MOBILITY MANAGEMENT PERFORMANCE IN PARTNER REGIONS AND IN THE EU

London Borough of Bromley

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North East South West
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CONTENTS

SECTION 1: INTRODUCTION

1.1 PIMMS

Mobility Management is an innovative demand-orientated approach to promote sustainable mobility. It is based on information, co-ordination and motivation, and complements traditional (infrastructure orientated) transport planning to achieve a modal shift away from unsustainable vehicle use.

PIMMS (Partner Initiatives for the development of Mobility Management Services) is a network operation focused on the exchange of best practice information between the eight project partners and b between them and their regional partners. The core concept is that successful examples of mobility management are based on Critical Success Factors that can be applied in other circumstances. So PIMMS benchmarks good practice throughout Europe, and uses this as the basis to organise a series of Study Tours and Staff Exchanges so that key decision-makers in the partner organisations can see examples of success and be encouraged to emulate them in their own region.

The partners in the network have an extensive range of experience in mobility management: BROMLEY is the lead borough for the *London European Partnership for Transport*, which aims to provide London with a coordinated approach to European transport activities and increase both the level and frequency of participation in EU project and policy work for the London Boroughs; GRAZ is a partner in Civitas/Trendsetter and SERRES & ALMADA are active in European mobility week and "In Town Without My Car!" (Almada shortlisted in the EU Mobility Week Awards 2004); TREVISO have developed road safety programmes; TERASSA have produced best practice on travel plans, whilst STOCKHOLM is a partner in Civitas/Trendsetter and represents Sweden on EPOMM.

The first step in our work has been to undertake the benchmarking. This report summarises our work and conclusions, as we have benchmarked:

- known best practice examples identified through European networks and EU-funded projects.
- the quality and experience of the eight project-partners

1.2 Benchmarking methodology

The methodology for benchmarking mobility management best practice comprises Component 2 of the PIMMS project: Learning. The methodology was devised by the lead partner, based on partners' and European local sustainability indicators. Its main aims are to:

(1) establish an objective performance rating, and
(2) identify Critical Success Factors (CSFs) that have led to the high take-up of mobility management in successful organisations. It will focus on the 8 domains both separately and collectively;
(3) provide a basis for selecting the key individuals to undertake the Visits;
(4) establish a reporting format, so that the outcomes of the benchmarking and Visits can be reported in a systematic manner, thus enhancing the European added-value of the project.

The following eight domains were agreed upon by the partners (see section 2 for descriptions):
(1) Clean vehicles
(2) Individualised travel marketing
(3) Mobility and education
(4) Policy and integration
(5) Road pricing
(6) Road safety
(7) Travel awareness
(8) Travel plans

Project Management Board 1 discussed the draft methodology, and agreed that the work would be done using an online database already in use in London, but requiring some adaptation to meet the PIMMS objectives. Partners then tested the methodology and the online database. There was however, substantial technical delay in making the adaptations to the database, which caused a delay in collecting the data. In order to assist progress, a paper-based questionnaire form was issued. This is appended as Annex 1.

Three aspects to the benchmarking study were identified:

1. International Context. The Lead Partner identified examples of best practice from cities and regions outside of those included in the immediate partnership. This was achieved by email requests through existing contacts with city networks such as EUROCITIES, POLIS, EPOMM and the CIVITAS Forum.

2. Local Context. Each individual partner was responsible for identifying examples of best practice in their own cities and regions. Each partner was asked to identify what communication channels they could use to distribute the questionnaire amongst their local and regional partners, and how to ensure the maximum level of response.

> **For Example –** The London Borough of Bromley used its existing contacts and networks to collect local and regional data. This included:
> - The ALG Sustainable Transport Forum – this is a forum organised every three months to allow all the London boroughs to discuss activities within the arena of sustainable transport. It is run by a non-governmental organisation that exists to improve communication between the boroughs and regional government
> - London Travelwise – this is an organisation set up to improve communication between London boroughs in the arena of sustainable transport. It is run by the boroughs, for the boroughs.
> - Similar networks in the fields of school travel plans and Road Safety

3. Local Benchmarking. Collectively, partners undertook a 'self-benchmarking' exercise, comparing their own organisations' performance with each other and with the organisations on the database.

1.3 The Online Database

The database is a subset of an existing database "STADIUM", developed by municipalities in London, which holds information about Sustainable Transport Initiatives ("STIs").

Entries in the online database can comprise:
- overall policies
- individual initiatives

We asked for a minimum of 25 records from each partner across all eight mobility management domains, but ideally more, on the grounds that the more entries on the database, the more useful it will be. The entries should NOT be restricted to the partner's municipality and region.

The database provides an extensive list of fields. Not all of these had to be completed for each entry, but the more extensive the information, the more valuable will be the database.

The focus on PIMMS is best practice and the transfer of success in one area to another area or subject. Partners were asked to pay especial attention to the following fields:

1. Description
2. Objectives
3. Overall success: we suggested a subjective 'mark out of 10', plus commentary
4. Success in changing travel behaviour: we suggested a subjective 'mark out of 10', plus commentary

5. Critical Success Factors: this was essential, because CSFs are a stated element of the PIMMS contract. We therefore suggested that partners consider the following possible CSFs:
   - national/EU pilot;
   - local political leadership;
   - local technical leadership;
   - successful demonstration from elsewhere;
   - inspiration from another field;
   - partnership with others;
   - stakeholder engagement;
   - other

   Partners were asked to consider which of these were significant in the success (or failure!) of each initiative and, if possible, to give the CSF a score, as follows: 'primary'=3; 'necessary'=2; 'sufficient'=1; 'not relevant'=0
6. The target audiences
7. Hard measures
8. Monitoring the success of the initiative
9. Other agencies involved

1.4 The "Self-Benchmarking" Exercise

This was undertaken as an exercise during the third Project Management Board meeting. It involved each project partner working with two others to assess its organisation's performance in each of the eight domains. Partners were asked to use the following 'scoring system'

1 Not part of my organisation's strategy
2 We have made proposals, but no actions so far
3 We have started but it's not complete [<25%]
4 We have made significant progress [<75%]
5 We have achieved our target [100%]
6 By European standards we know we are good

In the light of the two discussions partners felt able to draw a conclusion, and to set out the reasons for their particular 'scores'. The outcome of this exercise is reported in Section 3.

1.5 Critical Success Factors

Determining the CSFs of a mobility management initiative is a vital element of the PIMMS project. A method originally developed at MIT's Sloan school of Management by John F. Rockart to guide businesses in creating and measuring success, CSFs are commonly referred to as a key area where satisfactory performance is required for an organization to achieve its goals, or as a means of identifying the tasks and requirements needed for success. At the lowest level, CSFs become concrete requirements.

By analysing the CSFs identified in the case studies from the PIMMS database, this report aims to classify a set of common CSFs, which can be transferred between a) domains and b) countries. By producing a "universal" set of criteria for successful project implementation, this report intends to guide and assist stakeholders and decision-makers throughout the European Union in the planning and implementation of future mobility management initiatives.

1.6 Technical Visits and Exchanges

Drawing upon the case studies recorded in the PIMMS database and their CSFs, a programme of "best practice visits" between partners will be devised. The visits will be undertaken in three cycles, each of 8 months. In each cycle, every partner will undertake one study tour (6 people visiting for 2 days) and one staff exchange (2 staff visiting for 4 days). The visits will be used to expose

stakeholders and senior decision-makers to successful examples of mobility management to stimulate and facilitate the planning and implementation of future initiatives. By analysing examples of best practice from the PIMMS database, this report aims to a) provide a better understanding of the case studies and assist the project partners' choice of visit and b) assess the quality of reporting from the Visits.

1.7 Report structure and content

The remainder of this report will disseminate and assess the outcomes of the benchmarking methodology:

Section 2: Case Studies presents two case studies selected from each of the eight domains on the PIMMS database. The Critical Success Factors in each case study have been outlined from the information available on the database.

Section 3: Self-Benchmarking summarises the results of the partners' appraisal of their organisations' performance in respect of the eight mobility management domains.

Section 4: Critical Success Factors analyses the Critical Success Factors identified in the sixteen case studies and cross-fertilises the CSFs between the domains and countries to provide a universal set of common CSFs. This is intended to raise the awareness of stakeholders and decision-makers of criteria for the successful planning and implementation of future mobility management initiatives.

Section 5: Conclusion draws together key points and sets out brief recommendations for the development of the PIMMS database.

SECTION 2: CASE STUDIES

2.1 Clean Vehicles

Increase the use of vehicles that emit no greenhouse gases

a) Public Transport vehicles powered by biodiesel, City council of Mataró, SPAIN

Description

In 1992, Mataró was the first city in Spain to have biodiesel fuelled vehicles for public transportation and town services. This fuel is obtained from vegetable oil extracted from soy, colza and sunflowers, and it may be used as a diesel substitute. The results of this initiative showed that the use of biodiesel helped to decrease air pollution and atmospheric emissions, especially of particle matter, unburned hydrocarbons, CO and SO2, which were almost completely eliminated.

In 2003, a pilot project was developed to use biodiesel in Mataró's fleet of buses. The main objective of this initiative was to calculate the viability of biodiesel (BDP 30: 30% biodiesel, 70% diesel) for the whole public transportation service of the city through studies of the fuel, the operations and the services of the biodiesel motors and a quantification of the emissions reductions. Based upon this data, a consumption balance of the fuel was undertaken to study its environmental advantages. While there were no considerable variations in terms of consumption, the air quality was highly improved. The main conclusion of this initiative was that BDP 30 achieved all the technical requirements, which makes it viable for use in the whole public transport fleet.

During the pilot phase, the bus drivers observed that the vehicles functioned well and did not present any irregularities concerning speed, engine power, acceleration capacity and at low air temperatures. Nevertheless, a higher noise level and stronger exhaust smells were detected.

Critical Success Factors

Local (and national) political leadership: Governments at local/national level need to provide incentives to make biodiesel a more economically attractive option for consumers. At the moment, biodiesel is the same price as conventional diesel. Political support is also required to remove the legal barriers to biodiesel production and distribution.

Technical leadership: Testing and evaluating the emissions and performance of biodiesel in fleets is vital to provide evidence of the environmental benefits.

Public engagement: the project had a considerable impact on public awareness concerning the environmental impacts of motorised transport and the promotion of recycling used oils.

b) Biodiesel taxi fleet, City of Graz, AUSTRIA

Description

878 City Funk GmbH is the largest taxi fleet in Graz with presently 220 associated taxis.
The city of Graz faces a major problem in terms of air quality and particulate matter. Hence the local public transport operator (GVB) has decided to switch their bus fleet to biodiesel to make a

contribution towards better air quality in the City. The conversion of the biggest taxi fleet towards biodiesel is a further step.

A biodiesel service station was established next to the headquarters of 878 City Funk Gmbh. This is very convenient for the taxi drivers, as they do not have to drive long distances to obtain the biodiesel. Furthermore, the biodiesel service station is open to the general public as well. 120 taxis are now running on biodiesel.

Critical Success Factors

Marketing: The conversion of a prominent taxi fleet to biodiesel has increased awareness and acceptance of biofuels among citizens and encouraged operators, politicians and social groups for innovative, low-noise and low emission technology.

Access: The location of the biodiesel service station next to the taxi headquarters is convenient for the drivers already located there. The availability of the service to the general public also extends the range of biodiesel users.

c) Clean vehicles, Stockholm, SWEDEN

Description

At present, the City of Stockholm operates 600 alternative-fuel cars, the public transport authority runs 250 ethanol-powered inner city buses, and a number of different types of heavy trucks run on renewable forms of fuel (e.g. biogas). It has become common for businesses to take up alternative-fuel cars, and their numbers are steadily increasing throughout Sweden. In 1994, Stockholm City took the decision to invest in and promote clean vehicles. The goal was set to 5% of total sold new vehicles in Stockholm, after which the market is expected to run by itself.

The development of the market for clean vehicles in Stockholm has taken the following steps:

- Co-operation with fuel companies to set up stations for electric charging, ethanol and biogas
- Government support for the purchase of the initial electric vehicles
- Common procurement of electric vehicles for Stockholm City and other cities in order to obtain a significant reduction of prices.
- Overcoming barriers in legislation and taxation by lobbying. This resulted in reduced fuel tax, free parking for certain clean vehicle users, reduced tax for private use of company clean vehicles
- Obtaining new ideas through co-operation with other cities, e.g. in European projects such as ZEUS, ELCIDIS, E-TOUR, MOSES and TRENDSETTER
- Co-operation with car dealers to ensure proper service of the vehicles
- Official policy for all administrations within Stockholm City to choose clean vehicles only
- Continuously developing a clean vehicle fleet through framework agreements with car-dealers
- Creating incentives for private companies to purchase clean vehicles (test vehicles available for free, economic subsidies, cost calculation service on the City website, free parking and charging for electric vehicles)
- Continuous dissemination of news and results through newsletters and the City website.

Critical Success Factors

Results for 2002:

- 48% proportion of clean vehicles in the municipal fleet (600 out of 1,200 vehicles); - approx. 500 clean vehicles in company fleets.
- 40 stations for free charging of electric vehicles;
- 10 stations for ethanol;
- 4 stations for biogas.
- Expected environmental impact by 2005 is 1,500 tons reduction in CO2 emissions per year.

Public Engagement: Strong communication/dissemination campaigns have led to an increase in sales of alternative fuelled vehicles (AFVs).

Stakeholder Engagement: This example demonstrates the need to establish a good relationship with the car sales companies and the car manufacturers to raise the demand for alternative fuelled vehicles.

Political Leadership: It was important that the City was able to subsidise parts (10%) of the costs for companies when they bought a new AFV.

2.2 Individualised Travel Marketing

Promotes the use of mobility management to individual households (e.g the provision of information about public transport services, car-sharing, bicycle training etc) and focuses on those users who initially express an interest in changing modes

a) Bike + Business, Frankfurt/Rhein-Main, GERMANY

Description

Bike + business is a project to promote the use of bicycles in commuting to and from work in the Frankfurt/Rhein-Main region. Under the motto "Roundtable Planning and Management", the significance lies in tying together the interests of bicycling employees with those of their workplaces, in improving the image of the bicycle as a modern means of transportation, in the conceptual integration of public transit and in the strengthening of day-to-day bicycle traffic in the system of local and regional transit policy and planning. The conceptual framework for this project is the National Bicycle Traffic Plan (NRVP) of the Federal Republic of Germany.

Within the framework of bike + business, a "Netzwerk Fahrradkuriere Rhein-Main" (Bike Courier Network Rhein-Main) was initiated at the same time. The purpose is to strengthen the industry over the long term by networking the courier services with each other as well as with rail-bound service providers (e.g. the IC courier provider time matters).

Critical Success Factors

In the start-up phase 04/05, bike + business has met the objectives with regard to participation of communities and businesses. So far 9 communities and 14 large regional employers have been acquired. The public effectiveness has far exceeded expectations.

Public Engagement: the initiative requires intensive PR work: a stronger presence in the public and the printing of handouts about the project.

Stakeholder Engagement: There has been intensive support for and integration of project participants.

b) Better image of public transport (Trendsetter programme), City of Graz, AUSTRIA

Description

To increase public transport use, it is important to ensure that customers have positive associations with public transport. A system that continuously works to improve quality is also helpful. Both aspects were addressed within the EU-Programme Trendsetter in Graz.

Graz has tried a variety of ways to encourage a positive image of public transport and to ensure quality for the service provided. The activities include innovative marketing activities, door-to-door information on the web and "mystery shoppers".

The public transport company has changed the image of public transport by introducing entertainment and promoting public transport as a modern and pleasant way of travelling. Actions not normally associated with public transport have been carried out, e.g. musicians playing for passengers, a mobile birthday party, TV-trailers and a raffle with the chance to win a ride with friends in the Cabriobus. Another example was a special leisure ticket.

A web page for stop-to-stop travel planning was established, making it much easier to find complete real-time travel information, including tips on the best leisure trips by public transport. Since January 2006 door-to-door planning is available, complete with distance and time estimates and downloadable maps showing the route to take on foot from door to stop.

So-called "mystery shoppers" have been used for quality controls on-board buses and at stops. Operators were contacted where cases of poor service where identified. Over time, a reduction in negative reports has become evident. The hidden checks are now considered as an important part of improving the public transport system and increasing customer satisfaction.

Critical Success Factors

The service is popular and the number of users has increased steadily, from 64,000 customers in September 2003 to 260,000 in June 2005.

Marketing: Overall, a greater awareness of the company and the services offered has been achieved and in general, a more positive attitude towards public transport and an increase in travelling.

2.3 Mobility and Education

This is a specific "sub-sector" of mobility management, as it relates to most of the other domains in one of two ways: a) in relation to the particular mobility needs of students; b) to the importance of education in changing people's awareness about mobility management. Mobility & Education is specifically related to schools and education establishments and includes initiatives such as Safer Routes to School, School Travel Plans, Walking Buses, Cycle Training, "kerbcraft" skills for children crossing roads etc.

a) BICIZOOM, City council of Terrassa, SPAIN

Description

The BICIZOOM project tries to encourage the inter-modality between train and bicycle in order to improve the global supply of transportation. The pilot phase, which lasted until the end of June

2005, established the basis for a continuous multi-service area for bicyclists at the FGC (train) station at the city centre of Terrassa.

The main objective of this project is to start up a fleet of bicycles to be used by students, teachers and staff to go to the university (campus UPC Terrassa) from the train station Terrassa-Rambla of the Ferrocarrils de la Generalitat de Catalunya.

The final aim of this project is to implement a shared bicycle service in the urban centre of Terrassa, open to all the inhabitants of the city. This is part of a larger objective which aims to change people's transport habits favouring the increasing use of bicycles and public transport over other transport methods of low energy efficiency such as cars and motorcycles.

The maintenance of the fleet will be contracted to an external specialist company which will offer the following service:
- Weekly maintenance (eg. Monday morning) in the FGC room. It will consist in doing a quick review to the bikes to know if they have any mechanical problem (brakes, wheels, etc).
- Monthly maintenance: a deeper monthly review of each bike will be done depending on the mechanic's decision.

It is proposed that the inscription to the service can be done in a municipal office close to the FGC:
- The Centre of Documentation and Environmental Education (CDEA) of the Environment Area of the City Council.
The main tasks would be to attend the interested users and manage the TRAMITS to access the service (contract, management of the keys, collective financing of incidences, etc).

Medium term advantages:
- Reduction of total travel time from door to door, assisted by public transportation. - Providing an alternative to private motor transportation for going to the campus of the UPC (Polytechnic University of Barcelona) at Terrassa, with the combination of train and bicycle modes.
- Promotion of bicycle among the university community and public institutions.
- Practical example of the utility and feasibility of a bicycle sharing project at Terrassa.

Long term advantages:
- Offer an alternative to private motor transportation in order to move around the city of Terrassa.
- Improve the urban environment by decreasing atmospheric emissions, noise and congestion, whilst saving on the use of fossil fuels.
- Support other social initiatives and civic values by integrating the community bicycle within everyday life in the city and improving citizens' health though regular exercise.
- Improves individual autonomy for travelling (especially for children and those without a driving licence.)

Critical Success Factors

During the first 4 months of the pilot phase (November 2004 – March 2005), the 6 bikes have been constantly used by 12 people with different schedules and destinations.

Public Engagement: The present low level of bicycle use is due to a poor image of the bicycle as a transport option. In order to promote its use, it is necessary to increase its use by developing infrastructures and promotional campaigns to engage users.

Users of this service must collaborate with the organisation in the data gathering process by responding to periodic surveys and participate in forums devoted to evaluate the service.

Marketing: The BICIZOOM project offers the opportunity to promote the bike as an alternative transport mode to its potential users and to guarantee the regular presence of bikers within the

urban streets. It is proposed that the City council and the FGC disseminate the service through their common communication channels.

Political leadership: The lengthiest process was getting the support of the institutions and companies to get the necessary resources for developing the project. It has also been necessary to obtain the official permits and to adapt the electrical installation in the FGC room.

b) Bike im Trend - mobil und sicher mit dem Rad zur Schule, Frankfurt am Main, GERMANY

Description

This initiative offers project weeks at schools on the subject of biking. Here the pupils ride around test courses, learn to repair a bike, go on bike tours and survey the way to school, analysing potential danger zones and the current infrastructure. The results of these project weeks are further discussed in a working group of various departments to overcome barriers/danger zones on cycle routes. The final result is a biking route made available to target schools.

Scheme Objectives
- Improvement of road safety
- Improvement of traffic behaviour
- Improvement of bike parking possibilities
- Promotion of bike use on the way to school and in free time
- Participation of pupils in planning processes

Critical Success Factors

Infrastructure/local political leadership: The safety of the route to school needs to be improved. Improvements to the infrastructure, for example the possibilities for parking bikes, were achieved in part.
Stakeholder Engagement: The individual traffic behaviour (Road safety awareness) of participating pupils could be improved. The integration of the pupils in the planning process and taking their concerns seriously was integral to the success of the initiative. Also, the continued participation of the local authorities and continuous project support from travel experts.

2.4 Policy and Integration

The integrated policy and action by municipalities, integrated also with the policies of regional and national organisations in order to make the coordinated action usually necessary to achieve effective mobility management. This could specifically relate to the municipality's own Sustainable Urban Transport Plan and related policies. Does the municipality's policy agree/conflict with the regional or national policy?

a) Management of Green Paths, Girona, SPAIN

Description

The 'Consortium for Green Paths of Girona' is an institution of 23 local authorities, which have green paths within their municipal area, and the regional administration of Girona. "Green Paths" are understood as communication infrastructures that have been developed along old/expired railway lines and nowadays constitute important ecological areas. Non-motorized vehicles, pedestrians, cyclists or people with reduced mobility, may use those paths for leisure purposes and to travel between different activity centres.

Main characteristics:
• Low incline (max. 3% or zero). Except in very selective sections.
• Exclusivity for non-motorized vehicles
• Real physical independence in relation to road fees for vehicles.
• A continuous path along the original transects. Where the original path has been lost or interrupted, a connection with similar characteristics has to be established, guaranteeing when possible the shortest way.
• Reduced number of intersections with public roads
• Homogeneous signage, in order to follow the path safely, whether on the intersections or merging pathways.

The affluence of the population at the green paths improves local development. The majority of the services required along the paths are currently in process of construction and implementation. In some municipalities the benefits have been even higher, since the majority of the local tourism comes from the green paths

Objectives of the Consortium:
a) The planning, execution and management of the Green Paths in the province of Girona.
b) In general, the coordination of all activities related to the feasibility and implementation of this project.
c) The maintenance and the improvement of the paths and their connections.
d) The extension of the use of green paths in the province of Girona.
e) The support of socio-cultural initiatives related to the green paths
f) The promotion of the use of bicycles as a daily transport mode.
g) The promotion of the pedestrian's use of the Green Paths.
h) The coordination between institutions, federations and administrative authorities in relation to the objectives of the Consortium and the promotion of the Green Paths.
i) To help, support and provide advice on similar initiatives.
j) Aim to obtain all possible subventions and resources needed for the implementation of the project.

These objectives can be summarized in three main goals

1.- Maintenance and improvement of the infrastructures.
2.- Promotion of its use.
3.- Network extension.

Among the non-motorized users, cyclists and pedestrians who currently use the path have discovered a wide variety of purposes which might have a transversal impact on the society of Girona. Some of the activities that might take place at the green paths are:

1. Leisure. Walking around in rural areas at the outskirts of many cities allows to the citizens to relax from their working routines. As the green paths are separated from the motorized transport system, they are safer and quieter, with less noise and dust. This more attractive environment has lead to the development of better mobility habits in the surrounding villages.

2. Health. The Green Paths offer an open space where people can easily walk or bike, allowing for regular exercise. The most important impact has been on people who hardly ever exercise or have mobility problems (e.g. elderly persons).

3.- Sports. Green Paths are considered as sportive infrastructures by the general Department of Sports and effectively there are a lot of users, mainly pedestrians and cyclists who use the paths for this purpose. Safety is the main advantage, but also the path homogeneity and the low slope.

Moreover the green paths provide a long continuous distance for cyclists to travel along (100 km between Olot and Sant Feliu de Guíxols, still extendable in few years).

5.- Tourism. Bicycle tourism and hiking are paradigms of sustainable tourism, as they do not a) require the consumption of fossil fuels; b) produce any air pollution or noise and c) do not require large infrastructural build. Tourism in this area is increasing, enabling people to discover this territory and come into more contact with the local people and nature.

6.- Environmental and cultural education. Running throughout the whole province, The Green Paths expose a huge variety of natural resources, villages and historical monuments to their users.

7.- Accessibility. The number of citizens who use the green paths to go to work, school or other leisure activities, such as going to the beach is increasing. The flat paths allow for people of all ages to walk or cycle along the paths with ease.

Critical Success Factors

Physical Climate: The relative flatness of the Green Paths provides an easy route for walkers and cyclists of all states of fitness.

Access: The Green Paths have appealed to a wide range of people on a daily basis, as they provide convenient access to places of work, schools, universities and leisure centres.

Political support: The services and continuous maintenance also contribute to the success of the project, as well as the promotional campaigns in and outside the region, developed by the consortium, the government delegation of Girona and the Patronage of Tourism

a) Mobility Plan – Accessibilities 21, Almada, PORTUGAL

Description

Traffic in Almada doubled between 1996 and 2001, particularly affecting the areas of access into town in rush hour. Around 35 thousand vehicles per day cross residential areas in the Council on their way to neighbouring Lisbon or Seixal. There are 140 thousand vehicles in the city centre but in many areas it is impossible to increase the capacity of the roads. This enormous volume of traffic generates unsustainable levels of pollution and noise, creates severe road safety problems and degrades the public space.

This situation makes it ever more urgent to control and manage the use of the car, simultaneously creating feasible alternatives to access the town. It is only possible to change this reality if car use is rationalised and people rethink their use of transport.

This is the first global study of urban mobility concluded at national level and with measures applied. The steps of its conception included the analysis and diagnosis of road circulation, parking and public transport in the Council of Almada, by, among other measures, calculating proportions of traffic and analysing crossings, lanes and current traffic light systems.

The objectives of the application of the Plan Accessibilities 21 include achieving sustainable mobility in Almada, a better quality of life, regenerated public spaces, less pollution and more safety, stimulation of the use of public transports and soft modes and better access for all.

Another goal of this plan is the concept of multimodality of circulation. The Mobility Plan considers inter-modality between all forms of transport, giving preference to public transport (buses, ferries and trains) and soft modes.

Almada's Mobility Plan has been implemented since 2003. The actions that took place, namely in terms of the circulation plan, include traffic calming measures, elevated crossings and zebra crossings, and new light sign technology at zebra crossings. Measures related to parking management were also implemented, with the creation of ECALMA EM (Municipal Company of Parking and Circulation of Almada) and the elaboration of new municipal regulations. "Intelligent" traffic lights were also installed.

The offer of public transport, the creation of areas where one can walk and ride a bike in comfort and safety, the control of illegal parking, building parking lots in the ends of town and regenerating public space are all part of the proposals to be implemented in short to medium term. These will take place with the new South Tagus Light Rail (MST) and the progressive implementation of Accessibilities 21.

Some of the measures the plan proposed were already implemented and were successful in attaining its goals. Road safety was increased in the areas where interventions were carried out and the plan had some impact in encouraging a more sustainable use of parking spaces.

Critical Success Factors

Political Leadership: The proposals of Accessibilities 21 extend beyond the Council of Almada, taking into account the improvement of mobility and accessibilities with the neighbouring councils. At a local level some of the innovative proposals are the so-called "30 areas", where this is the speed limit. The support of the Local Administration is therefore a core CSF.

This urban mobility plan particularly focuses on dealing with the problems related to car use, which also requires complementary policies to address other mobility issues like public transport and soft mode plans.

2.5 Road Pricing

…to cut car use and reduce congestion. For PIMMS this includes the strategic use of related pricing mechanisms (e.g car-parking) when it is used as a deterrent to car use; incentives to promote clean vehicles are secondary. Road pricing as a source of funding is not included in PIMMS.

a) The Stockholm Trial, Congestion Charging, SWEDEN

Description

The trials started on 22 August 2005 with extended public transport. On 3 January 2006 the trial implementation of congestion charging started. The trials will be concluded by 31 July 2006 and evaluated continuously from a number of different perspectives. A referendum on the permanent implementation of congestion charges will be held in conjunction with the general election on 17 September 2006. The City of Stockholm is responsible for providing general information about the Stockholm Trial, evaluation, information on the evaluation, and extended park-and-ride sites within the city. The Swedish Road Administration is responsible for the design and operation of the technical system and information about how the congestion tax can be paid. SL is responsible for expanding public transport services and park-and-ride sites outside the city.

Scheme Objectives
The primary objectives of the trials are to reduce congestion, increase accessibility and improve the environment. The purpose of the (full-scale) trials are to test whether the efficiency of the traffic system can be enhanced by congestion charges.

Secondary objectives of the trials
• Reduce traffic volumes on the busiest roads by 10-15%
• Improve the flow of traffic on streets and roads
• Reduce emissions of pollutants harmful to human health and of carbon dioxide
• Improve the urban environment as perceived by Stockholm residents
• Provide more resources for public transport

Critical Success Factors

Technical Leadership/Stakeholder Engagement: In order to understand the impact of the initiative and its benefits, the following areas (crossing all domains) are evaluated during and after the trials: Travelling patterns, car traffic, effects on public transport, cycle traffic, environmental and health effects, road safety, distribution effects, business community and regional economy, revenue and costs of congestion charges, public economy,

Public Engagement: Ultimately the decision to implement permanent congestion charging lies with the general public via the referendum. The success of the promotional campaigns and communication with stakeholders and public will be determined in September 2006.

Political Leadership: The political decision was made by the national government against the will and promises of the local politicians. It would have been better if the local politicians had supported the idea from the start. This could have decreased the huge political debate, which was very time consuming at the start of the trials.

2.6 Road Safety

This comprises hard measures (ie physical work, building new infrastrucures) and soft measures (e.g awareness campaigns, education and training)

a) PREVENT: "Develop a training programme to improve work safety", Thessaloniki, GREECE

Description

The objective of the PREVENT project is to provide appropriate training to the main actors involved in work zone accidents: the workers and the drivers. To achieve this, PREVENT will develop dedicated and life-long vocational training schemes for highway repair and maintenance worker training personnel and driving instructors. The ultimate goal of PREVENT is to increase safety around work zones and reduce the number or work zone related accidents. PREVENT will bring numerous benefits to the economy and society and will have the following impacts:

- Enhance highway repair and maintenance worker training personnel training skills with state-of-the-art educational tools; technical material and knowledge regarding the appropriate ways to position temporary traffic controls; and divert traffic around work zones in a way that minimizes the potential for accidents. This will result in the expert training of highway workers on work zone safety and will potentially reduce the accident risk around work zones.

- Assist driving instructors in acquiring new skills and tools to educate drivers on work zone safety and driver behaviour. The objective of this educational program will be to alert drivers as to what to expect and how to behave as they approach a work zone, minimizing their perception-reaction time and aggravation, and reducing the accident risk.

Scheme Objectives:

- Developing high quality, relevant learning material used in work zone worker training and driver education. Making the training material available over the Internet and using information and communication technologies (ICT) allows for the most effective use of resources while making the material easily accessible and more attractive to potential users.

- Providing work zone worker trainers and driving instructors with innovative training material and mechanisms, supporting their training and educational role and enhancing their current curricula with material which may ultimately result in improving safety and efficiency of work zones.

- Using ICT tools and exploiting their potential in vocational training actions and products in the work zone safety sector.

- Addressing the needs of SMEs (driver training schools in particular), in developing appropriate learning schemes to facilitate access to learning for driver instructors, enhancing their skills and their training curricula.

Critical Success Factors

Stakeholder Engagement: The participation and the awareness of the drivers has been identified as the most prominent CSF.

b) 30/50 kph speed limit for the city of Graz, AUSTRIA

After a year-long discussion in which several parts of the city demanded the introduction of 30km/h-zones, a unique experiment started in 1992: Graz was the first city in Europe to implement a speed limit of 30/50kph for the whole city area. A 30 kph speed limit went into effect on all side roads, in front of schools and hospitals, thus covering around 80% of the whole city. A speed limit of 50 kph (31.25mph) was imposed on all major roads, to increase road safety and reduce both pollution and noise.

For major roads, a traffic safety monitoring group (city experts, police, consultants) identified and provided solutions to overcome danger zones. These included program changes for traffic-lights, reconstruction of roads and/for traffic-lights, reconstruction of roads and/or intersection and additional speed-limits.

Scheme Objectives:

The City of Graz aims to increase traffic safety for people using non-motorised modes of transport. The strategy focuses on the speed reduction of passenger cars, as they are the main risk for pedestrians and bikers. Car drivers will receive feedback on their driving behaviour by various means, addressing different aspects. A second focus of the awareness raising activities of the city of Graz lies on the reduction of car use in favour of more sustainable modes.

At present, Graz has about 800km of speed 30 zones. With lower limits the number of people injured in traffic decreases by 15%, and above all the seriousness of the injuries. On the strength of the effects that were observed, the 30/ 50 kph speed limit was firmly established in Graz. The majority of the population has meanwhile overcome any initial objection.

Critical Success Factors

Public Engagement/Evidence of benefits: Convincing and changing the attitude of the general public has been a CSF in project progress: In 1992, only 44% of the population were in favour of the speed restrictions, however, by 1994, 77% agreed to the speed limit. This increase in popularity is due to the dissemination of the scheme's proven safety and environmental benefits:

The number of accidents as well as injured or killed persons through car-accidents declined significantly. The average number of accidents in the previous 5 years compared to the average number during the 5 years after the implementation dropped from 2563 to 2039. Lower speeds bring a significant improvement in road safety conditions for cyclists and pedestrians. The number of accidents with cyclists has decreased, while cycle use has increased. Besides a decrease in accidents, noise pollution has also decreased and the quality of life and coexistence of pedestrians, cars, and bikers has improved.

2.7 Travel Awareness

Promotes the use of mobility management to the wider community via public campaigns (this might include, for example, promotional events).

a) Good Going Week, London Borough of Merton, UK

Description

Good going week comprised of different events promoting different modes of transport on each day of the week, e.g. public transport, bike, car sharing etc. A few examples of events which took place during the week are listed below:

Commuter challenge:
Four sites were carefully selected and volunteers from the council took part in the 'race' from these locations to the Civic Centre; people took part using all forms of transport (bike, walking & running, bus, tube, tram, car etc) and travel times were compared.

'Ride your bike'
This day was dedicated to cycling to work. Those who cycled to work received a goodie bag and were given a £5 voucher to be spent in a local/trendy cafe. People who cycled to work were also surveyed as part of a travel plan. The surveys aimed at getting cyclists views on cycling facilities in the building - showers/changing room and parking.

'Share your car'
This date was dedicated to encourage people to travel accompanied by a colleague and not alone. All those arriving by car were given information on the lift-share scheme and the car club. Those who shared their cars were given £2 vouchers as an incentive. All those claiming to have driven to work were also surveyed to establish where they were coming from; where they parked their car and whether they had an alternative mode to travel to work.

'Car Free day - Safer streets for children'
This was the Car Free day event. As the theme was safer streets for children, a road was closed where some schools are located. Several activities took place and nearly 1,000 children participated throughout the day as activities such as street entertainers; bike try-outs, cycle training; Debra the Zebra – a road safety mascot - and dance workshops took place. The London Underground was also represented and they had a mock tube station to train children on safety skills at tube stations.

We also promoted safe travel at night in Wimbledon during a Saturday night.

The overall objective of the *good going week* was to raise awareness of sustainable travel in the borough and amongst staff at the Council. The week also coincided with the European Mobility Week. *Good Going* is promoted all year long with the production of regular newsletters etc. The events also fulfilled the objective of promoting the *good going* branding.

Critical Success Factors

Public Engagement:
The objectives were fulfilled in regard to promoting 'good going' and sustainable and safe transport: Over 800 children took part in the events on Car Free Day. Over 300 staff replied to the surveys we carried out during the week on several transport related issues. However it is unclear as to whether this has led to a direct impact in changing people's attitudes on how they currently travel.

The 'Safe at Night' campaign was not successful. We tried to approach young women going out on a Saturday night and highlight safety issues such as the risk of rape in unlicensed mini-cabs etc. This did not receive a particularly good response.

It is also important to target school children as they are more susceptible to change.

Benchmarking: As things currently stand there is no clear evidence as to how these campaigns may impact the target groups. There is therefore a clear need to fully evaluate such campaigns at a higher level.

Car Free day itself takes up a lot of staff time and it was unclear whether this was the most effective way of using time. The council are re-assessing their position in relation to Car Free Day.

b) Almada, Better without Cars, SPAIN

Description

Drivers were encouraged to voluntarily not use their cars every Thursday. In doing so, they could enjoy a set of discounts and benefits: in public transport fares, in cultural and sporting activities and in several participating local shops. This project was aimed at all of Almada's driving population, including those who worked in Almada and lived elsewhere. In Almada, a light rail tram system is being implemented and this campaign is part of the strategy of the Municipality to promote the use of public transport and the modal shift between the use of the private car and public transport.

Scheme Objectives:
Awareness raising in the field of energy consumption in urban transport and benefits of the rationalisation of private car use combined with increased use of public transport. Debate on sustainable mobility and the car use in the city, involving the drivers in the solution of the problem.

Benchmarking/Public Engagement: Surveys were carried out to measure the impact of the campaign in Almada. The campaign has raised the debate around the issue of mobility and measures required to improve it; it succeeded in transmitting its message to a considerable percentage of the population of the City Council; it engaged drivers on a voluntary basis, although their number was relatively small compared with the total number of the target audience.

Marketing: This Campaign was presented in several conferences and the TV spot won the award for best movie in its category in the International Animated Film Festival Cinanima in 2003. The campaign was developed with the support of the Local Energy Management Agency of Almada (AGENEAL).

A TV spot was produced in addition to other campaign materials such as leaflets, participating cards, posters, t-shirts and merchandising products. There were also articles published in the Municipal Magazine, every edition with 80.000 copies in print, is distributed door-to-door in roughly every household in the City Council. Also, a web site was created for this project (http://www.melhorsemcarros.org/).

A survey has demonstrated that nearly 60% of the population of Almada was aware of this campaign. Despite this, at around 500, the number of participating drivers was relatively low.

Financial incentives given to drivers in the form of discounts, to 'compensate' for their efforts and a positive effect on local commerce, since the incentives are given by local shops and entities.

Stakeholder engagement: The initiative required the involvement of several public and private institutions located in Almada, as well as local actors.

Political Leadership: The approximate budget for the project implementation and marketing was €50 000. Until the 22nd September 2001, the major source of financing (60%) came from the Almada City Council. After this date, the City Council fully financed the project.

2.8 Travel Plans

A series of measures focused on a site (this might include schools, places of employment, retail centres) that seeks to affect positive modal shift away from single occupancy car use.

a) Mobility Management for schools, Graz, AUSTRIA

Description

Mobility management means changing behaviour of people towards the use of more sustainable alternatives for getting from point A to B. Graz has developed its efforts to improve travel for schoolteachers and pupils through a new programme initiated at selected primary schools where teachers, students, parents, police, and the city planning department must collaborate.
In this programme the students assessed their routes to school and tried to work out alternatives to car-traffic.

Various improvements have been implemented in the schools:
-Car pooling with the school classes
-Analysis and improvement of the school neighbourhood with respect to traffic safety
-Collecting green miles through more walking and biking to school.
-car free month with the "kugelbarometer": a measuring device, where each morning, the children throw coloured balls (each mode a different colour) into different transparent boxes, so that the state of filling indicates the modal split.
-painting the streets, measuring speed, etc·
-A benchmarking tool as available on www.schoolwaynet.at served to define specific measures per school
-Awareness with children: measure speed, mobility education,
mobility projects.

Children as the future generation are affected in two ways by motorised transport:
1) the suffer from pollution most and are at risk by car drivers, when they walk or cycle (e.g. to school)
2) they get used to a certain modal choice and are likely to prefer the car unless they are made aware of the alternatives. Hence, in Graz, mobility management measures were implemented at 4 schools.

Awareness raising activities were undertaken, such as idea contests, games, interviews and image campaigns with a main focus on the pupils, but also trying to influence the parents and teachers through the children.

The school mobility management activities had a positive impact on the modal split: it reduced car usage mainly in favour of Public transport usage.

Critical Success Factors

Stakeholder / Public Engagement: Almost 500 pupils participated in the school action to collect green miles and the activities led to a reduction of car use in favour of Public transport.

Training: The greatest obstacle to realising school mobility management usually lies with the teachers, who still wish to travel by car, even if the whole class of 30 pupils manages to walk or cycle to school. In many schools, there may be some lessons about the use of transport, however this is often car focused. It would help that alternative modes are integrated into the normal teaching syllabus, and that they are mediated in a didactically interesting and profound way. Children are a very good "excuse" to convince adults (parents, teachers, police) that alternatives to the car exist.

b) Agata - Creation of a multi-services portal for three industrial parks, SPAIN

Description

Agata is a European project co-financed by the European Commission within the framework of the Interreg IIIB Programme. Agata is carried out in three countries (Spain, Italy and Portugal) but it is shared by seven partners (local administrations, transport companies and energy and innovation entities). At local level, Agata is developed in Terrassa by the Area of Territorial Services an Urban Works, part of the City Council. The main objective is to improve the mobility of three industrial parks located at the South-East part of the city. They are not sufficiently connected (in terms of public transport) to the rest of the city. Thus, most of the employers and employees of these industries go to work by car. The City Council therefore decided to work on a specific mobility plan to improve the mobility of these industrial parks. This should be done by creating a multi-services internet website that gathers information on all transport possibilities available to go to work. It also offers the opportunity for commuters to use an innovative mobility tool, i.e. car-sharing.

A car-sharing system has therefore been developed, including a detailed cartography and the automatic creation of groups by a specific software that has been designed for the webpage. The initiative forms a good option to reduce the number of cars travelling to and from the industrial parks every day. Furthermore, it is a transport option for those who don't have a car, who cannot drive or who have really bad public transport connections towards the industrial parks.

In sum, this multi-services portal expects to ease commuting trips to the industrial parks by providing information, news, and the opportunity for car-sharing.

Critical Success Factors

Public Engagement / Marketing: The number of webpage visitors has significantly and permanently increased but there are only six people registered in the car-sharing service, so at the moment it is hardly possible to group them. It is therefore necessary to reinforce the campaign of the car-sharing service.

It is difficult to promote the car-sharing service to workers at the industrial parks, because a) many of them don't have the internet at home, b) don't trust the service or don't want to travel with unknown people or c) already use another car-sharing system.

Stakeholder Engagement / Marketing: The most important success factor is the communication between all stakeholders with the target audience (the potential users) to promote the service. The

City Council has therefore implemented an intensive communication campaign that includes the production and distribution of 10,000 leaflets, 300 posters (A2 papers), 20 panels (A2 hard posters that can be fixed on walls by hooks) and 100 posters (A3 papers).

In addition, meetings were held with the managers of the largest companies and the company committees, with workers' unions, representatives of trade unions and syndicates at industries etc.

The campaign was also promoted on the back of a similar campaign based on the car-sharing service (Sunrise) that provided a lot of information for the communication campaign, the software etc. The information was very helpful to advance the implementation process.

SECTION 3: BENCHMARKING MOBILITY MANAGEMENT: SELF-BENCHMARKING

This section summarises the results of the partners' appraisal of their organisations' performance in respect of the eight mobility management domains.

3.1 The methodology

The work was undertaken as an exercise during a meeting of the Project Management Board. It involved each project-partner working with two others to arrive at a considered conclusion as to its organisation's performance in respect each of the eight domains. Partners were asked to use the following 'scoring system':

SCORE	CYCLING AS AN EXAMPLE
1 Not part of my organisation's strategy	
2 We have made proposals, but no actions so far	
3 We have started but it's not complete [<25%]	stretches of cycle track but not a complete network
4 We have made significant progress [<75%]	network in place, we have more to do
5 We have achieved our target [100%]	cycling has increased to the level that we wanted
6 By European standards we know we are good	people tell us we are an example of best practice

In the light of the two discussions partners felt able to draw a conclusion, and to set out the reasons for their particular 'scores'. The commentary that follows assumes that the methodology eliminated any scoring distortions.

3.2 The outcome: summary

1. Annex 3 reports the numerical outcome as a table showing the scores. Given that mobility management and benchmarking are both concerned with the subtleties that underlie performance improvement, the table is of mainly arithmetical interest.
2. Overall the PIMMS partners self-assessed themselves as being at a score of 3.5, i.e started and on the way to significant progress.
3. In terms of the domains, they felt they were significantly best at Road Safety and Mobility & Education, and significantly worst at Policy & Integration, Individualised Travel Marketing, and Travel Awareness. The good-performing domains are perhaps explained because they are relatively well-established actions.

6. Road Safety	4.38
3. Mobility & Education	4.06
1. Clean Vehicles	3.63
Average	3.51
5. Road Pricing	3.38
8. Travel Plans	3.38
4. Policy & Integration	3.25
2. Individualised Travel Marketing	3.13
7. Travel Awareness	2.88

Partners' average scores are as follows:

Bromley	4.50
Stockholm	4.50
Graz	4.25
Frankfurt	3.94
average	3.51
Almada	3.06
Terrassa	2.81
Treviso	2.75
Serres	2.25

This variation may perhaps be explained partly by greater national wealth (northern countries have been able to invest more resources, and over a longer period of time); however it is also interesting to note that the 'above-average' partners are also the largest in terms of urban population.

3.3 The outcome: in detail

This section examines each domain in turn and reports the comments made by each partner. The comments are listed in 'score order', ie starting with the highest self-assessed score. Also included in each paragraph is our official definition of each domain. Full responses are confidential to the partners.

Domain 1. Clean Vehicles

Increase the use of vehicles that emit no greenhouse gases.

SCORE	COMMENT
6	People tell us we are an example of best practice in the field of using bio-diesel for the whole bus fleet and about 80 taxis (see BBC News, also Japanese TV). Visitors from all over Europe (London, Cork, Dublin…)
6	Trendsetter project; ethanol buses; biogas buses; best project.
4	EEV standard for buses (Dec 06), CRT-Filter for busses (90%), electric tram and underground.
3	Building bio-diesel plant for municipal vehicles
3	Financial support (€250) for citizens who convert cars to GPL Blue label compulsory for the certification of emissions Cleaning roads with water for PM10.
3	Toyota Prius Hybrid Fleet (5 vehicles for Councillors) Department vehicle (natural gas Fiat)
2	We have made proposals and political announcements, but the implementation of these measures will start after the elections.
2	1 station with biodiesel

Domain 2. Individualised Travel Marketing

Promotes the use of mobility management to individual households (this might include, for example, the provision of information about public transport services, car-sharing, bicycle training etc) and focuses on those users who initially express an interest in changing modes

SCORE	COMMENT
5	Door-to-door information including walking and public transport, on internet, by fax etc.
5	Car sharing project, bike and business, mobility service centre, promotion campaigns for public transport, homepage for public transport, brochure for disabled people using public transport.
3	Have run pilot scheme- not good results!
3	Different pilot projects, positive trends.
3	Web portal with information door-to-door (pilot project only for people working in an industrial zone in the south of Terrassa).
2	This issue is in our intention, but it needs better organisation in the traffic department.
2	
2	Step-by-step project (individualised survey and campaign for modal shift)

Domain 3. Mobility & Education

This is specific 'sub-sector' of mobility management, as it relates to most of the other domains in one of two ways: (a) in relation to the particular mobility needs of students; (b) to the importance of education in changing peoples' awareness about mobility management. Mobility & Education is specifically related to schools and education establishments though, and includes initiatives such as Safer Routes to School, School Travel Plans, Walking Buses, Cycle Training, 'kerbcraft' skills for children crossing roads etc.

SCORE	COMMENT
6	Heavy national and regional investment Strong targets that we are reaching All work under umbrella of school travel plans
6	High competence in training courses for: * Children * Citizens * Teachers
4	Walking school buses, safe roads to school, road safety taught in schools.
4	Children's Agenda 21 "In Movement" theme (work with schools, field-trips, children's parliament and documentary)
4	EU project "Step-By-Step"; activities for using public transport, bicycles and walking to school. Good co-operation with local school authority.
3	Mobility management for schools and enterprises. Work is going on; good experience in schools.
3	We have taken some action and are in the right direction. We are working with children (we have an educational park) and we are waiting for positive results.
2.5	PM: classes for pupils about circulation rules Contact the pupils with people who have had an accident.

Domain 4. Policy & Integration

The integrated policy and action by municipalities, integrated also with the policies of regional and national organisations in order to make the coordinated action usually necessary to achieve effective mobility management. This could specifically relate to the municipality's own Sustainable Urban Transport Plan and related policies. Does the municipality's policy agree / conflict with the regional or national policy?

SCORE	COMMENT
5	Score 5 due to the 'sustainable travel and transport' policies which are in place but not fully integrated in the different organisations.
4	Very good policy, concrete targets Local integration still has way to go
4	Good running mobility centre; traffic development plan ready for whole city, starting with extension of 3 tramlines. Traffic plan for our city district was a good experience because we learned that we can solve a lot of problems after these discussions, as most problems are small.
3.5	Masks Mobility Plan (MMP) Land planning in co-ordination with MMP Integrated ticketing Mobility studies in new developments
3.5	Regional co-operations with regard to mobility management. PIMMS project
3	PACicla- Almada's Cycle Plan. Accessibilities 21- Urban Mobility Plan (some measures already implemented in both cases)
2	Our intention is to change the mentality of politicians and citizens and we believe the conditions are ripe for this.
1	

Domain 5. Road Pricing

Specifically to reduce the negative impacts of congestion (this includes the strategic use of related pricing mechanisms eg car-parking).

SCORE	COMMENT
6	Congestion charge - success!
6	Congestion charges make it a score 6, but bad use of parking fares/policies.
3	Close area of short parking (blue zones) in city centre; special offer to residents and clean vehicles.
3	Parking fees on main roads for a limited parking time of 3 hours. Municipal company to regulate parking and circulation.
3	NO congestion charge, BUT parking fees etc.
2	There is neither the political willingness nor the organisation necessary to implement road pricing.
2	Blue zones
2	Great potential but no actions have been taken. Parking costs are too high.

Domain 6. Road Safety

This comprises hard measures (ie physical work) and soft measure (eg awareness campaigns, education and training).

SCORE	COMMENT
6	Excellent accident figures (EU comparison) meeting and exceeding local targets
6	Zero-vision (road deaths) “Alco-lock” (drink-driving issue)
5	Best practice with 30/50 km speed limit all over the city, well known all over Europe.
4	Measures to reduce the speed within the city New developments as a 30km/h limit Safe bicycle lanes (some examples)
4	Road safety is at the top of the agenda of our Local Authority. Actions: * Conversion of dangerous crossings to roundabouts * Information campaign for road safety: safety belts, helmets etc.
4	Speed limits (30 km/h) in residential areas and in front of schools/kindergartens; traffic-calming measures.
3	Some things have already been done but further action is needed.
3	Traffic calming measures around schools Accessibilities 21 Urban Mobility Plan

Domain 7. Travel Awareness

Promotes the use of mobility management to the wider community via public campaigns (this might include, for example, promotional events.

SCORE	COMMENT
4	Good use of brands Low use of performance indicators
4	Good and sometime innovative awareness campaign for public transport.
3.5	European Mobility Week “Better Without Cars” campaign Film “The Race: Public Transport vs. Cars”
3	No comment.
3	EU project, “Step By Step” (see section 3)
2.5	Mobility week (artwork on the road)
2	We want to create some travel awareness programmes, but it will take a long time to change the habits of the citizens (Greeks love their cars!).
1	

Domain 8. Travel Plans

A series of measures focused on a site (this might include schools, places of employment, retail centres) that seeks to affect positive modal shift away from single occupancy car use

SCORE	COMMENT
5	Travel plans for all schools in Frankfurt; personal travel plans; marketing brochures about public transport.
4	Working with businesses still at early stage, although getting good results
4	Good experience with door-to-door information and digital information.
3	A lot of work has been started, results in 2007
3	Two industrial zones (pilot project) Employees of the city council
3	A European project, OROS (Observatory for Road Safety) has inspired action for planning the travel of employees of the province of Treviso.
3	School Travel Plans (not for all schools and little implementation)
2	These travel plans are in our intentions. We made a survey for the destination (1000 questionnaires) and we are now studying the answers in order to organise travel plans.

SECTION 4: CRITICAL SUCCESS FACTORS

The original list of possible CSFs and scoring system (see 1.2 (5)) has largely been ignored and the identification of Critical Success Factors in the case studies was not extensive even in some of the more detailed reports, as most briefly described only one or two CSFs. In order to achieve a full understanding of criteria for a project's success, it would be very useful for partners to provide a more thorough analysis of CSFs when reporting on study tours and visits. Drawing from the case studies in this report, an analysis of generic CSFs (transferable between domains and countries) has been produced to provide clarification and act as a CSF benchmarking tool for partners own reports.

While individual "types" of CSF have been identified in the list below, it must be noted that the CSFs are intrinsically linked: Often the existence of one CSF depends upon another, or at the very least, one CSF will be considerably strengthened by the co-existence of others. It is therefore impossible to define a Critical Success Factor, without cross-referencing to another.

4.1 National and Local political leadership

Refers to the willingness and strength of governments to lead on a policy with positive implications on mobility management. National governments are likely to be involved in large scale project implementation, which may prove controversial and unpopular with a range of stakeholders and the public.

The interaction of central and local governments and enthusing local politicians at an early stage is also a critical success factor in the development of mobility management initiatives, as the experience of Stockholm illustrates (2.1b and 2.5a): In this case, the opposition of local government to the policies of national government caused much delay in the congestion charging trials.

The example of Stockholm also demonstrates how the interaction of complementary policies can provide considerable influence over the success of a mobility management project: The enforcement of a traffic calming technique, such as congestion charging, allows people to experience the benefits first hand – cleaner air, improved health, for example. Consequently, people may be more willing to accept further policies that aim to reinforce the existing benefits e.g car-sharing.

Evidence from the case studies (2.3b and 2.4b) shows that achieving overall reductions in traffic congested roads depends on some or all such supportive policies as re-allocation of road capacity and other measures to improve public transport service levels, parking control, traffic calming, pedestrianisation, cycle networks, congestion charging or other traffic restraint, other use of transport prices and fares, speed regulation, or stronger enforcement levels. Such initiatives fall within the remit of all the eight domains, demonstrating a need for the integration of many fields to ensure their individual success.

Further to lending financial and political support, governments could provide considerable weight to mobility management schemes with extended legislation. For example, planning legislation could be strengthened to ensure local authorities require effective travel plans in planning developments and car clubs for new residential developments (an extension of Section 106 in the UK), or travel plans could be made a statutory requirement for schools under health and safety requirements.

A clear, integrated national strategy and strong leadership to set precedence and stimulate the implementation of other initiatives is therefore a core CSF. Government support is required on both local and national levels to "lock in" or secure the benefits of mobility management schemes so that they are not eroded by induced traffic.

4.2 Engaging Stakeholders

Stakeholders (and communities – see Engaging the Public) may show a resistance to change when not equipped with a full understanding of the process and the reasoning behind the process. An informative and well structured consultation process therefore needs to be followed from the start to ensure acceptance of projects and a co-ordinated effort to achieve common goals.

Case studies such as Stockholm (2.1b), Agata (2.8b) and Girona (2.4a) provide excellent examples where decision makers have worked with a wide range of stakeholders to develop and improve upon mobility management plans.

4.3 Engaging the Public

As described above, winning the hearts and minds of the public is essential for mobility management schemes, as it is ultimately the public who will be affected by new initiatives as most people will come into contact with some mode of transport on a daily basis. This highlights the inherently social nature of transport and thus the importance of gaining public acceptance.

Engaging the public may require a behavioural/attitudinal change and the intervention of stakeholders on several levels:

Political
Inherently social issues, which affect people on a large scale can have a huge impact on the success of mobility management initiatives. For example, concerns about theft and fear of crime is a social barrier for walking or cycling. Policies which target such fears (improved street lighting, stronger police presence, increased CCTV) are likely to strengthen any initiative that promotes walking and cycling, as unless people feel safe in the first place, they will be unable to appreciate new cycle lanes or paths.

Economic
Financial incentives will often prove popular with stakeholders and the public, as cost and "value for money" often determines consumer behaviour. The success of Stockholm's government in stimulating the market for clean vehicles owes much to the tax incentives provided for the clean vehicles and fuels (2.1b). Business rebates and tax incentives on company cars also engaged stakeholders such as business and car manufacturers who would benefit from the increased demand for clean vehicles.

4.4 Marketing

Marketing is intrinsically linked to the engagement of stakeholders and the public, as it provides the means for engaging their interest and support through intelligent communication and dissemination. To be successful, marketing techniques must seek to promote an initiative with an understanding of the social, political and economic background that determines public and stakeholder behaviour. Travel awareness campaigns vary in nature from a general to a specific focus. Intensive campaigns tend to achieve higher levels of individual change.

It is also important to choose the most effective means of communication to reach specific groups. For example, while the internet may be the cheapest and often most accessible communication tool, some groups may not have access to computers or the internet, as demonstrated in the case of Agata (2.8b).

The case study of Merton (2.7a) highlights how promotional incentives are likely to benefit those who already utilize sustainable forms of transport, such as cycling. There is therefore a need to

assess how to reach the target audience, as more significant changes would be made focusing on those who still drive. (see Benchmarking)

The case studies reveal that in general, the techniques most likely to succeed will be a) innovative/attractive to stakeholders c) strengthened by partnerships/joint-marketing and d) media focused.

Innovative
Graz' s "better image of public transport" programme (2.2b) demonstrates a number of unusual actions undertaken, not normally associated with public transport. Merton's good going week (2.7a) provides a good example of promoting public transport as a modern and pleasant way of travelling in a fun and entertaining way.

Attractive
Besides the obvious attraction of economic incentives, marketing an attractive package of other benefits is also likely to appeal to people. The case studies promoting "soft modes" such as walking and cycling emphasise the fact that walking is free, easy, sustainable and good for your health. Alternatively, businesses might be encouraged by the promotion of walking as a means to improve the health of employees, potentially requiring less sick leave and operating more productively at work. The reduction of carbon emissions and better air quality will also create a pleasant environment for employees to work in, affecting lifestyle decisions such as where to select their home and work location.

Joint-marketing
The marketing success of several case studies involved joint marketing with other European projects such as TRENDSETTER, TAPESTRY and ZEUS (see 2.1b, 2.2b). The example of Merton's Good Going Week also demonstrates strategic timing by coinciding the event with European Mobility Week. "Good Going Week" has been developed as a brand to run similar events throughout London, thus widening the scale of awareness.

The media
Decision makers are more likely to approve a marketing proposal when the media participates positively in the initiative (see 2.7a)

4.5 Benchmarking/Evidence

Clear, technical evidence of the benefits achieved by an initiative will strengthen all of the above CSFs. This may prove to be a Catch-22 scenario in some cases, as testing/analysis may only occur once funding through political/stakeholder support has been secured. This is indeed an issue with clean vehicles and fuels, as without strong evidence of their environmental benefits, governments, stakeholders and the public may be unwilling to invest in new technology (see Technical leadership).

The case of Merton's Good Going Week (2.7a) demonstrates the need for project monitoring, as ultimately the organizers were unable to gauge the overall success of the event, which led to doubts over the use of resources, such as staff time.

However, where evidence of benefits is disseminated, the success and popularity of an initiative is most likely to increase. This was highlighted by the enforcement of a 30kph zone in Graz (2.6b), which after initial opposition, gained considerable favour when statistics displayed a dramatic decrease in road accidents.

4.6 Access

Several case studies have demonstrated increased use and popularity where a service is accessible to all. The Green Paths, Girona (2.4a) provides an excellent example of how an initiative can be integrated into daily life by providing a strategic network that links into essential points of the community.

Ease and convenience is an attractive incentive for most people, as displayed with the proximity of the biodiesel service station to taxi drivers in Graz (2.1a). As drivers would pass through the Taxi Headquarters on a daily basis, the strategic location of the fuelling station meant that drivers did not have to travel any extra distance to re-fuel.

Similarly, the storage and maintenance of bicycles at the train station in Terrassa (2.3a) ensured an easy transition from bike to train and vice versa.

4.7 Technical leadership

Requires a large amount of funding which is often unavailable. There are technologies which are in development but are not being used yet because the development process is too slow. The cost of new technologies is often too high for commercial businesses and the public to consider purchasing them.

Benchmarking/ emissions testing will use valuable resources (funding, staff time). However, it is vital to provide evidence of the environmental benefits of alternative fuels or clean vehicles to persuade stakeholders of the viability and benefits of new technology. (see also Benchmarking/Evidence and 2.1 clean vehicles)

4.8 Climate

The biggest and most critical of all, Climate is referred here in the broadest sense of the word: The physical, political and economic settings of a place and time will have a serious impact on the success of mobility management. As has already been discussed (see Engaging the Public), these various aspects are interlinked:

Physical: While certain aspects of the local environment can be changed over time (through improved air quality measures or urban planning approaches), and some can even be changed by increased walking and cycling (e.g pollution and air quality), the physical geography of an area is harder to alter. It is therefore necessary to identify and exploit potential benefits or barriers lent by the physical environment in any mobility management initiative. The experience of Girona (2.4a), for example, displays how the natural gradient of the landscape was effectively utilized to create accessible and popular cycle paths.

Political: Previous planning decisions may have created the existing city land-use footprint. This may affect the distance from residential areas, social groups and communities to work, shopping and leisure facilities. Long-term, sustainable and integrated policy, which places clean, efficient transport at the fore - as opposed to actively promoting car use - is vital to mobility management.

Economic: A more prosperous economy encourages large, low density housing estates and the increasing trend for companies to locate jobs, goods and services on out of town business parks where the overheads are lower than in urban areas. Case studies show that the quality of public transport tends to be poorer with increasing distance from the centre. It is therefore important that outer/rural areas are targeted with high quality sustainable transport to ensure wide-spread and balanced mobility management.

SECTION 5: CONCLUSIONS

5.1 Database coverage

With over 200 case studies, the PIMMS database has fulfilled the initial expectations in terms of overall quantity of entries. The tables below compare the number of entries per domain and per country.

Table 5.1: Case studies per domain:

Domain	Number of entries
Clean Vehicles	19
Individualised Travel Marketing	6
Mobility and Education	30
Policy and Integration	28
Road Pricing	2
Road Safety	24
Travel Awareness	81
Travel Plans	21
Total	**211**

Table 5.1 shows that most entries are found under Travel Awareness (81). This number contrasts with other domains such as Individualised Travel Marketing and Road Pricing with 6 and 2 entries respectively. The high proportion of initiatives under Travel Awareness, compared to Road Pricing could be due to their relative ease of implementation both economically and politically. Inversely, case studies such as Stockholm (2.1b) and Graz (2.6b) demonstrate that the most successful impact on mobility management has occurred where considerable economic and political resources were available. Interestingly, in the self-benchmarking study (Section 3) the partners concluded that their area's performance was "significantly best" at Road Safety and "significantly worst" at Travel Awareness. This indicates a strong case for the quality, not quantity of best practice examples as a measurement of success in a single domain.

Table 5.2: Case studies per country.

PIMMS Partner countries	Number of entries
Austria	20
Germany	17
Italy	26
Portugal	18
Spain	25
Sweden	21
United Kingdom	67
Other EU25 countries	**0**
EU candidate countries	**0**
Other European countries	**0**
TOTAL	**194**

A minimum of 25 records per partner across all the domains was set as an initial target of the benchmarking methodology. In some cases, the number of entries per partner fall short of this target and will be expected to increase as the project progresses.

There is great potential to develop the database further not only with increased reporting from the partner countries, but especially from non-partner countries. Table 5.2 shows that no records have been entered under Other EU25 countries, EU candidate countries and other European countries. It would be interesting to visit and report on the progress of countries where initiatives have

succeeded with perhaps fewer resources than those of the partners' countries. The reports could provide further evidence for the analysis of Critical Success Factors (section 4) and extend its universality/transferability.

5.2 Database quality

An analysis of the content of the database revealed a disparity in the amount of detail provided in different reports. Several reports were partially incomplete. This is clearly an area which could be improved. It might therefore be useful to impose a more rigorous data collection process for future reports.

5.3 Critical Success Factors

CSFs are a stated element of the PIMMS contract, as the transfer of success in one area to another area or subject is a core objective of the project. The analysis of Critical Success Factors identified in the case studies (Section 4) is intended to emphasise the importance of CSFs in the development of mobility management schemes and act as a benchmarking tool for partners' own reports. It is anticipated that partners will provide comments and further input into section 4 as they test the CSFs against their own experience, both in their own cities and on the Visits. Section 4 may therefore be revised and become an official document as a final project outcome in Sep 2007.

5.4 Self-benchmarking

The Self-benchmarking exercise has provided the essential basis for partners to identify their weaknesses and strengths, and to plan their Study Tours and Staff Exchanges accordingly. The effectiveness of the methodology will be evaluated at the end of the project, in the light of partners' experience.

ANNEX 1: Benchmarking Database Questionnaire

Country	
Local Authority	
Contact Officer	
Position	
Email	
Telephone	

TYPE OF INITIATIVE (TICK ONE)	*Policy / Strategy*		*Education / Training*	
	Publicity / Info		*Other 'soft' initiative*	
	Engineering		*Urban Design*	
TITLE				
DATE / DURATION				
CATEGORY (TICK ONE)	*Clean Vehicles*		*Road Pricing*	
	Individualised Travel Marketing		*Road Safety*	
	Mobility & Education		*Travel Awareness*	
	Policy & Integration		*Travel Plans*	

1. Overall objectives / key outcomes	
2. Target audience (size and type)	
3. Description of initiative / activities	
4. How did you market / publicise this initiative	
5. Links to other initiatives / developments (new cycle / walking routes etc)	
6. How much did the initiative cost, and from where was this funding secured (local / regional / national / International)?	
7. How was the impact / success of the campaign measured?	
8. To what extent did the initiative fulfil the original objectives?	
9. Specifically, what impact did the initiative have on:	
• *Travel awareness*	
• *Changes in travel behaviour*	

• *Modal Shift*	
• *Road Safety*	
• *Other (please state)*	
10. What can you identify as the Critical Success Factors?	
11. With the benefit of hindsight, are there any aspects of the initiative that could have been improved?	
12. Any other comments:	

Possible follow up questions

- Which agencies were involved in the initiative (public, private and voluntary).
- What was the public reaction to the initiative (apathy, enthusiasm etc)
- To what extent are Political Members signed up to these activities
- Was this a unique campaign or based on tried and tested format
- What media of communication were used?
- How were the media employed
- How does the activity support broader agendas
    - Sustainability
    - Accessibility
    - Promoting independence
    - Road Safety
    - Equalities
    - Air quality
    - Health
- How has the initiative been followed up?
- Do you feel that the initiative had a long-term sustained impact?
- Time scales (is this a one off or sustained campaign)?
- Resources required (staff, equipment, consultants, media etc.)?

ANNEX 2: Self-Benchmarking Questionnaire

Instructions:

1. Each PIMMS partner is to undertake the exercise twice, and then draw conclusions.
2. In the column 'first' (Sheet 1) please record the results of your discussion with your first project-partner.
3. In the column 'second' (Sheet 1) please record the results of your discussion with your second project-partner.
4. In the column 'final' (Sheet 1) please record your final conclusions about your organisation's performance. This does not have to be an average of the first two columns.
5. Finally, please transfer the 'final' score to Sheet 2, and record the reasons for your score

SHEET 1

PARTNER			
Mobility Management Domain	**First**	**Second**	**Final**
1. Clean Vehicles			
2. Individualised Travel Marketing			
3. Mobility & Education			
4. Policy & Integration			
5. Road Pricing			
6. Road Safety			
7. Travel Awareness			
8. Travel Plans			

On the basis of what you have learned through the project so far, please assess your organisation's performance using the following categories:

HOW TO SCORE	**CYCLING AS AN EXAMPLE**
1 Not part of my organisation's strategy	
2 We have made proposals, but no actions so far	
3 We have started but it's not complete [<25%]	stretches of cycle track but not a complete network
4 We have made significant progress [<75%]	network in place, we have more to do
5 We have achieved our target [100%]	cycling has increased to the level that we wanted
6 By European standards we know we are good	people tell us we are an example of best practice

SHEET 2

PARTNER NAME		
DOMAIN	**BENCHMARK SCORE**	**JUSTIFICATION FOR SCORE**
1		
2		
3		
4		
5		
6		
7		
8		

DOMAIN		BENCHMARKING SCORE	
1. Clean Vehicles	5. Road Pricing	1	Not part of my organisation's strategy
2. Individualised Travel Marketing	6. Road Safety	2	We have made proposals, but no actions so far
3. Mobility & Education	7. Travel Awareness	3	We have started but it's not complete [<25%]
4. Policy & Integration	8. Travel Plans	4	We have made significant progress [<75%]
		5	We have achieved our target [100%]
		6	By European standards we know we are good

ANNEX 3: Self-Benchmarking: Summary Outcome

Partner / Mobility Management Domain	01 Bromley	02 Graz	03 Stockholm	04 Serres	05 Terrassa	06 Treviso	07 Almada	08 Frankfurt	ALL (Av)
1. Clean Vehicles	3	6	6	2	2	3	3	4	3.63
2. Individualised Travel Marketing	3	5	3	2	3	2	2	5	3.13
3. Mobility & Education	6	3	4	3	2.5	6	4	4	4.06
4. Policy & Integration	4	4	5	2	3.5	1	3	3.5	3.25
5. Road Pricing	6	3	6	2	2	2	3	3	3.38
6. Road Safety	6	5	6	3	4	4	3	4	4.38
7. Travel Awareness	4	4	3	2	2.5	1	3.5	3	2.88
8. Travel Plans	4	4	3	2	3	3	3	5	3.38
ALL (Av)	4.50	4.25	4.50	2.25	2.81	2.75	3.06	3.94	3.51

Score categories:

1 Not part of my organisation's strategy

2 We have made proposals, but no actions so far

3 We have started but it's not complete [<25%]

4 We have made significant progress [<75%]

5 We have achieved our target [100%]

6 By European standards we know we are good