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1 INTRODUCTION

1.1 MMOVE

MMOVE is an Interreg IVC project, with 11 partners and a total budget of 1,9 million €. It will run for 36 months, starting in November 2008, with the aim of supporting interregional exchange on sustainable mobility policies for medium sized European cities (populations 50-250,000). The 11 partners, from 8 EU Member States, are local authorities representing medium sized cities, including 2 cities from new Member States and one Regional Authority.

MMOVE aims to improve the effectiveness of sustainable mobility policies implemented by local authorities in small and medium sized cities in Europe and to improve awareness amongst regional level policy makers of the importance of supporting these policies within regional development frameworks.

The main objectives are

- To identify and exchange good practices in sustainable mobility policies for small and medium sized towns.
- To assess the transferability of best practices in order to identify their critical success factors.
- To provide a common methodology for mobility management policies.
- To improve awareness of innovative mobility management methods that have low investment and large impact in terms of changing citizens' mobility patterns.
- To provide European small and medium sized municipalities with a tool to advocate for their needs with regional governments (providing policy recommendations).
- To provide a tool that will support policy-makers in their mobility management planning across Europe.

1.2 The Methodology

The methodology for benchmarking mobility management best practice comprises Component 3 of the MMOVE project. The methodology was devised by the CP3 lead partner, based on partners' and European local sustainability indicators. Its main aims are to:

- 1. provide a common format for describing the Best Practice (BP)
- 2. establish an objective performance rating



- 3. assess the BP transferability to other partner and to other EU towns outside the partnership
- 4. identify Success Factors that have led to the high take-up of the BP
- 5. identify Critical Factors that could limit the success of the BP
- 6. provide a basis for selecting the partner's visits;
- 7. provide the basic elements for the implementation of the tool that will support policy-makers in their mobility management planning.

The following three main domains were agreed upon by the partners

- A. Communication & awareness raising
- B. Parking and traffic management and control
- C. Public and collective transport

A not exhaustive list of possible BP from each theme is the following.

- A. Communication & awareness raising
 - Action aimed to get better the public transport image, promoting it as modern and pleasant way of traveling.
 - Public and thematic campaigns to promote the use of Mobility Management System, in relation to the particular mobility needs (e.g. students, employees..) including ad hoc initiatives, and/or to encourage the intermodality.
 - Road safety awareness campaigns.
 - Establishment of centers and or web tool to provide citizens with all kinds of information about urban and inter-urban public transport.
- B. Traffic management and control
 - Pricing mechanism (e.g. car-parking, road pricing..).
 - Traffic calming measures, zebra crossing area, restricted traffic area, severe parking restrictions, "Intelligent" Traffic Lights, speed limit, etc.
- C. Public & collective transport
 - Increase the use of vehicles that emit no greenhouse gases (e.g. biodiesel and /or natural gas fleet).



- Promotion of integrated tickets (discounts and pre-sales) for public transport.
- A series of measures focused on a site (this might includes, school, places of employment, retail centers) that seeks to affect positive modal shift away single occupancy car use (e.g. car sharing among colleagues, car pooling with school classes..).



2 BEST PRACTICE COLLECTION TEMPLATE

The BP Template is the instrument developed by the CP3 lead partner to collect the information of the BPs provided by the MMOVE partners. The collected BP templates (see next Section) have been uploaded into the MMOVE website.

According to the project phases and aims, the BP Template is constructed to define the context for exploration and exchange of best practices on mobility management that refer to medium sized cities, and collect homogeneous data from and outside the MMOVE partnership, in order to test the practice transferability to other contexts. More specifically the aim of the template is twofold:

- a) to provide each partner with a scheme that helps to give a detailed description of their BPs;
- b) to collect the relevant information from each partner by means of a standardized format that simplifies the analysis and comparison of the different BPs.

The whole BP Template consists of **three** main sections:

SECTION A - Background and information data

SECTION B - Urban Mobility Data and Environmental Background

SECTION C - Best Practice Description

The aim of the first two sections is to provide a brief description of the Municipality, its environment and its main mobility issues. The last section is devoted to the detailed description of each BP. In the following we will be mainly focused on the last Section C.

2.1 SECTION A - Background and information data

This section is aimed to comprehend the situation of the Municipality, from the geographical and morphological point of view, as well the socio-economic conditions, including the relevant mobility policies. It consists of three main subsections plus a summary for each BP.

- 1) GEOGRAPHYCAL and MORPHOLOGY DATA
- 2) SUSTAINABLE URBAN MOBILITY POLICIES
- 3) SOCIO ECONOMIC DRIVERS
- 4) BEST PRACTICE ABSTRACT: GENERAL DATA AND SUMMARY



The **first subsection** "GEOGRAPHYCAL and MORPHOLOGY DATA" is aimed at giving a short picture of the Municipality. The data required describe:

- the organization of the town (monocentric or polycentric);
- the morphology (percentage of the territory flat, presence of lakes, rivers, sea);
- the usage of the territory (percentage dedicated to agriculture, industry, etc.);
- the population (percentage male/female, employment, elder people, etc.).

The **second subsection** "SUSTAINABLE URBAN MOBILITY POLICIES" is aimed at giving a description of the National, Regional and Municipality sustainable urban mobility policies and their interconnections. This subsection also describes the actions undertaken to manage and direct the Mobility Demand, including any incentives and/or opportunities for the sustainable urban mobility policies. The partners are required to give a free description for each of the three following subjects concerning the mobility regulations:

- national framework;
- regional framework;
- municipality framework;

and the four following subject regarding the mobility demand management:

- planning;
- pricing;
- marketing & information;
- others.

The **third subsection** "SOCIO ECONOMIC DRIVERS" is aimed at giving some elements to understand the economical situation of the municipality. The required descriptions refer to the following subject:

- number of local active units in the Municipality (including industry, services, universities, etc);
- number of employees per local unit including people from other municipalities;
- number of employees per local unit coming from the Municipality.

The **last subsection** "BEST PRACTICE ABSTRACT: GENERAL DATA AND SUMMARY" is aimed at giving a list of the BPs presented and for each one a summary description (the detailed description of the selected Best practices is given in Section C). The data required are:

• Best Practice title;



- Best Practice acronym;
- Best Practice Thematic Issue (A. Communication & awareness raising; B.Parking and traffic management and control; C. Public & collective transport.);
- Partner;
- Municipality;
- Country;
- Other bodies involved;
- Duration;
- Budget.

2.2 SECTION B — URBAN MOBILITY DATA AND ENVIRONMENTAL BACKGROUND

This section provides a quantitative data on the urban mobility and environment status. The data are supposed to be extracted from the last statistical information collected by the Municipality. The year at which the statistics are referred is the first information required. The section is divided into two subsections:

- 1) URBAN MOBILITY DATA IN THE MUNICIPALITY
- 2) ENVIRONMENTAL BACKGROUND

The **first subsection** "URBAN MOBILITY DATA IN THE MUNICIPALITY" is the most relevant and detailed. It is organized into two parts: Mobility Demand and Mobility Supply.

The aim of the Mobility Demand part is to provide a detailed information on the mobility patterns of the Municipality. Inside the MMOVE project there is no activity related to the collection of these data, therefore we suppose that each Municipality performs periodic screening on the mobility on its territory. The data required are:

- Resident population for daily transfer and destination (transfer inside and outside of the territory);
- Motorization Rate (# cars per 100 inhabitants)
- Systematic trips compared with the unsystematic one (percentages);
- Number of daily trips per capita (one, two, etc.);
- Trips Times (average duration of the trips);
- KM/per capita (average distance covered each day by a citizen);
- Modal Split (percentage of different transport modes used by the citizens);
- Daily mobility distribution (percentage of trips in every hour of the day).

In the Mobility Supply part is the Municipality is required to give information concerning the infrastructures (e.g. roads or parking) and the services related to the mobility (public transport, car sharing, etc.). The data collected are:



- Municipality road network (total length in Km)
- Local Public Transport (LPT) (total kilometres of the public transport / inhabitants)
- fleet vehicle typology (number of vehicles using diesel, biogas, electric engines)
- LPT efficiency (total cost of the service / total km)
- LPT effectiveness (number of users / total km
- urban public transport fare for a single trip
- bus lane (total kilometers of dedicated bus lanes);
- car park (with and without fees);
- park and ride space (areas dedicated, if any);
- cycle lane (Total kilometers of lanes dedicated to bicycles);
- bike sharing (number of bicycles and stations);
- car-sharing (information on the existence and organization);
- carpooling (information on the existence and organization).

The second subsection "ENVIRONMENTAL BACKGROUND" is a short section collecting qualitative data on the quality of the environment. The subject addressed are:

- pollution;
- noise;
- congestion;
- car accidents.



2.3 SECTION C - BEST PRACTICE DESCRIPTION

This section is aimed to describe best practices for each project partners, according to the selected themes. The partners are called to fill out this section providing a full detailed description as well a summary for each BP. The section is organized into two subsections:

- 1) BEST PRACTICE DETAILED DESCRIPTION
- 2) BEST PRACTICE ABSTRACT GENERAL DATA AND SUMMARY -

The second subsection is a copy of the abstract included in Section A, so we do not repeat here its description.

The first subsection "BEST PRACTICE DETAILED DESCRIPTION" presents a list of elementary aspects of the BP and asks to give information for each one, mainly in a free format. Nevertheless quantitative indicators are required whenever available and appropriate.

First of all it is required to define the **Thematic** of the BP by choosing among:

- A. Communication & awareness raising;
- B. Parking and traffic management and control;
- C. Public & collective transport.

The following elementary aspects are considered and for each of them a proper filed is provided in the template:

- Ratio and Approach in the Undertaken Action
- Objectives and Target
- Financial Resources
- Description of the intervention
- Technical Training Course/Training Phase
- Transferability
- Output
- Coherence
- Critical points, constraints and further information
- Critical Success Factor
- Conclusion

In the Ratio and Approach in the Undertaken Action field the partner has to explain the reasons which leaded the choice of the specific BP, to detail the needs and



critical points faced, to describe the interventions formerly evaluated and if the action comes from a Bottom-up or Top Down approach (citizens participation, direct/indirect involvement, Local Agenda 21, focus group, round tables).

The next **Objectives and Target** it is required to describe the focus of the project and the primary objectives of intervention, including the a description of the target and the expected value for it.

In the **Financial Resources** field it is expected a description of the financial resources, used for the BP, including information on their source: the Municipality, the Region, the European Community, private subjects, etc. It is also required to specify how those resources have been activated.

In the **Description of the intervention** a detailed information on the implementation of the BP is required. In particular the following sub-field have been provided:

- *Technique* (the manner with which the intervention has been implemented and the information collected)
- *Method* (how the BP has been implemented)
- Activities and process (the tasks performed and their chronology)
- *Skills and bodies involved* (consultants in mobility, ICT experts, local public transport providers, enterprises, public/ private bodies, employers..)
- Incentives (incentives received and/or made available to the citizens)

The **Technical Training Course/Training Phase** field reports on possible training that has been necessary to implement the BP. Information on the contents and costs of the training is also expected.

In the **Transferability** field it is required to give a qualitative and subjective indication on the possibility to transfer this BP to other Municipalities

The **Output** field describes the results of the application of the BP. Quantitative information and comparisons with the starting context are required. Mobility indicators of Section B of the template should be addressed and evaluated.

In the **Coherence** field it is required to describe the relations with the urban mobility policies listed in the Section A, subsection two of the template: "SUSTAINABLE URBAN MOBILITY POLICIES".

In the **Critical points**, **constraints and further information** the Municipality has to describe the peculiar aspects and problems faced during the implementation of the BP. Qualitative and quantitative aspects should be described.



The **Critical Success Factor** field is a quantitative grid of evaluation of possible success factors. The partner has to provide a score of relevance, ranging from 1 (minimum) to 10 (maximum). The factors are:

- i. Political support and long-term commitment
- ii. Public awareness
- iii. Stakeholder Engagement
- iv. Integrated Policy
- v. Funding (national, EU)
- vi. Existing regional frameworks (Institutional, financial and legal)
- vii. Public Private Partnership
- viii. Co-ordinating organisations (on local level)
- ix. Reporting/monitoring
- x. Location (of co-ordinating organisation access to local stakeholders) or facility and accessibility of mobility centre
- xi. Technical capacity of staff
- xii. Standardised methodology
- xiii. Technology (innovation and variation)
- xiv. Strategic Planning
- xv. Experience/dedication (of staff)

The **Conclusion** field summarized the BP results. The first aim is to evaluate the efficiency and effectiveness of the actions undertaken, using the parameters suitable for the assessment process. Quantitative indicators should be used and the added value achieved with the BP should be emphasized. The second aim is to describe possible problems encountered (for the involvement of the bodies, during the implementation/training phase, etc). Finally it is presented an evaluation of possible divergences of the outputs achieved from the planned ones. Reasons of possible divergences have to be provided.



3 BEST PRACTICES FROM PARTNERS

3.1 Brasov (Romania)

3.1.1 Video survailance of the city busses

Theme:	Public and collective transport
Partner:	Metropolitan Agency of Brasov
Municipality	Brasov
Other Bodies involved:	
Duration:	Ongoing
Budget:	32800Euro

Rationale, objectives and target

The citizens have brought to the public authorities' attention that several gangs of pickpockets are roaming the city buses, steeling valuables, especially from old people. The victims, in turn, were mostly elderly people, which could not provide detailed descriptions of the thieves, mostly because they would only discover that they miss their wallet after they got off the bus. Also, tourist which did not speak Romanian were targeted as potential victims.

There have been incidents when other people in the bus observed the crime and tried to stop the thieves which became violent, and then got off at the first stop, without being catch by the police.

The objective of the intervention has been to decrease the number of crimes (which took place in the city buses.

A possible solution consisting of a presidium of the buses by policemen was discarded due to very high costs.

So, it has been decided, by the management of the public transport company to install, in the vehicles from certain bus routes (the ones targeted by the thieves) video surveillance and recording equipment, so that the police is provided with enough evidence to identify and then convict the persons which stole the goods.

Financial Resources



The financial resources have been ensured from the local budget of the municipality.

Description of the intervention

TECHNIQUE

According to the complaints of the citizens, and in cooperation with the city police, the bus routes where most of the incidents happened have been identified. Thus, the public transport company has established that 41 city buses will be equipped with video surveillance equipment

METHOD

The local administration organised a public tendering procedure, and a private company has been elected to provide and install the video surveillance equipment.

ACTIVITIES and PROCESS

- The critical bus routes have been identified
- The number of buses which will be equipped with video surveillance equipment has been established
- A public tendering procedure has been organised
- The designated private company which won the tender has installed the video surveillance equipment (one DVR-device video recording, one HDD de 120Gb and 2 or 3 video cameras with 360o view per vehicle)
- Random checks have been arranged with the local police and the public transportation company's own control staff
- The installation of the video surveillance equipment has been advertised in the local media.

SKILLS and BODIES INVOLVED

- Local Public Transport Company
- The Municipality of Brasov
- The City Police

INCENTIVES

Not applicable

Technical Training Course/Training Phase

The training provided has been directed to the bus drivers, and it comprised operational information about how to use the video surveillance equipment on the bus they are driving.

Output

The citizens would feel safe again in using the bus.

The level of thefts has decreased dramatically, to less than a third their initial level. Any crime that was happening it is easier to solve because of the video proof that



allowed the police to identify the offenders.

Critical points and conclusions

Unfortunately, after a few months, the video equipment started to fail. The cause is the condition in which they function (mostly vibrations and high temperatures). In this respect, the public transport company is looking for some specialised solution (which include temperature and vibration protection) to equip the rest of the bus fleet.



3.2 Brighton (United Kingdom)

3.2.1 Quality bus partnership

Theme:	Public and collective transport
Partner:	Local bus companies
Municipality	Brighton & Hove City Council
Other Bodies involved:	Local communities, groups, agencies
Duration:	Ongoing
Budget:	Not possible to quantify

Rationale, objectives and target

A Quality Bus Partnership [QBP] can be described as a statement of agreed intentions between a range of partners to deliver improvements to the public transport system to the benefit of local communities and/or wider areas. It is therefore a joint approach between public authorities and private/commercial bus operators. In overall terms, general objectives could be defined as:

- encouraging use of public transport to help reduce reliance on the car for some journeys
- improving the quality of the service to help meet more of the community's travel needs
- to plan and provide a service that is reliable, economic, inclusive, accessible, customer-oriented and integrated
- creating a safe travelling environment, while widening travel choices
- enhancing an area's economic vitality
- enabling greater sustainability within the planning system to help meet future local transport/movement needs

Financial Resources

Local authority – has invested significant capital sums over many years in road/highway infrastructure such as accessible bus stops, bus shelters, real time information signs, bus lanes, traffic signal technology

Bus companies – annual significant investment in modern, accessible, low emission bus fleet, on-board GPS vehicle tracking system (linked to real time signs), staff training for customer care



Description of the intervention

TECHNIQUE

Partnerships include 5 key ingredients for each partner. For <u>Bus operator</u>: improved service frequencies, value for money fares and tickets, investment in new buses, enthusiastic staff, effective sales message. <u>For Local authority</u>: bus priority on roads, improved passenger waiting areas, real-time information displays, traffic regulation/parking enforcement, Park + Ride

METHOD

Develop working relationship that primarily benefits the passenger and city. Local authorities also provide effective communication and consultation by involving stakeholders (e.g. public participation exercise for accessible bus stops). Bus companies provide quality marketing and publicity to boost public awareness, perception and use of services.

ACTIVITIES and PROCESS

Once the partnership working arrangement has been approved, each party can engage in the most appropriate way to define the priority activities and how to deliver them. Activities could include: Bus lanes and priority for late-running buses at traffic signals, Accessible bus stops, Real Time and GPS system, 'Talking' bus stops, Low floor vehicles, 'Journeyon' campaign/material – journey planning, Parking enforcement

SKILLS and BODIES INVOLVED

The local authority manages, operates and improves the road network and the private bus companies operate the services for local communities. Both provide information about the services and routes available. High stakeholder involvement – 500 organisations are involved in consultation on bus service changes; users, frontagers and disability groups approached for accessible bus stop programme; Royal National Institute for the Blind and local visually impaired bus users involved in 'talking' bus stop initiative.

INCENTIVES

Many different ticketing initiatives are offered by bus companies Bus patronage has increased from about 22 million passenger journeys per year in the mid 1990s to nearly 40 million by 2008. The network has become more accessible to everyone. 'Talking' bus stops has won national awards.

Technical Training Course/Training Phase



Bus companies invests heavily in staff training – including customer service, disability awareness and eco (efficient) driving techniques (RIBAS).

Output

Main output is sustained increase in passenger journeys of approx 5% per year, against a downward UK national trend. This equates to a rise from 22 million passenger journeys per year in the mid 1990s to nearly 40 million by 2008. For the Service 700, it has been agreed that the following targets will be pursued.

- 50% increase in patronage in 5 years
- 95% of buses must operate within 5 minutes of stated timetable
- to increase levels of customer satisfaction
- 9/10 buses are clean

In Brighton & Hove, the partnerships that have been developed have undoubtedly also contributed to some of the highest UK national levels of passenger satisfaction with local bus services and public transport information, in recent years. The success of the local partnership with B&HB+CCo has also been recognised through the receipt of many national awards

Critical points and conclusions

The success of a partnership depend on the willingness of both partners to deliver their responsibilities. A commitment to a continued level of funding and innovation are particularly important.

Regular meetings to update on progress also help to track how projects are progressing or raise new issues of concern.

The success of the local partnership with B&HB+CCo has also been recognised through high levels of passenger satisfaction and the receipt of many national awards, such as 2004 National Transport and 2005 UK Bus Awards.

 Potentially the transferability is very high if both partners are willing and committed, as benefits are far reaching and positive as overall working relationship and understanding between both parties increases and city's residents and businesses are the beneficiaries.



3.2.2 Journeyon campaign

Theme:	Communication and awareness raising
Municipality	Brighton & Hove City Council
Other Bodies involved:	Various – schools, businesses, road user groups, public transport operators
Duration:	Ongoing
Budget:	£200,000 per year

Rationale, objectives and target

The JourneyOn marketing campaign promotes sustainable transport and health messages in Brighton & Hove. It was launched at the same time as, and to support, the introduction of a personal travel planning programme designed to influence travel behaviour amongst a target population group. The initiative is promoting softer/smarter travel choices to deliver more sustainable and healthy travel options that will therefore deliver wider policy objectives in a cost effective manner. The project is delivered using many different media - website, events, publicity campaigns — and id designed to engage with people from a variety of backgrounds/communities.

Financial Resources

The Personalised Travel Planning initiative is funded through the council's Local Transport Plan capital allocation (accessed through government approval to borrow money) and funding received from Cycling England as the city is now designated as a 'Cycling Town'.

This amounted to at least £120,000 and £80,000 being allocated respectively in 2008/09.

Some sponsorship is also provided in terms of products/incentives.

Description of the intervention

TECHNIQUE

The JourneyOn campaign uses innovative promotional activities, online blogging competitions and a series of large scale free public events alongside more 'traditional' campaign materials such as billboards and radio adverts to reach the diverse audience of the city.



There is also a journey planner website – journeyon.co.uk. The unique journey planner compares travel modes across the city comparing costs, carbon emissions and even calories burned for every journey. Google maps and a gradient feature help users measure the amount of calories they'd burn if they walk or cycle up one of the city's hills.

METHOD

There is no set methodology for delivering the campaign overall but each individual element needs to be planned and funded. For example, for Personalised Travel Planning:-

each year the programme is delivered to an area covering 'thousands of households.

at the start of each year baseline data are gathered and analysed.

a team of travel advisors then visit people in their own homes to discuss travel and offer advice, information and incentives for people to try more sustainable travel modes.

During the year a series of other measures are implemented to complement the PTP work, such as walking and cycling improvements.

A year after the initial baseline study, households are re-surveyed to see if travel habits have changed.

ACTIVITIES and PROCESS

Journeyon includes a number of different activities. Some are listed below –

'Doodle my Journey' – May 2008 This was a website re-launch event to celebrate new features of the site. www.journeyon.co.uk/doodle

Billboards and radio adverts – May / June 2008 Local radio station JuiceFM ran a series of breakfast show programmes to promote the new-look website when their presenter took to the streets for a daily challenge to walk, cycle and take the bus to navigate the city's rush hour traffic.

JourneyOn Campaign events such as:

Children's festival – Choose your own journey –Residents followed the progress of the JourneyOn 10 as they worked towards their target, discovering more about the city, undertaking challenges and recording weekly blogs along the way. www.journeyon.co.uk/blogs.asp

Walk to school week: five local artists worked with local schools to take a creative look at the sounds children heard on their walk to school.

Meals on two wheels – Free bike breakfasts: over 800 cyclists took to their bikes to claim a free breakfast as an incentive to cycle to work.

Streets for People: Car Free Day: The 2008 event focused on turning areas of the Lanes and newly redesigned New Road into traffic-free, pedestrian friendly spaces with live music, performances and activities for everyone to enjoy.

Night Rider - October 2008 Over 200 cyclists took the Night Rider treasure hunt



challenge as part of Brighton & Hove's first White Night event in October 2008.

SKILL and BODIES INVOLVED

The initiative requires a number of different skills and close liaison between many different experts and agencies e.g. publicity and marketing, media relations, transport planning etc. Also key are businesses, schools, public transport operators etc, depending on the particular project or idea that has been developed.

INCENTIVES

A newly launched Car Free Day Community Fund was established to encourage local groups to become involved in staging their own celebrations. Groups could bid for up to £250 from a total fund of £2500 and has produced some innovative, inspiring and long lasting projects such as: providing a trolley to transport toys to and from the library, running a bicycle repair workshop to get cyclists back on the road, creating a cycle forum to promote and encourage cycling in the city, providing a 'like –a-bikes' learning cycle to a city nursery.

Technical Training Course/Training Phase

No formal training has been necessary – other than to train the travel advisors in terms of their role, the information required and the need for considerate customer care . Key people in the project have been brought together from their different areas of technical expertise to work on different ideas.

Output

Further development of the JourneyOn website will form part of a larger EU Civitas project and will include a WAP version of the journey planner. The first year results indicated that cycling had increased by 122%, walking by 33%, car journeys had decreased by 6% car journeys overall (including passengers) had decreased by 10.5%. Meanwhile JourneyOn website usage statistics show encouraging results with 20,000 hits in April 2007, 14,000 in Jan 2008, 85-90000 in June/July 2008 and 40000 in Jan 2009. Alongside website statistics, in a survey of over 200 people attending car free day (91% were residents), 86% said the event had made them consider how they travel around the city and 99% said they wanted another event like this next year. Several mobility indicators were improved.

Critical points and conclusion



only about 100 participants receive a tailored package of information and incentives each year. Therefore with only a small sample the likely level of change may be relatively small.

The level of information supplied through the website also reflects the investment made in other technologies such as real-time information etc, but the value of this is that the information is more widely and remotely available.

Softer/smarter measures are recognised as being good value for money.

There are also opportunities for private business expenditure on some soft measures, which can result in offsetting cost savings.

The campaign is considered successful and will be continued in coming years. When combined with other measures, it helps to increase the opportunities for people to better understand and choose different forms of transport for some journeys.

 Potentially the transferability is very high –a s the campaign and its form/content can be tailored to any particular town/city and/or mobility problem to help meet its overall objectives. The ideas for events are universally applicable



3.3 Girona (Spain)

3.3.1 Bus 12 card. Free urban public transport for children up to age 12

Theme (A, B or C)	С
Municipality	GIRONA
Duration	Begins September 2007
Budget	Initial investment: €20,000. Year 2008: €115,000. Year 2009: €190,000

Rationale, target and objectives

The City Council's Mobility Area had detected a very low degree of use of urban public bus transport by the children of the city, particularly on journeys to school.

By means of surveys, it was detected that one of the main reasons for not using the bus for these journeys was the excessive cost of the ticket or pass.

The decision was taken to offer free urban public transport for all the city's children up to age 12.

The objective of this measure is for children (and their parents or monitors) to use the urban bus service, particularly to go to and from school.

Through this measure, children who have acquired the habit of using the urban bus service will continue to use it when they grow up and will transmit the habit to their family.

This measure is addressed to all children up to age 12 (inclusive), who in the city of Girona are approximately 12,000 (13% of the population).

Indirectly, this measure is also addressed to these children's parents.

Financial Resources

The funding source is the Girona City Council's budget item *Public Transport*. There is no specific income for funding the measure. The Girona City Council subsidises the city's various urban public transport operators to apply this measure. This measure could be financed by a private partner, by incorporating publicity into the BUS 12 cards.

Description of the intervention



TECHNI QUE

The degree of use of buses by children was obtained by means of random countings.

Surveys showed that one of the main reasons for the low use of PT was the price.

METHODOLOGY

The measure consists in giving cost-free access to urban public transport to children of the city of up to age 12 (inclusive). A personalised non-contact card is sent by mail to all children of ages up to 12. This non-contact card makes it possible to validate bus journeys and counts the number of uses in order to compensate the operator companies for the decrease in revenues resulting from applying the measure.

PROCESS and ACTIVITIES

Survey to detect the use of PT by children.

Survey to detect the reasons for low use of urban PT by children.

Evaluation of data.

Proposed measure: BUS 12 cards.

Decision-making at area level.

Municipal approval of BUS 12 cards.

Negotiation between City Council and PT operator companies: technical characteristics and funding of the measure.

Signing of agreement between City Council and operator companies.

Adaptation of machinery of buses to accept BUS 12 cards.

Technical training of City Council staff for handling procedures relating to BUS 12 cards.

Production and personalisation of BUS 12 cards.

Sending of BUS 12 cards and use conditions to all parents of children up to age 12.

13. Annually, economic settlement by City Council to PT operator companies.

BODIES and SKILLS INVOLVED

- Children of the city
- Girona City Council Mobility Area
- Girona City Council Statistics Area
- Urban PT operator companies
- Supplier of bus cards and machinery

INCENTIVES

The incentive is the measure itself: free urban public transport for children up to age 12.

Technical Training Course/Training Phase

No external training or information is required.



Outputs

The BUS 12 cards have notably increased the use of public transport by children.

2008: BUS 12/ TOTAL = 4.1 %

2009: BUS 12/ TOTAL = 6.5 %

INCREASE BUS 12 2009 / 2008 = + 87 %

TOTAL INCREASE 2009 / 2008 = + 18.1 %

Critical points and conclusions

- Due to the success of the measure, at peak times the buses are full and reinforcements are needed.
- Urban buses do not need to comply with the (stricter) regulations on school transport, but to practical purposes perhaps they should meet them: monitors, all children seated...
- When a small child wants to board the bus alone, the responsible party is the parent. The driver is never responsible for the child. On the back of the card it is recommended that children be accompanied by a person aged over 14.
- When small child is not carrying the card, the drivers find themselves obliged to allow him/her to board and the journey is not counted.
- Children often lose their cards and then request duplicates
- The administration's budget item for covering the use of BUS 12 cards increases in proportion with the success of the measure.
- Free PT policies are often proposed for economic reasons or for persons with reduced mobility. The BUS 12 measure aims to create a habit of public transport use: It is not possible to encourage adults in the same way, because they have to pay for their tickets and help to fund PT.
- Once PT is implanted, MARKETING measures are required to encourage citizens to use it. The BUS 12 card creates the habit of using PT to take advantage of the free use offered.
- This project has proved to be a success at the local level (a city with 96,000 inhabitants) and, as a result, from September 2009 onwards it will be implemented throughout Catalonia (a country with 7,000,000 inhabitants).



3.3.2 Recovering public spaces (Agora)

Theme	В
Partner	Ajuntament de Girona (Girona City Council)
Municipality	Girona
Duration	Since 1998, every year two actions have been undertaken (in average)
Budget (in Euro)	Minimum 48.000 €, maximum 214.000 €

Rationale, Target and Objectives

It was identified a need to induce and consolidate a shift towards sustainable transport mode such as walking. The strategy was to improve short daily routes within neighbourhoods in terms of accessibility, safety and space winning for social relationships. Itineraries were built or refurbished from nursery and primary schools to squares, where a playground was set up and children could play and parents/grandparents could stay in a pleasant environment.

The main **objective** is to recover the public realm as a place for the relationships with others. The primary objective is that every nursery and primary school have a playground space within 200 m. The second objective is to guarantee a route between the school and the playground that is safe, accessible and kind.

The target population is children from babies to 12 years old and their parents, grandparents or guardians.

Financial Resources

Public financial resources are necessary but patronage may be obtained form trade associations or specific stores that identity that this action may benefit there interests (bring potential customers and/or make their shopping activities more relaxed as children).

Description of the intervention

TECHNIQUE and METHODOLOGY

1. A study locates the nursery and primary schools, as well as the playgrounds and accessible itineraries.



- 2. Around the schools circles of 400 m of diameter were drawn to identify sites to establish playgrounds.
- 3. Priorities are set.
- 4. Specific projects are developed.

PROCESS and ACTIVITIES

Select a public space of a minimum dimension of 20mx20m (to install playground)

Select the games (slides, swings..) to install and calculate the budget. This budget is around 18.000 € and has to be considered if patronage is necessary. It is the most likely portion of the budget to find a patronage.

Elaborate the project of the playground: Excavation of the site (30 cm), wood fence at the perimeter, fountain, benches (4-6), waste bins (2) and a paved area in the entrance for access of prams and wheel chairs of 2,5 width and plant deciduous trees for shade in summer (Estimated budget $6.000 \in$)

Elaborate project to make accessible the itinerary between the school and square (widen the sidewalks, build flat humps ...). It is important to implement measures to slow cars speed. Usually this implies eliminate parking zones. (budget varies from 24.000 to 190.000 €)

Execution of the project

BODIES and SKILLS INVOLVED: The main body involved is the municipality

INCENTIVES are not necessary. It works very well.

Technical Training Course/Training Phase

It is needed and architect expert in eliminating architectonical barriers and an expert in designing playgrounds. (Sometimes advice form firms that provide games may be sufficient)

Outputs

- Change in travel patterns. People do not use cars in their daily movements as in their neighbourhoods find pleasant spots to stay and shops are gradually set up around the new areas (recovering the "agora").
- Better social cohesion and improve relationship with others
- In summary the BP involves in average 2500 + 500 = 3.000 m2. More than 20 nursery and primary schools have been involved

Critical points and conclusions



- Playgrounds must be well designed. We recommend for Mediterranean countries: Playground must no be very grand (20mx20m), Ground must be sand of a depth 30-40 cm, Fences to prevent animals entering the zone, Fountain (very useful at summer), Wood benches, Deciduous trees, Wastebaskets
- Entrance paved with tiles o soil very well compacted to be accessible to prams and wheel chairs
- Well selected games (slides, swings ..) for different ages.
- It is very important that people feel comfortable and safe in daily moves related to schools. Offering a pleasant site to stay, rest and relate with their neighbours help social cohesion and induce people not to use their car to go elsewhere. Gradually shops and other trade activities are set up around this new "agoras".



3.4 Kavala (Greece)

3.4.1 Historical centre free public transportation

Theme (A, B or C)	С
Partner	Municipality of Kavala
Municipality	Kavala
Duration	Ongoing (launched year 2000)
Budget (in Euro)	installation cost: 176.000,00 Euro

Rationale, Target and Objectives

The main reasons for the introduction and installation of the small train route in Panagia region were :

- Panagia region, the city's historical centre is a cultural historical site with limited road network and problematic accessibility.
- The roads are stone paved and narrow and the region is a mountainous peninsula.
- There was no public transportation system available till then.
- Social exclusion was a big issue mainly amongst the elderly that lived in the neighbourhood.
- No other vehicle with capacity to move more than 20 people was eligible to travel to the roads of the region.
- The action was a long time demand from the regions inhabitants.

The focus of the initiative was to provide the citizens with an alternative means of transport other than privately owned car.

The primary objectives of the initiative are:

- To improve the mobility level of the region.
- To promote the region as a tourist destination.
- To fight social exclusion.

Target population is: Region inhabitants and travellers and city visitors

Financial Resources

Installation cost was 176.000.00 Euros which came from municipality revenue.



Operational cost is also covered by municipality revenue.

Description of the intervention

TECHNIQUE

At the time of the implementation not much statistical data was available. Inhabitants data was available through national statistical association (ESYE) and municipality data (DEYAK water company). The installation of a public transportation system was a long time demand of the region's inhabitants.

METHODOLOGY

The implementation of the intervention was empirical. A small train vehicle same as the one that was to be bought went on a test travel in the proposed route in order to make sure that it was suitable for the job.

PROCESS and ACTIVITIES

- Small train test ride.
- Acquisition of the vehicle
- Mechanical adaptation of the vehicle in order to travel without problem in the mountainous stone paved roads (suspension)
- Drivers education
- Signs on the roads and bus stop
- Timetable promotion

BODIES and SKILLS INVOLVED

Municipality of Kavala and Prefecture of Kavala (vehicle permit)

INCENTIVES

The transportation system is free of charge for everyone

Technical Training Course/Training Phase

The drivers of the small train vehicle took a small practice (training) session on the vehicle handling.

Outputs

New bus network 6 km (4 km in the old city region)

Bus stops: 8 (including starting point outside Panagia region)



Panagia region inhabitants: 1800 (ESYE 2001)

Panagia region car ownership: 520 private vehicles

Average travellers at starting point per day: 200 (excluding Sundays)

Critical points and conclusions

The small train vehicle public transportation system is considered a best practice because :

- 1. Improved the mobility level of a very important and difficult (transportation wise) region of the city.
- 2. Promoted the use of public transportation, a more environmental friendly means of transportation.
- 3. Helped city visitors and tourists to get a better view of Kavala.



3.4.2 Bollards

Theme (A, B or C)	В
Partner	Municipality of Kavala
Municipality	Kavala
Duration	Ongoing
Budget (in Euro)	138.000,00 Euro

Rationale, Target and Objectives

The need to protect public open spaces (squares and small parks), sidewalks and pedestrian zones from illegal parking led to the implementation of bollards in the city centre road network. The continuous rise of the parking demand, the shortage of available parking space and illegal parking are Kavala's major traffic problems. Police measures were not effective in facing this situation so installation of bollards was needed. During the last two years the municipality adopted two types of bollards: plastic and flexible used in street corners where illegal parking caused traffic jams and congestion and steel bollards used in pedestrian zones and pavements. This measure is extremely cost effective as the municipality purchases the bollards and city workers install them. It is also a bottom up approach as the action was a result from citizens demands.

Target population is pedestrians in general (fixed bollards in pedestrian zones) and people that use public transportation or in need of emergency vehicles (plastic flexible bollards in spots that illegal parking causes traffic congestion).

Financial Resources

Installation cost was 138.000,00 Euros which came from municipality revenue. $(55,0 \in \text{per bollard purchase } 30,0 \in \text{per bollard installation})$ total of 1500 bollards $(27,00 \in \text{per plastic flexible bollard, installation by municipality services})$ total of 400 bollards

Description of the intervention

TECHNIQUE

At the time of the implementation not much statistical data was available. Illegal parking on pedestrian zones was monitored as a result of the "Kavala city centre traffic study".



METHODOLOGY

The implementation of the intervention was empirical. Best practices of bollard installation from different EU cities were reviewed.

PROCESS and ACTIVITIES

Citizens demands for the protection of pedestrian areas from illegal parking were forwarded to the technical services of the municipality. The municipality's materials supply services purchased 1500 steel bollard and 400 plastic flexible bollards. The traffic committee of the municipality responding on citizens demands decided the installation of the bollards in certain spots. The municipality's technical services with a two men crew installed the plastic flexible bollards. An external contractor installed the steel bollards in pedestrian areas.

BODIES and SKILLS INVOLVED

Municipality of Kavala. Local bus operators. Local ambulance emergency services (EKAV)

INCENTIVES

Technical Training Course/Training Phase

No training actions were necessary for this action.

Outputs

Approximately 1 km (linear) of pedestrian area is now protected from illegal parking.

10 different critical points of traffic in city's road network are protected from illegal parking.

Critical points and conclusions

In some cases bollards were intentionally damaged probably from those who used to park in pedestrian areas every day. Installation of different types of bollards is considered best practice :

- 1. They prevent illegal parking and protect pedestrian areas.
- 2. They reduce the need for police monitoring.
- 3. They prevent critical points in the road network from illegal parking and traffic congestion.
- 4. They are extremely low cost and the cost / effectiveness rate is extremely high.



3.4.3 "Sygkoinonia" project – Free bus ride

Theme (A, B or C)	С
Partner	Municipality of Kavala
Municipality	Kavala
Duration	Started 01/01/2009 Ends 01/03/2010
Budget (in Euro)	410.000,00 Euro

Rationale, Target and Objectives

Promotion of public transportation is the main reason that lead to the implementation of SYGKOINONIA project meaning transportation. The action came as a Top Down approach with the initiative coming from The Central Union of Municipalities and Communities of Greece (KEDKE) with the cooperation of Ministries of Transportation and Internal Affairs.

Municipality of Kavala and the local bus company (AKTEL) agreed on implementing free of charge period from 05:30 (the time that bus schedules start) till 07:45 for every city bus line every day.

The project does not have a specific target group. The project aims at the improvement of mobility in Greek municipalities and the support of local growth. The aim for municipality of Kavala is to reduce car use especially for every day trips to work in the centre of Kavala.

Financial Resources

Total cost of the project for the municipality of Kavala is 410.000,00 Euros including the VAT and this cost is divided in monthly instalments (14 months of 29286 Euros). The cost comes from special funding program "Theseas" witch is a development program for municipalities funded by Ministry of Internal Affairs and 2% by funds from Ministry of Transportation.

Description of the intervention

TECHNIQUE

At the time of the implementation not much statistical data was available. Bus



passengers are measured by the local bus company (AKTEL). The average number of bus passengers from 05:30 till 07:45 at a working day was 750 on all city bus lines.

Extensive passenger data is collected during the implementation of the project. The first months of the program show average number of bus passengers during the specific period is 1100 on all city bus lines.

METHODOLOGY

The implementation of the intervention came as a result of two different traffic studies. One nationwide and one local specific for the municipality of Kavala.

PROCESS and ACTIVITIES

The Central Union of Municipalities and Communities of Greece (KEDKE) with the cooperation of Ministries of Transportation and Internal Affairs announced SYGKOINONIA project and a call for the municipalities to submit local transportation studies.

Municipality of Kavala and the local transportation (bus) company (AKTEL) negotiated the specific implementation for the city of Kavala with the help of a study from a mobility expert.

Municipality of Kavala submitted to KEDKE the proposed implementation of Kavala SYGKOINONIA project. After the funding approval Municipality of Kavala and AKTEL signed the agreement.

BODIES and SKILLS INVOLVED

Central Union of Municipalities and Communities of Greece (KEDKE), Ministry of Internal Affairs (YPESDDA), Ministry of Transportation (YME), Municipality of Kavala, Local bus company (AKTEL).

INCENTIVES

Technical Training Course/Training Phase

No training actions were necessary for this action.

Outputs

350 more bus passengers during the morning rush hours use the public transportation system (bus) witch is a 46,7 % raise.



Critical points and conclusions

The critical point in order to improve mobility in the city is the integration of this project with other mobility measures and especially parking monitoring.

Publicity and awareness raising measures are not adequate and need improvement (only one leaflet that was distributed in public services and banks).

SYGKOINONIA project is considered best practice :

- It helps promote the use of public transport and reduce the use of private car.It is a country wide project with different approaches in the implementation in different municipalities and the expected results from the program monitoring will help future projects.



3.5 Marche region (Italy)

3.5.1 Home/work for employees from the historical centre

Theme	A/C
Partner	REGIONE MARCHE
Municipality	Municipality of Pesaro
Duration	Permanent (from 2002 up to date)
Budget (in Euro)	€ 10.000,00-15.000,00 from the annual Municipal Balance Sheet, plus financing from other external public subjects.

Rationale, target and Objectives

The "Osservatorio Tempi" (Observatory of Time) has been instituted as an operative team composed by local authority employees, institutions, town associations coordinated by the Municipality with the aim of improving urban quality. In year 2001, the Observatory focalised its mission on mobility issues. Thanks to the project "Eppur si Muove" the Municipality, together with other bodies represented in the Observatory, introduced the "Piani degli Spostamenti Casa-Lavoro – PSCL (Plans for travelling from home to work and viceversa). This project concerns modality of commuting and sustainable alternatives. The main objectives are:

- To individuate strategies oriented at improving urban quality and sustainable development.
- To optimize mobility and traffic system.
- To experiments an **innovative public action** for the **management of the urban area mobility**, through **direct involvement** of public and private subjects who jointly participate, with their timetable and uses, to the traffic problem of the town.
- The **target** is about 20 Bodies/Associations/Organizations located in the town centre. Up to date, the members of the Osservatorio are over 40, and employees involved are over 4.500.

Financial Resources

Municipality resources for project management and for the realization of the interventions (*Park and Ride space, Walkabout and Cycle tracks*), financing from other public bodies (i.e. Regione Marche), mainly concerning the activation of innovative services (*bike sharing, car pooling*)



Description of the intervention

TECHNIQUE

To obtain data about **mobility demand**, a research has been conducted through a questionnaire submitted to the **totality of employees involved**. At the same time, also data about **mobility offer** (public transport, cycle tracks, etc.) have been collected.

METHODOLOGY

An iterative process has been activated, which includes the following activities:

- Periodical surveys (biennial), aimed at updating mobility demand, monitoring changes in progress about employees' habits, evaluation of policies' effectiveness, planning of new strategies;
- Updating of the mobility offer
- Individuation of new strategies of intervention, planning, implementation and promotion of actions/interventions
- Periodic Monitoring on some specific actions

All this happens during periodic meetings of the working group of the Observatory and, at the same time, through individual actions by single members.

PROCESS and ACTIVITIES

Biennial Survey, Data collection and Data processing, Plan for Commuting homework, including actions Each Mobility Manager is committed inside its own organization to collect information/requests by the employees and to promote new initiatives and interventions in progress.

BODIES and SKILLS INVOLVED

The Observatory Mobilità e Tempi della città, is coordinated by the Mobility Manager, is constituted by local public bodies representatives, local transport companies, public services corporation and service companies, syndicates, trade unions and consumer organizations, etc. In some phases of the project, consultants and expertise of ICT were also involved.

INCENTIVES

Not only **economic incentives** for Public Transport Subscribers were foreseen, but also **flexibility of delivery** .Another incentives in favour of the employees is reduced parking fare.



Technical Training Course/Training Phase

The previous work of the Municipality represented for sure – for all participants – a phase of general training. Specific technical training enforced the process and allowed to all participants to contribute significantly to all the project phases.

Outputs

Public Transport – Interventions implemented as to increase the use of buses to reach work place

Interchange Some junctions have been planned as to encourage the exchange between train, bus and bicycle, and also between car and bus shuttle.

Park and Ride space Other than a new Park and Ride space external to the urban centre, also other car parking scarcely used around the old town have been organized for the interchange:

Cycle tracks (*TOT Km*) a big spur has been given to the development of cycle tracks and the realization of new cycle tracks in the suburb around the centre;

Bike Sharing has been implemented in Pesaro in year 2006; the rent of bicycle is for free, usable from 7.30 am to 9.00 pm, and it is addressed to the employees of the bodies and associations of the old town which are members of the Osservatorio Tempi e Mobilità

Carpooling has been activated in May 2009. The Municipality of Pesaro offered a free software to encourage the creation of fleets of car pooling for employees of public bodies which are located around the centre of the town (www.pesaroambiente.it)

Critical points and conclusions

- The mobility management is a "volontary act", a process which cannot be supported by strong law directives;
- It represents a process to make strategies and objectives knowable, and to reach them are mainly necessary public actions and interventions;
- The context of referral is a plurality of actors who intervene in the definition and realization of policies, basing its strengthens on a **system of relations**, on the capability of putting together different subjects, social actors and institutions
- It should necessarily and progressively "evolve" and keep updated some instruments necessary to support its effectiveness.



The strengthens of the process is not just in the capacity of individuate innovative solutions. The good result is given by:

- Capacity to propose and make it visible the process of developing the Municipality policies
- The needs of medium-long time for the realization of intervention/actions necessary to create condition of alternative mobility, as it acts and means to "orient" and modify consolidated habits
 Political support and long-term commitment

Surely, a first positive result is represented by the big participation of subjects external to the Municipality. Another important aspect concerns the cultural transformation that this process has produced, both as concern organizations (mobility managers) and for single users (employees): awareness, responsibility and commitment for the sustainable mobility as a decisive element of urban and life quality.



3.5.2 Going to school on our own

Theme	A
Partner	REGIONE MARCHE
Municipality	Municipality of Pesaro
Duration	Permanent (from 2002 up to date)
Budget (in Euro)	Municipal Balance Sheet plus external public financing (Regione Marche): € 10.000,00-15.000,00 for the management of the project; € 50.000,00-60.000,00 for the realization of safe routes from home to school and vice versa

Rationale, target and objectives

A welcoming town, where children can gain their autonomy thanks to their routine activities such as going to school on their own: this is the content of the initiative "A scuola ci andiamo da soli" started in 2001 in two schools of Pesaro, and involving about 1.600 children of Pesaro district Primary Schools. Main issues managed are environment quality and usability of the urban area, welcoming and safe town, sustainable mobility. Aimed at promoting and favouring the mobility by foot and by bicycle in the Primary Schools of Pesaro and the autonomy of children, this project demands to re-think and transform the town as to give back to all citizens the opportunity of using public open spaces, so to favour a slower mobility, enhance the territorial and social context, and modifying the urban area using children as a parameter. The reconstruction of a cooperative and socially agreed environment is therefore one of the project's aim.

Financial Resources

Financial resources used for this project are public: Municipal and Regional resources for the general management of the project, (about \in 15.000,00 per year); Municipal and Regional resources for the realization of intervention to guarantee the safety of the routes home/school (\in 60.000,00 in 2005; \in 180.000,00 in 2006-07; \in 45.000,00 in 2008).

Description of the intervention

TECHNIQUE

In the starting phases, as to know better the situation concerning mobility/transfer issues, some researches have been conducted, aimed at children (at school) and



their parents. Every year a questionnaire has been submitted to children and parents in all **participating schools**. Data collected allow to check the **change in the transfer habits**, the **effectiveness of actions and durability of results obtained**, as to programme future interventions.

METHODOLOGY

Since the beginning the Municipality adopted a strategy based on participation, policies integration and transversality. As for Participation, Children, school, families, voluntary associations, trade unions, grandparents in the role of traffic police, local areas are involved into the project. As concern transversality and integration, the project has produced relevant changes in the institutional, organization. administrative and resources management's Inside administration, a specific office has been organized, i.e. the Laboratory for girls and boys' town, with two operators fully employed on this project; the Mobility Manager has been nominated as coordinator; a Technical Committee has been instituted for the project, comprising the Managers of Socio-Educative Mobility, Public works, Environment, Traffic Police, Town Planning's Services.

PROCESS and ACTIVITIES

Every year the Municipality proposes this project to the Education Institutes of the town, making available experts, technician and entertainers for children activities. The Schools who decide to participate, insert the project in the Plan for the Education Offer, as a transversal educative project. The Municipality, School, Area, Voluntary Association undersign a Joint Convention/Agreement for the actuation. Every year pupils from the first class of Primary School start the process with basic activities. Following to the first year, once children are able to go to school by foot, a series of initiative are started with the aim of "entrenching" the initial experience: in each school a Committee of children is established, the motoring is provided, instruments are used (such as the "Moral fine", the "Licence by foot") to increase awareness and consciousness of children. Finally, some laboratories are carried out with the cooperation of the Traffic Police for "Road Education", the Environmental technicians as concern "Air Quality" etc.). Events and experimentations are organized (e.g. communication initiatives, bicycle routes, meeting with institutional subjects, participation in the European Week of Sustainable Mobility, etc.)

BODIES and SKILLS INVOLVED

During the **meetings of the technical committee**, the Mobility Manager and the Laboratory for children's town highlight interventions necessary to make safe routes from home to school. Stakeholders necessary to support the project are involved: Dealers/Shopkeepers, Community Centre and Volunteers Associations which recruit grandparents in the role of Traffic Police.... Grandparents as Traffic Police are



fundamental and irreplaceable figures, not only for checking the dangerous crossways, but also for the generation exchange between them, children and families, and their presence on the territory generates better social control, trust and safety.

Technical Training Course/Training Phase

Training courses are provided for Grandparents Volunteers/Traffic Police even putting them on the road side by side with the Traffic Police. The Technical Committee has also had a "training" function, by sensitising stakeholders to such issues as "weak users" of the road, contents and objectives of mobility programmes, etc.

Outputs

Thanks to the project, 50% of children do not go anymore to school accompanied by parents by car. A consistent part of the activity done in three years period 2006-08 regarded also interventions necessary to guarantee safety in the route homeschool, in cooperation with the Municipal services (Mobility, Public Work, Maintenance). The road signals system has then been completed. Structured interventions realized in the last three years have for sure contributed to reinforce the change in act: a gradual but significant transformation of children and adults' transfer habits, in the culture of the sustainable mobility and children's rights.

Critical points and conclusions

The project requires a political support and a long-term, permanent and durable commitment; it is necessary to manage and constantly "encourage" the participative process, to check the coordination of different subjects involved, to guarantee the feasibility and effectiveness of interventions.

Critical factors more frequently showed are: times for the realization of the structural interventions; involvement and awareness raising of the adult community, mainly car drivers (children identified as the worst dangers on the road the high speed of cars, the lack of respect for pedestrians in correspondence of zebra crossing, the invasion by car of the space addressed to pedestrians, such as pavements) who request constant communication and awareness raising actions.

Although critical factors showed, as a whole the project has given good results these years, both as concern the change of habits of transfer modalities and the awareness raising about sustainable mobility.

Other than children, sense of responsibility has been indirectly given also to parents who, not having anymore to accompany their children to school, can better address towards sustainable mobility solutions to get to work.

Another positive element has been the cooperation with many subjects in the territory.



3.5.3 Mobility game

Theme	A. Communication & Awareness raising
Partner	REGIONE MARCHE
Municipality	Senigallia
Duration	Up to date 4 performances (1 month duration each)
Budget (in Euro)	In total € 40.000,00 (€ 10.000,00 for each one)

Rationale, Target and Objectives

The project stems from a wider context of activities for the promotion of Sustainable Mobility, encouraged by the Municipality in the framework of the Forum on Sustainable Mobility of AGENDA 21. The project approach is bottom-up, both in its preliminary and operational stage, for which the administration relies on the supports of teachers, parents and volunteers associations.

Strategic **objective** of the MG is the awareness raising of new generations, through operative practices of sustainable mobility, concerning environment and sustainability. Through MG children and teenagers learn sustainable behaviours, allowing specifically to save CO₂ and preserve the environment. Besides that, MG develops independence and self-esteem of boys and girls, and allow them to become promoters of sustainable mobility inside their own families. Other objectives is contributing to the promotion of intergenerational relationships, through the daily relationship with volunteers, in the majority elderly, which accompany them in the guided "Pedibus" (*Bus by foot*). Other objective is limiting the traffic congestion of private cars in the participating schools. Finally, the MG increases in participants the knowledge of the town.

Financial Resources

The MG is financed by municipal resources and private sponsorships of traders and shopkeepers agreeing with the mobility and sustainability issue (COOP, Sportswear Shops, Bus Companies).

Description of the intervention

TECHNIQUE



In 2004, in the framework of the project "Città sostenibile dei bambini e delle bambine" (Sustainable town for boys and girls) a series of activities of monitoring and researches about habits and use concerning transfer home/school have been conducted; it followed a seminar for school teachers, about didactical methodologies for the territory exploration and its knowledge by children. The administration also started to promote alternatives transfer modalities towards schools. In 2005, it was launched "Io a scuola ci vado da solo" (Going to school on my own), which gave the start-up at the Mobility Game.

METHODOLOGY

The Mobility Game (MG) is a competition-game addressed to children of the Primary and Secondary Schools of the Municipality of Senigallia who, for about one month, use the following alternative modalities for the transfer home-school: pedibus (on their own or guided), bicibus, autobus, car pooling, mixed modality. Each of this transfer system has been assigned a pre-defined quantitative of CO_2 (Carbon dioxide). As not to penalize students who live more distant from school, the neighbouring territory of each School district has been divided in three area. According to each origin area, each transfer system will have a determinate save of CO_2 to be associated with the mean of transport used. At the end of each week the average CO_2 saving will be calculated for each children/teen and for the classroom. The more virtuous classes will receive, at the end of the game, a reward, corresponding to a trip or a trophy made of recycled material.

PROCESS and ACTIVITIES

The project started in 2005 with the pilot initiative "A scuola ci vado da solo", in cooperation with the Parents Association (AGE), and it has increased, through its 4 performances, both the number of participants (from about 400 participants in year 2005 to 1.500 participants of the edition 2009) than the activities proposed, with a correspondent widening of the network of actors involved. From 2008 the guided pedibus has been added, allowing the involvement of volunteers association (AUSER, ANTEAS and the Spare Time Bank). In 2009, the theme of recycling has been introduced.

BODIES and SKILLS INVOLVED

The office AGENDA 21 of the Municipality of Senigallia is the promoter, the Mobility Office gives a logistic support for the individuation of the routes of the Pedibus, the cooperative Forestalp supports the management of the MG, the AGE, referrals of the POFT "Piano Offerta Formativa Territoriale" (Plan for the Territorial Education Offer) in the schools of Senigallia, teachers, parents, the voluntary association AUSER, ANTEAS and the Spare Time Bank.



INCENTIVES

The MG is sponsored by local companies. This summer the Transport Council of the Municipality of Senigallia put at disposal of participants at the MG free journeys on the road shuttle train (for tourism), as to promote the use of public means of transport also during summer period.

Technical Training Course/Training Phase

In the initial phase of the MG some training activities about didactical methodologies for territorial exploration and knowledge by children have been addressed to teachers. In itinere, it has been promoted an explorative approach related to sustainable mobility theme, through the organization of periodical meetings with different subjects, aimed at individuating integrated approaches of the different competences involved (teachers, operators, administration, but also parents and grandparents).

Outputs

The main obtained result is the growing number of children involved in the project: from about 400 children in the first year, to over 1.500 children in the fourth year of activities. A key role in widening the participation to the project has been played by a communication campaign.

Other result obtained has been the reduction of traffic in the large squares located in front of the schools involved into the project.

Further output is the external interests showed towards the project, which has been "repeated" in the nearby municipalities, and several requests for information and cooperation by administrations interested in promoting the project in their own territories.

Critical points and conclusions

The organisational complexity and the quantity of subjects involved, even if enriching considerably the project, are also one of those factors which, if not properly managed, can bring to a critical situation; the MG is an organization system quite complex which constantly needs of attention to work properly. Other factors are the continue enrichment in terms of contents, and the widening of the



project to other users categories (e.g. children of the high schools.

As concerns the project effectiveness, it is necessary to underline the constant growing of the MG as concerns participants, the involvement of a bigger and bigger number of territory social contexts, and the implementation of proposed activities.

The effectiveness of the project is recognizable by the strong popularity of it, by its transferability, by the capacity of creating a net of subjects able to work on sustainable mobility themes and by the relations between it and then young generation. In fact, subjects involved in the MG have often worked on other projects.

A potential issue is the different emphasis of certain actors involved on some aspects (e.g. the recycling theme) rather than other (e.g. the theme of "civic fares" for adults who park their car in front of the school, which will be probably proposed in the future).



3.5.4 Roadway accessible to blind people

Theme	A. Communication and Awareness raising
Partner	REGIONE MARCHE
Municipality	San Benedetto del Tronto (AP)
Duration	Not valuable, being an infrastructural intervention
Budget (in Euro)	€ 100.000,00

Rationale, target and objectives

Problem faced regards the lack of useful devices to make accessible and safer roads, and to plan routes specifically equipped for disabled users. The needs of blind or visually impaired people are improving the environmental communication, overcoming obstacles that denies access to locations, increasing the level of autonomy and independence.

This good practice is aimed at eliminating physical and sensorial obstacles that denies access to disabled people, thus improving environmental signal and offering to blind or visually impaired people the opportunity to decode safely and unmistakably the environment.

Financial Resources

€ 100.000,00 (70% from Municipality resources - 30% financed by Marche Region)

Description of the intervention

TECHNIQUE

The starting point is represented by "The European Charter of Pedestrians' Rights", which reports *The disabled have the right to specific measures to maximise mobility, such as the elimination of architectural obstacles and the adequate equipping of public means of transport.*



METHODOLOGY

Different accessible routes have been planned to allow to blind or visually impaired people to move autonomously. The involved area, i.e Porto d'Ascoli, is characterized by the presence of a park, a public school and several pedestrian routes. Intervention planned were:

- Sidewalks:
- Pedestrian routes with system Loges, characterized by a special pavement for blind or visually impaired people;
- Realization of Road signs;
- -Realization of *tactil plates* readable by blind or visually impaired people as to individuate locations of interest;
- Adjustment of traffic light systems with acoustic equipment.

PROCESS and ACTIVITIES

1 – General Planning and Business Plan; 2- Implementation.

BODIES and SKILLS INVOLVED

1 – Unione Italiana Ciechi (National Blinds Association), which gave its support.

INCENTIVES

None

Technical Training Course/Training Phase

None

Outputs

Critical points and Conclusion

This good practice represents a "pilot project" which, together with other infrastructures interventions, can guarantee innovative solutions for safety and independence of disabled people. Difficulties have been exclusively faced during the implementation, due to the lack of previous similar experiences: once eliminated these inconveniences, the realization of the intervention proceeded without any problems, allowing the achievement of the objectives.



3.5.5 Creation of a homogeneous net of cycle tracks

Theme	B. Parking and traffic management and control
Partner	REGIONE MARCHE
Municipality	Senigallia
Duration	From 2003
Budget (in Euro)	More than 1.000.000,00 from 2003 up to date, of which € 200.000,00 financed in year 2009

Rationale, target and objectives

In the phase "zero" of this project, the territory of Senigallia showed a few cross axles for the cycle mobility, despite a territory mostly flat along the coast board and the use of the bicycle as an historical habits of the citizens. This situation caused an excessive promiscuity on the road axles, which, together with the scarce protection of the user on the inter-junctions, made very dangerous the use of this mean of transport. Through a joint agreeing process with the main stakeholders, in 2003 a first hypothesis of homogeneous net of cycle tracks for the use of the territory was elaborated.

It is fundamental the objective of encouraging this methodology of transport rather than private car mobility, as to make use of all environmental advantages, citizens comfort, such us enjoying urban spaces. Besides, the creation of cycle tracks is fundamental for the users safety.

Interventions concerning bike sharing are addressed to commuters, to train and public transport users and also to tourist on holiday in Senigallia.

Financial Resources

The biggest amount of financial resources are from the Municipality Balance Sheet. For the realization of the cycle track in the area "Saline", the financing from the Province of Ancona was about 70% of the work, for about € 190.000,00. The involvement of private resources in the realization of pedestrians and cycle tracks has been realized through the practice of realizing public works. This brought - and will bring into the future – at the realization of important routes and works, such as the underground crossings for pedestrians and cyclists heading to the promenade.



Description of the intervention

TECHNIQUE

The knowledge of the territorial morphology and of the population distribution data, such as the presence of mobility attractors (such as the old town, the promenade and the high density zone), have been the basis for the research which leaded to the first planning of the hypothesis of the homogeneous net. In year 2006 the research conducted to elaborate the General Plan for Urban Traffic required the submission of about 1.400 questionnaires to road users as to allow an accurate definition of origin and destination. During the executive planning of interventions standards requested by Italian "Regulation concerning rules for the definition of technical characteristics of cycle tracks" were respected. In the majority of cases tracks have been realized colouring the cycle tracks with yellow resin.

METHODOLOGY

From a first study conducted on the territory concerning the existing situation and the population rate of the Municipality of Senigallia, the presumed demand of cycling mobility was determined.

After sharing and comparison processes with the population and the local stakeholders, the routes have been previously decided, as to create an homogeneous net of cycle tracks useful for the majority of the municipal territory. In the executive phase, further to other comparison with the citizenship, the cycle track has been planned and the road network has been adjusted to the existing conditions, as to make it compatible with the bicycle flows. The bike sharing stalls have been located in points which get to the Promenade and in the main interjunctions, such as the railways and the end of the bus line.

PROCESS and ACTIVITIES

2003: Planning of a homogeneous net of cycle tracks;

2003-2006: Building of axles for bicycles to get downtown;

2004: Realization of the cycle track on the Promenate Levante;

2005: Plan updating;

2006: Research with questionnaires and interviews about origins/destinations;

2007: Activation of the first stations for the bike sharing:

2008: Bike sharing integration; Ending of the connection north-old town;

2009: General Plan for the Urban Traffic, updating and integration of the plan of a homogeneous cycle tracks net , foreseen for 17 Kilometres; Organization of collective inspections by bicycle realized by the Municipality technicians together with citizens, as to test the condition, the elimination of critical points and the improvement of the existent.



BODIES and SKILLS INVOLVED

Mobility Office of the Municipality of Senigallia, "Systematica" Ltd in Milan, Environment Associations

INCENTIVES

Bike-sharing is free against the payment of a security deposit to register for the service and collect the necessary key to use the service. The use of the bicycle is daily, and at night the bike must be given back.

Technical Training Course/Training Phase

Outputs

From the starting situation, characterized by about 7 Kilometres of cycle tracks, mostly unconnected between them and without a specified disposition, we have at the moment 12 Kilometres of cycle tracks, organized along the penetration axles from the suburbs to the old town, and with an axle to go through the Promenade of about 2 and a half kilometres. In progress, they have been individuated and eliminated in progress the critical points of the intersections and the discontinuity of the offer. In the PGTU under adoption it is foreseen a net for a total of 17 kilometres. As concerns bike sharing, in year 2006 it has been introduced the service that, up to date, can count on 13 stations and 68 bicycles at disposal of the users, forecasting further widening

Critical points and conclusions

Major critical points are represented by the discontinuity of the routes, as some cycle track traits or inter-junctions are missing. The road routes, although it has been privileged one way road sections and it has been adopted a practice for the use of resin for the whole cycle track, comports critical points connected to the promiscuous use of the road section.

Bike sharing is very requested by the tourists during summer. It has been less used by commuters who arrive at the railways station, since the majority of them go to work to the old town, directly served by the station. Besides, given the territorial



morphology of Senigallia, residents who can be interested by the use of bike still have one. This is, in any case, a policy of big success.

The realization of a bicycle tracks net without discontinuity and critical points continues and, each year, assumes a more defined form. It is essential a cycle mobility and it is constantly requested by citizens. In fact, it is very dangerous to pass from the sensation of safety of the cycle tracks to the promiscuity of an unprotected road net. Thanks also to a continuous work of awareness raising about these themes, this necessity is particularly felt by the road users.

The traffic plans, defining environmental isles where vehicles traffic is reduced, has given the basis to formalize a grate of "principal" cycle tracks for inter-area and local roads, where protected sites are not necessary, considered the typology of traffic essentially represented by residents. This is the paradigm which will address the fulfilment of this project next years.



3.5.6 Intelligent Traffic-lights control system

Theme	C. Public & Collective Transport
Partner	REGIONE MARCHE
Municipality	San Benedetto del Tronto (AP)
Duration	Not valuable, being an infrastructural intervention
Budget (in Euro)	€ 39.416,11

Rationale, Target and Objectives

As to offer citizens more efficient services and increase the use of public transport as a substitute of private transport means, more innovative and practical mobility solutions have been adopted.

The motivation to use public transport has been encouraged by **considerable increase of commercial velocity** in some routes, with consequent reduction of time waste.

Road crossings characterized by the presence of traffic lights, besides general road congestion, can also diminish the commercial velocity of public transport means. The need of increasing commercial velocity in some routes of public transport is a fundamental condition to increase the number of users and their awareness, reducing considerably traffic due to the use of private means of transport in town.

Financial Resources

€ 39.416,11 (50% of resources - € 19.708,55 from the Municipality of San Benedetto del Tronto and another 50% of resources - € 19.780,55 from the Province of Ascoli Piceno).

Description of the intervention

TECHNIQUE

A detailed study about traffic on the main arterial municipality roads (SS16 – Lungomare – Viale dello Sport) has been conducted. The analysis has shown an average daily traffic up to 20.000 vehicles per each road section. At the same time an investigation O/D showed that over the 90% of road movements takes place in the municipality and/or in the suburban area around a 5 chilometres range. The use of public means represents the best solution to reduce using private transport means, but to encourage this habit it seems necessary to increase commercial velocity of public transport.

METHODOLOGY

The S.S.P. works thank to an infrared traffic detector system which allows to regulate the transit of public bus. Traffic lights are equipped of detectors able to



recognize signal coming from "priority" vehicle, as to give them priority access. This system is based on the transmission-reception of signals modulated with infrared light.

The emitter positioned on the vehicle transmits a code, pre-established among the ones programmable, which is picked up by special photocells positioned on the traffic lights which they manage. The photocells, received the signal, transforms it in a series of electric impulses which reach the electronic scheme positioned inside the switchboard managing the traffic lights system. Thanks to a particular "firmware", the electronic scheme recognizes the typology of impulse (code sent to the vehicle), and connects it to the ones into the memory.

The system, checked that the received signal is an enabled code, gives priority to the public means of transport. The traffic lights is then piloted to give the green light: the switchboard considers the phase of the traffic light in that instant and then, it programmes the yellow light for a few seconds, followed by the green light. The green light is allowed only on the direction from which the priority vehicle comes from; on all the other directions the red light (stop) is signalled, as to reduce the risk to the priority mean of facing vehicles coming from the opposite way. The software controls and prevents also another contingency: the one that two or more priority vehicles come up at the crossroad from two opposite sides, giving priority to the one which is firstly approaching the crossroad.

PROCESS and ACTIVITIES

- 1 Location of the traffic light systems with the slowest crossing time by Public Transport means.
- 2 On-board equipment in public bus and installation of the device on traffic light system.
- 3 Testing and start-up

BODIES and SKILLS INVOLVED

- 1 START Plus s.c.a.r.l. Public Transport Company for urban and suburban transport
- 2 ROMA LINEE, a bus company which manages the national route "Fermo-Roma"

INCENTIVES

None

Technical Training Course/Training Phase

Training days aimed at preparing the bus drivers to use the system.

Outputs



Statistical data by the START Plus Transport Company concerning duration time of the route "Ascoli Piceno-Civitanova Marche", where seven priority traffic light systems have been installed on S.S. 16 Road. The registered time reduction on the territory of San Benedetto del Tronto is of 5 instead of the 15 minutes planned.

Critical points and conclusion

This good practice represents a "pilot project" which, together with other infrastructures interventions, can guarantee innovative solutions to increase commercial velocity of Public Transport means. Some difficulties have been faced during the implementation due to the lack of previous similar experiences: once eliminated these inconveniences, the realization of the intervention proceeded without problems, allowing the achievement of the objectives.



3.5.7 Pedibus (bus by foot)

Theme	Communication & Awareness raising
Partner	REGIONE MARCHE
Municipality	Municipality of Macerata
	(Istituto Comprensivo "E. Fermi" di Macerata)
	(Estela baby)
Duration	-
Budget (in Euro)	€ 16.000,00

Rationale, target and Objectives

"Pedibus" is a free service which consists of accompanying by foot children during their route home/school. The objective is that of reducing traffic near schools when school lessons start and finish, and to individuate routes by foot more protected and safer.

The project was addressed, in school period 2007/2008, to children from Primary School "E. Rosa" located in the district of Pace (Istituto Comprensivo E. Fermi), a potential basin of around 150 children, characterized by problematic road conditions, mainly due to the narrowness of the road seats and to high transit speed. The lack of coordination between school timetable and public transport services, and the necessity of harmonizing time dedicated to job and family, made this intervention guite interesting, both in social and environmental terms.

Financial Resources

- € 8.000,00 (50% financed by Marche Region, in relation to the announcement for regional contributions finalized at the realization of interventions aimed at reducing air pollution in urban areas DGR nr. 1300 dated 10th November 2006);
- € 8.000,00 (50% co-financed by the Municipality of Macerata DG nr. 27 dated 30th January 2008).

Description of the intervention

TECHNIQUE



This intervention has been realized also thank to the <u>experimentation</u> conducted by some civil servants (volunteers) in academic year 2006/2007. During the experimentation period, the appreciation for the service and the need of measures to improve road safety where highlighted.

METHODOLOGY

PROCESS and ACTIVITIES

- Instalment of traffic lights on demand;
- Instalment of plagues/signals about the "Pedibus";
- Information and Awareness raising at the beginning of the Academic year concerning acceptance and how to go on with this service;
- Purchase and distribution of reflector signals;
- Service to accompanying children by foot to and from school.

BODIES and SKILLS INVOLVED

Arché Snc

Municipal Police Head Office of the Municipality of Macerata

INCENTIVES

Technical Training Course/Training Phase

Outputs

In Academic Year 2007/2008 about 20 children used this service, giving therefore a contribution to limit traffic, socializing and being an example which aroused curiosity and interest. The instalments realized allowed to conduct this action in total safety.

As concern Academic Year (2008/2009), the "Pedibus" experience has been carried out near the Istituto Comprensivo "E. Mestica".

Thank to this experimentation, also other Primary Schools have shown interest in replying the experience; they are now evaluating the opportunity of using the "Pedibus" in Academic Year 2009/2010.

Critical points and conclusions

Critical points:

- Too expensive because of the costs of the personnel involved;
- Difficulties in awareness raising of children's parents and volunteers;



Coherence with local policies for sustainable mobility.

"Pedibus", if carried out on a coherent contest of alternative mobility policies, could represent a valid instrument to state the practice of sustainable mobility home/school in a long term period. This practice can represent a temporary instrument to reach the final objectives of having safe pedestrian routes for children, as to encourage their autonomy. In this sense, these years experience brought into focus that simple instruments such as "traffic lights on demand" can be very important, even though a whole approach is necessary to solve mobility problems: without a general view the effectiveness of single interventions can meet severe stops.



3.6 Mölndal (Sweden)

3.6.1 Networking for More Flexi Motorists in Mölndal

Theme (A, B or C)	A
Partner	Vägverket Region Väst (The regional road administration), Västra Götalandsregionen, 11 companies City of Mölndal
Duration	2002 pre study The project starts in June 2004 and ends formally in June 2007, but the work and cooperation still continues.
Budget (in Euro)	340 000 euro (300 000 is for research study and reports).

Rationale, target and objectives

Mölndal, is situated in the metropolitan area of Göteborg, and has many companies with a large number of commuters coming in to and going out from the city everyday. In 2001 a discussion was started on the poor quality of air and the difficulties in handling increased motor traffic. A minor study was done in several large companies in Mölndal to find out their views on how to handle the increased motor traffic caused by commuting to work. The project took form based on that study and many meetings with the companies and regional authorities. Ten companies and the municipality finally participated in the project in cooperation with the Västra Götalands regionen and the Regional Road Administration (Vägverket Väst).

Target: employees in the 10 companies that take part in the project as well as the employees in the municipal organisation.

The **objective** of the project was to focus on new ways of thinking about everyday travel, and specially commuting to work, with the object of changing intentions and attitudes, as well as to increase the utilisation of modes of transport other than private car.

The overall goal was to improve the health and reduce stress within the target group, reduce the problems relating to congestions, noise, and the health and environmental hazards of emissions from motor traffic, and change attitudes and travel patterns within the target group



Financial Resources

The financing were divided equally by the City of Mölndal, Västragötalandsregionen and Vägverket (the National Road Administration - region West). The participating companies financed with the time and work put in the project. They did not need to report their work.

Description of the intervention

TECHNIQUE

The strategies used was to first make an in depth survey of travel habits among employees in the network. The next step were to network and implement activities, based on the knowledge of the survey, in order to reach the goal of the project.

METHODOLOGY

Phase 1 - Research study The study came to focus on lifestyles, preferences, and values, to highlight what it is that forms individual's travel habits. The study included two part; first a closed "traditional" survey of travel habits (2300 informants) and second 100 in-depth interviews were conducted.

Phase 2 - Networking and activities. The network were formed with the start of the project. All the participating companies had to find the right person to take part in the network meeting. A mutual agreement of the purpose of the network were signed of the vice president in all the companies.

After the study one representative from each company and relevant positions from the local authorise met for the first time in spring 2006. A list of measures to implement or investigate further were done for example: Car sharing among the companies, improved public transport in an industrial area, a mobile cycle repairer, cycle campaigns, coordination of taxi among the companies to the airport, improved cycle parking by the train station, cycle challenges, sending a proposal to the government concerning taxation of benefit with regard to free monthly tickets for the public transport etc. Not all the suggested measures were implemented but all carefully considered. Even though the project ended, the network still meets about 4 times a year to exchange experiences, giving advices to the local authority and serves as good examples for other companies.

PROCESS and ACTIVITIES

• 2004: The project manager was in place and started a dialogue with the interest companies and anchor the ideas.



- 2005: A common declaration was signed among all the partners. The research study starts.
- 2006-2007: The research study report is presented. The network meeting starts.
 An activity plan is made and measures starts to be implemented and the network meets regularly.
- Summer 2007: The project formally but the network and their way of working still continues.

BODIES and SKILLS INVOLVED

The project manager had a company background. The City of Mölndal provided experts within planning, environment, mobility and traffic. External consultants were used for some part, i.e. a study about the possibilities to start a cycle pool among the partner. In-depth advices to all companies on how to take control and reduce the environmental impact from business travels and what they practically can do to encourage their employees to commute by bike or public transport. Each contact person from the company has unique skills about their company and what measures are right for them.

INCENTIVES

Mobile cycle repairer visiting some of the companies a few times a year, cycle to work challenge, campaigns in some of the companies on in the European Mobility Week. All companies had the possibility to get "individual" advice from a company travel expert.

Technical Training Course/Training Phase

Outputs

- The project has increased the political awareness and support for mobility issues. Positive coverage in media. The project has also made Mölndal well known in other municipalities and organisations on a national and regional level for our work with mobility management.
- The dialogue between the local authority and the participating companies has improved
 - The project also helped to improved the cooperation within the municipality's



different administrations concerning mobility.

This a few examples of what has been done in some participating companies:

The public transportation supplier has visited the companies to give information. Education in eco-driving

Biking campaign and competitions.

Sustainable mobility campaign during the European Mobility Week.

A mobile bicycle repairer visits some companies a few times a year.

Critical points and conclusions

The study was important in many way; the survey helped the project to be known to people in the businesses and the municipality (and much further), it also in itself triggered people to consider how they travel and why an a lot of discussions started. The result of the study also enabled a unique knowledge bank - a platform for discussions and decisions.

Implementation takes longer time with many partners involved.

The unique in this project is that it starts with the needs of the involved companies – a bottom-up approach. The activities done is the result of a dialogue within the network. What is unique is also the broad representation from the municipality in the network. The persons in the network also has a position that they can make decisions and changes pretty fast. This way of working with an established network with large and important companies is a long-term way of working creating change in small steps.



3.6.2 Mobility Management in the municipal organisation - Health commuters

Theme (A, B or C)	A
Municipality	Mölndal
Duration	Campaign April –October 2006 2007 and 2008. I will report from the results 2007
Budget (in Euro)	4500 euro (project management is not included)

Rationale, Target and Objectives

In 2005 a travel survey was made among the employed in the municipal organisation and in 2006 Mölndal received finance from the national government for mobility management project.

A plan was made on how to increase the employed more aware of their choice of travel modes and to consider alternatives to car – for the environment and their own health. "Health commuters" was developed based on the knowledge that to change travel behaviour the individual has to test the alternative behaviour (i.e. cycling, or public transport) for a longer time. And to make a motorist try an alternative mode they have to gain something (better health, a prize, free tickets for the bus and tram etc). The idea of the Health commuter campaign is to make individuals to test cycling to work instead of using the car. The participants signed a contract were they promise to commute by bike at least 70 % of the working days for six months. As a bonus they get a bike helmet, a bike computers, reflectors etc. They also have to make a test of their condition before and after the campaign. If they fulfilled the contract they could win a very attractive price.

Direct target group: Employed in the municipal organisation (5000 people) whom, before the campaign, normally commuted by car. Indirect target group: Directors and leaders in the organisation as a channel to spread information and promote the campaign to the employed.

The Health commuters project aimed to:

reduce environmental impact and improve the health of the participants

Gather information of how change of travel behaviour impact on the participants health and satisfaction of cycling, as well as what factors can be used to make people to switch from car to bike.

Gather information of the participants' view of the cycling lanes and network in the municipality.

show good example in order to inspire other to do the same.

Financial Resources



The campaign was one part of a mobility management project (Mobility Management in Mölndal) financed fifty-fifty by the municipality and the Swedish Environmental Protection Agency Climate Change Investment Programme.

Description of the intervention

TECHNIQUE

We offered a service for the participants to test cycling and provided information about the advantages on their personal health and the environment. Advices were given to ensure the safety of the participants. Tests of the participants´ condition prior and after the campaign.

Survey to the participants before and after about their travels, view of the campaign, attitudes to biking and view on the cycling lanes in the municipality. The participants signed a contract were they promise to commute by bike at least 70 % of the working days for six months. To find participants and increase safety they all received a bike helmet, a bike computer, reflectors etc. To motivate the participants to bike during the campaign those who fulfilled the contract could win a very attractive price. The participants had to send a cycling report every month.

METHODOLOGY

Information about the campaign and a registration form were spread to the employed through e-mail, internet and intranet. The directors had an important role to distribute the information and registration form to the organisation's 200 workplaces.

PROCESS and ACTIVITIES

- 1. Planning of the campaign and development of information material, surveys, internet etc.
- 2. Information about the campaign and a registration form were spread to the employed through e-mail, internet and intranet.
- 3. Selection of the participants and signing of contracts.
- 4. Test of the condition among the participants.
- 5. Kick-off meeting with the participants were they received the biking equipment, practical information, and forms to register how they travel to work everyday
- 6. Start biking, and press-release.
- 7. Every months the participants report how they have travelled to work every working day. Based on these the participants receive information about the total length they have biked, the reduced CO2 compared to car and how many kcal they have used (translated in to chocolate). Regular e-mails with feedback to the



participants.

- 8. Mid campaign a small survey of how the participant experience to bike an to collect their views on the campaign (to improve it) and the cycle lanes.
- 9. End of campaign: Condition test again and a survey. What made the participants to actually bike and when did they choose car? Invite all the participants to celebrate the result! Press release again.
- 10. Summarize the results for the environment and health in total and for each individual.
- 11. One year after the end a simple travel survey was made to know if they continued to bike.

BODIES and SKILLS INVOLVED

Skill: mobility manager (also the project coordinator for the campaign)

Communication expert to develop information material.

A consultant to do the condition tests and summarise to an understandable report.

INCENTIVES

Lottery, feedback on their behaviour in the form of e-mail and the condition test.

Signing of an agreement.

Biking equipment.

Technical Training Course/Training Phase

Outputs

34 people signed the contract and of these managed 26 to bike and report the whole period and 20 of these manage to reach the goal of 70 % cycling of the working days. They biked in total 31 700 km which is equivalent to 8,7 tons of CO2 if car were used instead.

The media coverage were very good in both radio and the "big" regional newspaper.

The physical condition of the participants was improved of those who did not have very good from the beginning.

90 % of the participants said that they experienced cycling very positive.

A travel survey was made one year after among the participants. Not many answered the survey. The few answers showed that more than 50 % biked more than before the campaign. In average were 54 % of the trips to work with bike and only 28 % with car.

Critical points and conclusions



Continues feedback is crucial to keep up the changed behaviour.

The difficult is to keep contact during the whole campaign – its difficult to make people come to meetings.

It is good to work with the human resource office. It is a rather practice, simple and low cost way of working with mobility management. It gives quantitative results even if the number of participants are low.

It is a good awareness raising project to start with as it also give a change in behaviour.

The participants are also good ambassadors for cycling towards colleagues, friends and family.



3.7 Razlog (Bulgaria)

3.7.1 New Mobility Management Plan For Razlog

Theme (A, B or C)	B. Parking and traffic management and control
Partner	Traffic Police – Razlog, "Bultrafik"Ltd.
Municipality	Razlog
Duration	Ongoing since 2006
Budget (in Euro)	Euro 250,000

Rationale, target and objectives

The intensive economic development of Razlog Municipality during the recent years brought to increased traffic congestion, accidents on the road, and parking problems. The most critical point was the sharp increase of vehicles in the town because of the work immigration towards Razlog, higher standard of living of the local citizens (more cars bought by the local households), and the increased tourist interest towards the region.

Therefore the Municipal Administration developed in 2006 a General Mobility Organization Plan, (still on-going). The plan provides for:

- 1. Traffic management and regulation, depending on the types of vehicles and types of urban areas 2. Vertical signalization, horizontal marking and street installations for speed decreasing and traffic restraining in the town of Razlog (i.e. near schools).
- 3. Determination of pedestrian alleys.
- 4. Construction of roundabouts, which lead to 40% decrease of the accidents in the respective areas.

These measures were defined through a Top Down approach, as they have been discussed among the Municipal Council, mobility experts from the Traffic Police, the projecting company – "Bultrafik" Ltd., and the Municipal Administration. There has been one public discussion organized, after the plan was prepared by the projecting company, then it was agreed without any remarks by the local population.



The primary focus of the initiative is **traffic management** with the following objectives:

- sustainable mobility in Razlog;
- greener environment;
- safer conditions on the roads;
- easier access for the active resident and non-resident population (workers in local institutions, organizations and companies), tourists, visitors;
- preservation of the pedestrian alleys and increasing of green areas.

Financial Resources

All financial resources for the preparation of the new Mobility Management Plan, and its implementation came from the Municipal budget, as capital resources.

Description of the intervention

TECHNIQUE

For the preparation of the Plan, data was collected by the projecting company – "Bultrafik" Ltd., and provided by the Municipality of Razlog, the Traffic Police in Razlog, as well as some observations on place, done by the company's experts.

METHODOLOGY

The implementation of the intervention was done according to the Bulgarian tenders' legislation. The Municipal Council took exclusive decision for the step-by-step implementation of the project and provided full political and financial support. There was a constant co-ordination between the bodies responsible for the implementation of the intervention on behalf of the Municipality, the consulting company and other interested organizations.

PROCESS and ACTIVITIES

- 1.: the Municipality of Razlog organized a competition in order to choose a company to prepare the new Mobility Plan. After the approval of the company, data was collected, the plan was prepared and it was presented in front of the Municipality, the Municipal Council and the citizens of Razlog.
- 2. Approval of the plan by the local authority and the local population, and determining of implementation terms.
- 3.: installation of new signs and street signalization; construction of new crossings and roundabouts; rehabilitation of pedestrian alleys (new electric street-lighting,



new benches and water alleys); regeneration of public spaces for easier access.

4. The implementation of the plan is still ongoing.

BODIES and SKILLS INVOLVED

In this project, the following bodies were involved:

The Municipality of Razlog

Traffic Police - Razlog

"Bultrafik" Ltd. - private company

Local Construction companies

INCENTIVES

The main incentive that came out of this project are:

- safer conditions on the streets in Razlog;
- better mobility management and organization;
- improving the drivers' behavior on the road;

Technical Training Course/Training Phase

Not applicable

Outputs

- In the areas of the new roundabouts: 40% less accidents;
- Decreased pollution and noise in the central part of the town;
- Less cars enter the town's central part, because of the pedestrian alleys;
- No trucks enter the town's central part, because of the restriction to do so.
- Following the recommendations of the New Mobility Management Plan, every newly constructed building in the town is required to have its own parking places (nearby or underground).

Critical points and conclusions

The town of Razlog does not have a Master plan yet, which leads to difficulties in the realization of some of the measures, incorporated in the New Mobility Plan.



The outputs achieved through this intervention in the town of Razlog resulted in reaching the primarily determined targets. Road safety was increased at the same time congestion was reduced and made the targeted areas more accessible; the environment was improved in a sustainable way. There was full political support and long-term commitment which lead to comparatively easy implementation of the actions. We consider the preparation and implementation of the New Mobility Plan of Razlog best practice, because it is a relatively low-cost intervention which lead to the following:

- Decreasing the effects of the transportation and pedestrian intensity in the town;
- Decreasing of the number of accidents on the roads;
- Decreasing of the negative effect of the automotive transportation over the environment regarding noise, vibrations, gases and other emissions;
- Conformity of the existing mobility organization with the requirements of the Bulgarian legislation.



3.7.2 "Blue Zone" – Parking Control

Theme (A, B or C)	B. Parking and traffic management and control
Partner	Municipal Enterprise "Parking Lots and Garages"
Municipality	Razlog
Duration	2006 – still ongoing
Budget (in Euro)	60,000 for construction activities and preparation
	50,000/year is the enterprise budget

Rationale, target and objectives

The intensive economic development of Razlog Municipality during the recent years brought to increased traffic congestion, accidents on the road, and parking problems. Regarding the latter, the Municipal Council of Razlog and the Municipal Administration took a decision to define some so-called "Blue Zones" in the town's central part, where parking is limited and paid. There are three main zones: two of them are for parking up to two hours, and for the other there is no time limit. The Blue Zones are paid Monday-Friday, 8.00-18.00 o'clock. The action came by a Top Down approach. The determination, implementation and management of Blue Zones in Bulgaria is not a common practice in smaller towns as Razlog, but much bigger cities. That is why the very existence of such a zone is considered as a success. Another important issue was the reclaiming of the pavements, previously often used for car-parking, for the pedestrians. This was achieved through the installation of car-restricting architectural elements on the pavements.

The main **objectives** of the initiative are:

- Determination of controlled parking areas;
- Better and easier accessibility;
- Limiting illegal parking;
- Road safety, especially regarding the pedestrians;
- Decreasing the number of vehicles, entering the town's centre.

Financial Resources

The project itself and all interventions that followed the Mobility Plan of Razlog were implemented with financial resources provided 100% from the Municipal budget. In 2006 there was an exclusive municipal enterprise established, called Municipal enterprise "Parking Lots and Garages", with its own budget. It is responsible for the management and maintenance of the new infrastructure related to the paid parking



lots in the town. The enterprises yearly municipal subsidy is approximately 50,000 euro, and its revenue from the activities in the paid "Blue Zone" is approximately 100,000 euro.

Description of the intervention

TECHNIQUE

There was an additional detailed research on the zones, previously determined in the New Mobility Management Plan of Razlog through assessment forms and observations on place.

METHODOLOGY

There was a public procurement for choosing a construction and data processing companies for the realization of the paid parking areas.

PROCESS and ACTIVITIES

- 1. Collection and processing of initial information.
- 2. Preparation of the final working projects for the construction of the paid parking "Blue Zone" areas.
- 3. Promotional and activities
- 4. Procedures for choosing a construction and data processing companies.
- 5. Construction of the parking facilities and infrastructure.
- 6. Establishment of the Municipal Enterprise "Parking Lots and Garages".
- 7. Maintenance and management of the parking lots and garages.

BODIES and SKILLS INVOLVED

Municipal Administration of Razlog

Municipal Council of Razlog

Municipal Enterprise "Parking Lots and Garages"

Construction companies

INCENTIVES

A special licence regimen for entering of vehicles in the "Blue Zone" was determined for the people living in the central part of the town where these zones are located. There are special monthly fares determined for the companies that have offices in the same areas. There are also special fares and parking spaces for disabled people.

Technical Training Course/Training Phase



There was a training course organized for the Municipal Enterprise's new employees.

Outputs

- 1. Less cars enter the central part of the town that leads to decreased level of noise and air pollution;
- 2. Less car accidents;
- 3. Parking is better organized;
- 4. Illegal parking is controlled and sanctioned;
- 5. Better environmental conditions;
- 6. Pavements free from cars, available to the pedestrians;
- 7. Additional financial resources are accumulated in the municipal budget for supporting various green initiatives;
- 8. Improved security and theft prevention;
- 9. Long-term employment of people in the Municipal Enterprise.

Critical points and conclusions

There were doubts in the public opinion for the final success and efficiency of the undertaken measures, as well as some single cases of resistance by the locals in the first phase of the intervention implementation.

This Best Practice is proven as successful in bigger cities in Bulgaria. Learning from their experience and applying the above described measures some significant problems for the town of Razlog have been solved in a sustainable way at a relatively low cost. The admissible levels of noise and air pollution have been reached, and the number of vehicles entering and staying in the central part of the town has decreased with approximately 30%.



3.8 Reggio Emilia (Italy)

3.8.1 Reggio's Electrical experience

Theme (A, B or C)	B: Parking and traffic management and control
Partner	Municipality of Reggio Emilia, TIL, Farmacie Comunali Riunite, Province of Reggio Emilia
Municipality	Reggio Emilia
Budget (in Euro)	14.000.000 € (65% national co-financing)

Rationale, target and objectives

Decision to follow the provisions in the Environmental Ministries decree (RONCHI) (by 2003 50% car fleet with Low Environmental Impact) to convert the Council and the main public companies to the use of Electric Vehicles.

overcome PRECONCEPTIONS linked to the ELECTRICAL VEHICLE actual functioning of the vehicle - high purchasing costs - guarantee on after sales service

Primary objective is promoting the use of electrical veichle in urban context.

The initiative consists in a hire of the electric vehicle without driver like a service that guarantees the efficiency of the vehicle, and ALLOWS to overcome preconceptions linked to the electrical vehicle actual functioning of the vehicle (high purchasing costs, - guarantee on after sales service). The initial involvement of public owned company and municipality fleet has allowed the start-up of the project.

Target population consists in Public bodies and companies, private companies and, at last, citizens.

Financial Resources

426/1998 and 166/2002 acts financing ZEV vehicles on 65%

The role of the municipality, province, and FCR were to warranty a minimum market in order to decrease costs and so hire fares



Description of the intervention

TECHNIQUE

TIL (public owned company) buy with national contribution and hire electric vehicles ("ECONOLEGGIO")

municipality decided to convert the Council and the main public companies to the use of Electric Vehicles

Municipality allows free park and limited traffic zone access to electric vehicles

METHODOLOGY

4 phases:

- 1) substitution of the whole FCR (pharmacies public company) fleet with electric vehicles with "ECONOLEGGIO"
- 2) substitution of part of municipality and province administration fleets with electric vehicles with "ECONOLEGGIO"
- 3) involvement of traders associations in promoting electric vehicles with "ECONOLEGGIO"
- 4) hire of electric vehicles to individuals and companies

PROCESS and ACTIVITIES

- 1° phase since january 2001 still ongoning
- 2° phase since june 2002 still ongoing
- 3° phase since December 2003 still ongoing
- 4° phase since September 2005 still ongoing

BODIES and SKILLS INVOLVED

LOCAL MOBILITY AGENCY (ACT) and owned company (TIL)

PUBLIC COMPANIES (Farmacie Comunali Riunite)

PUBLIC AUTHORITY (Town Council and Province)

BUSINESSES (Traders Craftsmen)

PRIVATE INDIVIDUALS

INCENTIVES

Municipality allows free park and limited traffic zone access to electric vehicles

Technical Training Course/Training Phase



Outputs

176 electric vehicles circulating, instead of 126 thermal engine ones

since 2001:

km travelled	5.964.516
co2 reduction (Kg)	596.452
co reduction (Kg)	210
Nox reduction (Kg)	1.253
PM10 saving (kg)	329
fuel saving (litres)	497.044

Critical points and conclusions

Three factors let us consider it a best practice:

- Environmental aspects: electric small vehicles have a low impact not only for pollution and noise, but also for urban quality and safety expecially in historical centers
- the partnership between public and private sectors expecially in the start-up phase
- the possibility to continue the experience without local public direct contributions



3.8.2 BiciBus

Theme (A, B or C)	С
Partner	Municipality of Reggio Emilia 18 primary schools
Municipality	Reggio Emilia
Duration	Ongoing since 2003
Budget (in Euro)	1 person working part time inside the municipality for management and coordination (15.000 € per year) contract with local cyclist association for supporting management, dissemination and planning (8.000 € per year)
	gadgets and promotional materials and campaigns (5.000€ per year average)

Rationale, target and objectives

The needs which led to the action may be resumed:

- reducing cars circulating in the rush hours
- making parents free from the need to accompany children to school
- teaching to children behaviour rules in circulating
- increasing in the children the awareness in living the roads and the urban spaces
- promoting physical activity and health

The action starts both from municipality (mobility and educational departments), schools and parents

The focus of the initiative consists in organising groups of children who go to school by bicycle, accompanied by two adults (parents, volunteers, grandparents, ...). The target population is the primary school pupils. Main objectives consist in making answers to the needs explained in the previous section

Financial Resources

All financial resources come from municipality, in terms of staff and external services



Description of the intervention

TECHNIQUE

The intervention started involving 70 pupils of one school. The municipality check, through teachers, the possibility of organising one or more bicibus lines. Municipality supports schools in promoting the initiative through meeting with parents. Municipality provide an insurance against accidents for pupils and attenders. The municipality set routes and fix security problems in the road

METHODOLOGY

- 1) The municipality calls the schools and ask for the possibility of keeping bicibus (edn of august, beginning of September)
- 2) The school organises a promotional event with parents
- 3) The school collect the names and address of pupils who are available to participate and send them to municipality
- 4) The municipality make the best route for each bicibus line, checking the short route in the map and safety conditions through inspections by the road
- 5) Attenders organise the turnover for accompany
- 6) Bicibus starts

PROCESS and ACTIVITIES

Phase 1 end of august – beginning of September

Phases 2 and 3 beginning of September

Phase 4 first half of September

Phases 5 and 6 from September to November, from march to June

BODIES and SKILLS INVOLVED

Municipality of Reggio Emilia (Mobility department, schools departments), Primary schools, Local Cyclist association, Parents

INCENTIVES

Bicibus kit provided to each pupil and attender:

Helmet, waterproof tippet, fluo-color dickey, insurance against accidents

Technical Training Course/Training Phase



Outputs

2 schools and 70 puipils involved in 2003

18 schools and 534 pupils involved in 2008

considering a 500 m of average distance, bicibus covered in the 2008 over 50.000 people*km, shifting from car travels

Critical points and conclusions

Main critical point consists in the children-parents turnover in the schools. Every year municipality needs to re-start promotional and organisational steps because pupils, parents and teachers changes.

In 2009 an agreement between municipality, schools, sanitary and environmental agencies ahs been signed to promote together sustainable mobility in home to schools trips. Each school designates each own mobility manager who has to be the reference into the school.

We consider it a best practices for the following reasons:

- bicibus involve more pupils than classic school bus transport, with no significant costs
- more than sustainable mobility reasons, bicibus builds people engagement and awareness
- It is a chance, for pupils, to arise public space awareness, to make physical activity, and to know behaviour rules in circulating



3.9 Ulm (Germany)

3.9.1 Flexible transport modes

Theme (A, B or C)	С
Partner	SWU Verkehr GmbH (PT operator)
Municipality	Ulm
Duration	ongoing
Budget (in Euro)	The budget for the flexible transport modes varies year by year but should be mentioned that in general the costs for regular bus services are much more higher than the operation costs of the flexible public transport modes mentioned above.

Rationale, target and objectives

Off peak and in non dense housing areas a frequent running a regular bus route is not economical. Different transport modes for different requirements are necessary:

- MobilSAM is a Taxi, completing the bus and tram network on corridors with a lower demand especially off-peak. The Taxi runs a time-table between regular bus stops and passengers doorstep.
- The Quartierbus is a medium size bus only running in a district between all points of interest and tram- and bus stops.
- During the week tram and bus operation normally stops between midnight and 1 am. But passenger needs are different at weekends. Therefore SWU offers a special night bus system on Friday and Saturday night.

The focus of the three systems mentioned above is laying on a demand oriented services off peak and in non dense areas. The main **target groups** of the SAM varies. It's mostly used by commuters and for recreational traffic. Main target group of the "Quartierbus" are senior citizens and main target group of the night bus system are young and mid-age people going pubing and clubbing.

Financial Resources

The financing of MobilSAM and the night bus services is based on three pillars:



regular fare, an additional fee, compensation from cross subsidies.

The financing of the Quartierbus is based only upon the following two pillars: regular fare compensation from cross subsidies.

Description of the intervention

TECHNIQUE

To implement the different transport modes it was necessary to know the demand and the requirements of the existing patronage. With a traffic model the impact of the transport modes were simulated. For pricing the night bus supplement a specific passenger survey was made.

METHODOLOGY

For the traffic model SWU Verkehr is using specific software called VISUM by ptv.

PROCESS and ACTIVITIES

- 1. Step: SWU Verkehr planned in a close cooperation with the city council
- 2. Step: Planning were presented to the municipality council -> political decision
- 3. Step: Inauguration by SWU Verkehr including all authorisation procedures

BODIES and SKILLS INVOLVED

City Council (city planner, traffic planner,), Police department, Municipality council (Decision makers), SWU Verkehr (PT operator)

INCENTIVES

Target group oriented marketing and commercials

Technical Training Course/Training Phase

no

Outputs

By operating flexible transport modes it is possible to run public transport to all districts the whole day through. With a dense network of stops more than 90% of all inhabitants' life within a catchment area of about 400m.



Critical points and conclusions

Like any other also business public transport is urged to operate economically on the market. The critical issue is the demand. The Quartierbus for example currently runs a testing phase. If the critical mass of patronage won't be reached within the next two years the Quertierbus will be replaced by a MobilSam concept.

The experience of the past shows us, that special offers are successful when they are demand oriented and passenger friendly. It shows us that passengers are willing and able to pay a supplement to their regular fare, when they get a good offer.



3.9.2 New road Ulm

Theme (A, B or C)	A/ B
Partner	City of Ulm, Agency of urban planning, Agency of mobility
Municipality	Ulm
Duration	1994- 2007
Budget (in Euro)	Open space (incl. road, square): 5,1 Millions EUR
	Underground car park: 22,6 Millions EUR

Rationale, Target and Objectives

Ulm's historic centre was divided into two parts. A six-lane road has separated the cathedral from the historic town hall for over 50 years. The renewal of the "New Road" enabled urban planners to realize a new "connecting piece", which consists of an ensemble of buildings, public space and new understanding of mobility and public participation. In 1995 a new public discussion started for redesign and change of the New Road and ended in a successful and unique project for a new culture of planning and recovery of lost public space.

The target of the initiative was to redesign the "New Road" with an approach to reconstruct an (lost) open space with high public qualities. The "New Road" project finished a planning process lasting about two decades and affected urban functions like trade, economy and culture. Ulm's inhabitants as well as external visitors take advantage of this project.

Financial Resources

The procedural steps, technical planning and renewal of the "New Road" were funded by the city. The new erected buildings were funded by investors. Financing of the underground car park: 25% public, 75% private (Public Private Partnership)

Description of the intervention

TECHNIQUE

The "mobility development plan" of 1994 generated information about a new mobility behaviour and development. Following from this, the architectural workshop identified opportunities and potentials to be secured and expanded upon for future development.



METHODOLOGY

The success of the project is particularly based on public participation (workshops), public discussion (forum with civil groups, organisations, institutions), public information (exhibitions, documentations, flyer, campaign) and urban design competitions.

PROCESS and ACTIVITIES

Single steps for realization (1994-2007)

Since 1994 - public discussion supported by external experts.

- 1994 The new "mobility development plan" suggests a reconstruction of the "New Road".
- 1995 Workshop with Ulm architects and planners followed by an exhibition of the results and public discussion. An informal Planning committee was established. Preparation of a masterplan
- 1998 The municipal council votes for a "Masterplan New Road" and an urban design competition is carried out and discussed in 1999 with civil groups, organisations, institutions.
- 2000 Formulation and development of a possible master plan/ implementation strategy in cooperation with the 1st prize winner of the competition.
- 2001 Revision/ Correction of urban design concept because of public protests, additional to the conclusion of the procedure for the "binding land use plan". he municipal council votes for the "binding land use plan" and also voted for a step by step realization of the project.
- 2002 Start of the construction for the underground car park and beginning of archaeological excavations. Campaign about planning details of the binding land use plan.
- 2003 Beginning of architectural competitions for private office and business buildings in cooperation with private investors. The city acquired a private art collector for a private art museum "Collection Weishaupt" at the "New Road".
- Mar. 2005 Realisation of the "New Road" and Squares, based on the competition.
- July 2005 Start of construction of the private art museum "Collection Weishaupt"
- March 2006 Naming and opening of the new "Hans and Sophie Scholl Square".
- 2007 Opening of private art museum "Collection Weishaupt"

BODIES and SKILLS INVOLVED

Citizen of Ulm, Feb. 2005 - Start of construction of the buildings, local and external experts i.e. architects, urban planners, City of Ulm, agency of urban planning and



agency of mobility, Related public agencies and municipals, Patronage

INCENTIVES

Technical Training Course/Training Phase

Outputs

- Additional bus lanes
- Underground car park
- New Squares, new quality of life for citizens
- New public space, new way of participation of citizens,
- focus on pedestrians
- End of division of the old City into two parts

Critical points and conclusions

the project "New Road" is an example for applied social politics, in terms of content and process. The content is new space for new great architecture on a "lost space" and the end of the wrong division of the two parts of the old town through a road which had the wrong dimension. It is also the winning of open space for pedestrians and users of the new squares and the possibility to have an Art Gallery instead of traffic.

The recovery of lost urban and public space framed in fantastic architecture would not be possible without the control of the urban development by the urban society itself. Civil participation and dialogue in urban society is the basis for decisions and development in a city nowadays.

The "New Road Ulm" shows how public participation and public debate led to a successful end of the project. As pointed out, former efforts of the city in the past, not only made the urban situation sometimes more difficult, but also the psychological effect on Ulm's citizens concerning the planning process was in a bad condition. A missing public participation and a missing public discussion in the pastime was burned- in and lead to citizens sensibility and scepticism against projects of the city in the past. To stop that was the motivation to use new methods of making decisions that would create a new perspective of urban planning and participation.

The process and the activities described detailed steps, how public relation can reopen new possibilities of planning and how they influence awareness and consciousness.

This is an approach to planning alteration, which established a good reputation of the city.



3.9.3 Tram network extension

Theme (A, B or C)	С
Partner	SWU Verkehr
Municipality	Ulm
Duration	11.2008 – 11.2010
Budget (in Euro)	700.000 €

Rationale, Target and Objectives

The twin city of Ulm/Neu-Ulm once operated a large tram network. After WWII this network was replaced by bus routes step by step. Only one single route survived until today. It's remarkable this single route runs more than 1/3 of the whole annual passenger load of all routes. It's a fact that trams are more accepted by people than busses this and the need of a sustainable long term concept leads to a an 5 km tram extension in 2009. Meanwhile both cities understand the need of good reliable and sustainable PT which is also required by the inhabitants and daily commuters.

In a first step the technical and economical feasibility of three branches will be investigated. The results will help to categorize the braches and to find the route with the most benefit for the cities.

Beside the technique of tram pure tram alignment there is a special focus on the integration of the track into the different parts of the city. City planners and architects will consult the traffic planners. The objective of the tram extension is not only improving the public transport services but also enhancing the scope of the different district the tram will running through.

There is no specific target group for the extension of trams. SWU wants to offer a contemporary public transport offer to everyone by implementing a modern light rail system.

Financial Resources

The first planning steps, technical planning and cost-benefit calculation, will be founded by the city. In case of a realisation state funding is expected to built the infrastructure.



Description of the intervention

TECHNIQUE

METHODOLOGY

The cost-benefit calculation is based on an instrument called Standardsierte Bewertung (standardised assessment) which is valid for all tram operators throughout Germany

PROCESS and ACTIVITIES

- Technical feasibility and first drafts of the infrastructure
- Cost calculation
- Cost/benefit calculation (German standard calculation)

BODIES and SKILLS INVOLVED

Engineering group of the public transport operators, Engineers and architects of the city, Private enterprises (mainly engineering and traffic planners)

INCENTIVES

Technical Training Course/Training Phase

Outputs

The output of the first planning phase is a draft design of the alignment and a detailed cost-benefit calculation regarding not only technical and economical data but also ecological aspects.

Critical points and conclusions

Many cities the same size like Ulm are standing at the crossroad. They have to decide whether to invest into a new tram system or to improve their existing bus network.

The Ulm experience, SWU runs busses and trams, can help those cities to find the right solution.



3.10 Varberg (Sweden)

3.10.1 Walk and cycle to school

Theme (A, B or C)	А
Partner	Municipality of Varberg
Municipality	Varberg
Duration	2005-2007
Budget (in Euro)	100 000

Rationale, target and objectives

As traffic congestion has increased around schools, more and more parents drive their children to school. Schoolteachers and parents thought it was a problem. Instead of promoting even more parents to drive their children to school, the schools wanted to change children's and parent's behaviour by information and cooperation among parents, pupils and teachers and to encourage and stimulate cycle and walk to school. The initiative was a Bottom-up approach. The cooperation of all the stakeholders has been very important.

The **objective** of the activity has been to increase the number of cyclists in Varberg. Three elementary schools with 1 700 pupils participated, 2 schools from the city and 1 school from a village with about 2 500 inhabitants participated in the project.

The main target population was schoolchildren, but parents and all teachers were also very important to involve in the work. A coordinator worked together with pupils, teachers and parents to encourage cycling and walking as a means of transportation to school.

Financial Resources

A coordinator was employed half-time (50%) during three years (2005-2007). The total cost for the coordinator and all activities was 100 000 euro. The Swedish Environmental Protection Agency contributed with 50 000 euro. A local newspaper sponsored advertisement and information about the project in the newspaper (10 000 euro). All pupils at the municipality at the age of 12 received a helmet free,



with contribution from a local cycle-enterprise.

Description of the intervention

TECHNIQUE

Production and distribution of information- and education material, Information meetings, Practical exercises, Two competitions, Two inquires, Production of a "teachers" toolbox with educational material

METHODOLOGY

The coordinator supported the schools with different kinds of activities. Teachers at the three schools were engaged and responsible to implement the activities in the education.

PROCESS and ACTIVITIES

2005: decision at the childcare and educational committee, coordinator employed, contacts with schools, meetings with teachers and parents, 3 elementary schools were selected

Spring 2006:

Workshop with 170 teachers

Inquiry to all parents and pupils

Every pupil made an inventory of their way to school (how long, traffic safety etc) Competition- "My way to school" (describe your way to school by bicycle in writing,

painting or photo)

Autumn 2006:

Competition-"Cycle around the world" (every class measures meters during 30 days)

Prize award "Cycle around the world"

Workshop in September with 1 900 pupils and teachers (safety cycling, traffic safety, practical exercises, lectures etc)

Meeting with teachers and planners

Spring 2007:

Prize award "Cycle around the world"

Inquiry to all parents and pupils

Autumn 2007:

Meeting with teachers and parents

Evaluation

Presentation at the childcare and educational committee

BODIES and SKILLS INVOLVED

Schoolchildren, Headmasters and teachers, The local childcare and educational committee, Parents, Town/traffic planners, Swedish Association of Cycle (organisation), Police department (safety cycling), Cycleurope (private enterprise)



INCENTIVES

Not relevant for the project

Technical Training Course/Training Phase

Workshop for teachers with in-service training (information about the project, introducing new methods etc) The coordinator provided the teachers with toolboxes with different kinds of material suited for different ages (how to prepare a lesson, information about traffic safety, cycle maps, practical exercises etc). Theme day/workshop for all pupils and teachers

Outputs

Less traffic congestion at schools. At the end of the project we noticed a change in travel patterns:

23 % of the pupils cycled or walked to school, instead of their parents drove them

67 % of the pupils had increased their traffic knowledge

The stakeholders engagement increased. Schools and town-traffic planners cooperated to make cycle routes to schools more suitable for children.

The political support increased.

Positive media coverage with several articles in local newspapers.

The project increased also teacher's and parent's awareness in mobility management and healty issues.

As the pupils described their way to school by bicycle, the town- and traffic planners got a very good material concerning problems/difficulties along the way to school.

Critical points and conclusions

A coordinator is very important in the sense of preparing activities and to support teachers in their work with the pupils. The coordinator could maybe visit the schools at a more regularly basis. All teachers at the three schools had not the ambition and interest to implement all the activities in their education. The cooperation of all stakeholders is very important.

As we wanted to raise awareness and change behaviour, is it a long term project. The activities must be repeated regularly.



In the project we involved three schools with all teachers and pupils – total 1 900 persons. We also involved the children's parents.

All the activities were prepared together with the coordinator and teachers. They were all very successful and appreciated. The project had added values. Once the pupils are convinced they will also encourage their parents to use more bicycle instead of car. Teaching health and environment consequences of various transportation modes, enhances children's ability to make healthy choices in their lives, which will have a positive impact on the community and the environment. We introduced new methods and activities like competitions, toolbox etc.



3.10.2 Cycling for Health

Theme (A, B or C)	А
Partner	Municipality of Varberg, County Council
Municipality	Varberg
Duration	2007, March-November
Budget (in Euro)	12 000

Rationale, target and objectives

The aim of Cycling for Health is to encourage both the residents and those working in Varberg to start cycling. Many live nearby their workplace and drive only a few kilometres to work. To encourage new behaviour among citizens, ten habitual drivers left their car at home and started cycle to and from work instead. The aim of the project was to measure the health, environmental, financial and time-related effects of the transition from car to bike. In order to make this switch effective some form of incentive is required.

Target: Habitual drivers with a short distance between home and work (approximate 3-7 km).

Financial Resources

Total costs: 12 000 euro. The Swedish Environmental Protection Agency contributed with 6 000 euro.

Description of the intervention



TECHNIQUE

Change of travel mode. Bike instead of car to and from work. Information at the website. Study group. Health and fitness tests. The average age of the people in the group, which comprised 6 women and 4 men, was 44 years. The average journey to work was around 4,6 km.

METHODOLOGY

Over a period (1st April-31st October) 10 habitual selected drivers were to cycle to and from work. The 10 persons were selected among 40 interested citizens. They were quizzed about their travel habits and attended 3 health and fitness tests. The participants agreed to keep a travel diary, attend regular meetings and use bike helmets.

PROCESS and ACTIVITIES

March 2007: Information meetings and interviews to select the 10 persons.

April-November 2007: Cycling to and from work. 8 meetings during this period. Every week they sent the travel diary to a coordinator. Parts of the travel diaries were published at the website.

September 2007: participation at the European Mobility Week and exhibition Active Recreation

BODIES and SKILLS INVOLVED

Habitual drivers, whom lived and worked in Varberg. County Council: responsible for health and fitness tests. They also participated in the study group.

INCENTIVES

The cyclists were given bikes, bike computers, helmets and rain clothes.

Technical Training Course/Training Phase

Those selected for the Cycle for Health project participated in a study group to encourage each other during the period. They all meet 8 times for information and discussions. Each meeting had a special theme (health, food, climate etc).

Outputs

Cycling 11 800 km instead of cardriving.



Together the participants lost 20 kg

Reduction of CO2 by 3 900 kg

Saved 2 000 euro (petrol costs)

Increased health and fitness.

Positive media coverage with articles in the local newspaper.

Travel diaries published at the website.

Critical points and conclusions

The ten selected persons successfully participated in the project. One part of the project was that the project would provoke a discussion at the office/workplace about environmentally friendly modes of transports. Cycling for Health set at good example and inspire others drivers to take bike instead of car.



3.10.3 CycleWeek

Theme (A, B or C)	A
Partner	Municipality of Varberg, Cycleurope
Municipality	Varberg
Duration	August 2008
Budget (in Euro)	32 000 euro

Rationale, Target and Objectives

The aim was to provide information on activities and in that way influence people in Varberg to change their travel habits. By organizing fun and interesting activities in the city centre we reach many citizens; family with children, young and old people etc. It's also a opportunity to gather different organization at the same place and at the same time, and cooperate in Mobility Management.

Target: All citizens in Varberg.

Financial Resources

Total cost: 32 000 euro. The Municipality of Varberg: 20 000 euro. Cycleurope (private cycle company): 10 000 euro (cycle helmets and artists), The Swedish Environmental Protection Agency: 2 000 euro

Description of the intervention

TECHNIQUE

30 exhibitions (environmental transports, cycle, public transport, non-petrol cars)

Performances and artists (theme Cycling)

Information campaigns

METHODOLOGY

A coordinator from the municipality contacted interested partners, organised the exhibition area and performances, raised sponsorship, was responsible for advertisement and media contacts.

During the Campaign Day about 10 voluntary persons were engaged. Every



organisation was responsible for their own exhibition and activity.

PROCESS and ACTIVITIES

March-June 2008: Planning, preparations and information

Meetings with companies and organizations about the exhibition

CycleWeek 23-30 of August

Different cycle activities every day. Organisation

Saturday 23 August: Campaign Day.

A day with different activities and exhibitions in the central city.

Opening speech by the Municipality Commissioner

Discussions with local politicians

A central street closed for cars, used for performance at a stage and 30 exhibitions.

BMX-artists and activities

Artists performing for children

Quiz competitions for adults and children

August-September: Evaluation

BODIES and SKILLS INVOLVED

Local public transport company (travel plans, tickets, etc)

County Council (information about health, exercise and food)

Local restaurants and shops.

Three cycle shops (demonstration, repairs etc)

Cycleurope (cycle manufacture)

Local organisations (example Swedish Association of Cycle)

Car dealers (non-petrol cars)

INCENTIVES

Special offers for the visitors.

Competitions for adults and children.

Free taste of local food.

Technical Training Course/Training Phase

2-3 meetings with all the participating organisations and private companies.

Outputs

About 2 500 visitors at the campaign day 23 of August.

Increased awareness of mobility issues. Visitors received cycle maps

Advertising in local media

Leaflet to all households in Varberg with information about the CycleWeek and



mobility issues

Information a the website

Articles in local newspapers and local radio

Critical points and conclusions

Engaged local organisations and companies are necessary.

Bad weather with rain and hard wind is a critical point!

About 2 500 persons visited the Campaign Day in the city center. It was very successful. The participating organisations and private companies were satisfied and they would like to participate once more.

The CycleWeek and the Campaign day are good examples of cooperation between the municipality, local organisations and private companies. Together and with common resources we carried out a big event. The cooperation has continued in other activities and information meetings.



3.11 Volos (Greece)

3.11.1 Car free day

Theme (A, B or C)	А
Partner	VOLOS MUNICIPAL ENTERPRISE FOR URBAN STUDIES, CONSTRUCTION AND DEVELOPMENT (DEMEKAV)
Municipality	MUNICIPALITY OF VOLOS
Duration	22/9/2000
Budget (in Euro)	43.304 €

Rationale, Target and Objectives

Volos Greater Urban Area has some major problems concerning urban mobility. The rapid increase of ownership and use of private car, the lack of adequate parking spaces, especially in the city centre, the illegal on-street parking on the main roads, the increase of traffic congestion in the city center and increase of freight traffic through the city from/to local industries and the port, the increase of the cost and time for transportation by private car, the low use of public transport are some of the main transportation characteristics in the city. Nevertheless, walking is high for short distances and cycling still present, but they are both decreasing as distances get longer and traffic conditions worsen. All these conditions lead to the need for more free space for cyclists and pedestrians and actions for safer transportation in the city centre. Therefore, there was a need to improve the mobility strategy in order to integrate the quality of transportation inside or through the city centre by trying to remove private cars from it. The second thought was that the perfect way to test that and the reaction of the people was by taking place to the European Car Free Day.

The Car Free Day Campaign focused on informing not only car users but also the whole population living within the greater urban area of Volos about the benefits of using public transport (buses) or other environmental – friendly means of transportation (bicycles). The main objective was to inform people about the environmental as well as health problems caused by the emissions of private cars. The restriction of private cars use will result in better air conditions, limitation of noise pollution and more free space for the citizens.

Financial Resources



The whole undertaking was financed by the Municipality with the contribution of the Hellenic Ministry of Environment, Spatial Planning and Public Works. The surveys conducted were a donation of the Department of Planning and Regional Development, University of Thessaly.

Description of the intervention

TECHNIQUE

In 2000 the City Council decided to take part at the European Car Free Day and signed the European Declaration for the "Car Free Day". After that a committee was held for the organization and the implementation of this day. In order to have the best possible results the authorities asked help from the Local Schools, the Department of Planning and Regional Development, the University of Thessaly.

METHODOLOGY

The first step of the organization of the European Car Free Day in Volos to bring the whole subject into consideration of the Municipal Council. The council decided the participation of the city and signed the European Declaration for the Car Free Day. The second step was the decision to set up a technical committee with the participation of local stakeholders

PROCESS and ACTIVITIES

- 1. Municipal Council Approval
- 2. Organizing & Technical Committee Formation
- 3. Specification of the car free area, alternative ways of transportation, related parking spaces and Exceptions (e.g. emergency vehicles, area inhabitants)
- 4. Information, Dissemination & Communication Campaigns
- 5. Implementation & festivities
- 6. Evaluation of the project

BODIES and SKILLS INVOLVED

Municipality of Volos, Magnesia Police Division, University of Thessaly, Technical Chamber/Magnesia Department, Chamber of Commerce/Magnesia Department, Volos Port Committee, Volos Association of Commerce, Volos Urban Bus Company S.A., National Research Centre of Transport in East Mediterranean (DEKAMM), Taxi Owners Association, Division of Primary Education/Prefecture of Magnesia, Division of Secondary Education/Prefecture of Magnesia

INCENTIVES

Public transportation on that day was free.



Technical Training Course/Training Phases

There was two phases that they can be considered as training. The first one has to do with the training and education of school students on the procedures of the exclusion of the predefined area from traffic. This included also the distribution of leaflets and flyers. The second one has to do with the training of the university students who were conducting the survey about the mobility status on that day.

Outputs

- The results from the survey conducted by the University came from a sample of 60% of people inside the area of interest and 40% of people outside of it. The survey showed that the private car usage that day decreased from 33% a typical day to 10%. Also motorbike usage decreased from 12% to 8%. Bicycle usage had increased from 10% to 18%, public transportation and taxis showed also a marginal increase of 1%. Pedestrians' number reached 43% from 20% on an average day. This day only 10% instead of 40% of people went to their work by car. The same situation was with shopping trips also. Over 50% of them were by foot.
- From people asked about the campaign and the way they were informed, over 50% said that they found it pretty adequate and informative. When they asked about the idea of the city centre completely car free, over 50% thought it would be a good idea. Nearly half the people asked said that the quality of urban environment that day was way better than average. As for the project repeat, 18% stated that they wanted to repeat the undertaking on daily basis, 25% once a week, 26% once a month and 9% once a year.

Critical points and conclusions

Two points needed to be underlined: 1. better informing the people on the actions taking place during the day 2. Enhanced mobilization of local stakeholder

Public awareness and the change of behaviour is a very slow procedure especially in our country and the greater idea was an effort to accelerate and enforce things a bit more than a communication or promotion campaign does. The interventions planned and implemented so far have proven the above to be correct. The outputs achieved didn't diverge from the planned ones. The whole mobility behaviour of the urban inhabitants seems to start changing when they slowly accept the current situation and see the results concerning traffic, noise, pollution and urban environment quality in general to improve day by day. Together with all the actions implemented there is also the factor of the whole transformation of the city with urban regeneration and the new city profile emerging.



3.11.2 City center traffic calming plan

Theme (A, B or C)	В
Partner	VOLOS MUNICIPAL ENTERPRISE FOR URBAN STUDIES, CONSTRUCTION AND DEVELOPMENT (DEMEKAV)
Municipality	MUNICIPALITY OF VOLOS
Duration	June 2007 - today
Budget (in Euro)	3.300.000 €

Rationale Target and Objectives

Volos Greater Urban Area runs up against some major problems concerning urban mobility. The rapid increase of ownership and use of private car, the lack of adequate parking spaces, especially in the city centre, the illegal on-street parking on the main roads, the increase of traffic congestion in the city center and increase of freight traffic through the city from/to local industries and the port, the increase of the cost and time for transportation by private car (cost of fuel, fees-taxes, cost of parking), the low use of public transport (buses) besides the efforts by the Bus Company for service improvement and the promotion campaign are some of the main transportation characteristics in the city. Nevertheless, walking is high for short distances and cycling still present, but they are both decreasing as distances get longer and traffic conditions worsen. All these conditions lead to the need for more free space for cyclists and pedestrians and actions for safer transportation in the city centre. Therefore, the first consideration on behalf of the municipal authorities was to create a mobility strategy in order to integrate the quality of transportation inside or through the city centre by trying to remove private cars from it.

The **objectives** of the Municipal Mobility Plan are: the diversion of heavy traffic condition though the city centre, the integrated traffic conditions inside the city and to be more precise the integrated traffic flow on the main streets, the elimination of illegal on street parking, the integrated quality of urban environment and the need for more free space for cyclists and pedestrians and actions for safer transportation in the city centre.

Financial Resources

The origin of financial sources required was the Municipal Financial Programme THISEAS and from now on part of the Municipal Financial Programme THISEAS and



the National strategic Framework.

Description of the intervention

TECHNIQUE

There was an implementation plan from the Technical Department of the Municipality delivered to the Municipal Council after measuring the volumes of traffic on the main road of the city area.

METHODOLOGY

PROCESS and ACTIVITIES

- 1. Traffic Committee Proposal
- 2. Municipal Council Approval
- 3. Technical Committee Formation
- 4. Road Transformation Traffic calming areas
- -. Parking spaces construction
- -. Information, Dissemination & Communication Campaigns

BODIES and SKILLS INVOLVED

Municipality of Volos

Urban Bus Company S.A.

INCENTIVES

The bus service from the Park n ride facility at the entrance of the city is free of charge.

Technical Training Course/Training Phase

Outputs

There were only qualitative outputs till now. There is an obvious change in travel patterns, some stakeholder engagement, increased awareness of mobility issues from the citizens, political support on various levels in order to be successful.

Critical points and conclusions

At the beginning there were some problems with the shop owners concerning the unloading and reloading spaces near their shops and the informing of the citizens about the park n' ride facilities. But in time the information campaign and the new lay of the sidewalks including unloading and reloading spaces did their work.



Public awareness and the change of behaviour is a very slow procedure especially in our country and the greater idea was an effort to accelerate and enforce things a bit more than a communication or promotion campaign does. The interventions planned and implemented so far have proven the above to be correct. The outputs achieved didn't diverge from the planned ones. The whole mobility behaviour of the urban inhabitants seems to start changing when they slowly accept the current situation and see the results concerning traffic, noise, pollution and urban environment quality in general to improve day by day. Together with all the actions implemented there is also the factor of the whole transformation of the city with urban regeneration and the new city profile emerging.



4 TRANSVERSAL ANALYSIS

4.1 Section A: Background and information data

The transversal analysis of background and information data allows to formulate the following conclusions:

- The large majority of municipalities involved defines itself as polycentric (except for Razlog and Reggio Emilia).
- The productive system of the majority of towns is based on industry and services. Tourism is a significant source of income for Girona, Brighton and Razlog.
- The majority of the cities is on a flat area. There are many seatowns (eg. Girona, Varberg, Volos, Brighton, Kavala).
- Parks cover a significant share of the surface e.g. in Brighon, Girona, Razlog (data missing in many cases).
- Population is either below 100000 inhabitants or between 100000 and 200000 inhabitants.
- The employment rate vary significantly, from 78% of active population in Brighton to 34% in the urban area of Volos. (probably data are not homogeneous).
- In the majority of cases the rate of elders vary from 12% to 20%

As for policies, European and international frameworks are taken into consideration (e.g. green paper "towards a new culture for Urban Mobility), Kyoto protocol, European mobility week) in the definition of municipal strategies and related actions. Undertaken actions embrace all stages mentioned in the template (planning, pricing, marketing). One commonality in relation to pricing is the reference to parking, whereas marketing and information cover many issues connected to sustainable transports, mobility (public use of bicicles, road safety, parking, car sharing/pooling...)

When it comes to socio-economic drivers, it should be underlined that some data are collected according to different templates and different criteria (e.g. % vs. absolute values, yes/no answer vs. quantitative data). For instance, Brighton, Girona and Pesaro, 3 cities with similar population, have very different figures in terms of local active units. Around 18000 active local units in Pesaro, around 6000 in Brighton and Girona (probably the first figure refers to the municipality, the second and the third to the department, and includes also craftsmanship)

The level of comparability of these data is still an open question.



4.2 Section B: urban mobility and environmental background

Also in this case there are different templates and different criteria of data collection (e.g. % vs. absolute values). In some cases data are not available for comparison.

As far as **urban mobility demand** is concerned, the transversal analysis, carried out relying on the comparable data, allows to formulate the following conclusion:

- motorization rate is around 40% (with some exceptions 60% in Reggio EMilia, 20% in Volos).
- Systematic trip prevail (from 60 to 80%9. The average is more than 3 trips per capita in the majority of cases.
- Average Trips time is less the 15 minutes in the majority of cases (except for ULM, 59min on the average).
- Few partners are able to determine the KM per capita (The average distance covered by each citizen during the day). In such cases, this does not exceed 2km for the majority of citizens.
- As for modal split, car is the main mean of transport, although with varying shares (from 35% in Girona to 63 in Molnald). The majority is around 50%.

The following table illustrate the percentages of modal split.



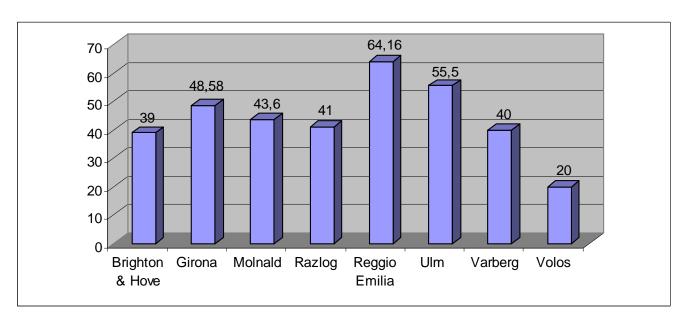
HEGIONS OF EUROPE SHARING				Marche						
	Brighton & Hove	Girona	Kavala	Region (Pesaro)	Molnald	Razlog	Reggio Emilia	Ulm	Varberg	Volos
D-11 (0()					Wolflaid			Olli	varberg	V0103
Rail (%)	8	0	0			3	I	Tram and		
Tram (%)	0	0	0			0	0	bus: 10		
Metro (%)	0	0	0		0	0	0			
Urban Bus, Trolleybus (%)	13	6	30			3	6			7
Extra urban Bus (%)	n/a	0	10			15				
School bus (%)	0	0	5		0	3				2
Car (by oneself and as driver)	43	35	30		63	26	48	39		34
Car (as passenger) (%)	5	0	15		5	29	10	13		
		Included in car's								
Carpooling (%)		split	0		?	6	0			
Car-sharing (%)	n/a		0		?	0	0			
		Included in bike's								
Motorbike, Moped (%)	n/a	split	5		1	1	4	1		13
Bike (%)	3	59	0		9	1	15	10		7
By foot (%)	18		5		10	13	12	27		31
Other (%)	n/a		0			0	3			



As one can see from the previous table, data are hardly comparable, since in some cases these are missing and in some other (Ulm, Girona) these are aggregate data.

The following graph illustrate the motorization rate (in percentage terms) where available:

Motorization rate (%)



The following tables present in a synoptic way some of the data referring to **urban mobility supply**.

The first table refers to Local Public Transport supply. Data vary significantly and probably are collected according to different calculation methods.

Local Public Transport supply (Vehicle*km/inhabitants)

				Marche						
В	Brighton			Region			Reggio			
8	k Hove	Girona	Kavala	(Pesaro)	Molnald	Razlog	Emilia	Ulm	Varberg	Volos
	64	14,08	26,4	11,4	80	1,14	36,59	0,14	36,5	0,036

The next table refer to the Local Public Transport fleet of the partners municipalities, sorted by typology.



Fleet vehicles typology (%)

	Diesel (% value)	Natural Gas (% value)	Electric (% value)
Brighton &			
Hove	100		
Girona	35		
Kavala	100		
Marche			
Region			
(Pesaro)	60	40	
Molnald	87		13
Razlog	100		
Reggio			
Emilia	30	13	0,5
Ulm	89		10
Varberg	100	_	
Volos	100		

Diesel motorization for urban transport vehicles prevails largely. Only in some cases there are alternatives (Pesaro, Reggio Emilia, Ulm, Girona)

The next table present the Km of bus lanes and cycle lanes in the participating municipalities.

KM of bus lanes and cycle lanes

	Bus lane	Cycle lane
Brighton &		
Hove	17	23
Girona	1,7	16,5
Kavala	0	0
Marche		
Region		
(Pesaro)	0,3	0
Molnald	1,5	110
Razlog	0	1
Reggio Emilia	156	143
Ulm	213	265
Varberg	1	141
Volos	0	10



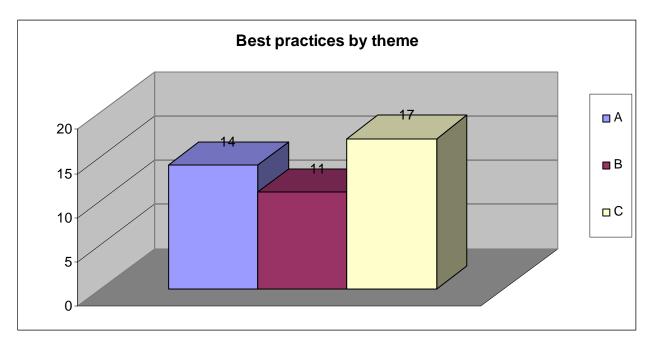
With regards to Bike sharing/car sharing it is difficult to present data, since in some cases there are Yes/No answers (e.g. Brighton, Girona), whereas in other cases there are quantitative data.

Finally, as far as **environmental background** is concerned, medium is the most frequent answer, although with several exceptions (good in Varberg, good/medium in Razlog, not good/medium in Molnald, although good in relation to car accidents, as it is the case in Volos, medium/good in Girona, not good in Reggio Emilia and Pesaro with regards to pollution).



4.3 Section C: Type of practices collected (Themes covered, top downbottom up)

The following graph illustrates the theme coverage of the best practices collected, including the additional practices presented in this report.



Overall, the practices analysed are balanced in terms of theme coverage. There is a slight predominance of practices referring to Communication and awareness raising as well as Public & collective transport compared to parking and traffic management and control. It should be pinpointed that several good practices refer to more than one theme: this is the case for instance of "Eppur si muove" (Marche Region), "New road Ulm", "Mobility Management in the municipal organisation — Health commuters" in Molnald.

However, it can be argued that in many cases the best practices collected can be referred to more than one theme (although they are allocated to one theme).

This is of course due to the fact that several themes related to sustainable mobility are certainly intertwined, and in many cases the combination e.g. of an initiative for innovative traffic management and related communication and awareness raising campaign is a multiplier factor and is definitely key to the success of the initiative.

It is also worth to mention that many of the best practices presented do not refer only to sustainable mobility in their stated objectives and outputs achieved. The best



practices descriptions often make reference to many intertwined policy objectives, such as:

- Environmental quality
- Energy efficiency
- Social inclusion (with particular reference to children and elders)
- Education (with specific regards to Road safety)
- Quality of life
- Economic growth...

In the best practices analysed there is also a relative balance between initiatives which can be considered top-down and initiative that are either bottom-up or the results of a combination between Bottom-up (e.g. public consultation or initiative) and Top Down dynamics (citizens participation, direct/indirect involvement, Local Agenda 21, focus group, round tables). However, it should be mentioned that it is rather problematic to classify an initiative as purely top-down or bottom-up, since it is possible to identify in almost all the best practices collected some stages featured by a top down approach and some other which can be considered bottom up.

The majority of best practices included is either ongoing or accomplished. Evaluation and analysis of results and impact, as well as lesson learnt and critical factors is easier particularly in the case of a practice accomplished.

The following table illustrates the country coverage of the best practices collected.

Best practices by country

AT	Gratz
BG	Razlog
BE	Hasselt
DE	Ulm, Bocholt
ES	Girona
GR	Kavala, Volos
ΙΤ	Reggio Emilia, Marche Region cities, Modena, Bolzano
RO	Brasov



NO	Bergen
SE	Linkoping, Molnald, Varberg
UK	Aberdeen, Brighton & Hove, Camden, Darlington

4.4 Role of Mobility Management, Services / Infrastructure

In the majority of the best practices analysed the infrastructure does not play a key role. This can have several explanations. One could argue that infrastructure investment is difficult to be undertaken by medium size towns, which are the main object of analysis in the MMOVE project. Moreover, recent literature on mobility management also argue that infrastructure as such is not the key to successful sustainable mobility policies. In some cases, and with specific reference e.g. to Nordic countries, it can be argued that the focus is on awareness raising since there is already a good level of infrastructures. For instance, it is likely that a municipality like Varberg in Sweden focus its mobility policies aiming at fostering cycling on awareness raising since there are already cycling paths in that city (see Cycle week in Varberg).

4.5 Financial aspects (budget-funding scheme-public support)

There is a variety of situations in the best practices collected in relation to funding sources. They can be public, private or even coming from voluntary work. Especially in relation to public transports or parking, resources come also from citizens paying services. There is also a variety of funding scheme (often combination of European and national/regional funds). Public funding is the main sources, although there are some examples of public-private partnerships (e.g. new road ULM) and private sponsorships (e.g. Mobility Game or journey on campaign in Brighton). The overall budget exceed 1M euros only in few cases, e.g. Reggio Electrical experience, City centre traffic calming plan, New road Ulm). However the data are hardly comparable since are not always available nor homogeneous (in some cases overall figures are provided, in some other the budget referring only to specific stages/years is reported).

4.6 Special personnel/training and other support actions

Less than half of the best practices collected refer to specific training measures. Among the ones referring to training, one could quote e.g. Eppur si muove, Going to school on our own, Mobility game, intelligent traffic light, Historical centre free public transportation in Kavala, Blue zone in Razlog, all 3 Varberg practices, car free day in

¹ Tom Vanderbilt's (2007) Traffic: Why We Drive the Way We Do (and What It Says About Us), Alfred A. Knopf, New York



Volos. Often training sessions are short and in some cases based on informal learning approaches. Specific training measures are more frequent in practices referring to communication and awareness raising.

4.7 Stakeholders involvement

Stakeholders involvement is high in the majority of cases, and it is not hazardous that this is considered a critical success factor by the majority of participants to the best practices collection (see the following section). Stakeholders are involved at different stages (planning, implementation, evaluation), but many statements in the best practices available refer to the importance of their involvement since the early stage of the initiative. Such involvement, according to the majority of participants to the best practices collection, add even more value if it takes place in a iterative way all along the project lifecycle. All kind of stakeholders are involved in the best practices analysed, but it might indeed be true that the citizens are the first layer of stakeholders considered in all the practices collected. Companies, public administrations other than the municipalities directly involved in the best practices NGOs are also often mentioned as stakeholders.

4.8 Evaluation measures (e.g. presence of quantitative effectiveness indicators)

Despite the fact that many practices presented have been accomplished or are ongoing since several years, there is not a wealth of information on quantitative effectiveness indicators, as well as efficiency indicators (cost-benefit ratio). Having said that, it is clear that all good practices presented, and particularly those aiming at awareness raising, cannot be evaluated purely in quantitative terms. Certainly quantitative indicators exist and are useful (e.g. number, scope and profile of stakeholders involved) but they certainly need to be complemented by qualitative considerations (e.g. change of behaviours of citizens) which are anyhow difficult to be measured since they can only be appreciated overtime.

4.9 Transferability potential (Dependence from physical characteristics)

The review of best practices collected, as well as the analysis of critical success factors rating (see the following sections) demonstrates that one of the key aspects affecting the transferability and the success of mobility management initiatives is the political support and long term commitment of decision makers, particularly at an early stage. Successful mobility management initiatives are also featured by virtuous circles among complementary policies: positive inter-dependencies, for instance, between traffic and parking management, collective transports initiatives and awareness raising emerge clearly while reading the best practices collected.



The best practices collected also demonstrate that achieving overall reductions in traffic congested roads depends on some or all such supportive policies aimed at improving the effectiveness of the practices implemented, such as training measures, awareness raising campaigns.

Virtuous circles embraces also polices going beyond mobility. 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.

Overall, it can be argued that successful initiatives demonstrate a need for the integration of many fields to ensure their individual success. But the capacity to integrate different policies, different stakeholders in a long term perspective is not so easy to transfer, since it depends to a great extent on cultural factors, the legal and political framework, organisational settings of each local municipality.

Having said that, it might indeed be true that the majority of best practices collected can be transferable and transferred to other contexts, at least partially. Exceptions could probably be the "Tram network extension" and "New road Ulm" practices, which are featured by a high level of dependence from physical characteristics of the city.



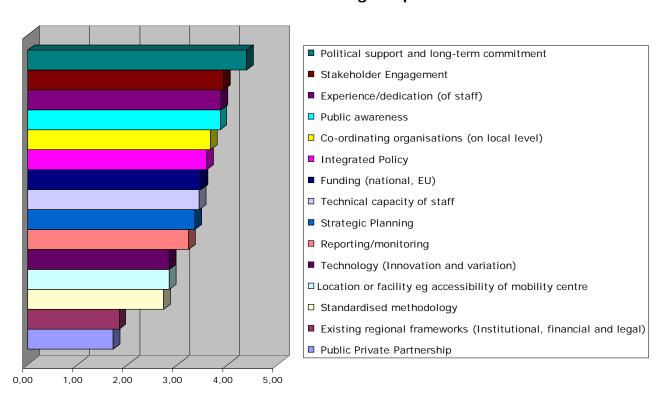
5 SUCCESS FACTORS AND CRITICAL FACTORS

Those critical success factors used in the MMOVE best practices template came from the PIMMS² project, founded in the INTERREG IIIC framework. PIMMS (Partners Initiatives for the development of Mobility Management services) is a network operation focused on the exchange of best practice information, between the partners and between them and their regional partners. MMOVE partners responsible of good practices collections were asked to assess the importance of the critical success factors suggested, referring to the following scoring system.

SCORE	SCORE DESCRIPTION	
0	No importance at all	
1	Scarce importance	
2 Quite important		
3	Important	
4	Very important but not decisive	
5	Very important and decisive	

The next graph provides a synthetic overview of the average rating of all the critical success factors proposed in the best practices template.

Success factors average importance



² http://www.pimms-eu.org/



The top rated critical factors are "Political support and long term commitment", "Stakeholders engagement", "Experience/dedication of staff". It is interesting to notice that these factors, according to participants, are more important than resources-related issues.

It is also interesting to look at the factors relatively less important, according to the majority of participants. They are "standardized methodology" (most probably this is due to the fact that participants acknowledge the need of adapting a methodology to local specificities), "public private partnership" (which is common practice in certain countries, particularly Nordic and Anglo-Saxons countries, less so in other European countries.).

Such outcomes are to a certain extent consistent with the results of the PIMMS project. According to the PIMMS final report, "Political support; Long-term commitment; Public awareness; Stakeholder Engagement and Integrated Policy are the most commonly cited CSFs, unanimously deemed by all partners to be the most important factors to influence the successful development and implementation of mobility management initiatives." The following table summarizes and orders the success factors most frequently cited in the PIMMS project.

Ranking	Critical Success Factor	no. of Partners
1	Political support and long-term commitment	8
1	Public awareness	8
1	Stakeholder Engagement	8
1	Integrated Policy	8
2	Funding (national, EU)	5
3	Existing regional frameworks (Institutional, financial and legal)	4
4	Public Private Partnership	3
4	Co-ordinating organisations (on local level)	3
4	Reporting/monitoring	3
5	Location (of co-ordinating organisation – access to local stakeholders) or facility eg accessibility of mobility centre	2
5	Technical capacity of staff	2
6	Standardised methodology	1
6	Technology (Innovation and variation)	1
6	Strategic Planning	1
6	Experience/dedication (of staff)	1

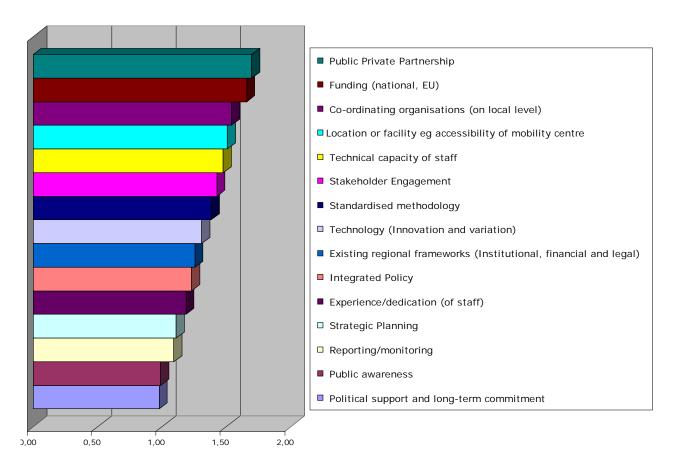
Source PIMMS final report

³ http://www.pimms-eu.org/downloads/reports.html



The next table illustrates the standard deviation for all the factors suggested. This is a rough indicator of the level of disagreement among participants on the options proposed. Such level is calculated on the basis of the distribution of the answers in relation to the options proposed. The higher is the raking, the lower is the level of "consensus" on the factors proposed.

Success factors standard deviation



It is interesting to notice that there is a relatively high consensus on the top rated factors such as "Political support and long term commitment". On the other hand, the consideration of standard deviation mitigates to a certain extent the statements made above based on the average importance.

Such factor as stakeholders engagement and particularly "Experience/dedication of staff", although reckoned on the average extremely important, are featured by a high level of dispersion among the participants.

In addition to that, there is a certain level of disagreement on factor such as "public private partnerships", the less important factor according to participants.

The next graph presents the factors proposed on a bi-dimensional continuum. On the Y axis the factors are positioned according to the level of disagreement among

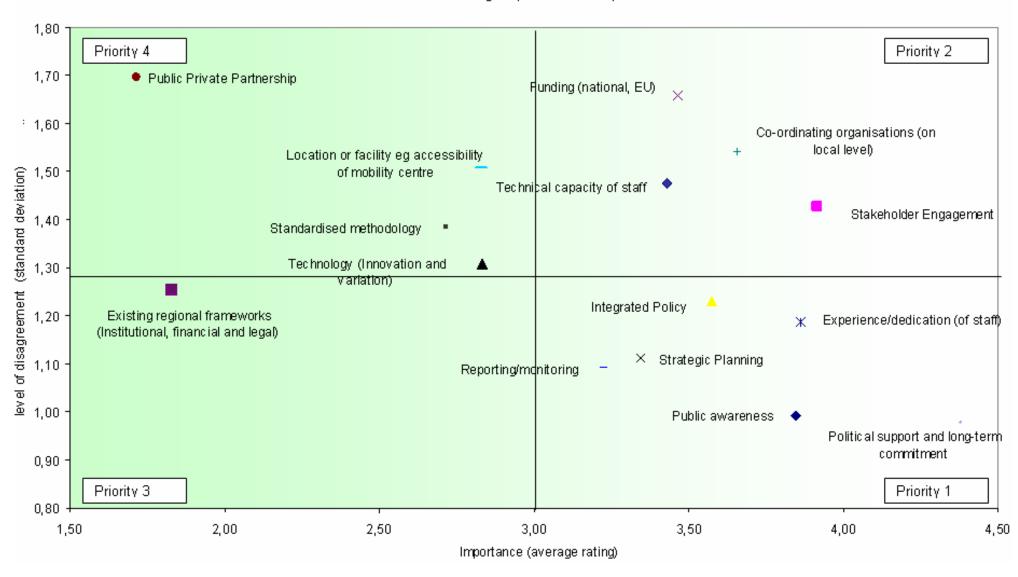


respondents, represented by the standard deviation. On the X axis the average importance of each of the factors proposed is presented.

One could argue that there is an area of "priority 1" factors, featured by a high level of agreement and importance. This is the case of such factors as "political support and long term commitment".



Success factors average importance and dispersion





There is an intermediate area, that could be called "priority 2" featured by a low level of agreement and high level of importance. This is the case, for instance, of the factor "stakeholders engagement".

It is interesting to notice that such "controversial" but important factors are "hot topic" in the current debate on sustainable mobility.

A third set of factors, which could be labelled "priority 3" is featured by a low average level of importance but a high disagreement among participants. This means that there is no consensus on the fact that they are unimportant. This is why they could be considered priority 3.

A fourth set of factors, which could be labelled "priority 4" is featured by a low level of importance and high agreement level. This is the case, for instance, of "existing regional frameworks". In this case there is agreement on the fact that they are rather unimportant, and this is why they can be labelled priority 4.

The demarcation of the regions is to a certain extent arbitrary, and one has to consider those factors which are close to the "demarcation lines" in a sort of grey area. This is particularly true for those factors close to the centre of the graph. On the other hand, one could argue that the more a factor is far from the centre, the more it belongs to the "region" indicated.

Success factors	Average importance	Standard deviation
Political support and long-term commitment	4,38	0,98
Public awareness	3,84	0,99
Stakeholder Engagement	3,91	1,43
Integrated Policy	3,57	1,23
Funding (national, EU)	3,47	1,66
Existing regional frameworks (Institutional, financial and legal)	1,83	1,26
Public Private Partnership	1,71	1,70
Co-ordinating organisations (on local level)	3,66	1,54
Reporting/monitoring	3,21	1,09
Location or facility eg accessibility of mobility centre	2,83	1,51
Technical capacity of staff	3,43	1,48
Standardised methodology	2,71	1,38
Technology (Innovation and variation)	2,83	1,31
Strategic Planning	3,34	1,11
Experience/dedication (of staff)	3,86	1,19

Average importance and standard deviation of MMOVE critical success factors



6 BEST PRACTICES OUTSIDE PARTNERSHIP

In this chapter we report about the Best Practice collected outside the project consortium. It has been searched towns which have comparable sizes with respect to the MMOVE partners (medium-sized towns). We have tried to find mobility management activities that have been widely recognized as BPs. In particular we have selected only BP's that have been presented in several conferences and that have been already referenced (in other projects, so as in specialized magazines or conferences) as BPs. The themes addressed have been selected so as to be a complement to the themes already covered inside the partnership.

However, the data sources are very different between the two groups (inside partnership and outside partnership), indeed, for the first group we have been able to collect complete descriptive data, qualitative judgements and quantitative scorings. The collection of the second group of BPs has been mainly based on available reports, conference proceedings, journal articles and web portals. The data collected are those who have been considered relevant by the authors of those documents. This induces some lack of information on specific fields, different from project to project. A common missing information for all'BPs is obviously the scoring of the critical success factors used in our template. As a consequence it is not possible to have a fair comparison of the two groups of BPs and we limit ourselves to present the data as they are without trying to devise some common behaviour.

6.1 Aberdeen

Title	SustAccess (Interreg North Sea Programme) - Aberdeenshire Park and Ride
Theme (A, B or C)	В
Municipality	Aberdeen
Duration	2006
Entities involved	Aberdeenshire Council, University of Aberdeen, and DHC, North East Scotland Transport Partnership (NESTRANS) and Modern Transport System (MTS).



Budget (in Euro)

N/A [The site cost approximately £650,000 (£ value in 2001) to design and build]

Rationale Target and Objectives

Park and Ride is commonly defined as passenger mode transfer from private car to public transport. It varies in formality, from highly informal on-street parking in the suburbs with lift-sharing into the town or city centre, to formal dedicated terminals and services with car parking facilities provided.

Aberdeenshire Council's Local Transport Strategy (LTS) establishes Park and Ride as a means to decongest existing road-space, by transferring journeys from car to bus over those sections where road-space is most congested.

The overall aims of SustAccess are, on the one hand to make gateways more accessible from their hinterlands, and on the other to support an increased use of more sustainable modes of transport. As part of the SustAccess project, Aberdeenshire Council aims to:

- Review the development of existing and proposed inter-urban Park and Ride sites in Aberdeenshire.
- Benchmark the existing site's (Ellon) performance against (any) similar schemes in the United Kingdom, drawing out best practice.
- Evaluate outcomes of the existing site (Ellon).
- Identify further areas for development of Park and Ride.

Financial Resources

Description of the intervention



Some less common and innovative features distinguishes the Aberdeenshire among the other Park and Ride solutions:

- •It stresses "inter-urban" bus Park and Ride interchange onto public transport for journeys between urban centres, rather than over the (invariably) most congested urban section of the journey, from the "edge of town" to the centre.
- •It places greater emphasis than usual on the use of the Park and Ride site for interchange between modes
- •Two solutions area developed: bus-based park and ride and rail-based park and ride, the latter remains

Outputs

In the financial year 2004/5, a total of 237,700 passengers used both Kingswells and Bridge of Don sites, with 150,600 vehicles parking between the two sites. Assuming 6-day opening, this equates to 765 passengers per day, and 485 cars parked per day.

Average car occupancy is 1.6 persons per vehicle, which is relatively low given the strong bias towards multi-occupancy vehicles in the fare structure. It may, however, be indicative of a high proportion of commuter users – such a bias is suggested by the variation in service frequency.

Critical points and conclusions

Five case studies were examined in order to compare Ellon to other locations and types of Park and Ride scheme. Two similar schemes were then examined in further detail: Ferrytoll, another inter-urban Park and Ride, and the two Park and Ride schemes in Aberdeen, which have similar objectives to Ellon and carry passengers to the same destination.

Analysis of key variables such as car park utilisation, suggests Ellon is neither performing poorly or spectacularly when compared to other schemes. Further work would be needed to identify the level of mode shift that has been achieved, and the impact on the local bus network



6.2 Bergen

Title	Road Charging Price/Autopass
Theme (A, B or C)	В
Municipality	Bergen (Norway)
Duration	1986-ongoing
Entities involved	Norwegian Public Roads Administration, Bergen Coucil
Budget (in Euro)	

Rationale Target and Objectives

Primary objective is to collect funds for road investments, but some contribution is also made to public transport.

Secondary objectives are:

- to reduce number of vehicles on most congested roads in morning and afternoon rush hours. [by between 10 and 15 per cent];
- to improve journey times for cars and buses in inner part of the City;
- to reduce air pollution

Financial Resources

For the period 1986–1997, the total road investment scheme in Bergen was NOK 2.5 billion (1996 prices). The Bergen toll ring was based on manual collection/inspection, but an automatic system (Autopass) was introduced in 2004 (with a cost of £4.3m).

Description of the intervention



The toll ring comprises 7 toll stations located at about two to eight kilometers from the city centre. All vehicles entering the tolled area during a defined period (e.g. between 6am to 10pm Monday to Friday), except on holidays. Altogether twenty traffic lanes lead to these stations. Ten of these lanes are reserved for traffic with seasonal passes. The capacity of a reserved lane is about 1500 vehicles per hour while the capacity of a manual lane is 400–600 vehicles per hour. The reserved lanes for non-stop traffic (with seasonal passes) have a conventional video enforcement system.

Toll stations were placed on all the main access roads leading to the centre. The fee is different among cars and trucks Prepaid tickets and monthly, bi-annual and annual permits are also available, at a slightly discounted rate.

January 1985 - The city council approved the scheme and the

Norwegian Parliament approval came in June 1985. The scheme was originally approved for fifteen years, from 1986 to 2001

January 1986 - The toll ring in Bergen was introduced.

2002 the Norwegian Parliament approved the extension of the deadline to 2011.

2004 Electronic collection start in 2004, when toll fees will be increased by approximately 50%.

Outputs

Almost 70% of the income went towards road construction costs, 20% for operating costs and the remaining 10% was put aside in a fund, the use of which was regularly under heated political discussion (Herdlevær and Arnesen, 2003)

Revenue

Scheme had expected to raise 35 million NKr but in fact, raised 70 million NKr.

Split 50/50 to be spent on public transport and roads.

Benefits/Results

6-7% fall in traffic (although traffic reduction not an objective of the scheme).

Revenue will provide finance for development of tram across the city.

Critical points and conclusions



The biggest issue that the city of Bergen faced was to get the Toll Ring system approved at the beginning of the process. Norwegians already bore heavy taxes including those for road transport. Cars are expensive to purchase; there is road tax and high insurance costs as well as high taxes on fuels. People argued that road building is a government responsibility, thus, they (the government) should provide the funds for it.



6.3 Bolzano

Title	Car sharing BZ	
Theme (A, B or C)	С	
Municipality	Bolzano (Italy)	
Duration	ongoing	
Entities involved	Cassa Rurale di Bolzano ("Ethical Banking"),	
	Comune di Bolzano,	
	Provincia Autonoma di Bolzano,	
	SAD (local tran sport company)	
	SASA (local tran sport company)	
	Trenitalia S.p.a.	
	Legacoopbund Bolzano	
Budget (in Euro)		

Rationale Target and Objectives

The last decades have been characterized by continuous traffic growth in western countries and increasing dependency on cars. There is a close link between car ownership and car use. In car-owning households, strong car-oriented mobility routines make it difficult to draw attention to alternative mobility offers.

In this context car sharing – defined as a service where members of shared-use vehicle organizations get access to a fleet of vehicles – plays an important role. Several studies have demonstrated the positive effects of this service, for example modal shift towards sustainable modes of transport and reduction of the annual carmileage, the number of car trips as well as the number of cars per household.

Financial Resources

Description of the intervention

The Carsharing BZ is a mutual company born from the initiative of Ökoinstitut Südtirol / Alto Adige



Outputs

Starting with 2 cars in start up phase, now CarSharing BZ has a fleet that is able to manage the needs of 150 users.

Critical points and conclusions



6.4 Bocholt

Title	"Compact City" model in urban and transport planning
Theme (A, B or C)	В
Municipality	Bocholt (Germany)
Duration	1970-
Entities involved	
Budget (in Euro)	

Rationale Target and Objectives

Bochold is a very compact city where the basic mobility controlling intervention strategy has been the maintenance of small trip lengths, compatible with the bicycle and, specially, the pedestrian mode. The basic objective of the different actions is to maintain a situation where 90% of the population lives within less than 3Km of the city centre.

Financial Resources

Description of the intervention

Strict local regulations concerning land use rules, specially directed to the location of new commercial developments, where licensing is awarded only when the essential of the respective accessibility can be guaranteed on foot or bicycle.

Also a strong emphasis is put on the achievement of significant diversity of land use types in the different city neighbourhoods in order to reinforce each area functional autonomy and thus contributing to contain and even reduce average trip lengths. A great deal of effort is required to prevent large shops being built in areas which are not integrated and to preclude their construction with appropriate building development planning. The implementation is so successful because the different municipal departments in Bocholt work together and share the same aims.

In parallel, car usage restrictions were imposed, ranging from the limitation of



circulating speeds in residential areas by implementation of 30 Km/h zones, to the reinforcing of parking restrictions with the imposition of parking fees covering the entire city centre.

Due to the regulatory interventions concerning retail outlet location and ensuring shops are located at distances which can be easily reached on foot or by bicycle, the whole population has equal access to shopping facilities, regardless of whether or not they have a car

This has been accompanied with the maintenance of a very high local quality of life for its citizens

Outputs

As a result the city adopted the use of the bicycle, being at present one of the German cities where bicycle mobility is more important with a 35% modal share, and justifying the qualification of a "cycling city".

Critical points and conclusions



6.5 Camdem

Title	Green Transport Strategy
Theme (A, B or C)	A/C
Municipality	Camdem (United Kingdom)
Duration	[1997 - First Green Strategy]
	[2001-2004 - Second Green Strategy]
	2008-2012 - Third Green Strategy
Entities involved	
Budget (in Euro)	

Rationale Target and Objectives

The challenge is to do better still over the next few years, when London's population and workforce will be increasing and the effects of climate change are ever more apparent.

In the Sustainable Community Strategy, the Council and its partners are committed to making real progress towards reducing carbon dioxide emissions in line with national targets. These are a 60% reduction in CO2 emissions by 2050, and making Camden "a low carbon and low waste borough" by 2012.

Managing climate change and the environmental problems related to congestion, local air quality, health, safety and mobility means that we need strong local transport strategies to help achieve a sustainable future for the borough.

Aims:

- help people in their decisions about their need to travel and which mode of transport to use
- encourage greener transport alternatives
- reduce the environmental impacts of new developments

Financial Resources



Description of the intervention

Camden's own travel plan:

- •reduce our travel-related carbon emissions by promoting low emission modes such as walking, cycling and public transport
- •promote the travel plan to staff and visitors to increase awareness of the plan as a corporate strategy and ensure its sustainable transport practices are promoted
- •provide information to ensure that staff and visitors know how to access all Council buildings by public transport and cycling
- •promote the existing financial incentives available to staff such as 100% bicycle loans and season ticket.

School travel plans

- •work towards all schools in the borough having an operational, DCSF-approved travel plan in place by 2009, with effective targets, an action plan and monitoring procedures
- •expand the school travel awareness activities to raise the level of involvement from all schools within the borough
- •provide regular newsletters and information to ensure that pupils, teachers, parents, and residents are aware of the projects and initiatives that are being developed to promote sustainable travel to and from schools
- 1. Encourage a move to greener vehicles through parking policies, including an annual review of the emissions-based permit scheme to monitor the makeup of the residential "fleet". Sep 2008
- 2. Review our cycling strategy, exploring how we can further encourage cycling in the borough and London as a whole, through better infrastructure, training and design. Sep 2008
- 3. Work with Transport for London (TfL) and other partners to investigate the feasibility of a Paris-style cycle hire system. Dec 2008
- 4. Invest in and encourage demand for car clubs in the borough, using the development control process to secure additional spaces and investigating offering



vouchers for scrapped cars. Dec 2008

- 5.Explore the introduction of parking charges for motorcycle bays and free residents' bay parking permits for owners of electric motorcycles powered by renewable energy. Dec 2008
- 6. Explore the potential for freight consolidation centres in the borough. Mar 2009
- 7. Encourage walking as an alternative to journeys by car, through better crossings, safer and more pleasant streets, pedestrian skills training, and promotional work. Ongoing
- 8. Work with schools to increase the number of approved school travel plans. Ongoing
- 9. Provide support to schools that would like to develop their own school bus scheme. Ongoing
- 10.Develop useful and informative tools to assist the public make more environmentally sound choices about the forms of transport they use and the vehicles they buy. Ongoing
- 11. Encourage the use of electric vehicles in Camden through the installation of onstreet electric charging points and provision of information about electric vehicles via the New Ride website. Ongoing
- 12. Work in partnership with City of London and Westminster through the Clear Zones Partnership to implement innovative sustainable transport initiatives which assist in reducing traffic, congestion and promote the adoption of cleaner vehicles and fuels. Ongoing
- 13.Explore further opportunities arising from new developments along the canal to improve the Regent's Canal towpath. Ongoing
- 14. Camden aims to reduce the level of traffic in the borough by 15% based on 2001 levels. 2012

Outputs

Critical points and conclusions



6.6 Darlington

Title	Local Motion Sustainable Travel Demonstration Town (STDT) Programme
Theme (A, B or C)	С
Municipality	Darlington (United Kingdom)
Duration	2004-2008
Entities involved	Darlington, Peterborough and Worcester
Budget (in Euro)	£10M, shared with Peterborough and Worcester

Rationale Target and Objectives

The 5 year project aims to demonstrate the effect a sustained package of 'Smarter Choice' measures in reducing car use can have when coupled with infrastructure improvements. Darlington, with Peterborough and Worcester, was selected from more than 50 local authorities in England who expressed an interest in becoming 'showcase' demonstration towns.

This action comes from a Top-Down approach.

The general aim is to encourage as many people as possible to become creative with their travel choices. Based on the priorities identified within its Community Strategy (achieving economic growth, improving accessibility and maintaining a high quality of life) and the emerging objectives for its second Local Transport Plan (LTP), the program's specific objectives were:

- to increase active travel amongst members of the community;
- to increase the use of public transport;
- to improve safety for all transport modes;
- to improve access to employment, health care provision, shops and other essential services;
- to improve air quality; and
- to reduce the number of local trips of less than two miles by private car.



Financial Resources

The funding source is the Department for Transport (UK).

Eligible Darlington residents had been entitled to a free pass giving half price fares, and to purchase for a cost of £70 a pass providing unlimited free travel on local bus services within Darlington.

Description of the intervention

Travel behaviour measured across the Darlington urban area between 2004 and 2008 is based on analyses of data generated by the baseline and final travel behaviour surveys, and in particular those relating to a number of key indicators of day-to-day mobility. The main indicators selected for the evaluation were:

- Trips per person per year by main mode5;
- Personal daily mobility (including trip rates, distances travelled and trip purposes);
- Individuals' exposure to active travel (walking and cycling);
- Car use measured by actual usage, number of trips, travel time, distance travelled and average occupancy per private car per day.

The activities of the project involve different areas:

- •Travel information: a substantial investment in travel information, including installation of bus timetables at all stops, showing information specific to each stop, was done during all the project duration. In August 2006 publication of bus, cycle and walking guides is seen and there was the launch of a local journey planning website.
- •Individualised Travel Marketing process is conducted over three separate phases targeting different geographical areas during the summer months of 2005 to 2007, all households in Darlington's 20 urban wards had the opportunity to receive personal travel advice.
- •General marketing activities: a Local Motion club was created in 2006 and arrived at the end of the project to have nearly 10.000 members. Other activities are included brand awareness raising campaigns using adverts in the Council's free magazine, The Town Crier; advertising on billboards, on buses, at bus stops and on bus and car parking tickets; and advertising for specific campaigns using posters, local radio and local newspapers.



- •School travel initiatives: In 2004, five of Darlington's 38 local authority schools had a travel plan; three of these produced by transport consultants to satisfy planning requirements. By March 2008, 30 schools had completed a travel plan, 20 had installed new secure cycle parking (a total of 1,042 spaces) and all primary schools were taking part in the biannual 'Medal Motion' campaigns promoting sustainable travel to and from school. Since autumn 2004, all year 6 primary school children have been able to take part in free cycle training at the national level 2 standard, with around 55% of eligible pupils completing the training each year. From autumn 2005 year 1, 2 and 3 pupils have been offered free pedestrian training, with around 95% of eligible pupils taking part during the 2007/08 academic year. Sixteen Darlington schools have also participated in Sustrans' 'Bike It' programme, receiving extra support for events, activities and challenges promoting cycling, for example 'Wheelie Wednesdays', 'Bike Breakfasts' and after school cycle maintenance classes.
- •Workplace travel plans: By the summer of 2008, 23 Darlington businesses had completed or were developing a travel plan. By summer 2008 the total number of employees working in business engaged in delivering a travel plan was approximately 11,000, or 30% of the Darlington workforce.

Outputs

For mode choice the share of car-as-driver-trips fell from 41% in 2004 to 37% in 2008, and the overall share of car trips was reduced from 62% to 56%. There were corresponding increases in levels of walking (from 25% in 2004 to 29% in 2008) and cycling (from 1 % in 2004 to 3 % in 2008), although no change was observed in levels of public transport use.

The changes in car use for day-to-day trips reflect the reduction in car-as-driver trips. That is testified from reductions between 2004 and 2008 in the share of cars used each day (from 77% to 72%), trips (from 2.5 to 2.2), duration of use (from 42 to 36 minutes), and distances travelled (from 24.7km to 21.4km). Instead average car occupancy remained constant at 1.5 people per trip.

Critical points and conclusions

The final survey evaluation includes the following limitations:

• The effects of any external factors and/or background influences (e.g. fuel price fluctuations; bus service changes) cannot be separated out from the overall changes; and



• The effects of specific Local Motion measures cannot be isolated from the overall changes

The 2008 surveys indicate some substantial changes in the potential for sustainable travel modes to replace car travel in Darlington over the period of the Local Motion program.



6.7 Graz

Title	Promotion Materials and Awareness Raising Strategies
Theme (A, B or C)	А
Municipality	Graz (Austria)
Duration	
Entities involved	
Budget (in Euro)	

Rationale Target and Objectives

Since the 80s the city of Graz has started to implement a sustainable, environmental friendly, city – compatible traffic concept based on the principle of "Gentle Mobility" is aimed to preserve Graz as a city of worth living in and to enhance the quality of life for all people. But implementing and transferring of projects and measures is not enough to change people's behaviour towards sustainable mobility. All projects were accompanied by intensive campaigns and public relation works.

There are many different approaches used to raise mobility awareness and achieve more sustainable behaviour.

Giving adequate information on walking and cycling by promotion material and by organizing awareness rising events like the yearly organized car free day or the bicycle action days.

Financial Resources

Mainly City budget and EU co-financing - ASTUTE

Description of the intervention



New walking and hiking map for the surrounding "Plabutsch / Buchkogel" were developed. The maps inform about new walking routes and leisure activities in the area of the City, which are all reachable by public transport and walking.

Further projects to show the walkability of the city are the production and dissemination of a new city guide with new walking routes in the historical part of the town, that belongs to the UNESCO WORLD heritage area.

For better information on the most important public transport stops, thirty stops were equipped with surrounding maps, which give information on public transport, contain comprehensive better and additional information on connections of footpaths, on sights in the UNESCO World Heritage site and on important public buildings

Outputs

The project in Graz produced a tool kit for local authorities that will help them implement concrete measures to increase walking and cycling. The tool kit was developed as a DVD, available in different languages.

The project can point to a 10% increase in levels of walking and cycling across partner cities. Moreover the project improved coordination between organisations that are responsible for walking and cycling at regional and local level.

Critical points and conclusions



6.8 Hasselt

Title	Public transport for free
Theme (A, B or C)	С
Municipality	Hasselt (Belgium)
Duration	Ongoing
Entities involved	The Hasselt Municipality in co-operation with public transport company De Lijn.
Budget (in Euro)	The most recent figures regarding the costs and benefits are those of 2001. In that year, the costs for the urban net were estimated at €526,296. The costs for the regional net in that

Rationale Target and Objectives

The benefit of a zero fare public transport system are:

- Operational benefits: i.e. transport operators can benefit from faster boarding and shorter dwell times, allowing faster timetabling of services.
- Commercial benefits: e.g. zero-fare transport service could be funded by private businesses (such as the merchants in a shopping mall) in the hope that doing so will increase sales or other revenue from increased foot traffic or ease of travel. Employers can operate free shuttles as a benefit to their employees, or as part of a congestion mitigation agreement with a local government.
- Community benefits: road traffic can benefit from decreased congestion and faster average road speeds, fewer traffic accidents, easier parking, savings from reduced wear and tear on roads. Environmental and public health benefits including decreased air pollution and noise pollution from road traffic.

The project was influenced by transport minister Eddy Baldewijns, who created an integrated transport policy framework in the middle of 1996 in which public transport was allocated a primary role. The project is recognized as an example of cooperation between the bus line, the Flemish government and the city of Hasselt.

For the urban bus: to multiply the number of passengers times four after the introduction of the new system (within three years). Another aim was to increase



the number of passengers who use the regional bus to go to Hasselt.

Financial Resources

All financial resources come from municipality, in terms of staff and external services

Description of the intervention

- 60s beginning of traffic problems
- mid-90s came a radical re-think, which became the city's Mobility Plan, a sustainable policy to guarantee mobility for everyone, regardless of income, age, disability, that would meet current needs without compromising the needs of future generations
- July 1st, 1997 beginning of the project
- 2006, the passengers who use the public transport are 4 614 844 with and increase of 1319% from 1996

Outputs

Until 30 June 1997, there was an average of 1,000 bus passengers a day in Hasselt. Today, the average is 12,600 passengers a day. There are now 46 city buses on nine lines, including a boulevard shuttle and a city centre shuttle. Two nightlines run at night. Altogether, these city buses cover 2,258,638 km in a year. However, there is also a social benefit, for example visits to hospitals have increased significantly.

Other results:

- The number of bus passengers increased tenfold.
- Of all the bus users, 37% consists of new users and 63% of former users.
- Hence former bus users started to make much more intensive use of the bus system.
- The origin of the 37% new bus users is: car: 16%, bicycle: 12%; pedestrian: 9%.
- 48.8% of the bus users lives in Hasselt, the other 52.2% does not live in Hasselt.

Critical points and conclusions



6.9 Linkoping

Title	BIOGAS - BIOFUEL
Theme (A, B or C)	С
Municipality	Linkoping (Sweden)
Duration	Ongoing
Entities involved	Linköping Biogas AB, Tekniska Verken i Linköping AB, Scan-Farmek, Konvex, The Swedish Farmers' Federation
Budget (in Euro)	8.4MEuro

Rationale Target and Objectives

With support from the local investment programme (LIP), the Municipality of Linköping in 2001 started a project aimed at the collection and digestion of waste from canteens and restaurants. The project provides a good example of how a local authority can combine better waste separation, production of renewable fuel and positive contributions to local agriculture.

The project has placed a new product in the market and has inspired many other local authorities to continue with equivalent projects of their own.

The increase in private motorized traffic and the subsequent rise in air pollution motivated local authority decision-makers to limit traffic flows in the centre of the city and to make of the development of public transport a top priority on the municipal agenda.

Financial Resources

Description of the intervention



The municipality installed a waste macerator at the university hospital and in two school canteens and restaurants. A tank to store the macerated waste was also installed. The waste was then transported to the Linköping biogas facility.

The municipality also installed a central screw press facility in its Technical Department. The facility handles liquid foods that have passed their best-before date from manufacturers and wholesalers.

The Technical Department plans to purchase a central waste macerator to enable it to handle large volumes of solid waste from wholesalers, such as fruit and vegetables.

- Initiated in 1989, the operation really started off in 1991.
- •From 1989 to 1993, five Scania buses were tested. Their introduction being a success, a total of 20 units were integrated into the fleet.
- •In 1998, the number of vehicles running on biogas fuel in Linköping amounted to 57 urban buses and 14 cars, including 4 taxis. 8,000 Nm³ of biogas are supplied daily to make them run.

Outputs

The experience carried out in Linköping is economically viable for three reasons:

- Any person who disposes of waste on a dumping ground or discharges waste water into a sewage plant has to pay a tax,
- The price for biogas is comparable to the price of diesel, which makes it easy to sell
- Manure produced in Åby Västegård (100,000 tonnes per annum) is sold

In Linköping, each bus running on biogas fuel contributes to reducing nitrogen oxide emissions (NOx) by 1.2 tonnes and carbon dioxide emissions (CO2) by 90 tonnes per year.

Data collected in 2009:

- The quantity of waste incinerated has decreased by 3,422 tonnes/year.
- Biogas production has increased by 1,334,580 m3/year, equivalent to 12.65 GWh of renewable vehicle fuel per year.
- •The quantity of biofertiliser going to agriculture has increased by 3,422



tonnes/year.

- The quantity of phosphorus going to agriculture has risen by 689 kg/year and nitrogen by 7,136 kg/year.
- Nutrients such as phosphorus, which are a finite resource, re-enter the ecocycle.

Critical points and conclusions

NanoVac has been placed on the market as a result of the project. The screw press facility is previously proven technology applied in a new way. The project has established a new system for collecting and recycling food waste.

The municipality is continuing to invest in biological treatment of food waste. The collected volumes of waste are substantially larger than the target in the original application, while the costs are substantially lower. The project has led to other municipalities and organisations having expressed interest in this way of dealing with waste.



6.10 Modena

Title	Car sharing
Theme (A, B or C)	С
Municipality	Modena (Italy)
Duration	Ongoing
Entities involved	Pubblic trasport Company of Modena (ATCM SpA)
	Association Car Sharing - Italy
Budget (in Euro)	about 2.500.000 Eur for 2002

Rationale Target and Objectives

Private cars in Modena have always been largely used considering its 175.000 inhabitants. Many circulation blocks were foreseen due to acoustic and air pollution. Since 1997, local Administration has been looking for alternative solutions to the traditional mobility systems. The first one is the three-year speed-bike experimentation. To strengthen the good results obtained, the Municipality deemed it necessary put into practice an integrated series of measures. One of the measures is the development of a car sharing service. Car-sharing was included by the Italian Ministry of Environment in a package of strategic measures to improve sustainable mobility in 1998. In 2000, approximately €9.3 million was set aside to support the development of car-sharing services. In October 2000 Iniziativa Car Sharing (ICS) was created in the form of an Agreement between municipalities. ICS's mission is to stimulate the development of car-sharing, to guarantee that nationwide service and system standards are respected, and to manage the allocated funds. ICS does not hand out funds, but provides goods and services. It does not intend to be a lasting service provider.

Financial Resources

The main financial sources are from Modena Municipality with some minor financing from Emilia Romagna Region and Transportation and Environmental Ministries.

Description of the intervention



The project activities have been divided between ICS and the Municiplaity

ICS is responsible for:

- designing and setting up a system, in all its technical, legal and administrative aspects;
- providing the technology (see also chapter technology) for operating the service, including on-board computers, call centre equipment, communication links and assistance;
- managing customer services (see also chapter service) through a call centre or contact centre;
- carrying out marketing activities (see also chapter awareness) such as communications and promotion.

The Municipality, member of ICS, can choose his own Local Company for the Car Sharing service and is responsible for:

- prices and market policies
- vehicles maintenance and cleaning
- investments and other developments
- getting customers
- •co-operation and integration with Local Bodies and other companies who provide mobility service customers satisfaction and personnel management.

To build up the project have been used the following expertise:

- Mobility manager (Modena Municipality)
- Directors of urban mobility sector (Modena Municipality)
- Communications
- Other experts of partners have been involved in specific interventions
- •Results evaluation from social, environmental, economic and managing point of view have been carried out by the experts of Municipality and consultants

Outputs

- A fleet of 13 vehicles (included hybrid ones) with 116 user (2003).
- 9 parking places around the city dedicated to car sharing.

Critical points and conclusions

The main obstacles consisted in the difficulty to modify people lifestyles in the use of private cars in town, in spite of high costs and the difficulty involved in vehicles management.



7 CONCLUSIONS

- 7.1 The BP collection coverage
- 7.2 The report quality
- 7.3 Key factors and transferability



APPENDIX I. GLOSSARY

EMPLOYMENT

The total number of people gainfully employed or working in the

Municipality of reference.

TRIP

Indicates a displacement with a starting-point and a destination.

LPT

Local public transport

URBAN TRANSPORT

The *urban transport* system provides access and mobility for people and goods, linking origins and destinations within the urban area.

SUB URBAN TRANSPORT The Sub *urban transport* system provides access and mobility for people and goods, interesting the suburbs also. So, it links the suburbs origins and destinations to the urban area and vice versa.

EXTRA URBAN TRANSPORT The Extra urban transport system provides access and mobility for people and goods, interesting the outside of Municipality of reference. So, it links the urban area origins and destinations outside the Municipality and vice versa.

CARPOOLING

Carpooling is the shared use of a private car by the driver and one or more passengers, usually for commuting. It is based on the shared journeys joint organization (i.e. home-work and work-home) and aimed to reduce the number of cars on the road. Carpooling decreases pollution and the need for parking space, and in a global perspective, reduces greenhouse gas emissions. Car-poolers use pool member's private cars, or a jointly hired vehicle,. The vehicle is not used in a general public transport capacity such as in car sharing, share taxis or taxicabs.

CARSHARING

Carsharing is a model of car rental where people rent cars for short periods of time, often by the hour. The organization renting the cars may be a commercial business or the users may be organized as a democratically-controlled company, public agency, cooperative, ad hoc grouping. Today there are more than six hundred cities in the world where people can carshare.



FARE

It is the fee paid by a traveller allowing him or her to make use of a public transport system: rail, bus, taxi, etc. The fare paid is a contribution to the operational costs of the transport system involved, either partial (as is frequently the case with publicly supported systems) or total.

BUS LANE

A bus lane or bus only lane is a lane restricted to buses, and generally used to speed up public transport otherwise held up by traffic congestion.

CYCLE LANE

Cycle lanes are roads, tracks, paths or marked lanes designated for use by cyclists from which motorised traffic is generally excluded.

BIKE SHARING

Bike sharing is a system whereby bicycles are made available on a large scale in a city allowing people to have ready access to these public bikes rather than rely on their own bikes. Municipal governments and community groups have promoted bicycle sharing systems as part of intermodal transportation by allowing people to shift easily from transit to bicycle and back again.

PARK AND RIDE SPACE

Park and ride facilities are public transport stations that allow commuters and other people wishing to travel into city centres to leave their personal vehicles in a car park and transfer to a bus, rail system (rapid transit, light rail or commuter rail), or carpool for the rest of their trip. The vehicle is stored in the car park during the day and retrieved when the commuter returns. Park and rides are generally located in the suburbs of metropolitan areas or on the outer edges of large cities.



APPENDIX II. BEST PRACTICE TEMPLATE: SECTION A -**BACKGROUND AND INFORMATION DATA**

1) GEOGRAP	HYCAL and	IYCAL and MORPHOLOGY DATA					
YEAR							
	Polycentric				Agric	ulture	
					Indu	ustry	
Urban S ystem ⁴			Vocation Munici		Serv	vices	
	Monocentric				Tou	rism	
					Other (explain)		
					Visitors	per year	
			If Tourism (abs. values)		spring		
					sum		
					autumn		
					winter		
Municipality Area	Build	ир				Park	
	(% val	lue)			(% value)	Agriculture	
	Sect	or	Flat	(%)	Hilly (%)		TOTAL (Km2)
	Agricul	ture	YES	NO	YES	NO	
	Indus	try	YES	NO	YES	NO	

 $^{^4\,\}text{Mark}$ your choice with a "X" $^5\,\text{Mark}$ your choice with a "X"



	Serv	vices	YES	NO	YES	S	NO		
	Other (explain)		YES	NO	YES		NO		
	Seaside Mu	Seaside Municipality?		NO			sea ports terminal?	Υ	N
	Lakes/ water		YES	NO		are there river ports with ferry terminal?		Υ	N
	male	female		Urban Area					
Population (abs. values)				ation dens oitants /kr		Со	untryside		
(abs. values)			(IIIIIak	Traints / Ki	112)		TOTAL		
Employment	male	female		Employm	ient (%	s valu	e)		
(abs. value)			The numb	er of emplo	oyee ev	ery 10	00 inhabitants		
Disables people			Elder pe	ople (over	65)				
(% value)			(%	6 value)					
Per capita income (Euro/year)									



2) SUSTAINABLE	URBAN MOBILITY POLICIES
National framework	
Regional framework	
Municipality framework	
Mol	oility Demand Management: Undertaken Actions
Planning	
Pricing	
(i.e. pricing mechanism)	
Marketing &	
Information	
(i.e. thematic and	
awareness campaigns, web tool)	
Others	



3) SOCIO E	CONOMI	C DRIVERS							
YEAR									
N. Local Active Units in the Municipality (abs. values)									
Industrial Local Units	Service	es Local Units	Shopping local Units		University/ Centres of Research	School	TOT AL		
		OF WHICH Public Institution (%)							
N. Employees p	er Local U	Jnit (abs. value	s) –	· including	non Municipality cit	izens			
Employees/ Industrial Local Units		yees/ Services ocal Units		mployees/ opping local Units	Students per University/ Centres of Research	Student s per School	TOT AL		
		OF WHICH Employees in Public Institution (%)		Costumer (monthly average)					
N. Employees p	er Local U	Jnit (abs. value	s) –	- Only Muni	cipality citizens				
Employees/ Industrial Local Units		ees/Trade and es Local Units	Employees/ Shopping local Units		Shopping local		Students per University/ Centres of Research	Student s per School	TOT AL
		OF WHICH Employees in Public Institution (%)	-	Costumer (monthly average)					



BEST PRACTICE A	BSTRACT ⁶ : GENERAL DATA AND SUMMARY – N. 1
Best Practice title:	
Best Practice acronym:	
Best Practice Thematic Issue:	
Partner:	
Municipality	
Country:	
Other Bodies involved:	
Duration:	
Budget:	
In this section you are as	ked to briefly present your best practice, on the following
thematic issue:	
A. Communication & awar	reness raising;
B. Parking and traffic mar	nagement and control;
C. Public & collective tran	sport.
The summary will not exce	ed half page.

Please insert table as required

 $^{^{6}}$ Please, take into consideration that the Best Practices description of this session might be used for publication and dissemination activities.



APPENDIX III. BEST PRACTICE TEMPLATE: SECTION B - URBAN MOBILITY AND ENVIRONMENTAL BACKGROUND

1) URBAN MOBILITY DATA in the MUNICIPALITY						
YEAR	YEAR					
	URBAN MOE	BILITY DEMAND				
Resident population for daily transfer and destination	In the same municipality of residence	Outside the municipality of residence	of Total		Transfer off site % (Municipality)	
Motorization The number of private ca						
	atic trips compared waterips that, on average, e	_		-	%)	
Syster	natic	Unsystematic				
Number of daily tri The number of trips that, makes durin	Trips Times (%) Minutes taken for the trips					
None		Up to 15 minutes	3			
Up to 2 daily trips		From 16 to 30 m	inutes			
From 3 up to 4 daily trip	s	From 31 to 45 m	inutes			
Over 4 daily trips		From 45 to 60 minutes				

⁷ The reason for the trips and their regularity during the week, allowing for the trips to be classified as either systematic or unsystematic. If statistical data are not available, those figures can be providing according to the entered sample test.



			0	ver 60 m	ninutes				
	KM/per capita (%)								
The a	verage d	listance	covered	by each c	itizen dui	ring the a	lay		
Up to 500 mt				Suburba	n				
From 500 mt to 2 Km				Extra url	ban				
Urban>2 Km									
		IV	lodal S _l	olit (%)					
% re	elating to	o the dif	ferent m	odes of tra	ansport d	onsidere	d		
Rail				Car (as	passeng	er)			
Tram				Carpooling					
Metro				Car-sharing					
Urban Bus, filobus				Motorbike, moped					
Extra urban Bus				Bike	се, торс	, d			
School bus				By foot					
Car (by oneself and as driver)				Other water wa	(ferry, y, share-	inland taxi)			
	Da	ily mo	bility d	istributi	on (%)				
			Ноц	ırs					
0-2 2-4 4-6	6-8	8-10	10-12	12-14	14-16	16-18	18-20	20-22	22-24



	URBAN MOBILITY SUPPLY					
Municipality road	network (TOT Kn	n)				
LPT Supply (Vehic	le*km/inhabitants)					
		Vehicle Ty				
	(Local F	Public Trans _l	port fleet)		1	
Diesel	Natural Gas		Electric		T	OTAL
LPT efficiency (Euro.	/vehicle*Km) ⁸					
LPT effectiveness (Us						
Urban PT fare for a si	ngle trip (Euro)					
BUS Lane (TO	T Km)					
Car Park ((O/)	With fee				Free
cai raik (70)					
Park and Ride	Snace		N.			apacity
Tark and Ride	Space					
Cycle Lane (To	OT Km)					
Bike Shari	na	N.	Bike	N. o	f Stations	N. of Users
DIKE SHALL	iig					
Does Car-Sharing ser the Municipa		YES		V	Vith Local (Organization
		YES		Supplied at local level, I organized at National le		

⁸ This indicator indicates the total cost to provide the service. Co-financed by European Regional Development Fund



	YES	Average	trips monthly supplied (N.)
	113		
	NO		
	YES		With dedicated fast lane
	YES		With dedicated parking
Dage Composing convices evict in the	YES		With local organization services
Does Carpooling services exist in the Municipality?	YES		With none dedicated solutions or services
	YES	N	Number of Users (N.)
	123		
	NO		None services



2) ENVIRONMENTAL BACKGROUND ⁹				
	NOT GOOD	MEDIUM	GOOD	
Pollution				
Noise				
Congestion				
Car Accidents				

 $^{^{9}}$ To fill out the Environmental Background, please refer to the Green Paper on urban mobility (COM(2007) 551).



APPENDIX IV. BEST PRACTICE TEMPLATE: SECTION C - BEST PRACTICE DESCRIPTION

	BEST PRACTICE DETAILED DESCRIPTION - N.1
Thematic:	PUBLIC AND COLLECTIVE TRANSPORT
Ratio and App	roach in the Undertaken Action
Please explain	the reasons which leaded the choice of the specific activities and the
undertaken ac	ction. Detail the needs and critical points to be faced, the interventions
formerly evalu	ated and if the action comes from a Bottom-up or Top Down approach
(citizens partic	cipation, direct/indirect involvement, Local Agenda 21, focus group, round
tables).	
Objectives and	d Target
Please describ	pe the focus of the project and primary objectives of intervention,
including the t	arget range (i.e. high school student, outliers) and the expected target
value.	
Financial Reso	urces
	ources see the financial resources, and, if they not coming from the Municipality



resources have been activated.		
Description of the interven	ention	
Please describe the techr	nical aspects of the implemented and tested intervention, the	
bodies involved, how thes	se bodies have been involved and how the activities have been	
implemented and outputs	carried out.	
TECHNIQUE		
Please, describe the manner with which the intervention has been implemented and the information collected (i.e. using the available data and/or entering sample tests).		
METHOD		
How to do		
ACTIVITIES and PROCESS Please describe the implemented tasks, including the chronological order.		
SKILLS and BODIES INVOLVED		
Please, describe the skills involved in the interventions (i.e. consultants in mobility, ICT experts) and provide a list of the implicated bodies (i.e. Local public transport providers, enterprises, consortium and/or		



organization, public/ private bodies, employers)		
INCENTIVES		
Please illustrate any		
incentives, received		
or/and made available		
(i.e. special fare for		
students/outliers,		
patronage/sponsorship		
)		
Technical Training Course/Training Phase		

Please explain if the undertaken action was supported by technical courses or training phases, and, if yes, which kind of information and/or abilities have been provided.

Transferability

Please specify the transferability level (high, medium or low) of the intervention and why.

Output

This section should give a detailed overview of the outputs realised. Please, describe the outputs in quantitative way compared with the starting context, specifying the direct impact on the Mobility indicators mentioned in SECTION B.

Coherence

Please describe the coherence of the intervention, according to the urban mobility



policies listed in the SESSION A, point 2) "Sustainable urban mobility policies".			
Critical points, constraints and further information			
Please, underline all peculiar aspects and problems you faced during the intervention.			
Critical Success Factor 10			
Scoring the following critical success factors according to their relevance for your experience			
Critical Success Factor	Relevance (from 1 to 10)		
Political support and long-term commitment			
Public awareness			
Stakeholder Engagement			
Integrated Policy			
Funding (national, EU)			
Existing regional frameworks (Institutional, financial and legal)			
Public Private Partnership			
Co-ordinating organisations (on local level)			
Reporting/monitoring			

¹⁰ Those critical success factors came from the PIMMS project, founded in the INTERREG IIIC framework. PIMMS is a network operation focused on the exchange of best practice information, between the partners and between them and their regional partners. Co-financed by European Regional Development Fund



Location (of co-ordinating organisation – access to local stakeholders) or facility eg accessibility of mobility centre	
Technical capacity of staff	
Standardised methodology	
Technology (Innovation and variation)	
Strategic Planning	
Experience/dedication (of staff)	
	·

Conclusion

This last section should evaluate the efficiency and effectiveness of the actions undertaken, using the parameters suitable for the assessment process. It is important to get an evaluation of the added value achieved with the applied interventions. In addition to that, please, describe if you have met some problems for the involvement of the bodies and/or during the implementation/training phase. Finally, mention if the outputs achieved diverge from the planned ones and, if yes, explain the possible reasons of such diversion.