

State of the Art Paper on Mobility Management in Sweden

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Christer Ljungberg, Trivector Traffic AB

1. Short history and background

Sweden was late starters in adopting the principles of Mobility Management. In the mid nineties very few Swedes have heard the expression. In Sweden there were almost no problem with congestion, and the real environmental problem were few.

Despite this already in 1996 a cooperation of several Swedish transport authorities and organisations (Swedish Road Administration, The Swedish Association of Local Authorities and Regions, National Board of Housing, Building and Planning, Rail Infrastructure Authority, The Car Industry Cooperation together with the Swedish Environmental Protection Agency), published a series of reports regarding “Environmental Adapted Transport Systems”, in Swedish called MaTs (MiljöAnpassade TransportSystem). This MaTs-concept discussed different measures on national, regional and local level.

In this MaTs-concept the measures for sustainability are divided into 5 areas:

- 1) Measures influencing the travel need
- 2) Measures influencing modal split and intermodality
- 3) Measure influencing operation of the different transport modes
- 4) Technical measures on vehicles and fuels
- 5) Measures influencing building, operation and maintenance of infrastructure

The two first bullet points were in practice Mobility Management, but the expression wasn't used.

The concept outlined in the 1996 reports called for cities to make their own plans, in practice what later have been called SUTP – Sustainable Urban Transport Plan.

In 1997 Mobility Management were introduced and discussed by Trivector in the comprehensive SUTP of Lund, LundaMats, the plan that have been very much noticed in Sweden and abroad. The medieval town of Lund, with 100.000 inhabitants, have a long tradition of dealing with traffic in the city. Already in 1968 a four lane motorway through the city centre was stopped, in

1972 the through traffic were stopped, and in the mid eighties a vast program of pedestrian streets were realized. Lund is also the bicycle town of Sweden, with the highest modal share for bikes.

The 300 pages plan of LundaMaTs consisted of a problem detection study, the setting of targets and an action plan with 120 measures, in 6 reform areas, whereof Mobility Management was one. In 2006-2007 the plan was revised and upgraded.

In 1999 Swedes attended ECOMM for the first time, and Sweden got member of EPOMM. At the same time Lund planned for its mobility centre.

MM were discussed in more and more meetings, seminars and conferences. A period of education and learning started. In November 2000 the first national conference on MM were held in Lund. More than 150 people from all over Sweden participated. The speakers list held both national and international speakers from EPOMM and the EU.

At this time Swedish partners joined the EU-projects MOST and TAPESTRY.

Since that point there has been a rapid development. Today MM is integrated in the policies at many levels in the Swedish society, as described below.

2. The position of MM in the National, Regional and Local Policy

2.1 MM in National Policy, the policy of the regions and local communities

National level

Since app 2002 MM have found its way into the national transport policy. There are a number of bills that include the discussion of use of MM. Since 1999 Mobility Management found its way into different policies at governmental level. In bills for “Climate protection”, “Environmental targets” and in the governmental bill for “Infrastructure” mobility management are discussed.

Already in 1996 there was a bill saying that SRA should have a sectoral responsibility which shortly means that the administration should cooperate with other actors and support activities within the whole road transport sector.

In the Infrastructure bill from late 2001 the SRA was given the commission to present a program on how to work with “Sustainable travel”, including MM. This program was launched during 2003 and has been running since then. In this vast program SRA have worked together with local and regional authorities in a large number of MM-projects all over Sweden.

The National Road Administration have since app 6 years been using the 4 step principle, presented below. This means that MM is to be used in many aspects.

SRA has since some years persons responsible for Mobility Management, at the national level as well at the regional level. SRA promotes and subsidizes a lot of MM-projects as a part of their sectorial work.

Regional level

The regional levels are the govern levels that have been working the least with MM. Although there are some regions that have been starting regional mobility centres/offices. These are for instance Stockholm, Gothenburg, Skåne and Dalarna. In Skåne, the southern part where Malmö and Lund is situated, in 2007 started a regional mobility office.

Local level

The local level, with cities and communities, are the strongest level regarding working with MM. More and more cities are recognising MM to be an important kind of measures to influence traffic in cities.

Today there are approximately 15-20 Swedish cities that have what could be called a MM-office, a project office working with MM. Many more cities are in fact working with MM measures, maybe app 50 cities or so.

Most of the MM projects in the cities are in fact projects and not processes. They have been financed partly by governmental funds, for sustainability and climate. But in more and more cities, like Lund, Malmö and Gothenburg there are today MM offices financed by regular city funding. In Stockholm it has unfortunately been abandoned during 2007.

2.2 Definition of Mobility Management

The definition used in the EU projects MOMENTUM and MOSAIC have been used in Sweden from the beginning. Some other definitions have also been used. These have often been based on the first definition but there also are examples, of different ways to express what it is about, for example this one, introduced by Trivector, and widely used:

“Mobility Management is soft measures to influence travel before it starts”.

2.3 Relations with Urban / Regional Planning, Sustainable Transport, Public Transport

A large part of all MM projects and measures in Sweden are connected to some planning process or to some physical measures. Many Swedish cities are working with SUTP:s and an essential part of those SUTP:s use to be MM measures.

Some of the public transport authorities have also adopted MM measures as a part of their marketing strategy.

Some examples:

Health bikers – pursuing car drivers to test cycling to work during a period is a common MM measure widely used.

Test riders - pursuing car drivers to try going by public transport to work during a period have also become a mainstream MM measure.

These two measures have been used for special workplaces, for areas of different workplaces, and for whole cities.

Smart traveler – a concept, developed in Lund, where a household, or company workers, get a visit from a mobility centre employee who ask if any help are needed to get a more sustainable transport behavior. Knowledge on the different consequences of different travel modes is given: economy, health, time consumption and environmental effects. Have gained good results, for example in Lund.

No ridiculous car trips – a much noticed campaign in Malmö were the inhabitants are urge to send in their most ridiculous car trip. This will build a new awareness of what a ridiculous car trip is.

2.4 Principles

In late 1990`ies the SRA launched its concept the “Four step principle”. This means that when investigating the need for new road capacity there should always be a four step process.

This principle says that in the first step you should investigate the possibilities of measures to influence the transport demand and mode choice, i e Mobility Management. In the second step measures to get a better use of existing infrastructure should be tested, for example Mobility Management and ITS.

The third step means limited rebuilding, and first in the fourth step totally new infrastructure should be considered. Naturally this new principle means a kind of a revolution, and the implementation is rather difficult and has been rather slow. But in fact it is there, and the SRA should be working after it, to follow the decision from the director general.

There are also good examples of how the four step principle have been used in local projects from different parts of Sweden.

2.5 Trends and developments

Today MM is a mainstream part of the work with transport in many Swedish cities and regions. More and more of the cities are going from MM project to make MM a part of the daily work creating a sustainable transport system. In this many cities both traditional and new MM work are carried out.

A speciality in many of the Swedish Mobility Management projects is the rather well organized monitoring and evaluation. Much has been learned from projects like MOST, but also the work of SRA has triggered this. SRA gave Trivector a commission to further develop the evaluation and monitoring tool MOST-MET for Swedish conditions.

The result was SUMO – System for Evaluation of Mobility Projects. This has now been used in Sweden for 4-5 years, and is compulsory to use in all projects that are co-financed by SRA. This means that today there are more than 100 projects evaluated after the SUMO principle. Now SUMO has been translated back to English and will be used in new EU-projects. In the ongoing MAX project a further developed version called MAXUMO is developed.

Right now SRA is in the final stage of creating a national benchmarking system for all kinds of Mobility Management measures. This consists of a data base called SARA, where all new MM projects should be showed. Trivector have been assigned to design the database structure, and SARA will be in use during 2008.

After some time when the data base has been fed with projects there will be big opportunities to get more knowledge about the effects of different measures, making future cost-benefit analysis more accurate. SARA will also give the opportunity for cities and other project owners to benchmark their project performance against other projects.

2.6 Relations Traveler – Institutions – Mobility Service Providers

In Sweden the cities and SRA with its sectorial responsibility are the driving forces in the field of Mobility Management implementation. There are in fact no traditional mobility centers in Sweden. Instead the project offices in different cities and regions are more of project offices, and more like mobility offices.

So if the traveler wants this kind of information there are mostly not any centers with a desk where they can ask questions etc. The historical reasons for this is that in the beginning of the nineties there was a reform in the public transport field, when 25 public transport authorities were formed. These authorities all created very well working information services.

3. *Institutional Framework in which MM has to deal and operate*

National level

As presented above one of the important frameworks is the four step principle. The use of SUMO and SARA also form a basis for a knowledge building around MM.

During the latest 5-7 years a rather large part of the sectorial work of the NRA has been MM projects.

As MM have been discussed in several governmental bills the national framework of MM seems rather stable.

Regional level

At the regional level the public transport authorities is slowly beginning to make use of MM measures such as Smart Traveler concept. Some regions have also formed regional Mobility Offices to help small cities that do not have their own MM work, and also to work with work travel between different cities. There are besides this no special framework in which MM is operating.

Local level

The most important level concerning mobility management in Sweden is the local level. As said before MM has become more or less mainstream in many cities. This means that the MM work will become part of the normal institutional framework in a city administration. Most often the MM work will be placed in the technical or street department of the city.

4. *MM Knowledge Infrastructure in Sweden*

As the SRA has been engaged in MM matters since 1999 they have formed a basis for a knowledge building. Research has been ordered, but although this there has been no formal platform for this knowledge building. But with the SUMO and SARA there will be a new platform for making new studies of cost-effectiveness of MM measures, and from that gaining new knowledge.

In 2001 the first Swedish education in Mobility Management started. The courses have been run by Trivector and today there have been several different courses: Strategies for Mobility Management, Mobility Management in practice and Environmental Management Systems and Transport. A newer version of the MM courses is Mobility Management and Sustainable Transport. Until now, some 200 persons from different organisations have attended.

MM are often part of conferences and seminars, especially on sustainable transport systems.

5. *Important MM aspects and fields*

In Sweden the environmental concern is the main task of working with MM. During 2006 and forward the discussion on climate change have reinforced this direction of the work. The interest for measures like MM are therefore fast increasing (2008).

The new Swedish handbook TRAST for making SUTP have also been strengthening the MM work during the 2-3 latest years.

The new SUMO/SARA work to make monitoring and evaluation even better will make the knowledge on cause-effect much better. It will also make it more easy to form indicators for use in MM work.

6. *The most striking best practices in Sweden*

Lund

LundaMaTs SUTP have been in the front of MM development since 1997. It was revised during 2006. LundaMaTs holds the most noticed MM measures in Sweden. Have been an inspiration for many other cities. One of the cities that have gone from project to process.

Stockholm

Stockholm congestion charging scheme is one of the biggest mobility management measures in the world. From August 2007 it will run permanently. Besides a mobility office, called Stockholm Mobility, have

been operating 3-4 years, but have unfortunately been abandoned 2007. Stockholm is also a CIVITAS city.

Karlstad

Karlstad was the first city in Sweden to start a real Mobility Office already in the mid nineties. Since then the city have been among the most active in this field. Now there is a new SUTP that includes MM task.

Gothenburg

Gothenburg have been working with MM as a part of their extensive work to form a sustainable transport system since the beginning of year 2000. Sweden's only real Mobility Centre was opened in Lundby, a newly redeveloped section of the city. The Centre was present already from the beginning and help companies and inhabitants to make their travel and transport more sustainable. Gothenburg is also a CIVITAS city.

Malmö

Malmö were rather late into MM. But today they are among Swedens most successful cities in working with MM. They have gone from projects till now running a process in this field. Malmö have been using MM in newly redeveloped areas in the Western Harbour, and are also a CIVITAS-SMILE city.

Kalmar

Kalmar is a rather small old city on the Swedish east coast. Kalmar have been adopting MM principles in planning and have been running a successful MM work for several years.

There are also a number of other cities that have been, and are, working successfully with MM. These cities are for example Växjö, Jönköping, Linköping, Umeå, Örebro, Gävle, Borlänge, Luleå, Eslöv and Ystad.

7. *How MM information is exchanged in Sweden*

Unfortunately there are no formal networks etc for exchanging knowledge on MM. There have been discussion about starting such a network, but at least there is an e-mail network.

In south east of Sweden the NRA together with the cities of Kalmar, Växjö and Jönköping have formed a regional network for knowledge exchange.

There are a mailing list on the internet, and also a MM site run by Trivector.

As in other EPOMM member countries there are also EPOMM newsletters.

8. Who are the 15 à 25 MM experts and policymakers in Sweden

Bert Svensson, SRA, Head Office, EPOMM president
 Krister Wall, SRA, Region South East
 Jan Lindgren, SRA, Region Middle
 Per Schillander, SRA, Region West
 Ulf Pilerot, SRA, Region North
 Jonas Thörnqvist, SRA, Region Stockholm

Christer Ljungberg, CEO, expert MM and sustainability, Trivector Traffic,
 Pernilla Hyllenius, consultant, MM expert, Trivector Traffic
 Lena Smidfeldt Roskvist, research manager, Trivector Traffic
 Karin Neergaard, consultant, MM-expert Trivector Traffic
 Muriel Beser Hugosson, office director, congestion charging, Trivector Traffic,

Anders Söderberg, chief transport/environment dept, City of Lund
 Stina Nilsson, chief transport/environment dept, City of Malmö
 Annika Hörlén, City of Malmö
 Åke Stålspets, expert, City of Linköping
 Bo Lindholm, expert, City of Kalmar
 Hasse Zimmerman, expert, City of Karlstad
 Anne Sörensson, City of Östersund

Gunilla Fransson Bangura, City of Gothenburg
 Nicholas Hort, City of Stockholm

9. List of most relevant Products

SUMO – system for monitoring and evaluation
 SARA- data base for benchmarking of MM projects
 Smart Traveler – concept for influencing travel mode