

Measure title: **Managing Mobility Needs of Private Persons and Business Sector**

City: **Malmö**

Project: **SMILE**

Measure number: **11.1 M**

A Introduction

For the purposes of practicalities of the evaluation of this measure we will consider the measure to be divided into two sub-measures depending on who is responsible for implementing the various parts of the measure.

Sub-measure 11.1 M is all of the activities within this measure that are conducted by the Department of Streets and Parks of the City of Malmö or those activities in 11.1 that can be considered to be the responsibility of that Department. This sub-measure includes various campaigns, projects, etc that are intended to provide or enhance information about mobility in general and transport by other means than car, permit households or other groups to “test” new forms of mobility or provide citizens and organisations with tools or experiences that support a modal-shift.

Sub-measure 11.1 S is all of the activities within this measure that are conducted by Skånetrafiken or those activities that can be considered to be their responsibility as part of 11.1. Skånetrafiken’s measures to support mobility management have the goal of shifting people in their role as employees in organisations towards buses and trains.

Sub-measure 11.1 S is reported upon in another document.

A1 Objectives

The measure objectives are:

- **Objective 1** Promote sustainable transportation system through soft measures such as information, marketing, education and guidance.
- **Objective 2** Stimulate a modal shift towards public transportation and cycling
- **Objective 3** To reduce traffic to work¹ by 0.5% per year and thus reduce emissions of CO₂, NO_x and particles

A2 Description

Mobility management tasks in this measure were developed and implemented on a broader scale than before in the city of Malmö. Initially, at the start of SMILE, the City of Malmö had the following orientations, strategies and overall target groups.

¹ Note: Objective not clearly worded in the opinion of the evaluation team.

1. Influencing local companies

The aim was to influence companies in Malmö to make their transportation of employees and goods more environmentally adapted. SMILE projects in the area of mobility management conducted at the Department of Streets and Parks of the City of Malmö included:

- Arranging seminars for local companies
- Bicycling for companies
- Individual meetings and guidance to companies
- Breakfast meetings in the Western Harbour
- Travel surveys at large companies

2. Influencing the public

Inhabitants in the city and people commuting into the city every day are included in this part of the measure. Some examples of sub-tasks/activities within this target group are:

- Friendly Way to School/Walk and Go to School
- Bicycle riding courses
- A travel indicator
- A visitors campaign in the Western Harbour area
- The University of Malmö;
Promotion of sustainable transportation among employees and students at the Teacher's College area of the university.
- Influencing new residents by phone calls and information sent out by post
- A broad communications/dialogue campaign involving the public
in discussions about alternatives to cars and sustainable transportation modes

3. Influencing the municipal organisation

The City of Malmö has about 20,000 employees. Surveys in the past have suggested that approximately 40 % of all employees commute to/from work by car. The primary activities in this sub-task are to:

- Influence the commuting patterns of public city employees
- Lobby the managers of the various city administration departments to make decisions
that help support their employees modal shift away from cars when commuting
- Change the direction of the current municipality travel and transport policy
- Participate in the city planning process
- Develop concepts for sustainable transport modes/systems at the city-wide level

Skånnetrafiken, as part of 11.1 had the following orientation:

4. Individual marketing towards employees at private enterprises

To work with private enterprises to change the transport behaviour of the employees in an environmentally sustainable direction. This new travel concept then moved from testing to full-scale. For more about 11.1S see the other evaluation document.

B Measure implementation

B1 Innovative aspects

Innovative Aspects:

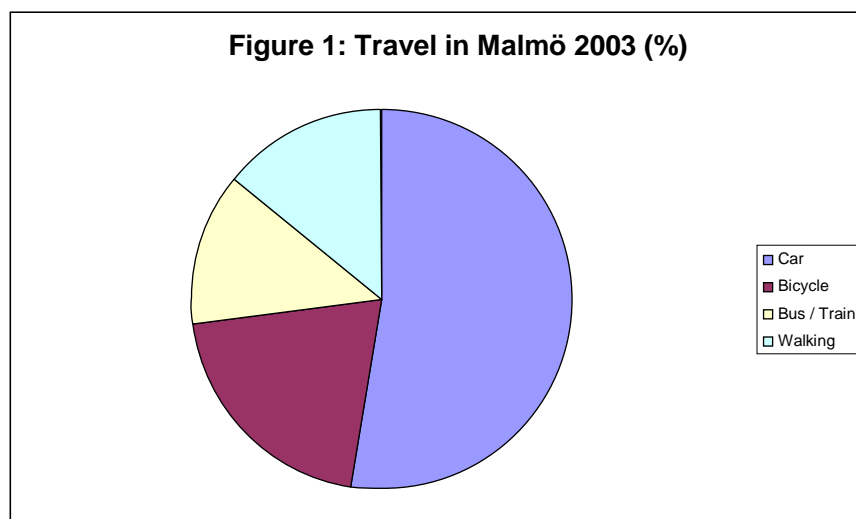
For the City of Malmö this measure is innovative in several ways:

- Scaling-up in geographical extent and the possibility of running multiple large campaigns in parallel which are mutually supporting. Prior to SMILE Malmö was unable to conduct long-term mobility management campaigns except in geographically limited areas of the city and larger scale campaigns tended to be limited in time. SMILE permits Malmö to professionalise its mobility management strategies and campaigns into a specific Malmö approach or, if you like, “brand” that will become increasingly recognisable by inhabitants and business.
- In some cases the measure has combined physical planning and mobility management strategies.
- Finally the measure has permitted a greater ability to target specific user groups and the perfection of methods to realise that.

B2 Situation before CIVITAS

The first attempts at mobility management by the City of Malmö occurred in 2001 as part of the European Building and Housing Exhibition in the Western Harbour district. In 2003 pilot projects beyond the Western Harbour were started and civil servants in the Department of Streets and Parks of the City of Malmö succeeded in establishing mobility management as an acceptable and important part of the tasks of the City, at least at the level of policy but not as part of the regular funding mechanisms. Prior to this time the city had only influenced transport behaviour indirectly through hard measures. Soft measures were seldom considered possible or important.

Prior to CIVITAS SMILE the modal split in Malmö as measured during the autumn of 2003 (different studies at different times do not always agree entirely) was the following:



B3 Actual implementation of the measure

During each SMILE year the mobility management staff held activity planning meetings to plan for the coming year. The basis for planning was financial, the personnel situation and experiences from previous years' work with mobility management campaigns and activities. Prior to SMILE each activity had its own implementation and evaluation plan, but gradually activities were planned on the basis of target groups and planning processes. This has been more efficient, both in implementation of activities and in planning of resources. This has been a consequence of the growth of the extent of the campaigns and the learning experiences of the staff involved.

The primary target groups in 11.1M have been local companies/organisations, the general public, the internal organisation of the city administration. Below follows an incomplete overview of the stages of work for each kind of target group.

Influencing local companies

First stage – Breakfast meetings and company visits in Western Harbour. Company on bikes activity in Western Harbour.

Second stage – Seminars for companies in all of Malmö. Company on bikes for all companies in Malmö.

Third stage – Visits to companies with more than 50 employees. Dialogue and cooperation performing a travel survey. (Travel surveys made at 3 companies)

Fourth stage – Back to specific geographical areas (close to City tunnel stations). Offering dialogue and travel and transport surveys, planning breakfast meetings and networking regarding sustainable transport.

Influencing the public

First stage – Communication activity in Western harbour. Dialogue close to the individual.

Second stage – Adding dialogue with specific target groups – people in a situation where it is easy to change behaviour – newly moving in to Malmö.

Third stage – Complement with larger scale communications campaign.

Fourth stage – Using the dialogue methods in specific geographical areas: i.e. people in a certain residential area or neighbourhood. Making projects part of ordinary processes, for example “Friendly Way to School”.

Influencing the municipal organisation

First stage – Campaigns related to strategic policy implementation, for example “Commuters Competition”.

Second stage – Starting processes together with other stakeholders within the city organisation. Tie activities to the policy process and start processes to change the basic conditions for sustainable transports, for example “bicycle pool”.

Third stage – Handing over processes to other departments/stakeholders. Continue to work with specific activities, evaluation and auditing.

Fourth stage – Work to add mobility management thinking and strategy to city administration transport and travels policy.

The following four tables, one for each year, show what was done on a monthly basis.

Tables 1-4: Implementation of the Malmö city Department of Streets and Parks parts of Measure 11.1 (i.e. 11.1M)

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2005	Year of start	Where?	JAN	FEB	MARCH	APRIL	MAY	JUNE	JULY	AUG	SEPT	OCT	NOV	DEC
	Breakfast meetings for companies	2004	Companies in Western Harbour			02-mar						21-sep		
Toolkit for companies	2004	Companies in Western Harbour										Film and handbook		
Company- bicycles	2005	Companies in Western Harbour										Kick-Off 19 Oct /	Finish Oct 2006	
Company visits	2004	Companies in Western Harbour												9 company visits
Commuting campaign at university	2004	The University building "Orkanen" Western Harbour			Starting week 11		Until and incl week 20				Starting week 37			Until and incl week 51
Visitors campaign in Western harbour	2005	Boardwalk in Bo01, Western Harbour							Week 30-	to week 32 incl				
Bicycle education	2004	Holma and Svedes plan, Malmö				Week 14-18 incl		Week 24-26 incl			Week 39-44 incl			
EcoDriving	2005	Companies in Malmö				Week 14	Week 22				Week 39-44 incl			
Bicycle barometer campaign	2005	By the parking building "Anna", Kaptensbron				Opening 23/4						1 miljon bikers 14/10		
Communication product - "travel indicator"	2004	People living & working in Malmö	week 5						Product ready week 30					
New address	2005	People moving to Malmö during Oct-Dec										Starting week 40		Ending week 51

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Commuters challenge	2003	2 City Dept's (Environ. and Central City Office)												
Famous People Who've Biked in Malmö - book and event	2004	People between 25-34 years, living in Malmö	Start during week 2				Event 23/4	End week 21						
Seminars for companies	2003	Malmö Börshus, companies in Malmö									Start week 39			Week 52 (seminar Jan 12 2006)
Walk and Go to School/Friendly Way to School	2005									Start of planning process				

	Year of start	Where?	JAN	FEBR	MARCH	APRIL	MAY	JUNE	JULY	AUG	SEPT	OCT	NOV	DEC
Breakfast-meetings	2004	Companies in Western Harbour					11/5						7/11	
Toolkit for companies	2004	Companies in Western Harbour		Film ready		11/4 Handbook		Company visits					Company visits	
Company- bicycles	2005	Companies in Western Harbour										Finnish 19/10		
Cyclist-education	2004	Svedes plan, people from all Malmö				2 courses	2 courses			Evaluation meeting	3 courses			
Travel and transport policy	2006	City administration										Start of project group	inventory, monitoring	
Film "An Inconvenient Truth"	2006	Malmö city												26-29 dec
EcoDriving training	2005	Companies in Malmö				Course 21/4								
New address	2005	Malmö									Restart of project			
Commuters challenge	2003	Two city departments			Start week 12			End during week 24						
Seminar for companies	2006	City Hall, companies in Malmö										20/10		
Friendly Way to School	2005	3 focus schools in Malmö: Ängsslätt, Riseberga, Kulladal								Start week 35 Parent meetings, kickoff	End of meetings week 40			Finnish, festivity 11/12

2007	Start yr	Where?	JAN	FEBR	MARCH	APRIL	MAY	JUNE	JULY	AUG	SEPT	OCT	NOV	DEC
New address	2005	People moving to Malmö				Advice and evaluation		Evaluation			Advice			End
Company cooperation	2003	Companies in Malmö	Evaluation film and handbook		10 company visits		network meeting 23/5						Travel surveys at 2 companies	
Developing the Web - Rolfs Travel indicator etc	2005	www.malmo.se/vagvalet				introducing new appearance						Intro of Rolfs travel indicator		Intro of "Famous people" v. 49-51
Vägvalet Communication campaign	2007	Triangeln Södertull Baltzars-gatan, Malmö city centre		Planning							Week 37-39 Campaign	Starting week 43 Evaluation	Ended during week 45	
Companies on bikes	2005	Companies in Malmö	Planning			Kickoff 25/4 (until April 2008)								
Travel and transport policy	2006	City administration		EcoDriving cooperation		meeting and results 20 april							Information	
Workplaces / planning processes	2007										Planning start			
Friendly way to school	2005	3 focus schools in Malmö						Evaluation		Producing Film	Kick off new schools			

Note that the table for 2008 includes plans for the second half of 2008 which have not yet happened.

2008	Start	Where?	JAN	FEBR	MARCH	APRIL	MAY	JUNE	JULY	AUG	SEPT	OCT	NOV	DEC
Bicycle pool	2006	Malmö					Information				Start			
Video conference proj	2008	City Hall			Project group									
Car sharing	2008	Malmö									inquiry			
Travel policy	2007	Malmö					Internal referral	newsletter, Breakfast meeting					Political referral	
Vägvalet part 2 campaign	2007	Malmö		Planning							Campaign	evaluation		
Communication strategy	2007									Planning				Strategy ready
Companies on bikes	2006 (2005)	Companies in Malmö				End 25 April		Evaluation						
Company visits, travel surveys		Companies in Malmö												
Western Harbour (WH)	2008		Workshop Hyllie/ WH				Workshop WH 27/5				New addres starts			
Värnhem	2008					meeting, advice								
Mobilia, Kulladal	2008					Travel Survey				presentation				
Other processes	2008	City Center			Workshop Stortorget			Breakfast meeting Hansa						
Skåne Trampar	2008	Companies & City admin				information	Campaign	Information			Campaign			
Friendly way to school	2005	Focus schools in Malmö					Travel survey parents	Evaluation meeting 10/10		Kick off new schools				

B4 Deviations from the original plan

On the part of the Department of Streets and Parks of the City of Malmö there were no significant deviations from the original plan because the exact nature and time of the various mobility management activities was not stipulated or planned for in the technical annex. However an internal memo from 2005 suggests that, besides attempting to achieve the three objectives listed in A1 and the three target groups listed in A2, the measure would seek to influence local companies by arranging at least 8 seminars/workshops during SMILE, visit at least 200 local companies, work to ensure that 75% or more of the citizens of Malmö would conclude that it is “very good” that the municipality works with municipality management, have a presence (i.e. influence or conduct campaigns) in all 21 municipal departments compared with only 3 at the start of 2005. Compared with this list the primary deviation has been a greater emphasis on children in schools and their parents as well as how the various campaigns and tasks were packaged and organised.

- **From specific target groups to public campaigns.** – The original approach was to get as near a specific target group as possible, to adapt measures to fit as well as possible and to find the best opportunities for changing behaviour in reality. Currently discussions of a wider communication concept are ongoing. The intention is to work as an umbrella for the different measures and activities, binding them together under the same message, ie in effect «branding». While work with specific target groups continues, the staff have developed a mass communication concept that will be evaluated post-SMILE.
- **From separate projects to being a part of the planning process** – The activities during the first year projects within measure 11.1 were planned and performed separately from other processes within the Dep’t of Streets and Parks. Knowing that mobility management in an early stage in the planning process is a key success factor for long term sustainability, the aim has been to connect mobility management to physical planning. During 2008 the first steps towards greater connections between projects within the Dep’t have been taken with the goal that daily activities and processes within the Dep’t should always be informed by a mobility management perspective. The development was not envisaged to take place within the SMILE timeframe and can in part be attributed to the success of mobility management as a concept and practice during SMILE.

Furthermore, the mobility management group at the Department of Streets and Parks has had a much greater role in the drafting and formulation of a Travel Policy for the City of Malmö than was originally expected prior to the start of SMILE. Through SMILE funding the mobility management group has been more able to participate in the process from the early stages and influence the result more on the lines advocated by a mobility management approach instead of a more conventional approach. This deviation from the original plan (more emphasis on the target group “Municipal employees and city organisation” than originally envisioned) will lead to a leverage effect in coming post-SMILE mobility management campaigns where staff from the mobility management group can have the backing of a mobility management-friendly Travel Policy.

B5 Inter-relationships with other measures

The following measures can be considered to have inter-relations: 8.3 with regard to bicycle promotion and 11.2 with regard to eco-driving for municipal employees. These inter-relationships were not planned for at the start of SMILE. However, because of the changing orientation of the content of 8.3, based on circumstances

beyond that measure leader's control, and the need to reach municipal employees for mobility management and participation in eco-driving training some linkages and synergies were realised. Therefore the mobility management staff had some involvement in the internal marketing of 5.1 and 11.2 as well as linkages with 8.3

C Evaluation – methodology and results

C1 Measurement methodology

Data collection for this measure relied on two different methods. First, staff dealing with mobility management at the Department either conducted self-evaluations and reviews of their own campaigns or paid a third-party to conduct telephone interviews, etc. Second, as part of the general public survey on SMILE conducted during April-May 2008 questions were asked about mobility in general and in particular three specific campaigns that were implemented as part of measure 11.1.

Under C2, prior to reporting measure results as economy, energy, etc. some results from the general public survey are presented. Following the reporting on measure results (C2.1-C2.5) a review of a number of individual campaigns is presented followed as section C2.6.

C1.1 Impacts and Indicators

This measure is by nature qualitative and soft. In the absence of concrete and quantitative goals it is difficult to have quantifiable indicators. Furthermore, the initial goal formulation was as follows:

- **Objective 1** Promote sustainable transportation system through soft measures such as information, marketing, education and guidance.
- **Objective 2** Stimulate a modal shift towards public transportation and cycling
- **Objective 3** Reduce traffic to work by 0.5% per year and thus reduce emissions of CO₂, NO_x and particles

Objective 1 is not at all quantifiable. However, as formulated the “objective” was fulfilled during SMILE *since the objective is more a description of the measure than an actual goal*. Objective 2 can be measured in terms of determining the modal shift prior to SMILE and at a point late in SMILE. However, the reasons for a modal shift can be many, complex and varied. Furthermore, an observed modal shift was not necessarily caused by the activities in 11.1 alone. In fact, the contribution of the 11.1 activities to the modal shift is a matter of inference at best and at times may be a matter of conjecture.

As pointed out in section A1, **objective three is quantitative but not clearly formulated**. Is the 0.5% reduction of all traffic to work in total in the city or is it a 0.5% reduction of car traffic in favour of other transport modes? This lack of clarity makes it difficult to determine measurement fulfilment and choice of indicators for assessment of fulfilment. In 2005 the Malmö technical evaluation staff pointed out these difficulties in their contribution to the Local Evaluation Plan. After discussions with measure leaders, evaluation staff determined that the following indicators would be used to assess 11.1 M

Table 5: List of indicators for Measure 11.1M

Nr.	INDICATOR Name	DESCRIPTION	DATA /UNITS
	Costs	Costs for the measure on the part of the Dept of	SEK

Nr.	INDICATOR Name	DESCRIPTION	DATA /UNITS
		Streets and Parks	
	Revenues	Income for the measure	SEK
13	Awareness level	Degree to which the citizens or other target groups are aware of the campaigns and/or offers provided by the city	
14	Acceptance level	Degree to which the citizens or other target groups accept the campaigns and/or offers provided by the city.	

Furthermore, information about the modal shift observed between the autumn of 2003 when a major city-wide questionnaire was used and the spring of 2008 when a smaller-scale survey was conducted about many SMILE measures will be included in this report. Remember, however, that the direct linkages between 11.1 and the modal shift are not very clear.

C1.2 Establishing a baseline

In an ideal world with unlimited resources, a baseline would be established for each campaign or project undertaken as part of this measure. Such a baseline would include the mobility habits of the target group *prior to* the start of the campaign. Based on an understanding of these mobility habits it would be possible to estimate emissions and describe the model shift.

Even with unlimited resources, it is impossible to know in some campaigns which persons in the target group actually will be reached. It is also difficult to poll participants in campaigns about their travel habits before the start of the campaign. Therefore there is no baseline for this measure.

C1.3 Building the business-as-usual scenario

The business-as-usual scenario describes what the situation would be today or a similar point in time if the measure was not carried out. For some of the campaigns in 11.1 carried out by the City of Malmö the population actually reached is very small compared to the entire population in the city. To construct a correct business-as-usual scenario an approach described below would be theoretically possible using the following methodology:

1. Identify groups of people that are the target groups of a particular campaign.
2. Identify equivalent groups of people who will not be targeted for this campaign. This assumes that a campaign will be limited geographically to a part of the city.
3. Compare the travel behaviour of the target group and the control group prior to the start of the campaign to insure that the groups are equivalent.
4. After completion of the campaign study the travel behaviour of the control group again. This behaviour could be considered a business-as-usual scenario.
5. The difference between the after-campaign behaviour on the part of the control group and the after-campaign behaviour on the part of the target group (or at least those in the target group that are actually reached by the campaign, is the effect of the SMILE measure.

Besides the very high cost in terms of staff resources, which would mean that evaluation of this measure would require taking evaluation resources from the evaluation of other measures, there are two problems which arise in this methodology. The first problem is that one cannot know whether the control group is actually similar enough to the target group to make comparisons. The groups may seem similar. Further, if the groups are similar but perhaps in geographically separate areas of the city, there is always the risk that members of the control group are actually unintentionally reached by the campaign and therefore compromised as a control group. A further problem is being able to know prior to the start of the campaign which members of the target group actually will respond to the campaign. If this was known, these people could be studied prior to the campaign to establish the baseline.

Alternative methods to establish a baseline and business as usual scenario:

Using the travel survey prior to SMILE and a travel survey at the end of SMILE, or preferably after SMILE, would be a way to determine the effects of all SMILE measures together. The contribution of 11.1 to the entire modal shift would then be a matter of conjecture. The travel survey prior to SMILE would be the baseline and the business as usual scenario given that transport modes without SMILE would probably have been very similar during 2003 and 2008. However, since the connection between the modal shift and the measure is tenuous and complex this methodology cannot be used either.

C2 Measure Results

When considering the results of this measure it is first important for the reader to better understand how the results have been obtained. Consideration of the measure as a single entity requires amalgamation of the various elements that were described in section B3 which is not particularly beneficial given the diverse, but sometimes interlinked nature of the various campaigns. Therefore the evaluation has been approached as follows.

- We begin with a meta-level evaluation of the measure, including the results from a general public survey.
- This is followed by the requested indicator layout for the measure as a whole
- Finally, data from self-evaluations (or equivalent) from the mobility management staff are presented. This has been provided in order to focus in on more detailed results which can show the impact of specific interventions that would otherwise be masked if the evaluation remained at the overall level.

A meta-level evaluation of the sum of SMILE measure 11.1 M

By meta-level it is meant that the individual projects are not part of the evaluation and the individual target groups are combined into an entire population to study. This was achieved by conducting a **general public survey** among Malmö residents. The survey was distributed in public places in Malmö during April and May 2008 on a variety of days and at different times of the day. The public places were shopping centres, large public squares or public transit nodes. In all over 3100 questionnaires were distributed, completed and returned either on the spot or by post at a later day. There were three versions of the questionnaire: a pilot version and then two main versions that asked some questions in common and asked other questions that were unique to each version but in common with the pilot questionnaire. There were some questions dealing with contacts with Malmö city and transportation. There were also questions about specific projects or campaigns.

The first question of relevance for 11.1 was: “Have you been in contact with or have been contacted by Malmö city concerning alternatives to car trips and your travels?” Of the 1882 respondents 4.2% said yes. The second question was: “Have your travel habits changed after the contact with Malmö city?” Here there were a total of 824 respondents and their responses were as follows: My travel habits changed after the contact: very much 5%, some 14.6%, very little 12.6%, not at all 67.7%.

These results are problematic to deal with since the first question had 79 people recalling that they had been in contact with the city whereas 265 people say that following the contacts their travel habits had changed either “much”, “some” or “very little”. This may mean that the first question was misinterpreted or that the second question could have included changes as the results of campaigns that the respondents did not realise were parts of the work of the City. Regardless of the reasons, these results are not very reliable. However, see Box A on the following page where a closer analysis is conducted of those 79 respondents who recalled that they had been in contact with the city concerning alternatives to car trips and travels.

Respondents were asked to identify themselves with three specific campaigns conducted as part of 11.1M. Respondents could say that they had participated in the campaign, or heard of the campaign, or knew nothing about them. The three campaigns that were chosen for closer inspection in this way are among the campaigns that have been outlined and whose evaluation has been summarised in the previous pages.’

Table 6a: Awareness of some campaigns on the part of all participants in the survey

Campaign	Number of respondents	Participated	Heard about	Know nothing
Friendly way to school	1772	1.9%	13.0%	85.1%
Information for new residents	1754	3.5%	16.6%	79.9%
Companies on bikes	1773	1.7%	20.1%	78.2%

If “participated” and “heard about” is summed we get 15%, 20% and 22% for the three respective campaigns. If we look at the average of the three campaigns: one that parents would respond to, one that new residents would respond to and one that those who worked in participating companies as well as a general reaction to seeing the bikes, we get the following results. 2.3% say that they have participated in some kind of mobility management campaign, 16.6% that they have heard of the campaigns. Together this is 18.9% of everyone in Malmö.

If we return to the question about habit changes because of contacts with the City we see the following numbers in comparison:

- 5% have changed habits a lot (thanks to mobility management work/contacts)
- 14.6% changed some
- 12.6% very little.

This is a total of 19.6% for changed habits “some” and “a lot.” With the addition of “very little” this is a total of 32.3%

Based on these numbers in this SMILE evaluation we will assume the following:

- 19% of the people in Malmö are aware of at least one campaign held as part of 11.1M.
- 2-5% of people in Malmö accept the campaigns either through active participation in the campaigns or a change in travel patterns.
- Perhaps as many as 4% of Malmö residents have been touched by more than one campaign.

Box A. A closer analysis of the 79 people who indicated that they had been contacted by/had contacted Malmö about their trips and alternatives to using a car.

Consider, as mentioned previously, that this number is smaller than the 824 people who claim that their travel habits have changed after contacts with the City of Malmö. Presumably the 79 people are those who believe that they have been in direct personal contact whereas the 824 are these 79 people plus those who in some way participated in a campaign or saw an event but did not consider this to be a “direct personal” contact with Malmö, such as those that might occur during an interview or a telephone conversation.

Of these 79 people, 74 answered the question how their travel habits changed after the “contact”. 16% changed a lot, 34% changed some, 24% very little, 26% not at all.

When asked about three specific campaigns that were targeted towards schools, new residents and companies the awareness of these campaigns were as follows:

Table 6B: Awareness of some campaigns based on the responses of 79 people who said that they had been contacted by/been contacted by Malmö with regard to alternatives to using a car.

Campaign	N	Participated	Heard about	Know nothing
Friendly way to school	73	8%	29%	63%
Information for new residents	74	24%	31%	45%
Companies on bikes	73	8%	34%	58%

Determination of overall measure level impacts

The following results are presented under sub headings corresponding to the areas used for indicators – economy, energy, environment, society and transport. The results are based primarily on the questions in the general survey conducted during April/May 2008 and attempts by the Department of Streets and Parks to evaluate, at a participant level, the results of individual campaigns.

C2.1 Economy

The total cost of the activities conducted by the City of Malmö in measure 11.1 is approximately €1.8 million. Note, not all of this will have been spent on directly implementing transport-related communications, as the involvement in a European project such as SMILE will have used a proportion of the budget for reporting, evaluation etc.

C2.2 Energy

No indicator under the indicator category Energy is associated with this measure. Some of the projects that are part of this measure are able to estimate savings in fuel usage. However the majority of the projects are not able to provide any kind of estimate. Furthermore the various projects are so different in terms of goals, target groups, delivery mechanisms etc that it is not possible to take estimates from a few projects and extrapolate these results to the entire measure 11.1M.

C2.3 Environment

No indicator under the indicator category Environment is associated with this measure.

The uncertainties behind the existing data make it difficult to determine the extent of reduced emissions. The results of the survey with questions about 11.1 activities together with attempts to evaluate individual activities suggest tendencies in change in awareness and acceptance but do not say with certainty the actual change in behaviour. Therefore a result of reduced emissions cannot be determined conclusively based on the existing data.

We have been able to identify reduced CO₂ emissions for several of the projects. The amount is about 46.7 tonnes which is the sum of bicycle campaigns targeted towards employees of companies and campaigns targeted towards the morning travel habits of school children aged 6-9 and their parents. *The other projects that were part of close scrutiny in this evaluation surely had CO₂ reductions but these cannot be quantified.*

C2.4 Transport

A transportation modal shift in Malmö could, in part, be the result of this measure. The following figures show a possible modal shift in Malmö.

Figure 2:
This figure is based on the Malmö City Travel Habit Survey conducted during the autumn of 2003 with over 5000 respondents.

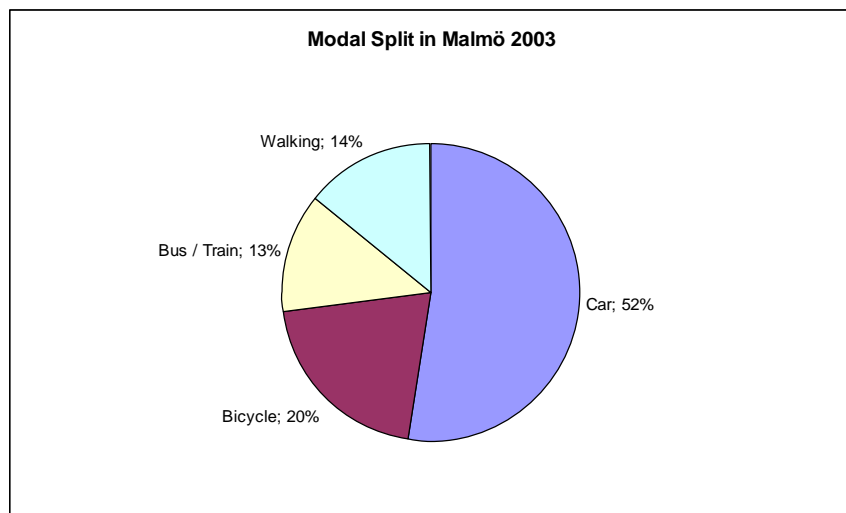
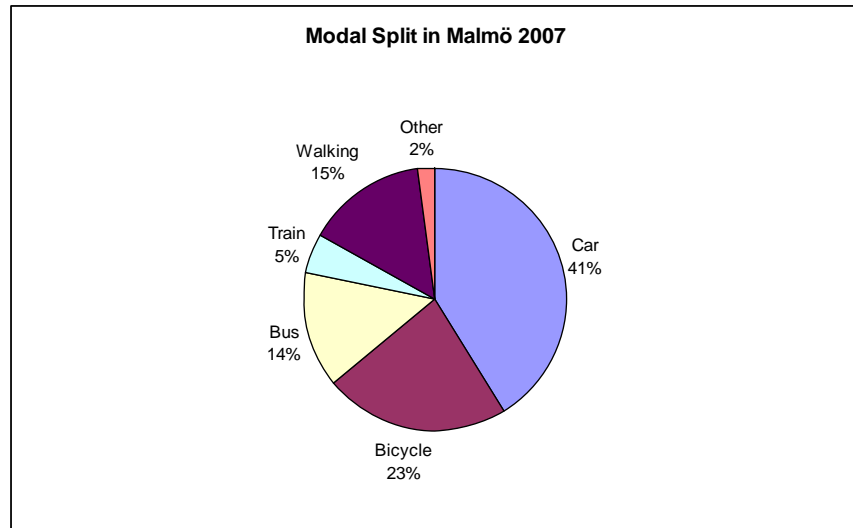


Figure 3:

This figure is based on a Travel Habit Survey conducted in the Skåne region during autumn 2007 with fewer than 1000 respondents living in the urban area in Malmö



In addition a survey with the identical delivery mechanism and purpose to the autumn 2003 survey was carried out in autumn 2008 and the results are shown in figure 4.

Modal split in Malmö 2008, N=11462 travels

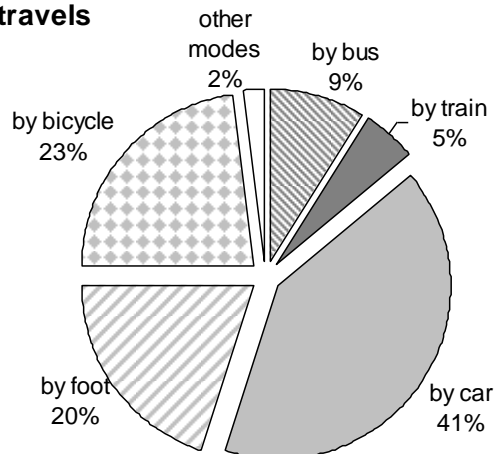


Figure 4 Results from the travel diary made in October and November 2008 with a sample of around 5600 travel diaries

The respondents are between 18 and 75 years of age and living in the city of Malmö. They have stated the main travel mode for each trip they have made during one day.

This survey showed that for the residents in the City of Malmö, 41 % were using cars, 14 % public transport, 20% were walking and 23 % were using bicycles. The survey 2008 also shows large changes in the modal split since 2003. The proportion of journeys by car has decreased from 52% to 41%, the proportion of journeys by foot has increased from 9% to 20% and the proportion made by public transport has increased from 13% to 14%.

The surveys made in 2007 and 2008 show some differences in the overall modal split. The proportion of car and bicycle journeys are the same, but the proportion of public transport are quite different, 19% in 2007 and 14% in 2008. The proportion of journeys made by foot differs as well, 15% in 2007 and 20% in 2008.

Public transport users often use other travel modes, preferably walking and bicycle when the weather allows, for shorter journeys. The weather was a bit warmer and dryer in 2008 than in 2007 and this could be a factor of some importance to explain the difference. The fact that the survey in 2008 was based on 5600 travel diaries and the survey in 2007 only on 295 is also important.

The result of the surveys in 2003, 2007 and 2008 shows a change in modal split towards more walking and train travelling and less use of car as travel mode since 2003.

While the survey results suggest a decrease in car usage in Malmö, all of this change cannot be attributed to SMILE and not all of the potential for change that is part of SMILE can be attributed to 11.1M. Interest in cycling has risen since 2007 in many locations in Sweden, presumably as the result of rising fuel prices and increasing concern about climate change issues.

In a variety of Swedish urban areas use of public transit has increased faster than increases in car usage during 2007. The survey results suggest an increase in the use of public transportation. During the first half of 2008 car usage in Sweden, as expressed by petrol and diesel fuel consumption, has decreased by 3%. These factors, external to SMILE, may be the primary factors for the trend observed by comparison of the three studies. On the other hand, we cannot rule out that SMILE measures and especially 11.1M in this case have contributed to the observed changes or have strengthened other trends or factors external to SMILE.

The work undertaken as part of 11.1M with regard to the city's own transportation policy and the integration of mobility management thinking in infrastructure decision-making and planning can provide long-term benefits. However, it remains to be seen if the political bodies making decisions about the transportation policy actually approve the proposal. Furthermore, policies are only as good as their enforcement and it may take several years before the majority of city departments clearly follow the proposed policy. This means that with regard to employee transportation in the city future changes are likely but beyond the scope of this evaluation.

C2.5 Society

Awareness and acceptance of the various projects in the measure vary considerably. The campaigns/activities in the yellow cells have been evaluated specifically (as documented in section C2.6) whereas the results of the meta-level evaluation are in green.

Table 7: Comparison of the levels of awareness and acceptance in several 11.1M projects

Campaign	Awareness	Acceptance	Comments
Companies on Bikes	~22% on part of general public	100% on the part of participating companies	
Just Moved In?	~20% on part of general public	1% (20-30%)	1% of target group participated in and accepted the entire campaign, 20-30% followed at least parts of the message
New Circumstances, New Habits	No data	No data	The campaign was oriented towards clear behavioural changes and neither awareness nor acceptance was included in the evaluation.
Path Choices	25% on part of general public	14,5% on the part of the participants	
Learning to Ride a Bike	No data	No data	The campaign was oriented towards bicycles skills so awareness or acceptance was not included in the evaluation.
The Commuter Competition	High	13-14% on the part of the participants	
Friendly Way to School	15% on the part of the general public. "High" on the part of the target group.	~ 10% on the part of the parental target group, higher on the part of children	Children higher because of their participation in events held in the school stemming from the campaign.
Meta-level Analysis: SMILE General Public Survey	19%	2-5%	Awareness of 2 or more campaigns ~ 4%

There may be other projects, not scrutinised in this evaluation, that have better levels of awareness and acceptance but this evaluation is based on the studied evaluation reports and the meta-level evaluation process.

Generally, the more specific the question about awareness and acceptance the higher the response levels recorded. This is because of the greater name recognition on the part of respondents to specific, named projects. This means that the question in the general public survey about SMILE from spring 2008 probably under-represents how much the public is reached by the various 11.1M campaigns.

C2.6 Presentation of results from evaluation of several campaigns that are part of the measure

11.1M has consisted of a very large number of activities, ranging from short-term pilot campaigns to long-term activities and projects. It has not been possible to sift through the entire wealth of materials as part of this evaluation. The following table shows materials received by technical evaluation staff and those marked in yellow have been studied thoroughly.

Table 8:

List of all self-evaluation materials received from employees working with 11.1M

Campaign Name	English Translation	2003	2004	2005	2006	2007	2008	[Evaluation] Report(s)
Företagscykling → Företag på cykel	Company Biking (2005-2006) → Companies on Bikes (2007-2008)			X	X	X	X	11 Aug. 2008
Nyinflyttade → Ny adress – nya resvanor	Just Moved In? (2005) → New Address, New Travel Habits (2006-2007)			X	X	X		6 Febr. 2006 21 Febr. 2007 25 Aug. 2008
Vägvalet [hösten 2007]	Path Choices					X		2 April 2008
Rolfs Reseindikator	Rolf's Travel Indicator						X	15 Jan. 2008
Cykelutbildning	Learning How to Bike		X	X	X			1 Dec. 2006
Hur kom du från hem till hav	How Did You Get to the Beach?			X				19 Oct. 2005
Seminarium för företag	Seminars for Companies	X	X	X	X			24 Jan. 2006
Nya förutsättningar – nya vanor	New Circumstances, New Habits		X	X				10 Nov. 2006
Berömda människor som cyklat i Malmö	Famous People Who've Biked in Malmö			X	X			31 July 2006
Pendlarkampen	Commuter Challenge	X	X	X				29 Sept. 2006
Gå och cykla till skolan → Vänlig väg till skolan	Walk and Bike to School → Friendly Way to School		X	X	X	X	X	?Dec? 2007
Malmö stads policy för möten, resor och transporter	Malmö Municipality Travel and Transport Policy					X	X	Several, Spring – Summer 2008

Materials in yellow in the table have been read extensively as part of the evaluation. The black “x”s indicate the approximate time the campaign/activity was underway and the green “X”s indicate the time period covered by the self-evaluation. The dates in the far right column are when reports or self-evaluations were completed or printed. In the case of the school campaigns materials that form the basis of the report were used instead. More exact timelines are available for all projects/campaigns, see pages 5-9 for these. Note that there can be some slight inconsistencies in the translations of the campaign names into English in the above table versus those listed in Tables 1-4 in section B3.

A large number of the campaigns have been self-evaluated based on the so-called SUMO methodology. This methodology, promoted by the Swedish National Road Administration, suggests that evaluations should be based on the “service” given, the “offer” that follows from the service and the “take-up” that is to say what the participants say will happen to them as a result of the campaign. Clear emphasis is placed on evaluation and description of the service and offer. This is not compatible with the GUARD methodology of establishing a baseline and a business-as-usual scenario which the Swedish National Road Administration believes is not possible in many mobility management promotions.

The SUMO methodology, with its clear focus on the evaluation of the campaign (equivalent) and its delivery misses the chance to try to evaluate the effects of the campaign. Because of 11.1M being funded by CIVITAS, the mobility management staff have attempted to extend the SUMO methodology to accommodate GUARD's interests where they have deemed this to

be possible. However, the inherent nature of some campaigns has made this very difficult in some circumstances.

Companies on Bikes

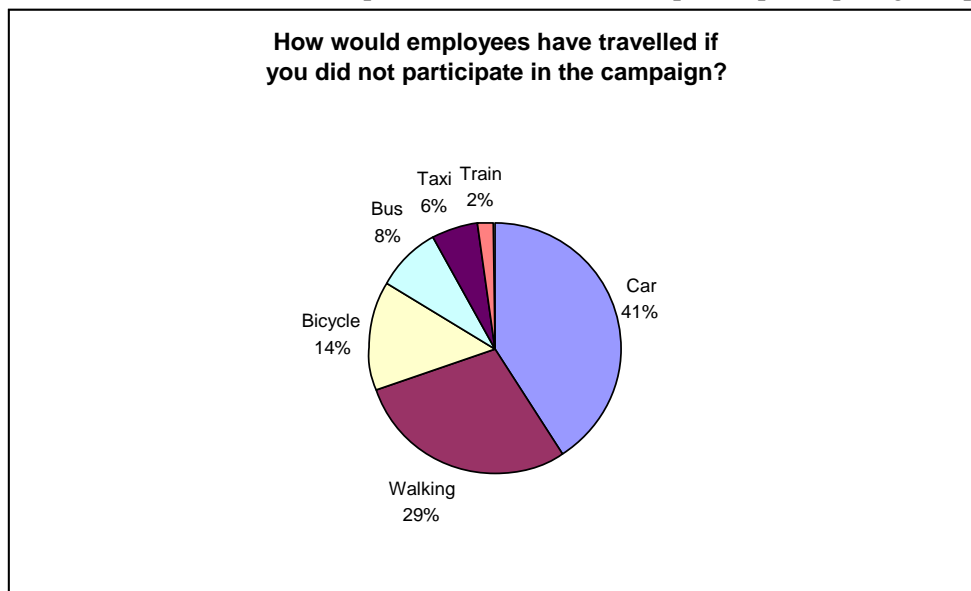
During a total of three years time and at a cost of 462 284 SEK plus staff work time, this campaign has promoted the use of bicycles by the employees of participating companies. Those companies that participated bought subsidised bikes with a campaign colour/logo and a bicycle travel computer that logged cycled km. This campaign started with a geographical limitation in the Western Harbour area but later included all of Malmö. During this entire period of time 173 bicycles were purchased and used by employees in 80 companies/organisations.

First year

During the first year the bikes travelled 22056 km but some of these kilometres were used for other purposes than employee travels while at work: commuting to/from home is also part of this number. If we, however, take this number as the distance the bikes travelled for the campaign purpose this gives 416km/bicycle/year and given a work year of 220 days/year about 1.9 km/day.

Besides some of the total distance being used for commuting purposes, about 30% of the companies said that they already had company bicycles. Furthermore: 36% claimed that the campaign reduced company costs, 64% said that employee health probably improved and 57% suspected that the project influenced employees to cycle more often when not working. In this SMILE evaluation even if some of the bicycle trips did not replace work trips by car, we will assume that commuting trips by car were replaced by using the campaign bikes. Companies were asked how employees would have travelled if they didn't have access to the bikes.

Figure 5: Business as usual modal split for work travel on the part of participating companies.



71% of participating companies stated that the use of bicycles have replaced car trips. However we do not know what this means in kilometres.

The goals of the original campaign were that the average use of bicycles should be 500km/year. This was not achieved since the result was only 416km. A possible permanent change in behaviour was not evaluated. However all companies that participated said that the test would be permanent in their respective organisation.

If each cycled km replaced car trips then 5 955 kg of CO₂ emissions would have been avoided. While we know that just under $\frac{3}{4}$ of the bicycle trips replaced car trips, the majority of participating companies believed that employees cycled more outside work because of the measure. For this reason we will assume that the total effect of the measure resulted in the reduction of CO₂ emissions stated above.

Last year

During the last year of the campaign an effort was made to attempt to better follow-up results. The reader should consider that this campaign used cycle “computers” to record cycled kilometres and each organisation committed itself to periodically read off and report the results. This campaign is thus almost unique compared with other campaigns conducted within 11.1 M in that organisations were targeted and not individuals.

The results of the final year suggest that 33768 kilometres or 2046 trips by car were replaced by the use of the bicycles. This yields 294 km/bicycle/year which is lower than the goal. This led to a reduction of 8780 kg CO₂.

80% of participating companies felt that costs were reduced and their employees’ health was improved. All companies intend to continue after the test period. A goal in the campaign was a rating of 75% total satisfaction but the result was 90%.

Result of all three years

If we combine the results of the first phase only in the Western Harbour (year 1 followed by year 2 and year 3) with the second stage (year 3), then the results are:

99 936 cycled kilometres leading to a reduction of 26.6 tonnes CO₂

While not achieving all goals in the project (for example the goal for km/bicycle/year was not reached) the campaign appears to have been **very** successful in terms of continuation of behaviour after the termination of the campaign. This means that this campaign has had a very high awareness and acceptance rate and has resulted in measurable reductions in CO₂.

Just Moved In? / New Address, New Travel Habits

The Original Campaign

During a 10 week period in the autumn of 2005 1427 households that moved to Malmö were contacted by telephone to provide information and coaching about trips in Malmö as well as the advantages and possibilities of sustainable alternatives to car use. Prior to the telephone call a letter was sent out saying that the city would be contacting the new resident in the coming days. After the call those that stated they were interested received a second mailing with brochures, maps, etc. This test project had a number of achievement factors and goals. These factors together with goal realisation are listed in the following table:

Table 9: Comparison of evaluation factors, goals and factor realisation in the campaign

Factor	Goal (%)	Realisation (%)
1. Notice the first mailed materials	50	73
2. Those reached by telephone would agree to participate in a conversation about trips	75	93-98
3. Those participating in the conversation would say that it was a positive experience	75	80
4. Those participating in the conversation wanted more information sent to them	75	93
5. Those who received the second mailing "partook" of the information	60	56-88
6. Recipients of the whole marketing procedure state that this contributed to a change in their way of <i>thinking</i> about trips.	40	25 (41%)
7. Recipients of the whole marketing procedure state that this <i>influenced</i> their choice of travel in one or more of their common trips in Malmö.	20	13-15

This means that most goals were fulfilled and some to a very high degree. The figure in parenthesis for the sixth factor is the response rate of motorists. The last factor related to behaviour change was not achieved.

This campaign targeted the entire city and no modification of materials or other parts of the campaign were tailored to where the person lived in the city. The entire campaign cost 437275 SEK plus staff time to administer the campaign.

Lessons learned by Department employees include the following:

- The necessity for a follow-up period 6-12 months later.
- The campaign attempted the modal shift from cars to bicycles while some participants were more receptive to a shift from cars to public transit and the campaign wasn't entirely geared up for that option.
- The potential to link the campaign to other campaigns, such as Skånetrafiken's "test traveller project" (not part of SMILE.)
- It is too expensive to rely so heavily on the telephone: an alternative has to be sought.

The Expansion of the Campaign

In the latter half of 2006 and during 2007 the campaign continued and was expanded. In addition to coaching over the telephone about alternatives to car travel, motorists were offered the option of borrowing a bicycle for free for a month or a free public transit pass for Malmö for a month. This meant that the offering was more tailored to the responses by and the needs of the individual participants. The following table summarises the results of the expanded campaign.

Table 10: Goals and goal fulfilment during the expanded campaign

When	Goal	Second half 06	During 07
Letters sent out		2154	6567
Telephone contacts made		63%	62%
How many noticed the welcome to Malmö letter	80%	77%	68%
How many accepted the offer of coaching via the telephone	90%	91-96%	90%
How many after coaching wanted information package		94%	87%
How many say contact was positive	80%	91%	86%
How many positive to contents of information package	80%	41%	87%
Cost (not including administrative staff time)		422664 SEK	784553 SEK

The degree of testing of the recommendations provided in the coaching session on the telephone and from the materials in the information package was approximately 1% of those initially contacted on the telephone. There were indications that of those who tested their degree of usage was rather low: eg majority of those testing public transit did not take a bus more than once a week and the largest group of bicycle users biked relatively seldom.

However, as many as 40% of those who tested options to a car rather regularly then continued their changed travel habits after the test period. Furthermore, during the follow-up conversations (i.e. after test period) some 20-30% of all participants said that they drove their car less now in Malmö when compared with before moving to Malmö. Some of this reduction can be attributed to the campaign but some of it may be the result of changes in the life situation for the respondent and his/her household that prompted the move to Malmö.

Summary

The idea behind this campaign is sound as when people are in the process of a major change in life they may be more receptive to a message of changing travel habits and behaviour. However, as the results of the study show, the amount of documented change that resulted is relatively low in comparison with the high cost of the method. Some 50 people took up the testing at a cost of 1 207 217 SEK which shows a very expensive way to lead to direct change. On the other hand this campaign, together with other campaigns that people who have just moved to Malmö encounter, may lead to a greater degree of reception of the idea of alternatives to the car. Furthermore since over 1000 people reached by the campaign say that they now drive their cars less, this could be an important result even if the evaluation of the campaign cannot directly equate the campaign to this change in behaviour. Some campaign participants may have listened to the campaign message and changed behaviour without using the offerings made during the test period.

New Circumstances, New Habits

This campaign has some similarities to “Just Moved In?” but is targeted towards a particular organisation in an attempt to change travel habits of university employees. The teacher’s college and the largest university library moved from a previous location to a newly constructed building very close to the Central Station. This move increased the ability for some employees to commute to/from work via public transit because the previous location was not located near a public transit node.

The central premise in New Circumstances, New Habits was that employees when faced with the move might be more willing to try an alternative to commuting by car. During the course of preparations for the campaign the student union requested that the campaign be extended to students as well.

The following table shows the results of the campaign based on polling staff before the move and after which corresponds to a “baseline” and the change because of the campaign.

Table 11: Results of the campaign, before and after, for both staff and students

	Staff before	Staff after	Students before	Students after
Car	48.4%	15.9%	34.2%	17.3%
Bicycle	30.3%	37.3%	25.0%	28.2%
Public transit	18.1%	43.3%	34.9%	50.0%
Walking	3.2%	3.4%	5.8%	4.4%

As the author of the report hastens to say, not all of these changes can with 100% certainty be attributed to the campaign. The new location, besides being closer to the transport node, has major construction projects in close proximity which reduce easy access by car. Furthermore,

the total number of parking spaces in the lot, compared with the previous location, has been reduced.

The principal change among employees is to switch from car to primarily public transit and, to a much less extent, to cycling. Among students a similar but less pronounced change is noticeable. Since students are less likely to own a car or afford regular use of a car this means that car usage prior to the move was already lower than that among employees. That the percentage of students walking to classes and the building fell after the move can perhaps be explained by students choosing to live very close to the previous building and then not being able to walk to the more central location in the present building. That cycling did not increase more seems odd in a university setting where bicycles seem to be ubiquitous.

Vägvalet / Path Choices

As opposed to the previously mentioned campaigns that primarily attempted to broadcast a message and lead to change, Path Choices was an attempt to use dialogue to lead to new thoughts and ideas. The principal question or task of the campaign was to get residents to think about "Which way should we go to reduce car traffic in Malmö?" This campaign ran partially parallel to *Inga löjliga bilresor* which was part of SMILE measure 8.3 but, according to the evaluation results in the SMILE evaluation report for 8.3, was perceived by some people as being connected or one and the same campaign. In this way *Inga löjliga bilresor* raised the idea that taking your car for a short distance was rather silly and not a time saver while Path Choices took the message the next step and asked: so what alternatives are there to the car.

The campaign designers wanted to provoke people into thinking about alternatives and bold ways to reduce car usage in Malmö but one of the results of the campaign appears to be that for many people --who were touched by the campaign -- the campaign wasn't very provocative.

Following the campaign 300 Malmö residents were interviewed by telephone. 25% of residents had noticed the campaign and of these 58% contributed to or participated in the campaign in some way.

The campaign cost 937 601 SEK plus staff time for administration. Based on the results of the post-campaign telephone polling, awareness of the campaign was 25% and acceptance 14.5% (58% of 25%). The evaluation design did not permit determination of changes of behaviour as the result of the campaign. On the other hand, *the goals of this campaign were not stated as being to **directly** affect behaviour.*

It is difficult to determine how successful the campaign was. Instead this campaign can be considered to support other campaigns in this SMILE measure and other SMILE measures in Malmö.

Learning to Ride a Bike

This campaign was first tested during 2004 which is before SMILE. The idea is that many adults, often women born outside Sweden, cannot ride a bicycle. If they can cycle it gives them exercise, an environmentally friendly and cheap transport mode with a high degree of freedom and flexibility and ultimately gives campaign participants more self-esteem and confidence. For those people in this category who have a driver's license and access to a car this campaign gives participants the ability to choose between more modes of transport: a choice that would not be possible without being able to cycle.

During 2005 the pilot version of the campaign was scaled-up. The campaign was free for participants and cost about 45 000 SEK (primarily purchase of bicycles and salary for a bicycle instructor). The framework for the campaign was that 6 groups of 20 people per group could receive instruction leading to a total of 120 students but most groups were not filled and participation was not entirely regular. In all 67 people completed most or all of the training and most could ride a bicycle at the end.

Lessons learned were: it was difficult to attract many potential participants and ensure that they participate each time. To determine the effects of the course a questionnaire should be provided to completion at the beginning and end of each course. A follow-up one year later to determine how much participants were actually cycling is a final lesson that was learned.

In 2006 the campaign grew to 91 participants and cost 82 640 SEK. This included bicycle repairs and replacement of stolen bicycles. Uneven participation made it difficult to determine how many actually learned how to cycle.

Further lessons learned were that attendance must be made compulsory, traffic safety theory must be integrated in a better way (most participants only appear to be interested in the mechanics of riding a bicycle), the marketing of the course must be different.

Following 2006 those involved in measure 11.1 decided to not repeat the course during SMILE. Instead the present idea is to develop a course model that other organisations can use to market via their own channels. The City of Malmö could give these “certified courses” a logo and a brand. Participants at the end could receive a diploma from the City. Marketing should be pushed into existing channels and the administration of the courses could be taken over by the participating organisations. During the 2006 campaign, unemployment offices, the Red Cross and medical clinics had contacted the Department of Streets and Parks and asked the City to hold the course for them in the future. The evaluator of this project suggested that these and other organisations could take over the course in the future after the course model was developed.

The awareness, acceptance and effects of this project cannot be evaluated according to the GUARD methodology. The evaluator could not judge success based on the SUMO evaluation methodology.

The Commuter Competition

This campaign has changed names, target groups and some of its delivery methodology several times. The origin of the campaign was during 2003 but has been funded in part with SMILE money since 2005. This description/evaluation comes from the autumn of 2005.

The target of the campaign has been employees of the City. The goal is to reach employees with a message and then to get a certain percentage of employees to *try* alternatives to the car for commuting to and from work. Furthermore the goal is to get a certain percentage of employees to “permanently” switch to other forms of mobility for their commuting.

In the autumn of 2005 the target groups were the 300 employees at two City offices (200 at the Main City Office and 100 at the Environment Department). Car-users were the principle focus.

The particular delivery methodology was similar to other versions of this campaign with an initial approach with the management of the departments, a visit to various staff meetings to present the campaign, the invitation to attend mobility coaching and various feedback and reinforcing mechanisms such as awarding “the commuter of the week”.

105 902 SEK was spent on this campaign during the autumn of 2005 including the occasional employment of a journalist. Over and above this cost was staff time spent for administration at the Mobility Management section of the Department of Streets and Parks.

This campaign had three goals:

- The knowledge goal to reach 50% of employees at both offices who would have increased knowledge about environmentally-friendly commuting compared to prior to the start of the campaign
- The behaviour goal that 10% of employees would test commuting in a new way
- The behaviour goal that 4% of employees would commute to work in a more environmentally-friendly way than prior to the start of the campaign.

60% of all employees filled in a web-based survey after the campaign was over. 45% of the employees at the Environment Department and 33% of employees at the Main City Office have 5km or less to work. Only 38% of employees felt that the campaign had increased their knowledge. 10-11% tried alternatives or had a temporary change in commuter patterns. About 3% said that the campaign had led to permanent changes in commuter habits. Based on the web survey with a 60% response rate it would appear that 2/3 of the goals were achieved. Car usage fell by 13-14% in the weeks directly following the campaign which is in accordance with other responses. However, follow-up some months later would have been required to ascertain more permanent change, which appears to be much less.

The effects of a campaign like this will tend to decline after several years because of staff turn-over and that new staff in a given department have not participated in the campaign while some of the previous staff who had made changes in their behaviour no longer work in the office. *There is a need to make at least some aspects of the campaign semi-permanent in all previously targeted offices* to counteract the tendency to return to the previous commuter habits. The campaign managers noted that there is a need to have greater commitment on the part of the participating organisations for greater success.

The evaluation methodology used here is not in line with that required by GUARD for a SMILE measure. The methodology approximates that which is suggested by the SUMO method.

Walk and bike to school / Friendly way to school

This project originated prior to the start of SMILE but has continued on a yearly basis in a different form during SMILE. The original intention prior to SMILE was that all municipal schools in Malmö with children aged 6-9 would be involved within four years. This intention proved not very realistic and if followed might have meant that resources were spread too thinly in an effort to reach all schools in a superficial manner.

As the project continued into SMILE it became increasingly clear that it would be better to place much greater emphasis on concentrating on a handful of schools each year to achieve real -- and hopefully -- lasting change. This means that some of the development of the existing project has been funded by SMILE and that the new way of dealing with the schools in a more long-lasting relationship has been the result of SMILE as well as the short-comings of the earlier approach.

The present project leader estimates that it will take several additional years before the long-term goal of reaching and achieving change in all target schools is realised. In the meantime returning visits and "maintenance" campaigns will be required at some schools that have participated in previous years as new groups of children and their parents enter the school.

The situation before SMILE

There are about 10 000 children in Malmö aged 6-9 years. They have on average 560 meters to travel to school and have about 178 or more school days per year. The assumption was made that about 20% of all these children were driven to school which would mean 398 000 km/year. At 0.13 litres petrol/km this would be about 122 tonnes of CO₂ emissions that could be reduced if all these children were no longer driven to school. The assumption about the percentage of children driven to school was based on a project in the neighbouring city of Lund where the average was 20%. It turned out that Malmö differed from Lund.

In the schools that were part of the campaign in 2006/2007 as many as 75% of children in the age group 6-9 years were driven to school. The three first schools that were part of the SMILE funded version of Friendly way to school had about 600 children aged 6-9 years and it was estimated that 89552km/year was the total car distance required for driving 75% of the children to school in the morning resulting in 27.5 tonnes CO₂ being emitted.

The evaluation of the results of changes in behaviour in these schools was that vehicle km driven fell by 17015 with 5.2 tonnes fewer CO₂ emitted. This comes from a reduction of driving from 75% to 65%.

In the 2007/2008 campaign the three schools 75-40% of the approximately 500 children were driven to school. The evaluation of the results based on changes from the autumn of 2007 point to a reduction of 30834 km and 9.6 fewer tonnes of CO₂ being emitted.

These and other results point to several conclusions:

1. Each school is unique in terms of percentage of children driven to the school and the degree of interest on the part of parents to changing travel habits.
2. Teacher and school leadership interest is important to reach good results.
3. The potential for improvement is great in most schools.

Furthermore, this is an important campaign since it helps lay a foundation for more sustainable transport habits at an early age which increases the likelihood that the children, as adults, will make more sustainable choices. Children who are driven to school will be less likely to be interested in more sustainable choices because of lack of experience from a young age.

In total during SMILE thus far almost 20 tonnes of CO₂ have been avoided.

The evaluation methodology and the results from these six schools, if expanded to all relevant schools in Malmö, would lead to a reduction of almost 135 tonnes CO₂. Further reductions in parents driving children to school would then lead to additional reductions of CO₂ emissions.

These calculations are based only on the driving of children to school. Parents who don't drive their children to school would be less likely to drive their car to work which would lead to additional reductions of CO₂ emissions. It was not possible using the evaluation methodology to determine how much this add-on effect might be.

C3 Achievement of quantifiable targets

Table 12: Overview of the results of this measure

No.	Target	Rating
1	The promotion of sustainable transportation systems through soft measures such as information, marketing, education and guidance.	**
2	The stimulation of a modal shift towards public transportation and cycling.	*
3	The reduction of traffic work ² with 0.5% per year and thus reduced emissions of CO ₂ , NO _x and particles.	0 (**)
NA = Not Assessed 0 = Not achieved * = Substantially achieved (> 50%) ** = Achieved in full *** = Exceeded		

C4 Up-scaling of results

With the advent of SMILE, an up-scaling both in terms of geographical coverage, duration in time, professionalism and number of target groups has already been achieved. Possible further up-scaling could involve the following:

- Commuters from nearby locations – eg Lund, Trelleborg, Staffanstorp – to Malmö. Presently Malmö has to rely on mobility management campaigns in surrounding municipalities to reach these groups and these municipalities may or may not have their own mobility management campaigns.
- Collaboration with other municipalities to achieve regional mobility management activities.
- Making a select number of mobility management campaigns permanent in Malmö so that target groups are continuously reminded of mobility management thereby increasing likelihood of the acceptance of campaign messages and specific offers. No mobility management campaign in Malmö has lasted much more than five years yet so there is room and scope for campaigns to be planned for and then carried out for five years or more. The work with schools targeting children aged 6-9 years and their parents is an example of an obvious candidate for campaigns lasting more than five years. There are other campaigns that should be taken into consideration for being given permanent status.
- Increasing the budget for mobility management activities so that greater numbers of staff can work on the same target groups.

The impact of SMILE on decision-making and priorities within the Department of Streets and Parks has lead to a more permanent budgetary status for mobility management staff and campaigns than might otherwise have occurred. However, factors external to SMILE may have contributed to such decisions. Such factors could include:

- Increasing public and policy-maker concern for climate change issues and the need to reduce emissions from travel and transports from a variety of ways including mobility management.
- Environmental authority pressure on the City of Malmö to reduce air pollution levels from traffic in central Malmö and the realisation within city administration that mobility management plays a role in meeting this pressure.

² Note: As pointed out in section A1, this measure objective is not clearly worded.

The work undertaken as part of 11.1M with regard to the city's own transportation policy and the integration of mobility management thinking in infrastructure decision-making and planning can provide long-term benefits. However, it remains to be seen if the political bodies making decisions about the transportation policy actually approve the proposal. Furthermore, policies are only as good as their enforcement and it may take several years before the majority of city departments clearly follow the proposed policy. This means that with regard to employee transportation in the city future changes are possible but beyond the scope of this evaluation.

C5 Appraisal of evaluation approach

Appraisal has been done in the entire body of this report. In summary: neither a baseline nor a business and usual scenario could be produced for the entire measure. Mobility management staff have attempted to determine the effects of campaign offerings on individual participants.

C6 Summary of evaluation results

The key results are as follows:

- **Key result 1** – The campaigns conducted within 11.1M fall within the ideas and strategies included in the Technical Annex.
- **Key result 2** – Success in the various campaigns and activities has varied considerably based on the ambition level, ability of the campaign design to fulfil targets, the degree to which target setting has been based on expectations of actual results, and the ability to measure success. Generally the majority of the campaigns have fulfilled their campaign goals and targets. However these goals and targets often have dealt with people's reactions to the "offering" included in the campaign and not the actual measurable change in people's post-campaign behaviour.
- **Key result 3** – Measurements of awareness and acceptance have been possible in some campaigns but not in others. General awareness of a typical campaign may lie around 20% of the population and acceptance of at least part of the campaign varies between 2-5%. Awareness levels will vary considerably by campaign type: targeted campaigns will be relatively unknown on the part of the general public (ie more elderly parts of the population in Malmö probably do not know about the "Friendly Way to School" campaign....) but may have relatively high levels of awareness in the target population. It has only been possible to estimate CO₂ reductions in two of the seven campaigns and these reductions cannot be extrapolated up to the whole measure.

D Lessons learned

D1 Barriers and drivers

D1.1 Barriers

- **Barrier 1 – Organisational culture.** The Department of Streets and Parks has a long history of building and maintaining infrastructure where softer activities, if ever conducted at all, were short-term exceptional activities. While this began to change a few years prior to SMILE, organisational culture changes only slowly and acceptance of mobility management and how it can help achieve the goals of The Department of Streets and Parks has taken time.
- **Barrier 2 – Reception of mobility management in other organisations.** Target groups involving other organisations have had a mixed acceptance of mobility management. While generally positive, not all organisations have followed-up or followed through as much as the mobility management staff have hope or wished for. This is not because of the short-comings of the approach but because slimmed, modern organisations which are increasingly project-based have difficulty relating to campaigns and offerings because of lack of staff to liaise with, time constraints, project-focus as opposed to organisation-focus, etc. This is not a barrier particular to this measure but shared by all measures introduced by an external group and targeted toward changes in organisations.
- **Barrier 3 – Barriers unique to each activity.** All of the mobility management activities carried out have unique circumstances because of different target groups, delivery mechanisms, geographic coverage. This means that there can be barriers that are unique to a specific activity and not generic to the entire measure.
- **Barrier 4 – Difficulties getting the general message across in the media and general awareness.** Based on discussions with mobility management staff, it is clear that there is a general barrier of getting the mobility management message across because of the general nature of modern society with high levels of communication where mobility management is just one of many, many messages and the difficulties of making the mobility management message stand out. The mobility management staff term this as “getting through the static” and making mobility management components “*en snackis*” as they call it in Swedish which could be best described as part of “what is talked about” or part of the “public discourse”. If this could be achieved, i.e. general awareness, than acceptance levels in general would rise and each individual campaign offering would be accepted/taken up much faster.
- **Barrier 5 – Staffing issues.** Communications activities such as these require significant staff time input and can be impacted by staff turnover, which hampers incorporating previous lessons learned into new campaigns. Turnover at the top can also have an impact as there is often a need to re-educate a new head of department in the need for communications activities to support transport projects, which are generally delivered and run by people with a technical / engineering focus. There was staff turnover within the mobility management group in charge of this measure.
- **Barrier 6 – Pre-research.** It is common practice for communications activities to be designed by ‘experts’ who have a feel for what type of campaign will work. Sometimes it is hard to see the appropriate message and method of contact or it takes time to establish. The best way to avoid this is to conduct a formal pre-research stage, investigating your target audience and the key messages that they will respond to. However, this takes time and money and is often missed out, which can put the ultimate output in jeopardy.
- **Barrier 7 – Cooperation** with other organisations is often required for this type of work, but often lacks the necessary formal backup and priority required to deliver a coherent project to time and budget. Another complication is that methods developed for one organisation have to change for another.

D1.2 Drivers

- **Driver 1 – Need to prepare the city and inhabitants for the completion of the City Tunnel Railway in 2011/2012.** Since the completion of the new infrastructure will lead to the potential for major improvements in public transit, there is a driver to make changes in behaviour so that the fuller potential of the infrastructure can be realised. It is important that the mobility management message is “out” prior to the availability of the infrastructure.
- **Driver 2 – Organisational focus and arrangements.** Difficulty to reach certain goals, such as outdoor air quality in some places in Malmö and that changes in physical infrastructure alone cannot lead to goal attainment have placed added weight and acceptance for the mobility management approach. Being located in the technical administration (Streets and Parks Department), rather than The Environment Department means that the measure leader has been closer to those involved in physical planning, which is a success factor in itself.
- **Driver 3 – Existing situation.** Good conditions within the city, e.g. conditions for biking, both topography and number of bicycle lanes, bicycle tradition etc.
- **Driver 4 – Wider public focus.** Climate threats and climate debate are reality. Awareness is high within the population, which makes it a good time to present options for action that will help in this area.
- **Driver 5 – Extra opportunity.** The SMILE project has opened up a significant opportunity because it offered the chance for a much bigger financial resource for communications activities that would otherwise have been the case. It also allows scope for experimentation, rather bringing a ‘must succeed’ culture which is often seen in other authorities where the opportunities are limited and has opened doors for co-operation with other departments on joint initiatives. There has also been the opportunity to learn from exchange of experiences, travels and conferences.
- **Driver 6 – Staff.** The measure has been driven by individuals that believe in their work, as demonstrated by commitment, energy and passion and which has been supported by key staff members within the organisation.

D2 Participation of stakeholders

- **Stakeholder 1** – The municipal organisation (employees at the City of Malmö). City of Malmö is also an occasional participant in the project, sharing ideas, experience and contacts.
- **Stakeholder 2** – The public (living and/or working in Malmö).
- **Stakeholder 3** – The local companies in the city.
- **Stakeholder 4** – Local/regional politicians dealing with traffic issues (City of Malmö).
- **Stakeholder 5** – Public transport users in Malmö.
- **Stakeholder 6** – Cycling/walking group in Malmö.
- **Stakeholder 7** – Car drivers in Malmö.
- **Stakeholder 8** – Transport operator, the local PT authority (City of Malmö).
- **Stakeholder 9** – Employees affected at workplace at companies which were targeted.
- **Stakeholder 10** – Commuters to work/education at the municipality and at companies/organisation that were targeted.
- **Stakeholder 11** – Potential public transport users in Malmö.

D3 Recommendations

- **Recommendation 1** – The mobility management staff at the Department of Streets and Parks should develop their own form of evaluation methodology, based on the SUMO method, but one where the effects of the projects/campaigns is also included in the evaluation. Projects that cannot be evaluated in terms of effects should be subject to possible change in project delivery and design during the planning process so that the potential to measure or gauge effects is facilitated. It is important that where the goal of a mobility management project is an actual change in behaviour that this change is directly evaluated, where this is practically possible. In those cases the evaluation of actual change in behaviour is not possible, the project plan should clearly state why and this should then be carried into the evaluation report.
- **Recommendation 2** - It is necessary that baselines are set prior to commencement of the project to enable like for like comparison as well as correct evaluation of achievements of quantifiable targets in C3, because in absence of a baseline it is difficult to evaluate the measure and determine its success as the ‘before’ and ‘after’ comparative analysis cannot be performed correctly.
- **Recommendation 3** - To gauge the success of a measure its objectives need to be tangible, achievable and measurable. It is recommended that the objectives are properly researched prior the start of the project to meet the project requirements and enable the evaluation process to correctly measure their achievements and overall success of the project.
- **Recommendation 4** - Interpretation of findings without properly defined and measurable objectives and no baseline is a difficult if not impossible task. The actual meaning, interpretation and evaluation of the results are therefore subject to assumptions and guessing. To ensure reliability of data and validity of results the correctly defined objectives and baseline are as important and crucial part of the project as is evaluation process to gauge and determine the success of the project.
- **Recommendation 5** – There is a need to set clear, realistic and all-embracing goals, both for individual campaign elements and as part of an overall long term strategy and then make time to review and adjust according to conditions. Review and adjustment should be done using control documents to steer the strategies and measures.
- **Recommendation 6** – For a large communications programme there will be a need to have a team of people, or at least a pool of people available, with a variety of competences to cover the range of tasks involved. Also be prepared to develop collaboration, both internally with colleagues and also with the private sector and neighbouring administrations. This could lead to wider effects than originally envisaged at lower incremental cost.
- **Recommendation 7** – Ensure internal management supports the work and understand the benefits, especially when implementing new methods within the administration.
- **Recommendation 8** – Use a portion of the budget for appropriate pre-research as well as post-campaign testing. Be prepared to test different mechanisms and messages.
- **Recommendation 9** – Don’t over-complicate campaigns. Limit and concentrate the projects and do not have too many projects simultaneously. Use simple, easy to remember messages.

D4 Future activities relating to the measure

A number of specific measures will continue during coming years. Because of pressure on the City of Malmö about air quality as mentioned in C4 and D1.2 the City will continue and perhaps increase mobility management measures. The general public opinion on matters such as climate change suggests that there is support for the city to work with soft measures leading to changes in personal transport habits. Growing numbers of city administration employees now understand the necessity of mobility management as a compliment to work on hard infrastructure and in some circumstances perhaps the only way to achieve certain transportation goals.

Furthermore the completion of the City Rail Tunnel in 2011-2012, connecting the Öresund Fixed Link with the old Central Station and the creation of two new centrally-located stations, is seen as an imperative and as an opportunity that must be taken. The City Rail Tunnel will lead to a drastic realignment of public transportation networks and greatly enhanced potential for use of public transportation. This means that the city must during the next 3-4 years actively prepare the public for use of the new services and discourage them away from car usage. Mobility management is the only tool for this. Dialogue, communication, seminars, workshops, travel surveys etc are methods developed in the SMILE project that will continue in to be used for target groups -- close to the new and improved transport nodes -- such as companies, the public, shops and retail trade etc.

Some of the activities established during the SMILE-period, will be taken over by others as they are or redeveloped. A main goal is to initiate activities that can be run by others on a more permanent basis. The notion of creating ambassadors for mobility management in key public and private organisations has been considered. If such ambassadors can be found the Dep't of Streets and Parks will support their work more and respond to ideas and needs identified by the ambassadors.

However the level and extent of the continuation of this measure will be determined during coming years by political bodies and decisions taken by organisations within the administration of the City of Malmö and others.