# Measure title: Managing Mobility Needs of Private Persons and Business Sector (Skånetrafiken)

City: Malmo Project: SMILE Measure number: 11.1 S

## **A** Introduction

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

Sub-measure 11.1 M comprises 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 comprises 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 11.1M is reported upon in another document.

## A1 Objectives

The measure objectives were:

- **Objective 1:** to promote sustainable transportation system through soft measures such as information, marketing, education and guidance.
- **Objective 2:** to reduce traffic by car and thus reduce emissions of CO<sub>2</sub>, NOx and particles.

These objectives are both shared with the part of 11.1 that are coordinated by the City of Malmö (11.1M)

## A2 Description

Mobility management tasks in this measure were developed and implemented on a broader scale than before in the city of Malmö. The City of Malmö and Skånetrafiken implemented Mobility management projects towards different target groups. The City of Malmö's work focused mainly on;

- 1. Influencing local companies
- 2. *Influencing the public*
- 3. Influencing the municipal organisation

For more information about the different measures for the city of Malmö, see the separate measure template 11.1M

Skånetrafiken's work focused on;

4. Individual marketing towards employees at private enterprises

CIVITAS GUARD | Intervitative is co-Financed Page 1

City: Malmo Project: SMILE Measure number: 11.1

The objective of the project was to work with private enterprises to change the transport behaviour of the employees in an environmentally sustainable direction.

In the middle of 2006 a larger scale of individual marketing towards employees of private enterprises was implemented. A pilot implementation of a new travel concept called "Skånetrafiken for you" was made. The concept involved a personalised travel homepage offering travellers personal travel guidance, advice, specified timetables, opportunities for buying season tickets etc. The concept and offers were targeted at areas where SMEs are located and where Skånetrafiken have an adequate bus line structure. The method was based on different steps; a letter of introduction to the business executives, visits to interested enterprises, registration of new travellers in a customer database of Skånetrafiken (CRM) and finally individual contacts with the employees.

CRM is linked closely to another project "My pages". "My pages" is the interface on the Internet that allows customers to enter their personal data (collected in the customer database), load their travel cards with money (in the future) and choose among the future services in skanetrafiken.se. "Skånetrafiken for you" is not a full scale test yet, but certain elements are available such as buying the summer card online, personal travel guidance and travelling offers.

■ Task 2 – Full evaluation – customer views and behaviour of inhabitants of Malmö Evaluation was carried out by:

SLTF Kundbarometern

Malmö Högskola/Lunds Tekniska högskola.

# **B** Measure implementation

## **B1** Innovative aspects

#### **Innovative Aspects:**

• Targeting specific user groups

The innovative aspects of the measure are:

• Targeting specific user groups, regionally – This measure is all about targeting specific user groups with travel behaviour campaigns. Business to business concept, the aim is to change their travel behaviour.

#### **B2** Situation before CIVITAS

Working towards enterprises was not a developed phenomenon. The commercial offer related to Public Transport cards was not adjusted towards company needs.

Project: SMILE

Measure number:

11.1

## **B3** Actual implementation of the measure

The measure was implemented in the following stages:

#### Stage 1: Marketing and Mobility management towards enterprises

(200510 - 200802)

Representatives from Skånetrafiken and representatives from different companies worked together to implement this measure.

A plan was drawn up focusing on external communication, towards the enterprises. The aim was to try to change their attitude and behaviour, make them cooperate with new participants, form a new part of joint ventures, both local and regional, and transporting both people and goods in a more sustainable way.

To be offered a test period, the employees who mainly travel by car have to be willing to try the public transport for one month. To establish the travel behaviour a survey was conducted. Evaluations of the activities; before, directly after and after 6 months were conducted together with the companies.

Introductory meetings with interested employees were held. Employees were asked to sign a contract in which they confirmed that they will travel by public transport during the test period and fill in survey 1 via "My Pages". Skånetrafiken put questionnaires on "My Pages", so that when someone registered he/she received the survey and as soon as it was complete the travel pass could be sent to the person, at the company or home. After the test period the employees were asked to fill in the survey 2 via "My Pages".

To use "My pages" for the survey was also a way of introducing people to Skånetrafiken's "My pages". Skånetrafiken want to have long-term relationships with their customers and have been useful for collecting customer data in the customer database. They have a personal relationship with their loyal customers.

# Stage 2: Developing Business 2 Business e-commerce possibility

See section B4 – 'Deviations from the Original Plan'.

# Stage 3: Conducting a large travel behaviour study with help from external partners

(200710 - 200711)

Representatives from Skånetrafiken and representatives from Banverket, Vägverket, the county administration in Skåne, the region of Skåne, and Skåne's municipality were all part of this project. The evaluation and the report have been conducted by Trivector Traffic AB.

A random selection was made among residents in Skåne, between the ages of 15 and 84. The survey was sent out to 63 900 people in Skåne, (777 people in Malmö) and consisted of a questionnaire and a travel diary. The survey was carried out during two weeks in the autumn of 2007, with an additional week for those who needed a reminder.

Steps	Quantity	Time period
Postcard of announcement	63 864	w40 - w42
Circular (covering letter, survey and journey logbook)	63 864	w41 - w43
Postcard of reminder	63 864	w41 - w43
Reminder circular (containing complete circular according to above)	43 935	w44 - w45

**Table B3.1** *Sample sizes for the Travel behaviour study in 2007.* 

28 893 answers came in from the survey in Skåne, giving a response rate of 45%. Of these 295 were from Malmö, giving a local response rate of 39 %. The evaluation will underlie future benefits, for example knowledge about people's travelling habits in a specific area. Knowledge about people's travelling behaviour for a specific area is very useful for the planning of the city and the region's traffic and urban structure. For the planning of a sustainable development, this kind of knowledge is very important. A thorough description of people's travel behaviour gives a good foundation for assessing the effects of measures in settlements and infrastructure and helps to prioritise measures.

## B4 Deviations from the original plan

Due to an organisational change the level of ambition was reduced. There has been a staff turnover, and in total, three people have been working on this project. Since April of 2008 a third co-worker has been employed at Skånetrafiken to see this project through.

#### Stage 2: Developing Business 2 Business e-commerce possibility

A representative from Skånetrafiken has been visiting different enterprises to introduce "My Company". Companies will in the future be able to use an e-commerce web site to buy and manage different kinds of travel pass and tickets. The web-site will also give travel information (how to get there, when the next bus/train leaves etc.) as well as tools to calculate the company's savings both environmental and financial.

"My Company" will be used by the person responsible for the company's business trips and benefits. The employees will be automatically registered on "My pages" by acceptance to purchase / receive monthly by the company. There is integration between "My Company" and "My pages" for an employee who has received monthly via "My Company". Due to the delays in the implementation of a new travel concept, Skånetrafiken hope to launch "My Company" e-commerce web site the earliest in year 2010, rather than in 2006/7 as originally planned.

## B5 Inter-relationships with other measures

The measure is related to other measures as follows:

- Measure 8.1 Marketing of new bus route system
- Measure 8.2 Improved security and safety on buses
- Measure 8.3 Integration of cycling with public transport
- Measure 11.1 Managing mobility needs of private persons and business sector
- Measure 12.1 Use of real time applications for traveller
- Measure 12.2 Traffic monitoring
- Measure 12.3 Mobile internet services in connection to bus information in Malmo
- Measure 12.4 Internet tool for traffic planning
- Measure 12.7 Bus priority system

These are all part of the new bus route system and the goal of a 10% increase in travels by the end of 2006 and 30% at end of 2010 are a result of all these measures working together. Therefore for the overall goal of increased patronage by 2010 (outside the SMILE framework), it will be difficult to establish which part of the increase is a result of which measure since all the measures together form the new travel opportunity for the traveller.

## C Evaluation – methodology and results

## C1 Measurement methodology

## C1.1 Impacts and Indicators

Table of Indicators.

Nr.	INDICATOR Name	Possible DESCRIPTION	DATA /UNITS
13	Awareness level	Degree to which the personalized customers are aware of the information  Degree to which the SME's are aware of the positive effects of having their personnel travel with public transport	A first control inventory to establish a baseline. A second survey to follow up the change of awareness after the first large campaign
14	Acceptance level	Degree to which the personalized customers are satisfied with the information/travel offers	Survey of opinions on part of the database
MSE-	Personalized customer relations	Number of persons in the database	Registration of new personalized costumer in Boomerang <sup>XRM</sup>

Detailed description of the indicator methodologies:

- Indicator 13 (Awareness level) Questions about awareness of the information and the positive effects of having their personnel travelling with public transport. The survey was conducted by Skånetrafiken together with the companies and the participants were the personnel at enterprises. This corresponds to objective 1.
- Indicator 14 (*Acceptance level*) Questions about how the information/travel offers satisfied each individual. The answers will show the acceptance level and corresponds to objective 1.
- Local Indicator (*Personalised customer relations*) All measures concerning public transport have changing travel behaviour as a common goal. The number of persons in the database is one indicator that measures this. This corresponds to objective 1.

## C1.2 Establishing a baseline

The baseline for this measure would be the situation before the travel behaviour campaign started. Awareness and acceptance of a new travel behaviour and attitude before it was established and implemented by the potential passengers is relevant. The overall goal for all the measures mentioned under C1 is to give information about public transport and change the travel behaviour. The baseline focuses on the participants' travel behaviour, mainly to and from work, before the different campaigns described in B3 started. Before SMILE started, no proper survey was done specifically amongst the companies to show how their employees were travelling to work.

#### Baseline for modal split among the residents in Malmö before SMILE

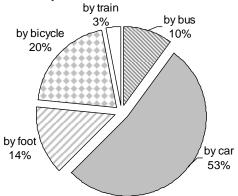
In 2003, The City of Malmo initiated a survey with the purpose of exploring attitudes and travel behaviour of the residents in Malmö (Table C1.2.1). The sample size was 5081 residents between 18 and 75 years of age. Questions were posed to assess attitudes to different ways of travel and the respondents were asked to keep a travel diary for one day. From the travel diary, figure C1.2.2 shows the modal split for all travels and figure C1.2.3 the way to travel to and from work. This is a good baseline for the overall way of travelling as well as the way of travelling to work in the City of Malmö before SMILE.

City: Malmo Project: SMILE Measure number: 11.1

Time for the study	End of 2003, before SMILE
Sample size	5081
Respondents	Residents of the City of Malmo, 18-75 years of age
	Survey, attitude questions as well as a travel diary
Method	for one day
	To give insight about the residents travel habits and
Aim	attitudes.
	This large survey were planned to be repeated
	within SMILE 2007 but will be repeated in 2008
Comments:	instead.

Table C1.2.1 Data about the study used as baseline before SMILE

#### Modal split in Malmö 2003

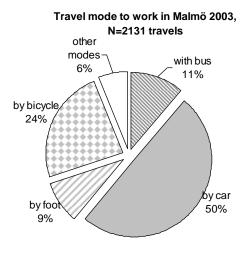


### Figure C1.2.2

Modal split for all travels in Malmö 2003 for residents between 18 and 75 years of age, N=5081

(The City of Malmo))

Figure C1.2.3 shows the travel modes for travels to and from work. The modal split for these travels is about the same as for all travels, with a slightly higher proportion of bus travels and other modes as train. Public transport systems are usually designed for regular journeys such as commutes.



#### Figure C1.2.3

The way the residents in Malmo travelled to and from work in autumn 2003.

(The City of Malmo)

This study is the best baseline for the modal split in the city of Malmö before SMILE since the sample size is rather large and the method reliable. The same method was used in the survey conducted in 2008 and described in table C2.4.3 and this survey will represent the "after-situation" for this measure.

Civitas Guard Integration Integration Integration Page 6

Project: SMILE Measure number:

11.1

## Baseline for the pilot implementation of the new travel concept "Skånetrafiken for you".

A pilot implementation of a new travel concept called "Skånetrafiken for you" started during the end of 2005 when representatives from Skånetrafiken started to visit companies. Employees were asked to participate under a test period, meaning that they had to try public transport for one month. Only employees who usually travel by car to work were allowed to participate. To establish the travel behaviour before the test period, a survey was conducted (table C1.2.4). The result of this survey is used as a baseline for the travel concept "Skånetrafiken for you".

Time for the study	End of 2005, before the test period	
Sample size	207	
Respondents	Participants at different companies	
Method	Survey	
Aim	Baseline for indicator 13 and 14	
	To be offered a test period, the motorised employees	
	have to be willing to try public transport for one	
	month. This survey was repeated after the test	
Comments:	period as well.	

**Table C1.2.4** Data about the study conducted for measure 11.1

The distribution of the incoming surveys in men and women as well as the mode of transport to work is reported in table C1.2.5. 207 individuals participated, 71 % female and 29 % male. The overall dominant way of transport to work was by car, 97 % of females go by car and 93 % of males. This is no surprise since only employees who usually travel by car to work were allowed to participate.

	Total	Men	Women	
Car	199	57	142	
Bicycle	3	1	2	
Walk	<u> </u>		1	
City bus	bus 0 0		0	
Region bus	egion bus 2		1	
Train	2	2	0	
Other	0	0	0	
Total	207	61	146	

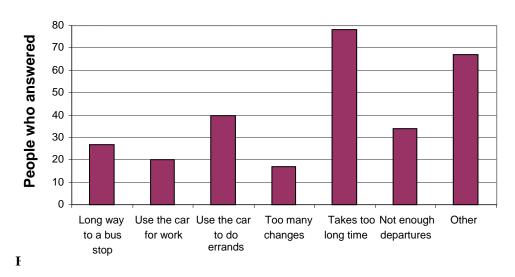
**Table C1.2.5:** The mode of travel to and from work for the participants before the test period.

207 individuals participated, 71 % female and 29 % male.

These 207 participants were asked why they didn't use public transport more often. In figure C1.2.6, different reasons are listed. The main reason is that it takes too long, according to 29 % of the female and 28 % of the male answers. Another large category is "other", which can be for example "dropping or picking up children at day care or school". 23 % of the female and 24 % of the male answers were in this category.

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## If you seldom go by public transport, why?



The reason why the participants said they wanted to try public transport is reported in figure C1.2.7. Financial profit and less environmental impact due to less pollution were the most important reasons why people wanted to try public transport. 44% of the male and 46% of the female reasons was to save money, and 32 % of the male and 33 % of the female reasons was to spare the environment.

## What is the main reason that you want to try public transport?

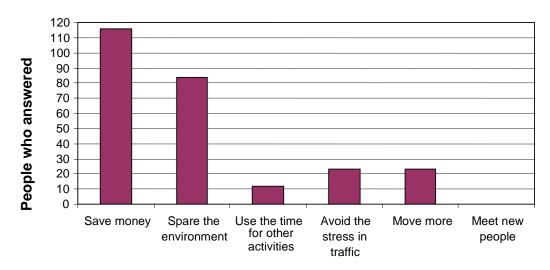


Figure C1.2.7 Reasons why participants wanted to try public transport. More than one answer was possible.

CiVITAS GUARD III THE CIVITAS INITIATIVE IS CO-FINANCED Page 8

City: Malmo Project: SMILE Measure number: 11.1

### Baseline for the personalised customer database (CRM)

The amount of personalised customer relations is measured by the number of persons in the CRM database. This database was established during this measure and a baseline is therefore not relevant. In

Table C1.2.8 presents baseline figures or the indicators in this measure.

Indicator	Description	Value	Comments
Awareness	Degree to which the	~8%	Percentage that said they travel with
level	personalised customers are aware of the positive effects of having their personnel travel with public transport		Skånetrafiken daily or several times a week before the test period (figure C2.5.2)
Acceptance level	Degree to which the personalised customers are satisfied with the information/travel offers	-	Not relevant to measure the acceptance level before the information
Number of CMR	Registration of new personalised costumer in Boomerang XRM	-	Not relevant
Modal split on journey to work	Bus Car Walk Bicycle Other	11% 50% 9% 24% 6%	Data from large survey across Malmo, not from participating companies. Figure C1.2.3)

**Table C1.2.8:** *The baseline for the indicators.* 

## C1.3 Building the business-as-usual scenario

As discussed previously, the goal for this particular measure is to inform and change the attitude and travel behaviour of the public and by that means reduce car travelling. In October-05 this measure started. At the end of SMILE, Skånetrafiken had achieved 43 000 active members within the CRM, the personal customer database of Skånetrafiken. This could very well have an impact on the number of trips made by public transport as a result of changed travel behaviour.

Since the baseline is the situation before the change in travel behaviour, the "business as usual"-scenario for this measure should be the situation with no change in travel behaviour due to these campaigns.

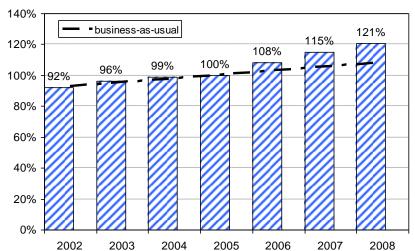
As is noted for all the inter-related public transport measures, the "business-as usual" scenario that will work for all measures related together would be the trend in passengers without the new bus route system and without any of the SMILE measures in place.

Figure C1.3.1 shows the change in number of passengers as totals per year. Year 2005 is the base year since it is the start period for SMILE. The route change (not a part of SMILE but included in the overall goal of increased travel) took place in June 2005. Measure 8.1 was running for around 6 month after the change. During 2007 measure 12.1 as well as 12.3 were fully installed/implemented. Figure C1.3.1 shows the development of number of passengers for this period. A trend line based on the yearly totals before SMILE and before the change of route system will represent the overall "business as usual".

Project: SMILE

#### Measure number:

# Change in number of passengers on a yearly basis for Malmö Bus Routes with year 2005 as a base.



#### Figure C1.3.1

Number of passengers on Malmö Bus Routes on a yearly basis shown in relation to year 2005, the base year for SMILE.

11.1

The trend line "business as usual" is based on the situation before SMILE.

The new bus route system were implemented in June 2005. (Skånetrafiken)

You could clearly see an increase in travel after 2005 that is greater than for the period before 2005. This increase is a result of the new bus routes as well as all SMILE-measures and a part of this is a result of just this individual measure.

#### C2 Measure results

The results are presented under sub headings corresponding to the areas used for indicators – economy, energy, environment, transport and society.

## C2.1 Economy

## C2.2 Energy

No indicator under the indicator category Energy is associated with this measure. The modal shift described under C2.4 from car to other modes leads to less energy consumption, but the modal shift is not mainly a result of this measure.

#### C2.3 Environment

No indicator under the indicator category Environment was associated with this measure. The modal shift described under C2.4 from car to other modes leads to less environmental impact, but the modal shift is not mainly a result of this measure.

The results of the individual communication programme with employees presented in section C2.4 are very encouraging. Unfortunately insufficient detail about personal travel patterns is known to give an accurate picture of the environmental impact. However, by making some assumptions we can provide an estimate of the reduction in car-related emissions for the participants' work trips:

Based on the most pessimistic assessment of the figures presented in section C2.4, which is a change in car use for the journey to work from 96% to 67% and taking an estimate of the typical journey distance to work of 10km leads to approximate car-based emissions of 783 kg  $\rm CO_2$  per day for the whole sample of 233 people in the before situation. If we assume that those who make the switch to non-car modes are more likely to be those within the group who live closest to work, then the average distance to work for those who continue to travel to work by car might be expected to increase for the smaller 'after' situation – say to 12km. In this case the approximate car-based emissions are 656 kg  $\rm CO_2$  per day, which is an approximate 16% reduction. Clearly there is a significant degree of uncertainty in this figure, but it can probably be considered as indicative of a worst case or minimum % reduction in car-based  $\rm CO_2$  emissions as a result of this measure.

## C2.4 Transport

The number of passengers in Malmö over a period of five years is shown in table C2.4.1. In June-05 the new bus route system was implemented in Malmö. One main objective with the new system was to increase the number of passengers. In October-05 this measure, Managing Mobility Needs, started.

There is an increase of number of passengers in table C2.4.1. This could be a result of the campaign to make people change their attitude and travel behaviour and a result of other SMILE-measures, but also of factors present in the world around. The number of passengers has increased on public transport system in other cities in Skåne as well.

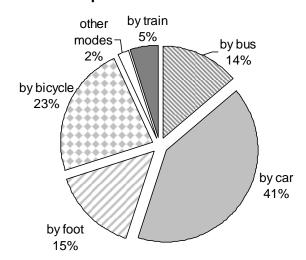
Time period	Number of passengers	Increase
Jan-04 to Dec-04	25 133 891	
Jan-05 to Dec-05	25 407 269	1,1%
Jan-06 to Dec-06	27 319 571	7,5%
Jan-07 to Dec-07	29 163 239	6,7%
Jan-08 to Dec-08	30 573 828	4,8%

**Table C2.4.1** Change in passengers for a period of 4 years. The new travel behaviour campaign was implemented in Oct-05.

As described in section B3, stage3, a large survey was conducted in the autumn of 2007 (see table B3.1 for details) with nearly 29 000 answers from residents in Skåne between 15-84 years. The sample size for residents in the city of Malmö was 295 persons. This survey was conducted as a part of this measure.

This survey showed that for the residents in the city of Malmö, 41 % were using cars, 19 % public transport and 23 % were using the bicycle (figure C2.4.2) The survey 2007 shows large changes in the modal split since 2003. The proportion of journeys by car has decreased from 52% to 41% and the proportion made by public transport has increased from 13% to 19%.

#### Modal split in Malmö 2007



#### Figure C2.4.2

Modal split for the residents in the city of Malmö, autumn 2007. The sample size is 295 answers but the method (travel diary) is the same as for the survey done in 2003.

Due to the small sample size, the percentages have a 95%-confidence interval of +/-3% for the percentages for car and bicycle and +/- 2% for the other modes.

Because the sample sizes are so different between these two travel surveys ( $\sim$ 5000 for 2003 and  $\sim$ 300 for 2007) a 95%-confidence test were performed for the results in 2007. Due to the small sample size, the percentages have a 95%-confidence interval of +/-3% for the percentages for car and bicycle and +/- 2% for the other modes.

Even with the confidence intervals considered, there are changes in the modal split since 2003. The proportion of journeys by car has decreased from 52% to 41% (38-44%) and the proportion made by public transport has increased from 13% to 19% (17-21%).

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(Trivector Traffic AB, 2008)

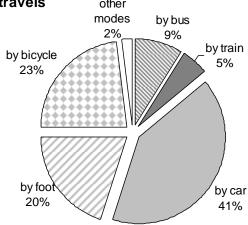
It should be noted that the 2007 survey results and these comparisons are for all journeys, not just the journey to work.

During autumn 2008, another survey (C2.4.3) was made among residents in Malmö between 18 and 75 years of age. This survey was of the same design and magnitude as 2003. The modal split in Malmö 2008 based on these travel diaries are shown in figure C2.4.4.

Time for the study	End of 2008, October and November	
Sample size	5610	
Respondents	Residents of the City of Malmo, 18-75 years of age	
	Survey, attitude questions as well as a travel diary	
Method	for one day	
	To give insight about the residents travel habits and	
Aim	attitudes.	
Comments:	The same design as 2003	

**Table C2.4.3** *Data about the study at the end of SMILE* 

# Modal split in Malmö 2008, N=11462 travels other



## Figure C2.4.4

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 the car, 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 walking 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% 2007 and 14% 2008. The proportion of journeys made by foot differs as well, 15% 2008 and 20% 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.

Civitas Guard Interception Services Confinence Page 12

City: Malmo

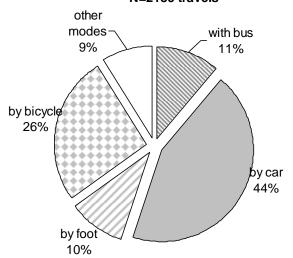
Project: SMILE

Measure number:

11.1

The modal split for work journeys 2003 was on balance more sustainable (i.e. less car focused) than the overall modal split. When you compare the modal split for work journeys 2008 with the overall modal split, the situation 2008 is different (figure C2.4.5). More work travels are made with car than for the overall modal split.

#### Travel mode to work in Malmö 2008, N=2189 travels



## Figure C2.4.5

The way the residents in Malmo travelled to and from work in autumn 2008. The percentages that use the train as their travel mode to work is 7%, included in the category "other modes".

(The City of Malmo)

#### **Company Based Travel Initiative**

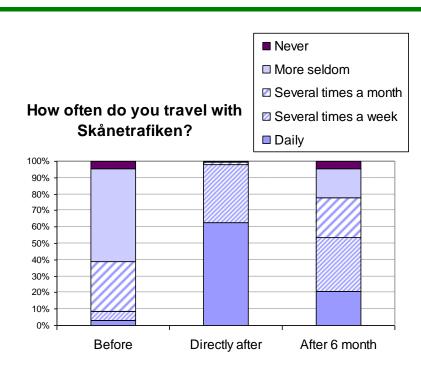
The new travel concept called "Skånetrafiken for you" started with the pilot implementation described in B3 stage 1. The participants were asked the same questions about their travel behaviour and attitudes before and directly after the test period. A total of 228 employees at different companies participated.

A follow up was conducted 6 months later, to see if their travel behaviour was changed. Questions about how they were travelling now, and when they knew more about the public transport alternative were the primary objective. The number of incoming answers was much lower this time, 133 persons.

	Before the test period	Directly after	After 6 months
N:r of outgoing surveys	228	228	228
N:r of incoming answers	207	201	133

**Table C2.4.6** Sample sizes for the different surveys conducted for measure 11.1 The third survey, conducted 6 months after the test period, did not achieve the desired level of response, but is acceptable for the following analysis.

Figure C2.4.7 shows the change in how often the test travellers used public transport, ie. "Skånetrafiken". Before the test they had very little experience of using public transport regularly. Directly after the test period, they reported how often they had used public transport **during** the test period, not really a measurement of a change in behaviour but maybe a measurement of their interest in this test. The change in behaviour after six months shows a definite change towards an increase in use of public transport.



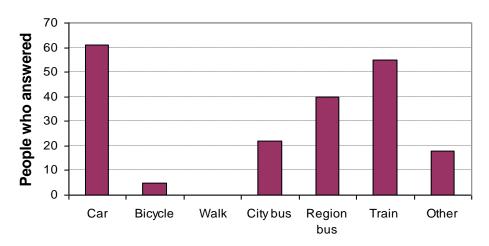
## **Figure C2.4.7**

The change in how often the test travellers said they have used public transport before the test period, directly after and finally, after six months.

The question posed to the respondents directly after the test period was formulated: "How often did you use your free card during the test period?"

To become a "test traveller" in the first place, you should be "motorised" and use car as the primary travel mode for your work trips and that was the case for 96% of the participants before the test period. Figure C2.4.8 and C2.4.9 show how the travel behaviour has changed for the participants directly after the test period and after 6 months when asked how they travelled to and from work.

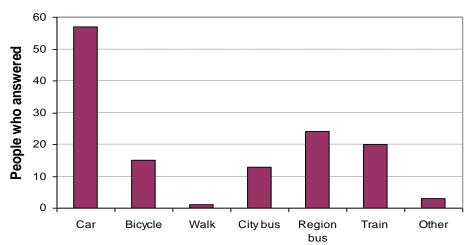
## How do you mainly get to work after the test period?



**Figure C2.4.8** The behaviour during the test period as measured directly after the test period. 71 % of the respondents were female and 29 % were male. Only 29 % of the females are now taking the car to work and 31 % of the males.

CIVITAS GUARD INTERCEPTATION PAGE 14





**Figure C2.4.9** The behaviour after 6 months. The basis for this survey is smaller than the ones before, due to failure to follow up after 6 months. 74 % of the respondents were female and 26 % were male.

Even though the numbers of respondents are different between these two surveys conducted directly after and 6 months later, a behavioural pattern can be seen. More people are now using public transport or bicycles than before the campaign. Directly after the test period 31 % of the respondents were mainly using the car and 6 months later 43 % of the respondents were. Regarding public transport 58 % of the respondents were using bus or train directly after the test period and 6 months later 43 % of the respondents were. Even if you assume that all the non-respondents have reverted to mainly using the car this is a very good result (car = 67%, down from 96% and public transport = 25%, up from 2%). Although the focus of the measure was public transport, given Skånetrafiken's corporate focus, the consideration of transport options has also had an effect on the use of non motorised modes, particularly cycling, which has increased among the test travellers from 1.5% to 11% of respondents to the final survey and at worst 6.5% of the total.

### C2.5 Society

The indicators chosen to measure the effects on society are indicator 13, Awareness level and indicator 14, Acceptance level. The objective is to see if a change in people's travel behaviour as a result of the campaign can be related to any difference in the way people think about their travelling.

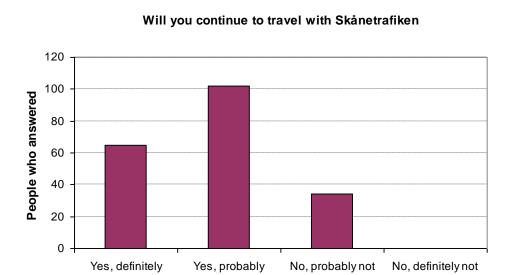
Figure C2.5.1 and C2.5.2 show how the attitude towards travelling by public transport has changed amongst the respondents directly after the test period and after 6 months.

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City: Malmo Project:

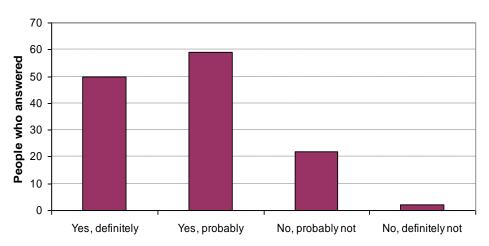
Measure number:





**Figure C2.5.1** The attitude to continue to travel by public transport directly after the test period. 71 % of the respondents were female and 29 % were male. N=201

# Will you continue to travel with Skånetrafiken



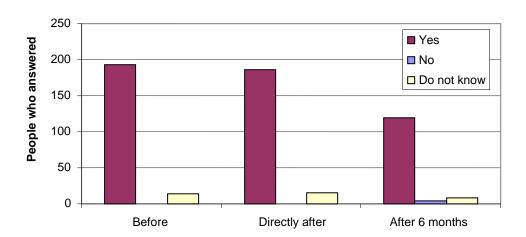
**Figure C2.5.2** The attitude to continue to travel by public transport 6 months after the test period. The basis for this survey is smaller than the ones before, due to failure to follow up after 6 months. 74 % of the respondents were female and 26 % were male. N=133

Directly after the test period 83 % of the respondents were positive to continue to travel with public transport, 78 % of the male and 85 % of the female. A follow up after 6 months shows that 81 % of the respondents were positive to continue travelling with public transport, 88 % of the male and 80 % of the female. This is part of indicator 13, awareness level described as "degree of individuals aware of the positive effects of having their personnel travel with public transport" in the Table of Indicators.

Both men and women stated that subsidised travel passes or other benefits for travelling to work with public transport were good ideas. The results can be seen in figure C2.5.3. This is part of indicator 14, acceptance level and the acceptance for this kind of measures are very high, around over 90% of those who answered agreed that it was a good idea.

# Good idea if your employer can subsidise travel passes or give you other benefits

11.1



**Figure C2.5.3** *Do you think that it is a good idea if your employer can subsidise travel passes or give you other benefits through cooperation with Skånetrafiken?* 

Skånetrafiken has achieved 43 000 active members within the CRM database as a result of this and other related measures. This forms a good customer base that Skånetrafiken have a relationship with and will be a valuable information channel to customers.

Indicator	Description	Value	Comments
Awareness	Degree to which the personalised customers are aware of the positive effects of having their personnel travel with public transport	~80%	Percentage that said they would definitely or probably continue to travel with Skånetrafiken after the test period (figure C2.5.5, C2.5.6)
Acceptance level	Degree to which the personalised customers are satisfied with the information/travel offers	~90% >95%	Acceptance of the method with information and subsidised travel passes for commuting (figure C2.5.7)  Percentage that used the test card daily or several times a week during the test period (figure C2.5.2)
Number of CMR	Registration of new personalised customers in Boomerang XRM	43 000 customers	Individuals in the database.

**Table C2.5.4**. *The value for the society indicators* 

The result of this pilot implementation of the travel concept called "Skånetrafiken for you" as a whole is very promising, even though the scale is rather modest. But this method has been tested before by Skånetrafiken and Lund University on a larger scale with good results. This is a good way of introducing public transport as a travel mode for motorised individuals, to start with the journey to and from work. If this can be done in a larger scale it could have an impact on the total travel pattern in Malmö. As now, only 207 persons have been "test-travellers" and this small group has of course no impact on the total number of trips with Skånetrafiken.

References: Indebetou, Lovisa & Quester, Anja. *Resvanor Syd* 2007 – *sammanställning av resultat*. Lund. Trivector Traffic AB, 2008

Civitas Guard Interception Services Confinenced Page 17

City:

Malmo Project: SMILE

Measure number: 11.1

## C3 Achievement of quantifiable targets

No.	Target	Rating
1	Promote sustainable transportation system through soft measures such as information, marketing, education and guidance.	
2	Reduce traffic by car and thus reducing emissions of CO <sub>2</sub> , NOx and particles	**
3	Personalised customer relations	**
	NA = Not Assessed 0 = Not achieved	

<sup>\*</sup> based on the evidence of modal shift among the test travellers in the "Skånetrafiken for you" measure.

## C4 Up-scaling of results

The test travelers showed a change in travel behaviour after the test period towards a more frequent use of public transport. The potential for upscaling lies in the opportunity to offer the "Skånetrafiken for you" service to a wider number of employees within Malmo and also more widely in the Skåne region, although the measure is most likely to have a benefit within the urban areas.

## C5 Appraisal of evaluation approach

It would have been better if the objectives had been quantifiable.

To establish a "business as usual" scenario for this measure is difficult, not only because all measures related to public transport are working together but also due to the fact that Skånetrafiken changed to a new bus route system at the same time, and this of course has a great impact on the number of passengers and is, in itself, not a part of SMILE. Without a thorough investigation of the effect of the route change alone it is difficult to build a business as usual scenario or overall results that separate the new bus routes from the effect of other SMILE measures.

The estimation of the quantified % reduction in CO2 emissions as a result of the Skånetrafiken for you" service is clearly only an indicative figure, but is useful if that caveat is kept closely associated with the result and it is not quoted out of context.

# C6 Summary of evaluation results

The key results are as follows:

- **Key result 1** The focus on developing an overall personalised customer relationship system for Skånetrafiken and using it to market public transport has been implemented successfully.
- **Key result 2** This measure, as part of a wider package, has contributed to the overall modal shift towards bus travel in Malmo, which includes the journey to work.
- **Key result 3** The results of the targeted, work-based "Skånetrafiken for you" initiative appears to have had a very strong immediate impact and also a substantial lasting impact.

City: Malmo Project: SMILE Measure number: 11.1

Indicator	Description	Before	After
Awareness level	Degree to which the personalised customers are	~8%	~8%
	aware of the positive effects of having their		
	personnel travel with public transport		
Acceptance level	Degree to which the personalised customers are		
	satisfied with the information/travel offers		
		-	-
Number of CMR	Registration of new personalised customers in	-	-
	Boomerang <sup>XRM</sup>		
Overall modal split	Bus	11%	11%
on journey to work	Car	50%	44%
	Walk	9%	10%
	Bicycle	24%	26%
	Other	6%	9%
Modal split on	Car	96%	43 – 67%
journey to work for	Bus	1%	25 – 43%
Skånetrafiken for	Bicycle	1.5%	6.5 - 11%
'test travellers'			

## D Lessons learned

#### D1 Barriers and drivers

## **D1.1 Barriers**

There are two different segments, commuters and businesses. How much is an adequate amount to spend on each segment. There is a national tax law in Sweden that prevents employers from financially supporting travel passes.

- **Barrier 1** Objective 2 does not appear to be measurable and has no targets to determine its achievements. It is not possible to assess if the objective has been met and therefore its success.
- **Barrier 2** Establishing a baseline for Pilot implementation of the new travel concept "Skånetrafiken for you" showed that people's travel behaviour is influenced by incentives, both personal and financial. To achieve and maintain the switch from private car to public transport it may be necessary to keep offering such incentives to people. However, such economic incentives are not in agreement with Swedish tax law.

#### D1.2 Drivers

- **Driver 1** Environment department
- **Driver 2** Mobility management and CSR (Corporate Social Responsibility).
- **Driver 3** Increased levels of acceptance and awareness are a good starting point to achieve modal switch and with this environmental and health benefits.
- **Driver 4** the synergy with the wider package of public transport measures helps to raise awareness and also improves the variety of sustainable transport options that are available for marketing through this type of measure.

**SMILE** 

Project:

Measure number:

11.1

## D2 Participation of stakeholders

Skånetrafiken, the regional public transport authority, has initiated and led this measure with involvement of following partners:

- T-Systems
- Aspekta
- ID kommunikation
- Strålfors
- The city of Malmö
- Vägverket (Swedish Road Administration)
- Trivector Traffic AB
- Tieto enator

## D3 Recommendations

The experience that Skånetrafiken gained through this measure is highly valuable. Seen from an environmental point of view, it is important to try to change the travel behaviour. Both citizens and enterprises are getting more aware of the environment. Unfortunately there are national laws that complicate the tax situation for the enterprises.

- **Recommendation 1** 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 2** marketing campaigns and activities for managing mobility needs and influencing travel behaviour could become strategic and policy driven to form part of the local and national transport policy to encourage uptake of similar measures in other cities and towns.
- **Recommendation 3** because of the corporate focus of Skånetrafiken this measure has had a public transport focus. Even so, it has had a knock-on impact on use of non-motorised modes. Depending on the institutional framework in different situations it may be equally or more appropriate for this type of measure to be initiated and run by the city authority, which could then widen the focus to include more content on walking and cycling.

## D4 Future activities relating to the measure

Skånetrafiken hope to launch "My Company" e-commerce web site and adjust the range of products to suit the need of the companies.

Future marketing campaigns should run periodically to reinforce the message and need to be able to adopt a holistic approach to promotion of benefits of modal switch and maintain and increase the levels of awareness, acceptance and use of public transport.

"Skånetrafiken for you" is still under development. When the new tax system is implemented it would be possible to buy travel cards, reload them with money and withdraw them from use if stolen through the membership of "My Pages". During summer 2008 the members of "My Pages" were able to buy different summer cards. At this stage (autumn 2008) the members are presented to different event offers. Service around customer problems/complaints are also available.