Regional Action Plan

Development on an integrated mobility plan for the Sälen/Trysil and the Åre areas (Sweden)

March 2021

Content

Introduction

This report presents the Regional Action Plan for the Swedish case within the InterReg project MARA Mobility and Accessibility in Rural areas (MARA_mobility). The overall purpose for the InterReg project is to improve the accessibility and mobility in touristic remote areas of the Baltic Sea Region by increasing the capacity of transport actors.
In Sweden, the main pilot case study takes place in Sälen which is a rural destination popular for ski resorts situated in the western part of Dalarna county. The Swedish case in the MARA consists of two parts; one who looks into developing an integrated mobility plan for the boarder region Sälen in Sweden and Trysil in Norway, the other to develop GIS based maps to assist in transport planning.
The main focus for the case is to develop an integrated mobility plan for the Sälen/Trysil area where gender aspects are included. The main challenge behind the case is the Swedish Transport Administration's (henceforth, Trafikverket) needs for improving methods, models and processes in the early phase of infrastructure planning for remote areas with an extensive tourism industry.
Overall, Trafikverket's approach in the case is to develop the dialogue between municipalities, other public organisations, business and citizens in winter resorts in the Sälen/Trysil area (main case) and the Åre area (follow up case). These areas have the common goal to further develop their tourism industry in a sustainable direction. This implies an overall goal of developing and improving public transport solutions to access these areas.
As will be described in more detail further on in the report, the case area Sälen/Trysil is to date the largest winter tourism destination in Scandinavia based on visitation numbers. As an example, the municipality in Malung-Sälen has just over 10,000 inhabitants, but receives in peak season over 50,000 visitors. The relationship for Trysil, with just over 6,500 inhabitants, are similar when it comes to visitor numbers.
Bearing in mind that the Swedish case in MARA somewhat differs in purpose compared to most of the other cases in the MARA mobility project, this Regional Action Plan includes both a description and discussion of planning processes and methods within the Swedish system as well as an analysis of mobility offers and needs for selected areas within the case.
Therefore, the aim of this Regional Action Plan is to summarize analytical activities conducted within the case Sälen/Trysil and Åre as part of the MARA_mobility project.
The report starts with a section on transport planning, linking the administrative levels; municipality, region and nation. Then follows a detailed introduction to the case areas including a description of existing mobility offers. Next follows presentation of results from mobility GAP analysis is presented using the tool developed by partner DU.
A section on tools and processes of planning in Sweden comes next, including the method of Strategic Choice of Measures and a description of its main components and how it is linked to the case area. A final chapter including subsection discusses the methods and work done in the case that leads to the process of forming the Integrated mobility plan for the main case area. The section discusses specific methods of planning and other planning processes. The section

also includes summery of interviews done in this study together with insights from literature review that together form the basis for an analysis. A final chapter offers some key findings from the overall Swedish case in the MARA project.

Transport planning – national and regional level regulations

When the Trafikverket is planning and building roads and railways, they start with an extensive planning process. One key in the process is the Strategic Choice of Measures methodology (SCM). This is a necessary step before a final plan to develop a road or railway is done. Before any construction takes place, a construction document is drawn up and decided on.

Trafikverket is responsible for planning, building and managing state railways and public roads, especially in rural areas but also for certain urban routes. STA is also responsible for the state ferry routes. There are several stakeholders that needs to be involved in the process of developing the road and rail network. In the process Trafikverket cooperates with other government agencies; county administrative boards, municipalities, public transport, interest groups, regional and liaison bodies, the public and property owners affected by their projects. The three picutres below sketches the steps in the planning process (see Swedish Transport Administration (2013), for further reading).

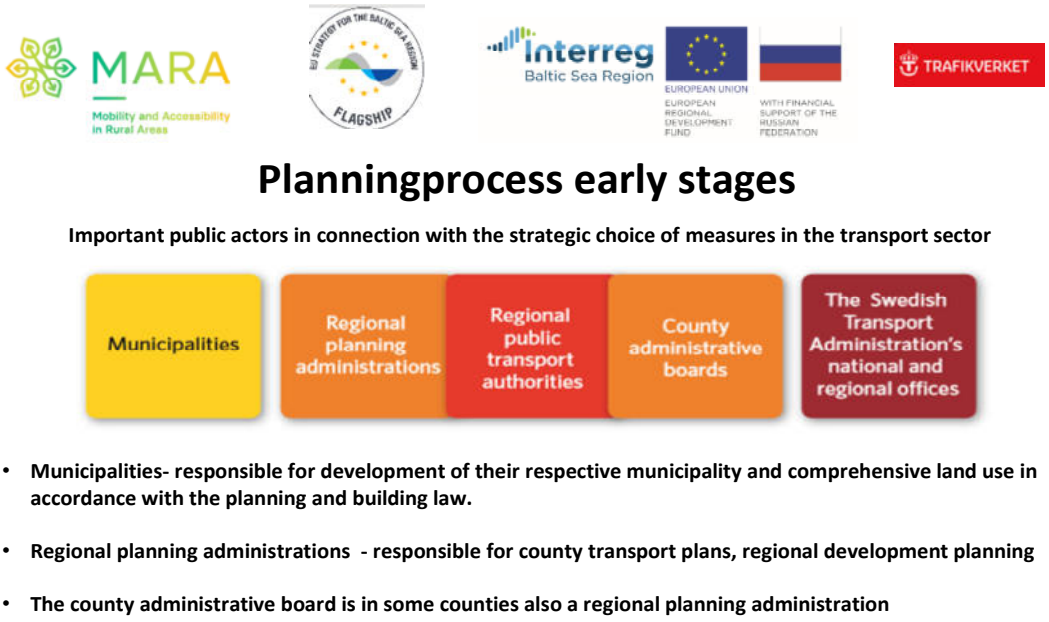

Figure 1. Planning process in early stages Source: Swedish Transport Administration (2013)

Figure 2. Planning process governed by 2011 bill Source: Swedish Transport Administration (2013)

Road or rail projects shall be planned in accordance with a specific process governed by laws and ultimately leading to a road plan or railway plan; The process is called Strategic Choice of Measures.. The planning process investigates where and how the road or railway will be built. The time it takes to obtain the neccesary data depends on the size of the project, the number of studies required, the existence of alternative routes, the budget available and what those concerned think. The results of the planning process and the design of the road or railway are described and reported in a road or railway plan.

In the beginning of a new planning process, there is also a need to establish how the project can affect the environment. The County Administrative Board then decides whether the project can be assumed to have a significant environmental impact. In this case, an environmental impact assessment shall be prepared for the road or rail plan, where they describe the environmental impact of the project and propose precautionary and protective measures. The plan is kept available for review so that those affected can comment before they complete it. Once the plan is established, an appeal period will follow before the plan becomes final.

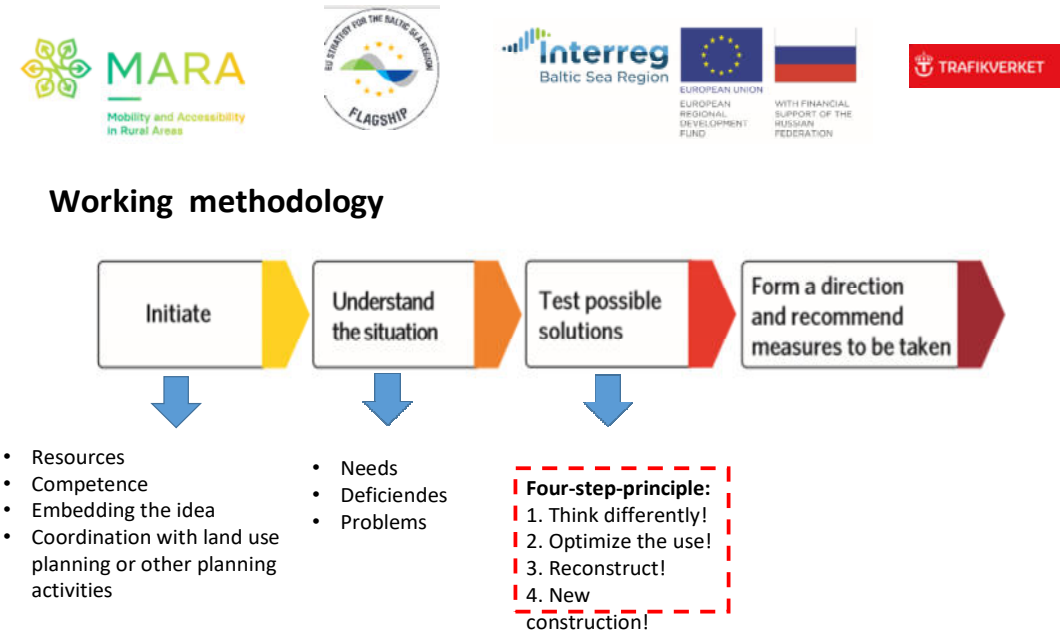

Figure 3. Working methodology for Strategic Choice of Measures

Source: Swedish Transport Administration (2013)

Consultation is important throughout the planning. This means to get in touch and have dialogues with other authorities, organizations and the relevant public in order to get their views and knowledge. They can consult directly with those concerned or through meetings that are open to the public. Sometimes they also have meetings with the landowners who are particularly concerned by a project. The comments received after consultations are compiled in a consultation report in which they also report on how the comments will affect the project.

National transport plan

Before starting the planning process for a road or rail project, long-term financial planning is carried out for the overall road, rail, maritime and aviation transport system. The planning is compiled into what is known as the national plan for the transport system. The national transport plan contains how much money they have to spend, what to do and what geographical areas are involved. These may include new railways, roads or shipping lanes, as well as conversions, operation and maintenance and road safety or environmental measures. It is the government that finally decides on the content of the national plan. Trafikverket's task is to make the plan a reality.

County plan for regional transport infrastructure

In addition to a national transport plan, each county develop a so-called county plan for regional transport infrastructure. The county plans contain the investments that the counties themselves intend to make taking into account the overall transport needs within the region. These include, for example, regional road grants for regional public transport, operating subsidies to non-state airports and co-financing of measures in national plans. The government decides on the financial framework for the counties. Each county is responsible for how these funds are prioritized in their county plan.

Financing from EU

EU's various programs also offer opportunities for funding of activities that complement national and regional programs. Through the EU's structural funds, co-financing can be provided for complementary infrastructure such as multimodal travel centres. In the Sälen area, however, that possibility is no longer open, but for northern Sweden, to which Åre belongs, co-financing of travel centres, bicycle paths etc can be obtained from the EU's structural funds. Projects under the EU's Interreg programs such as MARA can support knowledge building and demonstrations aimed at developing sustainable mobility solutions that meet citizens' needs for accessibility.

Description of the region and existing mobility models/offers

The Swedish case has the destinations Sälen-Trysil as main object of study with the destination of Åre as a follower case. This section of the report describes the two areas and discusses the current mobility situation. To start with, figure 1 below shows the location of the two destinations in the Baltic Sea region. The figure also shows a zoom in for Åre and Sälen/Trysil including analysis of mobility gaps, which will explained in a the next section.

Figure 4. Map showing the Swedish case areas in MARA-project

The Sälen-Trysil use case is the number one winter tourism area in Sweden in terms of guest nights. Roughly 5 million guest nights on a yearly basis.

As of 31st December 2020, the local population in Malung-Sälen was 10,177 according to Statistics Sweden (SCB, 2021). Table 1 below gives further details of the population structure of the municipality Malung/Sälen.

Geographically, there are several ski areas and residential quarters, but they are rather separated from each other. The distance is about 40 km between the two end points, Kläppen ski resort and Stöten. It is possible to go by train to Mora and then take a bus from Mora to Sälen-Trysil a distance of 100-150 km depending on where in the ski area one wants to go. There are also direct buses from Stockholm and other bigger Swedish cities. The strength from an attractiveness point of view is that the Sälen-Trysil area offers a great variety in ski experiences with slopes that cater to all types of skiers. Figure 1 below shows the main points of attraction in Sälen, the ski slopes. As can be seen, they are located fairly close to each other, still forming a spread out destination.

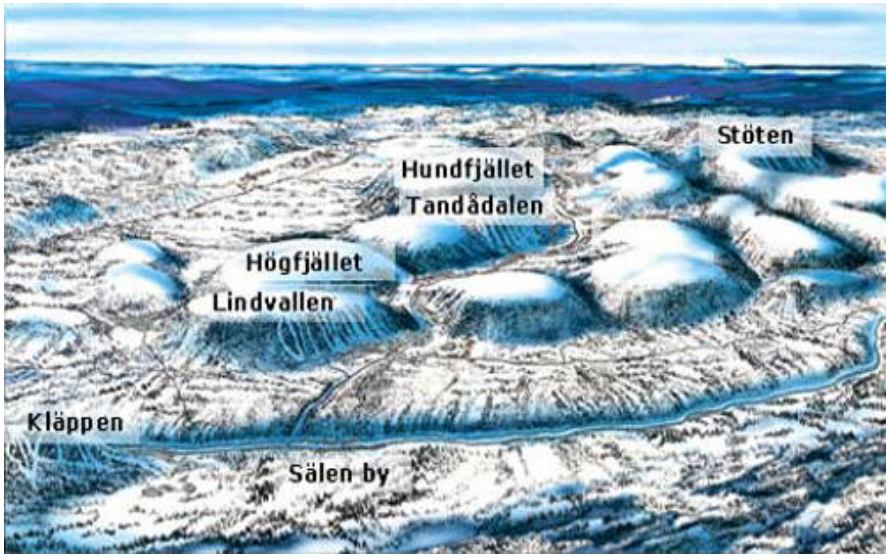

Figure 5. Map showing ski slopes in Sälenfjällen (Fritiden.se, 2020)

A further look into Figure 2 below shows the newly opened airport that sits in the middle of the Sälen-Trysil area.

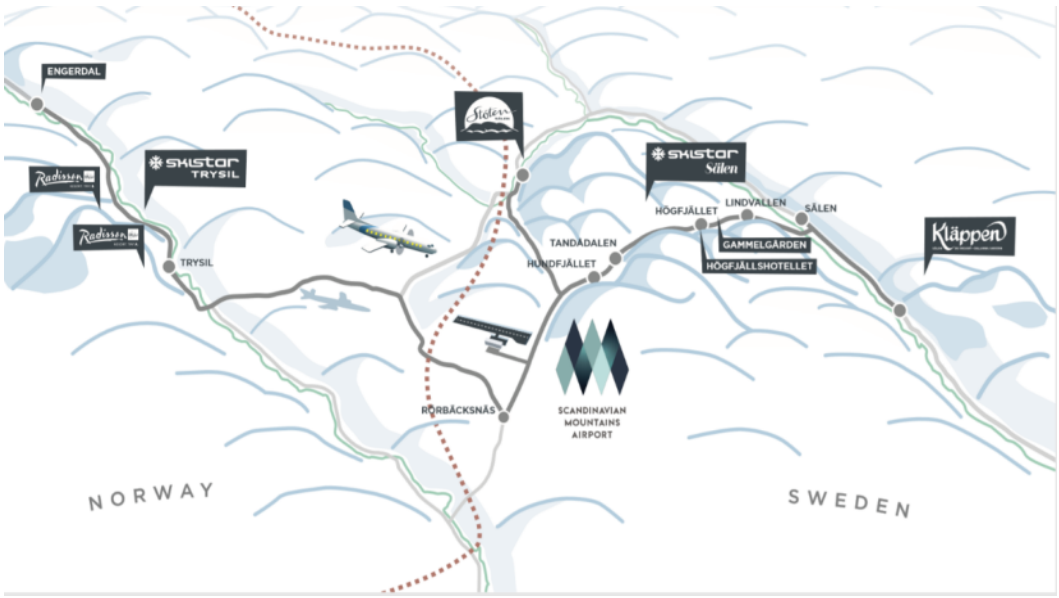

Figure 6. MAP showing Sälen/Trysil and location of Scandinavian Mountains Airport

(Destination Sälenfjällen.se 2020)

Both previous mobility studies and the study carried out within MARA project confirm that the preferred mode of choice for visitors coming to Sälenfjällen is car (Heldt &Robertsson 2017).

Table 1. Basic information about population

Region	Total population	Population		Population change per 1,000 inhabitants (2014-2019)	Population		
		city	village		0-19 years	20 – 65 years	over 65 years
Malung Sälen municipality	10 177	-	-	- 0.141	1974	5410	2728
Åre municipality	12 049	-	-	+ 1.382	2806	7054	2121

Source: Statistics Sweden (2021).

Table 2. Basic information about region

Region	Area of the region (km2)	Number of inhabitants	Density of population (number of inhabitants per km2)	Hard paved public roads per 100 km² in km	Cars registered per 1000 inhabitants	Bicycle paths (km)	Geographical location/local border traffic/ connectivity to transport hubs (airports, ports)	Access to railway/buses/waterways	Number of holiday and other short-stay accommodation (with more than 10 beds)

Table 3. Touristic attractiveness about region

Region	Touristic attractiveness

In the follower case Åre, the population as of 31st December 2020, amounted to 12 049 (Statistics Sweden, 2021). To note, Åre municipality has had one of the sharpest percentage-increases in population in Sweden in the last 5 year, + 11 percentages. Pre-corona numbers on commercial guest nights for Åre are estimated to 1,1 million, out of which more than 7 out of 10 are taking place during winter season (JHT 2020).

Geographically, the Åre the ski area is integrated around a central village in whish also the train station is located. Figure 3 below shows the layout of destination Åre and how to get to the destination with different transport modes. It is possible to come using all types of public transport, bus, train and flight.

The majority of visitors still arrive by their own car on E14, however the modal split has been shown to differ substantially between summer and winter visits. In a 2017 study the split for winter travellers to Åre were car-(36%)-train 40(%), flight (7%) other including buss (18%) while the same for summer was 89%-8%-2%-1%.

It is possible to fly to Åre using one of the two fairly close airports, either Åre-Östersund Airport, located at Östersund some 100 km to the east, or Vaernes Airport, Trondheim Norway, 136 km west.

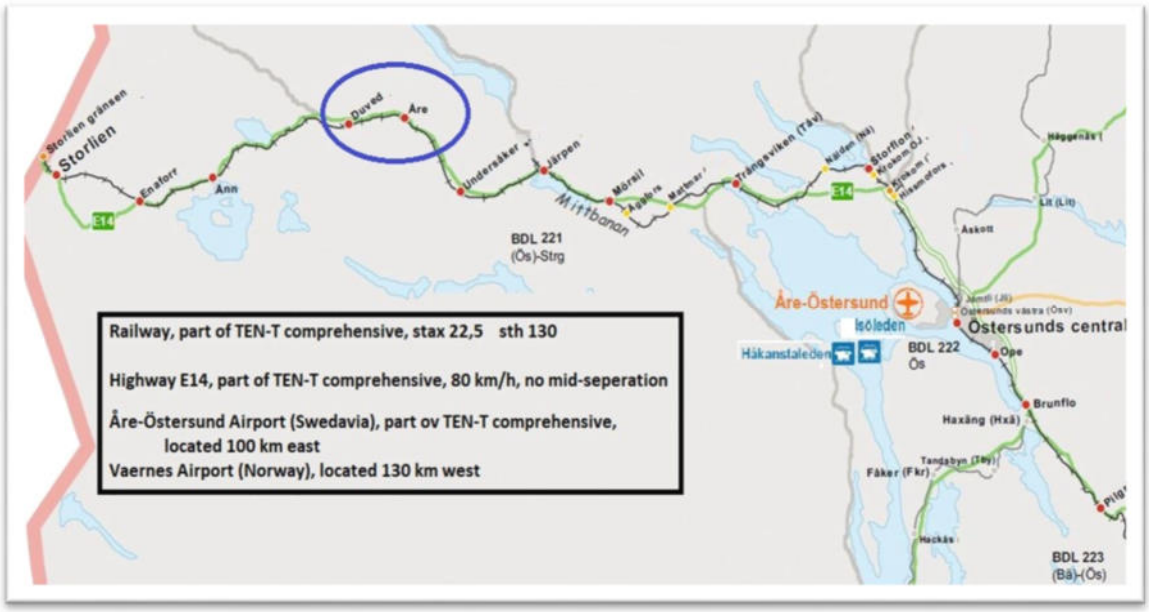

Figure 7. Map showing transport modes to get to Åre

Analysis of current mobility, connectivity and accessibility situation in Sälen-Trysil

Sälen-Trysil, as well as Åre, are far away from the metropolitan areas in Sweden. Once arrived in the areas there are local buses that run on schedule and taxis. The most practical mean to move around in both areas are by your own car. This is especially true for Sälen-Trysil with its elongated structure.

To better visualize the density of population the below maps were created for the Malung-Sälen municipality. It shows the more densely populated centre of Malung with two 500m square areas populated by more than 500 inhabitants (700 and 900). Similarly, for Sälen village, the map to the right shows a general below 49 population density, but with peak numbers in Sälen village reaching up to approx. 300 for two central squares.

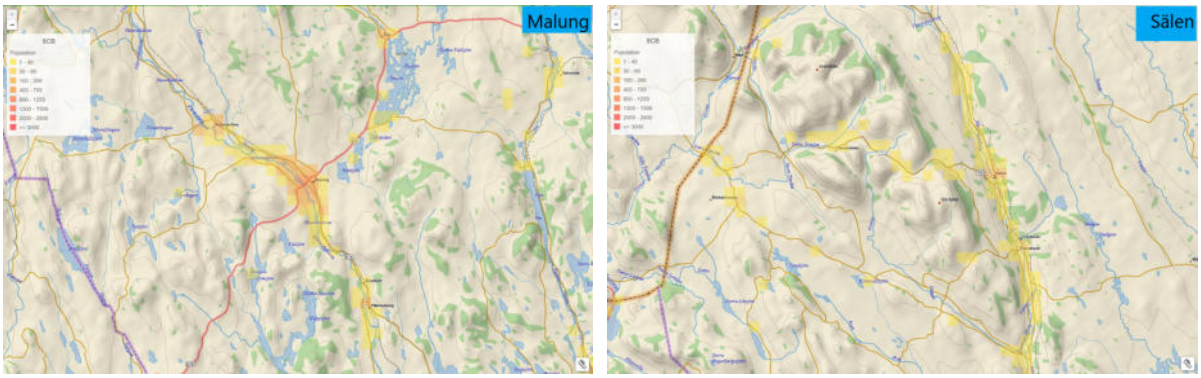

Figure 8. Population density in Malung (left) and Sälen (right) villages

The existing mobility models in the region, as described above, is mainly individual car using the road network. Mobility offers, however, includes options for travelling to, from and within the case areas with public transport. As an example, the below figure shows the system of public transport in Sälen/Trysil area. The 603 purple dots indicate the location of bus stops in the wider municipalities containing Sälen and Trysil. The municipality boarders for Trysil fylke and Malung-Sälen municipality are highlighted in red.

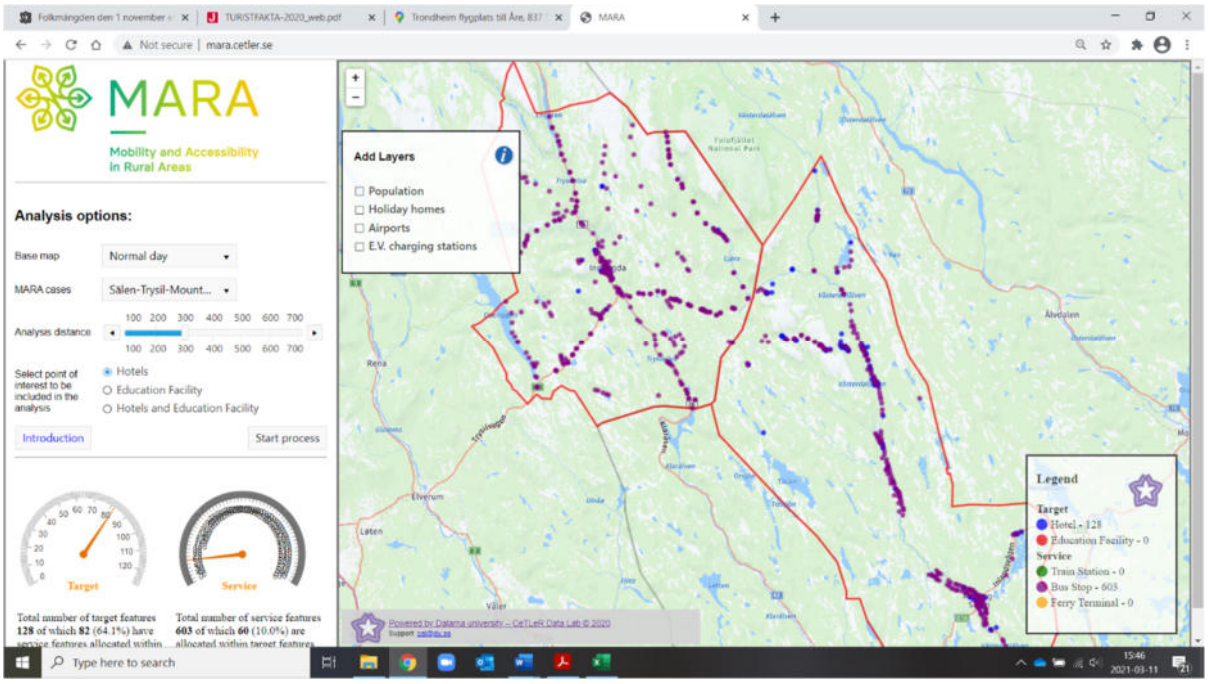

Figure 9. The location of a total of 603 public transport bus stops in the area

As described above, the area has up to recently been primarily a winter tourism destination. Currently there exists no Bike-sharing system. However, there are several bike rental companies in the area. It is also common that hotels offer the opportunity to rent bikes to their guests.

The area does not have a Call-a-bus-system. However, in winter time there is a shuttle bus system that offers a mobility service in between key points of interest and main lodging areas in the destination.

Table 4. Main problems of mobility and accessibility of region (Sälen/Trysil)

Region	The main problems of mobility
Sälen/Trysil	• Models and processes in the early phase of infrastructure planning are weak • Sustainable destination development - - more sustainable travel • Car dependent for travel to and within the destination • Crowded roads in the destination as well as on main access roads during peak days when “change of lodging” takes place

Analysis of current mobility, connectivity and accessibility situation in Åre

Dialogue with Destination Åre

In the project plan for MARA it states that findings in the project shall be tested for its usability in Åre (one of the largest ski resorts in Sweden). We started a discussion with some stakeholders in Åre order to find out which of our results that might be transferred to them. One lesson is that we also have to think the other way around. Åre has a lot of experiences that Sälen can use. Intense knowledge interplay between the two destinations is suggested.

Åre has a geographical advantage as the village is concentrated and situated along a railway and a highway. Over the past decade, Åre has developed in a number of different areas. Åre Municipality has the second largest percentage population increase in the whole country at the last survey. Between 1 November 2019 and 1 November 2020, Åre municipality's population increased by 3 percent, which corresponds to 355 people. In percentage terms, only Trosa municipality in Södermanland had a sharper increase during the current period. A conscious investment by the municipality and industry has initially developed winter tourism but gradually also developed a number of summer activities. "Åre all year round" was a slogan that became a reality. The population increase started with a migration due to the positive development in the tourism industry, including the investment that Åre municipality and the industry together made on Åre Strand and, above all, the increased summer tourism that it entailed. Growth was made possible by close cooperation between Åre Municipality, Åre Destination AB and Skistar.

The investment in Åre Strand broadened the destination's offering especially during the summer and created the opportunity for a larger year-round tourism. At the same time, store space in Åre increased significantly so that the supply for shopping increased. Small companies with focus on fashion, culture, spa and health have started and certainly influenced women's choice to move to Åre. As a result, the number of jobs and the opportunity to earn a living all year round increased. The population group that is increasing the most in the municipality is families with children with people in their 20s and 30s. During this period, however, efforts in the transport system have lagged behind.

Table 5. Main problems of mobility and accessibility in Åre

Region	The main problems of mobility
Åre	• Models and processes in the early phase of infrastructure planning are weak • Sustainable destination development - - more sustainable travel within Åre • Real estate developers doesn't take responsibility for overall sustainable destination development

	• Car dependent for travel within the destination • Crowded roads in the destination as well as on main access roads during peak days when “change of lodging” takes place

Challenges of transportation models and recommendations for improving mobility offers in policy and planning documents

One of the key challenges of transport and mobility in the Sälen/Trysil case area relates to geographical conditions and naturally given prerequisites. The mountains which host the ski facilities is a key naturally given asset. Business facilities, restaurants and hotels as well as lodging areas have been developed based on this geographical conditions. As has been pointed out in the previous section, Sälen-Trysil has a very dispersed geography. The distance is about 70 km from between the two endpoints. There are several ski areas and residential quarters, but they are rather separated from each other. As a consequence for mobility the majority of visitors chose to bring their own car to the resort. That means the national roads leading to Sälen/Trysil from time to time are heavily used with repeated traffic jams. The two major roads are narrow, passing through many small villages. This section discusses methods and offers insights from stakeholder interviews as well as offer insights on how to implement a future Integrated mobility plan.

The planning method Strategic Choice of Measures (SCM)

The Trafikverket has, in cooperation with stakeholders and other interest groups conducted a study in the Sälen area with a method named Strategic Choice of Measure, henceforth referred to as SCM, in Swedish the acronym is ÅVS (Trafikverket 2017). Among the recommended measures proposed in this study some will form the basis for actions with funding primarily from the Trafikverket's regional plan but also funding from involved stakeholders.

The Trafikverket's Region Center was project manager and carried out this selection study in collaboration with Malung-Sälens municipality. The purpose of the action selection study is to understand the situation, test possible solutions and shape the direction for the future of the vulnerable road users who move along and across road 66 between Sälen´s village and Hundfjället. The study also aims to create consensus and develop common planning basis for the future work of the different actors.

In the following chapters we discuss the method SCM and its relation in the planning processes. The interviews done in this study together with R&D results form the basis for this analysis.

The method of SCM is looked into from different perspectives, such as gender; regional development; financing; culture clashes; chain of command, thus identifying problems in the process and suggest countermeasures.

Identify and list stakeholders in the MARA project

The MARA projects focus on aspects of the planning process within Trafikverket. One aspect is to increase understanding of how Trafikverket as early as possible in their planning can interplay with different stakeholders in the region with interest in transportation. The question affects some crucial factors that have been raised in this project and have to be dealt with such as identify and list stakeholders.

In the project plan for the MARA project various stakeholders are listed, all together nine. Among them were the Commune Malung/Sälen, County Administrative Board, Destination Sälen, Skistar etc. They are all organisations with an outspoken role to work with transportation issues. But there are many more stakeholders that can contribute. Beside them listed in the project plan there are other actors who in various ways have a connection to aim and goals within the MARA project. Some of them have already been in contact with the project and are aware of their contribution. Others are to different degree part of the project but are not always aware of it. To be added are actors who in different ways could be of importance for the success of the process. To map them is an important task but it is not done merely by interviews as their relevance for MARA might not be obvious for them. That can be explained by research that show how professional groups to some extent are unaware of how their daily work is carried out and which information channels they use. Often they have this insight but it tends to be on a subconscious level and they might need support to articulate it. To map actors those are important but not so visible are important and requires special methods. One of these is the snowball method. It means to use the contacts you already have and ask them for additional actors, and these contacts can subsequently guide you further to other possible stakeholder who in their turn can guide you further. When the same names start to come up you have reached the so called saturation effect.

The dialogue with relevant stakeholders will gradually lead to new knowledge and new measures to be integrated in their work. It seems vital that this dialogue is part of an ongoing process as important circumstances change all the time. Which organizations and which individuals that is relevant stakeholders also shift from time to time. The importance of this flexible way of working is identified as a crucial factor for success.

As described above there were 9 stakeholders listed in the project plan but through our work with the snowball method additional 21 stakeholders were identified as listed in table 7 below:

Table 7. List of stakeholders

Besöksnäringens Forsknings- och Utvecklings Fond, BFUF (Tourist R&D fund)

Fiskarheden (sawmill in Sälen)

Fjällstugeföreningen i Sälen (association of hoouseowners in Sälen)

Fjällsäkerhetsrådet (mounting rescues council)

Destination Sälenfjällen

Destination Trysil

Grensekommittén (bordercommitte)

Högskolan Dalana Dalarna university college)

KLÄPPEN (skiresort in the area)

Polisen (police)

Region Dalarna (County council of Dalarna)

Räddningstjänsten (emergency service)

SCR – Svensk Camping (Swedish camping organisation)

SKISTAR

SLAO Svenska Skidanläggningars Organisation

STÖTEN

Svensk Turism AB

Scandinavian Mountains Airport,

SITE (Sälen-Idre-Trysil-Engerdal, InterReg funded project)

Svevia (road carrier)

Sälen Buss (Bus company)

Sälens snöskoter klubb (snow scooter club in Sälen)

Sälens Fjällsäkerhetskommitté (Sälen security committe)

Sälen Malungs kommun (Sälen-Malung municipality

Trafikverket (Swedish Transport Administration)

VISITA (tourist orgsanisation)

Visit Dalarna(tourist orgsanisation in Dalarna)

VisitSweden (tourist orgsanisation in Sweden))

UHR; hotel- och restaurang mfl (association for hotel- and restaurants)

Vägbyggare PEAB (road bilder company)

Prerequisite for constructive knowledge interplay between stakeholders

The process to identify relevant stakeholders as mentioned above is also the start of a process to develop transport planning e.g. "Strategic choice of measures". The basis for this process is regular meetings with Trafikverket and the stakeholders. In our interviews with the involved actors we have identified some important prerequisite in order to further develop the planning process. One is continuity and the other one is to define perspective on knowledge and competence development.

Continuity

We were able to note how important it is that the dialogue is allowed to take its own time so that the meeting between the participants differing funds of knowledge could have a chance to develop. Allowing the meetings to take their time increases the likelihood that exaggerated respect and prejudices among the participants would diminish and that a relationship based on more realistic expectations can be developed. People need time to get used to each other, to establish a working relationship, to develop their own vocabulary, to develop in-jokes and other routines that make them a good team. How long this process should take can only be decided from case to case. It is the participants who after a while will feel they have had enough and feel satisfied with progress on that occasion. It is important that they allow the process to take its time, that they are attentive to one another and that they are not in too much of a hurry and so lose contact. One further reason for "making haste slowly" and allowing the process to take all necessary time is that transport planning for some of the participants might compete with other activities. The transport planning meetings only take up a fraction of their time. Their working day is filled with contacts, meetings, decision-making, information intake, and external influence. This can be one of the explanations why stakeholders in our interviews find the process to be slow.

Perspective on knowledge and competence development

In the planning process it is important to define a perspective on knowledge and competence development To get added value to the dialogue with stakeholders it is an advantage if the participants discuss and eventually share the same perspectives.

Perspectives as:

- Information overload

- Rapid knowledge change

- Knowledge and values

- Know how – know why

Information overload

Since radio became a public property a century ago, the trend towards one-way mass information has been greatly strengthened. This trend does not yet show any signs of slowing down and for the future we can imagine that it will rather accelerate with the development of all kind of digital solutions. The overflow of information means that we are bombarded with messages on a daily basis. A large and increasing proportion of our working days are filled with sorting all this. This huge and one-way range of information also has an important social ideology. The more we are fed information, the more difficult it is for us to see societal contexts. In this cacophony of information, we find it difficult to sort substantial information from trivialities. Nor can we be sure that the information we receive is not misleading as the transmitter may, for various reasons, have grounds to de-information. Just over half a century ago a large part of the information we received was conveyed or sent by people with whom we somehow knew and had a social connection to. This entailed a certain amount of social control, an opportunity to ask questions and to continuity Information a century ago consisted mainly of local information, but today the ratio is the reverse which tends to make the world incomprehensible to the individual and undermines democracy.

In the scientific world, the conditions are the same. Every year, research reports and scientific articles are published around the world to a large extent. Every year, supply is increasing and today has a scale that creates significant problems in orienting yourself in this flood of reports and articles. The old type of researcher who was well versed in both the natural sciences and the humanities is becoming increasingly rare, if he/she exists at all. Even the individual researcher may have difficulty keeping up with what is happening in their own area of interest. For interested and knowledgeable people who are outside the scientific community, the

difficulty of finding the right one can become insurmountable. In the MARA project we solved that problem and had acess to scientific competence through our collaboration with Dalarna University.

Rapid knowledge change

People and organisations everywhere today face changes on a significant scale. Management researcher Peter Waill describes this poetically when he says “We are all living in permanent white water”. Today, it seems that we hardly have time to recover from one wave of change before the other comes upon us. Twenty years ago, management literature was filled with references to planned changes. Today, it is mostly about different ways of dealing with all the change that is being thrown at us by an increasingly chaotic environment. Managing change has become important not only in organisations but for us as individuals and also in our family life. Winds of change also affect the knowledge mass. The knowledge that was “true” yesterday may be wrong today; today’s “truth” is tomorrow’s “lie”.

One example of this kind of change is the new airport I Rörbäcksnäs – close to Sälen/Trysil. It has capacity to change mobility patterns in the area. It might attract new groups of tourists that are well off – a group that has been described as global nomads.

The high rate of change means that professionals’ knowledge and skills must be continuously adapted and renewed. If an employment is seen as an investment, it is not unreasonable to expect that previously dedicated knowledge is gradually consumed or rather becomes obsolete. If no maintenance takes place the investment will eventually cease to contribute to added value. When choosing people to participate in the mobility planning process this aspect should be considered.

Knowledge and values

New knowledge and development activities do not, of course, automatically lead to anything positive. Both new knowledge and development activities can also lead to deterioration for people and for businesses. The world is constantly evolving, but it varies to what extent we

think it is getting better or worse. An Estonian woman from the former Swedish island Wormsi told the author of this report after living through 50 years of Russian occupation:

";I wonder how long it will take before we have got so far that everything will be as before";

An important perspective that often is lacking is precisely what the Estonian woman expressed, namely the valuation perspective. What knowledge is conveyed? How can new knowledge affect other factors in the users' life? What can it mean to be exposed to knowledge transfer? What are the consequences of knowledge for those exposed to it?

Knowledge does not, of course, lead to anything positive. It can also lead to bigotry when trying to squeeze in reality to suit the methods and tools you have within your own area of knowledge. If you have learned a certain treatment methodology, for example in psychiatry and have also been successful with it, there is a risk that one tends to want to use it too often, that is, even in situations when that particular method is not the optimal one. This suggests that knowledge transfer should include phases, where the user comes into focus and the new knowledge can be put into a larger context in the users' life and valued and tested accordingly.

Know how- know why

The conditions described above raise several important questions about how information/knowledge transfer is organized and how users value knowledge. For many professions, it is therefore important that the focus of knowledge transfer is changed from the traditional broadcasting perspective to a user-centred perspective. One conclusion is that the primary thing does not seem to be how professions should be informed about knowledge, but rather how to inform themselves about knowledge. The emphasis should shift from the passive to the more active information. It underlines the need to learn to seek current knowledge and to be able to relate to and value it. Pure learning of a traditional educational nature can be a waste of effort. It is more important to know how to ask the question, KNOW WHY than to have gathered a body of knowledge, KNOW HOW, which may be outdated tomorrow.

A conclusion based on previous studies is that the professional is the one who has the opportunity to ask a lot of the questions that are relevant in the work situation and who also as interest and motivation to seek knowledge that can help to provide an answer to the questions. But theoretically being able to ask questions is not the same as being able to implement it in practice at all times. A stated area of concern is precisely how to ask adequate questions, how to circle problems, how to make strategic priorities and put their work in a wider context. The ability to absorb new knowledge depends primarily on one owns ability to identify and

pronounce one´s goals and needs and from this sharpen their question. Learning to ask the question is the primary – the question is the answer. This relationship underlines the importance of learning to make problem formulations yourself, seeking knowledge, relating to new knowledge (i.e. critically reviewing and evaluating), doing external analyses, setting priorities, etc.

In this context, the issue of knowledge networks becomes central. It is not the content of knowledge that is central, but the ability to critically evaluate, reassess and adapt knowledge to ones own reality, which is the primary and where networks can play a major role. The discussion above about information overload, knowledge change and values can play an important role in the planning processes for mobility.

The planning process and gender and equality

Social aspects are important issues in the transportation area and indicate considerable challenges for transport planning and traffic safety. It has, however, been rather neglected and is sparsely seen in the research field. In order to integrate gender and equity in the Integrated

Action Plan we take help from the Swedish National Road and Transport Research Institute and their R&D program on gender equality and diversity in the transport sector (VTI program Mobility, social inclusion and justice). Extracts from their presentation of the program show how activities within their research area, research and investigative activities are being conducted with the aim of deepening the knowledge on social sustainability, social consequences and welfare consequences with regard to practices among different groups, their preconditions and requirements in relation to mobility and access to transportation. One important aspect is how equity and inclusion can be ensured for individuals and groups in a diversified society.

Within this research area, both social and institutional conditions are taken into account, such as research on policy and practice with regard to different actors, and the mobility, power and inclusion of different groups in planning, designing and maintaining transport solutions. The research may involve studies on social disadvantages resulting from existing or planned transport infrastructure (e.g. safety), studies related to transport needs, evaluations of social consequences, studies on public participation, and the inclusion of a traveller perspective. In the research area, studies are also being conducted on how different practices and everyday activities can be understood in relation to mobility and transport infrastructure. One focus, according to the research group from VTI is to understand how different groups of travellers organise their everyday life in relation to transport infrastructure and mobility; another is the

interaction between "experts" and "non-experts" and how one can understand the communication of knowledge between them in a transport context (e.g., consultation procedure, training of road users).

Working with the method SCM "Strategic choice of measures" gender and equality aspects has to be included. That can be done in a variety of ways. Some of them are discussed below and is based on a summary in the article "Gendercontract and regional development in Dalarna" (Stenbacka, Grubbström & Forsberg (2011).

Local traditions in education, labour market and everyday life constitute lingering tough structures. If these are recognised, there are opportunities for reflection and change. In order for a labour force need and young people's educational and career choices to be consistent, efforts are needed to change and erase the traditional image of professions such as female or male, and especially their Social Skills. It is becoming clear that training in social skills is required in all vocational training courses, not just those relating to female-dominated professions such as healthcare, service and trade. More and more young men and women are breaking traditional boundaries and setting examples that make others follow suit, but young men who choose untraditionally are not encouraged as much as women. Responsibility for change should not be left to the next generation, but all actors should look to their ability to contribute to the development towards a more equal society. Gender relations are an important part of young people's view of the local labour market and their sense of the locality. The labour market, in turn, is of great importance for decisions to stay and the will to possibly return. For young people's strategies, their perception is more important than what it "actually" looks like. By paying attention to other images and opportunities, new strategies can be developed.

Attracting young people to move back to where they grow up is usually a priority area. Protecting those who remain and, by extension, giving a more positive picture of those who choose to stay should also be highlighted. In the young generation, both men and women want to take parental leave and care for their aging parents. It is important to work for good opportunities for these statements to be translated into action. Young women have different strategies for challenging prevailing norms about how they are expected to behave. Studies show that woman has a strong voice when a young family decides where to live. She often has the largest responsibility for the family and is the person who makes the family life puzzle work. Mobility opportunities are an important part of that.

Strategies can be about challenging the actions of the female majority and investing in jobs in male areas of activity. Another strategy is to engage politically, combining traditional femininity with untraditional leader engagement. A future challenge for young people is to renegotiate and question the norms governing how men and women are expected to be. In doing so, new structures are being built that are consistent with their image of an equal society.

In the work with an SCM it is possible to create the conditions and interest to participate in the development and working life of the local community and there many local actors can participate. This applies not least to the possibility of developing cooperation with local economic and cultural life. Influencing and changing habitual patterns of action requires time and training – but also reflection and insight into the consequences of them. In various forms, key players as well as young people or others in the population can be practiced in deconstructing gender structures. In working life, at school, in leisure activities, patterns can be dismantled and reassembled. The work with "Strategic Choice of Measures" in the transportation sector can be one such occasion. To develop and increase gender and equality issues in the planning process it can be an advantage to pick participants with knowledge and interest in these matters.

Unclear chain of command and diffuse financing

The planning method with the name "Strategic choice of measures-SCM" was developed by Trafikverket in 2013. It constitutes an arena for early dialogue between main actors and stakeholders at local, regional and national level to jointly assess transport related problems and develop solutions.

The Trafikverket in collaboration with stakeholders has conducted such a planning process within the Sälen area which resulted in quite a few suggestions to activities in order to improve the transportation. Interviews with people who participated in this study give a picture of a highly respected and useful process. But when it comes to implementation the interviews indicate problem of the "chain of command. It seems to be unclear who has the lead in the fulfilling of the process.

Financing SCM and step 1-2 measures

When an SCM is completed, a decision is made on continued handling. With regard to steps 1-2 measures, there is no statutory process for how the measures are to be taken forward. Against this background, a study was carried out on the conditions for step 1-2 measures after the

completion of SCM (Fernström A, Johansson &Tornberg 2016). The study is based on the basic assumption that the likelihood of measures being implemented is higher if there are actors who are justified in implementing the measures and if obstacles or inhibitory circumstances at the same time do not outweigh this motivation. Commitment is required from participating actors. Trafikverket's own ability to assume responsibility for step 1-2 measures is surrounded by a number of limitations such as available budget and terms of what Trafikverket has formal possibilities to do (especially in the steering documents that regulate Trafikverket's mission).

Trafikverket may finance from national and regional level, partly in terms of internal procedures that affect the agency's ability to work based on these possibilities (e.g. the possibilities to order step 1-2 measures internally, the possibility to use maintenance measures, as well as support systems and internal aids). Many step 1-2 measures fall within the responsibilities of other actors and in practice the implementation of these measures often depends on actors other than the Trafikverket. Trafikverket's mandate to work with step 1-2 measures is largely clear to many at the Trafikverket, but in concrete cases there is sometimes a grey area, especially regarding information and non-physical measures in another actor's area of responsibility. The ambiguity and uncertainty about whether the Swedish Transport Administration has a mandate to finance and work on these measures risks leading to the measures not taking place.

This also risks contributing to unclear signals to other actors, which can contribute to unrealistic expectations and the risk that the Trafikverket chooses not to implement measures in these grey areas to avoid mistakes. In some cases, the commitments of other actors to implement step 1-2 measures may be achieved through formal agreements implementing measures. However, the study concludes that the conditions for the implementation of step 1-2 measures after the completion of SCM do not necessarily need to be created in the form of formally binding agreements, injunctions or other documents with legally binding status, although this can be expected to strengthen the conditions. Instead, it is concluded that if step 1-2 measures are to be implemented, one needs to work on factors that influence relevant actors' perception of what they want to do and what they perceive they should do as well as what they need to do. Anchoring and participation are a prerequisite for agreements. All of the SCM studied in this study here have dragged on. For various reasons, the original timetables tend to be overly optimistic. One reason for this is that the anchoring problem is often underestimated. Another reason is that the issues turn out to be more complex than initially envisaged. Another reason is when practical circumstances make work on the road more difficult (e.g. that consultants or staff have been replaced). The way in which the process is carried out is therefore of great importance for the result that comes out of it. Many actors associate the SCM with SCM's workshops. You often participate passionately and perceive these workshops as good, but then

go home and wait for the Trafikverket to return. If you are going to be the bearer of the result, you have to feel that you are part of the process. It may require more than one invitation for this sense of participation to arise and is therefore a major challenge in the achievement of a process that promotes commitment on the part of the stakeholders.

Look out for parallel planning processes

The method Strategic Choice of Measures is just one planning process among others. In this section of the report we will give an example of such a process in ÅRE/Duved where a planning process named the Duved Model was launched in January 2018 as a pilot for the future of the urban development. An important part of the method Strategic Choice of Measures is to scan the surroundings for parallel activities and when suitable dock them to the planning process.

A goal for the Duved model is to transform Duved to be a pilot for the future of civil engineering. This is based on two parallel starting points. Global needs and opportunities and local needs and opportunities. The development has been based on what exists and those who live in Duved. Since its inception in 2018, the work has been based on citizens' thoughts and ideas through a series of workshops and the intention is to create a process that leads to citizens owning their own future. The work focused, also from the start, on creating innovation through parallel development of the whole society – housing, work, food systems, culture, school/education, street rooms/public places, and service/culture – precisely by developing all segments in parallel. The work was started by the public utility Årehus AB with Eau & Gaz as partners to get a strategy. All with the intention of creating a more accessible society – which in 2019 led to the formation of Duved Framtid AB (Duved future Ltd) a network company. The actions to be implemented are based on collaboration between all parties involved and will generate innovative local solutions to housing, work, food supply, social services, cultural activities, circular economy, energy systems and direct democracy, which together make up the Duved model. The actions will also serve as prototypes and as a basis for further development and scaling up nationally and globally.

Culture Clash

Some of the interviewed stakeholders expressed a frustration over slow processes within the Trafikverket and could not see the reason for that. They convey a stereotype picture of national

administrations as bureaucratic and rigid. At the same time it was obvious that they were not updated on the rules and laws that a national administration has to fulfil. Every stakeholder identified in the MARA project has their regulation and mandates to relate to. In order o have a good dialogue with the stakeholders it is vital that they have an insight in the realities each other has to live with and also respect them. Trafikverket has a responsibility for the vast majority of traffic issues and must take that in to account when planning measures in the traffic environment, something other stakeholders not always are aware of. In order to truly listen to other people conveying their knowledge in a meeting one must be prepared to accept the person supplying that knowledge. A feeling of trust must develop between the stakeholders based on an insight.

Implementation

One first step in the implementation work is to identify possible target groups. People working in the transport field are naturally in the first line and of course naturally the stakeholders involved in the planning process, But that is not enough. It doesn't have to be groups of people that directly are working with mobility issues. You have to think broadly and put the question "Who might be interested in the work we have done." When the target groups are identified the question arises what criteria they use when looking for new knowledge. Relevance for their work is usually an important one. Another one is how trustworthy they find the source.

The implementation process started in the very beginning of the MARA project. The workshops, the interviews, reports are all part of the implementation.

Mobility needs in the region Sälenfjällen region

Short description of research methodology

To date, there has been data collection within the case focusing the specific purpose to analyse mobility and accessibility for Sälenfjällen. A separate report (Alarcon et al. 2020) presents on a data collection that took place in the Sälenfjällen, during week 9-13 in 2020. Data collection was made on-site using a questionnaire and Public Participation Geographic Information System (PPGIS) adapted for the Sälenfjällen case area. A total of 162 responses entered the final analysis. Results of analysis find that the trip characteristics influence the transport mode choice. Also, there are differences in the tourists' perception of the mobility situation depending on transport mode chosen. Moreover, the perception of the mobility situation has a link to the overall satisfaction visit to the area, however, the relationship is weak.

Below a few key findings are summarized.

Descriptive statistics

Regarding the demographic information of the respondents of the questionnaires used, table 1 contains the summarized information. As it is shown, most respondents were female (56%) followed by the male (43%) and third gender (1%). In addition, many of the tourists were from Sweden (94%), Denmark (3%), United Kingdom (2%) and the USA (1%) in that order. Furthermore, the age of the respondents ranges between 18 and 73, with an average of 40 years old. This average falls in the range between 31 – 45 representing 40% of the total data collected. The other age ranges are 46-60 (27%), 18-30 (26%) and 61-75 (7%).

Table 6. Descriptive Statistics

Variable	Responses (n)	Percentage

Gender:		
Female	83	56%
Male	63	43%
Third Gender	1	1%
Country:		
Sweden	141	94%
Denmark	5	3%
United Kingdom	3	2%
United States	1	1%
Age group (years):		
18-30	39	26%
31-45	59	40%
46-60	40	27%
61-75	10	7%

Source: MARAInterReg project questionnaire

Moreover, the data shows that the tourist that visited Sälenfjällen attracted mainly by alpine skiing and other activities (75%) as shown in figure 7. This is followed by the ones that own a cottage and other activities (13%) and just for other activities (12%) of the respondents. Regarding the type of accommodation also shown in figure 2(b), the respondents stayed mostly in rental accommodations (58%), followed by own accommodations (22%), Hotel (11%) and, finally other accommodations (8%). The latter includes staying with friends or family, camping vans, hostels and caravans. This contrasts from the results found by Heldt et al. (2017) that indicate that most respondents stayed with friends or family (43%), over alpine skiing (31%).

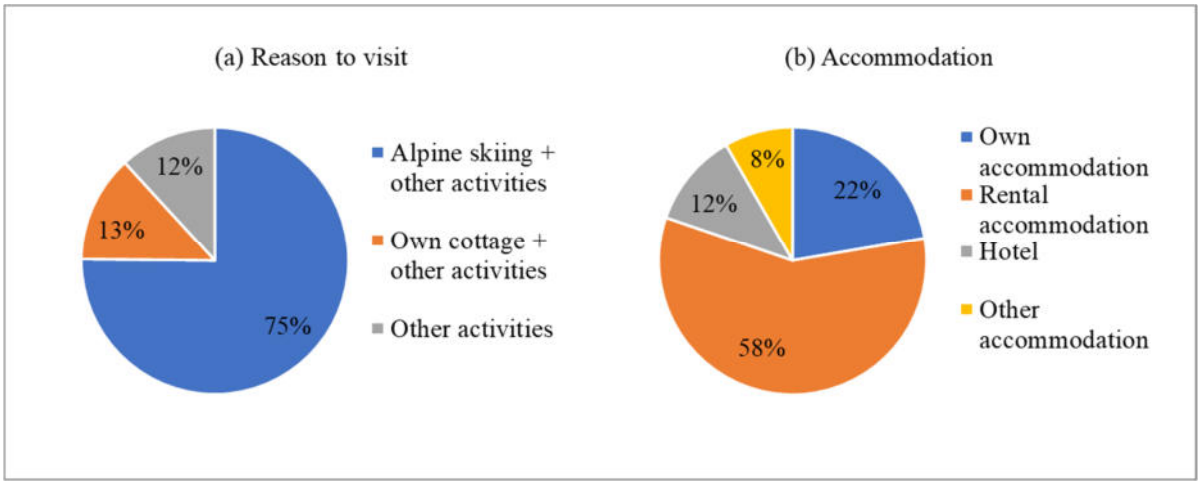

Figure 10. Reason to visit and accommodation

Source: MARAInterReg project questionnaire

When speaking about the frequency of visit to Sälenfjällen presented in figure 8, the data shows there were first time visitors (8%), more frequent than 3 times/ year (15%), 2-3 times/year (20%), and less frequent than one time/ year (57%). Finally, the average length of stay for the respondents was in the range 6-9 days (43%) suggesting most of the respondents of this study stayed around a week. This can be compared to the findings made by Heldt et al. (2017) that indicated 4-7 nights (55% of the respondents). In addition, as shown in figure 3(b) only a few (6%) of the respondents stayed longer than 9 days.

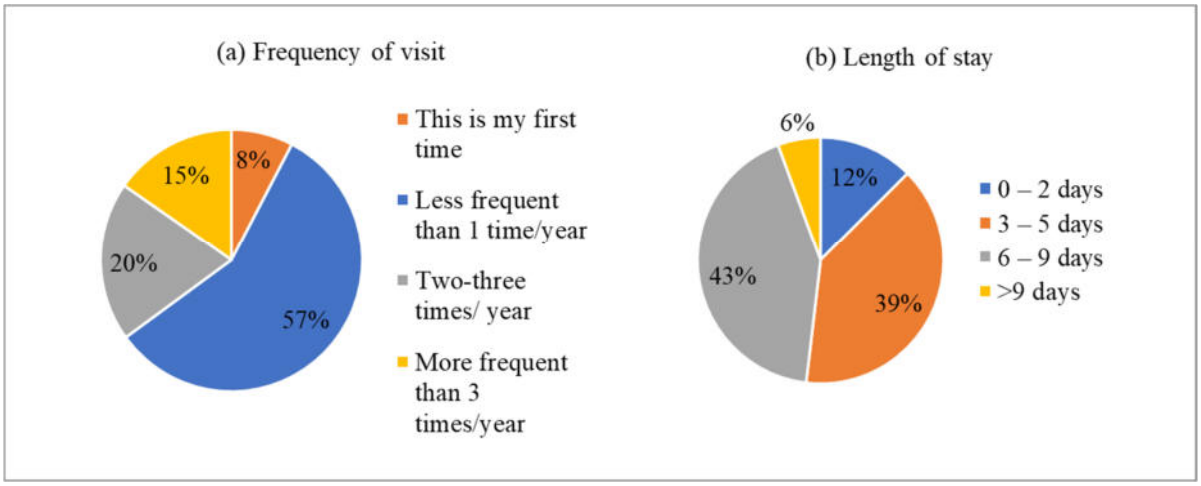

Figure 11. Length of stay and frequency of visit

Source: MARA InterReg project questionnaire

Transport preferences for visitors to Sälenfjällen

There are some mobility alternatives from which tourists can choose to travel in two spatial levels: to Sälen and to move within the destination. Figure 4(a) summarizes the results on the transport mode choice to travel to the destination. The data reflects that the most chosen mode is the car, composed by own (87%) and company car (7%). The use of the airport followed in a lower percentage (5%) and the least chosen was train (1%). It is important to mention that tourists that decide to go to Sälen by train, need to make bus connections in Mora or Borlänge, since there are no train stations in Sälen.

Regarding the choice to move within the destination which is presented in figure 9, once again most of the tourists used car (59%). This result is followed by walking and not travelling around (12% each) and combined modes (9%). Furthermore, the use of taxi (4%), bus (3%) and rental cars (1%) are the lowest.

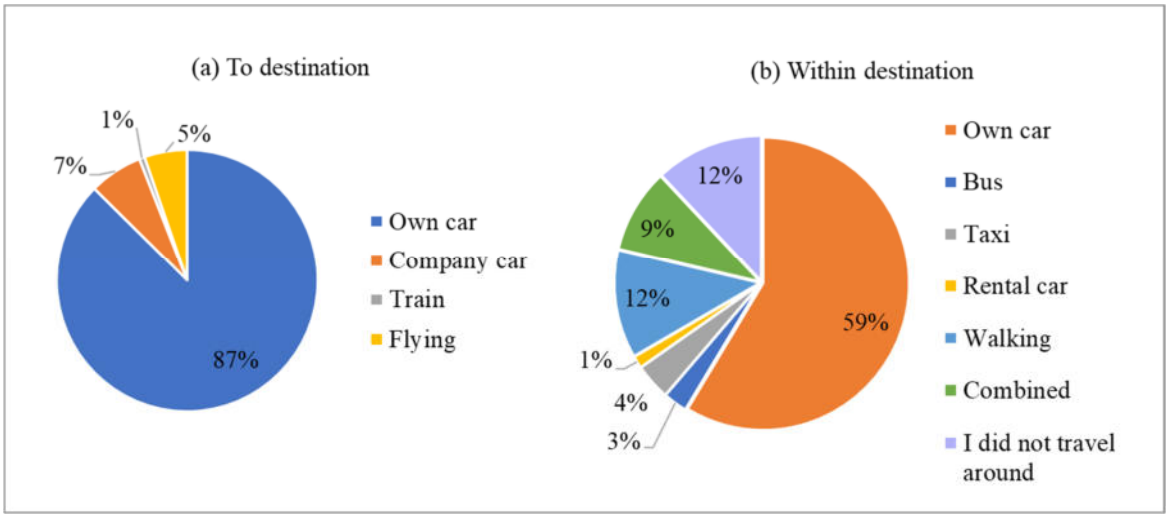

Figure 12. Transport mode choice to and within Sälen

Source: MARAInterReg project questionnaire

Moreover, the experience of mobility in a destination could be influence by the transport mode choice and this choice could be a result of trip characteristics. Thus, the following analysis intends to examine the transport mode choice for all the categories in the different trip characteristics included in this study: the reason to visit, the accommodation type, length of stay and the frequency of visit.

The current covid 19-pandemic has effected the possibility to collect data in the field. For spring 2021 another round of data collection is planned for. and the case has been supported with data collection of different kinds carried out by representatives of partner DU and Trafikverket. Quantitative studies with data collected on site in the Sälen area has taken place using on site paper and pen self complete survey. In depth interviews has taken place with a number of stakeholders in both Sälen-Trysil case area as well as in the follower case area Åre. Desk research has assisted the overall case.

Table 5. Research methods used to assess and analyze the needs of tourists and residents

Partner (Institution)	Methods applied																					
	Quantitative						Qualitative									Other						
	PAPI			CAWI			IDI			Case study			Desk research			Delphi method			Spatial information/ dynamic maps development and processing (including PPGIS)			
	T*	I*	A*	T	I	A	T	I	A	T	I	A	T	I	A	T	I	A	T	I	A	
	x	x		x	x							x			x	x	x				x	

*"T" – tourists; "I"- inhabitants; "A" - authorities/tourists entities (e.g. tourist agencies), (other?)

Table 6. The mobility needs of tourists – main results

Region	Measure (% or other indicator)	Mobility needs (in points)
		▪

Table 7. The main mobility needs of inhabitants – main results

Region	Measure (% or other indicator)	Mobility needs (in points)
		•

Disparities between the current mobility needs and the existing mobility solutions

The identification of mobility mismatches (gap) in the region between the current mobility needs and the existing mobility solutions inventoried - key findings summary.

Even though the case of Sälen-Trysil has a focus on improving processes of infrastructure planning at early stages, for consistency, this section reports on a mobility gap analysis for the case area.

Using the on-line tool, DU_GIS developed by the Dalarna University team as part of the MARA project, the maps below show mobility mismatches (gap) in the region.

The focus for this section is an illustration of the mobility gap in between a current mobility need, i.e. the travel demand of visitors staying in a hotel, in the following represented by a listing of the point-of interest “hotel”, and the mapping of the existing mobility offer(/solution) in the region when it comes to public transport accessibility. The latter represented by the mapping of bus stops in the region. Figure 12 below shows for example a mobility GAP analysis for Sälen.

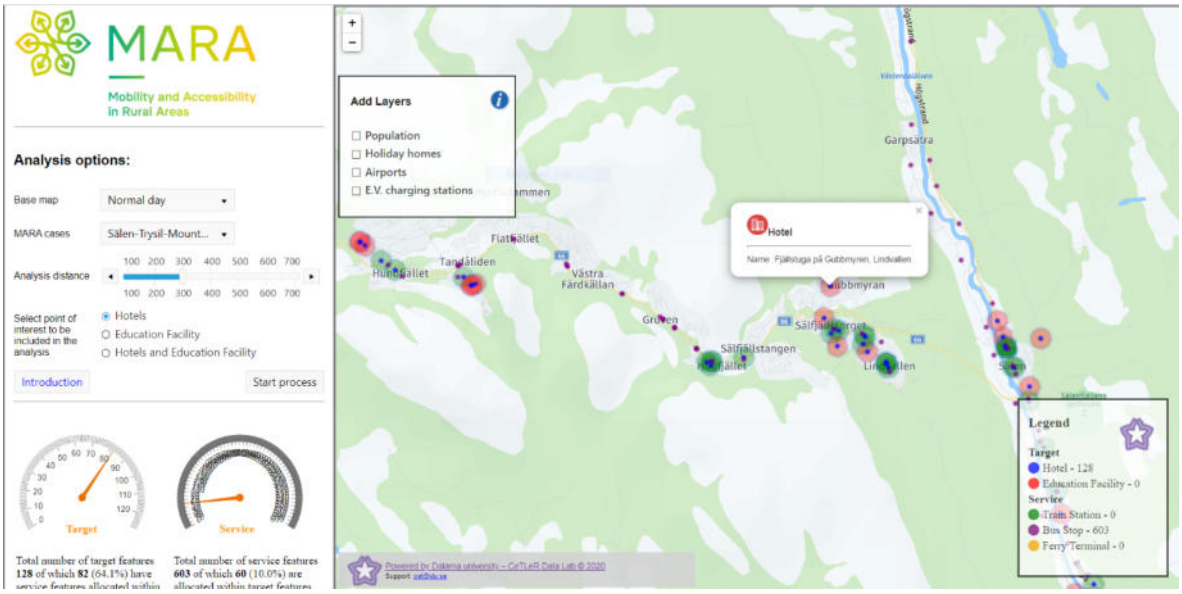

Figure 13. Mobility GAP_analysis 300 m Sälen area

The bottom right hand corner of the figure indicates the meaning of the target and service features. Blue dots displays the total of 128 hotel/lodging facilities in the area, while brown indicates bus stops (603 in total in the two municipalities). As can be seen, the map is zoomed in to allow for a better display of the GAP. The performed analysis indicate on the map a circle around the target feature: Hotel. The circle is green if there is an availability of a bus stop within the analysis distance of 300 m. The analysis distance can be changed as will be shown in the following maps. A final remark on the features of the map, is the evaluation indicator in the bottom left corner. It states that the overall mobility GAP in the whole area is 35,9 percentages, i.e. The coverage of bus stops to the hotels are 64,1 %. Of the 128 target features 82 are having access to public transport within 300 m of distance.

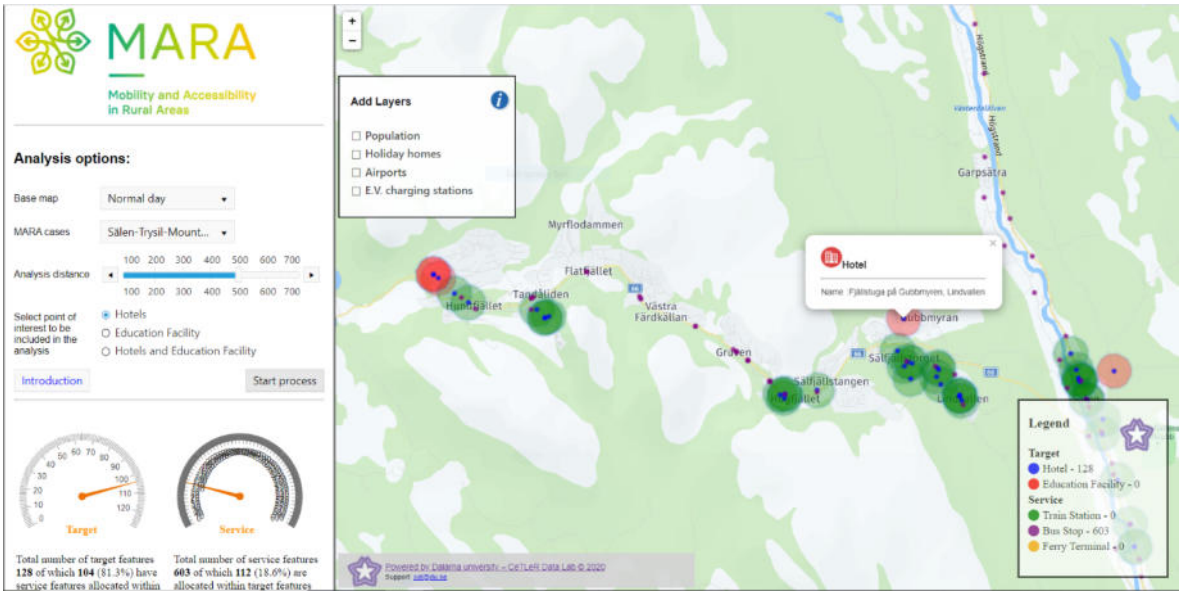

Figure 14. Mobility GAP_analysis 500 m Sälen area

Figure 13 shows the results when extending the analysis distance to 500m. As can be seen from the analysis indicator, the increase in distance narrows the mobility GAP. Now 81,3 percentages of hotels are covered by public transport within 500 m of distance.

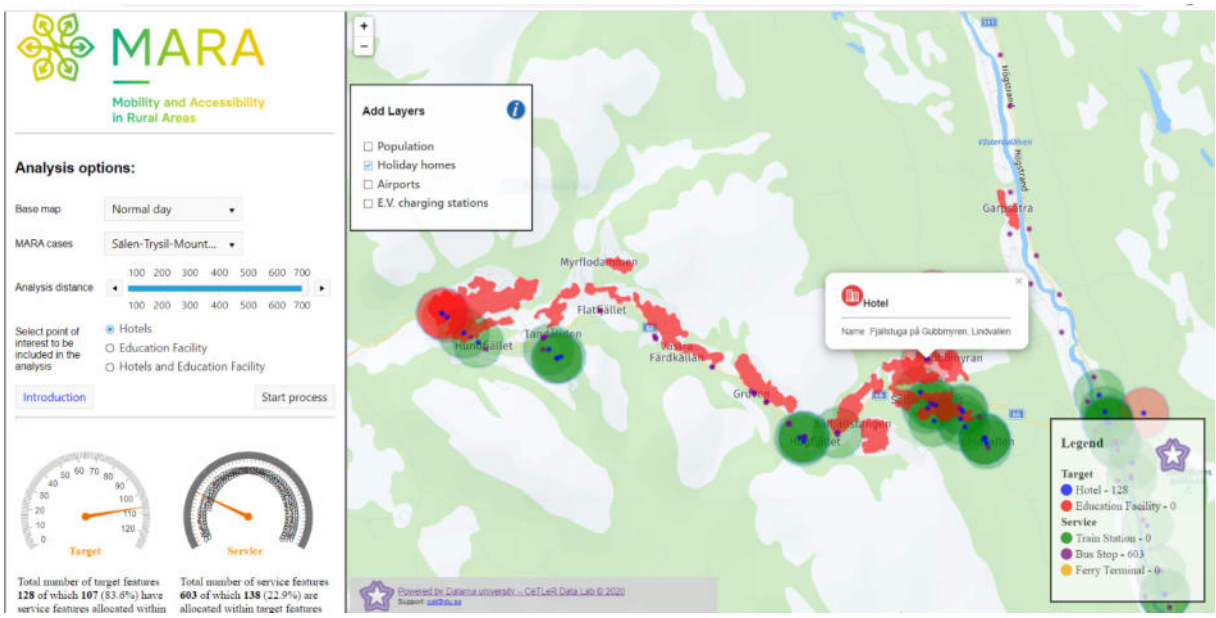

Figure 15. Mobility GAP_analysis 700m + holiday home areas Sälen area

A final analytical feature of the MARA mobility GAP-tool is displayed in figure 14. The map now includes an overlay of the areas where the holiday homes are located. The GAP-analysis distance is increased to the maximum of 700 m. One can clearly see in the middle left that there is a holiday home area not covered by public transport within 700m of reach. This in turn points to an obvious GAP in the accessibility to this area with a public transport mobility option.

Innovative solutions to improve mobility in the region

Innovative solutions to improve mobility as part of a sustainable destination

One ambition with the integrated action plan is that it will guide the parties in the establishment of a constructive arena and dialogue. The common objective of the project is to contribute to improving accessibility to sparsely populated areas and to reduce the climate impact of the tourism industry. The project also contributes to this goal by developing conditions for stakeholders to include and integrate social and gender aspects through an integrated and constructive dialogue in the early planning process.

The dialoque with relevant stakeholder will gradually lead to new knowledge and new measures to be integrated in their work. It seems vital that this dialoguel is part of an ongoing process as important circumstances change all the time. Which organizations and which individuals that are relevant stakeholders also shift from time to ime. The importance of this flexibel way of working is identified as a crucial factor for success.

The regional action plan will show how the responsibilities and contributions of each stakeholder are determined and how they contribute to sustainable destination and activities. The strategy shall provide an understanding for shortcomings and problems arising from the dialogue, when stakeholders meet to discuss needs, problems, condition, desired function and objectives. The Regional Action plan will describe agreed establishment plan (where and how does the dialogue begin). Furthermore agreed plan of a constructive dialogue in the early stages of the Sälen/Trysil and agreed action plan, including a gender integrated process/processes.

To improve on the dialogue at early stages, and as a test of innovative solution proposed by the Finnish partner, SYKE, it was suggested that Public Participation could be used (ref. to SYKE study). By letting stakeholder groups which currently are less engaged in the process, map their perceived mobility challenges this could add to the early stage process. Also a gender perspective was suggested to be able to include. The following section summarizes the purpose

and results of the pilot PPGIS study that was carried out during the testing phase of the MARA project. For further reading see Waleghwa and Heldt (2020).

Results from PPGIS study

Public participation GIS (PPGIS), is used to generate spatially explicit place-based information that can inform land-use planning and management alternatives (See for example Brown, 2017 or Kahila-Tani et al., 2016 for further reading). Historically, PPGIS comes to the GIS community from the planning profession and has the main aim of including input from different groups in society that would otherwise be excluded in decision making (e.g. Craig et al., 2002). As part of the testing phase of the MARA project, with the aim of improving the early stage planning, a PPGIS study was carried out as part of paper and pen survey. PPGIS mapping tasks was included as part of the survey described previously in this report.

The questions included multiple choices where respondents could answer with the attributes as of below.

- Why do you think these places need improvement?
- What kind of development do you think is required?

Places suggested for Improvements

The mapping question was the one intended to be of most value for transport planning in early stages. In this draw question, respondents had the opportunity to mark places in need of improvement and suggest the type of improvement to be made. In response, as is in Figure 15, a total of 39 markers were placed. To note, marking places to improve seems to have been the quite cognitively demanding compared to two initial the mapping tasks (not reported in this summary). Leading to relatively lowers markers placed.

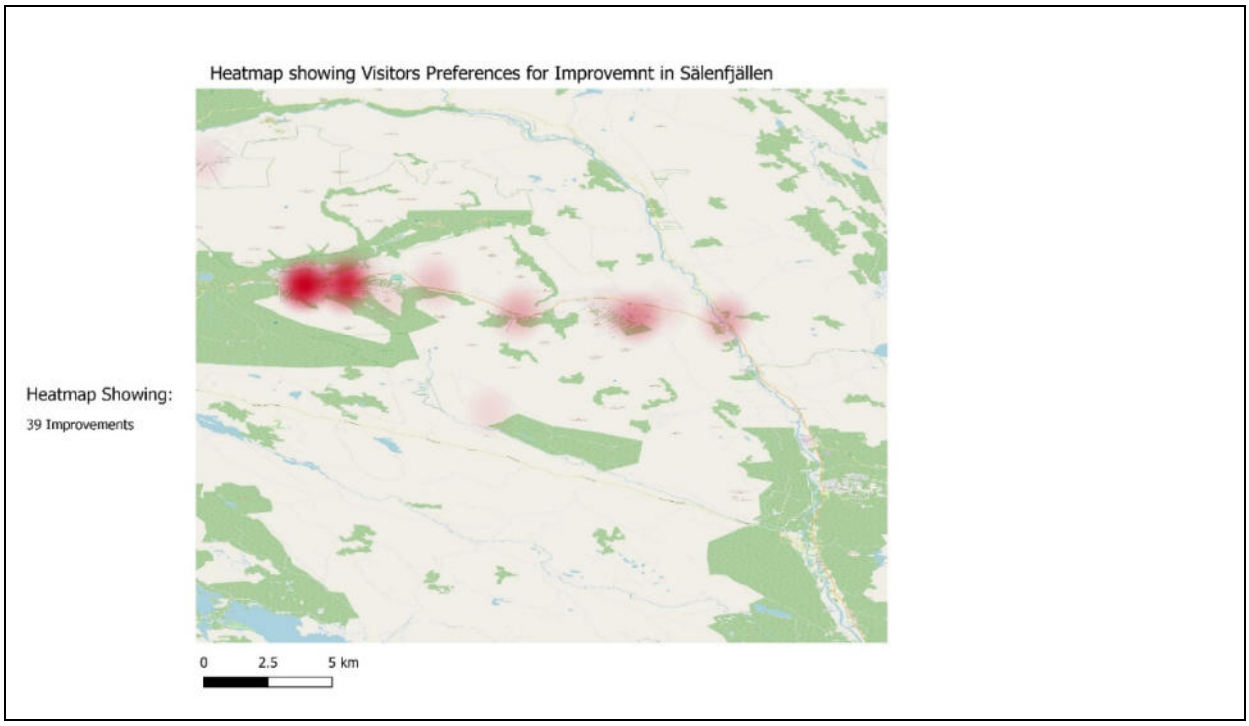

Figure 16. Places suggested for Improvements

Source: Waleghwa and Heldt (2020)

As a conclusion, comparing these results with the results of mobility GAP analysis in the previous section, one can see that it is the exact same location highlighted in the above figure with suggestions for improvements as having a high mobility GAP, shown in figure 14.

Recommendations and operation plan for improved mobility offers

What activities shall be undertaken

What meetings will be held

How will be the stakeholders involved the project

Formulation of new/improved/adjusted policy recommendations based on the evaluated policy recommendations, “planning aims” (Chapter 3) and the gap analysis

Operational plan – how the recommendation and new or improved mobility offers will be put into practices

Activities tailored to the needs of the region

Background of this chapter: serves as basis for the output documents of WP4

Summary

The aim of this Regional Action Plan has been to summarize analytical activities conducted within the case Sälen/Trysil and Åre as part of the MARA_mobility project. The main focus for the Swedish case has been to develop an integrated mobility plan for the Sälen/Trysil area in which gender aspects are included. The main challenge behind the case has been the Trafikverket's needs for improving methods, models and processes in the early phase of infrastructure planning for remote areas with an extensive tourism industry.

The key findings from the analysis in the report is listed below under the two headings improving the planning process and GIS maps as analytical support.

Improving the planning process

This report have discussed the method SCM and other planning processes. The interviews done in this study together with R&D results form the basis for this analysis. The report has also looked into the SCM from different perspectives as gender, regional development, financing, culture clashes, chain of command, thus identifying problems in the process and suggest countermeasures.

One aspect is to increase understanding of how Trafikverket as early as possible in their planning can interplay with different stakeholders in the region with interest in transportation. The question affects some crucial factors that have been raised in this project. They are summarized in the following.

In the project plan for the MARA project various stakeholders are listed, all together nine. To be added are actors who in different ways could be of importance for the success of the process. To identify actors those are important but not so visible are important and requires special methods which are presented in the report.

The dialogue with relevant stakeholders will gradually lead to new knowledge and new measures to be integrated in their work. The importance of a flexible way of working is identified as a crucial factor for success.

The interviews with the involved actors have identified some important prerequisite in order to further develop the planning process. One is continuity and the other one is to define perspective on knowledge and competence development; perspectives as:

- Information overload - Rapid knowledge change - Knowledge and values - Know how – know why

Working with the method SCM (Strategic choice of measures) gender and equality aspects has to be included. For example it can be an advantage to chose participants to the planning process with knowledge and interest in these matters.

Trafikverket in collaboration with stakeholders has conducted a planning process within the Sälen area which resulted in quite a few suggestions to activities in order to improve the transportation. But when it comes to implementation the interviews indicate problem of the "chain of command. It seems to be unclear who has the lead in the fulfilling of the process.

To note, the method Strategic Choice of Measures is just one method among others. It indicates the importance to scan the surroundings for parallel activities and when suitable dock them to the planning process.

GIS maps as analytical support

The report has included mapping of existing mobility offer using GIS maps in the case areas. The analytical functions developed as part of the MARA-project to produce mobility GAP analyses has been used an example the visualization of the discrepancy between the public transport offer and accessibility to hotel facilities. This result is an example of how the GIS maps can be used as analytical support in the planning process by better visualize a current mobility situation and a mobility GAP.

The pilot PPGIS study conducted as an initiative to improve in the current planning process in early stages is another example where the GIS maps improves the visualization of a perceived problem related to mobility. The study results show that the location that respondents perceived had the most problematic mobility situation also coincided with the location having a big mobility GAP, based on performed analysis.

To note, the piloting of PPGIS to improve on early stage planning within STA planning process showed potential, especially to point out gender differences, for providing improvements but it

was done in a small scale. Further research is needed to fully assess its potential. For example, a larger sample and the studying of also other stakeholder groups like residents, second-home owners and business owners.