Intelligent Energy Europe

Project n° EIE/05/009/SI2.419480

MIDAS
Measures to Influence transport Demand to Achieve Sustainability

Deliverable 15:
Evaluation Report

Project Co-ordinator: Merseytravel, UK

Partners: Transport & Travel Research Ltd
ATC Bologna, Italy
Aalborg Kommune, Denmark
Nordjyllands Trafikselskab, Denmark
Suceava Municipality, Romania
Cork County Council, Ireland
SMTC Clermont-Ferrand, France
POLIS, Belgium

MIDAS

Deliverable 15:
Evaluation Report

Prepared for

Intelligent Energy Europe

By

Transport & Travel Research (TTR)

Author(s)	David Blackledge, Anik Bennett and Leisa Stephenson, TTR; with contributions from all partners.
Quality Control	Suzanne Cain, Merseytravel
Project Coordinator	Suzanne Cain, Merseytravel
Project Number	EIE/05/009/SI2.419480
Version	Final Version
Date	**March 2009**
File location	MIDAS project
Last edited	19/03/09

CONTENTS

0   EXECUTIVE SUMMARY

Background

Measures to **I**nfluence transport **D**emand to **A**chieve **S**ustainability (MIDAS) responds to Key Action VKA9 of the Intelligent Energy for Europe's (IEE's) STEER Programme. The prime objective of this three year project was to encourage transfer to less energy intense modes of transport by optimising the use of soft measures aimed at reducing demand for private motorised transport.

Soft measures include information and marketing campaigns to encourage greater use of public transport, cycling and walking, car clubs and car pooling, and mobility management initiatives. When applied to encourage greater use of sustainable travel modes, soft measures have the potential to make a significant contribution to the EU goals for energy saving set out in the Green Paper on Security of Energy Supply and meet some of the aims of the Transport White Paper. Research shows that well conceived soft measures integrated with other transport improvements can reduce private car traffic by as much as 20%.

The project began in January 2006 and finished at the end of December 2008. The 6 partner cities: Liverpool (UK), Aalborg (DK), Cork (IE), Clermont-Ferrand (FR), Bologna (IT) and Suceava (RO), have implemented their mobility management measures according to the results of the consultations they each carried out during the first year of the project. This report aims to evaluate the success of the measures implemented.

Evaluation Report Findings

The soft measures implemented through MIDAS included: information and marketing campaigns to encourage greater use of public transport, cycling and walking, car clubs and car pooling, and other mobility management initiatives. Since each of the six MIDAS cities have used a range of different measures tailored to their specific needs, the evaluation of the measures has taken place within each city, and only broad conclusions can be drawn across the consortium.

Through the results of the evaluation of the measures implemented in each city, it is possible to see that there has been a broad increase in the use of environment-friendly modes of transport, and most importantly the acknowledgment of the need to change travel habits has been registered across the six cities.

The key results of the measures are summarised in the table below, for each city.

MIDAS city	Key results
Aalborg	6% reduction in car use for one target group (KMD employees) compared with a target of 2-3%. However, the situation is different for students. Here private car increases its share of daily transport by 0.6% despite efforts in MIDAS. Changes in students' place of residence are thought to have had an impact on this.
Bologna	1% increase in the number of public transport users and an increase of 40% for the bike hire service.
Clermont-Ferrand	55% of survey respondents think the new Travel Guide can modify their travel habits. 68% of respondents were unaware of the range of public transport options in the greater urban area before the guide was published.
Cork	11% of survey respondents reported increased use of the train, 9% increase in walking and 8% increase in bus use. 7% of respondents said that the soft measures influenced their changes to more sustainable travel patterns.
Liverpool	32% of respondents reported that the cycling campaign had encouraged them to cycle more, including 13% of previous non-cyclists. 72% of respondents thought the campaign promoted cycling as a positive activity that improves health. There was an 8% increase in awareness of the Car Share scheme as a result of the campaign. Awareness and recognition of the TravelWise sustainable travel brand increased from 26% to 42% after the implementation of the MIDAS measures.
Suceava	The number of the respondents who would like to use public transport more instead of the personal car has increased by 4%, and 3% said that they are using their car less to go to work.

The conclusions drawn below refer back to the initial three main categories of indicators used in MIDAS, and described in the second chapter of this report. They are:

- Impact indicators
- Attitudinal indicators
- Process evaluation

Impact indicators

The measures implemented in MIDAS have resulted in significant increases in the number of persons using public transport:

- 1% in Bologna;
- 11% for trains in Cork and 8% for bus;
- Clermont-Ferrand is forecasting by 2025 an increase of 16% in people using public transport thanks to the Urban Travel Plan actions, which include the Travel Guide implemented in MIDAS.

More people are walking or cycling:

- in Bologna there has been an increase of 40% for the bike hire service;
- in Cork, 9% of people increased their walking;
- in Liverpool, 32% said they were cycling more after the implementation of MIDAS measures. in Clermont-Ferrand, increase of 14% for people walking or cycling by 2025 is expected.

These changes logically lead to a decrease of the use of the car in many MIDAS cities. In Suceava, for example, the number of respondents who said that they are using their car daily to go to work has decreased by 3%, while the number of respondents who said they use their car only when they "strictly need" it has increased from 18% to 28%. There is no doubt that, as a result of the kinds of measures implemented in MIDAS, people are thinking more of using alternative travel modes.

The changes in use of different modes in MIDAS will have lead to reductions in energy consumption and emissions. Changes have been modelled in 3 MIDAS cities although it must be stressed that estimation techniques vary and it is not possible to compare results between cities.
Estimated energy savings in the three cities when results are upscaled from survey data to the relevant population are as follows:

- Aalborg - decrease in energy consumption of 2,260 GJ/year, equivalent to the annual energy consumption of 30 households.
- Bologna – energy savings 545 GJ/year
- Clermont-Ferrand – 10% reduction in energy consumption is estimated for 2025 thanks to all the actions of the Urban Travel Plan.

Savings in emissions are estimated to be:
- Aalborg (study corridor):

	CO	HC	NO$_x$	PA	SO$_2$	
KMD (Employer)	-581625	-45075	-77225	-10800	-5450	
Students	13525	1050	1800	250	125	
Net impact	-568075	-44025	-75425	-10550	-5325	g/year

- Bologna (whole city):
  CO_2 = -323 Mg
  NO_x = -441 Kg

- Clermont-Ferrand (by 2025):
  8% reduction in CO_2
  74% reduction in NO_x and CH_4 (mainly due to clean vehicles)

Attitudinal indicators

MIDAS cities recorded changes in the travel behaviour and attitudes thanks to the soft measures they implemented. For example:

- In Aalborg, KMD employees tend to be more interested in using their bikes and walking, while the share of the car trips has decreased.
- In Clermont-Ferrand, 55% of the respondents to the survey said that the new Travel Guide could modify their travel habits.

- In Cork, the Travel Diary results showed that almost 90% of respondents in the target corridor were using unsustainable modes of transport (car) at the beginning of the project, and that the majority of these were single occupancy journeys to and from work (commuting). In the 2008 evaluation survey, 13.5% of respondents interviewed were using more sustainable modes of transport. On average 7% of respondents said that the soft measures influenced their changes to more sustainable travel patterns, and 9% of respondents said that MIDAS soft measures had made a difference to their travel patterns.
- In Liverpool the cycling campaign proved successful in encouraging 'early adopters' and promoting cycling as a positive activity that improves health and fitness (72% of people took this view).

From these results, it is possible to assess that people are more and more aware of their responsibility and of the role MIDAS measures can play in changing the environmental impact of their travel behaviour.

Process evaluation

Concerning the processes undertaken to develop and implement the MIDAS measures, a number of lessons can be drawn:

- Consultation processes in the various cities, that aimed to help the global design of the measures, were essential to effective design.
- Public acceptance of measures plays a key role in changing travel behaviour.
- Careful definition of the target audience is important to obtain the best results from consultation processes.
- Consultation with the public helps to understand people's motivations and so this knowledge can be used to inform and direct the awareness campaigns for optimum effect.
- To achieve good results with promotion campaigns it is necessary to find the proper way to communicate, i.e. to adapt the quantity of information, the concept, and the means of promotion to the different target groups.
- When designing a campaign, it is important to identify how knowledgeable the target group about the measure that is being promoted.
- When launching a questionnaire it is important to consider the motivation for people to answer it.

With respect to the implementation of the measures, the target area chosen plays a great role in the future results to be observed. Another key point is the importance of the whole political and institutional context which impacts on the project and the organisations that must cooperate to implement it. Both Clermont-Ferrand and Cork had to set up inter-institutional working groups in order to implement their projects.

The results of the MIDAS project show that there has been a positive start towards increasing use of sustainable modes of travel in the six cities. However, all the measures implemented are complementary to the hard measures that provide the core transport services and infrastructure around which soft transport mode solutions operate. Unless the core public transport system, cycling and pedestrian infrastructure provides a quality service no promotion campaign can have a big and lasting impact on the number of people switching from car to environment-friendly modes.

1   INTRODUCTION

The prime objective of this three year project was to encourage transfer to less energy intense modes of transport by optimising the use of soft measures aimed at reducing demand for private motorised transport.

The role of the evaluation is to determine if the aims of the project have been met, and if the measures implemented are successful. The evaluation of any project is governed by the overall objectives the project is trying to address. This is expressed both in terms of the effectiveness of the measures implemented by the project and also in terms of the effectiveness of the project's internal ways of working.

The objectives of the evaluation are to provide assessments of the impacts of the MIDAS measures on public attitudes and sustainable mobility.

As part of the performance indicators established at the beginning of the project to measure success, three indicators are specifically related to the evaluation of the project.

These are:
- Public attitudes
- Traffic reduction and energy savings
- Assessment of consultation and campaign techniques

The measures of success agreed for each of these 3 indicators are given in the table below:

Criteria	Measures of success
Public attitudes	100% increase in awareness of the contribution of MIDAS-type measures to sustainable mobility among target groups.
Traffic reduction and energy savings	10-15% reduction in individual use of cars and similar reductions in energy consumption for targeted groups.
Assessment of consultation and campaign techniques	The success of each measure will primarily be assessed according to its success in meeting stated objectives according to the particular stage of the TAPESTRY[1] 7 stages of change model that it is supposed to address. (Raising awareness of issue, acceptance of responsibility, perception of options, evaluation of options, making a choice, experimental behaviour, establishing habitual behaviour.)

This evaluation report aims to show what has been achieved for each of those 3 indicators, and to which extend the cities have succeeded in meeting the measures of success.

---

[1] TAPESTRY was funded by the European Commission under the 5th RTD Framework Programme. It researched the specific role of awareness campaigns in changing attitudes, awareness and behaviour in a broad range of contexts at the local and regional levels across Europe.

2   EVALUATION IN MIDAS

Each city has developed different types of soft measures to address specific needs and target audiences. As such, evaluation has taken place within each city, and each partner has developed their own framework and indicators to evaluate the measures implemented.

2.1   Indicators

Three main types of indicators were used:

Impact indicators

This type of indicator is the most traditional way of judging the effect of the measures using quantitative indicators. For these indicators, MIDAS adopted the MAESTRO[2] and CIVITAS[3] indicator list, using:

- Energy: Total energy use for the journeys and the change as a result of MIDAS.
- Emissions: Total emission data for a selection of standard pollutants, including CO_2.
- Transport: The number of trips, average trip length, modal split and average journey speed that may be relevant depending on the MIDAS measure.

Attitudinal indicators

These indicators try to evaluate more qualitative data and use awareness and acceptance indicators that were developed within the TAPESTRY project, as shown in the diagram on the right.

Process evaluation

Process evaluation is conducted to assess the effectiveness of the implementation methodology in each of the project sites. This is

7. Habitual behaviour
Long-term adoption of sustainable modes?

6. Experimental behaviour
Trying out new travel choices?

5. Making a choice
Really intend to modify behaviour?

4. Evaluation of options
Is there actually a viable alternative?

3. Perception of options
Perception of sustainable modes?

2. Accepting responsibility
Accept personal / corporate responsibility or relevance?

1. Awareness of problem
Aware of the issue of traffic congestion or opportunities to change modes?

---

[2] DEFINE MAESTRO
[3] DEFINE CIVITAS

conducted against the background of the institutional and legislative frameworks that operate within each city and the impact these have on the decision making process.

2.2 Target profiles

In relation to the campaigns developed in MIDAS, the psychological profiles of the target audiences in terms of initial levels of awareness and receptiveness were important at the beginning of the project as they determined how to develop and target the measures.

The outputs of this stage of the research were:

- Identification of target audiences
- Perceptions of brands and market positioning
- Estimate of potentials increase in the market for public transport

2.3 Analysis Framework and Data Collection

As part of the evaluation plan designed at the start of the project, each city had provided information on the before and after data collection they planned to carry-out. This was based on a basic analysis framework. The following table was designed as part of the evaluation plan to help the partner cities with their analysis framework:

		Qualitative Information (process evaluation, target profiles and attitudinal data)	**Quantitative data (impact indicators)**
Pre-research		Target profile elements that might be most relevant for communications that are primarily aimed at the public	
Baseline / BEFORE	General background data	Use existing data and documentation. If no suitable baseline data is available a general survey may be needed. Contextual information can be used for process evaluation.	Use existing data where possible.
	Data specific to MIDAS measures	Specific surveys conducted with the target population/groups linked directly to the measures	See if existing data can be found in specific form to be of use or conduct additional data collection.
AFTER	Data specific to MIDAS measures	Specific surveys conducted with the target population groups/journeys	Specific surveys conducted with the target population groups/journeys

The following sections of the report give information on what kind of measures were implemented in each city, how they were evaluated, and what were the results.

3   AALBORG

3.1   General information on the city

Aalborg is the third largest Municipal District in Denmark with a population of approximately 195,000 and a total area of 1.144 km². Approximately 122,000 people live in the City of Aalborg. The municipality includes about 100,000 workplaces mostly in trade and catering, business services, local government (36.1 %) and the manufacturing sectors.

3.2   Target area

The focus area of the project in Aalborg was the corridor between the city centre / waterfront and the university campus in the south east of the city (please see map below). The waterfront and the university are both developing sites of the city. This means that these are potential sites for influencing travel behaviour by means of planning and promotion. The corridor between the sites is the main commuter corridor between the city centre and the university used by students and employees at the university. The majority of the students live within the MIDAS corridor. Evaluation in the corridor is highlighted on the map (red stretches are where car counts were made and blue stretches where bike counts were made).

Figure 1: Aalborg target area
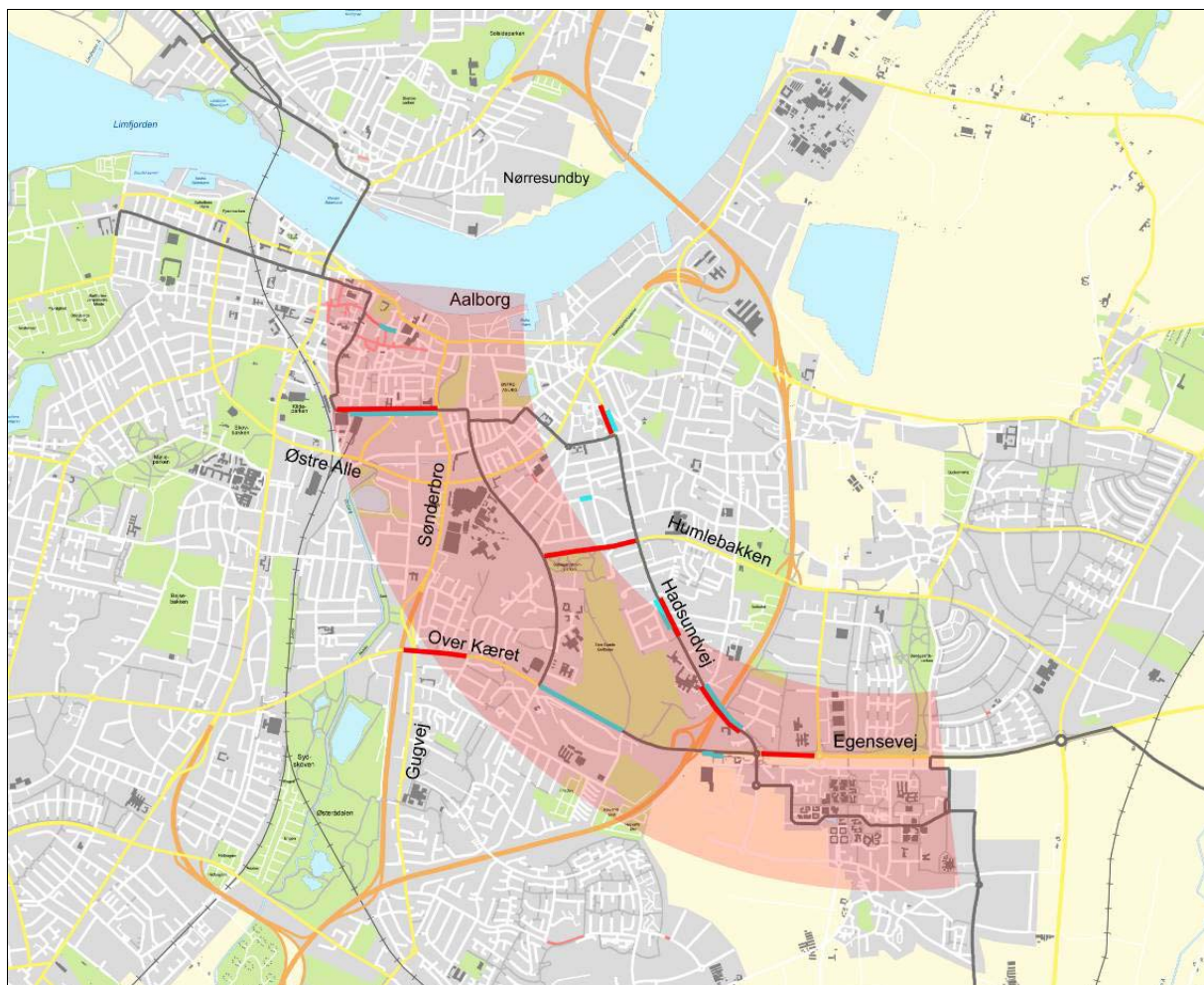
3.3   Introduction to the measures implemented

3.3.1   Description of the measures

In August 2007, the marketing campaign was launched. The first event in the campaign was called "Angels in town" where people, dressed-up as green angels, handed out marketing material in order to raise awareness of the campaign web home-page[4]. Online journey planning and traffic information was already available before MIDAS, but were included on the new web campaign portal in order for the target groups to obtain electronic information more easily[5]. Other awareness raising elements were TV and Cinema spots, radio spots and information in and on buses throughout the city.

One-way information was provided in the format of leaflets, TV/Radio/Cinema spots, bus commercials and fact sheets and was reinforced at the road shows between September and November 2007. A Mobility Manager was recruited specifically and visited the MIDAS target groups at the university and at the large employer at the heart of the project, where information packages were handed out directly to staff and students. In addition, the Mobility Manager regularly provided information to travellers through an information stand at the bus terminal.

3.3.2   Objectives

As identified in the second deliverable of the project (D2), one of the objectives of improving the information provided was to make it easier to use various modes of transport. The objective of replacing **2-3 % of all trips in the corridor from car to a more sustainable mode of transport** was identified as more than acceptable – however, it is inevitable that this replacement was not only going to be due to information systems, but also the marketing campaigns and information packages provided as well.

The objectives of the information package were to inform the target groups of where to get information provided by the City of Aalborg and general information about sustainable transport itself. The goal of this package was to raise the awareness of at least 50% of the target group (in relation to the baseline data collected in autumn 2006) on how to get traffic information. **The overall objective was to achieve a change in attitudes towards sustainable transport, so that 50% of the target group in some situations saw public transport, car sharing, car pooling and cycle use as good alternatives to the car. The objective was to change the travel behaviour within the target groups of the corridor by 2-3 % and to postpone car ownership for this part of the target group.**

Increasing knowledge about car sharing and changing peoples' opinion of car sharing scheme as an alternative to the car will, it is hoped, ultimately increase the number of car club users and thereby help to postpone car ownership.

---

[4] www.AtilBnu.dk

[5] www.aalborg-trafikinfo.dk

3.4   Implementation of the measures

3.4.1   Planned implementation of the measures

The measures were implemented from early September 2007 and ran simultaneously with the University students starting after their summer vacation, in time for the students starting their new term. The new website www.atilbnu.dk (a new cover page to the traffic portal in Aalborg) was launched, as was the marketing campaign (August 2007). The Mobility Manager worked their first day among the target group of students at the start of term and NT Live had been launched a few weeks before. NT LIVE is a SMS service that provides bus passengers with the actual arrival times of the buses. By using their mobile phones, bus passengers can check the actual arrival time of their bus before leaving home. Hence, if it is to be a couple of minutes late, users will know in advance.[6]

3.5   Evaluation methodology and results

3.5.1   Indicators used for data collection activities

In order to provide the evidence of a quantifiable measure of success of the MIDAS measures in Aalborg, impact, attitudinal and process evaluation indicators were established. These are listed as follows:

Impact evaluation indicators:

- Number of cyclists: cycle count in the university corridor was conducted
- Number of passengers: passenger count in the university corridor
- Traffic Volume : annual daily traffic on major streets in the area
- Traffic Safety: number of registered accidents in the University corridor and measured
- against by the whole municipality
- Mobility indicators for cyclists in the project area: cycle paths, security, and overall safety
- Energy and emissions: CO_2, CO, PM10. Modelling based on counts and awareness
- surveys

---

[6] To access NT Live, users send a text message that says NT LIVE to the number 1204. Then, subsequently, users receive the information about the service which has already started. The service itself is free of charge; users only pay what they would normally pay to access GPRS information via a mobile phone.

Attitudinal evaluation indicators:

- Awareness and acceptance/public attitudes:
  - Internet based questionnaire: behaviour, level and demand
  - Attitude survey towards public transport, traffic, 'the typical cyclists' and the environment
  - Focus groups concerning public transport and cycling as part of the marketing campaign

Process evaluation indicators:

- Mobility indicators for cyclists in the project area: cycle paths, security and safety along
- the University corridor
- Analysis of city plans in Aalborg: cycle path plan, plan for new residential areas and road
- Development plan

3.5.2   Processes used to establish the baseline data collection

Web-surveys

The first target group consisted of first year students at Aalborg University, (at the teacher training college and at one upper secondary school in the corridor). This target group contained approximately 3,000 people. The other target group was employees at a large company in Aalborg. This target group contained approximately 1,000 people.

The make up of the target group in year 2006 and 2007 was very similar, as shown in the table below. However the response rates of the target groups were smaller in 2007.

	Students 2006	**Students 2007**
Response rate	22 %	12.5 %
Average age	21.1 years	21.6 years
Percentage of women	54 %	54 %
Average distance to education	10.6 km	11.6 km

	Employees 2006	**Employees 2007**
Response rate	37.6 %	11.9 %
Average age	44.5 years	44.5 years
Percentage of women	34 %	32 %
Average distance to workplace	18.4 km	16.7 km

The reason for the difference in response rate was based on the fact that students in 2007 appeared less motivated to complete questionnaires than the first year group of 2006. For KMD employees, the 2006 questionnaire was regarded as more interesting to them as they could suggest solutions for implementation during the MIDAS project. The 2007 questionnaire provided less opportunity for this as it was solely for evaluation purposes.

Bus Passenger Counts

As part of the 'before evaluation' a number of passengers were registered in two primary bus lines in the corridor. The registration was carried out at the beginning of November 2006 and was both a manual count and an automatic count with the use of on-board counting system on the buses. The registration was carried out over three weekdays.

The two bus lines almost cover the corridor completely, but there were other lines that operated in the corridor too. The two bus lines in question run from the city centre to the university in an almost parallel route and are operated as city buses. In a typical rush hour there are 4 and 12 departures per hour respectively.

Line 2
The numbers of passengers entering and exiting were counted manually on every fourth departure over the whole day for each bus stop. The total number of passengers is calculated on basis of these numbers.

Line 12
The total number of passengers entering the buses was counted by the onboard counting system and registered for each trip. In addition to this, all entering and exiting passengers were counted manually on all departures between 7.30 and 9.00 and again between 14.30 and 16.30 for each bus stop. In this way it is possible to distribute the total number of passengers to the whole line.

This data was used for the evaluation of energy and emissions. Modal shift /transfer to the buses have proved to be of no significance to the bus service itself so energy consumption of the buses is the same before and after the campaign.

Cycle Counts

During the MIDAS project, three cyclist counts were carried out in the University corridor to monitor the number of cyclists. The counts were conducted in May and June 2006, before the start of the project; in October 2007 (in the middle of the project) running along side the marketing campaign and in June 2008, at the end of the implementation of the soft measures.

3.5.3   Summary of measures and results

Energy

Emissions and energy consumption in MIDAS corridor are calculated by use of the EMME2 traffic model for Aalborg and the TEMA2000 emissions model by the Danish Ministry of Transport. Speed levels, traffic volumes by category, and link lengths are transferred from the EMME2 traffic model to TEMA2000 for the analysed scenario and baseline emission levels are calculated for the MIDAS corridor.

The modal choice of students (university and upper secondary school) and workers at KMD has been analysed before and after MIDAS. Based on these data and emission calculations the impact of MIDAS has been assessed.

As the main changes in relation to modal choice are related to long distance journeys, only a limited part of the impact is found in the MIDAS corridor. It also seems that MIDAS

measures are outmatched by macro trends - relocation of KMD offices and changes in settlement patterns among students - making it difficult to determine the specific impact of MIDAS. Changes in public transport use as a consequence of this will have a negligible impact on public transport energy consumption and this effect is not considered in the following.

KMD workers home - workplace trip lengths

	25% percentile	**50% percentile**	**75% percentile**	**85% percentile**
Before MIDAS measures	6.0 km	10.0 km	25.0 km	30.0 km
After MIDAS measures	5.0 km	10.0 km	25.0 km	32.0 km

The increase in PT can be put down to two different reasons. Train transport has increased while bus transport has decreased. Once again the change in location plays a key role. The current location is only about 2.5 km from the train station compared to 7 km before. So now it is much easier for long distance commuters to use the train. Compared to the previous location in Aalborg East, the current location (at the waterfront) is poorly served by buses. Combined with the reduction in average distances to work it is understandable that the use of buses is now less than before.

However, the situation is different for students. Here private car increases its share of daily transport despite efforts in MIDAS.

Students home –Education faculty trip lengths

	25% percentile	**50% percentile**	**75% percentile**	**85% percentile**
Before MIDAS measures	2.5 km	5.0 km	8.0 km	18.6 km
After MIDAS measures	2.0 km	5.0 km	8.0 km	22.9 km

Looking into the details of the survey among students a likely explanation for this can be found by looking at changes in students' settlement patterns. The above table indicates that more first year students decide to live further away from the university - maybe because the decision to move to central Aalborg is postponed. Subsequently, this can explain the changes in modal choice.

As noted, the main changes to modal choice are related to long distance journeys and as a consequence only a limited part of the impact is found in the MIDAS corridor. It also seems that MIDAS measures are outmatched by macro trends - relocation of KMD and changes in settlement patterns amongst students - making it difficult to determine the specific impact of MIDAS.

As changes in public transport use by these only will have a negligible impact on public transport energy consumption this effect is not considered in the following.

Taking the results of the above surveys it has been found that the change in annual energy consumption for transport is a reduction of ~3,600 MJ/person for KMD workers and an increase of ~180 MJ/person for students. Changes are within the car user segment.
Before MIDAS, about 64% of KMD workers total number of journeys and 10% students' total number of journeys were made by car.

Up-scaling these results to all first year students and all workers at KMD the total annual impact can be estimated to be a decrease in energy consumption by 2,260 GJ/year. This is equivalent to the annual energy consumption in a little less than 30 households.

Compared to the total energy consumption for transport in the MIDAS corridor (~375 TJ/year) the above changes have resulted in annual savings of about 0.6%.

Emissions

This table shows the net impact of emissions per year respectively for KMD and Students. The emissions are calculated with the same model as the energy consumption.

	CO	HC	NO$_x$	PA	SO$_2$
KMD	-581625	-45075	-77225	-10800	-5450
Students	13525	1050	1800	250	125
Net impact (g/year)	-568075	-44025	-75425	-10550	-5325

Transport

The pattern for all counts, except one, is the same. The number of cyclists was reported to be higher in 2007 than in 2006, but lower in 2008 than in 2006. It is not possible, therefore, to conclude that the MIDAS campaign has had an effect based on these figures. However, the same pattern is revealed in the count for cars in three of the counts:
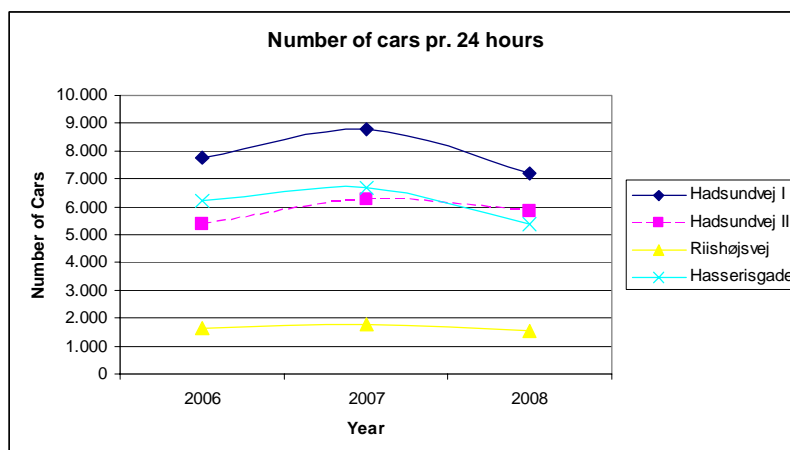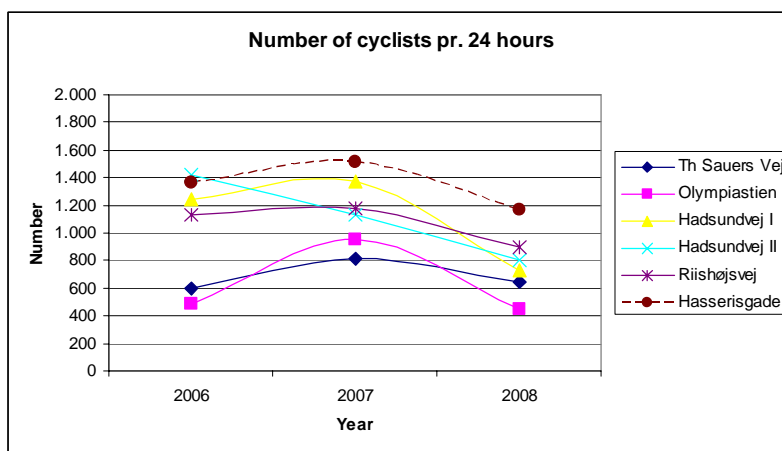
The objective of transferring 2-3% of all trips in the corridor from the car to other modes of transport appears not to have been met when the tables above are analysed. However, if we look at the table below, based on the web-surveys of the target groups, the numbers are different. This table shows the change in the share of car use for an average number of trips per person per week.

Change in car use in summer and winter months over average trips made per person

	Summer	**Winter**	**Average change**
KMD employees	-6.23 %	-6.18 %	-6.21
Students	+0.78 %	+0.36 %	+0.57

The results show that the share of trips made by the KMD employees by car has been lowered while the same share of trips by car made by first year students has risen between 0.36 % and 0.78 %. This is based on the web-surveys which lead to uncertainty of the actual results within the MIDAS-corridor.

Some possible explanations for this pattern follow:
- In autumn, more people are travelling because of how term time education is arranged.
- In spring, students have started the examination period and are therefore not travelling as much to attend lectures as much
- The weather often deters people from making unnecessary trips

The following three diagrams show the development in the number of accidents in the time periods September 2006-May 2007 and September 2007-May 2008. The accidents are police registered accidents on the main roads in the MIDAS corridor and involve pedestrians hence the term 'soft or vulnerable road users'.

Numbers of police registered accidents on the main roads in the MIDAS corridor
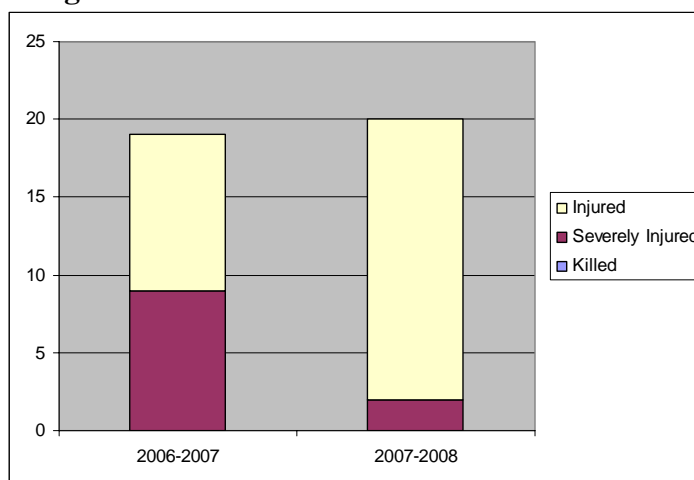
Numbers of police registered accidents in the Municipality of Aalborg
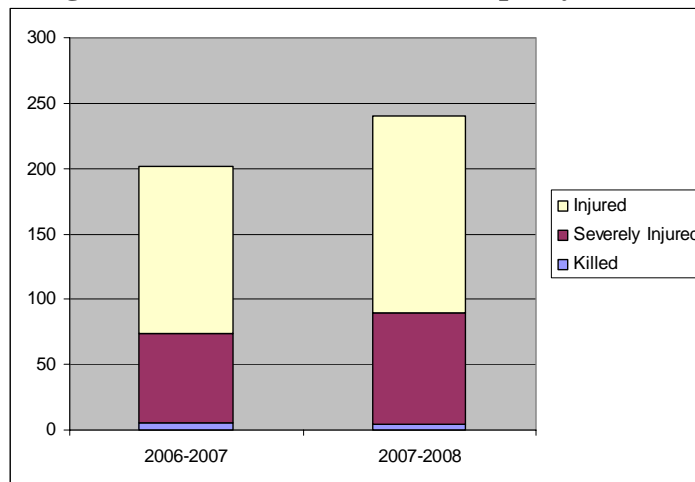
Numbers of police registered accidents involving soft road users on the main roads in the MIDAS corridor and in the Municipality as a whole
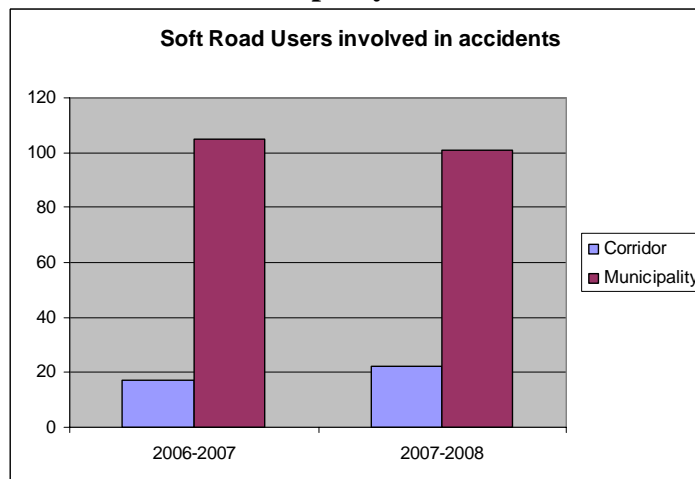
Society: Awareness and Acceptance

As mentioned earlier, the integrated marketing and information campaign was launched in September 2007 and continued throughout 2007. In November 2007 a web-questionnaire was sent out to the target groups in order to investigate the effect of the campaign, concerning primarily, the information level and the perception among the target groups towards sustainable transport. The perception was measured by the number of trips each week expected by the target groups.

Level of awareness of the traffic and transport web-portal in Aalborg, (which also contains information on sustainable transportation) has been increased for KMD and students respectively with 61% and 83 % level of awareness. In 2006, 39% of the KMD employees and 20 % of the students were aware of the transport web-portal (**The objective for the MIDAS project was 50 %**). The awareness of the new RTPI (Real Time Passenger Information) service on mobile phones, NT Live, was 21% and 27% respectively and the Mobility Manager was known by 7% of the students and 19 % of the employees at KMD.

Students, Summer

	Bus Summer	Car Summer	Bike Summer	Train Summer	Car Pooling Summer	Walking Summer
2006	1,70	0,57	2,74	0,32	0,15	1,80
2007	1,39	0,58	2,70	0,36	0,15	1,55

KMD, Summer

	Bus Summer	Car Summer	Bike Summer	Train Summer	Car Pooling Summer	Walking Summer
2006	0,25	3,35	1,14	0,03	0,30	0,65
2007	0,22	3,08	1,45	0,14	0,23	0,77

Students, Winter

	Bus Winter	Car Winter	Cycling Winter	Train Winter	Car Pooling Winter	Walking Winter
2006	2,39	0,62	1,90	0,32	0,17	1,76
2007	1,87	0,59	2,10	0,36	0,13	1,49

KMD, Winter

	Bus Winter	Car Winter	Bike Winter	Train Witner	Car Pooling Winter	Walking Winter
2006	0,45	3,61	0,66	0,04	0,30	0,62
2007	0,39	3,36	0,91	0,17	0,25	0,78

The figure shows the average number of trips every week made in summer and winter months by each target group in the 2006 and 2007 survey. Surveys were conducted in November 2006 and November 2007. Most remarkable changes can be seen among the KMD employees who tend to be more interested in using their bikes and walking in the 2007 survey, while the share of the car trips has decreased.

To test the second objective: that there is a change in attitude towards sustainable transport so **that 50% of the target group in some situations see public transport; car sharing; car pooling and bike use as viable alternatives to the car,** the following was undertaken. Target groups were asked if they were interested in car pooling should a colleague or co-student offer to drive them and if they would be interested in joining the car sharing scheme in Aalborg. The results are shown in the table below – from the 2007 survey:

Level of Interest in Car Pooling and Car sharing among Target Group 2007

	Very interested, interested or maybe interested : 2007	
Car Pooling	**KMD employees**	**Students**
	41.2 %	66.4 %
Car Sharing	**KMD employees**	**Students**
	26.1 %	53.0 %

Level of Interest in Car Pooling and Car sharing among Target Group 2006

	Very interested, interested or maybe interested : 2006	
Car Pooling	**KMD employees**	**Students**
	47.3 %	71.8 %
Car Sharing	**KMD employees**	**Students**
	22.3 %	52.1 %

With respect to the students, the objectives are met though this is not the case for KMD. Since the KMD employees are mainly car users and thereby also car owners, these alternatives are not as attractive and flexible to them as they are to the students. This is also visible on the modal split calculated on the background of the web-surveys described above and shown in the tables below:

Modal choice (by annual mileage) among KMD workers

	Km/year pr person	PT	Car	Bike	Walk
Before MIDAS	3.736	7.6%	83.0%	9.0%	0.5%
After MIDAS	2.140	10.1%	77.9%	10.6%	1.4%

Modal choice (by annual mileage) among students

	Km/year pr person	PT	Car	Bike	Walk
Before MIDAS	2.532	58.7%	21.8%	17.1%	2.5%
After MIDAS	2.716	58.3%	22.9%	16.9%	1.9%

Even though the objective for students has been met, the modal share of the car has increased from before the MIDAS campaign to after the campaign. Not only has the share gone up but the distance travelled is also longer. The survey result indicates that more first year students decide to reside further away from the university - maybe because the decision to move to Aalborg is postponed. This is one explanation for the changes in modal choice.

3.5.4   Assessment of the success of each measure according to the TAPESTRY 7 stages of change model

In Aalborg the key measures of the marketing campaign, with mobility manager and improved web based and SMS information services with NT live have contributed to assist the target groups in reaching stage 6 of the TAPESTRY model*;* **Experimental Behaviour.**

3.6   Lessons Learnt

3.6.1   Barriers – How they were overcome

"Public transport is not regarded as competitive when compared with private car use. Car travel is generally preferred, despite the fact that it is not the most cost effective option." The main focus on this barrier has been to inform focus groups about the fact that the car might not, in reality, always be the cheapest solution and to inform them about the alternatives to car use. The MIDAS project's integrated marketing strategy was developed in order to ensure that the target groups were informed about these alternatives. Specifically, the

marketing strategy focused on the individual, hence the role of the mobility manager engaging directly with individuals.

Lack of awareness of sustainable transport alternatives became evident through the consultation exercise (as part of MIDAS work package 3). Both focus group interviews and web-questionnaires revealed a low awareness on certain aspects of information and services. The MIDAS marketing strategy was tailored to raise awareness of 'how to get information' and 'to improve information services' in order to make the target groups able to make smarter choices about sustainable transport. The re-launching of the traffic portal, NT Live real time passenger information system on the mobile phone, and the awareness campaign were important measures in order to overcome this barrier.

3.6.2 Participation of stakeholders

The consultation process has mainly been used to create a picture of two target groups which have shown themselves important in the project corridor namely first year students and employees at KMD.

The first target group was made up of first year students at Aalborg University (at the teacher training college and one upper secondary school in the MIDAS corridor). Consisting mainly of young people likely to purchase a car within a short period of time (if they did not already own one) and also described as 'new in town'. Interestingly, 45-50 % of the entire population of young people live within the MIDAS corridor.

The second target group was a group of employees at KMD a large company in the process of moving all of its employees to a new office at the waterfront in Aalborg. This target group was defined as people between 18-65 years. The group was selected because KMD has changed their location which was thought would open up opportunities in terms of changes in staff travel behaviour. The target group could be described as typical road users in their commute to work. They were much more likely to have a car than the first target group.

The specific consultation process was split into two main parts. Two focus group interviews, one with each target group and two web questionnaires, one for each target group distributed to the students by email and to the employees at KMD on their Intranet. There were two reasons for splitting the consulting process into two different parts:

- It is very important to have a face-to-face consultation in order to obtain the right knowledge about the target groups and their requirements relating to information and their attitude towards sustainable mobility. Focus group interviews have been conducted with success in previous projects. as for example the elaboration of the Traffic and Environmental Plan (2005) and focus group interviews on public transport.
- The focus group interviews were conducted in order to improve the web questionnaire – particularly in order to ask the right questions.

The focus groups, consisting of 5 and 7 participants, were conducted by an opinion research institute. The focus groups took place on 23rd and 24th November 2006.

The web questionnaires were elaborated by the City of Aalborg. They were launched on 6th November. It was a one month web-questionnaire survey.

Following the two-month communication campaign in September and October 2007, a new Internet questionnaire was sent out enabling evaluation of the campaign results. This survey took place in November 2007.

4 BOLOGNA

4.1 General information on the city

The municipal area of Bologna covers an area of 141 km², and has a population of 372 500 residents. The metropolitan area of the city has nearly 600 000 residents.
Bologna is the main town of the Emilia Romagna Region, and is the centre of the most ancient University of Europe (XI century). It is also an important interchange city in Italian national transport networks, as the city is the only passage between North and South Italy. Bologna has an important Fair District and a Conference Palace, and therefore attracts many businesses to visit the area. Bologna hosts many industrial companies of primary importance in the field of mechanics, agriculture and food-transformation. It has an international airport, Guglielmo Marconi Airport, which deals with over 3.5 million passengers a year, and has a very important railway station.

Map of ATC's public transport network and service:

KM	2007
Urban service Bologna	18.090.577
Suburban service	6.737.743
Extraurban service	11.308.966
Special services	271.592
TOTAL	36.408.878

PASSENGERS	2007
Urban service Bologna	94.910.235
Suburban service	9.258.295
Extraurban service	6.216.762
Special services	422.113
TOTAL	110.807.405
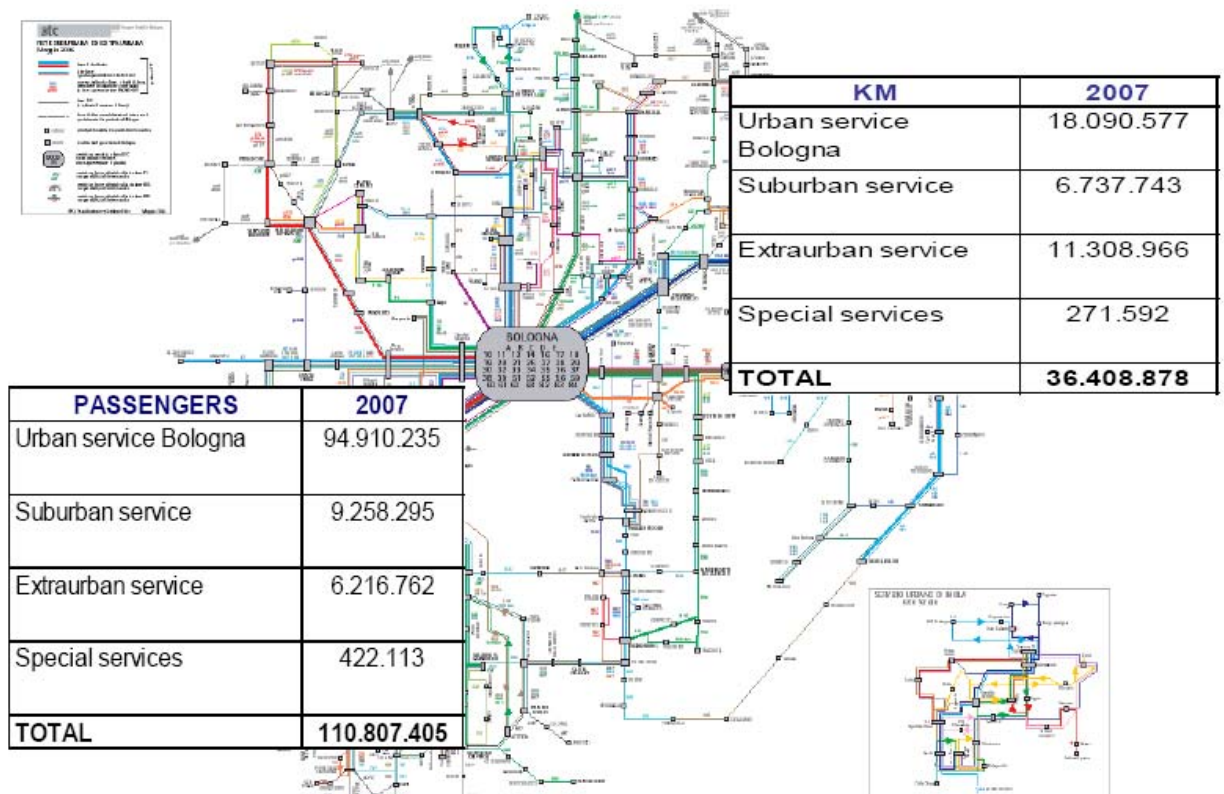
4.2   Target area

The MIDAS measures in Bologna involved principally the urban area with regards to the measures for cycling and car sharing. The information campaign and the Mobility Guide ("Vademecum") were addressed in general to all the users/potential users of sustainable transport services in the Bologna catchment area, which corresponds to the whole Province.

4.3   Introduction to the measures implemented

4.3.1   Description of the measures

ATC, the transport operator of Bologna concentrated their MIDAS measures on providing appropriate information on sustainable mobility services, on improving those services according to the feedback they had received from their consultation with the public and users. The sustainable mobility services in Bologna include public transport, car sharing, bike services and cycle paths.

One of the key measures in Bologna was an information and awareness campaign that started to coincide with the European Sustainable Mobility Week in September 2007. The ATC campaign focused on: car sharing service, bicycle use (cycle paths, bike hire service, bicycle facilities), and the public transport service. ATC took this opportunity also to enhance and widen services offered from ATCittà Infopoint that became a reference point for all sustainable mobility services.

The "C'entro in Bici" service (free public bike hire) has been improved and enlarged by ATC, in cooperation with the municipality. During summer 2008, a total of 92 new bicycles were bought, increasing the scheme from 68 to 160 bikes. Currently, Bologna has about 20 pick-up points placed in the city centre and in the immediate peripheral area.

As part of the measures to encourage cycling, a study to improve the existing cycle paths and signing of them was carried out.

In 2008, over 400 signs in the historical centre were installed to identify cycle paths with useful indications both for tourists and citizens.

Car sharing service: The numbers of locations and available cars were increased. The booking system has been improved to include the option of booking the car directly via the website. The on-board units have been replaced with more technologically advanced ones.

Some locations have been moved following suggestions from citizens. Some cars were replaced with small cars (Fiat 500) that customers find more suitable for travelling in the city.

Mobility management agreements: With the main aim of improving mobility in the city centre and to increase the use of the free bike hire service "C'entro in bici" and car sharing service, ATC agreed with Bologna University to give special terms to university employees and students: subscription costs were reduced and membership was simplified.
In September 2008 ATC had an information desk at the "Alma Fest" - the opening event of the academic year of Bologna University. The aim was to provide information on:

- public transport service opportunities and special fares for students
- special terms for students for joining the car-sharing and bike hire services

E-mail was also used for the information campaign: through the University an e-mail was sent to all the students and employees informing them on the opportunities for sustainable mobility in Bologna. Information is also published on the University web site.

Mobility Guide: ATC developed, designed and published a mobility guide called "Carta della Mobilità". This guide includes comprehensive information on all sustainable modes of travel available in the city.

The first edition was published in 2007 and had very positive results among users; following feed-back and suggestions a second edition was published in 2008 with more information on public transport bus services and better maps.

4.3.2 Objectives

The overall objective in Bologna was to increase the use of sustainable mobility services through a promotional campaign and an effective guide containing information on all services available in Bologna; to encourage bicycle and car sharing use; and to improve and promote those services to potential users.

4.4 Implementation of the measures

4.4.1 Planned implementation of the measures

The information campaign was launched in September 2007 during European Mobility Week.

The first edition of "Carta della Mobilità" was published in September 2007. The second edition was published in September 2008.

The car sharing service and free bike hire service have been improved creating new locations and enlarging the offer of bikes and cars. Agreement with the University was reached in September 2008, in order to offer special terms to students and employees.

4.5   Evaluation methodology and results

4.5.1   Indicators used for data collection activities

In order to provide the evidence of a quantifiable measure of success of the MIDAS measures in Bologna, impact, attitudinal and process evaluation indicators were established.

Impact evaluation indicators:
- Number of people using car sharing: Car sharing company data base analysis
- Number of people using bike services (bike free rent, electric bike rent, Parking+ bike): Data from the management companies
- Emission and Energy: CO_2, CO, PM10 etc.; Giga joule etc

Attitudinal evaluation indicators:
- Awareness and acceptance of sustainable mobility services:
- Before: Survey on public transport, traffic and environment, car sharing and bike hire service knowledge and use
- After: Survey after the "mobility island" realization and after the information campaigns
- Public transport, traffic and environment, car sharing and bike hire service knowledge and use

Process evaluation indicators:
- Reasons for not using sustainable mobility services (before and after)
- Reasons for starting to use the new sustainable services (before and after)
- Opinion on information given from the institutions and the company concerning of the available services (before)
- Opinion on the information campaigns concerning the available services (after)

4.5.2   Processes used to establish the baseline data collection

In order to collate baseline data in Bologna, the before evaluation was carried out in 2006 by means of telephone interviews.

The after survey was again conducted through telephone interviews with a sample of about 500 citizens living in Bologna urban area.

4.5.3   Summary of measures and results

Transport

Overall results of the evaluation carried out by ATC reveal an increase in the number of public transport users by 1% and an increase of 40% for the bike hire service. There was a decrease of 4% for users of the car sharing service, but this trend was reversed with a new campaign towards the end of the project.

Summary of the results	Baseline data - "Before" evaluation	Results "After" evaluation	Difference	Percentage change
Urban public transport passengers	92 509 998	93 350 000	+ 840 002	1% increase
Car sharing subscribers	1090	1051	- 39	4% decrease
"C'entro in bici" subscribers	1466	2404	+ 938	40% increase

This shift towards more sustainable travel habits is also confirmed by the positive trend of public transport season ticket sales:

	2006	2007	Difference	Percentage change	Forecast 2008
Monthly ticket	199 991	207 335	7344	4% increase	208 000
Students monthly ticket	54 398	57 768	3370	6% increase	58 000
Annual urban season tickets	32 878	34 293	1415	4% increase	34 789

Bicycle use and paths perception:

Survey results show that the improvements made to the cycling network were well received.

The survey showed that people noticed an improvement in bicycle paths:
- 25,4% in terms of visibility of the reserved lane;
- 32,8% in terms of signage on the ground;
- 11,5% with regards to improved signposts;
- 45,1% found an improvement with regards to the length (connectivity) and width of paths;
- 15,6% noticed an increase in number of bike parking racks

The focus groups held to gather more specific feedback on the quality of the services showed that some key factors played an important role when trying to increase cycling:
- 26,5% of respondents said the safety of paths was most important
- 28,3% of respondents said that enlarging the network was most important to them
- 13% wanted to see improvements at junctions of exiting paths
- 15,8% wanted to better information and signage of existing paths

Data concerning "C'entro in bici" service subscribers are encouraging. The increase in the number of subscriptions in 2008 is due partly to the increase in the number of docking stations and bicycles but mainly to the mobility management agreement with Bologna University, made in September 2008, which allows non resident students to use the service and reduced subscription cost.

Year	Subscriptions during the year	Total subscriptions	Percentage change
2005	812	812	
2006	654	1466	81% increase
2007	170	1636	12% increase
2008	768	2404	47% increase

Car sharing:

Data on car sharing shows clearly how difficult it is to promote and expand this service. It is well known that getting people to use their own cars less is very difficult. Because people are often not aware of the true costs of driving and owning a car, it is more difficult to convince them of the savings that they can benefit from if they used a car from the car sharing scheme (car club). In fact, about 46% of respondents did not give an indication of costs, and about 25% gave an indication of less than 1000 € per year. For these reasons, it is assumed that the respondents do not understand the possibilities to reduce their costs by car sharing.

If we compare data concerning the number of car sharing users from the "before" and "after" surveys, we notice that the number is more or less the same.

From these results, it is clear that efforts to increase usage of the service have to be addressed mainly to people that do not have a car available.

The information campaign was launched in September 2008: first results in these 2 months were 13 new subscribers coming from the University. The specific campaign was aimed at a niche of potential users, which then enabled ATC to obtain a trend inversion with a positive significant increase.

Mobility management actions:

As part of the survey, some questions were asked concerning the knowledge of the mobility management initiatives that ATC agreed with companies to promote the use of public transport amongst workers. The answers provided evidence that people did not know of this possibility and companies did not promote initiatives to optimise home to work trips. These findings made it clear for ATC to work more on these types of initiatives that already obtained good results within large companies and institutions.

Energy

Estimation of the savings: delta = -545 Gjoule

Emissions

Estimation of the savings: Change in CO_2 = -323 Mg NO_x = -441 Kg

NB - ENERGY AND EMISSION SAVINGS:

The soft and hard measures developed in Bologna were not applied to a restricted area; consequently a specific target group was not identified.

Results obtained are absolute and more significant because they relate to the whole Bologna urban area. The energy reduction (-545 Gjoule) has been estimated taking into consideration increase of public transport passengers from 2006 to 2008 of about 840 000 trips that means an equivalent decrease in using private vehicles. The same criterion has been used to calculate reduction of emissions considering the decrease in private vehicle use.

4.5.4   Assessment of the success of each measure according to the TAPESTRY 7 stages of change model

In Bologna the key measures of the information campaign, with the mobility guide and improvements to the car share and bike rental schemes have contributed to assist the target groups in reaching stage 6 of the TAPESTRY model; **Experimental Behaviour**.

4.6   Lessons learnt

4.6.1   Barriers – how they were overcome

From the MIDAS experience, ATC learnt that it is not sufficient just to implement sustainable transport services in a city, but it is essential to develop soft measures and actions to inform and raise awareness of the citizens on the service characteristics and opportunities.

In Bologna, ATC created the mobility guide "Carta della Mobilità" as an answer to the need for a concise and complete information tool on sustainable mobility in Bologna.

Furthermore ATC now understands the importance to reach potential users of soft modes services with specific actions and campaigns. The mobility management agreements with the University concerning car sharing and bicycle services promoted during the University "Alma Fest" at the beginning of the academic year gave, in just a few months, good results in terms of interest and new subscriptions.

4.6.2   Participation of stakeholders

The participation of stakeholders was a key factor for the activities development.
Through the survey of citizens ATC focused on the key points to be considered in order to develop efficient services, and understood in which direction they need to work to raise awareness and use of sustainable services:

- improve paths and services for bicycles
- clarify car sharing service characteristics
- provide clear and essential information on sustainable services to potential users

The involvement of the Municipality was a further element for the success of the measures; the information campaign developed in cooperation with the local authority during the European Mobility Week had a great impact on the city.

5   CLERMONT-FERRAND

5.1   General information on the city

The "Grand Clermont" area has a population of 400,000 inhabitants. The Urban Transport area has 300,000 inhabitants. The city of Clermont-Ferrand itself has a population of 140,000 people.

Car ownership in this area is average for the region, with averages of 1.3 per household in the whole urban area, 1.2 in the Urban Transport area, and 1.0 in the city centre of Clermont-Ferrand.

The density of the population varies, with 10,000 inhabitants per km² in the town centre, and less than 1,000 in the peripheral area.

Clermont-Ferrand is naturally bounded by two nature reserves, including a chain of volcanoes and mountains. This particular geography has contributed to limit the expansion of the city and constrains development within the urban boundaries.
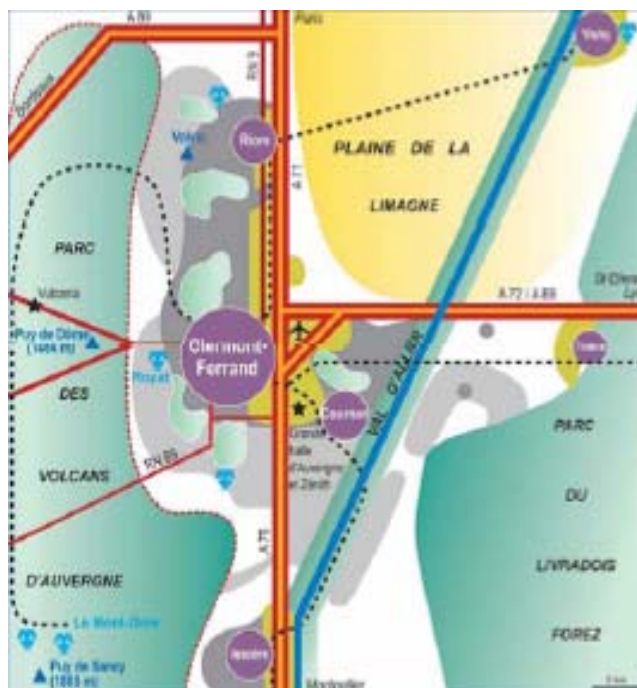
Map of Clermont urban area

A significant characteristic of Clermont-Ferrand is the level of employment, with 0.67 jobs per inhabitant in Clermont-Ferrand, and 0.42 for the whole of the Grand Clermont. This situation generates an important commuter flow, mainly by private car. As such, in the urban area, 65% journeys to work are made by car, 6% by public transport, 2% by bicycle, and 27% on foot.

5.2   Target area

The target area for the SMTC was the "Grand Clermont" area, which includes 107 "Communes" (a Commune is the smallest territorial division in France), and equates to a population of 400,000 residents.

5.3   Introduction to the measures implemented

5.3.1   Description of the measures

In Clermont Ferrand, three key measures have been developed. These are:
- a travel guide
- a travel conference
- a communication campaign for the Urban Travel Plan

Travel Guide
The Travel Guide is an information tool on all public transport services and soft modes with maps and schedules for the whole Grand Clermont area. The travel guide comprises 237 pages of colourful and detailed maps, giving information on all public transport routes and services.

Travel Conference
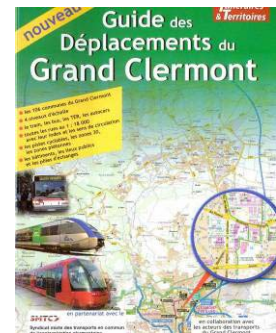The Travel Conference is an institutional consultation process involving all the authorities of the area which have transport responsibilities. The process was launched in February 2007, with the aim of developing an integrated, global and sustainable public transport network at the Grand Clermont scale, which is a new planning scale.

Communication campaign for the Urban Travel Plan (UTP)
The UTP is Clermont-Ferrand's reference document for transport policies for the next 15 years. Its aim is to implement a sustainable transport system, which is environmentally friendly, socially balanced and economically viable. UTPs are statutory in France for towns with a population of more than 100,000. Clermont Ferrand published its first UTP in 2001, and the revision process began in 2006 and should end in 2009. It is a transport planning tool which deals with the implementation of many soft measures such as pedestrianisation, walking and cycling facilities, public transport services, car parking restrictions, park and ride facilities, etc. The main actions of the revised UTP are the construction of a second tram line, the implementation of stronger bus routes, the construction of park and ride sites at each railway station and main entrances of the city, the development of intermodal centres, the development of dedicated cycle paths and promotion of soft modes. The public are informed about these measues through the communication campaign developed as part of MIDAS to inform residents, to get feedback on the proposed measures and to get people engaged in the process, leading to a public enquiry in the spring of 2009.

5.3.2   Objectives

The Travel Guide aims to make people aware of all the components of local mobility in the Grand Clermont area. The Travel Conference aims to develop an institutional coordination between local transport authorities to build a global, integrated and sustainable transport network at the Grand Clermont scale. The UTP communication campaign aims to inform the population, to prepare the public enquiry and to influence travel habits.

5.4   Implementation of the measures

5.4.1   Planned implementation of the measures

The first prototype of the Travel Guide was launched in spring of 2006. This version was then revised and a final version of the guide was published at the end of 2006 and distributed at the beginning of 2007. The usefulness of the guide was evaluated at the end of 2007 and at the beginning of 2008.

The Travel Conference was launched in February 2007, with a first meeting in June 2007.

The Urban Travel Plan communication campaign began in November 2007, with the XXI PT national meeting, then in a regional commercial exhibition in September 2008 and during the European Sustainable Mobility week. However, the key output of the communication campaign will be at the end of the year and continue until spring 2009 to prepare the official public enquiry.

5.4.2   Deviation from original plan

There has been no deviation for the Travel Guide, however, for the Travel Conference and the UTP communication campaign there has been a significant delay in implementation due to the local elections being held in spring 2008 and financial issues at SMTC in autumn and winter 2008.

5.5   Evaluation methodology and results

5.5.1   Indicators used for data collection activities

In order to provide the evidence of a quantifiable measure of success of the MIDAS measures in Clermont-Ferrand, impact, attitudinal and process evaluation indicators were established.

Impact evaluation indicators:
- Mass of atmospheric emissions
- Rate for each mode of travel

Attitudinal evaluation indicators:
- Awareness and acceptance of sustainable mobility services through the evaluation of the Travel Guide by the means of a questionnaire

Process evaluation indicators:
- Evaluation of the effectiveness of the Travel Guide and of the Travel Conference

5.5.2   Processes used to establish the baseline data collection

In order to collate baseline data in Clermont-Ferrand, three different processes were used for each of the 3 different measures described previously.

For the Travel Guide, a diagnosis of the situation was carried out at the beginning of the project. This process guided the design and conception of the guide, and a questionnaire was used to collate feedback on the prototype initially and then to collate comments on the usefulness of the guide and the information it provided

For the Travel Conference, a diagnosis of the situation was carried out to assess the best way to overcome a number of institutional barriers identified at the start of the project, and the results of what the Travel Conference has achieved at the end of the project.

For the Urban Travel Plan, a household survey was conducted to collate baseline information on travel habits and to seek participation in the process and also to get information on what the population is concerned about and wants for the future of public transport services in and outside the city. An urban multimodal model (MOSTRA) was also used to forecast the needs

in terms of transport and set priorities for the new transport plan. It is important, however, to note that these last two activities were conducted outside of the project, nevertheless, these have contributed to developing the MIDAS measures.

5.5.3 Summary of measures and results

Travel Guide

The Travel Guide was evaluated in the autumn 2008. Questionnaires were distributed to public transport season-ticket holders as well as the whole population during a regional commercial exhibition. A total of 285 questionnaires were returned and analyzed. One of the questions of the questionnaire asked: "Is this guide something new for you?" for which 86% of the respondents said yes.

The main reasons given for this positive response were:
- all the PT networks are detailed (21%)
- there are many maps for roads and PT at each scale (15%)
- it is an exhaustive document (10%)

However, 7% of the respondents also answered that the guide is not useful on a daily basis. To the question "*Is this guide easy to use?*" 79 % of respondents said yes:
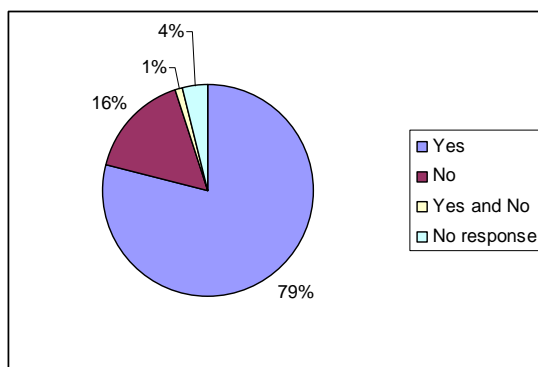
74% of respondents said that the presentation of the Travel Guide was suitable for them. 52% said this guide was useful on a day to day basis. Mainly because it is easier to plan journeys (25%), thanks to the information on PT (17%), thanks to the maps (16%). When asked if the guide helped to make the use of public transport networks easier, 65% of respondents said yes. Furthermore, when asked "Did you know the public transport networks of the Grand Clermont?" 68% answered no. To the question "*Can this guide modify your travel habits?*" 55% of respondents said yes:
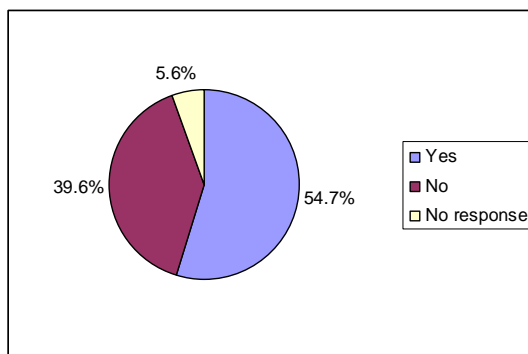
But it is important to note that most respondents to the survey are existing users of the public transport services, rather than car users.

As a whole, the objective of the guide was to promote the use of public transport, cycling and walking. From the results of the final evaluation of the guide in September 2008, it is appropriate to conclude that the Clermont-Ferrand Travel Guide has contributed to some extent to encourage residents to change their travel habits towards more sustainable modes of travel, through better information on existing services.

To summarise, the after evaluation results revealed that:
>   86% of the persons asked said the guide was something new
>   65% thought that the guide helps in using the public transport network
>   52% thought it useful in every day life
>   55% thought it could modify their travel habits

Travel Conference
Before the introduction of the Travel Conference, consultation on projects was always done through bilateral meetings between transport authorities, as and when needed, and there was no global and integrated transport network at the Grand Clermont scale.

The Travel Conference has brought the opportunity for the four local transport authorities of the Grand Clermont to build a global network for the area, called the Grand Clermont multimodal scheme. It is too early at the moment to build a new institution, using the basis of the Travel Conference, but it is the first step to achieving this. Some of the actions of this Grand Clermont multimodal scheme have been implemented, such as the intermodal centres in La Pardieu and Les Pistes, the express bus lane between Pont-du-Chateau and Clermont-Ferrand, and the increased frequency for the north-south railway.

The Travel Conference has also resulted in the introduction of new integrated fares, between two transport authorities: the SMTC (transport authority in Clermont-Ferrand) and the regional council. A new smart card was also introduced, with a wide advertising campaign.

Another important outcome to the Travel Conference is the commitment of three transport authorities in January 2008, (the SMTC, the Region, and the Department) to build a multimodal node at the main railway station.

Urban Travel Plan Communication Campaign
The Urban Travel Plan Communication Campaign, the third key action in Clermont-Ferrand, has suffered delays of implementation due to the local elections of spring 2008 and the financial issues that occurred in autumn and winter 2008, as explained previously. This has resulted in late implementation, and therefore it has not been possible to evaluate the effectiveness of the campaign. However, the quality of the design and wide spread communications means used for this campaign should prove successful, as the campaign was

drawn using previous experience in Clermont-Ferrand, but also from other MIDAS cities that had to go through similar processes for the adoption of their transport plans, such as Cork and Merseytravel.

Examples of the material used for the communication campaign on the UTP in Clermont-Ferrand:

Brochure: Display:

Two summary guides (36 pages and 16 pages, see below) of the Urban Travel Plan, which explain the processes and measures which are planned, were also produced in autumn and winter 2008.
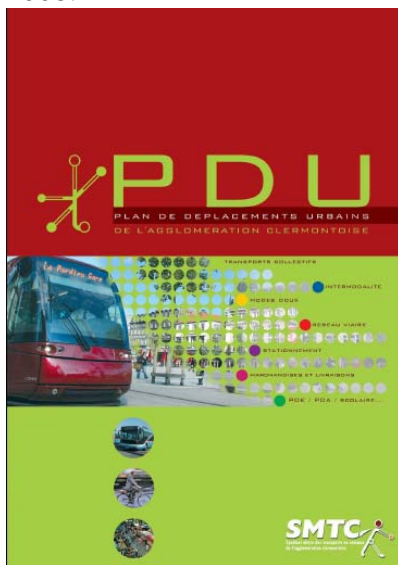
5.5.4 Summary of results in terms of energy, emissions, transport and awareness

Energy

In 2003, which is the baseline year for the Urban Travel Plan as it is the most recent household survey, a consumption of 236,159 Tonnes/year was recorded.

With the implementation of all the UTP actions (urban multimodal model), it is forecast that by 2025, the energy consumption will be 211,335 Tonnes/year which is a 10% less than 2003 and 8% less in real terms based on current trends.

Emissions

In 2003, there were 720,433 Tonnes/year of CO_2 emitted and 6,337 Tonnes/year of NOx and CH_4.

The forecast for 2025 is about 662,840 Tonnes/year of CO_2 which is 8% less than 2003, and 1,643 Tonnes/year of NOx and CH_4 which is 74% less. The latter result is mainly because the vehicles are cleaner and cleaner thanks to the European regulations.

Transport

In the 2003 household survey, 65% of the population travelled by car, 6% by public transport, and 29% by soft modes (walking and cycling).

The estimates for 2025 (based on previous trends and the likely impact of the policies of the revised UTP) are: 61% of the population travelling by car, 7% of people using public transport, 32% for people walking or cycling.

By 2025, in real terms based on current trends, the number of journeys by private car should decrease by 7%, the number of journeys by public transport should increase by 16% and the number of walk or cycle journeys should increase by 14%.

Society: Awareness and acceptance

The results of the Travel Guide questionnaire showed that 68% of the respondents are not aware of the public transport services available in the Grand Clermont. This is an area which needs the future attention of the public transport authorities in the whole Grand Clermont area.

5.5.5 Assessment of the success of each measure according to the TAPESTRY 7 stages of change model

In Clermont-Ferrand the key measures of the Travel Guide and the Travel Conference, implemented within the lifetime of the project, have contributed to assist the target groups in reaching stage 6 of the TAPESTRY model; **Experimental Behaviour**.

5.6 Lessons learnt

5.6.1 Barriers – how they were overcome

For the SMTC of Clermont Ferrand, the main barrier to the implementation of soft measures was institutional, whereby the different authorities working on the same territory did not work together and strategically plan their measures. However this barrier was overcome through the Travel Guide, and through the launch of the Travel Conference. This latter measure significantly contributed in breaking down the communication barriers between the different institutions and helped them to collaborate on common issues. It also established an ongoing arrangement for meetings and exchanges amongst the different authorities.

<u>5.6.2</u>   Participation of stakeholders

At the beginning of the project, a lower response rate then expected for the Travel Guide questionnaires indicated a lack of engagement with key stakeholders. Because of this, SMTC re-launched the survey with two specific target groups: the public transport season ticket holders who received the guide through the post, and all participants of a 10 day regional commercial event. And with those specific actions, the involvement of the stakeholders was much better.

With regards to the Urban Travel Plan, all associations involved in environmental matters, disabled persons, and public transport users were involved during the consultation process. The whole population will also be involved in this process through the public enquiry which will be held in spring 2009. The aim of the UTP communication campaign is to prepare this public enquiry to have the better involvement of the stakeholders.

6   CORK

6.1   General information on the city

The Population for the Cork Area Strategic Plan (CASP), which includes Cork City, the metropolitan and ring towns within a 45 minute commuting time was 377,576 in 2006 and employment grew by 4.5% per annum for the period 2002-2006. Gross Value Added per Capita (a derivative of GDP) for the South West Region is 45,000 €, approximately 23% higher than the national average. This is because of the high value production of employees involved in the pharmaceutical industries in the Cork area. Population density is highest in the City Council area at 303 persons per hectare. The demographic profile of the CASP area shows that there are more females in Cork City than in the County and that the labour force participation rate is higher (61%) in the County than in the City (54%).

The Sustainable Ireland Climate Change Strategy 2004 estimated that CO_2 emissions would increase by 157% by 2010 and suggested that an integrated approach to transport and land use planning should assist in achieving a more sustainable (and energy efficient) development for the country. Cork Area Strategic Plan (CASP) has embraced this policy and stated that a "total journey quality" should be designed to achieve a transfer of traffic to the railway and other energy efficient means of transport.

At present 96% of the national passenger transport is by road and car ownership in Cork has increased to 1.6 cars per household in 2006 in the metropolitan area. The CASP Update 2008 found that there are substantial deficits in meeting the targets set in 2000. For example, traffic has increased by 170% on the N25 national road and by 140% in the Dunkettle Road tunnel between 2000 and 2006. While there has been a substantial increase in patronage on the rail services, at the same time there has been a decrease in bus passenger patronage to 90% of the 2000 figure in morning peak hours. This has resulted in a shift in the modal split to more car drivers and car passengers.

Map of the Transport Strategy for Metropolitan Cork:
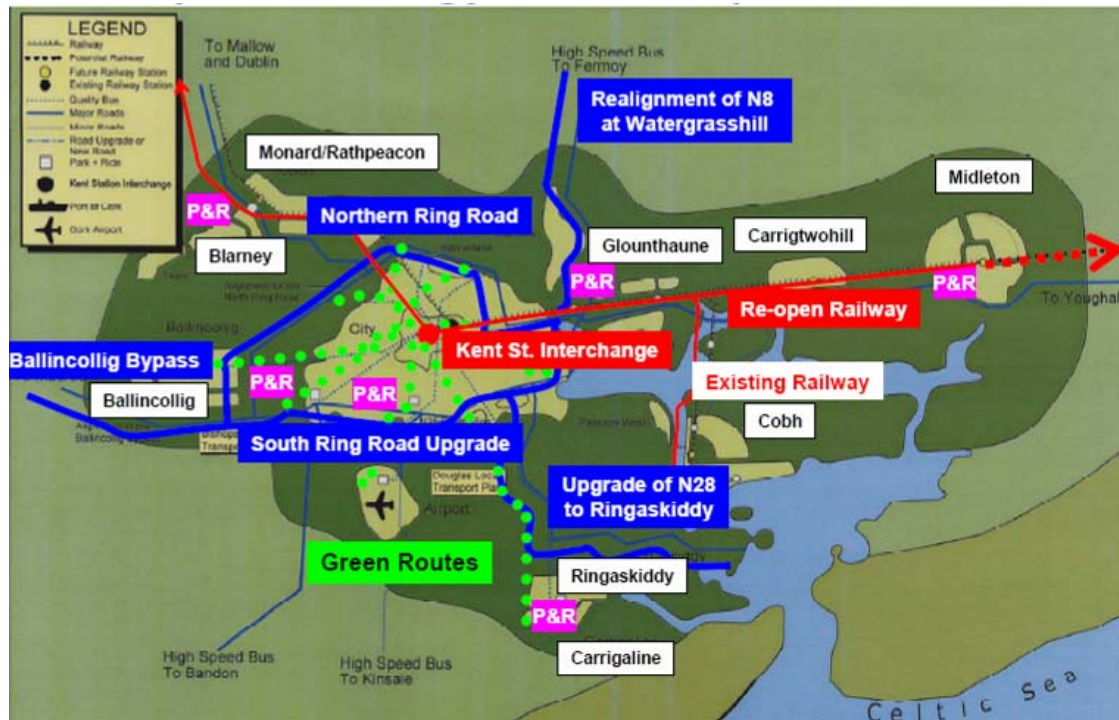
6.2   Target area

The MIDAS target area is the East Cork transport corridor from Cork City to Midleton. This corridor has been selected because there are opportunities to stimulate a significant modal shift away from the private car to more energy efficient modes by building on and developing energy saving initiatives that are already in the course of implementation, namely:

- The provision of an intensive suburban rail service linking Midleton and Cobh to Cork City by re-opening a disused line and enhancing services on an existing route; and
- The preparation and adoption by the planning authorities of detailed land use plans for that will stimulate population growth in locations that are close to the proposed stations on the rail network

The 2006 census suggests that the population of the corridor is about 46,000 persons. The existing planning policies for the area suggest that this will increase to about 70,000 persons by the year 2020. Within the corridor average annual growth in road traffic has been 7.7% over the last 6 years.

6.3   Introduction to the measures implemented

6.3.1   Description of the measures

As part of the consultation task, the project undertook a Personal Travel Diary and Attitudinal Survey of residents in the target area that were affected by the new suburban rail service being provided between Cork and Midleton. As a result of the survey carried out in 2006, the project implemented four soft measures relating to a lack of information, awareness, and co-ordination about more energy efficient modes of transport.

These 4 measures are:

- the Cork Connection brochure to promote information;
- posters promoting awareness of energy efficient measures;
- walking signs in City Centre; and
- a Promotion Day to disseminate information about the soft measures.

6.3.2   Objectives

The Travel Diary's objectives were:
- to assess the personal travel patterns of the residents
- to identify the deficit in provision of public transport services and the cycling and pedestrian facilities
- to analyse the resident's attitudes to public transport provision, energy efficient means of travel and awareness of the availability of public transport options.

The objectives of the four soft measures introduced were to improve connectivity and information to the residents (Cork Connection Brochure); signs showing the time to walk to the train station in Cork City; public transport posters at key employment areas and promotion day to disseminate information about the project. An evaluation of some of the original respondents was undertaken after the implementation of the soft measure to judge the effects of these measures on the target group.

6.4   Implementation of the measures

6.4.1   Planned implementation of the measures

A Travel Diary questionnaire was sent by post to all residents in the target area and this was supported by press releases in the newspaper and radio advertising in the area. Opportunities were offered to residents to reply via the email addresses (on-line) or by post.
Of the 6000 households in the area, a 1% return rate for the questionnaires was achieved. Following this survey, key stakeholders (local authorities and service providers) formed a Stakeholder Steering Group to discuss the project and this group assisted in making decisions about the type of soft measures and how they were to be implemented.

The soft measures were implemented in four different target groups:
- The Cork Connection Brochure was distributed to the whole target area (East Cork).
- The Walking Signs were implemented in the Cork City Centre only
- The Travel Options Posters were distributed to 18 key employers
- The Promotion Day was in the County Council offices with invited guests and the public.

"The Cork Connection" Brochure
This colourful brochure gives information on the public transport services available in East Cork, and gives a summary of the timetables and costs. It was distributed to the residents of the target area of East Cork.

Walking Signs to rail and bus stations

A total of 12 signs have been located throughout the city centre, within a radius of a 30 minute walk to the railway station. The signs highlight the time in minutes and direction to the railway station. The scheme also encourages people to report any defects on routes, so that these are rectified.

Examples of the signs used in Cork:

Poster campaign – "Faster, cheaper, cleaner"

The poster campaign was targeted at car commuters in the rail catchment area. The poster focuses on energy efficient transport options. 18 posters were displayed in high employment and prominent locations in September 2008.

Promotion Day

The event was held at the beginning of September 2008, following the holiday season. The aim was to promote the MIDAS measures and other soft measures, and to raise awareness on sustainable travel and energy issues.

Display used, and the promotion day:

6.4.2   Deviation from original plan

The data gathered in the Travel Diary was used to assess the potential for change of the travel patterns and attitudes to the new suburban rail service to Midleton. The implementation of the rail project has been delayed by one year and will now only be operational until mid 2009. Consequently an alternative approach to the implementation of Soft Measures had to be devised.

So as to achieve the best results for MIDAS, the Soft Measures have been implemented in the same rail corridor as originally proposed, as this corridor is currently served by the Cobh rail line. It is considered that this method is likely to give the best comparison for evaluation purposes with the data gathered using the Travel Diary. Given the significant amount of time and resources dedicated to the development and implementation of Soft Measures, it has not been possible to develop a web based integrated travel package as originally envisaged.

6.5   Evaluation methodology and results

6.5.1   Indicators used for data collection activities

In order to provide the evidence of a quantifiable measure of success of the MIDAS measures in Cork, impact, attitudinal and process evaluation indicators were established, for comparison with the original data gathered by the use of the Travel Diary. 100 of the original respondents to the Travel Diary agreed to participate in the evaluation process. An evaluation questionnaire was designed and forwarded to this group. 74 completed questionnaires were eventually received from this group.

Impact evaluation indicators:
- The change in each respondent's use of the various modes of travel was established.

Attitudinal evaluation indicators:
- The factors influencing the change of travel mode were established
- The factors remaining as barriers to change of travel mode were established

Process evaluation indicators:
- Awareness of MIDAS Soft Measures was established
- Effectiveness of each MIDAS Soft Measure in achieving a modal shift was also established

6.5.2   Processes used to establish the baseline data collection

The original Travel Diary data was analysed by RPS Consulting Engineers who prepared the "MIDAS Survey Analysis Report" in August 2007. It was not possible to use the full Travel Diary for the evaluation of the soft measures because of time constraints but more particularly because of the lack of a mechanism to ensure that the original respondents would carry out the Travel Diary process again. An effective evaluation questionnaire was designed by RPS Consulting Engineers, based on their knowledge of the original Travel Diary results. 100 of the original Travel Diary respondents agreed to complete the evaluation process by completing the evaluation questionnaire. Eventually 74 completed questionnaires were received from this group, using e-mail and postal responses.

6.5.3   Summary of measures and results

Modal Split
- 58% of respondents have not changed their travel patterns/modes of transport
- 11% of respondents use the train more
- 9% of respondents walk more
- 8% of respondents use the bus more

In relation to car use generally:
- 13% of respondents drive a car more
- 16% of respondents drive a car less
- this corresponds to a 3% decline in car use, and correlates with a 3% increase in persons travelling as car passengers

6.5.4   Summary of results in terms of energy, emissions, transport and awareness

Energy

Using the baseline data collected through the before evaluation activities, an energy report was prepared, from the Travel Diary results: 28.76 litres/person/week were consumed.
In view of the fact that evaluation was carried out using a subset of the original Travel Diary respondents, it has not been possible to derive an "after" level of fuel use per person/week, for comparison with the original. However the energy analysis carried out under MIDAS quantifies the energy saving which can potentially be derived from a modal shift away from car use. The evaluation under MIDAS also identified a modal shift as a consequence of the MIDAS actions. The energy report quantified the reduction in fuel use attributable to a 1% modal shift from car to train at 0.13 litres/person/week which is equivalent to a reduction of 0.5% in fuel use.

Emissions

The energy report derived from the Travel Diary results, established that there was an emission level arising from transport in the study area of 40.10 kg CO_2/head/week in the "before" evaluation. The situation with CO_2 emissions is directly comparable with energy use above, for the "after" evaluation. The evaluation under MIDAS also identified a modal shift as a consequence of the MIDAS actions. The energy report quantified the reduction in CO_2 emissions attributable to a 1% modal shift from car to train at 0.31 Kg/person/week which is equivalent to a reduction of 0.77% CO_2 emissions.

Transport

The "before" results of the Travel Diary Modal Split are:
- Car (88.3%)
- Train (3.4%)
- Bus (2.8%)
- Walk (3.2%)

When doing the "after evaluation" of the sample interviewed, approximately 11% increased their use of the train, 9% increased their walking and 8% increased their use of the bus.

Reasons for change of travel mode:
- Changes in employment/school/residential circumstances: 38%
- Public Transport Improvements: 25%
- Cost of driving/parking: 16%
- Fitness/Health: 9%
- Other reasons including road safety, environmental awareness etc: 13%

Barriers to change of travel mode:
- Unreliable Public Transport: 27%
- Unavailable Public Transport: 17%
- Poor integration of Public Transport: 17%
- Car required for work purposes: 3%
- Miscellaneous reasons: 3%
- No response: 34%

Society: Awareness and acceptance

The Travel Diary results showed that almost 90% of respondents in the target corridor were using unsustainable modes of transport (car) at the beginning of the project, and that the majority of these were single occupancy journeys to and from work (commuting).

Travel Diary Results showed that respondents had a willingness to consider alternative modes of travel (public transport). The challenge was to convert willingness to change to actual behaviour change.

In the 2008 evaluation activity, 13.5% of respondents interviewed are using more sustainable modes of transport. On average 7% of respondents said that the overall implementation of MIDAS soft measures influenced their changes to more sustainable travel patterns.

Additional Observations:
- 12% of respondents who were aware of the MIDAS soft measures now use sustainable travel modes more.
- 3% of respondents who were aware of the "Cork Connection" brochure use public transport more.

6.5.5   Assessment of the success of each measure according to the TAPESTRY 7 stages of change model

In Cork the key measures of the Cork Connection brochure, the walking signs, the poster campaign and the promotion day have contributed to assist the target groups in reaching stage 4 of the Tapestry Model; **Evaluation of Options**

6.6 Lessons learnt

6.6.1 Barriers – how they were overcome

The Travel Diary showed that there were a number of barriers to effective public transport in the target area:

- A lack of information about the connectivity between public transport operators. This was overcome by the preparation of the "Cork Connection" brochure giving times and fares of all the public transport service providers.
- Lack of awareness of the walking accessibility to the Train Station in Cork City. This was overcome by the erection of 12 signs showing the direction and time required to walk to the Train Station, which were strategically located in the city centre.
- A lack of awareness of commuters of the energy efficiency benefits and range of public transport services provided in the target area. This was overcome by the production of posters showing the energy efficiency of public transport (especially the train service) and the distribution of these posters at 18 strategic employment locations around the city (main universities, hospitals, local authorities, libraries and workplaces).
- A lack of co-ordination between service providers and local authorities in the promotion of more energy efficient measures of transport. This was overcome by the creation of the key Stakeholders Steering Group and the Promotion Day, which also included press releases.

6.6.2 Participation of stakeholders

The project set up a key Stakeholder Steering group comprising the City and County Council, the Town Councils of Midleton and Cobh, the Department of Transport and the transport service providers (Bus Eireann and Irish Rail), two universities, and the police.

The Steering Group met three times during the project to give direction to the tasks and to achieve consensus on the project measures to be implemented.

While the Steering Group was a very effective co-ordination body, it was difficult to achieve implementation of some of the soft measures using the group because it took a long time to achieve consensus, so it was more effective to implement individual soft measures using one of the stakeholders i.e. the design and construction of the walking signs in the city centre by the relevant local authority (City Council) proved very effective.

6.6.3 Formal/political decisions required

The Promotion Day involved the presentation of the project measures by the County Council Mayor and councillors and the Strategic Policy Committee Chairman was a member of the Steering Group. This ensured that any decisions taken on the project had sufficient political acceptance. Although the Stakeholder Steering Group, who also assisted in achieving political consensus (buy in), is a non statutory group and the CASP Update Plan is also non statutory, the MIDAS project outputs have been incorporated into the County Development Plan and the relevant lower level Local Area Plans, which are formal government documents. The key Stakeholder Steering Group will be well placed to assist in the preparation of future integrated transport plans for the target area and other transport corridors.

7   LIVERPOOL

7.1   General information on the city

Liverpool, the focal point for MIDAS in the UK, is in the conurbation of Merseyside in the North West of England. Merseyside has a population of around 1.37 million (of which 0.45 million live in Liverpool). Merseyside covers an area of 645 km², with a population density of 2,118/km².

In 2006, average car ownership per person in Merseyside was 0.4, representing considerable growth in recent years, but still significantly below national levels. The Gross Value Added (GVA)[7] per person for Merseyside has increased by 62% from 1995 to 2004, although in comparison to the regional and national average over the same period, it lags behind considerably. The latest data for 2005 shows Merseyside's GVA per head has grown from £12,448 to £12,784, a rise of 2.8% against 3.1% in the North West and 3.6% for the UK. The GVA per head for Merseyside is 71.7% of the UK average. Weekly gross earnings for Merseyside have consistently been below that of the UK national average.

7.2   Target area

The target area, Liverpool, is one of five district councils of Merseyside (Knowsley, Liverpool, Sefton, St Helens, and Wirral).
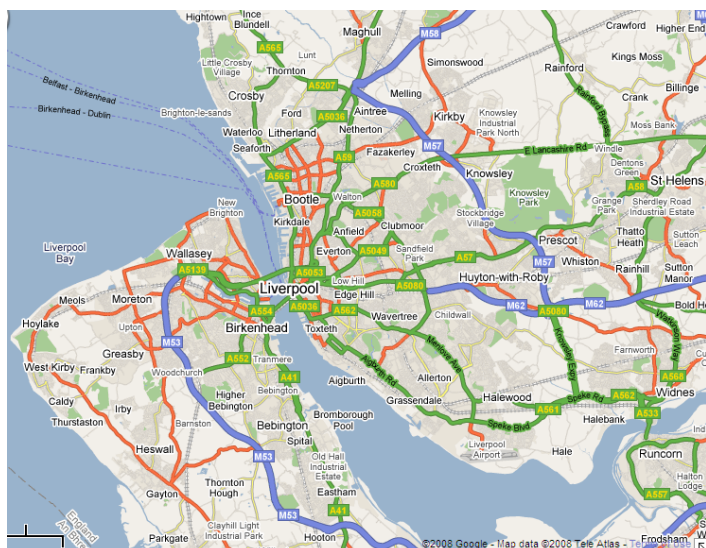
Map of the 5 Districts of Merseyside:
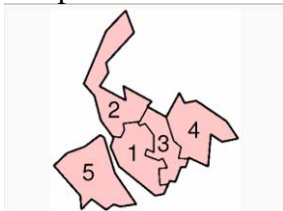
1. Liverpool
2. Sefton
3. Knowsley
4. St Helens
5. Wirral

---

[7] GVA measures the contribution to the economy of each individual producer, industry or sector in the United Kingdom.

7.3 Introduction to the measures implemented

7.3.1 Description of the measures

In Liverpool, for each of the four broad soft measure categories developed in MIDAS, a number of measures were developed and implemented:

Education & Awareness:
- On-the road training to 4,500 young people, age 10-11 years.
- National Training Standard for Cycle Training, " Bikeability"

Participation & Consultation:
- Study on the psychology of travel behaviour, with focus groups, hall tests, and large scale survey

Information, Advice & Marketing:
- Developed marketing and awareness campaigns (for cycling, car share, car club, using public transport, etc)
- Developed new branding for TravelWise Merseyside campaigns

Examples of the new branding used by Merseytravel:

Planning & Co-ordination:
- Production of a travel plan pack for use as a resource for organisations looking to develop and implement their own travel plan
- Working with developers, carried out workshops held with district planners, and the production of a Supplementary Planning Document (SPD)

7.3.2 Objectives

The overall aim was to conduct market research and test the effectiveness of advertising campaigns to ensure that the 'TravelWise' campaign was effectively positioned, targeted, monitored and delivered. The purpose of the research in Liverpool was to raise public awareness (MIDAS objective was for a 100% increase in awareness of target group) of sustainable transport options in order to improve take up of public transport, car sharing, cycling and walking as positive alternatives to single occupancy car use (MIDAS objective

was for traffic reduction and energy savings for target group). Specifically the objectives of each of the measures were as follows:

- Education & Awareness: to train people to cycle more safely.
- Participation & Consultation: research to establish who the people susceptible to change were. Once these people had been identified, campaigns could be targeted on changing their behaviour.
- Information, Advice & Marketing: the purpose was to send out a consistent, well-targeted campaign message on promoting sustainable travel promoting brand awareness and loyalty.
- Planning & Co-ordination: working with developers so that organisations had access to a "dip-in" resource as and when required.

7.4   Implementation of the Measures

7.4.1   Planned implementation of the measures

The first phase required wide scale participation and consultation with people in the target area and involved an extensive study into the psychology of behaviour and behaviour change. It incorporated three research techniques; focus groups; hall tests and a large scale survey. Phase two involved wide scale consultation of target audiences by way of pre and post campaign testing, the results of which fed into the branding of TravelWise.

The campaigns were as follows:

- CYCLING :
    - July 2006 - 'Let's cycle into summer', post campaign evaluation
    - September 2007- 'Summer 2007 cycling campaign', post campaign evaluation

- CAR CLUBS:
    - July 2006, pre-campaign research
    - September 2006, campaign testing
    - December 2006, interim campaign evaluation

- CAR SHARE:
    - July 2006, pre-campaign research and market testing
    - December 2006, market testing
    - March 2007 interim campaign evaluation

- TRAVELWISE/Car free day/TravelWise rail:
    - July 2006, pre-campaign research
    - August 2006, market testing
    - September 2006, post campaign evaluation
    - August 2007, market testing
    - February 2008, post campaign evaluation

The production of a travel plan for use as a resource for organisations looking to develop and implement their own travel plan was produced and made available to businesses.
Working with developers, land-use and district planners (transport integration) to explain the role of transport and accessibility in housing and employment site development was also an area that was exploited in order to inform and promote the importance of soft measures.

7.5 Evaluation methodology and results

7.5.1 Impacts and Indicators used for data collection activities

In order to provide the evidence of a quantifiable measure of success of the MIDAS measures in Liverpool, impact, attitudinal and process evaluation indicators were established. These are listed as follows:

Impact evaluation indicators
- Air quality, patronage, modal shift

Attitudinal evaluation indicators
- Awareness, information and usage of sustainable modes of travel:
  - Surveys to examine the effectiveness of various campaigns (Car share campaign; "It's Bike Time" campaign; Public transport campaign targeting Estuary Business park commencing; Car Free Day; Public transport/rail marketing campaign); and surveys with the business community

The innovative 'Bikeability' cycle training was aimed at making cycling more attractive and increasing the number of cycling trips made. The aim of the 2006 campaign was to raise awareness of cycle information; encourage a positive perception of cycling and to sign post to various resources and opportunities. In addition to the aims above the 2007 campaign also aimed to encourage people to contact TravelWise for information.

The car club campaign aimed at promoting a working alternative to car ownership. The campaign needed to increase awareness in order to increase membership, increase usage and reduce car ownership amongst city centre residents and businesses. Likewise, the car sharing campaign needed to increase awareness and understanding of what car sharing was and looked to create a positive perception of car sharing. It was expected that car sharing would increase generally and that as a consequence there would be an increase in registration of car sharers on the database from 350 to 2000.

With respect to TRAVELWISE/Car free day/TravelWise rail, there were a series of adverts promoting rail use which highlighted the personal benefits of travelling by train and promoted frequency, reliability and quality. Campaigns to promote the message of TravelWise specific to individual modes (bus, cycling, train and walking) were promoted on bus back adverts where the overall aim was to promote the personal benefits of making 'smarter' travel choices. The design of these resources was influenced by key findings of campaign design and testing research in 2007.

Process evaluation indicators
- Online survey: To monitor inter alia, modal shift an on-line survey was developed to assess the effectiveness of newly implemented travel plans.

7.5.2 Processes used to establish the baseline data collection

The evaluation work was carried out in 2006-2008 and was conducted in 2 phases:

Phase 1 - Initial evaluation phase. This phase of the research was used to understand where respondents were situated on the TAPESTRY 7 stages of change model. This information was then used to identify groups of people who were more likely to be susceptible to changing their travel behaviour according to a selection of more general attitudes and personal characteristics. It was possible to establish a 'catalogue' of language, attitudes and motivations for use in designing and monitoring the TravelWise campaigns.

Phase 2 - Campaign testing, implementation and evaluation. The objective of this phase was to provide campaign testing, implementation and evaluation support in the delivery of the TravelWise advertising campaigns which were aimed at those target audiences highlighted by the Phase 1 research.
Each of the campaigns being run required some or all of the following; pre-campaign testing; market testing; post campaign evaluation.

CYCLING - The 2006 Campaign signposted various cycling opportunities and resources being promoted throughout the summer. Four hall tests were conducted in 3 different areas of Liverpool where 285 self completion questionnaires were administered and completed. In 2007, the advertising campaign involved 7 separate bus back adverts on 300 buses across Merseyside and different rail poster designs at 218 sites. Also, to promote 'Bike week'; 'Bike time'; and the provision of cycle maps. 312 On-street questionnaires were completed.

CAR CLUBS- The campaign was evaluated in the form of 300 on-street surveys.

CAR SHARE - 300 on-street surveys were completed.

TRAVELWISE/Car free day/TravelWise rail - Roadside, newspaper, magazine, and bus back advertising. Hall tests in central Liverpool were conducted with 105 questionnaires being completed and in 2008, 472 on-street questionnaires were completed.

7.5.3   Summary of measures and results

Transport

Cycling
The campaign proved successful in encouraging 'early adopters' and promoting cycling as a positive activity that improves health and fitness (72% of people took this view) in fact 13% of non-cyclists reported that the campaign had encouraged them to cycle more. However, there was a low level of awareness as a consequence of the communication channels i.e. where the advertisements were placed. Most liked were leaflets and adverts in local newspapers. Of all the campaign material the cycling 'leaflet, incorporating the slogan, 'It's Bike Time !' was thought to promote the most positive view of cycling (73%) causing 32% of respondents to cycle more.

Car Club
During the pre evaluation there was a low recognition of car clubs (18%) though 5% of those who knew what a car club was said they would use a car club. Surprisingly, there was no increase in the recognition of car clubs (still recorded at 18%) after the MIDAS measures were implemented. However, recognition of car clubs was far higher with males (age 24-65) than females of the same age. 8% said they would use a car club which was a 3%

improvement and suggests that willingness to try something new appears to increase with an increase in awareness.

Car Share

Prior to the implementation of MIDAS measures, knowledge and awareness of car share was very limited (only 1% of respondents were aware of car clubs) and few remarked that they would seek out more information on car share in the future. After the implementation of measures there was an increase (up to 8% awareness) and of the total number of respondents 85% thought that car share was a good idea, 34% thought it would be a realistic option for them. Again, this suggests that with an increase in awareness levels, behaviour change becomes more of a reality.

TravelWise (Rail/Bus/Cycling/Walking)

A low awareness and recognition of the TravelWise brand was evident prior to the campaign (26%). After the implementation of the MIDAS measures this increased to 42%. Moreover, young people of the target market (i.e. 'convertibles') reported that the campaign made them feel more positive about each mode being promoted which is a very positive outcome.

As part of the research and evaluation of the TravelWise Merseyside programme a set of face to face surveys was designed and administered in order to evaluate a Personalised Travel Planning (PTP) intervention with 3500 households in the Childwall area of Liverpool. Interviews were conducted with 200 respondents in each of three categories:

- households that participated in the PTP intervention;
- households in Childwall that were contacted but which did not participate in the PTP intervention;
- households in a control area chosen as the closest possible match in terms of access to transport services and socio-economic characteristics.

Within the group of participant respondents, 36 people were identifieded who had changed their travel behaviour or stated that they intend to change.

The PTP intervention appears to have accentuated the propensity for walking, primarily at the expense of car use, but also at the expense of bus use. Rail travel and cycling also appear to have become more common as a result of the PTP project, but levels of use remain low, so the results are subject to greater uncertainty.

In terms of *number of trips* the main changes for the participant changers are:

- Walking: mode share increase from 22.1% to 36.6%, which represents a relative increase of 66%
- Bus: mode share decrease from 15.5% to 10.9% , which represents a relative decrease of 30%
- Car: mode share decrease from 56.4% to 44.5%, which represents a relative decrease of 21%

When considering the motivating factors within the participant group it appears that the PTP intervention has successfully capitalised on two specific issues. For changes between the motorised modes the desire to reduce overall travel costs appears to have been the primary motivation for changing behaviour, which is not surprising given the backdrop of high fuel prices during 2008. In contrast, the increase in walking appears to have been primarily motivated by the opportunity to increase or take advantage of the leisure and fitness aspects

that walking offers. This is reflected by feedback from participants who state that they have become more active and become more aware of their options.

The travel behaviour results translate to the following estimated levels of CO_2 emissions from personal travel:

- On average a typical non-contacted non-participant produces 2.33kg of CO_2 per day from their travel.
- A participant who has not consciously changed appears, on average, to produce 2.24kg of CO_2 per day, i.e. about 4% less as a result of their pre-disposition to sustainable travel.
- The participants who have consciously changed appear to have reduced this further to around 2.10kg of CO_2 per day, on average; i.e. a further reduction of about 6.1%.

It is clear that participants consider issues around the transport system that is available to them to be more of a hindrance to changing travel behaviour than obvious changes to the way that the PTP interaction is managed. In particular, the level of bus use in the whole participants group (i.e. not restricting to the 'changers') is similar to that in the non-participants. When considering the participant changers, there appears to be a decrease in bus use (though not as large as the decrease in car use) as these participants changed to walking for short journeys. This, combined with the detailed comments of both participants and non-participants, suggests that a significant improvement is required in the standard of bus services in the intervention area for PTP (or indeed any other intervention) to make a substantial change in mode share towards bus.

Another piece of research, with the business community, regarding the effectiveness of measures to address congestion (for example workplace travel plans) linked to developing the case for a Supplementary Planning Document (SPD), showed some very interesting results. Some 60% of businesses said that they had experienced some negative impact on their business due to delays in delivery due to bad traffic issues, and a third of those questioned believe that the situation has deteriorated over the last five years. Furthermore, a large majority of businesses fear that delays have become worse, both for business travel (90%) and for staff commuting (67%). 47% of employers questioned perceive delays due to transport problems or congestion as being a problem for their businesses – seeing it as a waste of time for both staff and clients. 80% of employers identified that staff were sometimes held up getting into work, occasionally meaning that they arrived tired or stressed. On the other hand, employees appear to have become proficient at adapting their behaviour to minimise the impact that transport delays have on their work. As such, almost 60% have changed the way they travel to work, whilst others try to catch up on their work throughout the day, or work later or through lunch hours. Less than 20% believe they underachieve as a result.

Society: Awareness and Acceptance

As a consequence of the implementation of MIDAS measures the level of awareness is reported to have increased for all measures (see above).

The research provided an insight into the perception of transport modes and the reasoning behind modal choice. In this way it was possible to understand people's motivations and use this knowledge to inform and direct the campaigns for optimum effect.

Study on the psychology of travel behaviour helped to establish a catalogue of language, attitudes and motivations for use in designing and monitoring TravelWise campaigns. The research also identified that there was 30% of the population who were susceptible to change. Important motivational factors effecting modal choice were identified and these provided an insight into existing perceptions of travel. The study also informed Merseytravel that the most effective way of communicating the message of TravelWise was local radio and local newspapers.

7.5.4   Assessment of the success of each measure according to the TAPESTRY 7 stages of change model

In Liverpool the key measures of the different marketing campaigns with new branding, the travel plans and the work with developer and new planning guidance have contributed to assist the target groups in reaching stage 4 of the TAPESTRY model; **Evaluation of Options** The results of the effects of the cycle training, however, shows that this measure has contributed to assist the target groups in reaching stage 6 of the TAPESTRY model**; Experimental Behaviour**

7.6   Lessons Learnt

7.6.1   Barriers – How they were overcome

A significant barrier with respect to cycling was that people were simply not taking-up cycling. It was identified that the advertising campaign needed to be better positioned i.e. leaflets /local press instead of adverts on the back of buses (as this was not identified as a favoured place for adverts); campaigns were targeted where the cycling infrastructure was good and the personal benefits of cycling were quantified (i.e. "cycling saves you money" - provide details of the savings via case studies) so as to provide people with clear, concise information about the benefits.

A further barrier was that people did not understand what a car club was. Therefore, it was agreed that in the future it would be important to clarify the concept early on in the campaign and to promote the idea that it is good value for money.

Thirdly, people thought that car share was not a realistic option because of issues relating to availability and practicality. Therefore, the feasibility of car share was specifically promoted and groups of people susceptible to car sharing more closely targeted.

With respect to TravelWise (Rail/Bus/Cycling/Walking) a barrier identified early on was that people did not recognise the brand TravelWise. Testing visual recognition was as important as prompted verbal recognition in the survey design.

7.6.2   Participation of stakeholders

As part of MIDAS, Merseytravel also conducted a 'Communications Audit', on their communications strategy for the Merseyside Local Transport Plan (MLTP). The research was intended to gather a snapshot of representative views across a wide range of people involved in some way with the MLTP partnership.

The telephone interviews were held with partners, stakeholders and user groups. The workshop was aimed at staff who implement or support the MLTP policies in a more direct way, for example as engineers, policy officers, road safety officers or TravelWise officers.

The aim of both the interviews and the workshop was to:
- understand the range of communication currently undertaken by MLTP
- hear views over how effective it is
- gather views over potential improvements
- assess communication needs internally and externally.

As part of the audit, a standard series of questions was asked of interviewees. These were asked in two ways:
- through telephone interviews with a selection of MLTP's partners and stakeholders
- through group face to face discussion at the workshop event.

Responses were recorded individually. A summary of these responses is provided here, broken down by the individuals' areas of work. Insights from the group discussions are also included here, within the responses:

The need for ownership

A greater level of ownership of the LTP is both desired and required. There is widespread recognition of the value of the LTP and TravelWise. There is also, however, a strong first loyalty to the employer or area of work. Partners often see their "day job" as being their role with a district council or other partner, and the LTP role (and particularly the communications role) as being a "bolt-on" or extra.

Equally, there was widespread recognition that the LTP was often understood by important audiences only in terms of single projects, rather than a coherent whole.

Communications, whether through partnership meetings, working groups, briefings or written material was valued. However, it did not seem to have generated the level of widespread and deep ownership that is required for the communications strategy to be effective.

The need for clarity

There is a pressing need for clarity, simplicity and accessibility in the language of the LTP. Documents, briefings and concepts are often felt to be excessively weighty, complex and hard to understand. While technical documents are appropriate for certain purposes, there was clear desire among all audiences for a simple summary to be the starting point of all communications.

The need for co-ordination

There is a need for greater co-ordination of communications. This applies to communications by the LTP partnership and by the partners themselves. It applies also to the link between local (district level), Merseyside-wide and national campaigns.

Greater co-ordination would allow MLTP to speak more easily with one voice, using a series of consistent messages and supported by a network of spokespeople.

7.6.3   Formal/political decisions required

Merseytravel and the five Merseyside Local Authorities (Knowsley, Liverpool, Sefton, St Helens and Wirral Councils) form the Local Transport Plan partnership. TravelWise is the partnership's campaign to help people on Merseyside make smarter travel choices. A steering group, comprising representatives of Merseytravel and each of the five Merseyside Local Authorities shape the budget and programme for the campaign, under the guidance of the Merseyside Strategic Transport & Engineering Group, which comprises senior officers from all the LTP partners. The political approval comes via the Merseyside Strategic Transport and Planning Committee, which comprises councillors from each of the LTP partner Authorities.

Merseytravel is what is known as the "Accountable Body", which means they hold the purse, so all procurement and expenditure has to be approved by the Merseyside Passenger Transport Authority, the political arm of Merseytravel.

7.6.4   Financing

Each of the LTP partners contributes to the campaign budget, and a percentage of the Government's Integrated Transport Block, which is a capital grant to the partnership is "top sliced". The Merseyside TravelWise team also bid for funds to support particular initiatives, a prime example being the £346,000 from the Government towards the Bikeability project, which has formed a central part of MIDAS. This is the biggest cycle training grant in England.

8   SUCEAVA

8.1   General information on the city

Suceava City lies in the North-East part of Romania, 450 km from Bucharest, and has been the capital of Suceava County since 1388. The municipality of Suceava, with a surface of 52.1 km² , lies on the E 85 European road, on the Suceava riverside, in a highland area situated at a medium altitude of 400 m from the Black Sea level. The population of Suceava is 118,500 inhabitants at present, with 287 inhabitants who own a car for every 1000 people.

Map of Romania

8.2   Target area

The groups targeted by MIDAS activities are the citizens, employees of public and private companies, car owners, pupils of primary and secondary schools and university students.

8.3   Introduction to the measures implemented

8.3.1   Brief description of the measures

A variety of measures have been implemented in Suceava within the framework of MIDAS. The provision of information to raise awareness on traffic and environmental issues and on the level of pollution in the Low Emission Zone (LEZ) and city centre was a key measure for Suceava. This information was made available on the Suceava Municipality website: http://www.primariasv.ro/index.php?option=com_content&task=view&id=246&Itemid=93, and also through folders, leaflets, and adverts on the local radio.

Special promotional activities to raise awareness regarding environmental impact of transport, were also organised, and also to encourage walking, cycling and use of clean public transport. Citizens were involved in actions to promote alternative transport modes and clean vehicles.

Conferences and seminars about sustainable mobility took place twice a year in the university, schools, high schools and employment sites (with participation of private car owners, car dealers, traffic police and the Environmental Protection Agency (EPA));

Special events were organised in the LEZ and the city centre in order to promote it and to increase people's support for alternative fuel vehicles and environmentally friendly ways of travelling.

Touch screen systems have been located in public institutions to encourage and promote sustainable modes of travel.

MIDAS and public transport information was made available on the VMS (Variable Message Sign) located in the city centre.

Furthermore, local workshops in high schools, schools and public institutions have taken place in Suceava in order to promote travel plans. A total of 5 school travel plans, 5 high school travel plans, 2 public institutions and a private institution travel plans have been implemented and evaluated.

Promotional activities included sending information on travel plans, alternative fuels and sustainable ways of travelling at national level to Romanian association of municipalities

(around 45 cities), to Environmental Protection Agencies from each major cities in Romania, to public transport operators and to public institutions.

Work was carried out with employees from Suceava Municipality, Suceava Local Council and other public institutions, in order to change their behaviours regarding travel and environmentally friendly modes.

As well as effective partnership working with these new target groups, existing stakeholder groups, including Health and Education Authorities, local environmental organisations and the EPA, have been actively involved with MIDAS activities.

8.3.2   Objectives

Three key objectives were identified in Suceava, as guiding principles for any actions implemented within MIDAS:
- Raising awareness of the need to adopt sustainable travel habits;
- Promoting the Low Emissions Zone of the city;
- Educating the younger generations to use sustainable modes of travel.

8.3.3   Planned implementation of the measures

It was anticipated that the measures would be to be implemented in the 3 years of the project, from 2006 to 2009. Travel plans and touch screen system were to be implemented in 2008.

8.4   Evaluation – methodology and results

8.4.1   Impacts and indicators used for the data collection activities

The major expected impacts concerned awareness (attitudinal indicators), travel behaviour and emission level (impact indicators). For the assessment of each of them, specific indicators and tools were designed:

Impact evaluation indicators
These included:
- Number of citizens/employees using different transport modes: Travel plans/behaviour
- Number of passengers on the Ecoroute: Passenger count in the eco route zone
- Traffic volume : Permanent counts and manual intersection counts Ana Ipastescu St, 1 Mai boulevard, G Enescu St, Carlea Unirii St
- Monitoring of emissions: CO_2, NO, SO_2, PM_{10}, Modelling based on counts and awareness surveys

Attitudinal evaluation indicators
These included:
- Awareness and acceptance:
  Before:
  - Printed questionnaire - info on behaviour, level and demand.
  - Attitude survey on public transport, transport, environment etc.
  - Focus group on public transport, cycling as part of the marketing campaign

After:
- Printed and internet based questionnaire, to collate data on behaviour changes and opinions with regards to the information available and the level of demand.

8.4.2   Processes used to establish the baseline data collection

The baseline data collection consisted of measurements and surveys to provide the inital information.

8.4.3   Summary of measures and results

Emissions

From the data collated by Suceava Municipality on the different levels of pollutants since 1999, there has been a positive effect in the reduction of atmospheric pollutants, however this is mostly due to new technologies implemented and new measures to reduce pollution of transport modes and waste treatments.

Specific data on pollutants gave the following results:

Sulphur dioxide emissions (SO_2): From 1999 to 2006, SO_2 annual average in Suceava city centre was 0.14 µg/m^3, while it was no more than 0.04 µg/m^3 annual average in 2007. This represents a 71% reduction in this area. However, in reality, traffic volumes have increased. The reduction in SO_2 emissions is likely to be due to the increase in the number of vehicles with at least Euro 3 engines and powered by less polluting fuels such as LPG.

Nitrogen dioxide compound (NO_2): From 1999 to 2006, *NO_2* annual average was 13.44 µg/m^3 in Suceava city centre. In 2007, it reached 15.75 µg/m^3 (a 17% increase).

Airborne particulate matter of 10 micrometers in diameter (PM10): From 2003 to 2006, PM10 annual average in Sediu APM $C_{medie\ anuală}$ (µg/m^3) = 44.5 µg/m^3, while it was 41.81 in 2007; from these figures, no noticeable evolution can be highlighted during MIDAS lifetime.

The increasing number of motorised vehicles in traffic, leading to a PM10 powder increasing evolution in Suceava City, appears here as the main issue.

Volatile petroleum composite: This type of pollutant reached its higher limit in Suceava city centre in 2000 (0.01748) and has decreased to 0.00159 in 2007.

Transport

The average change in travel habits (which includes "very often", "frequently" and "occasionally") from before and after results is positive regarding car usage with a drop of almost 3%, however, all other modes also seem to have had a drop in usage.

Usage of transport modes - Before:

Before data	Very often	Frequently	Occasionally	Never	Total	Average (Very often, Frequently, Occasionally)
BUS	33,30%	28,30%	31,70%	6,70%	100%	31,10%
MINIBUS	15,00%	26,70%	51,70%	6,70%	100%	31,13%
PERSONAL CAR	30,00%	23,30%	20,00%	26,70%	100%	24,43%
TAXI	10,00%	1,70%	61,70%	26,70%	100%	24,47%
BIKE	5,00%	6,70%	21,70%	66,70%	100%	11,13%
ON FOOT	31,70%	38,30%	15,00%	15,00%	100%	28,33%

Usage of transport modes - After:

After data	Very often	Frequently	Occasionally	Never	Total	Average (Very often, Frequently, Occasionally)
BUS	23,00%	26,00%	42,00%	9,00%	100%	30,33%
MINIBUS	11,00%	27,00%	54,00%	8,00%	100%	30,67%
PERSONAL CAR	26,00%	17,00%	22,00%	35,00%	100%	21,67%
TAXI	6,00%	4,00%	55,00%	35,00%	100%	21,67%
BIKE	5,00%	6,00%	15,00%	74,00%	100%	8,67%
ON FOOT	25,00%	24,00%	34,00%	17,00%	100%	27,67%

Difference "before/after":

	Before Average (Very often, Frequently, Occasionally)	After Average (Very often, Frequently, Occasionally)	Average Change (Very often, Frequently, Occasionally)
BUS	31,10%	30,33%	-0,77%
MINIBUS	31,13%	30,67%	-0,46%
PERSONAL CAR	24,43%	21,67%	-2,76%
TAXI	24,47%	21,67%	-2,80%
BIKE	11,13%	8,67%	-2,46%
ON FOOT	28,33%	27,67%	-0,66%

Personal Car users

Within the project lifetime, the number of respondents who said that they were using their car daily to travel to work decreased by 3%. Another interesting result is that the number of respondents who said they use their car only when they "strictly need" it, i.e. when they don't have any other options, increased from 18% to 28%. Which indicates that habitual use the car for all trips is gradually changing, and that people are thinking more about alternative modes.

Utilization of personal car (2005)		% of respondents
DAILY DISPLACEMENT AT WORK	230	24%
WHEN I'M OUT FOR SHOPPING	220	23%
FOR PERSONAL PLEASURE	210	22%
ONLY I HAVE STRICTLY NEED	170	18%
ALWAYS WHEN I WALK OUT IN TOWN	110	12%
TOTAL RESPONDENTS	940	100%

Utilization of personal car (2008)		% of respondents
DAILY DISPLACEMENT AT WORK	250	21%
WHEN I'M OUT FOR SHOPPING	260	22%
FOR PERSONAL PLEASURE	270	23%
ONLY I HAVE STRICTLY NEED	330	28%
ALWAYS WHEN I WALK OUT IN TOWN	90	8%
TOTAL RESPONDENTS	1200	100%

*Using public transport rather than the private car*

Based on these survey results, it could be concluded that respondents did change their travel habits for the better, given that the percentage saying they intend to make greater use of public transport has increased from 23% to 27%. However, it cannot be assumed that MIDAS

has been the main driver of this change, as the investment in public transport infrastructure made over the last 3 years has resulted in a more attractive service.

Do you intend to use PT instead of your personal car?		
BEFORE Data 2005		% of respondents
YES	140	23%
POSSIBLE, IN SPECIAL CONDITIONS	340	57%
NO	120	20%
Total respondents	600	100%

Do you intend to use PT instead of your personal car?		
AFTER Data 2008		% of respondents
YES	270	27%
POSSIBLE, IN SPECIAL CONDITIONS	530	53%
NO	200	20%
Total respondents	1000	100%

Local indicator: Average number of passengers per month for LTC vehicles
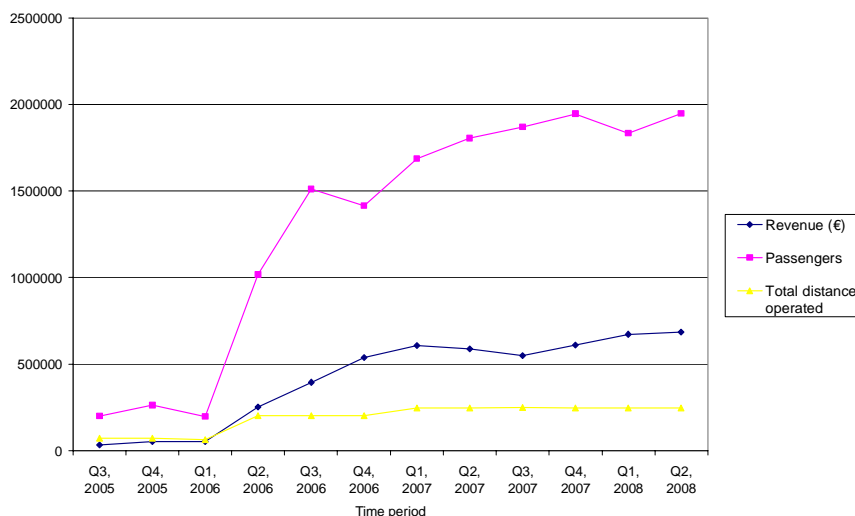
From April to December 2006, 438,118 passengers / month used LTC vehicles; from January to December 2007 609,156 passengers / month were counted and 630,144 passengers / month from January to June 2008.

This increase shows that MIDAS did contribute to the increase in the number of public transport passengers; this means that alternative ways of travelling are more popular in Suceava in 2008 than they were before.

Society: Awareness and acceptance

Perception of the public transport mobility option

From the study of perceptions with regards to public transport, Suceava Municipality has observed that since the beginning of the project, people are expecting more from the public transport services.

In 2005, the profile of potential users was less demanding and unaware of what a modern public transport can offer. Respondents did not show much interest for aspects like: the "physical comfort during trip" (30% said this was "*not very important*"), "accessibility of the PT vehicles within the bus stops" (36% said this was "*not important*"). Changes in behaviour and demands were obviously expected to occur and therefore, this was a task to be earlier taken up by the Suceava project team to raise citizens' awareness for what a modern public transport fleet should mean.

In terms of mobility needs, the interviewed people clearly pictured their expectations, if we analyse the results obtained for the following factors: insufficient vehicles provided by LTC (only 15 responses rated as "not very important" factor when deciding to travel by private car and 154 responses considered as an "important" and "very important" factor to avoid public transport in favour of private cars), insufficient area coverage of public transport vehicles networks, poor LTC service, costs of the trip and personal security during the trip.

The responses indicate a negative perception of the general quality of the services: bus routes, number of buses, frequency of bus stops maintenance, price, timetables, security during trip, and poor information network. Also, it appears that short duration of the trip is very important for citizens and that to a greater extent; they would choose a faster way of transportation, resorting to private cars.

The public perception regarding implementation of "soft measures"

People chose their car more as a first option in 2008 than in 2005, but when merged with those who mentioned it as the second option, no noticeable evolution can be observed between 2005 and 2008.
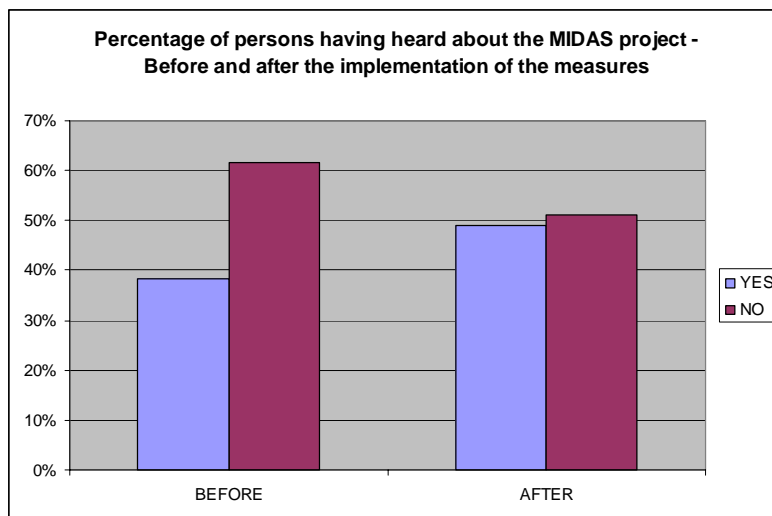
EVOLUTION OF ANSWERS BETWEEN BEFORE AND AFTER SURVEYS

The public perception regarding implementation of "soft measures"			
EVOLUTION 2008/2005	Top most		Less
Rank in the answers	1et 2	3	4 et 5
I CHOOSE MORE THE CAR	-1%	33%	-18%
I SUPPORT REDUCTION OF NOISE AND POLLUTION	36%	-40%	-12%
I CHOOSE WALK OUT	23%	-12%	-18%
I CHOOSE THE BIKE	23%	110%	-23%
I CHOOSE LOCAL PUBLIC TRANSPORTATION WITH TPL BUSES	-17%	87%	-13%

When talking about the measures which are the "most popular" and gain higher support from the general public, it seems that in general, the measures connected with traffic (noise, pollution: +36% between before and after surveys when options 1 & 2 merged) and travel behaviour (alternative ways of travelling, like walking and cycling) are at the top. These results can be considered as positive, although public transport seems to be less favoured, with 17% less people who see it as an important measure. Generally speaking, it is not possible to conclude that MIDAS measures alone improved the general perception regarding alternative ways of travelling at local level. However, MIDAS could be considered as a starting point for future projects concerning changing in travel behaviours, although to obtain better results it is obvious that a longer implementation period and more "soft measures" are needed.

Local awareness of MIDAS measures

In the first year of the project, and following the implementation of MIDAS measures, the residents of Suceava city were asked if they had heard about MIDAS. The results are as follows:

Percentage of persons having heard about the MIDAS project - Before and after the implementation of the measures

The number of respondents who were aware of MIDAS measures increased over the 3 years of the project; this shows that the local dissemination and information campaigns did have an effect at the local level. However, still just over 50% of the respondents did not know about the MIDAS project. This percentage is quite high and could contribute to reduced impact at local level. Therefore, for future projects, the team should reconsider the design and methods used for dissemination campaigns (such as eco driving lessons, extension of travel plans, policy at general level), as it is clear that better local awareness would impact positively on the results of the measures.

Local awareness of "mobility plans" and "mobility management"

Local awareness regarding concepts like "mobility plans" and "mobility management"
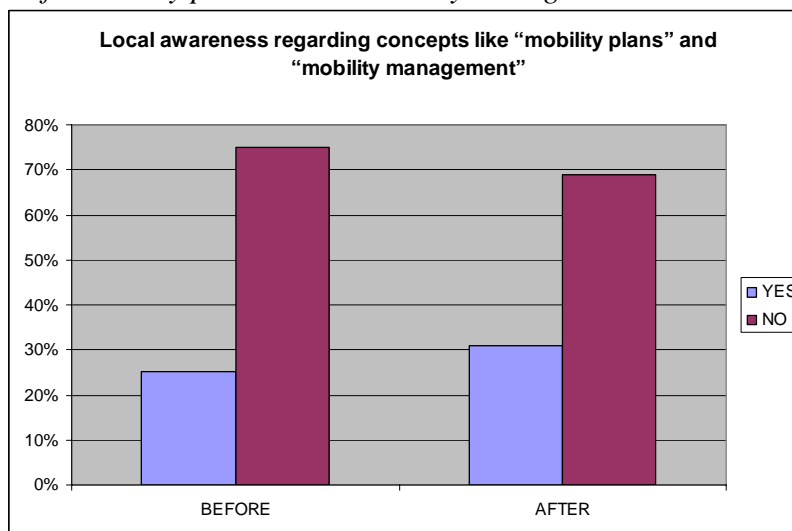
At the beginning of MIDAS, concepts such as "mobility plans" and "mobility management" were not very well known at the local level. In fact, they were promoted as concepts in the context of sustainable mobility, with no practical inputs (travel plans, mobility plans etc). From the above figures, we can conclude that awareness of the concepts is starting to grow amongst citizens of Suceava city, accepting that, a substantial amount of work is still needed in order to be able to say that the concepts are well understood, and implemented on a large scale across the city.

That said, during the project more than 10 travel plans were designed and implemented for several target groups, and almost all dissemination activities included information regarding the mobility concepts.

Bearing in mind that for Suceava, MIDAS has been the first step towards a city offering good soft transport measures, we can conclude that there has been a significant increase in awareness with respect to the above mentioned concepts. In the coming period of time, the local experts will have to extend these concepts at a larger scale in Suceava.

Citizens are aware that new projects will need to be implemented, and that MIDAS project afforded them a first opportunity to understand sustainable planning approaches in tackling traffic and travel issues in their city.

Willingness to participate with "mobility plans"

One of the main questions from the first survey concerned the concept of "mobility plan", as it was one of the most important objectives of MIDAS in Suceava. Results show that more than 50% of the respondents are now aware of travel plans and are willing to take part in their implementation. Having in mind that the target groups were selected from different categories (school children, public employees) we can conclude that the travel plans already implemented were a good way of convincing people that a change in their travel behaviour was needed in order to reduce the negative impact of traffic. From this point of view we can conclude that the objective was achieved and the implementation was successful.

However, MIDAS did not have noticeable impacts on the willingness of people "before" and "after" with regards to their participation in a consultation on "mobility plans".

The availability for a public consultation regarding "mobility plans"
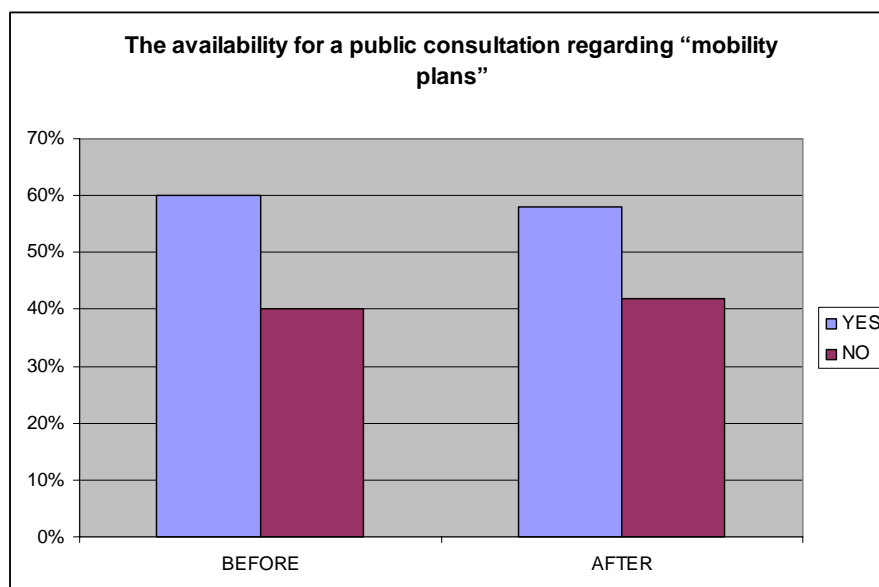
Awareness of best practice solutions for mobility problems in Suceava

With respect to best practice solutions, the survey included some questions regarding "innovative' measures, that are not yet implemented in Suceava, but which are common in several other cities from Europe. The idea was to start preparing future improvements at local level through dissemination and information, and to increase familiarity with the concepts.

EVOLUTION AFTER/BEFORE	AT ALL	MEDIUM LEVEL	BIG LEVEL	HIGHER LEVEL
1.Usage of the public transport by a higher number of citizens trough means of stimulation	-83,64%	-10,00%	38,00%	20,00%
2. Creating an infrastructure exclusively destined to bicycles.	44,00%	-27,65%	0,00%	240,00%
3. Improving the pedestrians' infrastructure	-25,00%	-12,50%	-24,44%	212,00%
4. Designing an integrated plan for local public transport.	-76,00%	-25,00%	31,43%	0,91%
5. Implementation of the concepts of "car sharing" and "car pooling".	-20,00%	20,00%	-2,86%	-10,00%
6. Implementation of the concepts of "park and ride" and "park and drive".	-18,18%	-5,26%	26,67%	-15,00%
7. Improving and extending the existent roads network	-70,00%	-18,18%	-5,26%	30,00%
8. Setting rules for traffic priorities granted to pedestrians	-40,00%	4,21%	38,95%	-35,71%
9. Permanent monitoring of the road traffic	80,00%	-40,00%	17,50%	20,00%
10. Maintain a permanent contact between citizens and public administration for a better knowledge of citizen's needs	30,00%	-4,00%	-12,00%	26,67%
11. Carrying out information and promotion campaigns related to the impact of irrational use of fossil fuels upon environment	50,00%	-28,00%	-7,86%	80,00%
12. Setting up a permanent information desk for dissemination of information.	20,00%	-13,60%	9,41%	-2,50%

Whilst accepting that the responses are not directly attributable to MIDAS, the comparison of before and after implementation surveys results have a significant importance when considering the information disseminated during the project and the way the soft measures included in MIDAS were a ramp for future major investments and improvements at local level.

The conclusion is that respondents are aware about the importance of these measures. Citizens do believe that in order to have a better life in the city, some measures have to be taken to improve the environment and the traffic conditions: "car sharing" and "car pooling", permanent monitoring of the road traffic and carrying out information and promotion campaigns are highly necessary. Most of all, one key point people mention when talking about solution for mobility problems in Suceava is the importance of creating and improving infrastructures and facilities for cycling and walking, as well as finding means to stimulate the usage of public transport services amongst the population.

8.4.4 Assessment of the success of each measure according to the TAPESTRY 7 stages of change model

In Suceava the key measures of the awareness raising campaigns, the travel plans, the promotional events and the information provided on the touch screen systems have contributed to assist the target groups in reaching stage 4 of the TAPESTRY model; **Evaluation of Options**

8.5   Lessons learnt

8.5.1   Barriers - how they were overcome

It is sometimes difficult to encourage children to go to school by walking and cycling, and to try to convince their parents not to take them in a private car. Safety is a very important issue. Many parents prefer to use their car and to drive their children to school and back, instead of encouraging walking, because of this safety issue, added to the perception of the private car as a more time-efficient mode of transport.

The amount of information currently available is substantial, as well as the number of promotional campaigns. To achieve good results with the promotional campaigns, it is necessary to tailor the information, the concept, and the promotional tools to the specific category being targeted. For example, sometimes information available on the Internet has less impact than leaflets distributed during on street events: Romania does not surrently experience high levels of Internet usage, with more than 40% of the population not having regular access.

The main barriers encountered in Suceava for the implementation of travel plans include:
- Public acceptance and habits: people are used to cars for travelling from home to work, and very often they take their children to school on their way to work. This does not foster an environmentally friendly way of thinking amongst younger generations.
- Natural conditions in Romania: with heavy winters (of 4 months) and large distances from some city areas to several main schools, this can lead to reduced options for walking and cycling.
- Infrastructure: Lack of cycling facilities, which can discourage the use of bicycles, and lack of an adequate level of public transport services in some places. Public transport is still generally not as good as it could be, therefore in many cases it is not a viable alternative to a car journey to school.

8.5.2   Participation of stakeholders

Stakeholders were invited to participate at several activities including promotional campaigns, design of the dissemination materials, travel plans, workshops and surveys.
At the beginning the involvement of the stakeholders was not significant, whilst at the end they have been keen to engage in almost all MIDAS activities.

8.5.3   Formal/political decisions required

The expansion of the pedestrian areas, as well as the implementation of cycling facilities, requires political support, and sometimes politicians are not very open-minded to, or aware of, the concept of "sustainable ways of travelling".

8.5.4   Financing

Actions within MIDAS were mainly financed through the maintenance budget for Traffic and Roads.

9   CONCLUSION

Through the implementation of soft measures as part of MIDAS, the six partner cities have demonstrated a wide range of measures in order to encourage the road users to use less energy intensive modes of travel. The results of the evaluation of the effects of these soft measures, has shown a positive impact on reducing car travel and consequently reducing emissions and energy consumption.

The conclusions drawn below refer back to the initial three main categories of indicators used in MIDAS, and described in the second chapter of this report:
- Impact indicators
- Attitudinal indicators
- Process evaluation

9.1   Conclusions of the impact indicators

Many positive conclusions can be drawn concerning the impact of MIDAS on sustainable mobility:
- In several cities, the number of persons using public transport increased significantly. This is the case in Bologna for everyday trips (1% increase), for Cork concerning the use of train (+11%) and bus (+8%) and for Clermont-Ferrand (which is forecasting an increase of 16% in travel by public transport by 2025, if compared to the trend situation).
- More people in MIDAS cities are walking or cycling. In Bologna there has been an increase in usage of the bike hire service of 40%. In Cork, 9% of the people increased their walking and in Liverpool, 32% said they were cycling more after the implementation of MIDAS measures. In Clermont-Ferrand, an increase in 14% of walking or cycling by 2025 is expected thanks to the UTP if compared to the projected situation in 2025.
- These changes logically lead to a decrease in the use of the car in MIDAS cities. In Suceava, within the project lifetime, the number of respondents who said that they are using their car daily to go to work decreased by 3%. Another interesting result is that the number of respondents who said they use their car only when they "strictly need" it, (or when they don't have any other choices) increased from 18% to 28%. This indicates that the systematic choice to use the car for all purposes is gradually changing, and that people are thinking more about alternative travel modes.

However, not all results are positive. In Suceava, for instance, no overall change can be observed in use of the car between 2005 and 2008 (even though survey respondents reported that they were using their cars less). In Aalborg, for students, private car increased its share of daily transport despite efforts in MIDAS (although this is affected by changes in students' places of residence).

When projections for changes in pollutant emissions have been made, they are always positive (as for Clermont-Ferrand or Suceava), but results are mainly due to new technologies implemented and European norms, and to new measures to reduce pollution of transport

modes and waste treatments. It is very difficult to judge the impact solely of the MIDAS measures.

Globally, energy consumption has decreased, or is expected to do so, in the MIDAS cities. This is due either to a reduction in the total number of journeys made by car (in Aalborg); to an estimation taking into consideration the increase of public transport passengers (in Bologna); or to modelling a mid-term view of what the actions implemented should lead to (in Clermont-Ferrand).
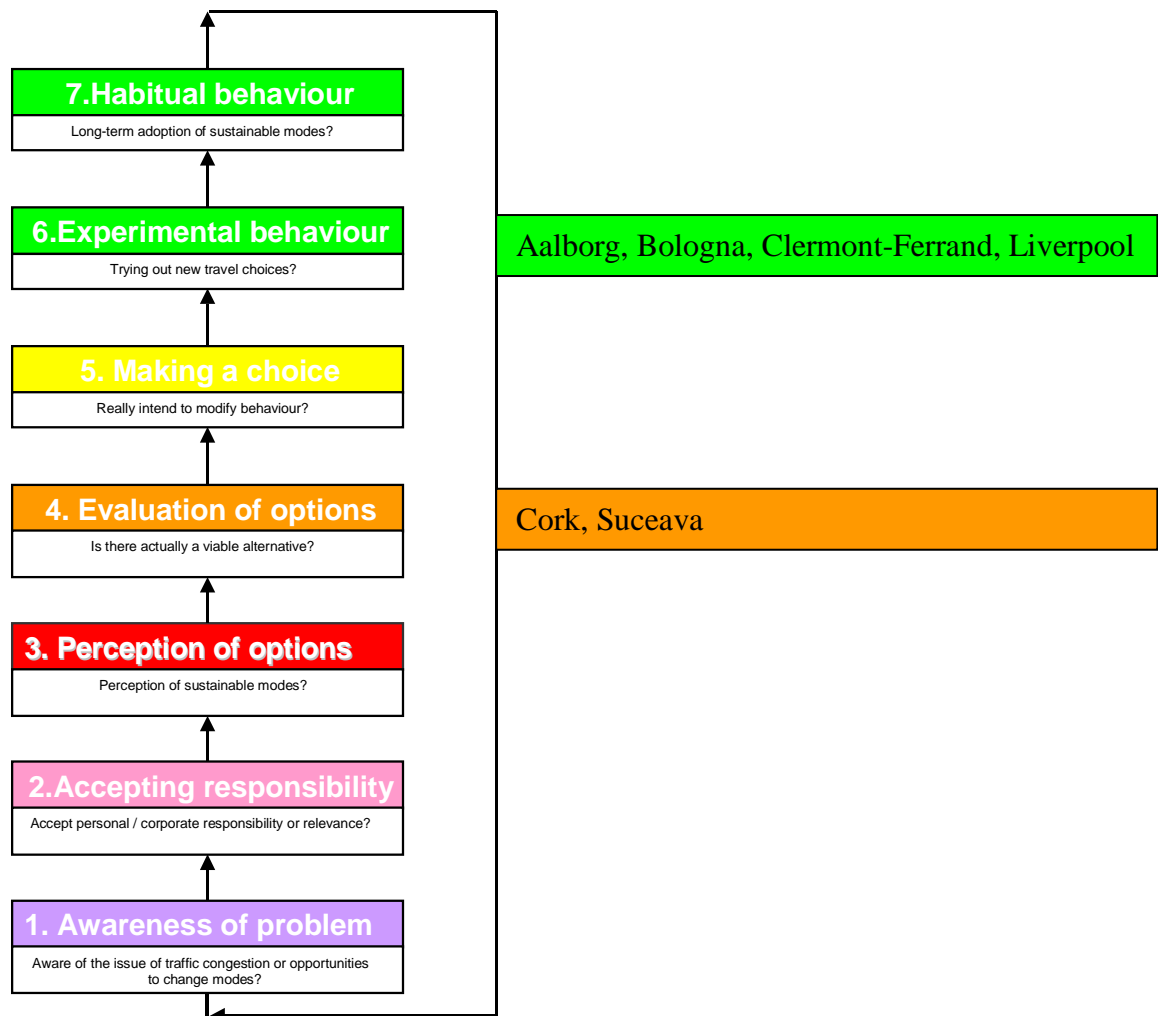
9.2   Conclusions of the attitudinal indicators

The impact of MIDAS on the awareness level in the case study cities, in terms of making people more aware of sustainable transport options, was very positive:

- Several measures were targeting an enhanced perception of the **information** available to assist travellers in their journey.
    - In Aalborg, the level of awareness of the traffic and transport web-portal was increased for company employees and students with 61% and 83% levels of awareness respectively.
    - In Clermont-Ferrand, 65% of respondents thought that the new travel guide helped to make the use of public transport networks easier. In fact 68% of respondents were not previously aware of the range of public transport services available in the Grand Clermont area.

- An enhanced **perception of alternative transport modes** available in the MIDAS cities was one of the goals of several measures:
    - In Bologna, people noticed an improvement in bicycle paths.
    - In Cork, 7% of respondents said that the soft measures influenced their changes to more sustainable travel patterns, and 9% of respondents said that MIDAS soft measures had made a difference to their travel patterns.
    - In Liverpool, the cycling campaign proved successful in encouraging 'early adopters' and promoting cycling as a positive activity that improves health and fitness (72% of people took this view). 13% of non-cyclists reported that the campaign had encouraged them to cycle more.
    - 50% of the people interviewed in Suceava are now aware of travel plans and are willing to take part in their implementation.

- MIDAS allowed people to see and express more clearly what their **needs** are:
    - In Suceava, as a result of MIDAS, people are expecting more from the public transport services (mainly the importance of creating and improving infrastructures and facilities for cycling and walking, as well as finding means to stimulate the usage of public transport services amongst the population).

From these results, it is possible to assess that people are more and more **aware of their responsibility** and of the role MIDAS measures can play in changing the environmental impact of their travel behaviour, as with Suceava, where citizens do believe that in order to have a better life in the city, some measures have to be taken to improve the environment and the traffic conditions.

The assessment of the success of each measure according to the TAPESTRY 7 stages of change model showed that overall the MIDAS measures reached between stage 4 and 6, as shown on the diagram:

7.Habitual behaviour
Long-term adoption of sustainable modes?

6.Experimental behaviour		Aalborg, Bologna, Clermont-Ferrand, Liverpool
Trying out new travel choices?		

5. Making a choice
Really intend to modify behaviour?

4. Evaluation of options		Cork, Suceava
Is there actually a viable alternative?		

3. Perception of options
Perception of sustainable modes?

2.Accepting responsibility
Accept personal / corporate responsibility or relevance?

1. Awareness of problem
Aware of the issue of traffic congestion or opportunities to change modes?

9.3   Conclusions of the process evaluation

Concerning the **process evaluation** of the MIDAS projects, several results or lessons can be drawn.

With regards to the **consultation and evaluation questionnaires processes** implemented in the various cities, they were aiming to help the global design of the measures at the beginning of the MIDAS project, or to assess what should be done after MIDAS.

Public acceptance and habits plays a key role in the possible range of changes. When people are used to cars for travelling from home to work, and very often they bring their children to school on their way to work, this travel habit influences the way of thinking of younger generations.

The MIDAS experience showed that properly identifying the targeted audience is important to obtain the best results. In Clermont-Ferrand for example, at the beginning of the project, engagement with stakeholders for the Travel Guide was poor, with a lower response rate then expected for the questionnaires. Because of this, the SMTC re-launched the survey targeting two main groups: the season ticket PT users who received the guide in the post and all participants of a 10 day regional commercial event.

With regards to the Urban Travel Plan in Clermont-Ferrand, all associations involved in environmental matters, disabled persons, and public transport users were involved during the process.

In any of the MIDAS cities that have chosen to consult the public (travel diary in Cork, focus groups in Bologna, Studies in Liverpool…), this has helped with understanding people's motivations and to use this knowledge to inform and direct the awareness campaigns for optimum effect.

To achieve good results with the promotional campaigns, it is necessary to tailor the information, the concept, and the promotional tools to the specific category being targeted. For example, an advertising campaign in Liverpool needed to be re-focused i.e. leaflets /local press instead of adverts on the back of buses. For example, sometimes information available on the Internet has less impact than leaflets distributed during on street events; for example Romania does not currently experience high levels of Internet usage, with more than 40% of the population not having regular access.

When proposing a measure, it is important to bear in mind the preconceptions of the target audience: in Bologna, because people are often not aware of the true costs of driving and owning a car, it is more difficult to convince them of the savings that they can benefit from if they used a car from the car sharing scheme (car club). For these reasons, it is often assumed that the respondents do not appreciate the possibilities of reducing their costs by car sharing. So before implementing and promoting a car sharing scheme, a full campaign on the advantages of sharing a car would be sensible. In Liverpool, people did not believe that car share was a realistic option because of issues relating to availability and practicality. Therefore, the feasibility of car share was specifically promoted, and groups of people susceptible to car sharing more closely targeted.

When launching a questionnaire, MIDAS has experienced the need to consider the motivation for people to respond: in Aalborg, a considerable difference was noted between the number of people answering the web survey questionnaire in 2006 and in 2007. The reason for the difference in response rate centred on the fact that students in 2007 appeared less motivated to complete questionnaires than the first year group of 2006. For KMD employees, the 2006 questionnaire was regarded as more interesting to them as they were asked to put forward solutions for implementation during MIDAS. The 2007 questionnaire provided less opportunity for this as it was solely for evaluation purposes.

Regarding the **implementation of the measures**, the target area chosen plays a great role in the future results to be observed. In Aalborg, as the main changes in relation to modal choice were related to long distance journeys, only a limited part of the impact was applicable to the MIDAS corridor. In Bologna, the soft and hard measures developed were not applied to a restricted area; consequently a specific target group was not identified. Results obtained wee therefore considered more significant because they referred to the whole Bologna urban area.

Another point observed within this process evaluation relies on the importance of the whole external context, on which the project could act or not.

Firstly, the **political context**: e.g. the significant delay in implementation of the Travel Conference and the UTP communication campaign, in Clermont-Ferrand, due to local elections and to financial constraints.

The expansion of the pedestrian areas, In Suceava, along with the implementation of cycling facilities, required political support. This can really slow down the impacts of the measure. In Cork, to ensure that any decisions taken on the project had sufficient political acceptance, the MIDAS project outputs were incorporated into the County Development Plan and the relevant lower level Local Area Plans, which are statutory documents.

The **organisational context**: MIDAS offered the opportunity for many authorities to co-ordinate & work together, to try new approaches in different target areas. For example, the Travel Conference in Clermont-Ferrand provided the opportunity for the four local transport authorities of the Grand Clermont to build a global network. The Travel Conference has also resulted in the introduction of new integrated fares, between two transport authorities. The Travel Guide gave the focus for discussion at the launch of the Travel Conference. This truly contributed to breaking the communication barriers between the different institutions. In Cork and Liverpool, the project set up steering groups gathering stakeholders and representatives involved in Transport planning and measures implementation on the ground (local transport authorities). The Steering Group met three times during the project to give direction to the tasks and to achieve consensus on the project measures to be implemented. However in Cork while the Steering Group was a very effective co-ordination body, it was difficult to achieve implementation of some of the soft measures using the group because it took a long time to achieve consensus, so it was more effective to implement individual soft measures using one of the stakeholders.

Finally, some **technical factors** had to be taken into account, such as the anticipated web based integrated transport package for all commuters in the selected transport corridor in Cork, which proved impossible to complete due to technological difficulties, and will now not be a major output from the project.

To conclude, what became apparent when evaluating the process implementation of the MIDAS activities is the extent to which the impact results are reliable. Here again, external factors and micro trends influenced the raw results; for example the relocation of KMD offices and changes in settlement patterns among students in Aalborg - making it difficult to determine the specific impact of MIDAS. In Bologna, the increase in the number of subscriptions to the bike scheme in 2008 was due partly to the increase of docking stations and bicycles but mainly to the mobility management agreement with Bologna University, which allowed non resident students to use the service at a reduced subscription cost. In Suceava, natural conditions with heavy winters (of 4 months) and long distances from some city areas to several main schools resulted in few of walking and cycling options.

The results of MIDAS show that there has been a positive start towards increasing use of sustainable modes of travel. However, all the measures implemented still have to be complementary to "hard measures" and often there is a need to improve mobility services and infrastructure in order for soft measures to really make an impact. Lessons learnt from the process evaluation have to be borne in mind for the design of future awareness campaigns and

measures, and for encouraging the stakeholders involved in the transportation system of the target area to work altogether.

9.4   Comparisons at the local level, between the expected and the actual results

At the local level, when comparing the actual results of the effects of MIDAS in the 6 case study cities, we can see that the overall outcomes and objectives of the project have largely been met.

In **Merseyside**, it was anticipated that the soft measures being implemented as part of MIDAS would contribute to the city's planning goals. Some preliminary indications used early in the project had established that:

- Use of **Travel Plans** in Merseyside had the potential to contribute to a 15% reduction in car use.
- **School Travel Plans** were already in widespread use in Merseyside and achieving positive results, reducing peak hour congestion, improve competitiveness of city and helping to tackle air quality problems in Merseyside.

Baseline evaluation undertaken in 2006 provided a clear and detailed understanding of the target audience and a comprehensive baseline of attitudes and motivations related to travel behaviour on Merseyside, as well as identifying factors most likely to influence receptiveness to particular messages for different segments of the population. It provided the basis and structure of TravelWise campaigns that were then subsequently designed, market tested and evaluated. Post campaign testing has shown that these campaigns were effective and have contributed to an increase in the use of sustainable modes of travel. The actual results in Merseyside showed that, for example, the cycling campaign proved successful in encouraging 'early adopters' and promoting cycling as a positive activity that improves health and fitness (72% of people took this view) in fact 13% of non-cyclists reported that the campaign had encouraged them to cycle more. Furthermore, of all the campaign material the cycling 'leaflet, incorporating the slogan, 'It's Bike Time !' was thought to promote the most positive view of cycling (73%) causing 32% of respondents to cycle more. For the Car Share campaign, there has been an increase of up to 8% in awareness of the scheme.   85% of respondents thought that car share was a good idea and 34% thought it would be a realistic option for them. Regarding the TravelWise campaign (Rail/Bus/Cycling/Walking), after the implementation of the MIDAS measures, the awareness and recognition of the TravelWise brand has increased from 26% to 42%. Moreover, young people of the target market reported that the campaign made them feel more positive about each mode being promoted which is a very positive outcome.

In **Aalborg**, the estimates of the effects of the MIDAS measures were originally linked to the TAPESTRY description of campaigns i.e. being able to change peoples' awareness, attitude and behaviour.   The objective of the information package / marketing campaign developed, which targeted at first year university students and employees of KMD was to change the travel behaviour within the target groups of the corridor by 2-3%.   In reality, as seen previously in this report, the results from the web-surveys of the target groups show that this target has been achieved for the KMD employees with an average reduction in car use over average trips made per person of 6.2%. However, for the students, there has been an average increase in car use of 0.6%. The lower results for the university students was explained by

the fact that the students live further away from the university, possibly postponing their move to the city to live at home longer, and therefore may have access to the family car to make the journey.

In **Bologna**, the measures developed aimed to increase the use of public transport service, car sharing and the free bike rental services.

From MIDAS experience ATC learnt that it is not sufficient to implement sustainable transport services in a city, but it is necessary for them to be complemented with soft measures to inform and make citizens aware of the service characteristics and opportunities. ATC had good results in terms of approval of the new guide "La carta della Mobilità", which fulfilled the need for a concise and complete information tool on sustainable mobility in Bologna.

Furthermore, following MIDAS, ATC now understand the importance of reaching potential users of such services with specific actions and campaigns. For example the mobility management agreements with the University concerning car sharing and bicycle services promoted during the University "Alma Fest" at the beginning of the school year, gave good results in terms of interest and new subscriptions in just a few months.

In **Clermont-Ferrand**, the main objective was to reduce car dependency and to raise awareness of alternatives to the car. Following the introduction of the Travel Guide, the "after" survey results revealed that for 86% of the respondents, this guide was something new, 65% thought that the guide would help them to use the public transport network, 52% considered it useful in every day life, and 55% that it could modify their travel habits. These results show a positive response to the Travel Guide, in meeting the aim of raising awareness and providing accurate information on sustainable travel modes.

In **Cork**, the preliminary results of the survey suggested that about 2% of journeys in the study corridor were by energy efficient means. The Cork Area Strategic Plan seeks a shift to about 7% by energy efficient means and this was the target of the MIDAS measures in Cork. When doing the "after evaluation" of the sample interviewed, the results showed that approximately 11% increased their use of the train, 9% increased their walking and 8% increased their use of the bus, which is very encouraging and shows that the initial aim has been met in broad terms. Further more, in the 2008 evaluation activity, 13.5% of respondents interviewed are using more sustainable modes of transport. On average 7% of respondents said that the soft measures influenced their changes to more sustainable travel patterns.

In **Suceava**, it was anticipated that the soft measures being implemented as part of MIDAS would contribute to between 1 and 7% of the city's planning goals, with: improved information systems and awareness raising activities, marketing campaigns, promotion and design of travel plans, the promotion of cycling and walking, and the promotion of sustainable mobility to students in Universities, schools and high schools.
The results of the analysis showed that overall, there has been a positive reduction in atmospheric pollution since 1999, although this is mostly due to new technology and new measures to reduce pollution caused by transport waste treatments. Within the project lifetime, the number of respondents to the survey who said that they are using their car daily to go to work decreased by 3%. The number of the respondents who would like to use public transport more instead of the personal car has increased by 4% compared with the beginning of the project. The awareness about MIDAS within the target groups has increased in the 3 years of the project; this showed that the local dissemination and information campaigns did

have an effect at the local level. Results also showed that more than 50% of the respondents were now aware of travel plans and are willing to take part in their implementation.

9.5   General conclusion

The success of the project as a whole was evaluated against the 3 initial "measures of success", as set out in the introduction of this report.
The measures of success agreed for each of these 3 indicators, together with the evaluation findings are given in the table below:

Criteria	Measures of success	Evaluation findings
Public attitudes	100% increase in awareness of the contribution of MIDAS-type measures to sustainable mobility among target groups.	The 100% increase in awareness of the contribution of MIDAS-type measures to sustainable mobility among target groups has been difficult to assess globally for the project, however public awareness of most of the measures has clearly increased substantially.
Traffic reduction and energy savings	10-15% reduction in individual use of cars and similar reductions in energy consumption for targeted groups.	The target of 10-15% reduction in individual use of cars and similar reductions in energy consumption for targeted groups proved to be a very difficult target to meet. In part this is because of the influence of external factors, such as increasing car ownership, whose impact is very difficult to assess. The average impact of the measures across the 6 cities is more in the order of 7 to 10 %.
Assessment of consultation and campaign techniques	The success of each measure will primarily be assessed according to its success in meeting stated objectives according to the particular stage of the TAPESTRY 7 stages of change model that it is supposed to address. (Raising awareness of issue, acceptance of responsibility, perception of options, evaluation of options, making a choice, experimental behaviour, establishing habitual behaviour.)	The assessment of the success of each measure according to the TAPESTRY 7 stages of change model showed that overall the MIDAS measures reached between stage 4 (Cork, Suceava) and 6 Aalborg, Bologna, Clermont-Ferrand, Liverpool). Raising awareness has been achieved, acceptance of responsibility is also recognised, the perception of options was recorded, the action of making a choice is starting together with the experimental behaviour, however establishing habitual behaviour is not quite so established. Nonetheless, the measures pursued and initiated through MIDAS have started to show their benefits, and the partners recognise that continued efforts and investment are to be made to reach the last stage of the change model.

Having reviewed the impact of the MIDAS measures, it is clear that the MIDAS project presented an opportunity to advance the research into the use of behavioural and attitudinal "soft" measures as tools for encouraging modal shift from private car use to sustainable modes. The difficulty of quantifying the impact of soft measures has been recognised. Although the impact of the "associated" measures such as the usage of Bologna's bike rental service, or Clermont-Ferrand's Travel Guide have been easier to quantify, the overall impact of the awareness raising activities of Aalborg, Cork, Liverpool and Suceava will take longer to ascertain as the impact of the campaigns will, hopefully, have a longer lasting effect.

The results of the MIDAS project show that there has been a positive start towards increasing use of sustainable modes of travel in the six cities. However, all the measures implemented are complementary to the hard measures that provide the core transport services and infrastructure around which soft transport mode solutions operate. Unless the core public transport system, cycling and pedestrian infrastructure provides a quality service no promotion campaign can have a big and lasting impact on the number of people switching from car to environment-friendly modes.