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## **Title:** SMART Road User - individual marketing campaign for environmentally sound transports

**Conference:** EPOMM, European Conference on Mobility Management in Karlstad, May 2003

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**Main topic:** 1h, Key factors in achieving sustainable change in attitudes and behaviour.

**Objective:** Individual marketing method called SMART Road User is a central part of the work at the Mobility Centre in Lund. Individual information in combination with dialogue and an opportunity to try another mode of transport results in sustainable change in behaviour.

**Relevance to conference theme:** The City of Lund works on a broad basis with mobility management in a growing urban area and has been successful in changing behaviour, even though the changes are small so far. By presenting some of the methods used in Lund, good practice can be spread and discussed.

### **Background**

#### Traffic in Lund

In the municipality of Lund about 45 percent of all trips are made by car and another 45 percent by bicycle or walking. App. 10 percent of all trips are made by public transport. The share by bicycle and walking is a lot higher than the average in Sweden which is app. 30 percent. The population in Lund is young, the city is quite small and the climate is suitable for cycling, but we also have a tradition of cycling. A great deal of the short trips are already made by bicycle and that is one of the basic factors supporting the general plan for spatial planning in Lund. Important objectives are that the city should grow within biking distance (maximum five kilometres) and other expanding parts of the municipality must be provided with good public transport.

Traffic by public transport and by bike increases in Lund. Car traffic, however, is unchanged since some years back. The trend in Sweden is increasing car traffic. Is this a coincidence or is the work towards a sustainable transportation system starting to give effect?

LundaMaTs - an integrated effort to create a sustainable transportation system in Lund

Since 1995 the City of Lund has worked with LundaMaTs, Lund's sustainable transportation system. In 1997 the project started with a study concerning the current traffic situation, followed by target setting and an action program with eight main projects and 83 subprojects. The following five major reforms were identified:

- ? Town and country planning
- ? The Bicycle friendly town
- ? Extended public transportation
- ? Environmentally friendly car traffic
- ? Commercial and industrial transportation

In 1998 the City of Lund selected four projects to focus on over a three-year period (1999-2001) and began the implementation process. The four selected projects were the *Mobility Centre*, the *Bicycle Municipality*, *Walk and cycle to school* and the *Lundalänken (Lund Link)*. A new three-year project period (2002-2004) started a year ago and the projects *Mobility Centre* and *Bicycle Municipality* are continuing and a new project called *Environmentally sound car traffic* has started.

New infrastructure AND mobility management

The measures carried out within LundaMaTs are of both technical and mobility management character. Examples of measures are construction of new bike paths, safe school routes, commuting by bike and bus, car-sharing associations etc. Another example is the *'In town without my car'* event in which Lund participated on September 22, in the years 2000, 2001 and 2002. In 2002 Lund also participated in the *European Mobility Week*.

The emphasis in the reforms of LundaMaTs is on measures designed to encourage voluntary changes aiming at creating an environmentally sound transportation system.

Costs of LundaMaTs

To enable work with the LundaMaTs system, the City of Lund has applied for and received a special grant for environmental improvements from the Swedish Department of the Environment and the Swedish Environmental Protection Agency. During 1998-2004 app. 280 million SEK (app. 31 million €) are to be invested in different measures within LundaMaTs.

<b>Project</b>	<b>Period</b>	<b>Total cost in millions SEK (incl. governmental grant and municipality funding)</b>	<b>In millions €, app.</b>
Bicycle municipality	1998-2004	80	9
Lundalänken, Extended public transportation	1998-2003	170	19
Walk and cycle to school	1998-2002	9	1
Mobility centre	1998-2004	16	2
Environmentally sound car traffic	2002-2004	4,6	0,5
<b>In total</b>	<b>1998-2004</b>	<b>279,6</b>	<b>31,5</b>

*Table 1: Cost of LundaMaTs projects 1998-2004 million SEK, both governmental grants and funds from the municipality.*

#### The bicycle municipality

Already today, Lund is one of the best towns for cycling in Sweden. Bicycle traffic is given high priority to by improving the infrastructure for bicycles. A bicycle centre with rental bikes and a bicycle reference group has been started.

#### Extending public transportation

Extending public transportation is very important in reducing dependency upon cars.

*Lundalänken* is a fast connection from the railway station Lund to the major working areas in the town. It was finished in January 2003. App. 24 000 persons commute to the town every day and the goal is to get as many as possible of them on the *Lundalänken*. In the beginning *Lundalänken* will be a connection for bus services only, but the link is developed and dimensioned for a possible introduction of a modern tram system.

#### Walk and cycle to school

The purpose of the project is to reduce carbon dioxide emissions by getting parents not to drive their children to school and preschool, and to walk or cycle with them or let the children walk or cycle on their own instead. An inventory of these school routes for the youngest has been made and the most dangerous intersections and paths have been localised and rebuilt. In addition to the improvements a series of mobility management measures have been conducted. Information at parent meetings, traffic safety work in school, campaigns and preventative health projects are some of these measures.

#### Mobility Centre

The *Mobility Centre* in Lund has been active since 1999. The Centre works with mobility management measures such as car sharing, walking school buses, car pooling and commuting by bike or bus. The measures of technical character, which have been carried out at the same time in the other projects, have made it easier to communicate about traffic with the inhabitants of Lund.

#### **SMART Road User**

One of the most important mobility management campaigns within the *Mobility Centre* is the SMART Road User. SMART Road User is a method to present information about commuting to work. The *Mobility Centre* has compared travel time, cost, emissions and health effects of commuting by bike, bus or car between residential areas and working places in Lund. The residential areas studied are seven different areas in Lund and the five towns outside of Lund with large groups of people commuting to Lund. Seven different working places are included. The results are presented in so-called SMART pamphlets, one for each trip. The SMART pamphlets shows for each individual how much money can be saved by taking the bus, or how much time it would take to bike to work. The health aspects are covered in an amusing way by counting calories consumed by cycling into kilos of chocolate. The four aspects time, health, cost and emission are always in the pamphlets, even if car would turn out to be the best alternative.

**Time:** in many cases the bicycle is fast, sometimes even faster than the car. Bus is usually the slowest alternative, but it can be relaxing to read or sleep while travelling to work.

**Cost:** taking the bike or bus to work can save you a lot of money. We count that the car costs 2,4 SEK per kilometre (app. 0,3 €/kilometre), bicycle 0,4 SEK/kilometre.

**Health:** up to 80 kilos of chocolate per year for biking to work! Other effects on the commuter's health are brought up as well.

**Environment:** emission of carbon dioxide for cycling, car and bus are presented. Bicycle is of course always the best alternative, but even train and bus make a huge difference compared to the conventional private car.

The results of these trips are to be presented to those who travel – the goal is to present information relevant to each individual. How can we find these individuals and how do we communicate? We work from two different directions – residential areas and working places.

### Residential areas

The SMART Road User campaign in residential areas consists of several different activities. The first activity is to send out brochures containing information of environmentally sound transports with clear connection to the residential area in question. It can contain information of the latest bicycle path in the neighbourhood, an interview with a person in a car sharing association, how to ride a bus to the new *Lundalänken* etc. The next step is square exhibition with information, dialogue and for example test-driving of an electrical bike. Media is kept informed.

After distribution of brochures follows knocking doors and discussing traffic with the population. Those who already are travelling smart are encouraged and more information, such as bike maps and timetables are available. The smart travellers also receive a small gift. Those who commute by car are offered to join one of our campaigns: *test riders* or *health bikers*. In these campaigns they get the opportunity to try biking or travelling by bus to work. *Test riders* try the bus or train to work for one month, we offer the travel pass free of charge and in return they answer some questions. In earlier *test rider* groups up to 60 percent of the participants continued to take the bus after the test period. The *health bikers* promise to commute by bike for a whole year. They receive a bicycle computer, training suit, reflector vest etc. During the year they cycle we have meetings with them, they answer surveys and can report faults in the infrastructure.

Information about car sharing, eco cars etc. is also offered. Some households have been contacted by telephone in order to evaluate which method is the most effective. We also arrange thematic meetings in the residential area for example about car sharing.

The first residential area was contacted in the autumn of 2003. In January 2003 an evaluation of the two methods, knocking on doors and telemarketing was done. What was the most effective? The experience so far is that the two methods are equally efficient, but it is not yet known how successful the campaigns (*test riders* and *health bikers*) in the area will be. In the first residential area 559 households were visited/called by telephone. 65 households were interested in participating in one of the campaigns (11,6 percent). The next area 80 households of 544 visited were interested (14,7 percent).

### Working places

Campaigns at work places are conducted in cooperation with the company/organization visited. For example the *Mobility Centre* has met app. 350 employees at Tetra Pak and participated in their International Environmental Day. The aim is to offer companies a variety of measures and help them in carrying out different activities. The measures can be

the same as in residential areas (*test riders* and *health bikers*) but also videoconference, tele-commuting, eco cars at the company and car-pooling.

Simultaneously as the opening of *Lundalänken*, which offers better public transport to the major working places in town, information campaigns at companies close to the route were conducted. Ten big working places were visited with an exhibition. Brochures, pamphlets, timetables etc. were handed out. In total over 3 600 brochures were handed out. About 600 of these were so-called SMART pamphlets that indicate how commuting by bus, bicycle or car affects you and the environment.

After the exhibition try-out bus tickets were handed out at the company parking lots in the morning rush hour. A ticket valid for one day in public transport was offered to employees travelling by car if they were interested in trying and had a connection that worked. 945 tickets were handed out to car drivers - ours most important target group!

The goal for the campaign is not necessarily a change in attitudes, but a change in behaviour. It is important for the individual to see benefits for himself or herself, better economy or health. Old habits are hard to change when it comes to transports - that's why the *Mobility Centre* gives individual information and lets people try other modes of transports.

#### **LundaMaTs – the first evaluation, May 2001**

LundaMaTs has given results - physical measures and Mobility Management give synergy effects. Three years after the project started, in spring 2001, the first extensive evaluation was carried out.

#### Awareness and effects

The purpose of the evaluation was to investigate how aware the inhabitants in the City of Lund were of the different projects that had been conducted over the last few years, and how they have affected the inhabitants.

The four major projects were fairly well known in the City of Lund. Within every major project several activities and subprojects had been carried out. The awareness of these more specific projects was somewhat larger than for the five major projects.

#### Attitude towards the investments

The inhabitants have in general a positive attitude towards the investments for a sustainable transport system. 60 percent consider the investments very good and another 30 percent think it is good.

#### The Mobility Centre

The projects that are included in the first survey include car sharing, eco cars and locally produced groceries. The Mobility Centre has worked to get more people to start or join car-sharing associations. This has resulted in a very high awareness among the inhabitants in the City of Lund.

#### The Bicycle Municipality

In general 50 percent think that the investments have been larger or even a lot larger during the last two years. Slightly less than 15 percent have not noticed any difference, and less than 35 percent say that they do not know. The concept *Bicycle Municipality* is known by a majority of the people living in the City of Lund.

### Walk and cycle to school

The project group has mainly been involved in activities such as *Safe routes to school*, which 55 percent of the inhabitants have heard about, and *Walking school bus*, which 30 percent have heard about. The final evaluation of the projects shows that awareness isn't enough to change the behaviour: the decrease in driving children to school was only two percent.

### Effects on travelling and emissions

The majority of people living in the City of Lund are aware of the work with LundaMaTs and the projects and activities involved. The scheme has also affected the inhabitants' travelling:

- 2 percent have to a large extent switched from car to bicycle and public transport
- 2.4 percent have to some extent switched from car to bicycle and public transport
- 4.3 percent sometimes try to take another transport mode than the car
- 3 percent have started thinking of alternatives to the car

Approximately 10 percent of the inhabitants say that LundaMaTs has influenced them to cycle more and make more use of public transport. A large proportion of the inhabitants have also stated that they have reduced the distance in kilometres that they travel by car during an average week.

The people living in the City of Lund have reduced their car travelling with nearly 4 million kilometres – or about 1 % – during the last year. Annual counts of traffic confirm these figures; the car traffic increase has been eliminated. The change corresponds to a 900 tonnes reduction in carbon dioxide emissions.

### **Conclusions**

The LundaMaTs system represents an integrated effort to ensure a better environment. One can thus expect synergistic effects when a variety of different measures of the sort described are put into effect simultaneously.

The evaluation shows that the activities have given measurable effects after a couple of years. It is important to continue giving the inhabitants the information that is required for an altered behaviour, and also point out the individual's gains such as better health, time and money. By investing a lot of time and money in LundaMaTs, the City of Lund has become a city working effectively with sustainable transport.

Individual information and dialog with the inhabitants of the city is a very important part in creating a sustainable transport system; investments in better infrastructure are required but they also need to be supported by mobility management measures such as SMART Road User campaign.

### The future

The *Mobility Centre* has been active since 1998. In year 2003 a new project starts within the centre to tie mobility management and spatial planning even closer together. The project aims to form a policy and a handbook for mobility management in spatial planning and to find tools to work more efficiently with these issues. Demonstration of good examples and seminars for providing greater insight into the effects planning has on traffic. A basic conclusion is that planning needs to be started now if an environmentally sound traffic situation is to be expected in 30 years from now. Sound land use and structural planning is one of the reforms that the city works with. Adapting the infrastructure to environmentally sound forms of transportation by creating more adequate infrastructures for various

activities. A good example is safer routes for children's way to school so that fewer children will need to be transported to school by car.

The SMART Road User campaign will continue the whole project period until autumn 2004. App. 6 000 more households are to be visited prior to July 2003. In the spring of 2004 a new LundaMaTs survey will be conducted in order to evaluate the results and effects on the traffic in Lund.