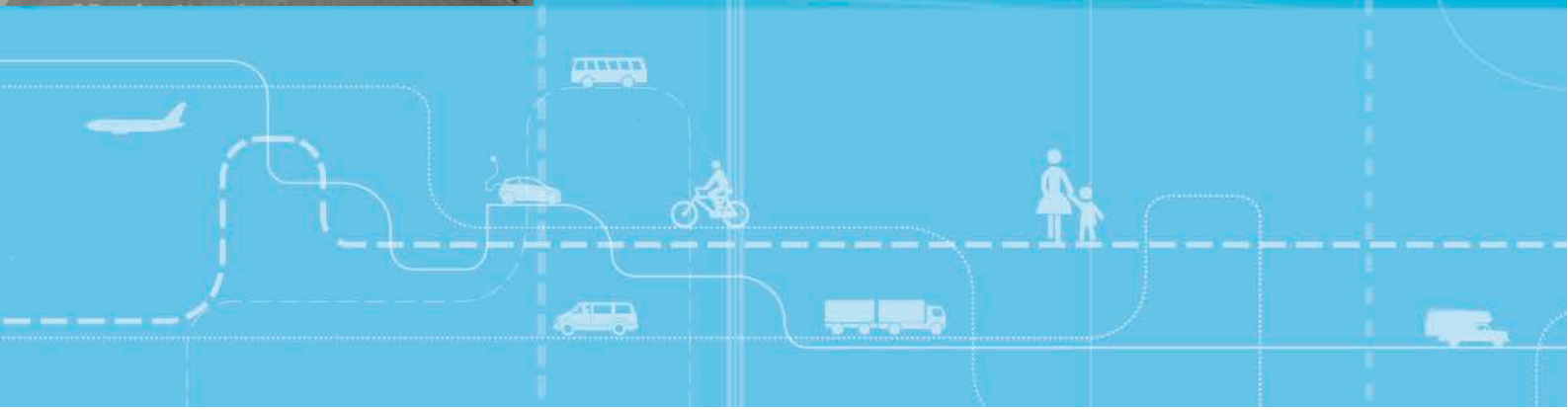
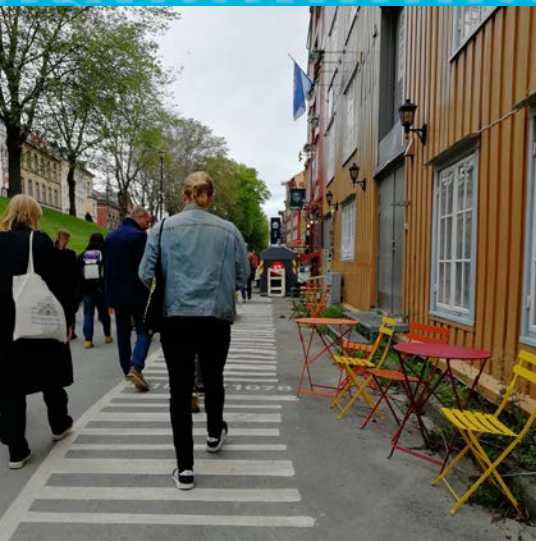


Characteristics of walking strategies affecting their usefulness and effect

Studies of walking strategies in Haugesund, Trondheim, and Ås



Characteristics of walking strategies affecting their usefulness and effect

Studies of walking strategies in Haugesund, Trondheim, and Ås

Marianne Knapskog
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Tittel:	Egenskaper ved gåstrategier som påvirker deres nytte og effekt: Undersøkelser av gåstrategier i Haugesund, Trondheim og Ås	Title:	Characteristics of walking strategies affecting their usefulness and effect: Studies of walking strategies in Haugesund, Trondheim, and Ås
Forfattere:	Marianne Knapskog Sebastian Peters Aud Tennøy	Authors:	Marianne Knapskog Sebastian Peters Aud Tennøy
Dato:	04. 2021	Date:	04. 2021
TØI-rapport:	1839A/2021	TØI Report:	1839A/2021
Sider:	21	Pages:	21
ISSN elektronisk:	2535-5104	ISSN:	2535-5104
ISBN elektronisk:	978-82-480-1909-1	ISBN Electronic:	978-82-480-1909-1
Finansieringskilder:	NFR Nordland fylkeskommune Innlandet fylkeskommune Trøndelag fylkeskommune	Financed by:	NFR Nordland county Innlandet county Trøndelag county
Prosjekt:	4843 – Walkmore	Project:	4843 – Walkmore
Prosjektleder:	Tanu Priya Uteng	Project Manager:	Tanu Priya Uteng
Kvalitetsansvarlig:	Frants Gundersen	Quality Manager:	Frants Gundersen
Fagfelt:	Byutvikling og bytransport	Research Area:	Sustainable Urban Development and Mobility
Emneord:	Gåstrategi Gåing Egenskap Nytte Effekt	Keywords:	Walking strategy Walking Characteristics Usefulness Effects

Sammendrag:

Gange som transportmiddel blir stadig mer aktuelt og viktig. Mange kommuner utarbeider egne gåstrategier for å få flere til å gå og å gjøre opplevelsen av å gå bedre. I denne rapporten har vi undersøkt hvilke egenskaper ved gåstrategier som påvirker om de blir gode og virkningsfulle verktøy i kommunal planlegging. Anbefalinger til byer som skal utarbeide gåstrategier kan oppsummeres som: Gåstrategien bør ha en langsiktig og helhetlig strategisk del og en mer kortsiktig og konkret tiltaksplan som revideres ofte; Kommunen bør lage gåstrategien selv; Gåstrategien bør forankres bredt; Involver flere avdelinger i kommunene og andre relevante aktører i utarbeiding av gåstrategiene; Medvirking med befolkningen er viktig - barnetråkk og kartfesting av data og tiltak kan bidra til engasjement; Kampanjer som uansett gjennomføres bør inkluderes som del av gåstrategien.

Summary:

Walking as a means of transport is becoming more relevant and important. Many municipalities develop their own walking strategies to get more people walking and to improve the experience of walking. In this report, we have examined what characteristics of walking strategies affect whether they become effective tools in municipal planning. Recommendations for developing walking strategies can be summarized as: The walking strategy should have a long-term and holistic strategic part and a more short-term and concrete action plan that is revised frequently; The municipality should make the walking strategy itself; The walking strategy should be broadly anchored; Involve multiple municipal departments and other relevant actors in the preparation of the walking strategies; Participation from the population is important – mapping of where children walk and mapping of data and planned interventions are tools to engage; relevant Campaigns that are conducted in other arenas should be included as part of the walking strategy.

Language of report: English

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Preface

Walking as a means of transport is playing an increasingly important role in discussions about urban development and urban transport. In 2012, the Norwegian Public Roads Administration published a national walking strategy with two main objectives: to make walking attractive for everyone, and to make more people walk more. Increased walking shares in everyday travels and having more people walk more can for example help to reduce car use, traffic volumes and emissions, improve public health, make cities more pleasant and vibrant, increase social interaction and strengthen the competitiveness of public transport.

This report has been prepared as part of the research project WALKMORE, which aims to develop knowledge about how to plan and develop small Norwegian cities in ways that help to improve the experience of walking and to make more people walk more. As part of this, we have examined what characteristics of walking strategies affect whether they become useful and effective tools in municipal planning. In an earlier project, we did not find any existing systematic investigations of walking strategies. We have therefore decided to publish our findings so that others can benefit from our work.

The study was carried out by Sebastian Peters, NMBU and Marianne Knapskog and Aud Tennøy, TØI. We would like to thank everyone who participated in the research interviews.

This report was first published in Norwegian in April 2021. It was later translated to English and published in this language in January 2024.

Oslo, April 2021

Transportøkonomisk institutt

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Summary

Characteristics of walking strategies affecting their usefulness and effect

Studies of walking strategies in Haugesund, Trondheim, and Ås

TOI rapport 1839A/2021

Authors: Marianne Knapskog, Sebastian Peters, Aud Tennøy

Oslo 2021 21 pages

Walking as a means of transport is rapidly becoming more relevant and important. Many municipalities develop their own walking strategies to get more people walking and to improve the experience of walking. We have examined what characteristics of walking strategies affect whether they become good and effective tools in municipal planning. Recommendations for cities planning to develop walking strategies can be summarized as: The walking strategy should consist of a long-term and holistic strategic part and a short-term and specific action plan that is revised frequently; Municipalities should develop their walking strategy themselves; The walking strategy should be broadly anchored; Multiple municipal departments and other relevant actors should be involved in the preparation of the walking strategy; Participation from the population is important – mapping of where children walk and visual presentation of data and planned interventions in maps are important tools to create involvement; Campaigns that are conducted in other arenas should be included as part of the walking strategy.

Introduction

Walking as a means of transport is an important topic in discussions about urban development and urban transport. Increased walking shares in everyday travels are important to help more people to achieve targets for daily physical activity and to achieve the goal of zero growth in traffic volumes for private car use in the largest urban regions in Norway. More people walking helps to create more pleasant and vibrant streets and cities, and it can contribute to increased social interaction. In 2012, the Norwegian Public Roads Administration published a national walking strategy with two main objectives: to improve the experience of walking for everyone, and to make more people walk more. An important purpose of this was to encourage municipalities to develop their own walking strategies.

This report has been prepared as part of the research project WALKMORE, which aims to develop knowledge about how to plan and develop small Norwegian cities in ways that help to improve the experience of walking and to make more people walk more. Through the project we follow the work of three small cities in developing their own walking strategies and assist them in this. As part of this, we have examined what characteristics of walking strategies affect whether they become useful and effective tools in municipal planning. In a previous project, we found no existing systematic investigations of walking strategies. We have therefore decided to publish our findings so that others can benefit from this work.

When starting the work of developing a walking strategy, it is natural to ask what characterizes walking strategies that function as useful and effective tools in municipal planning. We understand this as the walking strategies contributing to changes and the implementation of measures that help to get more people walking, and to improving the experience of walking. Walking strategies can contribute to this directly, for example by developing action plans with measures that contribute to goal achievement, see Figure S1. Measures may include large and small physical interventions, regulatory changes, changes in

responsibilities, campaigns, better operation and maintenance, etc. Walking strategies can also contribute to goal achievement indirectly, by affecting other plans in ways that lead to a development of land use and transport systems (and other elements) that contribute to more people walking and to improved walking experiences.

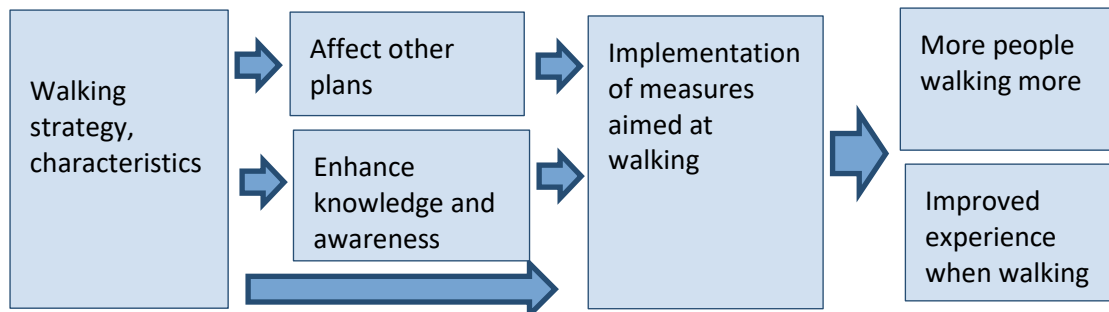


Figure S1: How walking strategies can help to make more people walk more and improve the experience of walking. Based on Hagen, Knapskog and Tennøy (2019).

Different characteristics of walking strategies can influence whether and in what way they constitute useful and efficient tools and contribute to goal achievement, such as: Defined goals, strategic approaches, how specific they are, the use of proven knowledge, how results are evaluated, the design of the strategy document, what processes have been implemented, who has participated, etc.

We have examined this through comparative case studies with the walking strategies for Haugesund, Trondheim and Ås as cases. The study was conducted using document studies and interviews with relevant professionals.

Results

The three walking strategies are quite different, both because they are adapted to the local context and because they differ with regard to their focus. The walking strategy in *Haugesund* was prepared as a background document for the municipal master plan. It consists of a map that shows important links and how these connect destinations for walking. It also has an action plan aimed at four different themes: land use, urban development, design, and changing attitudes. The walking strategy for *Trondheim* focuses on shortcuts, visibility of walking in the streetscape, image, and information design (signage, logos, messages painted on streets and pavements). It highlights the playful and positive sides of walking. Trondheim has chosen to start with ‘easy’ projects that give quick results, and then address bigger challenges later. *Ås* municipality has developed a combined cycling and walking strategy which follows the procedures in the Norwegian Planning and Building Act with respect to public participation, hearings, and decisions (as the only one of the three walking strategies). It has a long-term strategic part valid for the entire strategy period, and a short-term action plan that is revised annually in connection with the adoption of the municipal budget. This ensures an active use of the strategy, and regular updates of the action plan.

In sum, all three walking strategies have a strategic and long-term part, and Trondheim and Ås also have concrete action plans. None of the strategies plan to measure the effects of the strategy and its measures within defined deadlines. All three municipalities have chosen to make the walking strategy themselves, and they agree that this helps to build knowledge, ownership, and engagement in the municipality. However, all employed consultants for

limited tasks such as design, transport distribution calculation, and surveys. Furthermore, all leaned on the national walking strategy.

All interviewees stated to the importance of anchoring the walking strategy broadly politically and administratively in the municipality, and to include relevant actors such as the county and the Norwegian Public Roads Administration. All find it important that someone is responsible for following up the strategy and providing input about walking within the municipality in various processes. Inclusion of experts across different sectors also creates trust and raises awareness around walking.

The three cities have had different degrees of public participation when developing the strategies, but all the project managers see broad participation as important. Mapping of where children walk with the help of a digital registration tool ('barnetråkk') and similar methods, as well as the visual presentation of data and measures in maps, encourage the population to become more active and involved both in the preparation and follow-up of the strategy.

The walking strategies rarely mention existing, established campaigns to promote walking and cycling such as 'Beintøft' and 'Cycle to work', compared to how important these are in cities. Such campaigns should perhaps be given a more prominent place in the walking strategies.

The results indicate that the walking strategies have had an effect both directly through the making of action plans and the implementation of measures that can contribute to more people walking more and improved experiences when walking, and indirectly by influencing other plans in directions that contribute to this. The work with the walking strategies is also likely to contribute to increased knowledge, awareness, and commitment, which can contribute to the cities being developed in ways that achieve goals related to walking.

Recommendations

We found that different characteristics of the walking strategies have affected whether and how they contribute to goal achievement related to walking. Based on our findings from the study, recommendations for other cities to create walking strategies can be summarized as follows:

- The walking strategy should have a long-term and comprehensive strategic part and a more short-term and concrete action plan that is revised frequently.
- It is advantageous that the municipality makes the walking strategy itself, because it helps to build knowledge, ownership and engagement, while help can be consulted for limited tasks.
- It is important to anchor the walking strategy broadly, both administratively, politically and in the population.
- Involve multiple departments in the municipalities (such as city planning, childhood and youth services, and operations/maintenance) and other relevant actors (especially the regional authorities/county council and the Norwegian Public Roads Administration) in the preparation of the walking strategies.
- Public participation is important - mapping of where children walk ('barnetråkk') and similar, as well as mapping of data and measures, could cause engagement.
- Yearly campaigns should be included as part of the walking strategy.

1 Introduction

1.1 Background

Walking as a means of transport is an important topic in discussions about urban development and urban transport. Increased walking shares on everyday trips are important for more people to achieve targets for daily physical activity (Helse- og omsorgsdepartementet 2015, Vegdirektoratet 2012). In addition, more walking is important to achieve the goal of zero growth in traffic volumes for private cars in the largest urban regions in Norway, and to reduce greenhouse gas emissions. More walking helps to create more pleasant and vibrant streets and cities, and it can contribute to increased social interaction. Walking is also an important part of the public transport system. Facilitating pedestrian traffic can contribute to more people choosing public transport over private cars on daily journeys (Hillnhütter 2016). As part of an effort to make more people walk, the Norwegian Public Roads Administration in 2012 published a national walking strategy for Norway with two main objectives: to make walking attractive for everyone, and to get more people to walk more (Vegdirektoratet 2012). The Public Roads Administration has also compiled a guidance document for municipalities that develop their own walking strategies (Vegdirektoratet 2014). The objective was to encourage more municipalities to create walking strategies.

This report has been prepared as part of the research project WALKMORE, which aims to develop knowledge about how to plan and develop small Norwegian cities in ways that help to improve the experience of walking and make more people walk more. Through the project we follow the work of three small cities in developing their own walking strategies and assist them in this. As part of this, we have examined what characteristics of walking strategies affect whether they become good and effective tools in municipal planning. In a previous project, we found no systematic investigations of walking strategies (Hagen, Tennøy and Knapskog 2019). We have therefore decided to publish our findings so that others can benefit from our results.

1.2 In what ways walking strategies can have an effect

When starting to develop a walking strategy, it is natural to ask what characterizes walking strategies that function as useful and effective tools in municipal planning. We understand this as the walking strategies contributing to changes and the implementation of measures that contribute to more people walking, and to improving the experience of walking.

Walking strategies can contribute to this directly, for example through developing action plans with measures that contribute to goal achievement, see Figure S1. Measures may include large and small physical interventions in the built environment, regulatory changes, changes in responsibilities, campaigns, better operations and maintenance, etc. (see Hagen, Tennøy and Knapskog 2019 for a summary of knowledge on how the physical environment affects whether people choose to walk and the experience of walking). Walking strategies can also contribute to goal achievement indirectly, by affecting other

plans in ways that lead to a development of land use and transport systems (and other elements) that contribute to more people walking and improved walking experiences.

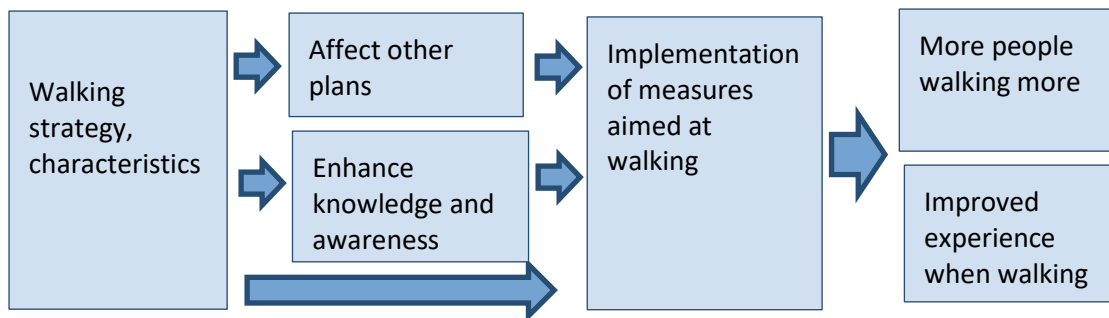


Figure 1: How walking strategies can help to make more people walk more and improve the experience of walking. Based on Hagen, Knapskog and Tennøy (2019).

Different characteristics of walking strategies can influence whether and in what way they constitute useful and efficient tools and contribute to goal achievement. This can for example be related to: what goals are defined and how these are formulated; what types of strategic approaches are described and how specific these are; to what degree the strategic approaches are supported by documented knowledge; whether it is defined how goal achievement is to be evaluated; how the actual strategy document is designed; what types of processes have been conducted during strategy development; who has participated etc. An interesting question here is whether strategies that focus exclusively on walking have a larger or smaller effect than walking strategies that are part of more comprehensive transport strategies or of coordinated strategies for both land use and transport. Here, the transition towards ordinary plans, such as municipal master plans and more detailed zoning plans, can be unclear.

1.3 Methods

As a research design for our study of how characteristics of walking strategies affect whether and in what way these strategies have an effect, we chose to use comparative case studies. We compiled an overview over all Norwegian walking strategies that were adopted up to and including May 2020, and chose the walking strategies for Haugesund, Trondheim and Ås as cases. These three strategies represent different types of walking strategies. We believe they can provide useful knowledge to small Norwegian cities that are going to develop their own walking strategies, and they are all based on the national walking strategy. The study was conducted using document studies and interviews with relevant experts/professionals in those municipalities.

Through the document studies, we mainly mapped the following areas: Motivation; Goals and measures; Knowledge base; Actors and process; Type of strategy; Type of document.

To supplement the document analysis of the walking strategies with more in-depth information, five interviews were conducted with relevant experts in the three municipalities. We contacted the municipalities with the aim of interviewing the project manager for the walking strategy (mainly about the process of creating a walking strategy) and a planner in the city planning department (mainly about how the walking strategy has been put into use and whether/in what way it has had an effect). In Haugesund and Trondheim, the project managers for the walking strategy had left the municipality, but they agreed to be interviewed, nonetheless. In these cities, we interviewed the former

project managers, as well as a planner who still worked in the municipality. In Ås, we interviewed a planner who had worked extensively with the walking strategy and followed it up afterwards.

Through the interviews, we gained more thorough insight into the following topics (see interview guide in appendix): Process and preparation of the walking strategy; Knowledge base for the strategies; Whether the walking strategy has had an effect; Characteristics of the walking strategy that affect whether it is effective; Advice for other cities.

Both the document analysis and the interviews were carried out in the autumn of 2020. Those who were interviewed were sent minutes from the interviews, which they then approved. Some had supplementary comments or corrections which were included in the minutes.

2 Walking strategy for Haugesund

2.1 About the strategy

The walking strategy for Haugesund¹ was finalized in 2014. The strategy was prepared by the climate and energy advisor for the municipality. A project manager was employed to work on the strategy, and eventually transferred to the municipality's planning department to enable closer collaboration. This strategy was one of the first in the country and has been considered a kind of pilot for walking strategies. Therefore, Haugesund municipality received funding through Transnova², which made it possible to hire a project manager to develop the strategy.

The strategy was adopted together with and as an element of the land-use element of the municipal master plan. There was no separate public participation process for the walking strategy and Haugesund municipality did not have separate consultation processes/hearings for the walking strategy either.

The municipality prepared the strategy on its own without the help of consultants. It is largely based on knowledge the municipality already had, but they used a consultant to carry out a survey which was used to supplement the knowledge base for the strategy.

The strategy has not been revised since it was completed in 2014. After the project manager left the municipality, no one has been assigned responsibility for the walking strategy. The walking strategy is still in force and is used in the administrative processing of plans and building applications.

2.2 The strategy's content and goals

The walking strategy for Haugesund has the overall aim of improving public health, creating a vibrant city centre, providing attractive walking areas, building new habits and attitudes towards walking and creating a walking culture. The walking strategy has an action plan aimed at four different thematic fields: land use, urban development, design and public attitudes. All four overarching goals are detailed and explained in the document.

Some goals and measures in the strategy are more general, while others are specific. The specific goals are mainly related to physical measures and interventions in the environment, supplemented and clarified with maps showing important connecting routes for pedestrians. This map is shown in Figure 2. The strategy is linked to important directions for the development of Haugesund, and it is in line with the land-use part of the municipal plan. The map shows important connection routes and how these connect destination points for pedestrians. The connections are colour-coded according to different purposes:

¹ <https://www.vegvesen.no/globalassets/fag/fokusomrader/miljo-og-omgivelser/gaastrategi.pdf> [available in Norwegian only]

² Transnova was a government project to promote more environmentally friendly transport solutions in Norway. In 2015, its tasks were transferred to Enova, a Norwegian government enterprise responsible for the promotion of environmentally friendly production and consumption of energy.

there is a thoroughfare, a pedestrian street, a coastal path and a route connecting locations for different outdoor activities. Some important east-west connections across the city have also been defined. Haugesund municipality has not set deadlines for the measures to be implemented.

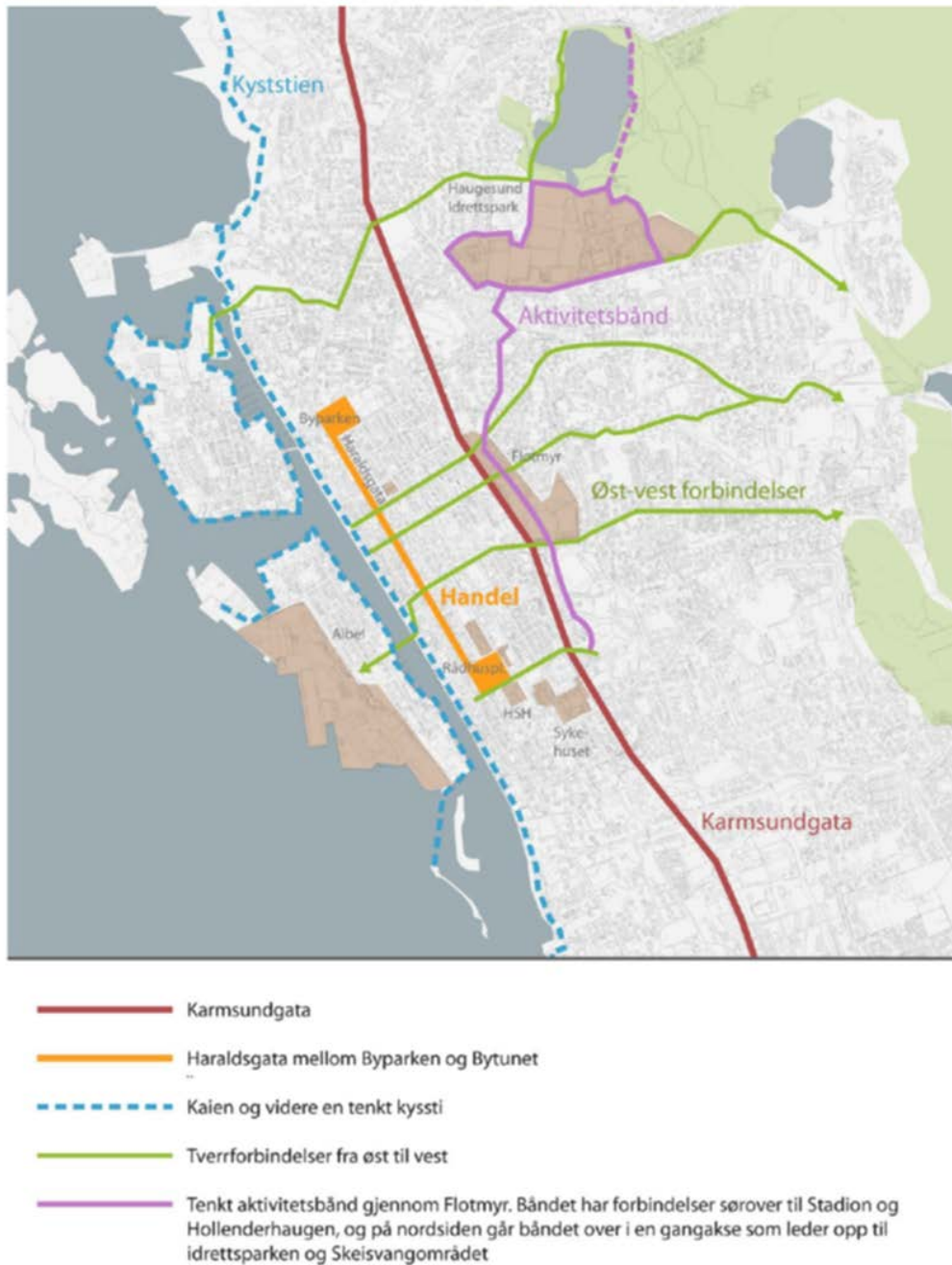


Figure 1: Strategy map Haugesund. Facsimile from the walking strategy³.

³ The legend says: Karmsundgata; Haraldsgata between Byparken (the city park) and Bytunet (the central square); Kaien (the seafront area in the city center) and an imagined coastal path in the continuation; Cross-connections from east to west; An imagined activity belt through Flotmyr. The belt has connections southward to Haugesund stadium (Haugesund Sparebank Arena) and Hollenderhaugen, while in the north the belt turns into a pedestrian axis leading to the sports grounds and the Skeisvang area.

2.3 Effects

It is difficult to identify concrete effects of the walking strategy. The strategy does not contain any concrete requirements to measure effects. The walking strategy has not been revised since it was adopted, and there has not been any reporting to local politicians or others on what has happened after the adoption of the strategy.

However, from the interviews, we do get the impression that the planners believe the walking strategy has had an effect. The most important aspect they mention is that the work on the strategy has resulted in increased awareness in the municipality, both administratively and among politicians, about the role of walking and facilitating walking. This is an important effect in the eyes of the planners. The walking strategy is also seen as a basis for other plans. The planners emphasize that plan maps in other plans follow the strategy map shown in Figure 2. In this way, the status of important walking axes has been raised through the walking strategy. The coastal path has received more attention because of the walking strategy.

Our respondents also point out that walking has been prioritized and linked more closely to town center planning. The municipality cites examples where walking has been facilitated through the development of a square aimed at improving the environment in the city centre, and that better conditions for walking have been created at the expense of accessibility by car as there has been professional and political will to remove parking spaces to create more space for pedestrians.

Campaigns that promote walking to school and to work have become part of the municipality's work with walking and are carried out every year. The effects of this have however not been mapped.

2.4 Experiences and recommendations

The walking strategy for Haugesund is probably the oldest walking strategy developed for individual municipalities in Norway. The walking strategy is closely linked to the work with the municipal master plan. It seems as if especially the strategy map has been very effective, for example by making walking more visible in the planning process.

The project manager states that the municipality would probably have done things somewhat differently today. This includes that

- the walking strategy could have been more specific with regard to measures, including deadlines for measures and reporting
- the municipality would have involved the state to a larger degree
- the municipality would have conducted a more open and formal process, for example with a separate public participation process and hearings specifically for the walking strategy (i.e., not in connection with the municipal master plan)

The project manager believes that separate processes for the walking strategy would have resulted in better anchoring of the strategy, while the planner thinks that anchoring has come over time. Both agree that, in the event of a re-do, the strategy would have been developed with a broader focus and a larger degree of participation. The existing plan, for example, does not include any urban districts other than the city centre to any meaningful extent. After the strategy was adopted, Haugesund municipality has also had positive experiences with the use of the Kids' Track digital registration tool. Ideally, the

municipality would have liked to have sufficient resources to map children's movements with the help of Kids' Track for all schools in the city, which then could have been included in the walking strategy. They would also have preferred to get more external analyses. They see that surveys like the one carried out for the municipality by a consultant are an important addition to the surveys done by themselves or which they have access to.

3 Walking strategy for Trondheim

3.1 About the strategy

The walking strategy for Trondheim⁴ is from 2016 and was formally adopted by the city council in Trondheim. The municipality was responsible for the work with the walking strategy itself, and no external consultants were used when developing the actual strategy. The work with the walking strategy was allocated to 'gågruppa' (the 'walking group'), a cross-sectoral group in Miljøpakken⁵ (, with representatives from the municipality, the Norwegian Public Roads Administration and the regional administration. There were no separate consultation processes for the walking strategy, as it was part of a larger work effort for Miljøpakken. There were however some internal consultations, including meetings with the city planning department, which is an important user of the walking strategy in further planning work.

3.2 The strategy's content and goals

The walking strategy lists the following goals:

- 30 percent of all daily trips are undertaken on foot
- To double the number of pedestrians moving in and out of the city centre "Midtbyen"
- The network of pedestrian routes is coherent, and orientation is easy
- It feels safe to walk
- Good year-round accessibility on the pedestrian routes

These goals apply to the period until 2025, but the strategy does not contain measurable indicators or similar for all goals. In addition, nine thematic areas/focus areas have been defined for which more in-depth measures are to be developed:

- Good communication and work on public attitudes
- Comprehensive network of pedestrian routes for everyone
- Short walking distances
- Dedicated network of pedestrian routes
- Easy orientation
- Safe pedestrian network
- Attractive surroundings
- Good operation and maintenance

⁴ <https://www.trondheim.kommune.no/globalassets/10-bilder-og-filer/10-byutvikling/byplankontoret/temaplaner/gastrategi-2016-16des-etter-vedtak.pdf> [Norwegian only].

⁵ Miljøpakken ('Greener Trondheim') is a partnership for sustainable transport in the Trondheim region. In co-operation, municipalities, county and state invest in new infrastructure to facilitate increased biking, walking and use of public transport. Source: <https://miljopakken.no/about>.

The goals are largely related to the network of pedestrian routes and to shortcuts which are part of this network. Accessibility analyses were carried out, and shortcuts were mapped and presented with the help of GIS. These are shown on the left-hand side in Figure 3, which provides an overview of shortcuts for pedestrians in the different city districts. The figure shows that no shortcuts were mapped in the city centre as part of the walking strategy. The map analysis was carried out to show possibilities for making the shortcuts more walkable, and to show which shortcuts need measures plus a priority list for these. The walking strategy and the measures were not formally evaluated, but there is reporting via Miljøpakken on how much money was spent and what shortcuts were upgraded. Miljøpakken has also made a point out of celebrating completed measures with a ribbon cutting ceremony, making the measures visible through signage (see sign on the right in the figure), and sending out information to the relevant city district to invite the population to use the shortcuts.

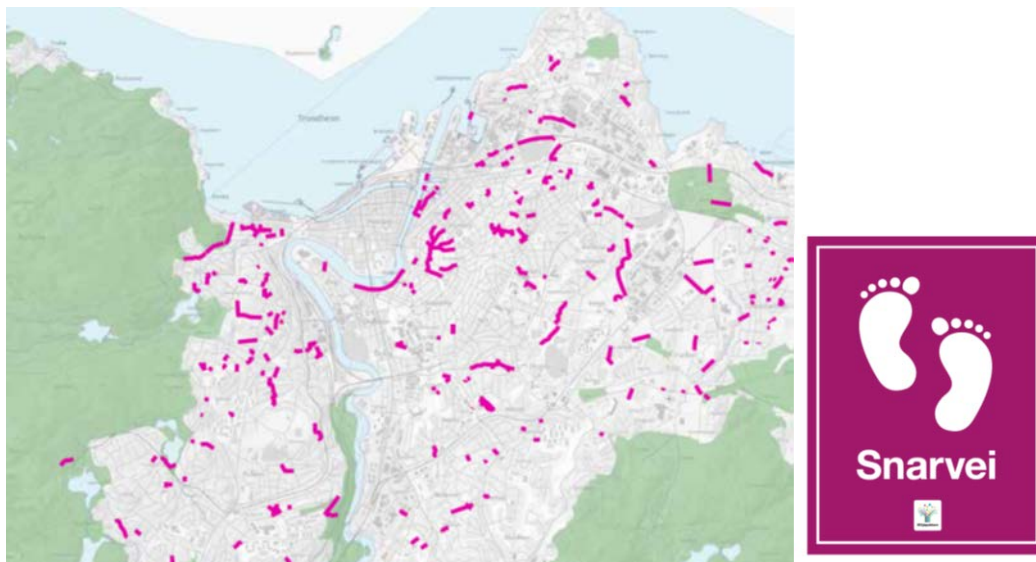


Figure 3: Mapping of shortcuts in GIS (on the left) and sign for shortcuts (on the right). Facsimile from the walking strategy.

In the actual strategy document, design and communication were emphasized. It presents a type of ‘sign’ for walking, which is also meant to be used to promote walking in the streetscape. The sign does not fulfil the official design requirements of the Norwegian Public Roads Administration for traffic signs, but the agency has approved its use to mark the shortcuts. A design consultant was used to create the overall design, professional layout and materials (templates, advertisements, signage). The walking strategy has also resulted in a number of temporary measures. Temporary changes have for example been marked with the help of paint and street furnishings. Messages (‘thanks for walking’) and time estimates for important walking routes (‘it’s 10 minutes to the city square from here’) have been painted in the streets.

Miljøpakken/the walking group have also organized special campaigns, with distribution of packed lunches or snacks to those who walk in the city and nominating a ‘pedestrian of the year’. The municipality also takes part in national campaigns for schools and workplaces.

3.3 Effects

The most important effect of the walking strategy and the strategy work is increased awareness around walking on an administrative level in the municipality, and the fact that they have been able to reach out to the population through new ways of using design and temporary measures. The walking strategy has supported a strong effort to promote pedestrian shortcuts which have been integrated into regular operation and maintenance activities in the municipality.

The strategy also functions as a basis for other municipal plans, our interviewees stated that plan maps in other plans follow the overall guidance provided by the walking strategy. The city planner we spoke to however points out that many measures for pedestrians are already being taken into account in planning work, and they are routinely included in planning practice independently of the walking strategy. It is difficult to say to what degree the walking strategy caused this or if this is an integrated part of how planners think, although the city planner believes that the walking strategy has likely contributed to raised awareness and acceptance around walking both in the population and in the administration.

The walking strategy is part of the work Miljøpakken is responsible for, and work with walking has also been an important part of the work on a new bus system, especially with regards to locating bus stops in the new network. The walking strategy is also one of the key documents that are referred to in the urban growth agreement⁶ for the Trondheim region.

3.4 Experiences and recommendations

The experience from Trondheim municipality is that cooperation between the Norwegian Public Roads Administration, the county and the municipality in a 'walking group' is positive and important for proper anchoring of a walking strategy, although this means that the link to the city planners within the municipality is weakened to a certain degree and the walking strategy tends to focus more exclusively on the network of walking routes. The city planner however believes that despite this effect, their routines to include walking and to take this into account in planning processes are fairly good. The increased emphasis on shortcuts for pedestrians has still been important in order to make people walk more. After the strategy was finalized, the city planning department in the municipality started a project related to hubs/local centres, where accessibility and shortcuts for pedestrians between residential areas and local services are a priority. Although this is not formally anchored in the walking strategy, it is an important part of the work with walking and works along the same lines as the walking strategy.

The project manager for the walking strategy views it as especially important to start with some 'easy' measures first, so that there will be some quick results which can be presented. It proved to be quite simple to upgrade existing pedestrian shortcuts. These are inexpensive measures with considerable effect. The biggest challenge with regard to this has been maintenance, and in retrospect it seems important to include the municipality's department for operational and maintenance services from the very start. In addition, the experience from Trondheim is that it is important to make the strategy visible, and to keep it alive.

⁶ Urban growth agreements are agreements between the state, regional authorities and municipalities designed to help achieve the government's zero-growth goal for car traffic in Norway's major cities. The zero-growth goal for major urban areas means that any growth in passenger transport shall be absorbed by public transport, cycling and walking.

There is a risk that a walking strategy will remain unused when nobody has (and takes) responsibility for it.

Campaigns and a focus on design have been important in order to make walking more visible and get attention for the topic in Trondheim. The inspiration for this comes from Miljøpakken, which makes a point out of marking the completion of measures and celebrating developments that are positive and new. With regards to sustainable transport, it has been important to turn the argumentation from using admonishments towards facilitating and encouraging changed behaviour. This is important for all forms of transport, including walking.

4 Cycling and walking strategy for Ås

4.1 About the strategy

The newest walking strategy we studied is the cycling and walking strategy for Ås municipality⁷ from 2018. It was adopted as a part of the municipal master plan according to the provisions in the Norwegian Planning and Building Act. The strategy for cycling and walking follows all the guidance and the statutory requirements in connection with this. Separate public participation and consultation processes were parts of developing the strategy.

Also, this strategy was developed by the municipality itself, with some input on people's travel habits by an external consultant. As in Haugesund, the municipality's environmental advisor acted as the project manager. The project received funding from Klimasats, a support scheme for municipalities and regional authorities that aim to cut greenhouse gas emissions and contribute to the transition to a low-emission society. Ås' strategy differs from the others in that it is a combined cycling and walking strategy. Like the others, the cycling and walking strategy contains long-term goals in combination with more short-term measures. The strategy in Ås also differs from the other strategies in that the short-term action plan for measures is revised every year in connection with the municipal budget process. The municipalities' environmental advisor reports on what has been done and updates the action plan every year.

4.2 The strategy's content and goals

The content in the cycling and walking strategy is divided into two parts. There is a long-term part which sets general goals for the development, and a short-term list of concrete measures. Cycling and walking are seen in context with each other, and unlike in the other cities, there is no separate walking strategy. Ås chose this solution for practical and financial reasons. The municipality could either develop a joint strategy for cycling and walking, or a strategy that only covered cycling, and they went for the joint solution. However, the project manager points out that there are clear differences between cycling and walking, and that, in the course of the process, it became evident that walking differs from cycling mainly because the needs of pedestrians are not as clear-cut as the needs of cyclists. It has therefore been easier to develop concrete measures for cyclists than for

The cycling and walking strategy followed the processes required for working with a plan in accordance with the Norwegian Planning and Building Act, and the municipality carried out various types of public participation and consultation processes. A representative for NMBU, the Norwegian University for Life Sciences in Ås, was also involved in the process. The content of the cycling and walking strategy was influenced by an open

⁷ <https://www.as.kommune.no/strategi-og-tiltaksplan-for-mer-sykling-og-gange-i-aas-kommune.6131027-385744.html>

process, including the use of the Kids' Track digital registration tool and workshops, and it is the only one of the strategies we looked at that included consultation processes and systematic public participation. As part of the public participation process, the municipalities of Ås and Ski cooperated on a GIS-based survey called 'Pedaltråkk' ('Pedal track', somewhat analogous to the Kids' Track initiative) with the help of Geodata in Oslo. They invited people through the web page of the municipality and announcements in the newspaper, and invitations were sent to parents and pupils in primary and lower secondary school. Here, the participants could draw routes directly into an internet-based map. More than 300 responses were received, which were then used as the basis for a 'heatmap', in addition to registrations from Kids' Track. In addition, workshops were conducted in Ås city centre and in Nordby, where people had the opportunity to draw infrastructure they wished for into maps.

The municipality developed the knowledge base for the strategy on its own but needed help with identifying the distribution of journeys between different means of transport. The consultancy Rambøll was engaged to solve this and developed a 'calculator' for this distribution. Otherwise, the municipality developed the cycling and walking strategy by itself. As in the other cities, this process was seen as important in order to build knowledge, and to ensure that there would be a person who could follow up the strategy after it was adopted, by providing information, participating in discussions and making sure that strategy work would continue and measures implemented.

The goals for the cycling and walking strategy in Ås municipality are as follows:

- A network of cycling and walking routes that is as coherent and interconnected as possible
- Good bicycle parking
- Land use planning that facilitates more cycling and walking
- Improved safety for cyclists and pedestrians
- Prioritized maintenance/service of walking and cycling infrastructure
- Campaigns to increase the share of pedestrians/cyclists
- Facilitating the use of bicycles to get to/from work
- Facilitating cycling and walking to/from school, kindergarten and leisure activities

To achieve these goals, an action plan was developed which is also illustrated on a map that is shown in Figure 4. The measures cover the whole municipality, but the highest number of measures is found in the city centre.

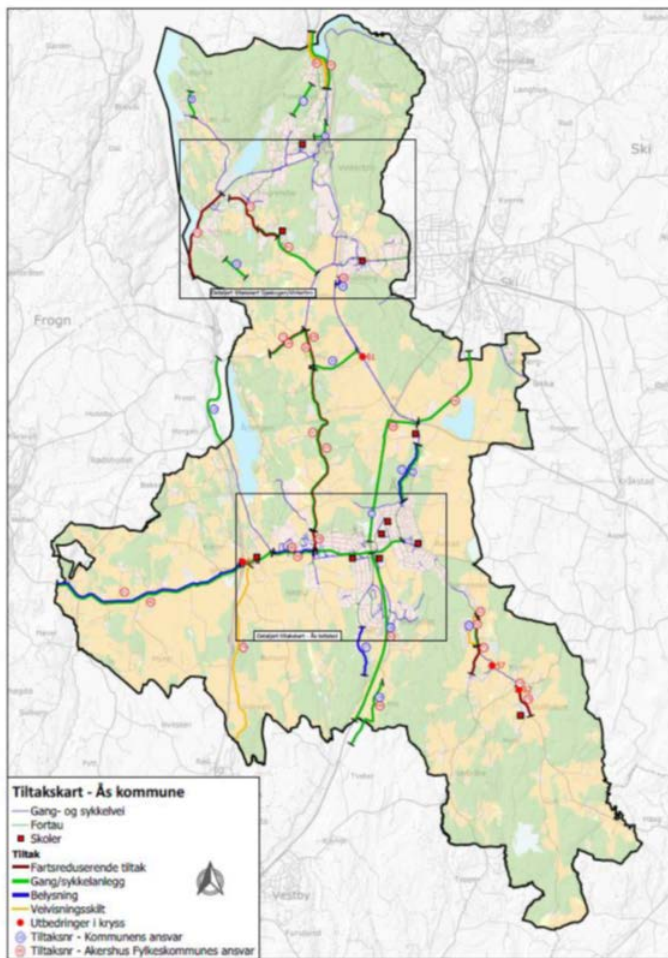


Figure 4: Map over measures in Ås municipality. Facsimile from the cycling and walking strategy⁸.

4.3 What the municipality is trying to achieve with the strategy

The strategy is meant for the long term, and it provides guidance for an action plan that is revised annually. This means that the focus of the strategy is holistic and long-term, and the individual measures contribute to goal achievement for the plan. The strategy was adopted in 2018 and is thus relatively new, but the project manager thinks that it has increased attention around the topic of walking and cycling. Both walking and cycling are included in planning work in the municipality in a different way than before. This applies to detailed area development plans in general, but especially to the land use plan for the city centre. The land use plan for the city centre and the cycling and walking strategy were developed at roughly the same time, and they have mutually influenced each other regarding their content. Due to this, there are many measures related to walking and cycling in the centre, and an increased focus on mobility in the land use plan for this area.

⁸ The legend says: **Measures – Ås municipality:** Walking and cycling route; Sidewalk; Schools. **Measures:** Speed reduction measures; Infrastructure for pedestrians/cyclists; Lighting; Signage; Repair/improvement at crossing; Nr. of measure – municipal responsibility; Nr. of measure – responsibility of the county council.

The fact that the action plan/list of measures is revised regularly means that the focus on walking and cycling is maintained over time, and that many employees who work for the municipality are familiar with the plan and include it in their work. It is also easier to get funding for measures when there is a holistic plan with long-term objectives to point to. This applies to funding both at the national and the regional level.

National campaigns such as 'beintøft' ('hardcore' – an initiative to encourage primary school pupils to walk, cycle or take public transport to school) and 'bike to work' have been conducted in Ås several years in a row. The municipality has carried out yearly satisfaction surveys in connection with the 'bike to work' campaign, where people are asked what they think about the conditions for cycling and walking in the municipality. In general, the responses are quite positive, but there is also a lot of information on what the municipality can improve when it comes to walking and cycling.

4.4 Experiences and recommendations

For Ås, the combination of a long-term strategy and an action plan with specific measures that is revised and updated regularly has been important. A long-term strategy legitimizes measures and makes it possible to get funding from support schemes like 'Klimasats' and other regional and national sources.

Close collaboration across sectors in the municipality when developing the cycling and walking strategy means that the different sectors include the strategy in their work and that the strategy is anchored more solidly. This collaboration also creates joint ownership and mutual trust within the municipality. It is, however, still important that there is one designated administrator or project manager who is specifically tasked with giving a voice to pedestrians and following up the strategy in other planning processes.

Ås municipality arranges regular internal meetings (independently of the cycling and walking strategy) for informal discussion of planning work that is important for internal coordination. Externally, public participation has both led to an increase in interest for walking and cycling, and in many ways, this works like a campaign in itself. The process has led to a raised awareness which means that the population actively takes contact with the municipality and asks for and demands solutions – the process activates the inhabitants. The regular updates to the action plan create an expectation that the municipality will do a lot. The whole participation work keeps up the pressure, for better or for worse.

One challenge that has still not been resolved are roads and paths that are not the responsibility of the municipality, and this can be difficult for the population to understand. The municipality sees a need to address issues related to roads/routes owned and serviced by the state and the county. They recommend others to include the county council as early as possible, especially to address issues related to the fact that the ownership of footpaths may change. This applies in particular to (winter)operation.

5 Discussion and recommendations

The three strategies we have examined are quite different from each other, both because they are tailored to the local context and because they differ in focus. The walking strategy in Haugesund municipality was the first municipal strategy that was developed after the national walking strategy was adopted, and it is a background document for the municipal master plan. It consists of a map showing important connections and how these link destination points for pedestrians. It also contains an action plan aimed at four different thematic areas: land use, urban development, design and attitudes. In Trondheim, the walking strategy has been created by a cross-sectoral group of people who work with walking in the various government agencies and in Miljøpakken, and it has been adopted by the city council. It is not a plan in the sense of the Norwegian Planning and Building Act, with the processes and procedures that follow from this. It focuses on shortcuts for pedestrians, increased visibility of walking in the streetscape and information design (signs, logos, messages painted on streets and pavements). Trondheim has chosen to highlight the playful and positive aspects of walking. Furthermore, they have chosen to start with simple measures, which give quick results, and then take up the bigger challenges later. Ås municipality has drawn up a joint cycling and walking strategy, which follows the procedures laid out in the Planning and Building Act with regard to public participation, consultations and decisions. The strategy in Ås consists of a long-term part that is fixed, and a short-term action plan which is revised annually in connection with the adoption of the municipal budget. This means that the strategy is used actively and that the action plan is updated regularly.

The results show that the walking strategies have had an effect both directly in the sense that action plans are developed and measures are implemented that make people walk more and improve the experience of walking, and indirectly by influencing other plans in a way that contributes to achieving the goals of the walking strategy. The work on the walking strategies also helps to increase knowledge, awareness and engagement, which can help to develop cities in a way that leads to goal achievement.

We have seen that different characteristics of the walking strategies have affected whether and in what way they contribute to goal achievement, in this case making more people walk more and improving the experience of walking. One of these characteristics is related to the process of developing the walking strategy. In the interviews, it emerges that it is important to anchor a strategy in the municipality both on a political and an administrative level, but also across different departments and sectors. An open and inclusive process is essential for the municipality to get ownership to the strategy. This is especially important when the project manager leaves or is not able to follow up for other reasons. All three municipalities have experienced that it is important to have somebody who can follow up and provides input on walking internally in the municipality in different processes. This can be related to planning, but also campaigns around mobility and (winter)maintenance. To reduce vulnerability, it is important that multiple persons in different fields and departments in the municipality feel a sense of ownership. The inclusion of experts across different sectors also creates trust and increased awareness of issues related to walking.

The three cities have had different degrees of public participation in their strategy processes, but all project managers regard participation as important. All three cities have

made use of the Kids' Track registration tool, and Haugesund says they would have liked to do this to an even greater extent. In Ås, participation from other groups than schoolchildren was organized with methods that resemble Kids' Track, and these were seen as very useful. Data that are presented in the form of maps help to activate the population, as this allows the inhabitants to follow the situation and see if something has been done to resolve the issues that they have informed about. A heatmap can make it easier to decide on measures.

For the actual design of the strategy, it seems to be important that there is a long-term component, which all three municipalities have, combined with a concrete action plan/list of measures that also includes deadlines. This is most clearly the case in the strategy for Ås, which has a list of specific measures that is revised and approved by the city council every year or every other year (in connection with the municipal budget). Ås has positive experiences with this. The project manager in Haugesund says that in hindsight, this is probably one of the things they would have done differently if they had developed their strategy now.

None of the strategies shows any ambitions to measure and audit the effect of the strategy within a defined period of time. Deadlines for measures and evaluation of effects could help to create more engagement around the walking strategy by making it easier to see whether action is being taken and if the municipality is on track regarding the existing plans. At the same time, the walking strategy will be less vulnerable when there is engagement and activity related to the strategy, and the strategy is not solely the responsibility of the project manager. This also makes it less likely that the strategy ends up in a drawer in case the project manager changes jobs.

All three cities have decided to develop the walking strategy on their own, internally in the municipality or within the framework of cooperation round a larger package of environmental measures for the city. Especially Ås and Trondheim emphasize that it is important to build knowledge. All three cities have however engaged some help for smaller tasks such as graphic design, calculating the share of people using different means of transport, and additional surveys. All of them have also relied on the walking strategy developed by the Norwegian Public Roads Administration and the knowledge base this has provided for the local discussions. Last, but not least, they point out that it is important to ensure follow-up on the strategy.

As we read it, there is little comment on the role of campaigns in the walking strategies, considering how important campaigns are in all three cities. Both local and national campaigns, which are either conducted in the form of short-term stunts or repeated annually, are seen as important. All cities take part in mobility campaigns such as 'Beintøft' for schoolchildren or 'Cycle to work' (which also includes walking) for companies and other workplaces. 'Beintøft' is administrated by Miljøagentene ('agents for the environment'), which is a membership organization for children and their families. 'Beintøft' is supported by both private actors and public actors such as the Norwegian Environmental Agency and the Ministry of Transport and Communications. In the case of 'Cycle to work', companies and the municipality pay to participate. Both of these campaigns are simple tools to change the population's travel habits. They might deserve to be given a more prominent place in the walking strategies.

Recommendations for other cities that are planning to develop walking strategies can be summed up as follows:

- The walking strategy should have a long-term and holistic strategic part and a more short-term and specific action plan that is frequently revised

- It is an advantage that the municipality develops the strategy itself, as this helps to build knowledge, ownership and engagement, while help can be hired in for specific smaller tasks
- It is important that the strategy is anchored broadly, both administratively, politically and in the population
- Involve different departments in the municipality (such as city planning, childhood and youth services, operation, and maintenance) and other relevant actors (especially the regional authorities and the Norwegian Public Roads Administration)
- Public participation is important – the use of tools such as Kids' Track and presenting data and measures in the form of maps can help to increase involvement
- Campaigns that are scheduled to be independently conducted should be included as part of the walking strategy

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Appendix 1 – Interview guide

Interview guide – walking strategies in your own municipality

Position/work tasks/role in the walking strategy

Process for and development of the walking strategy

- Why was the walking strategy designed in the way it was (with regard to focus, strategies, measures etc.)?
- Who initiated the work on the walking strategy? Experts, politicians, others?
- Who developed the walking strategy (carried out expert analyses, proposed measures, conducted additional analyses/evaluations, decided which elements should be included, etc.)? The relevant experts in the municipality (in what departments?), consultants, others?
- What kind of professional expertise is the strategy based on? (with regard to the relationship between measures/development and the goal that more people should walk more and to improve the walking experience)
- What processes were carried out when developing the strategy? Consultations?
- Was the walking strategy formally adopted, and if yes, by whom?
- Were there public participation processes where the population was invited to take part?
- What goal conflicts did you experience?
- Who has been strongly in favour of, and strongly opposed to, developing a walking strategy? What were their motives/arguments/reasons?

Whether the walking strategy has had an effect

- Are there examples for the walking strategy having had an effect, through measures, changes in other (land use) plans or a change in focus and awareness, which contributes to more walkability?
- Is it documented in any way whether and in what ways the strategy has had an effect and/or whether there are changes in walkability (share of journeys undertaken on foot, public satisfaction, other?)

Characteristics of the walking strategy that influence whether the strategy is effective

- What characteristics of the walking strategies have influenced whether and in what way they have been used and contributed to better walkability, either directly or indirectly?
 - Goals/motivation, strategic/concrete, measures that are proposed, knowledge the strategy is based on, etc.
 - Design of the strategy document/report, illustrations etc.
 - Who has developed the strategy, ownership, degree of commitment, formal decision/adoption, etc.
 - Process leading up to the strategy, promotion once the strategy was completed, political commitment/involvement, etc.

- Are there other important explanations why the walking strategies have had/are going to have an effect – or not? (in the way that the strategies and/or we define the goals)
- Who are the most important supporters and opponents of the walking strategy and the measures to facilitate more walking? What role does this play? How do you handle this?

Recommendations for other cities

- Based on your experience, what recommendations/advice would you give to other cities that are planning to develop their first walking strategy?

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