SMILE

Sustainable
Mobility
Initiatives for
Local
Environment
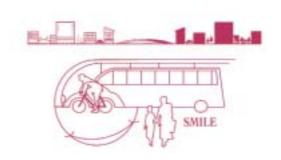
Towards Sustainable
Urban Transport Policies
Recommendations for Local Authorities

SMILE

Towards Sustainable Urban Transport Policies

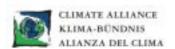## Recommendations for Local Authorities

SMILE

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Introduction

Most European local authorities are confronted with increasing problems of congestion and pollution due to the steady growth of urban motorised traffic. People moving out of the cities due to bad environmental conditions, increasing car ownership, and faster travel have given rise to dispersed urban structures, leading in turn to greater volumes of motorised traffic. But transport is also a challenge in terms of climate protection: By 2010, transport will be the largest single contributor to greenhouse gas emissions.

To turn around these trends, reduce these problems efficiently and thus raise standards of living in our cities, it is necessary to:

– carry out a true modal transfer from private motorised traffic towards more sustainable modes of transport,

– implement urban planning strategies with planning principles like urban density, improve the mixed use of space, and limit new urban developments to areas served by public transport,

– develop the concept of responsible car use and introduce less polluting and quieter vehicles.

Priority must be given to more sustainable modes of transport, which must become more efficient and attractive. At the same time, specific organisation methods and innovative technologies in terms of energy saving and the environment protection must be introduced. It is moreover crucial to raise awareness among citizens about the effect of their choice of transport mode on the quality of urban environment. But it is also the duty of local authorities to provide real alternatives for people to walk, cycle and use public transport instead of driving alone and to promote intermodality.

> "The big problem that urban authorities will have to resolve, sooner than might be thought, is that of traffic management, and in particular the role of the private car in large urban centres. … The lack of an integrated policy approach to town planning and transport is allowing the private car an almost total monopoly".
>
> White Paper on European Transport Policy:
> "European transport policy for 2010: time to decide",
> COM(2001) 370

SMILE - SUSTAINABLE MOBILITY INITIATIVES FOR LOCAL ENVIRONMENT: THE GATEWAY TO SUSTAINABLE MOBILITY!

Sustainable Mobility aims to reconcile citizens' mobility needs with quality of life and environment.

SMILE aims to help local authorities cope with this challenge by presenting good practices and introducing innovative approaches on a permanent basis.

Sustainable Mobility patterns require the distinct political will of local decision makers to bring about a change. Targets to reduce private motorised traffic, concerted strategies for the implementation of measures and specific examples for other stakeholders pave the way for sustainable mobility policies.

SMILE supports local authorities by presenting **170 successful and replicable practices** for sustainable urban mobility in its local experiences database (see www.smile-europe.org).

SMILE analyses local policies and jointly with experienced European cities and towns, drafts **recommendations for local authorities** to facilitate the replication of these practices (see further considerations below).

Sustainable Mobility includes the concept of cooperative planning as measures are most effective if targeted towards specific groups of citizens and their corresponding requirements.

SMILE compiles the results and experience of European cities and towns in designing projects and measures according to **the needs of specific target groups** and presents successful models on how to involve citizens (see recommendations on target groups and SMILE CD-ROM).

Sustainable Mobility is about creating incentives for citizens to choose more sustainable modes of transport such as walking, cycling and public transport.

SMILE gathers experience on how to best include **public transport** in sustainable mobility initiatives and draws up recommendations for both local authorities and public transport operators (see recommendations on public transport and SMILE CD-ROM).

Sustainable Mobility intends to lower harmful noise levels, particularly from road traffic, thus increasing health and the quality of life in European cities and towns.

SMILE identifies innovative activities in reducing noise from urban traffic and elaborates practical guidelines aiming to point out existing potential for noise-abatement measures in a field for which local authorities are responsible and can therefore take action more easily.

Sustainable Mobility calls for innovative and permanent solutions to face increasing traffic pollution and congestion and contributes to a new mobility culture.

SMILE enables local authorities to benefit from the experiences of 14 of the most advanced European cities and towns in this field through the SMILE **Study Tour Catalogue and Site Visits**, showing some of today's most innovative and replicable sustainable transport measures.

Sustainable Urban Transport Policies

A CONCEPT

The Commission's Communication "Towards a thematic strategy on the urban environment" [COM(2004) 60 final], formally adopted on 11th February 2004, proposes the following vision for sustainable urban transport:

A sustainable urban transport system:

– supports the freedom of movement, health, safety and quality of life of current and future generations,

– is environmentally efficient, and

– supports a vibrant, inclusive economy, giving access to opportunities and services to all, including less affluent, elderly or disabled urban citizens and non-urban citizens.

It achieves these objectives by, among other things:

– promoting a more rational use of private cars and favouring clean, quiet, energy-efficient vehicles powered by renewable or alternative fuels,

– providing a regular, frequent, comfortable, modern, competitively priced, well linked network of public transport,

– strengthening the share of non-motorised transport (walking and cycling),

– making the most efficient use of land,

– managing transport demand through the use of economic instruments and plans for behavioural change and mobility management,

– being actively managed in an integrated manner with the participation of all the stakeholders,

– having quantified short, medium and long-term objectives with an effective monitoring system.

The SMILE partners fully share this vision and use the term Sustainable Urban Transport Policy to denote a policy allowing for the coordinated and efficient use of all modes of transport (public transport, private vehicle, bicycle, walking, etc.) over a given area (e.g. the town or conurbation), in particular through the appropriate use of roadways and the promotion of transport modes that are less polluting and consume less energy.

It is essentially a policy in which the transport of persons and goods, along with traffic and parking, are organised to ensure a sustainable balance between mobility and accessibility requirements and the preservation of the living environment. Such a policy must, among other things, comprise a certain number of technologies concerning the different modes of transport and make sure that they combine efficiently with each other, but also and above all it must ensure that they are associated with particular organisation methods derived from the implementation of clearly defined political commitments. Since transport issues lie at the heart of urban development policies, a Local Sustainable Transport Policy must also take account of this question in its urban planning policy.

In our view, such policies can only be generated by the implementation of integrated and global urban transport schemes within the local authorities and must serve all of the local authorities' citizens, who themselves have a key role to play in their everyday decisions, such as their choice of transport mode. It is also of utmost importance to link these policies to regional and national plans and strategies. Indeed, to complement and support these local policies, all Member States must in parallel adopt a clear policy on urban transport to promote its sustainability, and, as a general principle, seek to internalise the external costs of transport through appropriate measures (e.g. taxation, road user charges, licence fees, etc.).

A sustainable transport system:

– allows basic access and the development needs of individuals, companies and societies to be met safely and in a manner consistent with human and ecosystem health and promotes equity within and between successive generations,

– is affordable, operates fairly and efficiently, offers a choice of transport modes, and supports a competitive economy as well as balanced regional development,

– limits emissions and waste within the planet's ability to absorb them, uses renewable resources at or below their rates of regeneration, and uses non-renewable resources at or below the rates of development of renewable substitutes while minimising the impact on land use and the generation of noise.

Definition of a sustainable transport system adopted in April 2001 by the EU Transport Council

FROM GOOD PRACTICES TO THE SMILE RECOMMENDATIONS

In order to draft the recommendations for local authorities, a questionnaire was prepared by the SMILE partners and sent to 700 local authorities throughout Europe with the objective of making an inventory of successful and replicable practices for sustainable mobility. As one of the SMILE project aims was to capitalise in particular on the results of the European Car Free Day and European Mobility Week Campaigns, cities and towns who participated to these initiatives were the core target.

The SMILE Survey

Number of local authorities addressed: 700

Countries involved: 28

Number of questionnaires returned: 146

Return rate of the SMILE questionnaire: 21%

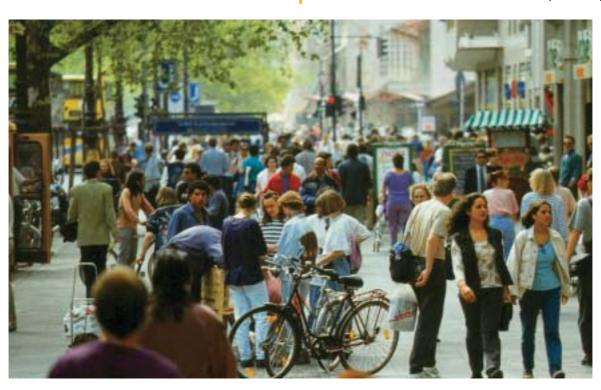Successful and replicable practices: 170

Each local authority was asked to provide comprehensive information about its overall transport policy, measures implemented and actions undertaken to promote sustainable mobility. The questionnaire was focused on permanent measures the local authority had implemented or intended to launch shortly. Measures were included which had been made permanent in the local authority, which contributed to modal transfer from private motorised traffic to more sustainable modes of transport and to a more sustainable urban mobility in general.

The data collected allowed the SMILE partners to prepare 170 successful and replicable practices for sustainable mobility (see SMILE local experiences database at www.smile-europe.org).

The analysis performed afterwards by the SMILE partners jointly with experienced European cities and towns as well as with several experts in the field of sustainable transport policies led to the preparation of recommendations for local authorities. These recommendations are the subject of this guide.

This guide should be considered as a tool that can help:

– facilitate the replication of these practices,

– enable a successful Sustainable Urban Transport Policy.

The thirteen fields for which recommendations have been prepared cover the main topics of urban mobility. In order to make the recommendations more readable, they are grouped in three main sections:

1. Planning and Management with:

– Integrated Approach / Urban Transport Plans,

– Urban Planning,

– Mobility Plans,

– Parking,

– Urban Goods Delivery.

2. Transport modes with:

– Responsible Car Use,

– Public Transport,

– Cycling,

– Walking / Pedestrians.

3. Transversal approaches with:

– Mobility Advice & Campaigns,

– Traffic Calming / Living Streets,

– Considering the Needs of Specific Target Groups,

– Noise Abatement Planning for Road Traffic.

One should note that issues related to:

– intermodality appear mainly in the field Integrated Approach / Urban Transport Plans,

– cleaner and quieter vehicles appear mainly in the field Responsible Car Use.

As some of the fields are closely linked and/or inter-related, similar considerations may appear in different fields. Moreover, it is obvious that in some cases recommendations are relevant for different fields. One should also note that it was considered important to allow readers to focus only on one field or another, which explains/justifies the listing of recommendations exhaustively for each field.

All of the recommendations are presented under a common framework:

– introduction to the field,

– presentation of the recommendations under five main topics:

- plan and organise,

- fit out, take measures and actions,

- communicate, promote and sensitise,

- monitor and evaluate,

- develop, adapt and refine.

The examples mentioned refer in most cases to the successful and replicable practices for sustainable mobility contained in the SMILE database (www.smile-europe.org).

Integrated Approach / Urban Transport Plans

Local authorities set up urban transport plans to increase the safety, sustainability and economic attraction of their town or city with the ultimate objective being to ensure/improve the quality of life of their citizens. They are to establish a comprehensive perspective integrating all modes of transport and giving balanced consideration to the needs of all stakeholders involved. In order to really contribute to sustainability (minimisation of impacts on the environment, equality of access, increasing traffic safety, economic growth without transport growth) such a plan should be based on a clear and concerted policy aimed at reducing the market share of private motorised traffic by providing more environmentally friendly ways to travel or by reducing the need to travel and optimising trips that cannot be prevented.

An integrated approach considers the causes of traffic generation and integrates land use and transport planning. The basic principles are: urban density instead of urban sprawl (indeed, urban density is more cost-effective than urban sprawl!) and improving the mixed use of space and urban developments around attractive and efficient public transport stations. The approach offers solutions for the transport of both people and goods. An integrated transport planning is part of an overall city marketing strategy to reposition itself as an attractive place to live, shop, work, invest or spend time and money as a tourist.

PLAN AND ORGANISE

- Overview of existing plans, objectives and targets:

  – Make an overview of relevant existing plans and programmes that concern the local transport situation (transport, spatial, economic development, nature development and environmental, social development plans, etc.),

  – Make an overview of relevant existing objectives and targets that appear in these plans.

- Prepare a state of the art including an evaluation of the current transport situation, in particular the share of each transport mode, successes, weak points, etc.

- Check potentials for regulations on the local level as well as regional, national or European funding opportunities for the implementation of measures.

- Set up organisation structures allowing the cross-sector coordination of activities including formal arrangements on budgetary commitments. An urban transport plan requires organisational integration and hence cooperation between different policy levels, different city services, with stakeholders and partners.

- Decide on the structure and composition of a management team that is responsible for the development of the transport plan. Each person or organisation should have a detailed task description.

Working on an integrated approach requires a multidisciplinary and empathic team. If some necessary competences are not available within the city services or the partner organisations, new staff can be hired, or targeted training should be provided. Some tasks could also be outsourced to consultants.

- Agree with the partners on which decision making procedures are to be followed. For measures implemented by cities, it is a must that all the necessary formal steps be taken. These steps can include the formal decision by the city council, budget advice, and tendering and subcontracting procedures. This has implications for the time frame.

- Agree with the partners on the monitoring and evaluation procedures.

FIT OUT, TAKE MEASURES AND ACTIONS

- The local authority should express a clear political commitment and show the decisive will to really bring about a change. The local authority is seen as a model and should act in this manner. The city could start with its own internal organisation of activities that are in line with the objectives of the transport plan.

- see local practice: Neuchâtel (CH) – Promoting Sustainable Transport.

- **D**efine a vision that takes into account future economic activity, the environment, social opportunities, traffic safety and the quality of life. This vision shall serve as a guide when developing a sustainable integrated transport strategy.

    Example: Milton Keynes' (UK) Vision. "We aim to open up Milton Keynes by making it a place where everyone can afford to move around conveniently, where economic, social and cultural life can flourish, whilst damage to our environment is minimised."

- **S**et targets for the changes in transport use over time to enable you to monitor the progress of your strategy. These targets should be measurable, relevant and realistic. Long-term targets should cover a period of at least 10 years, but interim targets should also be fixed/adopted. Localised targets (such as for the city centre, industrial or commercial areas, individual neighbourhoods, etc.) can help to take locally varying transport behaviour patterns and travel opportunities into account.

    Examples for such targets are: improving air quality, road safety and public transport, but also reducing road traffic, noise, car-use for leisure and other journey purposes, car ownership, the share of people travelling alone in cars, etc.

- **D**efine guidelines as rules for implementation. These rules apply to all measures being/to be implemented as well as to planning for applications; they shall ensure that the overall objectives of the strategy will not be undetermined.

- see local practice: Zürich (CH) – Sustainable Mobility Strategy.

- **A**dopt planning principles as a basis for the integrated approach chosen, such as urban density, improving mixed use of means of transport, urban development around attractive and efficient public transport stations, etc. An integrated approach requires multi-sector planning and thinking. Transport planning is closely linked with urban economic development, environmental policy, tourism, social welfare, education and others. Land use planning is an especially essential instrument for restricting private car use, for instance in new developments.

- see local practice: Groningen (NL) – Permanent Measures for Sustainable Transport.

- **P**riority areas of an integrated approach are also optimising and networking existing features and systems and complementing infrastructures in a targeted manner (less use of scarce finite resources).

The combination of the different resources of the partners involved can lead to a more efficient way of allocating money and people and an optimised use of existing resources.

- see local practice: Padova (IT) – Intermodality Network System.

Intermodality is one of the keywords when choosing an integrated approach, giving special attention to the combination of different transport modes, including all measures and activities facilitating interchanges or promoting such systems and facilities, e.g. spatially and temporally optimised interchanges from one mode to another, good passenger information, integrated ticketing/tariffs, etc.

- **D**efine a detailed action plan. The action plan should contain a short description of the measures, the timing to implement the measures, the partners involved, and the total budget dedicated to this particular measure. To set a timeframe, normally the common categories short-term, mid-term and long-term measures are used. The more specific the deadlines, the better. The action plan should be short and simple. The action plan contains a timeline and a allocation of the tasks for the moments of evaluation.

DO NOT FORGET / WARNING

The action plan should be well balanced and implement meaningful groups of measures in parallel to reinforce their synergetic effects.

Whether you are developing an individual measure or a set of measures, always develop a communication strategy to support them. The action plan will normally contain measures that are geographically clustered or grouped in time. This can be used as eye catchers in the promotion and communication of different projects in the action plan.

▶ For details on potential measures to be included in the action plan, see all other recommendations on individual transport modes, specific policies or fields of action.

- Co-operate with neighbouring local authorities or the whole region/agglomeration to find a joint integrated approach for a whole area, not limited by administrative boundaries.

- see local practice: Flemish Region (BE) – Mobility Covenants: an integrated approach for local mobility problems.

- see local practice: Nottingham (UK) – Greater Nottingham Local Transport Plan.

COMMUNICATE, PROMOTE AND SENSITISE

- Regularly publish articles in the local newspaper(s) or information leaflets about your progress in implementing the urban transport plan, new infrastructure, measures and services, the last achievements in terms of traffic reduction or other benefits in this regard (better air quality, reduction of noise, modal shift in favour of more sustainable modes of transport, creation of jobs, etc.).

- Make arrangements to use the communication channels of the different partners involved (such as public transport news in the city's monthly magazine, links to the partners' websites, etc.).

- Regularly publish a city map providing information about the public transport network, cycling routes, mobility services, etc.

- Promote greater public awareness of sustainable transport issues, as a first step especially among the staff of the local authority; set the example as an employer by implementing a green commuter plan for city staff, and provide training in this field.

- Work to permanently change the transport behaviour of commuters. Invite major employers to introduce a mobility plan for their company.

- Involve schools by organising specific campaigns for children, raise awareness among parents about safety and health issues related to school journeys, call upon schools to prepare a mobility plan, set up schemes allowing children to walk or cycle to school, etc.

- Organise campaigns or participate in regional, national or European campaigns to raise awareness about sustainable mobility, its challenges, solutions and benefits.

Example: Zürich's Mobility Games
During the summer of 2003, around 40 playful interventions were installed around Zurich's central station, recognizable by their green colour. The mobility games aimed to stimulate laughter and reflection – and above all raise awareness about how intimately connected we all are with the principle of mobility.

- A new mobility culture includes... culture! Invite artists to produce sculptures, paintings, installations, etc. and present them in public (streets, squares or

public transport vehicles). The art should aim at initiating a process of deliberation and perception of all issues related to mobility, traffic, sustainability, changes in behaviour and the associated benefits ("quality of life").

• Involve citizens in municipal activities related to the development and implementation of the sustainable urban transport plan (public participation process). Such a process should include a forum with local stakeholders, participation per neighbourhood, etc. This can happen ad hoc but is even better on a more formal and permanent basis.

▶ See also the recommendations for consideration of specific target groups' needs.

MONITOR AND EVALUATE

• Monitor the implementation of the action plan to make sure it is on schedule.

• Monitor the financial commitments of the different partners.

• Monitor and evaluate the impact of the implemented measures in relation to the targets set.

• Evaluate the decision-making procedures and the modus operandi in the project management team.

DEVELOP, ADAPT AND REFINE

• Check your initial targets regularly, as it might be necessary to revise them or set new targets.

• Review the priorities set. Not everything can be done at once, so it is important at one stage to make efforts in fields that were not priorities initially.

• Develop additional initiatives, measures and projects (update the action plan).

• Assess barriers for the implementation of individual activities and develop strategies to overcome them.

• Identify focal areas for future activities.

• If necessary, try to find new partners. Keep an open eye and mind for new stakeholders. These groups can evolve quickly.

Urban Planning

Linking policies with transport and land use is a challenging task, as one often has to overcome political barriers or administrative obstacles. Furthermore, the topics involved are complex and often entail new ways of thinking and shaping the vision of a comprehensive planning and development policy for a city.

In light of this, urban planning is essential for the management and regulation of cities' spatial organisation to achieve the efficient allocation of urban infrastructure and land use purposes. Integrated urban planning plays a crucial role in the reduction of the negative impacts of transport on the urban environment and on city dwellers' quality of life. At the same time, it makes provisions to satisfy citizens' needs and desires for adequate mobility by reducing the demand for travel, promoting and increasing the use of environmentally sound modes of transport, and by implementing adapted sets of measures to diminish the impact of "conventional" modes of transport. Therefore, urban planning can greatly contribute to the development of sustainable mobility in and around a city.

PLAN AND ORGANISE

- As a first step towards more sustainable urban planning policies at local level, a re-adjustment of policies in the fields of the environment, transport and land use may be necessary. This would require a policy review aiming to identify problems and clearly define and set objectives towards implementing relevant measures and actions in the short, medium and long-term and towards establishing criteria to monitor and evaluate progress and outcomes.

  As a consequence, this approach may lead to an adjustment of the existing institutional frameworks - for example, by merging the relevant departments for the environment, transport and land use into a single entity at the local and/or regional level. Even though it would be rather complicated to execute such a strategy, it would clearly demonstrate the political will to abandon traditional, sector-based approaches by integrating various structures and responsibilities at different levels.

- Include three overall principles in your urban planning process: encouraging the modal shift from private cars towards public transport and non-motorised or environmentally friendly modes of transport, avoiding or reducing unnecessary or undesired mobility, and promoting good accessibility to local amenities.

- Promote the establishment of a consistent and co-operative development plan not only at the local level, but also on a sub-regional scale.

- Promote the participation of stakeholders at all key stages of development and the implementation of integrated urban plans and transport strategies.

- see local practice: Mouscron (BE) – Public Participation Strategy integrated into Local Mobility Plan.

Promoting Sustainable Mobility… includes planning compact rather than dispersed cities to minimise trip lengths.

- Try to control urban sprawl and plan compact rather than dispersed settlement patterns to minimise trip lengths and promote sustainable modes of transport.

- To maintain high population densities in the central district area, public transport services should be improved and prioritised over the construction of ring roads – although at least one ring road is required to prevent heavy-duty vehicles from crossing the central district area.

- Do not locate businesses and commercial facilities (such as supermarkets) on greenfield sites, as they can generate high volumes of traffic and negatively affect the economic development of inner cities.

- Concentrate new residential developments on sites available in, or close to, built-up areas, such as decontaminated brownfield sites. Locate these sites along public transport corridors where public transport can provide a viable alternative to the use of private cars. In large development areas, modal interchanges for public transport, walking, and cycling need to be provided.

- Make efforts, in all districts of large urban areas and in smaller towns, to keep a balance between housing, jobs and services by proactively implementing measures to ensure mixed-use areas.

- Design residential areas to take into account walking distances from dwellings to bus stops and other current or future public transport facilities. Local amenities such as supermarkets, health, educational or leisure centres ought to be provided within walking (up to 1 km) or cycling (up to 4 km) distances.

- Residential areas should also be well connected to high activity centres and public areas with direct cycling and pedestrian routes in addition to an efficient public transport system.

- Comprehensive cycle and pedestrian networks are very important elements to be considered in any urban planning process.

- Plan simultaneously the renewal and maintenance of existing transport infrastructure and the construction of new infrastructure to ensure integrated approach for urban planning, transport and mobility management. The overall aim is to build a comprehensive and interconnected transport infrastructure, as modern industrial or service centres would be inconceivable without it.

- Urban and spatial planning is proving to be a key instrument in sustainable development at the local level. The cross-sector dimension of this field is important as it affects many other fields, such as noise abatement planning, commercial development, etc.

- Urban sprawl reinforces the need to travel and increases dependence upon private motorised transport, leading - in turn - to increased traffic congestion, energy consumption and polluting emissions. Therefore, environmentally driven urban planning should be a horizontal objective considered at all political and territorial levels. Environmental and urban planning should always be integrated in urban areas. And last but not least, for it to be really efficient, a sustainable urban planning policy should be maintained over long periods.

See local practices in Lund (SE) – where a sustainable urban planning and transport strategy has been implemented and extended since the nineties, and a project aiming to tie mobility management and spatial planning closer together is now being carried out.

FIT OUT, TAKE MEASURES AND ACTIONS

- Existing networks must be regularly maintained, repaired and upgraded by removing architectural barriers from all pavements. Due to cities' limited budgets, such measures should be properly co-ordinated to save financial resources.

- If necessary, pavements should also be widened. However, experience shows that widening of existing roads, the construction of bypasses, and the development of new roads can create controversy. On the one hand, these measures can be helpful in achieving an efficient and affordable transport

infrastructure system, which is very important for economic prosperity. On the other hand, they may contribute to congestion, air pollution and noise, which could be a reason for citizens to migrate to the suburbs. A careful assessment of needs, demands and consequences is thus required along the planning process.

- Create specific lanes for public means of transport (buses and taxis) and for private vehicles used for car-pooling and high-occupancy vehicles.

- Park and Ride and Bike and Ride facilities should be designed and promoted. However, small-scale solutions for bicycles should be preferred in city centres and at public transport stations and stops because construction and maintenance costs are lower in most cases.

- Connect cycling and pedestrian routes to local recreational areas. Cyclist and pedestrian facilities requirements (such as bike racks) should be considered and included in these areas.

the use of home telecommunications as an alternative to conventional workplaces so that people can choose not to travel at all.

- Give priority to low emission or zero-emission vehicles for access in central areas of a city, especially the central district area.

Adequate urban planning can provide excellent results.

- Develop a comprehensive parking policy, including a reduced number of parking places, limited parking time and higher prices in the city centre, reserved spots for residents, and dissuasive parking lots in the outskirts of the city.

- By-laws created to keep the number of parking spaces provided with each new office or residential building to the strict minimum can be adopted so that car use becomes less attractive for citizens.

- Lower the widespread habit of unauthorised parking through strict enforcement and penalties issued to the registered keeper of the vehicle.

- Promote travel-reduction ordinances and company transport plans. At local or national level, developers could be obliged to present a plan specifying ways in which they will reduce car use to their premises.

- Complementary measures are also recommended such as the promotion of flexible working hours so that everyone can choose the best time to travel and

- Experiences show that the positive initiatives to promote alternative transport modes must be combined with measures to reduce and restrict vehicle traffic in selected inner city areas, or even to ban it. In this sense, the regulation of parking spaces, park charging and road pricing have been shown to be effective instruments, which also have the positive side effect of increasing revenues.

- Congestion charging schemes have been proven successful in reducing car traffic in city centres, such as in London, where traffic entering the "charged zone" has been reduced by 20%. Such schemes can also help to improve the reliability of journey time, the efficiency and quality of public transport as well as the services operated.

- In residential areas, give priority to pedestrians and bicycles, and discourage through-traffic. Consider the enforcement of speed limits on residential roads by road design.

- Promote the development of green zones close to the city aiming to limit travelling distances to further green leisure areas.

- Car-free housing developments can be a very interesting option to reduce private car travel.

- see local practice: Vienna (AT) – Car Free Housing.

COMMUNICATE, PROMOTE AND SENSITISE

- Inform widely the citizens about new urban planning processes and actions carried out to ensure more sustainable urban development in and around their city. This should be done by means of formal and informal consultation processes.

- Regular information and awareness campaigns ought to be carried out, putting forward the numerous benefits of integrated urban planning to ensure sustainable mobility.

- A specific section on urban planning and sustainable mobility aspects could be created on the municipality's webpage, so that citizens can receive up-to-date information about the development of their city.

- Public participation is essential since it may provide a better understanding of what projects include and therefore involve greater acceptance; it can take into account the needs of every stakeholder, and it can also improve social cohesion.

Promoting Sustainable Mobility... includes strong public participation.

- see local practice: Copenhagen (DK) – Public Participation in Travel Policy.

- Organise events and contests on "urban planning for sustainable mobility" topics.

- Carry out specific information and training sessions for urban planning related professionals.

MONITOR AND EVALUATE

- Put into operation a programme of surveys and studies to collect information on citizens' and other key stakeholders' satisfaction with the sustainable urban planning implemented and its benefits.

- The impact of the new urban planning should be monitored, especially in terms of the evolution of modal split, emissions, congestion level, the efficiency of the services provided, safety, the total number of kilometres travelled daily by citizens, and the average distance to reach the workplace/home.

- A quality management tool should be applied for the assessment, evaluation and monitoring of the plan.

- The level of public awareness and understanding of all measures is to be monitored using quantitative attitudinal surveys and qualitative focus groups. Together with data on the scheme's operation, the feedback obtained should be used to evaluate and adapt continuing public information campaigns encouraging citizens to use environmentally friendly transport modes.

- see local practice: Kecskemét (HU) – Promoting Cycling and a Healthy Lifestyle.

DEVELOP, ADAPT AND REFINE

- Decision-makers must be committed to considering adjustments to implemented urban planning schemes and to their associated traffic management or complementary public transport measures if evidence suggests this would be necessary.

- The annual monitoring of the plan and level of implementation achieved must be the instruments used to guide the necessary adaptations and refining of the plan.

Mobility Plans

Mobility plans should be integrated at all levels in the urban transport policy. The objective should be to promote rational mobility plans in companies, associations, civil service organisations, schools, universities, shopping centres, defined urban areas, etc., which generate high traffic flows in their daily activity. Mobility plans may be led by these local organisations, and supported by public partners (municipality, chamber of commerce, local or national agencies for the environment). Mobility plans should include all transport modes and aim at promoting more efficient, safe and environmentally friendly transportation to and from these areas. Even though these trips do not represent the main share of urban mobility, they tend to shape citizens' mobility patterns with their repetitiveness and their purpose.

PLAN AND ORGANISE

- Organise mobility in the metropolitan area with attractive services for alternatives to private cars (multimodal attractive fare system, intermodal transportation hubs, etc.), and in this context, integrate the strategic actors of the mobility plan in order to rationalise the traffic and the distances covered per vehicle: companies and administrations (for employee transport plans), schools, universities (for student transport plans), shops and supermarkets (for optimised "customers access and exit plans").

- For this, select the zones and companies likely to be interested in developing/implementing mobility management plans for their staff, such as those about to invest in costly parking spaces, those affected by congestion and/or pollution.

- Try to involve managers (especially human resources managers), representatives (associations, unions), employees (in general, and small group by small group), specific organisations, and altogether, define a set of measures, according to their needs, such as timetables, stops locations, specific lines with adapted characteristics.

◆ see local practice: Málaga (ES) – Mobility Management.

DO NOT FORGET / WARNING

The home-to-work, work-to-school and school-to-home trips (the most frequent urban trips) are done mostly by car. The involvement of all the actors (such as parents groups, student bodies, local government and transport companies) is essential in building a successful mobility plan.

A multi-actor strategy for a local mobility plan.

- Encourage people to live close to their workplace, decrease the distances travelled daily, and adapt their mobility habits to the mobility plan (such as using bicycles for distances < 3 km). See also the recommendations on urban planning.

- Help companies create their mobility plans by granting them tax discounts if they launch a mobility plan, and by providing them with practical information and tools (such as local transport plan regulations, local practices, information leaflets, or even customised solutions for employee groups within companies, etc.).

- see local practice: Nottingham (UK) – The Travelwise Centre.

- Organise frame agreements between the public transport authority and the operators to propose attractive fares for companies involved in local mobility planning (i.e. subsidising public transport fares for employees).

- see local practice: Geneva (CH) – Transport Package.

- Promote the creation of jobs related to alternative transportation, such as bike rental and repair job opportunities, and seek cooperation with the local unemployment office.

- see local practice: Dunkerque (FR) – Mobility Plan for Employees.

- Develop easy-to-read signs specifically for pedestrian and bicycle routes of local mobility plans.

- Choose street designs that allow for car flow management and convenient parking infrastructures to safely drop-off children involved in mobility initiatives at schools (such as parking spaces for cars carrying more than one child).

- see local practice: Graz (AT) – MOSCHUS.

- Define objectives for each action of the mobility plan for municipal employees, such as create a special task force to test car-pooling, and after achieving first successful results, promote the implementation of the same schemes in other public and private local organisations.

- Set parking restrictions related to mobility plans, such as establishing parking fees to discourage employees from going to work by car.

- In the frame of the mobility plans for public organisations (municipality, university, school, hospital, etc.) and companies, support and promote bicycle rental), and deal with security and comfort accessories (lights, rain clothes, helmets, bags) for cyclists, and pedestrians.

- see local practice: Nantes (FR) – Vélocampus (promoting cycling at the University).

FIT OUT, TAKE MEASURES AND ACTIONS

- Promote cycling with secure and convenient bike shelters at workplaces, commercial centres and schools, and pay attention to cyclist safety along the paths and roads leading to working and commercial areas.

- Create safe road crossings for pedestrians and bicycles to favour the use of soft modes by the employees (companies) and children (schools) in the framework of mobility plans.

For fewer cars around the school…

- Invest in a bicycle or clean vehicle fleet for home-to-work trips and work-related transportation for municipal employees and consider subsidising or offering financial schemes for private organisations.

- For school mobility plans, have children picked up by foot and/or by bike, organised along with the school administration and teachers, parents (voluntary collecting and walking of the children in turns), and the police or city staff (safe road crossing, technical rules, marketing support).

- see local practices: Lausanne (CH) – Pédibus and Comines-Warneton (BE) – Cycling Bus.

- Train some local authority staff to help companies customise specific mobility plans.

- Consider creating and implementing a system of tax discounts for companies/organisations that implement a mobility plan for their employees. Subsidising the costs arising from such a plan may also be considered.

- Create an environmentally concerned logo/sticker that can be awarded to companies/organisations developing a mobility plan for their employees as an incentive for companies to invest in such measures due to the "green" image related to the acquisition of the logo/sticker. Also, a local contest can be organised for awarding the city's mobility plans best initiatives.

In Montreuil (FR), the mobility plan developed by the city council is a model for the establishment of new mobility plans in companies.

COMMUNICATE, PROMOTE AND SENSITISE

- In general or locally, raise users' awareness, target specific groups of people, and try to involve them through customised marketing campaigns.

  - see local practice: Malaga (ES) – Tourist Mobility Management Plan.

  - see local practice: Montreuil (FR) – Employee Transport Plan.

- As a contribution to a mobility plan, produce, publish and distribute maps of the bicycle network and parks, including information on complementary means of transport (such as regional trains, local buses), and other relevant information of the mobility plan (such as public services and opening hours).

  - see local practice: Poitiers (FR) – Time Policy Agency, and information leaflets for journey times by foot, bus and bike.

- Value the good mobility behaviour of the staff participating in a mobility plan (use the local media, brochures, etc.) to motivate employees to keep travelling in a sustainable way and serve as an example to other citizens. Also, give notice of any initiative taken to supply incentives for the implementation of mobility plans in companies, such as the environmentally concerned logo, or the launching of local contests regarding mobility.

- Use awareness-raising campaigns such as the European Mobility Week, "In town without my car!" and "I walk to school!" to promote, launch, test or develop mobility plans.

The logo of the Nantes (FR) Vélocampus association is a landmark for students while some logos or pictures help to identify directly practical car-pooling tools or orientations (see the Montreuil (FR) poster above).

- Create a visual identity campaign for the mobility management plan.

MONITOR AND EVALUATE

- Before and after implementation, evaluate the financial, social and environmental benefits of mobility management at local and metropolitan levels (for both employees and employers), e.g. compare the yearly costs of either driving a private car or using alternative modes of transport for a given itinerary.

- Monitor qualitative (such as public opinion on advantages and drawbacks of a mobility plan) and quantitative indicators (such as the distance covered per mode, the number of public transport tickets / travel cards, the number of visitors to the mobility centre, the number of bike-users, etc.) and use the positive results to strengthen your argumentation in favour of mobility plans and find support for your policy.

- Assess the benefits of mobility plans for the public transport authority and the operators (attraction of new customers and building of their loyalty).

DEVELOP, ADAPT AND REFINE

- According to the results obtained and lessons learnt from the past, promote the development of new local mobility plans in your municipality, by:

  – choosing, analysing and integrating the best practices,

  – creating discussion forums and mobility clubs,

  – launching media campaign contests.

- Target newcomers in companies, administrations, schools, etc. for communication, awareness-raising and information to show them the practical, economic and environmental benefits of joining mobility plan initiatives.

- Once launched, accompany with campaign information and try to influence nearby neighbourhoods that might be interested in enjoying the benefits of the mobility plan (by the municipality, a company, a school, etc.) and potentially be involved in similar mobility approaches and initiatives, by:

  – inviting representatives to the meetings of the organisation developing the mobility plan,

  – including them in the test measures,

  – carrying out door-to-door awareness-raising actions,

  – conducting qualitative surveys,

  – polling, managing and launching best practices for residents.

Parking

The reduction of the proportion of car trips in the total transport mix can be a real objective adopted by local authority officials in their quest for a less congested, less polluted, and less noisy city that makes better use of space and energy. In addition to the development of alternative modes of transport (public transport, walking, cycling), parking management is one of the most effective methods to manage or even reduce private car trips. Managing parking is certainly not at easy task. If one constructs new car parks in the town centre, this will generate additional traffic in the very place where pollution and congestion problems are already delicate issues. Giving priority to long-term parking is to favour commuter traffic, which does not use space efficiently and actually effectively reduces the number of parking spaces available, etc. In addition, a co-ordinated package of measures needs to be used to control car trips in urban areas. This requires: political will, courage, the force of a strong and determined conviction on the part of local authority officials; interest, competence and a sense of dialogue on the part of those with technical responsibility; and understanding on the part of the public. Bringing together all of these ingredients is a real challenge.

PLAN AND ORGANISE

- Consider the legal framework applicable, especially in terms of parking regulations (legal problems in imposing parking restrictions such as for resident-only spaces, etc.).

- Parking should be part of a global transport policy allowing for the coordinated and efficient use of all modes of transport (public transport, private vehicle, bicycle, walking, etc.) and should be linked to the land use planning policy. Hence, it is not only important to get a grip on public or semi-public parking spaces, but also on the private parking facilities in the city.

- Parking should be considered:
  - an important instrument to manage traffic flows and reduce the share of private motorised traffic (modal shift),
  - part of a comprehensive planning process for transport and travel. Incorporate parking as an element in a wider transport and access policy,

Promoting Sustainable Mobility… includes creating new developments with limited parking spaces and/or separated parking and vehicle road space from pedestrian road space.

Promoting Sustainable Mobility… includes creating attractive Park and Ride facilities well connected to frequent and fast public transport services.

  - part of a general traffic management policy even in very small local authorities, thus releasing central road space for other users (pedestrians, cyclists, etc.).

- Activate existing potential, i.e. privilege rapid and easy-to-implement solutions instead of costly solutions (be cost effective!).

- Set up an integrated parking programme and implement groups of measures step by step; a single measure has a limited effect.

- Create/extend the area subject to charging and increase compliance with parking regulations.

- see local practice: Dijon (FR) – Parking Attendants and Parking Policy.

Interestingly, Dijon (FR) has actually gone back to earlier practice with a labour-intensive system: a parking attendant is directly responsible for managing a car park, in this case a small number (30) of on-street parking spaces.

- Use parking and access restrictions in the historic core to tempt the user back to public transport, cycling and walking.

- Give particular attention to Park and Ride facilities (see further considerations below).

- see local practice: Ibiza (ES) – Disuasive Parking.

- see local practice: Prague (CZ) – Park and Ride System.

  In Prague (CZ), the Park and Ride System, which is part of both the urban planning of Prague's city and Prague's region, allows people to combine a drive in the outer city with public transport into the downtown area. This form of transport requires an attractive Park and Ride system with sufficient capacity, thus enabling car drivers to leave their vehicles in the vicinity of rapid rail transit, primarily the metro.

- Parking regulations and measures in the city centre should not cause further problems for residents next to the city centre.

- In residential suburbs, new developments should include limited parking spaces and/or separate parking and vehicle road space from pedestrian road space. Reduce the road space in residential developments to prevent on-street parking and reclaim the space for pedestrians and children. This should be coupled with other actions – such as 30 km/h zones or other traffic-calming measures. Establish a strong link between parking and living street measures. Sometimes subsequent opposite parked cars can be used as a traffic-calming measure.

- Parking in residential areas is both a hazard and a nuisance and there should be therefore an incentive to at least separate parking space from public space. Impose such design restrictions during early layout phases of new developments. This can be combined with additional obligatory in house cycle storage space.

- Introduce "commuted payments" by which the developer compensates the local authority for the higher profits it can make due to of the lower number of user car parking spaces it is obliged to provide.

- Introduce rules/regulations against new out-of-town developments with extensive parking to maintain the commercial vitality of the city centre and to reduce car use for shopping purposes (such as for large superstores). Think multi-modally: as a design principle, parking lots should be located behind these superstores, not in front of them. Pedestrians and cyclists therefore have direct access to the store and do not have to cross a large, uncomfortable and unsafe parking lot.

- Consider sustainable parking as a pillar for current and future large urban renewal initiatives.

- Consider the needs of parking for goods delivery (see also the recommendations on goods delivery).

- Involve local stakeholders in the preparation and implementation of parking regulations and measures (especially car users, residents and shopkeepers).

DO NOT FORGET / WARNING

The rate of parking outsourcing can considerably affect the success of the city's parking policy. The city's authorities should be very careful in contracting their parking organisation and keep in mind that car parking can bring a lot of money to the city and that it is an excellent tool for managing traffic. The good parking policy examples have often a public private partnership structure that offers sufficient flexibility to handle such a dynamic issue.

FIT OUT, TAKE MEASURES AND ACTIONS

- While implementing parking measures themselves tends not to be very expensive, it is often necessary to carry out other works – for instance an inner ring road, Park and Ride facilities or improved public transport, which can cost many times the price of the parking measures. When viewed as a whole, measures including parking restrictions are rarely cheap.

- Redistribute the roadway between cars (traffic lanes and parking spaces), public transport, cyclists and pedestrians (share of the space between the different users).

- Launch/extend in parallel the pedestrianisation of the city centre roads.

- Convert on-street parking places into pedestrian areas, for instance, especially in the city centre as it is important to demonstrate the benefits of liberated space.

- Create Park and Ride facilities in the periphery of the city and at main interchanges.

DO NOT FORGET / WARNING

To be attractive, Park and Ride facilities must offer connections to frequent, fast public transport services and be well managed. Real-time information for passengers and comfortable waiting and transfer areas increase their attractiveness.

- Resort to a dedicated and relevant (dynamic) signposting scheme for parking.

- Parking lots (above ground and underground) should have a multifunctional design. The function of the space can change in time (parking lot turns into weekly market, etc.).

- Think multi-modally: organise enough bicycle parking or storage capacity.

- Fit out enough parking spaces for people with disabilities. Agree on the number, the design and location with local organisations of people with disabilities.

- Consider as an essential element of your parking policy/programme the reduction of the availability of parking spaces in the city centre (especially on-road) to reduce the utility of travelling to the city centre in a car.

- Different charging and monitoring techniques can be chosen to implement the reduction of supply: increasing the area with restrictions or parking charges; prices and time graded by distance from the city centre (it is important to adapt the price to the demand); stricter or more efficient enforcement; etc. More expensive developments can be included as well, Park and Ride and underground car parks in particular.

- see local practice: Gent (BE) – Third Tariff for Parking between City Centre and Ring Road.

In Gent (BE), the zone of paid parking is much wider than what we currently find in many cities. It comprises the whole area within the city's ring road (11 km perimeter). The price for parking differs according to the location. In the very centre, parking tariffs are very expensive and discourage long-term parking, whereas the area between the heart of the city and the ring road makes use of the so-called "third tariff". The tariff does not make it impossible to park for a longer time, but it does encourage people to look for alternatives.

- see local practice: Ljubljana (SI) – Short Time Parking.

In Ljubljana (SI), a special policy for short time parking has been implemented at important social places (health care centres, primary schools, etc.) located in the city centre. It is not possible to park for more than 1-2 hours. This measure aims to maximise vehicle turnover, guarantee a place to park for visitors/users and make employees and residents sensitive to the rational use of the car.

- Optimise parking use: for instance, eliminate on-road parking for commuters through the use of time-restricted zones and ensure that the restrictions are enforced.

- Consider Park and Ride as a complement to parking restrictions in the city centre and as a good tool to facilitate the modal shift from private motorised traffic to public transport in particular (providing alternatives!). Park and Ride schemes must be consistent with parking measures implemented in the city centre; for instance, each new parking place in a Park and Ride should mean one parking space less in the city centre.

- Resort to road closure when necessary.

- Limit the creation of parking spaces in new office buildings (such as via the urban development plan). Restrictions on private parking spaces should also be studied.

- Discourage free parking at workplaces and, even better, implement workplace charges.

- Prepare and launch green commuter plans.

- Launch/propose developments where car ownership is prohibited/limited and parking spaces are scaled down drastically (normally to 10% of car-culture developments). These are called "car-free" developments. The establishment of a car-sharing scheme to accompany the development is recommended. The commitment of the residents, the location and provision of support services, and the prevailing culture are factors for success.

- Try to pay special attention to the residents' needs and expectations (special permits for residents, parking cards for residents, etc.).

- Effective policing is vital and has a considerable impact on the success of the measures.

- Issues such as balancing revenue generation with political acceptability and the possibility of discouraging usage (and therefore restricting revenues) are important to be considered and have a bearing on decisions. Limiting the duration of stay could appear a far more effective weapon, but there is always the risk, paradoxically, that this could increase flow into and out of the centre since there will be a more ready availability of spaces.

COMMUNICATE, PROMOTE AND SENSITISE

- Establish a dedicated information centre on parking and try a direct personal touch with residents and other parking users. This can be an evident help in selling the parking strategy.

> **DO NOT FORGET / WARNING**
>
> As parking issues are issues for a local area with local users, try to involve the local press. It appears that the message of a change in parking price, an increase in the area of parking restriction and a reduction in the rigour with which parking offences are dealt with rapidly gets back to car users (and owners of city centre shops). In contrast, the opening of a new Park and Ride requires broader and more specific publicity to pay dividends. Effective signposting and poster campaigns help keep the principle of Park and Ride in the driver's eye.

- Regularly launch information and awareness-raising campaigns to promote parking measures (for instance, directed at car users, residents, shopkeepers). "Responsible parking", quality of life, etc. are possible themes of action.

- ◆ see local practice: Parma (IT) – Governing Sustainable Mobility.

- Launch advertising campaigns in the media and put forward the objectives of parking measures (in terms of a reduction of congestion in the city centre, air pollution, noise, etc.).

- Publish different communication aids and tools (such as maps of the parking areas and Park and Ride facilities with relevant information concerning the policy carried out, the measures in application, etc.); website and/or information leaflets, etc. about the new measures. Motivate stakeholders to add parking and accessibility information to their marketing products.

- Involve interested local stakeholders (car users, residents and shopkeepers especially) in municipal activities/projects related to the parking policy right from the beginning to better satisfy their needs and expectations and limit dissatisfaction (public participation process).

MONITOR AND EVALUATE

- Monitor and evaluate the impact of your parking policy in particular in terms of:

  - reduction of traffic flows and traffic congestion (especially in the city centre),
  - evolution of the modal split within the city centre but also within the local authority as a whole,
  - reduction of the supply of spaces in the city centre, both public and private, on and off road, thanks to a variety of measures (pedestrianisation, planning conditions, enforcement, etc.),
  - number and use of the Park and Ride facilities,
  - reduction of noise, air pollution and energy consumption,
  - public acceptance (opinion polls), possible target groups being car users, residents and shopkeepers.

- Use a quality management tool for the evaluation of your local parking policy.

> **DO NOT FORGET / WARNING**
>
> When the parking management is outsourced, the definition by the city's authorities of specifications containing objectives, expected results, etc. and periodically renegotiable is a good instrument to evaluate your parking policy.

DEVELOP, ADAPT AND REFINE

- On the basis of the results obtained, plan the improvement of the existing parking measures (permanent improvement process) especially if problems were encountered outside the area of implementation.

- Study and plan the extension of the parking measures to other areas (especially outside the city centre).

- Fix new objectives in terms of:

  - reduction of traffic flows and traffic congestion,
  - extension of the pedestrian area,
  - increase in the number and use of the Park and Ride facilities,
  - set-up of car-free developments via planning procedures,
  - reduction of noise, air pollution and energy consumption,
  - public acceptance.

- Launch new information and awareness-raising campaigns to increase public acceptance (especially among car users, residents and shopkeepers).

Urban Goods Delivery

Today, cities face a contradiction between the need to keep or increase economic activities in the centre and to decrease the impacts of road traffic. Peripheral commercial areas are becoming more competitive than the centres. Goods delivery organisation is thus a key element in urban transport planning.

The share of goods transportation in urban transport can be a consequence [such as in France 7% of vehicles and 18% of veh. km (with equiv. private cars) – Source: LET 2000]. As delivery vehicles travel more in the city and are usually bigger than private cars, their impact on congestion, space consumption, air pollution, noise and energy consumption is even more noticeable.

Local practices show that public initiatives aim to manage mobility and improve environmental standards in urban life, and private initiatives have commercial objectives. Both may be complementary. A publicly owned urban delivery centre close to a city can be financially interesting as an intermediary step for private carriers to have their goods delivered to the centre.

The management of goods transportation depends a lot on local or national legislation (such as limited weight in urban areas, limited times for deliveries) and on parking such as dedicated delivery parking places.

PLAN AND ORGANISE

- Identify and rank the problems to be faced (such as noise, pollution, congestion, narrow streets, low efficiency of the goods delivery system, road safety, possible conflicts with other modes of travel).

- Define an urban strategic policy to support shops, especially in the city centre, and make economic activities in the centre more compact than in the suburbs.

- Integrate goods delivery in general urban transport planning (link with pedestrian areas, traffic-calming areas, public transport lanes, creation of corridors dedicated to public transport) and in specific local regulations (see also the recommendations on parking).

- Identify the social structure of the commercial actors system (shopkeepers, drivers, company managers, local authorities, dwellers), what they expect and what they need.

Congestion and pollution on its way to the city centre.

- **P**articipate with professionals in the delivery sector and shopkeepers for private and public purposes such as the preservation of the historic centre, noise abatement, and economic development. There is no single way to approach the issue. It is thus important to be extremely attentive to communication, consultation and/or participation of the various actors.

- see local practice: Berlin (DE) – Goods Traffic Platform.

- **I**nvolve shopkeepers unions for promotion to have them support the measure and not contest it after implementation.

- **I**nvestigate legal aspects and existing rules and habits for goods delivery in its context (times, places, parking facilities or parking habits).

- **I**dentify target zones to organise goods delivery (historical or cultural centres, high density areas with problems of pollution, congested areas, etc.).

- **A**nalyse the efficiency of the city goods delivery system in general, per carrier and per zone (carrying ratios, types of vehicles).

- **A**nalyse the spatial pattern of the city goods delivery system (localisation of the logistic platforms), and identify typical logistic routes (tours, volumes, weights).

- **D**evelop a specific approach for the end part of deliveries by assisting drivers in the final 1 km or 100 meters (special delivery agents dedicated to a zone, adapted trolleys, delivery tricycles).

- **C**heck funding and cooperation opportunities (such as from the European Commission or the National agency for environment and energy management).

- **C**onsult other neighbouring local authorities and lead actions in coherency.

FIT OUT, TAKE MEASURES AND ACTIONS

- **S**et up Urban Distribution Centres in peripheral areas to ensure final delivery. To the extent possible, organise urban delivery services with cleaner vehicles.

- See local practice: Rotterdam (NL) – Electric Vehicle City Distribution System.

In Rotterdam, the 3 main transport companies already performing on an approach based on Urban Distribution Centres for years play an important role. These companies, transporting at least 70% of all parcels & packages, operate from their own UDCs located at the edge of the city. They use large trucks for long-distance transport to and from the UDC and distribute goods in and out of the city by means of cleaner vans and small trucks.

- **O**rganise proximity delivery areas (such as in Nürnberg (DE), the goods may be picked up by inhabitants from the shop or an intermediate city goods centre or be delivered directly at home, with a co-financing of the delivery by the municipality and participation by the purchaser).

- **B**uild parking facilities for goods delivery (such as the Lyon (FR) Rapido delivery principle).

- **D**efine appropriate street furniture for drivers and delivery people.

- **L**aunch new services and adapted equipment for shoppers to promote purchases in the city centre.

- **U**se important works (such as the construction of a public transport corridor) to redefine and improve the goods delivery equipment and its organisation.

- Define a regulation system to anticipate goods deliveries in the new buildings with commercial activities and inside them, define dedicated delivery zones, or authorised delivery times.

  ◆ see local practice: Monaco (MC) – Freight Platform.

> ### DO NOT FORGET / WARNING
>
> Accompany heavy programmes of public transport investments (metro, tramway) to reduce the impact of the works period on commercial activities

- Establish a participative dynamism involving all the actors of goods transportation (thematic discussion groups to orientate the strategies and measures, test periods of the measures for all, common logo for a common measure, etc.).

- Define criteria for restricted areas for motorised traffic.

  ◆ see local practice: Copenhagen (DK) – City Goods Ordinance.

  ◆ see local practice: Aarhus (DK) – Distribution of Goods.

  In Copenhagen and Aarhus (DK), environmental zones have been designed. In Aarhus, access for vehicles >2t is only allowed if they comply with the Euro 2 standard, have particulate filters, have a permitted total weight <12t and have at least 60% capacity utilisation. The scheme requires substantial supervision, and for a similar scheme in Copenhagen, a Green, Yellow or Red certificate system involves the carriers even more.

Dedicated off-peak delivery hours in the centre, supporting smaller, cleaner and more silent vehicles.

- Define multi-use traffic lanes, with lines dedicated to public transport, deliveries and/or residential parking depending on the time of the day.

  ◆ see local practice: Barcelona (ES) – Multi-Use Lanes.

- Favour the use of shared vehicles or shared equipments and the grouping of consignments (such as "van-sharing").

  ◆ see local practice: Aalborg (DK) – City Goods Delivery Cooperation.

  Since January 2003, voluntary cooperation between four of the major goods distributors in Aalborg (DK) ensures that a minimum of vehicles enter the city centre; vehicles to deliver packages are shared. Pedestrians and people who live in the central area also benefit from this initiative. Other companies can also use the service to get a package delivered by partners by paying a small fee. In Aarhus (DK), similar cooperation between shopkeepers is now well known throughout Europe for its environmental benefits.

  ◆ see local practice: Borlänge (SE) – Coordinated Distribution of Provisions.

  Borlänge is experimenting with the same measure for deliveries to schools, nursery schools, homes for the elderly, and other local units within the municipalities.

- Organise intermediate or goods delivery for inhabitants such as Nanterre (FR) or Nuremberg (DE):

  – develop home delivery for phone commerce and e-commerce from some supply centres in the city or its close neighbourhood,

  – develop delivery of purchases at the Park and Ride, or

  – offer lockers and other new services at the Park and Ride for shoppers.

- Define facilities to organise cleaner goods delivery (time of parking, pedestrian streets, restricted areas).

- Define benefits for the professionals taking part in the goods delivery reorganisation (improved quality service, image, costs, etc.).

- Offer a fare reduction for cleaner vehicles going through existing or planned urban tolls to encourage the use of cleaner vehicles by lowering their operating cost.

  ◆ see local practice: London (UK) – The Congestion Charge System.

COMMUNICATE, PROMOTE AND SENSITISE

- Define a communication strategy together with professionals of delivery sector and shopkeepers.

- Value the image of the professionals who join the organised system (such as a green label given by the municipality).

- Organise promotional events to favour home delivery or delivery at the Park and Ride.

- Broadcast a valuable image and graphic identification of the alternative vehicles to the trucks or petrol/diesel private cars (logo, pictures).

- Organise communication events around new sustainable and permanent measures (such as during the European Mobility Week).

- Carry out opinion polls to evaluate public acceptance (especially among residents) of the new measure.

- Seek cooperation with other cities to exchange information and expertise (such as the EU-supported ELCIDIS Project).

MONITOR AND EVALUATE

- Evaluate the initial organisation (spatial flows, volumes, distances) and environmental impact of the goods deliveries within the metropolitan area.

> ### DO NOT FORGET / WARNING
>
> When assessing the impact of urban goods deliveries, also take into account the pollution of other vehicles hindered by the deliveries.

- Evaluate the average daily distance covered for goods delivery in urban areas, and compare it with potential distances if the new measure is implemented.

- Carry out a cost/benefit analysis of the scheme, including congestion (time, public opinion), environmental impact (emissions including particles, noise) and energy consumption. Evaluate average costs/ drawbacks for citizens to travel to peripheral commercial areas, and assess the potential interests

for a citizen to keep shopping in the centre; use specific survey techniques (such as revealed preference surveys).

- The evaluation of an operated Urban Distribution Centre requires an estimation of the hypothetical impact of a situation without UDCs. The input of the evaluation is an assessment of the veh./km generated by the goods delivery system. It is thus possible to calculate the impacts of the UDC in terms of:

  – air quality (models such as IMPACT, developed by ADEME),

  – energy consumption,

  – noise impact,

  – space consumption of the freight activities,

  – visual impacts.

- see local practice: La Rochelle (FR) – Electric City Distribution System.

In the ELCIDIS Project, La Rochelle (FR) built an urban distribution platform near the city centre, from which privately operated electric vans could pick up the goods to be delivered to the centre from any other long distance carrier. This is a win-win system for the carriers, the shopkeepers and the inhabitants. This experience was the occasion of a pilot impact assessment by ADEME.

DEVELOP, ADAPT AND REFINE

- Organise annual monitoring of the system.

- Organise exchange of experience with other cities.

- Test the reliability of the technical innovations tested.

- Integrate other services to diversify the activities of the Urban Distribution Centres (such as home delivery, lockers, delivery to Park and Rides, specific goods). This could foster the economic dynamism of the city.

Responsible Car Use

Private vehicles are often the main transport mode in urban areas. In some cases, despite considerable negative impact on the environment, cars can be a convenient mode of transport – for instance, in rural or peripheral areas, where public transport systems are not so efficient, or for evening/night travels, holiday trips, etc. But in many other cases, cars are overused; in many countries, around 50% of car trips cover less than 2 km, and the average occupation rate is of 1.2 people per car.

Interesting options to use private vehicles more efficiently include car-sharing, in which several people use the same car at different times, and car-pooling, when people share the same car during the same travel. Other alternative systems, such as short time rentals or self-service vehicles, can be developed. And in all cases, eco-driving techniques should be the ones pursued to achieve energy-efficient driving of private cars - providing greater security, significant noise reduction, and important fuel and CO_2 emission savings.

These practices are even more favourable for preserving our urban quality of life when they are carried out with cleaner or more silent vehicles.

PLAN AND ORGANISE

- Consider the applicable legal framework, especially the possibility of giving local tax discounts to citizens and private/public organisations, for purchasing cleaner vehicles (alternative fuel and low consumption/CO_2 emission vehicles).

- Consider implementing car-pollution levy programmes and subsidies for eco-driving courses.

- Take into account that car-sharing and car-pooling requires a change in the behaviour of potential users, which in most cases implies a combination of time and incentives. The implementation of car-pooling or car-sharing needs to be integrated in an overall mobility policy and not as an isolated solution – which means involving all relevant actors related to transport and mobility in the municipality as well as all employers and institutions concerned.

- Car-sharing and car-pooling schemes should be set up at the biggest possible scale, such as a car-pooling scheme run on the Internet and co-financed by the municipality, at the disposal of all employees and city dwellers.

- see local practice: Södertälje (SE) – A car-pooling scheme.

- see local practice: Langenegg (AT) – Car-sharing as a local authority service.

- Set up an organisation to help develop car-sharing or car-pooling in local companies, along with connections to other means of cleaner transport.

- see local practice: Strasbourg (FR) – The GEODES (management and organisation of commuting journeys) project.

DO NOT FORGET / WARNING

Car-pooling should be managed by a specific person or organisation able to solve individual problems.

In Langenegg, a rural area with many commuters, a municipal vehicle is shared between the municipal staff and the inhabitants. The aim is to prevent households from buying a second car.

- Before setting up any such schemes, the initial situation (traffic flows, potential users and their specific needs, routes, parking facilities, etc.) must be carefully studied.

- Seek cooperation with private car renters to run the car-sharing or car-pooling system, such as Berlin (DE) StadtAuto, which is run by a well known car rental agency.

- Set up partnerships to favour car-sharers, car-poolers and users of cleaner vehicles, i.e. with parking operators, urban motorway operators or the national railway company.

- see local practice: Odense (DK) – Car-sharing scheme, where the car-sharing system proved economically interesting and is now run by a private operator (a well known car rental company). The system has now 1,000 members, with 10 to 20 users per vehicle.

FIT OUT, TAKE MEASURES AND ACTIONS

- Dedicate the best locations in the city to shared-vehicle parking spaces.

- see local practice: Bristol (UK) – City Car Club.

- Build High Occupancy Vehicle lanes for public transport and shared vehicles, especially on the main radial roads entering the city.

- see local practice: Stockholm (SE) – Car-sharing and Car-pooling.

With a dedicated traffic lane, favour vehicles transporting at least 2 persons, public transport and two-wheeled vehicles.

- Define practical advantages for car-poolers and car-sharers of public organisations when setting up employees' mobility plans (such as free and dedicated parking places, financial contribution from the company for petrol, free bicycles, access to the repair shop, etc.), and make sure they match potential users' needs as much as possible. Try to convince local companies to do the same.

- Support (materially and/or financially) the setting of car-pooling and car-sharing organisations.

- see local practice: Geneva (CH) – Transport Package.

- Set up a dynamic local database for car-pooling and car-sharing. Include a detailed section on the benefits of the different systems, a practical section on costs and how to share them in the case of car-pooling, an incidents management tool, etc.

Like in the Geneva Region (CH), create a free and easy-to-use online car sharing system.

- Favour the use of environmentally friendly vehicles for car-sharing and car-pooling systems, especially for those dedicated to the municipal employees, as a good practice example.

- see local practice: La Rochelle (FR) – LISELEC.

- Consider shared-car systems a potential complement to other modes, and seek co-operation with public transport operators in marketing actions, integrating fare systems or involving the public transport operator in the management of the car-sharing or car-pooling system.

- Consider special events (cultural, sports, European Mobility Week, etc.) as an opportunity to test responsible car-use principles and actions within companies, local institutions, universities, commercial centres, etc.

- In collaboration with private companies, favour the use of company cars to promote car-pooling among employees, and show the advantages of such schemes to companies (fewer parking places needed, image, communication between employees, etc.).

- Carry out eco-driving pilot projects with municipal staff or the staff working for the municipality (such as public transport, rubbish collection) and important local public organisations (such as the post office); support the training of several groups of drivers, and monitor and broadly disseminate the results and benefits of Eco-driving.

COMMUNICATE, PROMOTE AND SENSITISE

- Encourage public discussions on potential and/or existing car-sharing and car-pooling schemes, and in general on the notion of responsible car use, and eco-driving; for this, organise with as many local organisations as possible awareness-raising campaigns and develop a logo and a tool box (explanations, maps, timetables, etc.).

- ◆ see local practice: Krakow (PL) – European Mobility Week Campaign 2002.

- Promote the activities of car-pooling or car-sharing associations to support their setting and development (such as by joining their marketing campaign).

- ◆ see local practice: Nottingham (UK) – A Comprehensive Mobility Management.

- Make sure that car-sharing and car-pooling schemes are well indicated in the traffic sign system.

- In the local media (local press, regional TV, etc.) and at the occasion of specific communication events, regularly publicise the practical, economic, social and environmental benefits of car-sharing, car-pooling, and eco-driving such as information leaflets, maps and demonstration stands for car-sharing, car-pooling and eco-driving during the European Mobility Week or the "In town without my car!" campaigns.

> **DO NOT FORGET / WARNING**
>
> It has proven very useful to lead a communication campaign against the initial negative image of car-pooling amongst the population, and to distinguish car-sharing from car-pooling.

- Promote the purchase of energy-efficient vehicles, basing your campaigns on the information provided by the label, the guide, the poster/electronic display and other promotional literature as described in the car labelling Directive 1999/94. Awareness can be raised with these materials by means of local articles, conferences, stands in local fairs, etc.

- Organise meetings with local employers to show them ways of using cleaner vehicles and the numerous advantages of such measures.

- On the occasion of special communication events, organise a rally in the city requesting the use of shared vehicles and dedicated parking facilities and get well known people involved.

MONITOR AND EVALUATE

- Monitor the number of car-pooling or car-sharing users (and potential ones) and their characteristics, and use the positive results for your next marketing actions.

- Evaluate the vehicle-kilometres, time, and money saved by the users of the different scheme, and use the figures for future promotion.

- Analyse the attitude and opinions of users, authorities and agents involved, by launching a car-poolers' and car-sharers' opinion poll to identify the advantages and drawbacks of the existing scheme both quantitatively and qualitatively. Draft the questionnaire along with some representatives of car-sharing or car-pooling organisations (they can provide good suggestions and important support to collect filled-in questionnaires and even help interpret the results).

- Carry out a public opinion survey to identify the local specificities that could support the development of a car-sharing or car-pooling system (such as focusing on the main routes used by municipal staff or employees of companies in a defined area of the city).

- Assess the number and quality of dedicated parking facilities for car-pooling and car-sharing.

DEVELOP, ADAPT AND REFINE

- Assess existing or recently tested successful car-sharing or car-pooling systems qualitatively and quantitatively, and seek cooperation with organisations

that could be interested in similar schemes for their members (such as universities, social centres, city halls, centres for the disabled, etc.).

■ Integrate the survey results and the new local specificities in the shaping/redefining of future car-pooling and car-sharing strategies (such as number and quality of the parking facilities, practical benefits/difficulties for the users, etc.).

> **DO NOT FORGET / WARNING**
>
> Continuous improvements and incentives are necessary to keep the schemes attractive to potential users.

■ Carry out "corrective" actions as a consequence of the results of the analysis of the different schemes being developed; for instance, modify the incentives for car-sharers and car-poolers, strengthen and re-orientate the promotional campaign, etc. Use flexible approaches.

CLEANER AND QUIETER VEHICLES

"Cleaner and quieter vehicles" generally have reduced air and noise pollution impacts such as: liquefied petroleum gas, compressed natural gas, biofuel, electric or hybrid vehicles. The promotion of cleaner vehicles requires consideration of many different factors, including:

– vehicle and infrastructure performance and purchasing and operational costs (incl. maintenance),

♦ see local practice: Werfenweng (AT) – Solar Charging Station for Electric Vehicles.

– energy consumption and real environmental impact,

♦ see local practice: Stockholm (SE) – ELCIDIS / Electric Vehicle City Distribution System.

– social and cultural factors, strongly linked to awareness-raising and communication.

♦ see local practice: Geneva (CH) – Individual Public Transport.

Local authorities may decide to invest in cleaner public transport or municipal fleets, or subsidise cleaner private vehicles.

♦ see local practice: Camden (UK) – LPG Taxi Conversion.

Other alternative sources of energy can also be used by municipalities in the framework of local recycling policies.

♦ see local practice: Graz (AT) – Biodiesel from Waste Oil.

> **DO NOT FORGET / WARNING**
>
> Give preference to already well developed, environmentally friendly vehicles instead of investing or supporting investments in expensive new technologies, which might prove not so efficient in the end.
>
> NB: Regarding traffic noise aspects, see the SMILE recommendations on noise abatement.

La Rochelle (FR), An electric shuttle system between a Park and Ride and the city centre.

Public Transport

Buses, trams and trains can, particularly in large cities, provide quick, safe, cheap, noise-abating, environmentally sound and comfortable ways to get from point A to point B. And they cost the community less, take up less space, use less energy and are less damaging to public health than cars.

In many cities, public transport is a "civic brand" and an expression of the local culture. Think of London with its distinctive "tube" and double-decker buses. Think of Zürich and the excellence of its bright blue trams and buses. What city, by contrast, would want to be defined by its traffic jams?

In all cities, the case for giving public transport priority over cars is very strong. Such measures can never receive too much attention – particularly as the opinions of decision-makers often fail to reflect the attitudes of residents towards public transport. The examples of best practices and the recommendations are intended to show how best to include public transport in sustainable mobility initiatives.

Promoting Sustainable Mobility... includes major interchange integration.

PLAN AND ORGANISE

The better use of economic resources requires that urban sprawl and its side effects, continuous increases in car travel, and the use of non-renewable fuels be minimised.

- Ideally, the planning of land use, public transport and land-use policies should be integrated. Cooperation of this kind can help to prevent developments with inadequate transit and thus create conditions in which public transport can flourish.

- Urban plans that limit development on the city fringes and promote it close to stations served by efficient public transport help to curb sprawl and favour public transport.

- Development and transport need to be combined in ways that link jobs and leisure activities with new or existing transit services.

- A bus or tram line running on reserved roads surrounding the city and linking surrounding areas in addition to the usually radial connections should be considered.

- Investment in city centre car parks and public transport should be coordinated to prevent one cancelling out the other.

- Useful sources of finance for public transport include city centre congestion charges, as in London, or levies on employers, as in France.

- Region-wide action to bring together all public transport operators helps to achieve seamless door-to-door travel. Such unions also help to achieve multimodal information centres and unified tariffs.

- see local practice: Aalborg (DK) – Parking Policy, where the Council extended the parts of the city centre covered by on-street parking charges and raised the fees to reduce traffic car journeys to the centre and people to use public transport.

Environmental friendly modes such as public transport and cycling , here in Graz (AT), complement one another.

FIT OUT, TAKE MEASURES AND ACTIONS

To compete with cars, public transport must continue to improve its speed, regularity and comfort. Easy access for pedestrians, speed, and regularity are key to attracting car users. The following steps are recommended:

- Buses, trams, cyclists and pedestrians should be treated as the main travel actors. Space devoted to cars should be reassigned to them.

- Traffic lights should be managed so that buses and trams stop only at places where passengers require them to.

- see local practice: Malaga (ES) – Centralised Traffic Light Management, which coordinates and optimises traffic lights with specific attention and priority to bus lanes.

- Regulating and managing the number and price of city centre parking spaces is an important tool in a pro-public transport policy.

- Employees should be given incentives to use public transport rather than cars whenever possible.

- Buses and trams should run on dedicated lanes wherever possible but share them with taxis, cyclists and emergency vehicles as appropriate. Delivery vehicles should be considered as possible users as well.

Dedicated Bus lane in Gent (BE).

- Stepless and gapless boarding to buses and trams is desirable and appreciated by all passengers, not only those with disabilities.

- Bus and tram shelters should be covered, well-lit and comfortable and provide real-time passenger information.

- The presence of an underground railway should not lead to the neglect of surface transport. Only a dense network of bus and trams services is capable of servicing a city at a "neighbourhood scale".

- see local practice: Montreuil (FR) – Promotion and Development of Public Transport, where, although extending its underground, trams have also been introduced in 2003 and small electric taxis in 2002 in an effort to replace cars for shopping trips.

- Clean and attractive vehicles give a feeling of "individual safety" while well-designed stops with good lighting, route maps and real-time trip information help to attract riders.

- Non-polluting vehicles help to give public transport a positive image and add to the status of its users.

- see local practice: Graz (AT) – Biodiesel from Waste Oil.

- see local practice: Valencia (ES) – ECOBUS, where 10 hybrid buses have been bought for use in the historical centre with cofinancing from the European Union.

COMMUNICATE, PROMOTE AND SENSITISE

Marketing, promotions and awareness-raising are indispensable in attracting people to public transport.

- Public transport should clearly "branded" so existing and potential users can see every element in the network as "part of a whole".

- To increase the quality and attractiveness of their services, managers should focus on customers' needs.

- see local practice: Vorarlberg Region and Oberes Rheintal (AT) – Board of Municipalities for Public

Transport, where 17 small municipalities collaborate to plan and manage the bus system. New incentives, such as presents, special fares and the possibility of carrying bicycles, are offered regularly.

- Successful managers use techniques such as market research and customer satisfaction surveys to identify the needs of potential passengers.

- Techniques that keep existing customers and attract new ones include individualised marketing, bonuses for commuter tickets, and the offer of free tickets and mobility diaries for a few weeks in exchange for car keys.

- see local practice: Lund (SE) – Bus Rider Project, where in an effort to convince residents of the advantages of public transport, 70 car commuters were persuaded to sign an agreement to commute by bus for two months.

- see local practice: Vienna (AT) – Individualized Marketing for Public Transport, where specially trained staff of the "Wiener Linien" visit potential passengers at home to give them individual information about public transport services that would suit them.

- Human factors are decisive in high-quality public transport. Successful managers train their staff in the subtleties of customer-oriented behaviour.

Public transport staff trained in the subtleties of customer-oriented behaviour is a success factor for public transport operators.

- Developing good relationships with prospective and existing customers and other stakeholders depends on a comprehensive approach to marketing that includes customer satisfaction surveys and the targeting of seniors, families, businesses and all other groups.

MONITOR AND EVALUATE

- Transit policy makers should always monitor their actions. This will involve:

  – tracking passenger numbers and changes in the modal split,

  – tracking how many traffic signals offer priority,

  – recording changes in levels of congestion and emissions,

  – setting up passenger advisory boards to suggest improvements,

  – using customer surveys to find out where to enhance quality,

  – using staff as "mystery shoppers" who act as "normal" passengers but actually perform quality control.

- Review regularly all safety, environmental and structural maintenance standards.

DEVELOP, ADAPT AND REFINE

- Previous experience should always be analysed and taken into account when planning new projects.

- Monitoring should enable local government to improve constantly the design and implementation of its actions.

- Targets should be set for the share of the market to be carried and the expansion of the service network.

DO NOT FORGET / WARNING

Hailed share-taxis, shared car services, car-pools, cycling and walking can be seen as rivals to bus, tram and train services. However, in most cases they bring more customers, provide a service to public transport or help to raise transit's share of the travel market.

- Well coordinated cooperation between the "soft" modes is a useful way to attract travellers from cars.

- see local practice: Bad Hofgastein/Werfenweng (AT) – Car Free Tourism Resorts The "Car-Free Holidays" offered by the local tourism resorts involve traffic innovations and links with "soft" modes. They include city centres free of motorised traffic, paid parking in centres, pedestrian and cycle-friendly street planning, car-free arrival of tourists, and subsidies of electric vehicles.

- Relationship between passenger transport authorities and transport operators are never rigid since, in the end, the authority determines the conditions of the agreement and pays the operator.

- Bear in mind the endless "public transport paradox". It saves money to rationalise transit services and adapt them to demand, but lowering the service attracts fewer travellers.

Cycling

Increasing the number of journeys made by bicycle can be a real objective adopted by local authority officials in their quest for a less congested, less polluted, and less noisy city that makes better use of space and energy. Along with encouraging a greater share of the number of journeys made on foot and by public transport, it is certainly one of the most effective methods available to cities where better quality of life - a desire now shared by a growing number of citizens - is the aim. Whilst bicycles are usually regarded as a simple "machine", reinstating it as a real mode of transport in urban areas, long regarded as private-car domain and hence developed to this end, is not so simple. This requires: political will, courage, and the force of a strong and determined conviction on the part of local authority officials; interest, competence, and a sense of dialogue on the part of those with technical responsibility; and patience and reason on the part of cyclists. Bringing all these ingredients together is a real challenge.

PLAN AND ORGANISE

- Consider the share of each mode of transport as a basis for your future cycling policy.

- The cycling policy should be an element of a global transport policy aimed at reducing the market share of private motorised traffic (modal shift).

- see local practice: Groningen (NL) – Cycling as a core of transport policy.

In Groningen (NL), thanks to a consistent transport policy aimed at encouraging the use of bicycles and discouraging the use of cars, especially for short distances, the market share of cycling is 50% over short distances (up to 7 km).

- see local practice: Lund (SE) – Bicycle City.

- Consider cycling as a real mode of transport and as alternative to the private motorised traffic with the ultimate aim of becoming one of the first modes of transport within the local authority.

- Set up an integrated plan and implement groups of measures step by step, as single measures only have a limited effect.

- Change priority rules for private motorised traffic and enforce the priority for cyclists over private motorised traffic when and where possible.

- Facilitate intermodality for cyclists (such as by allowing them to take bicycles with them in public transport).

- Simultaneously plan the improvement of existing infrastructures and the realisation of new ones, the ultimate aim being to build a comprehensive network, interconnected (without breaks), safe and comfortable.

- Activate existing potential, i.e. privilege rapid and easy-to-implement solutions instead of costly solutions (be cost effective!).

- Favour long distances by bike (5-15 km) to win market shares, such as by ensuring the continuity, interconnection, safety and comfort of the cycle network, by putting into force the priority for cyclists over the private motorised traffic at relevant crossings, etc.

- Improve the safety and comfort of the cycle network to reduce accidents.

- Launch/extend the pedestrianisation of the city centre and implement access restriction measures to the city centre for private motorised traffic plus traffic-calming/ living street measures.

- Plan your cycle network comprehensively to be hierarchical and interconnected, i.e. for the whole local authority territory (even though the fittings will have to be done phase by phase). Try to avoid developing "periphery" and "city centre" cycle networks with bad connections between the two.

- Involve local stakeholders in the preparation and implementation of cycling measures (cyclists, residents, and other road users like car users).

Promoting Sustainable Mobility… includes putting into force when and where possible the priority for cyclists over the private motorised traffic.

FIT OUT, TAKE MEASURES AND ACTIONS

- Redistribute the roadway between cars, public transport, cyclists and pedestrians (share of the space between the different users).

- Increase all road users' awareness of each other (signposting, road markings, etc.).

- Use all possible fittings/facilities to develop the cycle network and improve the cycling conditions for cyclists, including their security and comfort (attractiveness of the network). For instance, implement sufficient crossing facilities for cyclists that allow for early detection and good visibility for all road users, such as advanced stop lines for bikes at traffic lights; crossings that enable cyclists to cross busy roads in two stages; indirect "turn left"; bridges and subways to reduce distances; cycle gaps in no-through-roads, specific signs for cyclists and/or cyclists/pedestrians, cyclists/public transport; cycle network lighting; on-street facilities (benches, information points, fountains, toilets, etc.).

- To the extent possible, privilege cycle paths instead of cycle lanes.

DO NOT FORGET / WARNING

Cycling and walking, although the two most sustainable means of transport, do not necessarily live in harmony. They are two modes with very different characteristics and demands and only show limited compatibility. These specific demands have to be considered carefully when planning cycling lanes near sidewalks.

- Create/develop well equipped parking facilities for cyclists to avoid/limit theft; activate employers, big companies and shops to provide sufficient and safe cycle parking, such as covered bike parks / bike sheds close to public transport stops to encourage intermodality; spaces reserved for bikes and equipped with racks, bollards, hoops and other support devices, spaces reserved for all types of two-wheelers without any specific equipment or reserved for bicycles at specific times, for example when the area has several uses; pavement parking authorised for two-wheelers, etc.

- Introduce traffic-calming / living street measures (such as the establishment of 30 km/h zones, introduction of speed limitations, police enforcement).

- Implement specific measures to develop and facilitate cycling, shorten distances and increase safety, such as put into force within the local authority the priority for cyclists over private motorised traffic at relevant

crossings; two-way cycling in one-way streets; mixed-road pedestrians/cyclists and/or cyclists/public transport; permission to cycle in pedestrian areas, zones with limited access and no entry streets; anticipated traffic lights for cyclists; cycle paths next to busy roads, cycle lanes, contraflow cycle lanes, cycle gaps in no-through roads, etc.

> **DO NOT FORGET / WARNING**
>
> Allow cycles in pedestrian zones to improve the attractiveness of cycling. Nevertheless, bicycles are "guests", so a testing phase should be introduced first, with an accompanying awareness-raising campaign.

- Implement local regulations to increase the offer of parking facilities for cyclists (such as via the urban development plan).

- Where possible, convert on-street car parking into cycle parking.

- Provide special and attractive services, such as: bike renting (such as via e-cards); available bicycles free of charge at different points within the local authority; multi-purpose bicycle station; cycle lockers; cycle maintenance service; uphill bike tows; provision of public pumps and telephone booths for cyclists, bike anti-theft identification services, etc.

- ◆ see local practice: Koprivnica (HR) – City Bikes.

- ◆ see local practice: Rennes (FR) – Pro-Cycling Facilities and Public Bikes.

- Involve shopkeepers to offer free delivery of goods to cyclists.

- Create a "bicycle office" and/or appoint a municipal civil servant exclusively in charge of cycling issues to coordinate the local authority's cycling policy and advocate more and safer solutions.

COMMUNICATE, PROMOTE AND SENSITISE

> **DO NOT FORGET / WARNING**
>
> Do not promote cycling until the local authority has implemented traffic-calming / living street measures or has a minimum of safe infrastructure facilities for cyclists.

- Regularly launch information and awareness-raising campaigns and advertising campaigns in the media to promote cycling (for instance, directed at school children, companies and their employees, tourists, etc.) and to put forward the benefits of cycling (for health, for the environment, etc.). Safety, theft, air pollution, etc. are possible themes of action.

- ◆ see local practice: Odense (DK) – Good Examples for Improving the Daily Use of Bicycles.

Odense (DK), Denmark's National Cycle City, has launched many campaigns aimed at making people sensitive and interested in the daily use of bicycles. As a result of the transport policy and bike promotion, the modal split has changed in favour of cycling: +50% cyclists from 1990 to 2000! "RIT – a campaign in day-care institutions", "Freewheeling – a campaign for school children", the "Bike to Work" national campaign and "The Annual Bike Festival" are successful examples of cycling promotion campaigns.

- see local practice: Lausanne (CH) – Representatives for Pedestrians and Cyclists.

  In order to respond to user demand, promote non-motorised transport and put favourable planning measures into place, Lausanne (CH) created two new positions within the municipality: one representative for pedestrians and one for cyclists in 1996 and 2000. They work with a support group and the various municipal departments concerned. They also serve as intermediaries between citizens and municipal authorities.

- Promote incentives that make car users experience the benefit of cycling.

- Organise training sessions on how to cycle in the city.

- Introduce a signposting system for the cycle network as it considerably increases the visibility of your cycling policy.

- see local practice: Kiel (DE) – Veloroutes.

  In Kiel (DE), veloroutes are special signposted main connections within the 190 km long bicycle network. The special signposts with white signs and red letters correspond to everyday routes and those with green letters to leisure routes. Signs in form of tables are used at important junctions. The signposting not only supports orientation along the main routes but is also an important factor for image and awareness-raising for cycling.

- Publish different documents such as maps of the cycle network with various information concerning the cycling policy, the services provided, etc.; information leaflets with the new realisations and measures, the last achievements in terms of traffic, etc.

- Organise events and contests to sensitise people (such as Cycle Week, European Mobility Week, etc.).

- Involve inhabitants in municipal activities related to cycling policy to better satisfy their needs and expectations (public participation process), such as in the preparation of a new action plan to develop cycling, in conducting studies, creating information and reflection groups for bicycles, establishing a public participation process per neighbourhood, etc.

MONITOR AND EVALUATE

- Monitor and evaluate the impact of your cycling policy, especially in terms of:
  - evolution of the modal split,
  - increase of the market share of cycling,
  - parking facilities for cyclists,
  - safety (decrease in the number of accidents),
  - relevance and efficiency of the services provided,
  - reduction of noise, air pollution and energy consumption,
  - public acceptance (opinion polls).

- Use a quality management tool for the evaluation of your local cycling policy.

DEVELOP, ADAPT AND REFINE

- On the basis of the results obtained:
  - set new objectives, especially in terms of the market share of cycling,
  - plan improvements in the existing network (permanent improvement process) but also extend it when possible (continuity, interconnection, safety, comfort, signs, etc.),
  - define common strategies and measures for cycling and public transport,
  - address home-to-work trips,
  - create new services and launch new information and awareness-raising campaigns to reinforce the attractivity of cycling.

Promoting Sustainable Mobility… includes walking and cycling in our city centres.
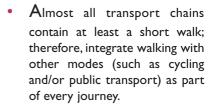
Walking & Pedestrians

Everyone walks! To make this common action safer, convenient and pleasant, a careful walking policy should be implemented in every city. The benefits of walking are well known and not only related to health or environmental issues, but also to the creation of vibrant street life. Here are some recommendations that can help achieve accessible, convenient, safe and enjoyable walking environments for everyone.

PLAN AND ORGANISE

- Seek integration with land-use planning and policies for education, health and the environment. Pedestrianisation is to become a priority in every city, since its benefits are always widely appreciated and enjoyed at all levels.

- Let policy, funding and guidance of the municipality reflect the higher priority attached to walking. Everyone in the city is a pedestrian; therefore, local targets to encourage walking - including budgetary measures - should be set.

- Creating well adapted communities for pedestrians starts with the very nature of the built environment, including: keeping destinations close to each other, siting schools, parks and public spaces appropriately, allowing for mixed-use, and creating commercial districts people can access by foot and wheelchair.

- Where new developments are expected to generate many travels, they should be placed in existing centres so they are accessible by walking. They should be planned with a mixture of uses that have easy pedestrian access to each other.

- Retain existing facilities in neighbourhood centres as much as possible, so that they are within walking distance of people's homes.

- The creation of a well-connected pedestrian zone in downtown areas, in which strolling and shopping represent the most important options, is highly recommended. It must be designed without barriers for the disabled.

- see local practice: Larissa (GR) – Pedestrian Network – and Terrassa (ES) – Comprehensive Pedestrian Plan –, where the Pedestrian Plans and their corresponding measures to build pedestrian networks have totally transformed the city centres and improved citizens' quality of life.

- The linked pedestrian networks have to be of high quality with easy, safe, convenient and well signposted paths for all users, including the disabled, particularly between key destinations such as residential areas, schools, shopping areas, bus stops, stations, and places of work.

- Consider the establishment of walking-friendly employer initiatives and "walking to school" programmes as part of the town's travel plan.

- Almost all transport chains contain at least a short walk; therefore, integrate walking with other modes (such as cycling and/or public transport) as part of every journey.

- Involve pedestrian organisations and neighbourhood associations in all planning processes for pedestrianisation.

- Local authorities should keep informed of the latest developments in pedestrian technologies, such as accessibility materials and aids for the disabled or mathematical modelling of pedestrian flows.

Promoting Sustainable Mobility… includes giving priority to pedestrians.

FIT OUT, TAKE MEASURES AND ACTIONS

- Organise well the distribution of the roadway between cars, public transport, cyclists and pedestrians, considering as often as possible pedestrians and cyclists as main actors.

- Adopt standardisation so that pavements and footways are convenient, well designed, and soundly built for pedestrians.

- The pedestrian network should be easily recognisable; coloured pavement and specific pedestrian signs, indicating pedestrian routes and times to reach the main places of interest in the city ought to be considered. Likewise, neighbourhood identification through specific colours or materials, welcome signs and other details can enhance the walking environment and sense of community.

- When main routes include crossing busy, high-speed highways, railroad tracks or natural barriers, the construction of pedestrian overpasses and underpasses allowing uninterrupted flow of pedestrian movement, separated from the vehicle traffic, should be considered. However, in the case of city roads, convenient surface crossing (i.e. including appropriate measures) should be preferred over underpasses or overpasses, which are expensive and might discourage some pedestrians from walking.

- Landscaping in medians, although convenient for creating attractive environments, should not obstruct visibility between pedestrians and approaching motorists.

- To prevent accidents at intersections, kerb radius reduction might be considered in some cases, since it reduces overall crossing distance and reduces the time needed for the pedestrian phase.

- Consider the use of tools such as kerb extensions, chokers, crossing islands, chicanes, mini-circles, speed humps and tables, raised intersections and pedestrian crossings, gateways, serpentine designs, purely residential areas, landscaping and specific paving treatments to make walking safer and more attractive to citizens.

- Consider electronic devices to enhance traffic signals, such as automatic pedestrian detectors and countdown signals providing pedestrians with information about the time remaining in a crossing interval.

- Give full consideration to access for people with disabilities at all levels. Measures to reduce architectural barriers must be included in all street and road construction and reconstruction schemes. Networks of barrier-free streets and roads should be continually extended, starting with the inner city towards outlying districts.

- see local practice: Olomouc (CZ) – Accessible Olomouc.

- see local practice: Koprivnica (CR) – Continuous Reduction of Architectural Barriers.

- Disruption and inconvenience to pedestrians during pavement works should be minimised as much as possible, and special attention should be paid to using high quality materials and appropriate design, which can greatly improve pavements and reduce the maintenance required. This management can be implemented by coordinating the follow-up of the different works and trying to combine them.

- To ensure an adequate maintenance of pavements during their entire lifetime, warranty systems - in which the company that contracts the pavement works pays a sufficient deposit to cover any costs incurred due to maintenance of the pavement - may be considered.

- Contemplate the construction of pedestrian (& cycling) routes that encircle the city and link surrounding areas. The loop could connect to the city centre by means of green areas, thus acting as a link between currently separated open spaces, parks and sporting areas, a truly structured system for both the city and its outlying community areas.

- Where cyclists share the route with pedestrians, it is important that bike users not intimidate walkers, especially people with sensory impairments, the elderly and parents with young children. Segregated facilities not only benefit pedestrians, but can also be advantageous for cyclists in that pedestrians do not impede their passage. Cycle paths should ideally be separated from footpaths by a difference in level or a physical barrier.

Pedestrianisation can boost an area's commercial activity.

- Specific areas may be closed to vehicle traffic by means of automatic bollard systems or remote control devices aimed at preventing access by unauthorised vehicles. Taxis, residents and emergency services may be given a specific identification card to access and park in the area. Access may also be allowed to special bus services taking passengers from the city outskirts to the pedestrian areas.

- Transform the shopping streets in the town centre into a pedestrian network on weekends, with some entry points left to allow local residents access to the town centre with their cars. The same measure can be implemented at school entrances during school rush hours.

- see local practice: Le Mans (FR) – Pedestrian Saturdays –, where every Saturday afternoon, from 1 p.m. to 7 p.m., the shopping streets in the town centre are closed to motorised traffic.

- Convert unused lots in the city outskirts into public car parks. The car parks should be free of charge and allow drivers to park and either walk to the city centre or go by public transport.

- At crossroads, reduce waiting times for pedestrians where possible. Pedestrians are likely to ignore red lights when waiting times are too long. Therefore, measures such as favouring higher frequency of pedestrian phases, reducing the crossing distance, increasing the distance between the traffic stop line and the crossing, or implementing mathematical multi-modal crossroads models should be considered.

- During hours of darkness, adequate lighting, mixed-use developments and appropriate urban design (i.e. avoiding the construction of alleys and blind corners) will surely encourage a greater number of night-time pedestrians.

Good street lighting design is important for creating safe and enjoyable urban environments at night.

- Adequate design and conditions of bus stops – especially lighting - would also help encourage people to walk and use public transport rather than drive. Close-circuit television can also be effective.

- In areas of high pedestrian activity, promote the implementation of low-speed zones, the reallocation of road space to pedestrians, and other traffic-calming measures. Consider also increased prosecution of excessive speed, dangerous driving, illegal manoeuvres, footway parking and drunk driving.

- Ban pavement parking so that it does not affect accessibility and pavement quality.

- Promote pedestrian-based businesses and cultural activities.

- Implement a system for accompanying children on their way to school in some neighbourhoods, with the help of volunteer parents with identification badges. This "walking bus" scheme can operate thanks to a voluntary parental collaboration with organisational and logistic support from the local authorities (see also the recommendations on mobility plans).

COMMUNICATE, PROMOTE AND SENSITISE

- Increasing walking requires a comprehensive approach that includes long-term awareness-raising and educational campaigns directed at the general public, politicians and opinion leaders right from the first steps of the process.

- Promotion should be undertaken to change existing attitudes to walking and to publicise new and existing facilities. Shopkeepers, neighbours, parents, pupils, and all public path users should be aware of the measures adopted to promote the development of a more sustainable urban mobility by means of campaigns closely tailored to the target audience.

- Launch publicity campaigns to inform the public about the health, environmental and economic benefits of walking. The programmes should be highly visible and covered by all available means of communication.

- Information leaflets, including journey times by foot, initial walking network and proposed extensions, can be created and distributed to the public.

- see local practice: Poitiers (FR) – Information Leaflets – where information leaflets and pocket maps, with journey times and lists of the personal and environmental benefits of soft modes of transport, have been published.

- Permanent information boards can be installed to provide the population with information about the specific measures and regulations adopted that will affect pedestrians.

- Pay special attention to improving awareness between pedestrians and other road users to help create a safer and less intimidating environment for pedestrians. Integrate measures such as campaigns on the behaviour of different road users at crosswalks or cycle & pedestrian trails as part of the local policy.

Pedestrianisation and street design can help create vibrant urban environments.

- Promote walking for recreational purposes linked to travel awareness campaigns aimed at encouraging walking and cycling - and thus to reduce car use - as alternative modes of transport.

- see local practice: Maribor (SI) – Guidelines for the Development of the Municipal Transport Policy, where inhabitants and pedestrian organisations should be involved as much as possible in municipal transport and pedestrian policy and in all pedestrian-related activities (events, campaigns, contests, conferences, etc.).

- In schools, pupils can be asked to produce leaflets for children and parents about the benefits of walking to school. It can be a good example of involving the target audience in promotional work.

MONITOR AND EVALUATE

- The local policy makers should always monitor the effectiveness of the measures implemented. The monitoring will include:

  – evolution of modal split,

  – assessment of the length of pedestrian routes that have been audited,

  – previous and post-pedestrian route improvement surveys,

  – number of pedestrian-friendly crossings provided,

  – accessibility achievements,

  – safety improvement,

  – reduction of congestion and pollution.

- Organise meetings with pedestrian groups, other organisations and the wider community aimed at monitoring measurements of accessibility to public roads and paths, public spaces and buildings, discussing results and suggesting improvements. Local people must have the opportunity to raise issues and identify problems.

- Safety, environmental and structural maintenance standards on pedestrian paths ought to be reviewed and monitored constantly, including lighting and winter maintenance (including salting and snow clearing arrangements).

- "Encouraging walking: advice to local authorities" (Department of the Environment, Transport and the Regions, UK, 2000) recommends the "5 Cs" checklist to assess the overall quality of the existing environment for walking: "The local walking environment should be well Connected (walking networks giving good access to key destinations), Comfortable (in terms of footway width, walking surfaces and planning for disabled people), Convenient (easy, safe and no-delay street crossing), Convivial (interesting, clean and free from threat routes) and Conspicuous (walking routes clearly signposted and published in local maps).

DEVELOP, ADAPT AND REFINE

- Analyse all results of and conclusions from previous experience and take them into account for the planning and development of new projects to improve pedestrian facilities.

- As a result of the monitoring process, constantly improve the design and implementation of future measures and adaptations and obtain the maximum benefit from their expenditure.

- Set new objectives in terms of market share of pedestrians and extension of pedestrian networks.

Mobility Advice & Campaigns

The long experience with campaigns, such as the European "In town without my car!" campaign or the European Mobility Week, along with the experience with mobility centres, show us that advice and campaigns on sustainable mobility issues can be an important aspect of an integrated urban transport policy.

Mobility advice services and campaigns are a combination of three factors:
- traditional campaigns with targeted and persuasive communication using different media and developed around information and motivational aspects,
- "dialogue marketing" techniques, image or brand building, social & cultural events and educational programmes using a detailed break down of types of different users and target groups combined with counselling and personal advice,
- specific hardware or traffic organisation measures with and in the interest of the public. These measures can be first tested and presented as an experiment and later permanently applied.

PLAN AND ORGANISE

- It is good to start a campaign out of concern for global or general problems, such as climate change or air quality. Contributing to solving these problems can be the broad objective of your campaign. However, to communicate and promote your ideas and actually raise awareness, it is crucial to bring the objectives closer to the daily concerns of the campaign's target group to make sure they feel addressed and link the message of the campaign with their own needs.

- A baseline to every mobility campaign and advice is the lowering of the thresholds to the use of the preferred transport mode. People can feel thresholds concerning budget, safety, comfort, punctuality and accessibility. The information given in a mobility centre breaks down a barrier to the use of, for instance, public transport. In addition, the "cycling bus" has to be seen in this regard. By organising children's trips to school in a more centralised and safe (!) way, you make it easier for parents to let their children cycle.

- A legitimate legal basis for the campaign is important. Make sure that the measures implemented are democratically passed in the city council.

- Cities should carefully consider the arguments for and against outsourcing the campaign or advice service in whole or part. Either way, the city should remain visibly committed. Take the time needed to go through a tender process for selecting the communication agency into account in your schedule.

- From the start, politicians, media, and local organisations should be involved in the development of the campaign. For a mobility centre, public transport authorities and operators are the most important partners.

- To be able to evaluate the impact of your campaign, quantitative and qualitative targets need to be set already in the planning phase, such as about modal shift. This is also true for a mobility centre. Targets are set for the number of people and organisations that need advice and for their appreciation of the services rendered.

Personal mobility advice in a mobility centre.

- A public awareness campaign can focus on the preparation of a measure. Preparatory methods can be public involvement meetings, mobility forums, demonstration of limited car access schemes in preparation of permanent implementation, etc. These kinds of activities provide a good assessment of public opinion. Along with an early involvement of the media, they can pave the way for citizen ownership of permanent mobility measures.

- Define the target group in an early stage of the planning process. Use the multiplication principle as much as possible: it is easier to contact one school than 1,500 children directly.

> ### DO NOT FORGET / WARNING
>
> Think multi-modally from the start. Campaigns focused on the promotion of one transport mode will affect the use of other transport modes.

- A timeline indicating key events is necessary. It is obvious that the weather can be decisive in the success of a campaign. Think about alternative solutions when planning the date of big outdoor events.

- In general, mobility management campaigns can consist of "push" (vinegar, stick) measures and "pull" (honey, carrot) measures. Most cities choose for a positive message and thus for "pull" campaigns. It is recommendable to add carefully chosen "push" measures (such as enforcement of limited car access areas, parking restrictions at school entrances). It is clear that, along with "push" measures, sufficient means must be available to allow people to use an alternative transport mode (such as more buses, a bike rental system). Another "pull" or "carrot" measure is the possibility of rewarding people after they have "done the right thing". These rewards can have many forms [be registered on a (published) list of participants, discounts in shops]. A similar methodology is challenging individuals or groups to reach a certain goal (such as leaving your car at home on Thursdays) or to involve them in a game or a contest (such as a lottery). In this case, only the best or the luckiest are rewarded, not everyone. Some target groups do not like this.

- A very successful way of promoting sustainable transport is to spice up and add value to existing ways of going to work or to school. A good example is the "walking bus". Probably, a lot of children walk to school together now and then. The "walking bus" concept gives a new name to something existing. It makes children want to be part of it. Another example is home-to-work car-pooling. Some people drive to work and back together. In adding value (car-pool matching, dedicated car park spaces, extra driver's insurance) other people are aware of the possibility and might join in. And car-pool veterans are rewarded as well.

- Look for a brilliant idea that does not cost much!

- see local practice: Ljubljana (SI): Living Street Day – The City participates in sustainable urban mobility campaigns such as the "In town without my car!" campaign and the "Safe Walk to School" programme. During the Car Free Day (every year), flowerpots are put on a total of 300 parking spaces (approx. 10% of all city centre parking spaces) from 8 a.m. until 6 p.m.

- The organisation of a mobility advice centre is mainly planned as a company: most of the Mobility Centres in Europe have a business plan, a board of managers and clear budget targets.

FIT OUT, TAKE MEASURES AND ACTIONS

- Sustainable mobility policy is a mix of the "4 Es": Engineering, Education, Encouragement and Enforcement. It is clear that in local campaigns and mobility management schemes, education and encouragement are emphasised. However, educational and promotional actions lead to nothing if not backed by complementary and permanent hardware measures in the field of infrastructure or transport equipment. State-of-the-art, comfortable public transport vehicles, roads, sidewalks, bicycle lanes and public domain furniture can demonstrate that public services are serious about promoting a new mobility culture.

> ### DO NOT FORGET / WARNING
>
> The campaign will not be a success unless there is a link with visible permanent measures and an involvement of the organising authority on this aspect.

- Most local campaigns are part of a regional, national or even European framework. The other governance levels can offer a lot of opportunities and support (in forms of financial contribution, shared expertise) for local campaigns. The campaigner should be informed about the occurrence of these opportunities. The campaigner should also examine the possible synergies with other ongoing campaigns or action days (for instance, heritage days: use public transport to visit cultural heritage).

- The campaign's and mobility centre's budget has to be balanced. Financial contributions can be made by different authorities that are involved, and/or by sponsorship. Financial contribution to the campaigning budget is the most obvious, but not the only way partners in the campaign can contribute. Other ways of contributing can be voluntary manpower, discounts, free use of equipment. If necessary, the commitment of partners contributing "in kind" can also be formally noted or be the subject of a contract, i.e. cheap access to the public transport network for a week. This could be partly financed by the competent authorities (which increase the subsidy to the public transport operators for these days, the public transport operators themselves with the acceptance of low or no profit during these days) and the public who pays a cheap(er) fare.

- The effective organisation of a campaign and mobility centre requires a well-structured network. Each partner of the campaign should appoint one contact person. Most campaigns are run with a centralised structure, where the campaigning secretariat dispatches to the different partners. If people have questions about the campaign, they must be directed to one desk.

- People like gadgets. Participants in mobility management schemes appreciate the fact that the extra transport equipment is available at low or no cost and in sufficient (abundant) amounts. Extra transport equipment can enhance the image and comfort of a transport mode (free trial of bicycle trailers, antitheft bicycle racks, etc.). It can also add to the safety of a transport mode (reflecting material, bicycle helmets, etc.).

- A high-quality corporate style that can be used for several years reduces costs in the long term.

DO NOT FORGET / WARNING

Find a catchy name and slogan for the campaign.

- Although campaigns and mobility advice services start from an enthusiastic feeling about sustainable transport modes, please give objective information (such as time charts per mode). People like short, simple and personalised information. It is better to print three targeted leaflets than one complex brochure.

- see local practice: Karlstad (SE) - Sustainable Travel to the University. The University is expanding and faced with too many car commuters. Measures taken were pre-trip information packages and a free ticket offer for new students. Personal travel advice is given twice a year to students and staff at a temporary mobility office.

COMMUNICATE, PROMOTE AND SENSITISE

- The consultation and involvement of relevant stakeholders is necessary to have positive exposure of the campaign. Their (lack of) support can make (or break) the success of the campaign. A small but strong, vocal group of opponents can send the campaign into a downward spiral. Put enough effort into consulting and informing these groups and try to create win-win activities in the campaign's programme. Local organisations should be involved. Schools are also important partners in creating a win-win situation. It is productive to set up links between schools' educational objectives (often part of their legally required work programme) and the campaign's objectives and targets. As mentioned before, it is easier and more effective for campaigners to teach the teachers than to teach the children.

The European Mobility Week (EMW) methodology describes four types of partner organisations:
- NGOs and associations,
- Transport companies and authorities,
- Businesses,
- Other partners.

These partners were involved in the following type of events during the EMW:
- Public Transport,
- Cycling,
- Living Streets and Greenways,
- Responsible car use, car-sharing and car-pooling,
- Mobility management for companies and administrations,
- Mobility management for schools,
- Leisure and shopping,
- Involvement of citizens in the implementation of a measure.

- see local practice: Nantes (FR) – Balad'air. The city of Nantes is a French pioneer in environment and air quality management. Balad'air is a guided educational walk through the heart of Nantes that illustrates the effects of atmospheric pollution on the urban environment.

Spice up existing ways of going to work or school.

Ferrara's European Mobility Week Poster.

- Campaigners must examine the complementary use of the media. Accurate knowledge of the local media (target groups, readership, the editor's position towards the campaign) is important. Information media within the partner organisations are a useful communication tool as well. Do not forget the most classic form of communication with media: a press conference. The message communicated to and through the media should be interesting in terms of image, but also in terms of education (i.e. presentation of relevant key figures and data on pollution, energy consumption or modal split). During the events, on-the-spot information (such as mobile information stand) must be available. Not everybody visiting the site of the event knows what is going on. A dedicated website or intranet site is a must.

- see local practice: Geneva (CH) – Communication strategy for the 2002 European Mobility Week: partnership with a local newspaper, a local radio station and a local TV channel, a newsletter distributed to 250,000 households, and a mobile information stand made it possible to establish a dialogue with the local population. To cover the whole population, three press conferences at various levels were organised.

- The guaranteed participation of city officials is a necessary and efficient communication message. This is also good for the monitoring and evaluation of the activities. The civil servant responsible for the campaign (being near to this target group) gets direct feedback from his colleagues.

Links between the schools educational objectives and the campaign's objectives.

MONITOR AND EVALUATE

- A thorough evaluation is only useful when there is a follow-up to the campaign or a long-term basis for the mobility centre.

- When the campaigner or the mobility centre has set clear quantifiable targets at the start of the planning process, monitoring and evaluation will be easier to realise. Focus on the target group addressed in the campaign. Do not forget to evaluate qualitative aspects of the campaign as well. Before collecting your own evaluation data, think about easily accessible data collected in other ways (number of public transport trips, traffic counters, feedback from the media). Before organising a survey, think about other ways to get information. There are several levels of evaluation. How many people know of the campaign? How do people feel about the campaign? How many people joined in the activities?

- Save some time and energy to talk to volunteers in the campaign or desk officers in the mobility centres. The people in the front line are very acutely aware of the general feeling surrounding a campaign or the centre. The information they can deliver about the practical arrangements is very valuable.

- Also try to register positive and negative fall out: local measures have sometimes a large-scale impact.
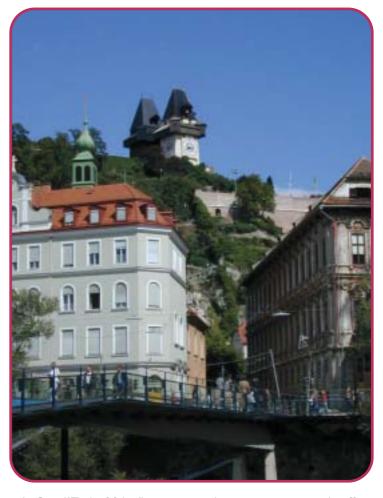
DEVELOP, ADAPT AND REFINE

- A campaign is always part of a larger process and policy. Do not start something without knowing about the possibility of having a continuation in the weeks, months or years following the campaign. The partners must be involved during the follow-up of the events. The campaign must result in new commitments for permanent, visible mobility measures. Partners, volunteers and members of the target group will be fairly disappointed when the event they all worked hard for dissolves into the inertia of the city authority.

- A good campaigning and mobility centre concept can be exported to neighbouring cities or areas or other organisations. This can strengthen the campaign.

- After a successful experience, widen the scope and/or the size of the campaign. Use the benefits of low marginal costs: how much would an additional day of campaigning cost? Does the cost of organising one car-free day a year differ substantially from organising it twice?

Traffic-Calming / Living Streets

Traffic-calming / living street measures are certainly one of the preferred elements in mobility policies that seek to redefine priorities, in particular by reducing speed and restricting access to the town centre. Measures of this type reconcile safety, traffic and local life requirements where residential activities and community life take precedence. They offer increased safety for the various users involved (cyclists and pedestrians in particular) and allow for greater freedom for children and people with limited mobility. But that's not all: such measures also result in improved quality of life, a desire now shared by a growing number of citizens, through a better distribution of road space between these users. They deal a fairer hand in terms of road use and in terms of the priorities given to the different modes of transport. Moreover, they contribute to reducing noise, pollutants, greenhouse gas emissions, and energy consumption in urban areas. In summary, they are one of the reasons people return to live in the city. But they also go against established habits. Here are some recommendations that can help achieve successful traffic-calming / living street policy.

PLAN AND ORGANISE

- Consider the legal framework applicable, especially in terms of speed limitation of traffic at 30 km/h and even below (there must be a legal basis).

- The traffic-calming / living street measures should be part of a global transport policy allowing for the coordinated, efficient use of all modes of transport (public transport, private vehicle, bicycle, walking, etc.).

- The traffic-calming / living street measures should be mainly:

  – aimed at reducing the predominance of the car over other modes of transport in a given area (such as the local authority or the conurbation), in particular through appropriate use of urban road space, speed limitations, etc.,

  – used as an instrument to improve the possibilities of travelling by other modes of transport than the car.

- The traffic-calming / living street measures can be implemented independently of the size of the local authority and may concern the whole or part of the city centre, the surroundings of the pedestrian area and may be extended to residential areas located outside the city centre.

- see local practices: Graz (AT) – Permanent Measures for Sustainable Mobility.

In Graz (AT), the 30 km/h zone covers the entire city centre and traffic-calming / living street measures are very well accepted, most probably because of the successful results obtained in terms of quality of life, the decrease in accidents and noise level, etc. According to an enquiry carried out in 2002, 80% of the inhabitants are in favour of the 30 km/h zone.

- Set up an integrated plan and implement groups of measures step by step; one single measure has a limited effect.

- Activate the existing potential, i.e. privilege rapid and easy-to-implement solutions instead of costly solutions (be cost effective!).

- Establish a strong link between the traffic-calming / living street measures and parking policy: reduce the number of parking spaces (especially on-road) in the city centre, avoid through-traffic, restrict access to the city centre by car, except for few categories like residents, and create Park and Ride facilities in the periphery of the city (such as for commuters).

- see local practice: Parma (IT) – Governing Sustainable Mobility.

*In **Parma (IT)**, accessibility rules aimed at radically reducing private motorised traffic, especially in the city centre, have been implemented with the final objective of improving the quality of life. The whole historical centre is now a limited traffic area (ZTL), and priority is always given to sustainable modes of transport (public transport, cycling and walking). Thanks to the measures taken, Parma is now considered a model city in Italy.*

- Traffic-calming / living street issues should not be limited to speed limitations and/or access restrictions but should be extended to other concepts like the one of "Home Zones" in the United Kingdom or "Zones de flânerie" in Switzerland where the safety and the attraction of the streets in a given area are also improved, the use of the streets diversified, community life in the neighbourhood developed, residents involved in the preparation and implementation of the project, etc.

- see local practice: Geneva (CH) – Improved travel safety and quality of public spaces.

  In Geneva (CH), a consultation process led to proposals for the introduction of traffic-calming / living street measures in the Eaux Vives district. Initiated upon request of the inhabitants, the demands were to reduce through-traffic, free up parking spaces occupied by people commuting to the area, upgrade the quality of public spaces, and increase safety for cyclists and pedestrians within the community. As a result, different measures were implemented (e.g.: introduction of parking permits which improved parking for residents and commercial visits, pedestrianisation of several streets, etc.). They all contributed to a more convivial district!

- Traffic-calming / living street measures should be considered as a pillar for current and future large urban renewal initiatives. The promotion of the mixed use of streets (such as shopping and housing) is part of this.

- see local practice: Vienna (AT) – Car free Housing.

- Involve local stakeholders in the preparation and implementation of traffic-calming / living street measures (the car users, the residents and the shopkeepers especially).

- A well developed trial period is generally a guarantee for success.

FIT OUT, TAKE MEASURES AND ACTIONS

- Redistribute the roadway between cars, public transport, cyclists and pedestrians (share of the space across different users).

- Convert on-street parking spaces into pedestrian areas, especially in the city centre.

- Increase all road users' awareness of each other (signposting, road markings, etc.).

- Improve the safety and the comfort of the roadway to reduce accidents.

- Improve accessibility for people with disabilities and consider your action in this field an essential part of the living streets approach. This benefits all!

- In addition to speed limitations, use all possible fittings/facilities to:

  – reduce speed of private motorised traffic. For instance: building of chicanes, roadway narrowing, road humps, conversion of two-way streets into one-way streets, construction of mini roundabouts

at junctions. All these facilities require the implementation of other measures, such as parking on alternating sides or the creation of cycle tracks, the re-vegetation and modification of street furniture, choice of different materials from those usually used for road works (textured and coloured surfacing),

– develop the cycle and pedestrian networks and improve the travelling conditions of cyclists and pedestrians, their safety, security and comfort (attractiveness of both networks). For instance, implement sufficient crossing facilities for cyclists and pedestrians that provide early detection and good visibility for all road users.

- To reach your objectives in terms of speed limitations, you need a complementary approach for: road design/physical obstacles/fittings (see above), signposting, road markings, and combine both.

- If for a question of strategy and/or cost the objective is to reduce the number of physical obstacles/fittings to the bare minimum, speed controls can be a useful instrument to make your policy successful.

- Follow a special artistic line to reinforce the identity of the neighbourhood/district or of the large urban renewal project. Projects carried out at the roadway level may also contain a modification of public lighting, or some artistic elements/components.

- Make something happen in the streets: art exhibitions, objects for children to play with, skater zones, places to sit and meet, etc.

- On the local authority scale, traffic-calming measures imply coherence between two networks: a "fast" one, allowing for connection and easy-quick access

between different districts/neighbourhoods; the other rather "slow" for journeys within the district/neighbourhood itself. The implementation of traffic-calming measures in the city centre requires efficient management of traffic in the periphery. The possible solutions include ring roads and Park and Ride facilities aimed at favouring the modal shift from cars to efficient public transport for people wishing to reach the city centre, etc.

- If necessary, change priority rules for private motorised traffic and give priority to cyclists and/or pedestrians within the traffic-calming / living street areas.

- Try to pay more attention to the most vulnerable modes of transport (cycling and walking especially), children being a special target group. Once the habit of travelling by bike or by foot is developed, the use of public transport becomes also more obvious to complement "soft modes of transport".

- Establish as many 30 km/h zones as possible without forgetting the necessary accompanying measures (see the respective recommendations in this section).

- Traffic-calming / living street measures must quickly show their relevance and have immediate impacts in terms of behavioural change.

- Find ways to put more greenery on streets (such as by growing plants on the sidewalk close to the front of houses, by removing one row of bricks on the sidewalk, etc.).

- When preparing and implementing traffic-calming / living street measures take the opportunity to:

– promote walking (such as by establishing pedestrian areas or launching/extending the pedestrianisation of the city centre),

– promote cycling (such as by improving and expanding the cycle network),

– promote public transport (such as by developing the public transport network and increasing the offer/frequency),

– reduce private motorised traffic (such as by implementing access restriction measures to the city centre except for a few categories like residents) and take action in the field of parking (such as by decreasing the offer in the city centre and increasing the offer in the periphery to limit the presence of cars and facilitate the modal shift from private motorised traffic to public transport, in particular),

Promoting Sustainable Mobility… includes sharing the street with all users: public transport, cyclists, pedestrians and car drivers.

Promoting Sustainable Mobility… includes extending pedestrian areas to make our city centres friendlier.

– better manage goods delivery (such as with local regulations to optimise goods delivery),

– improve intermodality by coordinating the different activities/measures.

◆ see local practice: Thessaloniki (GR) – Seashore Urban Transport and New Quay Area.

◆ see local practice: Berlin (DE) – Goods Traffic Platform.

COMMUNICATE, PROMOTE AND SENSITISE

• Regularly launch information and awareness-raising campaigns to promote traffic-calming / living street measures (such as directed to car users, residents, shopkeepers, school children, etc.). Road safety, noise reduction, air pollution, etc. are possible themes of action.

• Launch advertising campaigns in the media and put forward the benefits of traffic-calming / living street measures (in terms of car accidents, air pollution, noise, quality of life, etc.).

• Publish different communication aids and tools (such as map of the traffic-calming / living street areas with information concerning the policy carried out, the measures in application, etc.); website and/or information leaflets (such as including new realisations, last achievements in terms of traffic, car accidents); (TV) commercials on road safety.

• Organise events and contests to raise awareness of the population (such as the traffic-calming / living street day, the European Car Free Day, etc.).

• Involve local stakeholders (car users, residents and shopkeepers especially) in municipal activities/projects related to traffic-calming / living street policy right from the beginning to better satisfy their needs and expectations and limit dissatisfaction (public

participation process, such as in the preparation of a new action plan to favour traffic-calming, in conducting studies, via the creation of an information and reflection group on the subject, via the establishment of a public participation process per neighbourhood, etc.).

• Pay particular attention to school streets when communicating, promoting and sensitising.

MONITOR AND EVALUATE

• Monitor and evaluate the impact of your traffic-calming / living street policy in particular in terms of:

– evolution of the modal split (within the local authority and also within the city centre),

– increase of the market share of cycling and walking,

– reduction of vehicle speed,

– road safety (decrease in the number of accidents),

– reduction of noise, air pollution and energy consumption,

– public acceptance (opinion polls).

• Use a quality management tool for the evaluation of your local traffic-calming / living street policy.

DEVELOP, ADAPT AND REFINE

• On the basis of the results obtained, plan the improvement of existing traffic-calming / living street measures (permanent improvement process).

• Study and plan the extension of traffic-calming / living street measures to other areas and the expansion of the pedestrian area (continuity, safety, comfort, etc.).

• Fix new objectives in terms of:

– market share of cycling and walking,

– reduction of vehicle speed, noise, air pollution and energy consumption,

– road safety,

– economic development,

– public acceptance.

• Launch new information and awareness-raising campaigns to increase public acceptance (of car users, residents and shopkeepers in particular).

Considering the Needs of Specific Target Groups

A sustainable city is accessible to anyone and welcomes everyone – a city that takes specific needs into account and offers transport solutions adapted to these needs. It is a city that breaks down the barriers to access and mobility that members of society face, thus contributing essentially to social inclusion. In recognition that travel behaviour and experience differ by age, gender and lifestyle, the SMILE project takes the following target groups into account: children, young people, women, the elderly, the disabled, and the poor. The recommendations given here are elements accompanying each step of integrated urban transport policies as they apply to:

- planning by considering the needs of individual target groups right from the beginning and therefore improving the quality and effective implementation of plans,
- "hard" measures such as the adaptation of transport infrastructure and the built environment by taking accessibility, safety and security criteria into account, developing intermodal solutions, and improving access to information,
- "soft" measures such as awareness raising for specific needs, the development of specific services, initiating dialogues and building partnerships.

SPECIFIC NEEDS OF THE INDIVIDUAL TARGET GROUPS – AN OVERVIEW

CHILDREN

- are the weakest road users. Still developing physically and mentally, they lack a mature concept of "safety" and "danger", making them a particularly vulnerable group for road accidents. Movement is fundamental to children's development and health. They need safe places to play, move and meet other children as well as opportunities to explore their environment and make journeys on their own – needs barely met in most of today's urban environments.

Today, the urban environment barely meets children's mobility needs.

YOUNG PEOPLE AND STUDENTS

- are high dynamic and face changing situations such as new schools, new jobs, or new households. Mobility plays an essential part in gaining autonomy and implies "freedom". Individualisation and an increasing pluralism of life-styles are the main characteristics of this target group. Their price sensitivity due to relatively low income, their high amount of leisure time (compared to other age groups) and their above-average mobility needs must be taken into account when tailoring measures, offers or campaigns to them.

WOMEN

- continue to be primarily responsible for domestic work, shopping, child-rearing and home-based care of the elderly, although their employment rate has been increasing considerably. Women hold most part-time jobs, generally low-level jobs. Juggling a high number of different obligations every day, women generally have shorter, but more frequent journeys, which they combine in a chain of trips. In addition, urban functions are more and more separated, journey distances are increasing considerably, access by sustainable modes is restricted, and women still have much less access to cars. Urban structure is thus a fundamental barrier to women's mobility. Another decisive restriction is the fear of aggression and sex-specific violence, which leads women to avoid certain areas and transportation options.

THE ELDERLY

▪ With the share of people over 65 expected to increase by 40% over the next 30 years in most European countries, the specific needs of older people will become more and more important. Factors restricting the mobility of senior citizens are health and physical handicaps, an increasing risk of injury and death from road traffic accidents, and fear of crime. On the other hand, the travel patterns of older people change considerably: senior citizens have no job-related journeys anymore, but transport still provides an important link to friends, family and the wider community.

PEOPLE WITH DISABILITIES

▪ The group with disabilities consists of with physical, sensory and mental impairment disabilities. This group is absolutely not homogenous. The different kinds and severities of disabilities result in a wide field of mobility restrictions, thus requiring very specific measures or adaptations of measures supporting accessibility to buildings, transport infrastructure and services.

PEOPLE WITH LOW INCOME

▪ There is a clear relation between transport and social exclusion, which is particularly marked among unemployed people, families with young children, young people, the elderly and all those on low (benefit level) income. People with low incomes often have a relatively small travel range and rely very much on their local area. As this group has the lowest car-ownership rate, the availability and especially affordability of other transport options are essential. An urban structure that strengthens the role of neighbourhoods, provides services on the spot, and favours non-motorised modes of transport enhances the mobility of people with low income considerably.

PLAN AND ORGANISE

▪ Express a clear political commitment to involve individual target groups in future planning procedures to adapt/improve measures according to specific demands.

▪ Set up a permanent forum with representatives of the various target groups; the forum has to be consulted regularly and in all relevant planning processes.

◆ see local practice: Sabadell (ES) – Mobility Committee.

▪ Develop – along with the permanent forum – a catalogue of fundamental accessibility criteria that have to be checked before implementing new measures.

▪ Be a role model and let your staff analyse public buildings (their working places) and other infrastructure according to these accessibility criteria.

▪ Make an overview of relevant existing plans and programmes that should be reviewed according to requirements of specific target groups.

▪ Review, together with representatives of individual target groups / the forum relevant existing objectives and targets that appear in these plans.

FIT OUT, TAKE MEASURES AND ACTIONS

▪ Assess accessibility by organising specific groups to speak about the barriers they face to access public buildings, public transport stops and vehicles, etc. Ensuring access to the built environment and transport is one of the pillars towards enabling all citizens to take part in everyday life regarding education, employment, leisure or services and to creating a safe and comfortable environment to live in and enjoy. Use participation methods adapted to the requirements of specific user groups.

▸ for more detailed information about specific demands and the various models for public participation see the "Sustainable Mobility for All!" guide on the attached SMILE CD-ROM.

▪ Examine and overcome the barriers to transport, the built environment, and mobility that citizens experience, with special attention paid to the disabled and others with reduced mobility, such as the elderly, parents with children, pregnant women, people with heavy luggage, etc.

◆ see local practice: Olomouc (CZ) – Accessible Olomouc.

◆ see local practice: Zaragoza (ES) – Public Transport Accessibility Plan.

Access to public transport for everyone?

- Organise local meetings (per district or even per neighbourhood) to discuss how to improve access, safety and security in this area or invite local residents to produce a declaration of how they want to improve their street to make it accessible and enjoyable for all.

- see local practice: Geneva (CH) – Eaux-Vives: Improvement of Travel Safety and of the Quality of Public Spaces.

- Have the local authority commit a set date to repair poor infrastructure and ensure that features such as wheelchair ramps and tactile paving are included.

- Offer mobility services designed to meet the specific needs of individual target groups, such as night taxis, flexible public transport stops in the evening, call-a-taxi-from-the-bus, flexible public transport services, etc.

- see local practice: Pöttsching (AT) – City Bus.

Night buses support independent and car free mobility especially of young people.

- Produce clear and accessible information and maps on access in your local area.

- Provide a brochure, booklet or map of all the shops, restaurants, hotels, leisure facilities and means of transport accessible in your local area.

- Provide information in accessible formats, i.e. large print, Braille and easy-to-read language. This is particularly important for people with sensory disabilities and learning disabilities as well as for the elderly and children.

- Produce accessibility guides for public buildings, schools, companies and sites of major events like stadiums, concert halls, etc.

- Provide individual door-to-door public transport information.

Auxiliary staff provides immediate and individual information.

- Make sure transport information on the Internet is produced in accordance with the web accessibility guidelines.

- Produce an easy-to-read timetable or transport information leaflet in large print that can be read and understood by children, people with learning disabilities, and the elderly.

- Assess how clear the presentation of information is at night with a cross-section of users – people with reduced mobility, including people with visual disabilities and the elderly.

- Identify gaps and make practical improvements to break down the barriers, involving user groups such as disability organisations, community groups, etc.

- see local practice: Leeds (UK) – Quality Bus Initiative.

- The promotion of the greater use of sustainable transport modes is directly linked to safety and security. If people do not feel safe using the different possibilities, they will not use them. This is of particular concern to specific groups such as women, children, the elderly, and the disabled.

- Invite citizens to mark safety and security faults on a large map.

- Organise on-site assessments of a certain area together with residents or specific user groups.

- Ask schools/children to survey their surrounding/ catchment area in terms of safety with the aim of enabling children to come to school on their own. Invite children to draw their ideal local area with ideas of how to improve safety and security for all.

- Increase staff at train stations and other service stations to assist the general public.

- Make security staff accompany public transport vehicles during the evening and at night.

- Make public and emergency phones accessible to everyone (including deaf persons).

- Improve the maintenance of public areas such as pavements and street lighting, and including lighting along footpaths and bicycle lanes, Park and Ride and Bike and Ride facilities, and shortcuts.

  ▶ for more recommendations on how to accomodate specific user groups' needs, see the recommendations on walking and public transport as well as integrated approaches and urban planning.

COMMUNICATE, PROMOTE AND RAISE AWARENESS

- Build partnerships between transport decision-makers and other community groups, in particular the disabled and the elderly.

- Make local decision-makers experience current (in-) accessibility conditions by equipping them with prams, heavy bags, wheelchairs, etc.

- Organise safety and security training for personnel – transport staff and others – taking into account the needs and demands of users, in particular vulnerable users (disabled persons and elderly persons).

- Organise disability awareness training of transport personnel, frontline staff and management, and transport authority personnel.

- Use all media forms – educating the media on accessibility and specific demands of individual groups. Produce imaginative posters, local TV and radio press articles about the issue.

▶ for all activities regarding campaigns, mobility advice and mobility plans see the respective recommendations in this guide.

MONITOR AND EVALUATE

- Agree with the partners on the monitoring and evaluation procedures.

- Make targeted surveys before and after the implementation of new measures and "learn" from the results: Experience gathered in one project can make the implementation of other, future projects easier and more cost-effective and may help reduce effort and complexity of future public participation.

DEVELOP, ADAPT AND REFINE

- With participation structures set up, review the priorities regularly, as not everything can be done at once.

- Create a strong link to long-term urban planning policies. Incorporate specific demands already identified today to prevent future development projects from failing.

- Take seriously the needs and demands expressed by the target groups when implementing measures and projects. Disregarding these demands will lead to disappointment and frustration among target groups and bring the local government into discredit.

- Focus on district-by-district rather than on target-group-by-target-group activities, as specific demands of individual user groups should be considered in a well-balanced and agreed way when developing new measures.

  ▶ for more detailed information and experience see the document "Sustainable Mobility for All!", the SMILE recommendations on how to consider the needs of specific target groups on the attached SMILE CD-ROM.

Noise Abatement Planning for Road Traffic

Road traffic is a major source of noise, causing about 80% of urban noise pollution. In addition, between 30 and 50% of Europeans suffer from noise annoyances and disturbances.

In June 2002 a new pioneering directive on environmental noise was issued at European level to be implemented at local level in all EU Member States in the course of the next few years. The target of this EU directive is to define a common concept to prevent or reduce harmful effects caused by environmental noise.

Against this background, the SMILE project's "Guidelines on noise abatement planning principles for road traffic at the local authority level" aim to point out existing potential for noise-abatement measures in a field for which local authorities are responsible and in which they can therefore more easily take action to bring about improvements for the benefits of their citizens. A brief summary of these guidelines' recommendations is given in the following sections.
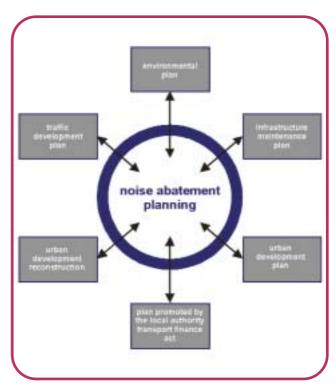
PLAN AND ORGANISE

- Noise abatement planning is to be seen as an integrated approach. An effective and comprehensive planning process requires plans by local authorities that affect noise emission to be dovetailed with noise abatement planning. Thus an early integration of noise abatement planning into the planning process enables efficient and comprehensive planning and evaluation.

- Furthermore, noise abatement is also becoming increasingly significant in the context of integrated environmental relief programmes, e.g. by Local Agenda 21.

DO NOT FORGET / WARNING

Where noise abatement planning is not prioritised in the planning hierarchy of a local authority and is subordinate to planning areas such as land use and urban and traffic development, there is a risk that the latter planning areas will create conditions that promote undesirable noise levels.

An example of noise abatement planning.

FIT OUT, TAKE MEASURES AND ACTIONS

- To implement an integrated noise abatement strategy successfully, it is important to coordinate the activities involved within the local authorities' administrative structure.

- Decide on a responsible coordinator within a local authority's structure first. From experience in various European countries, the following departments are often designated with the tasks involved in noise abatement planning: environment, urban planning, traffic planning or civil / engineering departments.

- The main tasks of the responsible coordinator are to control the overall process of assessment and evaluation of a city's noise pollution, set priorities by ranking district and/or streets according to the

existing noise levels, plan and develop an integrated concept with a set of bundled noise abatement measures, and realise these measures on site.

- Close cooperation with other (city) departments and or agencies such as the industrial inspection board, the land registry and surveying office, the highways department, the road traffic authority and the regulatory authority is also essential for broad-base support when aiming at the realisation of effective noise abatement measures for road traffic.

- Partners for external cooperation can be railway companies, the local chamber of industry and commerce, local transport companies, non-governmental organisations in the fields of noise and environment, and other relevant professional associations.

- To finance the realisation of noise abatement measures, municipal budgets for maintenance work, revenue from fees or charges, and funds for projects already planned and for road works should be reviewed and included in the planning and implementation process.

- Added value to the organisational arrangements of comprehensive noise abatement strategy also comes from the formation of a strategic cross-sector approach, including urban development, transport and the environment, embedding a local noise abatement policy into the context of regional, national and EU environmental policies. In this way, the acquisition of additional funding may be facilitated for innovative approaches to the proposed measures.

- In a large conurbation, the creation of a particular centre of competence can be helpful to coordinate the process of noise abatement planning and prepare the decision-making process as competencies and responsibilities for noise may be fragmented among different levels of regional, local and regulatory administrative bodies.

DO NOT FORGET / WARNING

Gaining political support at the local level, setting up a proper framework for action, pooling and fine-tuning financial resources, and designating a responsible coordinating body in a local authority will help to successfully put planning into practice for noise abatement planning.

- When setting priorities for noise abatement measures for individual areas, the number of residents affected and the level of disturbance should be taken into consideration. For example, this can involve

standardising the number of people affected and the disturbance for about every 100 metres of road. These standardised values can then be used to compare the disturbances on individual roads and town districts. Priority is allocated according to the level of each disturbance. This step can be carried out for one or more of the noise disturbance parameters. The highest number of people affected by noise and / or the level of noise disturbance constitutes the highest priority for noise abatement activities.

DO NOT FORGET / WARNING

Consideration should also be given to such non-acoustic parameters as the need for special protection and previous urban development and urban planning in specific areas. The setting of priorities enables the local authority to make a quick comparison of noise abatement possibilities.

- To form an effective overall concept for the reduction of road traffic noise, the individual measures can be combined in a set of measures as experience has shown, as exemplified by the following selected good practices from local authorities:

- Reduce traffic density by promoting environmentally friendly means of transport (walking and cycling), enlarging the public transport system, providing Park and Ride facilities, developing parking management concepts, stabilising traffic flows and reclassifying/ declassifying roads.

- see local practice: Annecy (FR) – where key issues are to ban through-traffic in the inner city, develop one-way streets with bus lanes in opposite directions for public transport, and give access to the city centre for residents and visitors.

- Reduce the percentage of heavy goods vehicles (HGV). Potential measures are traffic bundling on appropriate routes, designating HGV routes, and banning/restricting HGV temporarily.

- see local practice: Berlin (DE) – carried out a pilot project banning HGV of more than 3.5 tons on a specific main road, introducing 30 km/h speed limit in this area and designated an inner city HGV route to evaluate the measures' effects on air and noise pollution.

- Reduce speed/traffic calming by lowering excessive driving speeds, re-designing street layout and designating 30 km/h zones and traffic-calmed (business) zones.

Planning the Torrenova residential area in Modena

- see local practice: Breda (NL) – is narrowing selected roads from 2x2 to 2x1 lanes, building free-standing cycle paths in these locations, and defining "dosing" levels of use at peak traffic moments and guiding traffic flow on urban main thoroughfares.

- Renew public transport by introducing low-noise buses and trams and promoting low-noise (heavy) goods vehicles.

- see local practice: Parma (IT) - introduced smaller, low-noise and low-emission buses for operation in the historic city centre, is offering flexible bus services operating on demand via a "green" number, and limiting access for private vehicles to the city centre.

- Change road surfaces by using low-noise road surfaces, rehabilitating tram tracks and regular track maintenance.

- see local practice: Valencia (ES) – has tested low-noise asphalt in various sites within the municipality.

- Screen noise by installing:
  - sound-proof windows, windows with ducted ventilation or ventilation systems,
  - noise barriers (with solar cells) and earth banking or using building structures for screening or tunnels and troughs.

- see local practice: Vienna (AT) – has installed transparent sound absorbent barriers financed by means of semi-transparent overlays with advertising slogans or solar energy (photovoltaic) system operators.

- see local practice: Gothenburg (SE) – replaced windows in residential buildings exposed to high levels of traffic; created "silent" façade in residential blocks which means that no noise from any potential source is acceptable at one of the walls in a residential building, e.g. the side facing a back yard or court.

- Consider noise abatement in urban planning by reducing / avoiding traffic by decentralising local amenities into sub-centres of settlements, or interposing less sensitive uses between the noise source and sensitive uses.

- see local practice: Modena (IT) - re-designed a residential area in the planning phase based on noise contour maps, has set up a working group where architects/town planners work together with other experts (noise, air pollution, sewerage, traffic, electricity grid, parks and gardens); local plans must consider noise reduction, and a "noise climate assessment" is used for new development projects to indicate expected noise levels in the area.

- Organisational and strategic approach:
  - internal coordination and external cooperation,
  - information of and communication with the public as well as participation of stakeholders,
  - establishing a centre of competence for improved coordination of noise abatement activities.

- see local practice: Paris (FR) – where a noise observatory brings together all partners involved in noise abatement. The observatory provides integrated information about urban shapes into the computation of noise levels; it estimates the noise exposure of the population and simulates effects on noise exposure for political or urban planning decisions.

- Bundling noise abatement measures in an integrated approach.

- see local practice: Celle (DE) – where the integrated approach includes a routing system for heavy goods traffic, the reduction of speed levels, a concept for small quantity deliveries to the city centre, the re-planning/designing of a federal highway and the re-building of a road as part of conversion measures of a former military area for civilian use.

DO NOT FORGET / WARNING

Bearing in mind the budgetary situation of local authorities, effective, cost-efficient measures should be prioritised for implementation in the short and medium term. These measures should be integrated into the local authority's planning process at an early stage.

COMMUNICATE, PROMOTE AND RAISE AWARENESS

- Communication and information are intended to change mentality and behaviour. The target groups are, for example, the general public, school pupils, decision makers, stakeholder groups, etc. Publications produced for disseminating information can be periodic bulletins on a city's noise situation, guides and brochures to inform and show inhabitants how to combat noise-related problems, poster campaigns, dedicated websites about noise, telephone hot lines for noise-related problems, and media campaigns.

- To achieve a high degree of acceptance for the realisation of noise abatement measures by the public, a well-structured participation and consultation process is also crucial. Based on the principles of dialogue, discussion, and exchange of experience, it will become clear to the public that noise pollution is everyone's business and that everyone can contribute to the reduction of annoyances and disturbances from noise.

DO NOT FORGET / WARNING

To communicate and deliver clearly information on noise-related issues, understandable and non-technical language is essential. For example, for citizens and decision makers the number of persons affected by noise pollution is easier to understand when existing noise levels and the potential of noise reduction from measures are explained.

- see local practice: Madrid (ES) – included an awareness-raising campaign in its strategic plan for noise pollution reduction; established a generic communication plan; events with schools and activities in streets, public parks, open-air and pavement cafes and restaurants, public houses; media campaign.

MONITOR AND EVALUATE

- The evaluation of noise abatement measures should include an assessment of the estimated noise reduction. A clear evaluation of the effects of the different noise abatement measures being proposed can be gained by comparing the estimated levels of noise reduction these measures will achieve. In addition to the acoustic effects of noise abatement measures, their features, feasibility and cost should also be taken into account.

DO NOT FORGET / WARNING

Considerable care should be taken to ensure that the noise abatement planning measures do not give rise to any serious new noise disturbances or other environmental problems.
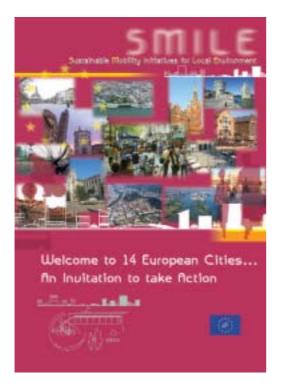
DEVELOP, ADAPT AND REFINE

- Re-evaluate the priority of individual investments, which already form the subject of financial planning at local authority level within the framework of noise abatement planning in light of their contribution to noise reduction. This also enables the local authorities that lack additional funding for noise abatement measures to at least implement their noise abatement plans in the long term.

DO NOT FORGET / WARNING

Evaluating the measures on the basis of the impact analysis also enables local authorities to make effective use of their budgetary resources.

Other SMILE products

SMILE Study Tour Catalogue and Site Visits

The SMILE partners selected 14 champion cities in Europe that can show good practice examples of sustainable mobility. These cities invite you to learn from their sustainable transport policies. The SMILE Study Tour Catalogue enables you to carry out study visits to these cities. This favours the exchange of know-how and the replication of good practices.

On-site visits, information, meetings with players engaged in practical actions and exchanges of experience: 14 European cities throw open their doors to all interested elected representatives, municipal officers or technicians.
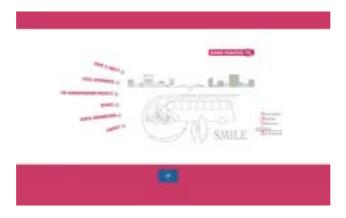
◆ Meet local decision makers, public transport operators, technicians, and local stakeholders.

◆ Visit mobility centres and mobility managers in private companies.

◆ Experience innovative bicycle and pedestrian policies and state of the art public transport services.

SMILE partners can organise visits for you – and with you – in all the participating cities. A typical two-day visit is proposed for each city. If you are interested, please contact us to receive a more detailed proposal.

SMILE WEBSITE AND DATABASE

The SMILE website and database, a tool for local authorities to:

◆ find in-depth information

◆ exchange their experience and transfer their know-how

in the field of Sustainable Urban Transport Policies and Initiatives.

www.smile-europe.org

You will find on this CD-Rom:

- "Welcome to 14 European Cities... An Invitation to take Action", the SMILE Study Tour Catalogue and Site Visits

- "Towards Sustainable Urban Transport Policies: Recommendations for Local Authorities", the SMILE recommendations to facilitate the replication of good practices and to enable a successful Sustainable Urban Transport Policy

- "Public Transport: A Pillar for Sustainable Mobility", the SMILE recommendations on how to better integrate public transport in sustainable mobility activities

- "Sustainable Mobility for All!", the SMILE Guide and Experience on how to consider the needs of specific target groups in local sustainable transport policies

- "Guidelines on Noise Abatement Planning Principles for Road Traffic at the Local Authority Level", the guidelines include recommendations on how to proceed with noise abatement planning, which, at the same time, is illustrated with examples taken from real life

SMILE

Sustainable Mobility Initiatives for Local Environment

Warmest thanks to local authorities and experts for their interest in the SMILE project and especially for their contributions and assistance.

System Requirements:

- 133 MHz Intel Pentium processor, Windows 95, 98, NT4, 2000 Professional or later

- 32 MB of free available system RAM and 40 MB of available disk space

- 256 color monitor capable of 800 x 600 resolution

SMILE - Sustainable Mobility Initiatives for Local Environment

www.smile-europe.org