Sustainable mobility in the Sustainable City – a study of 11 large municipalities in Sweden

Final Report. Project 15-549

Author: Paul Fenton

Division of Environmental Technology & Management, Linköping University, 58183 Linköping, Sweden. Tel: +46 13 285620, Fax: +46 13 281101, Email: paul.fenton@liu.se

Summary

The report presents findings from a qualitative study of strategy and policy processes for sustainable mobility and sustainable transport in eleven large municipalities in Sweden. The findings are presented thematically and with reference to interviews in each of the municipalities. The main conclusions of the report are that organisational design and the extent to which external stakeholders are involved in municipal processes are important influences on outcomes; political will and the presence of committed individuals is vitally important; and that municipalities are hamstrung by ineffective national planning processes.

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In addition, thank you to the many individuals who have contributed directly or indirectly to this study, including Agnes Rönnblom, Prosper Chipato, Tanaka Mukoko, Jenny Ohlsson Orell, Karolin Ring, and Tove Nordberg. In particular, I wish to thank the interviewees for their time and insightful contributions to this report. I hope you find the results interesting and useful.
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1. Introduction

“We can say as an introduction that... municipalities are very complex organisations with very many different departments, there are often political dimensions when we work with the public, and so it’s not always easy to describe our work in a well-structured way. So that which you take with you (from this interview) may not be really exact or complete or clear, but hopefully I can offer you insights into how we work in different ways... although it’s hard to describe in a really simple and clear way exactly how. And it changes a little with time, and it depends a little on which persons are involved, and what kind of politicians are in charge obviously influences how we work... but I hope that you gain more insights into how we work”.

Respondent from Lund

The objectives of this study are broadly addressed in the quote above. Municipalities are complex organisations and the precise structure of a municipal organisation is, like the territory it administers and operates in, varies according to the local context. This study aims to provide insights into how so-called “larger cities” in Sweden – that is, municipalities with populations of approximately 100,000-250,000 located outside of larger agglomerations – work to develop strategies and policies to promote sustainable mobility and sustainable transport.

The report presents this information thematically, based on the analysis of interviews with municipal representatives in 11 municipalities. Alternative accounts, presenting some of the municipalities featured in this study from a case study perspective, are offered by for example Holm, 2016¹. The findings of this study should thus be interpreted as indicative, as the best attempt of the author to present an overview of rather complex material sorted, as far as possible, by themes rather than location. Many of these themes may appear unsurprising, and many overlap with other themes. However, the report hopes to illustrate some intriguing perspectives which emerge from the study.

¹ Fredrik Holm (2016) Hållbar mobilitet från Umeå till Malmö, Stockholm: Gröna Bilister. Fredrik and I discussed our projects during a meeting at Transportforum 2016. There are points of intersection between the studies, yet also significant differences – not least that, where Fredrik’s book presents cases, my study presents findings thematically. Nevertheless, I believe the studies complement each other. Additional reading relevant to this study includes scientific studies by authors such as Mattias Hjerpe, Robert Hrelja, Erik Hysing, Karolina Isaksson, and Sofie Storbjörk. A good overview of relevant literature is provided in Paul Fenton (2016) National infrastructure, small towns and sustainable mobility – experiences from policy and strategy in two Swedish municipalities. Accepted for publication in Environmental Planning and Management. DOI: 10.1080/09640568.2016.1246998
2. Methods

This Chapter describes the methods used to conduct the study, qualitative document and interview studies. The methods are consistent with those used in Phase I of the project².

2.1. Document study

The internet was used to identify publicly-available material for the document study concerning the municipalities of Borås, Eskilstuna, Gävle, Helsingborg, Huddinge, Jönköping, Linköping, Lund, Norrköping, Sundsvall, Umeå, Uppsala, Västerås, and Örebro. The author made use of a variety of documents to plan the project, identify possible interviewees and prepare the interviews, and conduct analysis. Documents also provide important source material to control or clarify specific issues arising from the interview study.

The document study considered the topic of sustainable mobility and transportation within the broader framework of strategic planning in each municipality. Whilst the local context was the main focus of this work, the author has also studied (where available) related material published by regional, national or international associations or institutions, including EU projects or similar. Relevant scientific literature, along with other kinds of document, were also used to inform the research. When preparing interviews, this enabled the author to ask detailed follow-up questions specifically relating to strategic objectives or measures in each of the municipality.

2.2. Interviews

Interviews took place in 12 municipalities during the period June 2015 to February 2016. The first interviews (5 persons) took place in Linköping and were conducted in parallel with another project on the topic of urban planning for high-speed rail. These interviews provided an opportunity to identify issues related to sustainable mobility relevant to this study, yet made use of a different interview guide and are therefore excluded from the scope of this study.

Similarly, the author decided to exclude Huddinge and Norrköping from the interview study, on the basis that Huddinge – as part of the Greater Stockholm urban conurbation – is somewhat different to the other municipalities addressed by the study, and Norrköping was the subject of the study of recent research on this theme (see Fenton and Gustafsson, 2015³).

This report thus presents findings from interview studies in 11 municipalities (see Table 1). In all cases, the interviewees were municipal civil servants working close to strategy and policy for urban development, sustainable mobility and transportation. These individuals were identified by the author or colleagues of the interviewee as key informants. A mix of individual and group

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² P. Fenton (2016) Sustainable energy and sustainable transport: what can Swedish towns learn from municipalities in Denmark, Germany and Switzerland?, Linköping: Linköping University. DOI: 10.13140/RG.2.1.1578.5849

interviews took place, which on average lasted one hour per interview. A total of 19 interviews took place, attended by 29 interviewees who represented 17 different municipal departments.

Table 1. Overview of interviews by type and respondent. * indicates individual interviews to which an additional person joined the interview for a short period or participated after the recording was completed.

<table>
<thead>
<tr>
<th>Municipality</th>
<th>Date</th>
<th>Individual interviews</th>
<th>Represented departments</th>
<th>Group interviews (persons)</th>
<th>Represented departments</th>
<th>Total interviewees</th>
</tr>
</thead>
<tbody>
<tr>
<td>Borås</td>
<td>26-jan-2016</td>
<td>0</td>
<td>1 (2)</td>
<td>Stadskansliet; Tekniska förvaltningen</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>Eskilstuna</td>
<td>11-jan-2016</td>
<td>3</td>
<td>Kommunledningskontoret (2); Stadsbyggnadsförvaltningen</td>
<td>0</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>Gävle</td>
<td>24-feb-2016</td>
<td>0</td>
<td>2 (2+2)</td>
<td>Kommunledningskontoret (2); Samhällsbyggnad (2)</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>Helsingborg</td>
<td>27-jan-2016</td>
<td>1</td>
<td>Stadsbyggnadsförvaltningen</td>
<td>0</td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>Jönköping</td>
<td>25-jan-2016</td>
<td>0</td>
<td>1 (2)</td>
<td>Stadsbyggnadskontoret</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>Lund</td>
<td>1-feb-2016</td>
<td>1*</td>
<td>Stadsbyggnadskontoret</td>
<td>0*</td>
<td></td>
<td>2*</td>
</tr>
<tr>
<td>Sundsvall</td>
<td>23-feb-2016</td>
<td>1</td>
<td>Stadsbyggnadskontoret</td>
<td>1 (2)</td>
<td>Kommunalbolag</td>
<td>3</td>
</tr>
<tr>
<td>Umeå</td>
<td>22-feb-2016</td>
<td>2*</td>
<td>Verksamhetsområde Tillväxt</td>
<td>0*</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>Uppsala</td>
<td>25-feb-2016</td>
<td>1</td>
<td>Kommunledningskontoret</td>
<td>0</td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>Västerås</td>
<td>7-jan-2016</td>
<td>0</td>
<td>2 (5)</td>
<td>Stadsbyggnadsförvaltningen (2); Tekniska kontoret (3)</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>Örebro</td>
<td>17-nov-2015</td>
<td>3</td>
<td>Kommunledningskontoret; Stadsbyggnad (2)</td>
<td>0</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>12(*14)</td>
<td></td>
<td>7 (15)</td>
<td></td>
<td>29</td>
</tr>
</tbody>
</table>

Several additional interviews were planned, yet cancelled due to last minute changes or illness. Some individuals were also approached at conferences for informal discussions. All interviews were anonymous. The author attended and recorded all interviews and transcribed some of the interviews. All interviews were conducted in Swedish, with the exception of those in Örebro, which were conducted in English. This was because the interviews in Örebro were attended by Prosper Chipato and Tanaka Mukoko, Masters students from Zimbabwe, who conducted their own document study for a project course, participated in the interviews and transcribed the interviews. Agnes Rönnblom from the Division of Environmental Management and Technology at Linköping University attended, participated in and transcribed the interviews in Gävle, Sundsvall, Umeå and Uppsala. Some of the other interviews were transcribed by Tove
2.3. Analysis
Each interview addressed a diverse range of topics. To conduct analysis, interview transcripts were sorted by theme and logged in excel sheets to provide an overview of common themes in each municipality. In the next step, the thematic material from each municipality was compared with that of other municipalities, enabling the author to identify similarities and differences both within and between the municipalities. These findings are presented in this report.

3. Results
In this chapter, the results of the study are presented in three sub-sections – Organisation; Implementation; and Instruments. The title of each sub-section represents an “umbrella” under which a diverse range of topics are clustered, e.g. the topics of Organisation broadly address issues such as political and institutional dynamics, visions and strategies, strategic cooperation, and multi-level governance. Inevitably, there is some degree of overlap between the sub-sections, and links between the sub-sections will be addressed in the text and Conclusions.

3.1. Organisation - governing processes in 11 “larger cities”
This section will not attempt to describe the formal organisational structure of each municipality, but rather presents information concerning processes of governing in the 11 municipalities that the respondents felt was relevant to discuss. Some of the issues raised are of common relevance to all municipalities, whereas others – and here we will try to be specific – are related to the particular context of the municipality in question.

3.1.1. General findings
In general terms, the interview findings indicate that municipalities have undergone, or are in the process of undergoing, a transition in which sustainable development, particular in urban areas, is strongly emphasised as a pre-requisite for municipal success. In relation to this, municipalities are increasingly understanding that there is a complex, dynamic relationship between urban form and mobility patterns, which in turn has profound implications for life in municipalities and their surrounding regions. Old planning practices and organisational structures have, in most locations, focused strongly on providing accessible infrastructure for motor vehicles, rather than on facilitating seamless mobility for all travellers and all modes of transport.

An increasing awareness of the need for sustainable mobility, and the need to make transportation sustainable, is one factor among many influencing the reorganisation of municipal organisations. Most of the interviewees report attempts to consolidate roles and responsibilities for mobility and transport in departments or units with strategic functions, and indicate increasing efforts to integrate previously isolated practitioners within urban planning processes such as the development of detailed development plans. For example, in Borås, responsibility for traffic questions is now allocated to two departments, rather than four.

Nordberg, Jenny Ohlsson Orell and Karolin Ring, students in Energy, Environment and Management. All transcriptions have been checked by the author.
Generally, respondents were positive about such initiatives, although evaluating the impact of such reforms is beyond the scope of this study.

Nevertheless, the need for a clear structure and routines was identified as enabling efficient and effective processes in several municipalities. For example, one respondent viewed the introduction of a “balanced steering model” in Västerås as a means of increasing the probability that strategic objectives are implemented, and reducing an excessive focus on the political priorities of individual politicians or parties. Despite this, two respondents noted examples of processes in which the new steering model causes duplication and explored the possibility of further improvements.

### 3.1.2. Examples

In Västerås, the municipal vision, masterplan and twelve strategies guide work, with detail provided in thematic actions plans and annual workplans. Two types of permanent steering groups within the administration provide input to strategic planning processes. Stratsam is a management-level group focusing on planning and cooperation that aims to ensure the municipal organisation works to achieve its vision. Another kind of group is established for specific masterplan projects, such as the Traffic Plan. Such groups are smaller and include participants, selected by department managers, from departments involved in the topic in question. Each type of group meets once per month, and there is overlap between representation and the topics discussed, which—in the eyes of one interviewee—leads to good exchange between different parts of the municipal organisation about conflicting targets, resources, etc.

In Eskilstuna, five strategic goals for the municipality—an attractive city, increasing levels of education, ecological sustainability, more jobs and social resilience—provide the basic framework for municipal strategy and are pursued through seven main processes, including provisioning for the need for environmental and societal development. This work is overseen by a process development group, which meets once a month and work on seven sub-processes addressing different themes related to planning, construction and maintenance of the built and natural environment, waste management, energy, etc.

This organisational design enables managers to meet representatives from all part of the organisation. One respondent remarked that this has “anchored” climate and sustainability topics in the organisational structure and diffused decisions and implementation across the organisation, reducing implementation times and ensuring monitoring of strategic objectives takes place. Another stated that they had, upon joining the municipal organisation in Eskilstuna, been positively surprised at the levels of commitment and dedication towards to the municipalities’ various plans, and suggested that this was a consequence of a slow and systematic process to develop strategies “in an attempt to get everyone on board from the start”.

In Helsingborg, the process of moving from vision and strategy to projects and implementation was described with reference to a “project model” used to develop “programmes”. In this:
“you look at the organisation, what is the background, what is the purpose with the project, what we want to do, and often we have a group called a “forum”, where all so-called managers sit. Sometimes there’s a steering group and sometimes a special political steering group, it varies a bit from project to project and what the level is. You then define which people are involved, and approximately how much time is needed”.

In Helsingborg, the project model allows various forms of reference groups to be used, and – as in most project planning – risk analysis is carried out. Interviewees from various municipalities remarked that reference groups, expert groups, or similar entities, usually provide valuable input to abstract processes such as masterplanning, but may be harder to engage when engaging in more “physical” planning processes. One respondent in Örebro said consultation processes risk being “not so constructive because people tend to think about their own street not the whole system” and “from our point of view, you must have a system perspective to see how the city will develop”.

3.1.3. Barriers and challenges
Various barriers to the development and implementation of strategies aiming for sustainable mobility were identified. Some are obvious, for example the way that masterplans resemble “puzzles” to which municipalities do not possess all the pieces. Both the development and implementation of strategies are contingent on processes, both inside and outside of the municipal organisation.

One interviewee in Gävle discussed the protracted process to develop a key municipal strategy. This process took almost six years, in part because the municipal organisation focused too much on internal, technical dimensions and involved important stakeholders only when the plan was too advanced. When these stakeholders reacted negatively, there was a tendency to dismiss critique and treat consultation as an imposition. This contributed to a serious of major setbacks to the strategy and influenced changing political dynamics in the municipality. In other words, there is an obligation for planners to look beyond the document and to consider and engage with the wider context which they seek to influence.

In contrast to this experience with external stakeholders, an interviewee in Jönköping described the challenge of aligning interests within the municipal organisation, referring to “isolation” and “need to spread” knowledge about the municipality’s own strategies for sustainable mobility and transport. A lack of buy-in or commitment from key department managers was identified as an important barrier to implementation both in Jönköping and elsewhere. In Uppsala, the construction boom in the city was cited as a constraint on municipal resources, meaning progress towards internal sustainability objectives was slow.

Most of the municipalities interviewed make significant efforts to promote sustainable mobility and sustainable transport within the municipal organisation through e.g. travel plans, limited provision of parking (or increased cost), internal climate funds. Jönköping recently had an extremely successful campaign to enable municipal employees to purchase (company) electric bicycles, and other municipalities have adopted similar policies, including Borås and Västerås.
Another challenge relates to (perceptions surrounding levels of) knowledge. A respondent in Eskilstuna said that as “many people who are interested of environmental issues are more theoreticians than practitioners, they often adopt strategic roles”, meaning there is a disconnect between strategic and operational functions in (many) organisations. “Everyone knows this, but we talk far too little about it”, said the interviewee. This has consequences for the quality of construction or maintenance of, for example, cycle paths.

Respondents in several municipalities noted that many construction companies wish to reduce the number of parking spaces when building new offices or premises, and that municipalities are increasingly adopting minimum and/or maximum parking thresholds, or offer possibilities to reduce the number of parking spaces at new developments through “dynamic” or “flexible” measures or use of “green parking purchases”. Some (but far from all) construction companies acknowledge their need for support when planning measures supporting sustainable mobility, yet municipalities design their policy instruments in different ways. Respondents in Umeå commented that, when designing their “green parking purchases”, they ensured that revenues would be spent on a staff member with expertise who could support construction companies in implementing measures. This approach ensures appropriate competencies are available to assist companies. In contrast, on-street parking revenues in Lund are used to asphalt roads.

Various respondents remarked that it is difficult to overcome “mental” challenges influencing behaviour, such as the economics of car ownership, infrastructure or natural barriers. According to the interviewee from Uppsala, one such mental barrier is the traditionally “low status” of environmental issues compared to economy or resources, meaning “you don’t have the same muscles to work on environmental issues... (so we have to demonstrate) that the questions we work with give direct economic impacts” and offer the potential for synergies and spin-offs that are hard to quantify in such terms.

Many of the municipalities interviewed were in the process of renewing, or preparing to renew, their municipal masterplans. Most interviewees considered masterplans to be “umbrellas” for different interests, which may lead to inconsistencies. In Lund, an interviewee suggested that the next masterplan (under development) will need to bridge and unite different priorities to ensure planning is more strategic and measures are mutually supportive. This interviewee suggested that good masterplanning requires some form of backcasting, to avoid incremental, prognoses-based planning that reinforces or repeats past errors. For example, in Umeå, the pursuit of political objectives to increase the city’s population would have, under the old masterplan, involved doubling the urban size and becoming heavily dependent on motorised transportation. This realisation led to a focus on improving existing structures to enable compact city development.

Nevertheless, masterplans are simply a frame, as many developments – such as external retail centres – emerge in the shadow of masterplans; that is, such projects may fulfil some strategic objectives in terms of jobs or other interests, but often counteract the fulfilment of many long-term strategic goals. Thus, some degree of consistency – and the ability to say no to unforeseen (and unwanted) developments – is an important prerequisite for sustainable implementation.
Similarly, the organisational structure and routines to enable implementation and monitoring must exist in situ and not only on paper. An interviewee in Västerås stated that the lack of progress towards objectives in the municipality’s old traffic plan was mainly attributable to a lack of structure ensuring implementation of the masterplan.

### 3.1.4. Politics – enabler or impediment?

Turning to politics, respondents in several municipalities suggested that municipal politicians and civil servants had been courageous, willing to take controversial decisions and stick to them (Eskilstuna, Umeå, Örebro). A respondent in Borås suggested that politics involves “poking into people’s lives”, which means politicians need to listen, yet need must be patient, courageous and consistent to implement their agendas. Moreover, the extent (or the form) of such poking depends on the ideology of the political parties in a municipal government. For example, Eskilstuna’s attempts to address the environmental impacts of consumption have led to initiatives such as the Retuna reuse centre, yet such initiatives are – according to interviewees – sensitive as the governing coalition includes parties that are generally reluctant to interpret the municipality’s mandate as also influencing private behaviour. Similarly, a change in the coalition at the last election led to changes in Eskilstuna’s business development strategy, loosening controls on new retail developments.

Most of the municipalities were governed by coalitions of political parties, yet in several, the largest groups lacked an overall majority. This means many decisions which under normal circumstances are relatively easy to decide upon in full council are subject to more complex negotiations and, on occasions, impasse. The traditional main parties still dominate the composition of the committees that develop and approve detailed policies or plans, yet this influence may be compromised in full council if the largest parties disagree. In Gävle, this led to a change in control of the municipality, as the centre-left coalition was unable to pass its budget. The centre-right parties assumed power, with tacit support of a nationalist right-wing party, bringing to an end a long history of centre-left rule in the municipality.

Interviewees in other municipalities alluded to the fragmentation of strategies, as “uncomfortable” topics are removed prior to political approval – a critical problem for transport strategies attempting to adopt a systems perspective. That said, many respondents felt that the differences between coalitions (or the so-called “main” parties) is largely rhetorical, and results in tweaking of municipal targets, as opposed to fundamental policy shifts. Indeed, civil servants in several municipalities expect and plan for changes in the ruling coalition at each election.

For example, Lund and Helsingborg have experienced fairly regular shifts in political government. This has, according to respondents, meant that politicians have often been careful during their mandate periods and adopted long-term, consensual approaches. Moreover, it has meant that municipal institutions have developed working methods that are robust in the face of political changes. This dynamic is credited with resulting in stable and progressive political outcomes that are acceptable to the majority, yet perhaps limits the possibilities to embrace bolder or more radical policy approaches to particular problems. Indeed, in Lund, for example,
some of the most radical shifts in municipal policy have occurred as a consequence of singular events, often with an external impetus (i.e. 1969 decision to block a planned major road project through the city centre and instead pursue a strategy of pedestrianisation).

Individuals politicians were, in certain cases, identified as playing a particularly important role – something that may be double-edged, in the event that such individuals change roles or leave politics. Several interviewees discussed how politicians “mature” or become more “pragmatic” as their level of knowledge about sustainable mobility increases; others indicated that civil servants use past decisions as a basis for framing new initiatives, to ensure political acceptance, and that proposals must be framed in a clear, pedagogical way.

3.1.5. Regional dimensions

In terms of municipal structure, those municipalities with smaller towns or large rural hinterlands emphasise the need for clustered development around service towns, which serve as intermodal hubs along public transport corridors. One reason for doing so is economic, as concentrated development should reduce the costs of service provision outside of urban areas. However, this issue is often ideologically sensitive for local political parties. Another challenge is that, even if municipalities were to achieve their ideal forms of development, they have no guarantee that regional public transport authorities will make adequate provision for high-quality services to service towns. Moreover, as one Sundsvall interviewee said:

“Over the last fifteen years, all regions have talked about wanting regional enlargement. Implicit is that this should occur with sustainable transport, mainly rail. Yet an increased interaction within a region by rail as a basis would, I suspect, although I haven’t seen it confirmed, would also increase the number of interactions by car”.

Interviewees in several municipalities stated that cooperation with neighbouring municipalities and wider regions provided material benefits for all, in terms of e.g. resource efficiency through use of “shared” facilities. One interviewee in Gävle said, noting that “it is a requirement of the Planning and Building Act that a masterplan should include a regional perspective”, said “we have tried to do it in a serious way and not merely as an add-on” as “growth in the city is contingent on there being a surrounding area that can stand on its own feet” and infrastructure investments in other municipalities may provide greater value to the municipality than its own planning may provide. For topics such as mobility management, regional networks, and particularly the engagement of the region’s largest employer Sandvik, exert a strong influence.

In Skåne, the interviewees in Helsingborg and Lund emphasised the value of regional and sub-regional networking, particularly in the framework of national infrastructure planning for high-speed rail (the “Sverigeförhandlingen”). The formation of sub-regional groups of municipalities in Skåne has enabled members to present a joint view “where you’ve already identified priorities together and then it’s easier for the region to meet four sub-groups than 33 different municipalities”. Helsingborg and Lund, together with Malmö, have also coordinated their planning of public transport, to ensure that it will be possible to upgrade the planned BRT lines in Malmö and Helsingborg in the future and ensure interoperability with the tramway to be constructed in Lund. Lund and Malmö are also cooperating on structure plans to identify and
implement common principles for physical planning of infrastructure such as regional cycle paths or park-and-ride.

A different form of regional cooperation was observed in Sundsvall, where the Mid-Sweden Chamber of Commerce (which covers two counties) leads a transport and logistics network, an initiative welcomed by the municipality who felt they were unable to initiate such a network. One interviewee said that “politicians want us to work for good cooperation between different logistics actors in the region” and that this includes cultivating strategic and mutually-beneficial partnerships with other regional logistics hubs such as that in Ånge. Similarly, Umeå is working with Skellefteå and other neighbours, including Finnish Vasa, on various kinds of project aiming for sustainable mobility and transportation. Other types of regional initiative include Uppsala’s efforts to coordinate goods transport with the County Council, regional planning for electric charging infrastructure (e.g. in Västerås), and free bus traffic for high school students travelling between Eskilstuna and Västerås.

3.1.6. National frustrations

With regard to national government, interviewees suggested there was a policy vacuum. In the words of a respondent in Gävle:

“If we are to get anywhere in Sweden on these issues, then we need regulations, from the government or parliament, yes from higher up... (there are many words) but no muscles behind them... it’s resources we need most, and political will. It isn’t impossible, but it will require a lot and it means that we need brave politicians if we’re to get there”.

The interviewee continues that there is a need for a level playing field, meaning:

“There must be demands on municipalities to do something. There must be sanctions if you don’t, just as, I mean if you get indications that the environment, air quality is going to breach norms then you get real programmes you must follow. There are real sanctions. As long as we don’t have those problems, then it nothing we must do. In most Swedish cities today, we don’t have congestion like you get in Europe. The reason The Netherlands has worked so well with cycles is that there isn’t space” (for cars).

These quotes are representative of many comments by interviewees. Further, many were highly critical of the Swedish Transport Administration.

Delays to locally-significant infrastructure investments were the source of frustration in many municipalities, yet – even when such delays handicapped urban development priorities such as noise abatement or air quality improvement programmes – interviewees accepted that their municipalities exist in a wider, national context and uncomfortable decisions are inevitable. In contrast, many interviewees considered the use of prognoses indicating increasing vehicle traffic to plan infrastructure investments by the Swedish Transport Administration as methodologically flawed and – with respect to climate policy – contradictory.
One respondent suggested that such prognoses are understood to be indicative at the managerial level of the Swedish Transport Administration, yet are applied deterministically “as truths” by planners. This respondent said:

“we need realistic information that supports the democratically-approved development we have. That is, we want to change the types of vehicles and journey types and need support with this, so that infrastructure investments make it easier for us, not counteract”.

A number of the municipalities in the study have been deeply involved in the planning and negotiations for high-speed rail. In some cases, uncertainty concerning the location and timing of construction has effectively put the brakes on urban development projects and strategies. Interviewees described a litany of missed opportunities and the difficulty of planning under uncertainty when, as one respondent in Borås said, “you can’t give an answer to anything”. On the other hand, each of these municipalities – and others whose station areas have been, or are subject to, development – emphasised the strategic importance of such developments to their municipalities. For this reason, Eskilstuna and Västerås are cooperating with Enköping and Strängnäs to achieve a “Mälardalspaket”.

3.1.7. Inter-municipal cooperation

Many of the interviewed municipalities participate in exchange with other municipalities, often through municipal networks, projects or study visits. Such engagement is credited with providing valuable ideas and inspiration for municipal processes, but is also considered a way of attracting the interest of funding bodies, or of taking global responsibility by sharing experiences with cities in developing countries. For example, Borås had bilateral exchange with a city in Indonesia through the Swedish Symbiocity initiative, first concerning waste management and subsequently on broader issues related to urban development.

Nevertheless, engagement requires resources, which in turn impact upon the prioritisation of municipal objectives. Representatives of several municipalities remarked that, in the words of one respondent from Eskilstuna, “it is hard to find time for everything” and “we don’t have time to participate as we’re working like crazy”. However, others felt that their managers were supportive of conference visits or other education activities. Similarly, engagement requires coordination, and some municipalities – such as Uppsala – have tried to streamline their internal processes to improve coordination and oversight of such activities.

Various networks were named as important by interviewees. These include national associations such as SKL; regional networks including energy offices; municipal networks such as Klimatkommunerna or Sveriges Ekokommuner; networks focusing on specialist themes such as SWEPOMM, Svenska Cykelstäder, Svenska Spårvagnsstäder, Svenska Stadskärnor; and invited groups such as the “Seven Cities Cooperation” which includes Eskilstuna, Gävle, Norrköping, Södertälje, Uppsala, Västerås and Örebro. A respondent from Eskilstuna identified a need for regional networks and increased cooperation with neighbouring municipalities to influence issues such as regional commuter travel or biogas production. Helsingborg, Lund and Malmö have similar networks for traffic planners.
Other international networks and initiatives were named. An interview in Örebro considered networks such as POLIS, which offer a more targeted range of services to a narrow group of members, more valuable than broader networks or EU platforms with networking functions. An interviewee in Lund remarked that initiatives such as the EU Covenant of Mayors typically do not influence strategy, as these reiterate existing objectives rather than raise the bar.

With regard to other cooperation, respondents considered the form and quality of cooperation to vary depending on the actors and issues involved. For example, several respondents indicated that municipalities find it easier to work with other public sector bodies than other, particularly small-medium sized, organisations (and especially those whose role is limited to, e.g. construction and not operation of premises or infrastructure). Efforts to promote sustainable mobility in small industrial enterprises were considered difficult, prone to conflict and dependent on the presence of individuals, who are often difficult to identify.

3.2. Implementation
In this sub-section, the ways in which the municipalities address particular challenges or problems is presented.

3.2.1. Compact cities, rural sprawl and walking
Each of the municipalities pursued growth as a strategic objective, yet the implications of growth were understood to have spatial consequences. As noted above, Umeå’s plan for compact city development emerged from analysis of the municipality’s old masterplan under future growth scenarios. Similarly, the other municipalities aim for densification and compact city development – the respondent in Helsingborg remarked:

“It is always a trade-off between vehicle traffic and densification and space”.

However, some of the municipalities also face challenges related to rural settlements that for example lead to depopulation in many villages and small towns, and new construction or repopulation of areas such as those described by a respondent in Borås as “lakeside but out of the city”. Such dynamics place a strain on municipal budgets, and efforts to concentrate development along public transport corridors or in service towns are, as already stated, challenging.

Within cities and particularly with reference to city centres, many of the interviewees referred to the “Årets Stadskärna” competition run by the association Svenska Stadskärnor. Örebro, for example, had used this network and the competition as a platform to organise cooperation among different city centre stakeholders, initiating a range of projects with implications for sustainable mobility. Several municipalities stated their ambition to, like Örebro in 2015, win the competition in the near future. Eskilstuna, for example, property owners in the city centre are co-financing the pedestrianisation of a key shopping street and bus lanes are being introduced as part of the city’s strategy to win Årets Stadskärna in 2018. Similar approaches are evident in other municipalities. In Borås, an active retailer association has contributed towards to incremental pedestrianisation of large parts of the city centre.
This trend illustrates that multi-stakeholder cooperation can provide material benefits for sustainable mobility and urban environment, whilst also indicating that, as a respondent from Örebro said, developing the city centre “is a process not a project” and it “is better to produce together”. However, although interviewees from various municipalities agreed with a respondent from Örebro that “promoting the city centre is a strategy itself because it makes people choose to walk, cycle or go by bus”, this also indicates some degree of dissonance between municipal planning practices, which have often (indeed, do still) permitted establishment or expansion of out-of-town retail centres.

Moreover, it is not always straightforward to negotiate arrangements for cost-sharing both between the municipality and stakeholders, nor within stakeholder groups. Many city centre retail associations have three owner groups – the municipality, property owners, and retailers – each owning one third. As one respondent in Gävle noted, even when companies agree on long-term objectives, it is difficult for them to be visionary and strategic – and the cooperate with their competitors – when they are losing money and cannot guarantee increased revenues through such cooperation. Despite positive experiences with such cooperation, another respondent in Gävle remarked ironically that members of the city centre retail association “understand the importance of cycles, yet it’s hard to get them into retail, because there it’s still the car that buys things, it’s not the person that sits in it. Retailers are happy to have the shop on the pedestrian street, but don’t understand that they can’t have cars there too”.

For this respondent, along with many other interviewees, such differences in opinion reflect a broader difference in how groups perceive space in city centres:

“There are people that actually say, yes but if you take away a parking place then everyone will travel to the out-of-town retailers to shop. Yet retail isn’t what a city centre lives on. A city centre lives on there being other things to do too, not just shopping... the city association is active and helps as we have lots of pedestrians, cyclists and bus travellers who don’t go to the out-of-town retailers”.

Such remarks are backed up with studies indicating that, as in Denmark, Germany and many other European countries, vehicle owners tend to shop once per week in bulk, whereas pedestrians, cyclists and users of public transport make frequent small shops and spend more money in total. Nevertheless, it is, as noted before and was further commented upon in Eskilstuna, it is a “mental challenge” for many citizens to adjust from living in a “small” town to a “large” city in which it is no longer possible to park outside the door of a building, but must walk or cycle from a parking space.

Gävle was named as Sweden’s Pedestrian Municipality for 2016, and also received commendations for its work on prioritised road crossings for cyclists. Other municipalities, such as Jönköping, are preparing pedestrian strategies and all municipalities clearly include paths and pavements in their strategic and detailed planning. Nevertheless, there appeared to be an assumption that walking was an issue to be solved in tandem with pedestrianisation of city centres, and a lack of broader discussion about the role of walking in peri-urban or rural communities. In other words, pedestrianisation often appears to be closely linked to short
journeys and commercial space, rather than a pre-requisite for public health and a key part of an intermodal transport system.

### 3.2.2. Cycling

In contrast to walking, cycling is much more explicitly addressed by the majority of municipalities, either in masterplans, traffic plans, or through specific cycle strategies or action plans. For example, at the time of the interview, the first cycling strategy of Borås was undergoing consultation. Interviewees indicated that previous attempts to develop such a strategy had proven difficult, with some of the proposed measures implementing in an ad hoc manner. Many other municipalities have worked with cycling in a structured manner over a longer period. Topography was considered an important factor influencing the modal share for cycling in different municipalities. For example, in Gävle and Örebro, topography was considered a facilitator of cycling, whereas in Borås and Jönköping it was perceived as a barrier. Similarly, short distances were considered advantageous for the promotion of cycling.

Adapting space to enable “good choices” was considered a pre-requisite to enable cycling. In Eskilstuna, the municipality has introduced a high minimum cycle parking standard for new buildings in the city centre, with a number of recommendations concerning standards for e.g. indoor and sheltered parking. An interviewee in Eskilstuna suggested such standards are a helpful tool, appreciated by construction companies. Västerås has a similar approach, but could – according to one interviewee – adopt this practice from Eskilstuna to ensure construction companies enforce building standards for cycling.

Eskilstuna is also an example of a municipality that is attempting to reduce levels of on-street parking in order to create street space for increased levels of walking, cycling and bus traffic. Municipalities that have avoided doing this reported conflicts over space between pedestrians and cyclists, particularly during summer when restaurants and bars have on-street service. Some interviewees commented on the need to regulate the speed of cyclists in urban areas and develop cycle highways to enable high-speed travel on electric cycles. Other municipalities stated that provision of infrastructure alone does not increase cycling, and that maintenance of infrastructure is costly. Nevertheless, all interviewees were optimistic concerning the future of cycling, perhaps because, as one interviewee in Örebro suggested, “the bike has almost the same freedom as the car” when used in urban areas and in particular if electric.

Various municipalities have attempted to actively involve cyclists in urban planning. For example, so-called “Cycle Councils” are used in municipalities such as Gävle, Västerås and Örebro. These include citizens who are appointed at regular intervals to represent cyclists and act as reference groups providing input to strategic planning processes. Often cyclists are the only defined mode/vehicle category approached for informal consultation during the early stages of projects. In Örebro, the Cycle Council also a 1 million SEK budget for investments. In many municipalities, informal groups – such as facebook groups or employee networks – also provide important channels for communication and dialogue with cyclists.
3.2.3. Public transport

It has already been noted that many of the interviewees consider that, as one interviewee put it, “we have laws and rules that are designed for planning for cars, we don’t plan for people even if we say we do”. Another remarked that “we still for cars. It says in the Planning and Building Act that we should have roads, but it always means a car road, it’s not a cycle road. So you don’t need to build (alternatives)... there’s no requirement”. Moreover, the operation of public transport has in recent years become a regional task and there is increasing emphasis on profitable routes, often with negative consequences for rural areas.

It is thus no surprise that interviewees indicated that the municipalities’ strategic work to increase levels of public transport use is somewhat constrained. Despite this, the interviewees indicated a range of experiments and measures aiming to increase modal share for public transport (e.g. free daytime public transport for pensioners in Borås, City Örebro’s gift card which is also valid on urban buses), or introduction of new vehicles or fuels to reduce environmental impacts of public transport (e.g. electric or biogas buses).

Various municipalities identified three-party cooperation between the municipality, regional public transport authority and operating companies as important when planning public transport. Municipalities in which such cooperation had existed and then ceased reported declining use of public transport. In contrast, Helsingborg reported significant growth in use of public transport, albeit at the expense of cycling. Few municipalities have been successful in increasing all sustainable modes whilst reducing use of cars. The use of so-called “journey time quotas” were identified by two interviewees as undermining planning processes by over-emphasising the importance of cars vis-à-vis other modes of transport.

In recent years, several municipalities have announced plans for “BRT” (Bus Rapid Transit) or tramways. Such initiatives aim to provide attractive, high frequency public transport services and cultivate new user groups. Indeed, in Lund, municipal plans for a new tramway (see above) led to the emergence of an anti-tram party who, through vocal opposition as the plans became more definitive, managed to gain 6% of votes in the last municipal election. In Gävle, plans for a BRT line also been the source of political controversy due to the inevitable impact of BRT on lane space for cars. This has led to the BRT plan being implemented in smaller steps than previously envisaged.

The plans for a BRT line in Helsingborg were initiated by politicians, whereas planners preferred constructing a regional tramway to Höganäs. The BRT line will be constructed by 2019 and will provide opportunities to further increase levels of public transport use in the city. The interviewee in Helsingborg said that “it’s great to see it happening for real and that it didn’t become yet another document with fluffy words”, but also identified challenges related to the planned route and the (possible) need to integrate an out-of-town shopping centre into the service. Here, the interviewee described the challenge of convincing retailers of the value of bus stops relative to parking spaces, a point echoed in other municipalities. Jönköping and Västerås are among other municipalities to have studied the possibility for trams, trolley buses, cable cars and other potential complements to existing public transport services.
3.2.4. Cars and parking

Many of the issues related to cars have been discussed in relation to previous topics. For this reason, this section will focus more closely on the topic of parking, which was discussed in all municipalities. Other strategic objectives, such as reduction of speed, services such as carpooling, or introduction of alternative fuels to private vehicle fleets, were discussed to a far lesser extent.

Parking is a critical issue in all of the municipalities and, as already discussed, is closely linked to settlement patterns, urban form and other modes of transport. Many municipalities report that spaces in the city centre (often polluted former industrial sites) are now attractive to developers and, as parking spaces disappear, drivers are forced to choose between on-street parking or multi-storey parking. The latter alternative is often unpopular, yet desirable for sustainable urban planning and the promotion of sustainable mobility, whereas the former is attractive for developers seeking to avoid investments in expensive parking facilities.

One means of resolving such conflicts is through “green parking purchasing”, in which developers purchase spaces for residences in shared parking facilities some distance from new buildings, with sustainable alternatives offered to the residents. This approach, used in Umeå, is increasingly being adopted by other municipalities. Similarly, “flexible” standards are being introduced in most of the municipalities. Developers in Eskilstuna are allowed to build parking within a specific range (minimum to maximum) with discounts allowed if investments in measures promoting sustainable mobility occur; the levels also vary by zone. This means new construction close to public transport is more attractive to developers. The municipality also monitors implementation in a much more stringent way than in the past.

Seen from a different perspective, most of the municipalities have an over-supply of parking, often in the wrong location. For example, in Gävle, one interviewee explained “we did some simple calculations that each car has about six to seven parking spaces somewhere in the municipality, so there is always a parking space” and this corresponds to around one thousand football pitches. The respondent continued that the ideal of free parking for everyone “isn’t free for everyone... there is nothing that’s free, but always someone who picks up the bill”. In Umeå, an interviewee said that, when mapping parking spaces used by municipal employees, they realised over 30% of users lived within 2.5 km of city hall:

“it’s completely crazy, they live 300 metres away and take the car every day... but the employer hasn’t chosen to go in and influence how people travel to and from work”.

Other interviewees felt that dramatic progress has occurred in a relatively short space of time, with increasing awareness from retailers and companies that parking is a major challenge. For example, in Örebro, the city retailers offer money back on multi-storey parking tickets for those purchasing in stores. One interviewee in Örebro encouraged municipalities to try a variety of methods to reduce use of cars and incentivise alternatives:

“The main thing is to be brave enough to challenge going by car. It is not a human right to take a car into the city centre”.

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Nevertheless, road traffic and parking are also problematic outside of city centres. Interviewees in the majority of the municipalities discussed mobility and transport in relation to urban sprawl, external retail centres or industrial areas, and wider regional transport flows. Respondents described constant pressures to increase parking or reluctance to remove parking spaces in favour of sustainable modes at retailer or industrial sites located on the city periphery, and the constant fear of inner city retailers that restrictions on parking, or increased costs, will favour out-of-town retailers with free parking.

Development or retail policies are used in municipalities such as Umeå in an attempt to limit out-of-town developments. Nevertheless, a new IKEA opened in Umeå in 2016 and is expected to increase the number of journeys by car in and around the city (although this increase may be offset by a reduction in journeys to Birsta outside of Sundsvall, which was previously the closest IKEA to Umeå and Skellefteå). Interviewees in Umeå said that the local site manager for IKEA has been active in attempting to promote sustainable mobility through, amongst other things, an electric cargo-bike pool operated together with the municipality and University.

The influence of IKEA was discussed by various municipalities. A respondent in Gävle remarked that IKEA is “a strong card with respect to retail indexes and such. Cities with high retail indexes are cities with IKEA”. Nevertheless, this respondent – along with others – described how the presence of IKEA influences travel patterns and noted that, despite the interest of global and local managers in reducing customer use of cars, IKANO – the actor designing and constructing IKEA warehouses – tend to override local concerns and prioritise cars over alternatives. Of course, IKEA are not solely responsible for out-of-town retail or urban sprawl, but one actor among many and as such, somewhat indicative of more general patterns in urban planning. Municipalities are attempting to influence such development reactively by, for example, testing forms of home delivery services, or attempting to coordinate logistics in and around their cities.

3.2.5. Goods and distribution

In Sundsvall, interviewees described how the growth of Birsta – Sweden’s third largest retail centre – has impacted upon retailers in the historic city centre and on mobility patterns in Norrland. In addition, the interviewees highlighted how large retail centres generate traffic in empty containers which – by road, rail or sea – must be transported back to their source. Strategic challenges for Sundsvall and other municipalities is to identify ways of filling such containers and ensuring their transportation using rail freight or shortsea services, rather than on land by truck.

At the local level, many municipalities work with coordinated goods distribution within the municipal organisation, sometimes with other actors (e.g. Uppsala share services with their County Council), and on city logistics for city centre retailers. For example, in Eskilstuna, coordinated distribution of goods has halved the number of delivery trips in the city, and the municipality hopes to expand their scheme to involve the private sector. Interviewees said it was difficult to accommodate the private sector in such schemes, yet – in the absence of other initiatives – they must try. Nevertheless, there are many barriers to such schemes, not least the willingness of retailers and distributors to embrace them. In Sundsvall and Umeå, bottom-up
approaches focusing on coordinated waste collection have been developed in an attempt to demonstrate functional systems, rather than address system-level questions such as who is responsible or who can issue contracts.

Other forms of infrastructure influence distribution. For example, in Västerås, a delivery tunnel is located under the city centre and is still used. Municipalities such as Gävle, Sundsvall and Umeå have large ports and related infrastructure. Both Sundsvall and Umeå aim to develop infrastructure for Liquid Natural Gas (LNG) for use on Baltic ferries. In Sundsvall, land for an LNG terminal is ear-marked in detailed plans for the new port area, and the municipality is waiting for a commercial actor to initiate a project. There is potential to link this to biogas production facilities and ensure continuous demand for locally-produced renewable fuel, as well as potential use as heavy vehicle fuel in trucks or the municipal vehicle fleet, which is largely comprised of biogas cars. Electrification of existing railways in and around the port areas has also been prioritised by both municipalities, in an effort to reduce vehicle traffic and improve air quality.

3.3. Instruments

This sub-section will briefly illustrate some of the instruments used by municipalities to develop and implement strategies and policies for sustainable mobility. Some examples may be considered conventional processes or tools for monitoring or evaluation, such as travel surveys (RVUs), whereas use of other approaches, such as use of external project funding, varies.

3.3.1. Gathering data

RVUs are used by all of the municipalities as a way of monitoring travel behaviour and providing inputs to policy-making. RVUs may use different methods, having varying degrees of formality or have different scopes. Municipalities often carry out RVUs once per mandate period, although there is no fixed procedure for this. Eskilstuna and Gävle are examples of municipalities that make use of extensive regular and ad hoc measurement to assist planning and monitoring of measures.

For example, Eskilstuna has for many years published an annual compendium of municipal traffic statistics. When designing policies, such as the municipality’s new parking strategy, such data has been supplemented with simple measurements from site visits, or survey data (the interviewee in Helsingborg indicated the intention to adopt these processes from Eskilstuna). Gävle subscribes to the “Public Transport Barometer” service, meaning there is a monthly inflow of data about travel behaviour. Other municipalities, such as Jönköping, are introducing new ways to monitor the number of journeys by cycle. However, the use of statistics has implications. For example, one interviewee in Eskilstuna asked:

“There are generally few accidents between pedestrians and cycles, and almost no serious accidents, so is it that we should focus on, just because people shout about it? Or should we implement measures that actually impact upon absences, mortality and invalidity?”
In other words, statistics may help secure political support and financing, yet not always in line with critical needs or priorities.

### 3.3.2. Communications

A different form of instrument used by municipalities are communication technologies and the media. Internet and video conferencing were considered highly effective work tools to avoid travel, particularly for municipalities in Norrland, for whom travel to other parts of Sweden is expensive, time consuming, and may result in negative environmental impacts. Such tools can also play a role in policy development. For example, in Västerås, citizens can submit “e-proposals” via the municipality’s website. Proposals which receive 100 votes from the public are then delegated to relevant departments in the municipal organisation for detailed evaluation and, subject to political approval, implementation.

Several municipalities commented upon the role of local media (newspapers, radio, etc.) in disseminating information about municipal strategies, and in facilitating debates. Interviewees considered media to play an important role in influencing the tone and content of such debates, but was considered to be uncritical concerning “fun” activities and campaigns, whilst being sometimes overly critical – either in terms of editorial content or reader comments – of broader strategic initiatives or site-specific measures, particularly if the municipal strategy in focus emphasises environmental considerations above economic, health or other considerations. Reader comments and letters appear to, across contexts, be dominated by particular topics (e.g. vehicle parking restrictions) and particular groups.

Several municipalities were keen to emphasise their efforts to involve, communicate with and disseminate information to key stakeholders, through initiatives such as the EU Mobility Week or organisation of national conferences. Such activities were considered to result in “rings on the water” and add value to the municipal organisation’s work by e.g. identifying and activating stakeholders in implementation of strategic objectives and burden-sharing.

Cooperation may also be the focus of communication, in that the particular form of process – for example, the Climate Protocol in Uppsala – becomes the subject of interest from other actors. In Uppsala, external interest provides momentum for the local process, which is structured around a series of regular communication actions, including regular meetings with focus groups, environmental managers, and (every half year) company leaders and administrative managers.

In contrast, a project-based approach is deployed in Västerås, where each year a city district is selected for a “trygghetsprojekt”. This initiative has been running for four years, and aims to foster local dialogue and cooperation to identify and address local strategic challenges (from the perspective of the residents living in the area), including mobility and transport. Citizens can join working groups and participate in the project, and dedicated resources are allocated for implementation of measures, enabling the municipality “to get things done where those who live in the area want them to be done”. This approach also increases levels of knowledge within the municipal administration about the different districts and the impact of measures.
on residents. Västerås’ work with citizen dialogue through this initiative is a focal point in an exchange with the Chinese city of Jinan.

### 3.3.3. External funding

Whilst this initiative is funded from the municipal budget of Västerås, the Uppsala Climate Protocol is co-funded by the municipality, its members and external funding bodies. Many RVUs take place within the wider context of funded projects. Given the increasing importance of external funding schemes to municipalities – e.g. the interviewee in Lund stated that such finance represents a framework condition for the municipality’s next masterplan – it is worth exploring some uses of external funding in more detail.

Interviewees had a variety of opinions concerning the use of funding programmes to finance investments. Generally, such instruments were considered useful if they responded to clear needs and added value to municipal work, yet detrimental if they resulted in additional administrative burdens. Municipal routines for disseminating information about opportunities were considered somewhat ineffective, with several respondents remarking that projects emerged primarily from personal contacts and not in a structured manner.

### 3.3.4. EU projects

A number of interviewees indicated a reluctance to engage in EU projects due to the volume of administration involved, or the need to work with partners or topics that were ill-suited matches for their municipality and its needs. One interviewee suggested that past experiences meant “we are now more careful about which projects we join”. Nevertheless, municipalities were engaged in EU projects and initiatives in a variety of ways.

For example, Umeå is represented on the Political Advisory Committee of the EU’s CIVITAS initiative and has received project funding for initiatives such as BeGreen Umeå (Life+) and investments in port infrastructure (TEN-T Motorways of the Sea). Such participation helped influence Umeå’s bid to become European Green Capital 2018. Similarly, Örebro is active in EU projects on themes including public health and parking, enabling the city to recruit additional staff members. According to one respondent, Örebro was able to initiate an EU project through the POLIS network that was “good not only for the money but also for the positioning and validation of ideas. Our politicians are very happy to see both the influence of money from a European project but also that we are doing quite well in comparison to other cities”.

Several interviewees remarked that some funding streams focus solely or predominantly on implementation of measures and neglect to focus on the underlying processes that pave the way for implementation. For example, respondents in Eskilstuna and Gävle described the drawbacks of national funding mechanisms that only enable investments in infrastructure, rather than providing for staff costs. In a different vein, the respondent from Uppsala described how, as national agencies became more aware of the municipality’s Climate Protocol, it became easier to access sources of finance. A respondent in Umeå made a similar point concerning familiarity when describing how the municipality had developed a brand identity in Europe.
3.3.5. Stadsmiljöavtal

Various national funding schemes were referred to as having impacted upon municipal actions. Several of the interviewed municipalities have applied for national funding through the “Stadsmiljöavtal” initiative\(^4\). One respondent approved of the low administrative burdens of this initiative, saying “it demands little more than an application... you don’t have to go to thousands of meetings or report everything like in EU projects”.

A respondent in Eskilstuna praised the initiative, stating that it was necessary as urbanisation means medium-large sized municipalities need to provide more transport infrastructure, yet the division of tasks and responsibilities means national funding has been unavailable for some kinds of investment. However, the need to demonstrate municipal actions to motivate national investment had not been understood by those writing the municipality’s application, and the respondent felt their application had been too conventional. This highlights one risk with the use of competitive processes to allocate national resources for public investments – that “innovations” may be over-emphasised, or that competency or familiarity with application processes may result in project approval, rather than societal needs.

Respondents in Gävle and Sundsvall remarked that the first call for applications was rushed, meaning the applications were of varying quality or that some municipalities did not have the resources required to write an application. Gävle’s application for co-financing of its BRT (bus rapid transit) plans was approved along with several other municipalities’ applications, although the bulk of resources were allocated to Lund. Another respondent remarked that, although such funding is welcome, it is for investments and does not make provision for the human resources required to actually implement the measures. Helsingborg, another recipient of funding through the scheme, will also develop a BRT system and make other investments in measures promoting sustainable mobility. A respondent from Helsingborg emphasised that, in the absence of such funding, the municipality would have been forced to cut corners and compromise its plans.

3.3.6. Klimatklivet and Uthållig kommun

Another initiative that was considered important by some respondents was “Klimatklivet”, the Swedish Government’s investment programme in measures to reduce greenhouse gas emissions. For example, in Eskilstuna, this programme provides funds for measures including increased biogas production and installation of charging points for electric vehicles. Concerning charging infrastructure, the municipality works proactively with property owners and companies (through e.g. working groups) to ensure coordinated and strategic expansion of its charging network.

Funded projects can result in spin-off benefits. A clear example is provided by MMMiS (Möjligheter med Mobility Management i Samhällsplaneringen). This network was originally a project within the Swedish Energy Agency’s Sustainable Municipality (Uthållig kommun) programme, which ran from 2003-2014. When national funding ended, the participating

\(^4\) http://www.regeringen.se/pressmeddelanden/2015/12/sju-stader-far-pengar-inom-ramen-for-stadsmiljoavtal/
municipalities decided to form a network and pay annual subscription fees to fund it. The network provides a forum for exchange of information and experiences, and some of the participating municipalities have applied for projects together. A respondent from Eskilstuna remarked that one positive effect of the network is that, when private companies approach municipalities, they increasingly find the municipalities are speaking with similar voices, which is of value for all parties; others (e.g. Gävle, Jönköping, Umeå, Västerås) remarked that the network provides valuable input to their strategic processes and, in particular, their work on vehicle parking management.

3.3.7. Other activities
The municipalities make use of a variety of other instruments or activities as part of their strategic work for sustainable mobility. For example, Umeå applied for the award of European Green Capital. Interviewees said the municipality’s bid started as an internal process but became progressively more external and strategic, with a diverse range of actors engaged in the implementation of long-term environmental objectives. A network of over fifty companies has been formed and develops its own activities. Four working groups address the twelve themes of the Green Capital bidding process. Interviewees suggested the process of bidding – and the shared experiences, learning and “unexpected contacts” – may be as valuable as the award itself (which, despite positive evaluation for Umeå, was awarded in June 2016 to Nijmegen in The Netherlands).

A different approach was observed in Eskilstuna, where the municipality is participating in the Swedish Green Building Council’s CityLab initiative. This aims to facilitate development of systematic and holistic approaches to urban sustainability in city districts. This engagement aims to support Eskilstuna’s process of “urban healing”, and aims to improve integration in the three districts divided by physical barriers by adopting a broad sustainability perspective with 17 targets. It is expected that, through participation in CityLab, the municipality may avoid focusing too strongly on the act of producing housing, but rather take into account both the process of producing housing and its implications for the urban environment. However, the process of selecting priorities is a challenge in such initiatives, as the range of possible actions is very broad.

3.3.8. Good practice
Each of the interviewees were asked to name their sources of inspiration, along with their impressions of good practice in their own municipality. Several municipalities were keen to emphasise their processes and the organisation of work. For example, the organisation of the municipal administration and the existence of a municipal executive office or chancellery working directly under the municipal politicians was considered a strength in Eskilstuna, although one respondent commented that this was contingent on the presence of engaged and united politicians. Ambition, clear lines of communication and resource allocation are also considered recipes for success. For example, employment of a fully-financed team within the municipal administration working on sustainable mobility was considered a key strength in Eskilstuna.
Interestingly, a respondent from Jönköping – critiquing perceived challenges in their own organisation – highlighted Eskilstuna as a good example in similar terms to the respondents from Eskilstuna, indicating that the Eskilstuna approach is considered desirable in other contexts. With regard to the funding of its sustainable mobility team, one respondent from Eskilstuna contrasted their approach with that of Umeå, whose BeGreen project was financed using EU funds. This project was, despite being “an excellent mobility office” (respondent, Eskilstuna) closed when the funding ended, with knowledge diffused outwards into other parts of the municipal organisation. BeGreen was also considered a success by respondents in Umeå, who underlined the challenge of integrating project knowledge into the municipal organisation in the absence of additional financing.

The process of continual dialogue with inner-city property owners was considered a strength in Borås’ strategic work for sustainable urban development. Gävle’s long-term work on sustainable mobility has been a source of inspiration for many cities inside Sweden and elsewhere, for example spread to their twin towns and through European networks. The work of Gävle’s city bus company on issues including scheduling, ticketing and driver education was considered innovative.

A respondent in Helsingborg considered the municipality’s work to develop its new urban plan as a good example to other municipalities, as the plan is extremely detailed and was developed following consultation with many stakeholders. Similarly, the municipality’s past work with its Bus Vision was successful in increasing the modal share for public transport (thereby creating challenges for future policies, as further increases may be difficult to achieve). In Sundsvall, respondents were keen to emphasise the municipality’s role and responsibility as the largest municipality in its region to assist in regional planning.

Umeå consider their long-term strategic planning to provide advantages when addressing complex problems. For example, the municipality regards its work to address air quality problems as instructive to both cities in Sweden and other parts of Europe – indeed, it represented a prominent part of the municipality’s bid to become European Green Capital. Their approach is described by respondents as “systems thinking” and avoidance of silver bullet solutions in favour of a holistic, strategic approach. Similarly, the municipality’s work to increase the modal share of cycling (particularly in winter) is considered a good example to other practitioners. This view is backed up not just by statistics and benchmarking, but also by the comments made by respondents in other municipalities.

Umeå has also been successful in introducing alternative fuels and propulsion systems to public transport, e.g. bioethanol and electrical systems in buses. Rapid charge buses have been developed in cooperation with a local company, Hybricon, and are used on the municipal airport bus and other routes in the city. The use of such buses is, due to their low noise and reduced environmental impacts, considered an essential part of the city’s urban development strategy.

With regard to the implementation of specific measures, several municipalities considered themselves to exhibit good practice. Eskilstuna’s work with parking standards and dynamic
parking was considered exemplary by both respondents in Eskilstuna and other municipalities. Indeed, this example is interesting not least because it highlights the need for engagement “to make (parking) more an issue of sustainable urban development issue than only a sensitive political question”. From a broader sustainability perspective, respondents in Eskilstuna emphasised their municipality’s attempts to focus on circular economy (e.g. through the recycling mall Retuna). Göteborg is considered an important reference point in this regard, due to its work on consumption and ecological footprints.

The Uppsala Climate Protocol is an obvious reference point for many municipalities, illustrating a form of participation that is functional and effective for diverse groups of stakeholders that has resulted in numerous “unplanned” initiatives emerging without the need for involvement of the municipal organisation. One important pre-requisite for the success of such initiatives is the presence of committed individuals in for example local companies. A respondent from Uppsala emphasised the need to communicate the process behind the Protocol and lessons learnt, to assist municipalities launching similar initiatives.

In addition to the trygghetsprojekt (see Section 3.3.2), respondents from Västerås emphasised the city’s cycle network and services (e.g. snow clearance, heated paths) to be good examples, along with a tunnel under the city centre that is accessible for trucks to deliver goods to local shops, for waste collection services, etc. Both the tunnel and cycle network are the legacy of far-sighted urban planners, yet the same is also true of the city’s highways, which are easily accessible by car and represent the single largest barrier to modal shift for short journeys.

3.3.9. Inspiration
A wide range of examples were cited by the municipalities as sources of inspiration. Copenhagen’s experiences with cycling emerge as a key reference point for the majority of the Swedish municipalities, along with national experiences concerning mobility from Germany. Within Sweden, respondents identified various municipalities as being good at different things - Umeå (parking and cycles), Eskilstuna (parking, mobility management, city logistics), Malmö (parking and mobility management), Lund (cycling and long-term planning), Karlstad (public transport), Uppsala (cycling), Örebro (walking, traffic planning), Västerås (cycling), Sollentuna and Göteborg (cable cars, city logistics in Göteborg). In other countries, Basel, Bremen, Freiburg and Gröningen were cited as good examples of cities enabling sustainable mobility, Metz was identified as a city enabling high-capacity public transport, and Vancouver was noted for its urban planning. Oslo and other cities that have closed or drastically reduced access for cars in large parts of their inner cities were also cited as inspiration.

4. Conclusions
This report provides an overview of current work to develop strategies and policies to promote sustainable mobility and sustainable transport in 11 large Swedish municipalities. A range of interesting practices are illustrated, in terms of organisation, process and practical implementation. Some general observations can be offered as conclusions. First, some municipalities appear to have organisational structures that have better design than others. In
such municipal organisations, individuals and entities understand their roles and responsibilities, and work within a structure through routines that facilitate effective development, implementation and monitoring. Moreover, such municipalities also appear to have developed working methods for cooperation with external stakeholders.

Politicians send important signals and often underestimate their influence over municipal organisations and the wider municipal community. Brave, engaged and committed individual politicians are thus essential for sustainability transitions, yet such individuals also need allies both inside and outside of the municipal organisation. The work of municipalities such as Umeå and Uppsala with local civil society, including businesses, indicates that cooperate outside of the scope of traditional municipal operations can add value to the work of the municipal organisation.

Interviewees were almost unanimous in demanding action at the national level to demonstrate greater sensitivity towards the challenges of urban mobility, including a need to revise and reconsider existing infrastructure planning models, a need to increase municipal resources, and a need to regulate transport in urban areas in a more stringent manner. It is difficult for municipalities to act alone on issues such as car-free development or city logistics, yet it is also possible to imagine scenarios in which current patterns of transportation change, radically and immediately. After all, cars used to be driven in the left lane, and that changed overnight, so where there is a will there is usually a way.

5. List of project publications / activities

1. Reports
1.1. Sustainable energy and sustainable transport – what can Swedish towns learn from municipalities in Denmark, Germany and Switzerland? (Funding report to Göteborg Energi presenting findings from Phase I. Available on DIVA, Researchgate, etc).
1.2. Sustainable mobility in the Sustainable City – a study of 11 large municipalities in Sweden (Funding report to ÅForsk presenting findings from Phase II. (Will be posted on DIVA etc).

2. Peer-reviewed articles (published/approved)

3. Articles under review

3.3. P. Fenton, S. Gustafsson, Moving from high-level words to local urban action – governance for urban sustainability in municipalities. Abstract accepted for Current Opinion in Environmental Sustainability; submitted May 2016 with publication planned for 2017.


4. **Conference presentations**


4.2. P. Fenton, Sustainable mobility in the sustainable city – what can Swedish towns learn from municipalities in Denmark, Germany and Switzerland? 4th National conference in transport research, Karlstad, 21-22 October, 2015.


5. **Other presentations**

5.1. P. Fenton, Sustainability • Strategy • Space. Uppsala University, 6 December 2016.


5.4. Article from Norrköpings tidningar, 25 August 2015.

5.5. Presentation to research colloquium of Sustainability Research Group, Basel Universität, 23 April 2015.