e_atomium

Transport & mobility training for energy agencies & local actors

Mobility Management –

Tourism, Company and School travel plans –

Training manual

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Treatise

THE E-ATOMIUM PROJECT

e-Atomium is a training project funded through the STEER programme which is part of the European Commission's Intelligent Energy Europe programme and will be implemented in Belgium, France, Ireland, Italy, The Netherlands and the United Kingdom. The aim of e-Atomium is to strengthen the knowledge of local / regional managing agencies in the transport field and to accelerate the take up of EU research results in the field of local and regional transport. The beneficiaries of the project are managing (energy) agencies and local actors who want to play a bigger role in the transport field.

The following compendium contains results of EU research-projects and complementary results of national research-projects. The authors especially thank the partners and collaborators of the Treatise and Competence projects.

A complete list of the studied projects, involved consortia, and cited literature is given at the end of the material. All materials can be downloaded from the project website: www.e-atomium.org

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1. 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 shift from private motorised traffic towards more sustainable modes of transport like walking, cycling, public transport;
- implement urban planning strategies based on principles like urban density, improved mixed use of space and limited new urban developments to areas served by public transport;
- develop the concept of responsible car use and introduce less polluting and quieter vehicles.

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.

The training activities within e-Atomium will address all the mentioned goals by explaining the following themes:

Mobility Management

- School Travel Plans
- Company & Administration Travel Plans
- Tourism Travel Plans

Awareness raising and communication Campaigns

- Target group dedicated communication
- Eco-driving
- Topic related communication
- Organisation of an awareness raising event

Alternative fuels & vehicles

- Biofuels (incl. pure vegetal oils)
- Comparative analysis of all alternative fuels & vehicles
- Environment appraisal of community/municipal vehicle fleets

Demand Management

- Road pricing schemes
- Access management
- Car free cities & town planning
- Vehicle restrictions

This document is mainly addressing the examples of the theme "**Mobility Management**"

"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.

PART I TOURISM TRAVEL PLANS

2. TRAINING MATERIAL ON TOURISM TRAVEL PLANS

This training material is set up to help you understand how mobility management strategies may be adopted in tourist areas and how a Tourism Travel Plan (TTP) may be implemented. This paper will give you an overview of the steps to be taken to develop mobility management initiatives for tourism.

The training material will give you some tips in setting up a TTP of your own. It provides theoretical approaches and some practical examples.

3. INTRODUCTION

Ensuring sustainable development, and then limiting the dramatic pressure of demand, requires the adoption of an integrated set of strategies that combine tourism, transport and land-use related measures. The control of accessibility and mobility to and within a tourism destination is one of the most important management tools to regulate visitor flows, reduce traffic congestion and pollution and meet tourists' and residents' requirements. These objectives should be achieved by co-ordinated actions involving public and private operators alike. The organisation responsible for local mobility (Local Authority and/or Energy Agency) should therefore be able to support and coordinate the actions to be developed in order to reduce the impact of tourist flows on the local environment.

In this framework, tourism and recreation related traffic are an important target for mobility management.

This particular sector of transportation demand, at times defined as Tourist Management or Resort Community Transport Management offers inherent opportunities to the traditional mobility management strategies. This is because recreation and tourism are activities in which the quality of the environment at the destination adds to the quality of leisure time spent. In this context, people are more receptive to ideas about reducing motorised traffic, not only because they see the short time effect in the visited environment (traffic jams, noise, emissions) but also because of the emotional link between recreation and a clean environment. In other words: the recreational or tourist environment removes barriers for the promotion of "soft mobility".

The idea must be to establish a strong link between, on the one hand, campaigning for behaviour change towards sustainable mobility and, on the other hand, quality of tourism and recreation. The motto is: "if you come to relax or enjoy a natural or historical environment, why not increase your pleasure by using also more enjoyable transport modes?".

The desired outcomes of the implementation of mobility management strategies to/from and within tourist areas should be:

- creation of awareness and creation of responsibility among decision makers and the general public about the importance of sustainable mobility for recreation and tourist purposes;
- promotion of sustainable transport solutions for recreational purposes to the large group of visitors of all relevant sites and to a broader national public;
- demonstration of soft measures that can contribute to behaviour change in leisure related trips and testing of new behaviour among target groups;
- concrete energy savings at the demonstration sites;

- direct increase of the environmental quality of the environment (noise reduction, reduction of emissions, reduction of congestion problems), long term reduction of emissions.

4. REASONS FOR SETTING UP TOURISM TRAVEL PLANS

The inadequacy of information and/or the lack of reliable data on volume, dynamics and characteristics of visitor flows are considered to be one of the main hindrances to the development of Tourism Mobility Management. For example, visitor statistics only record the total volume of individuals entering both archaeological sites, without any distinction by nationality or typology (e.g. tourists and same-day visitors). Furthermore, they rarely provide any information concerning visitors' motivations and evaluation of the way the visit is organised.

The importance of measuring tourism flows to leading cultural/leisure sites is given by the fact that tourist pressure affects not only the resource, but also the whole surrounding area (city, region, etc.), is now generally acknowledged.

In particular, as a result of new trends in tourism demand, there is a growing need to monitor itinerant visitors. For instance, 'culture' is becoming a mainstream holiday activity in most parts of Europe. The number of cultural visitors has been growing steadily in the last decades, also thanks to the increasing variety of products offered, ranging from classical archaeology, architecture, painting and sculpture, to crafts, industrial archaeology and cultural events. On the other hand, long-stay holidaymakers (e.g. beach tourists) are looking for new formulas that combine traditional holidays (e.g. sun & sea) with alternative recreational activities, such as discovering and visiting different cultural attractions during the same trip (museums, historical sites and buildings, etc.). In this context, the concept of 'tourist itinerary' plays a central role.

The estimate of the size of this segment is generally made on the basis of ad hoc surveys that, for their being non systematic and their lacking of homogeneity in the methodology applied, do not facilitate comparison among different case studies.

The evaluation of the weight of day-visitors on total tourist demand is still of extreme importance, especially if considering the variance existing between the effective tourist pressure - in physical, environmental and social terms - generated by this segment on the resources, and the benefits derived for the local community. The spatial and time concentration of these flows generate, in fact, a quick saturation of the carrying capacity for the primary resource, followed by a deterioration of the quality of the stay-visitors' experience and often reduced profits for local economic activities interested by tourism. Such effect interests not only the single attraction of visitor flows but also and especially the context in which it is placed and consequently influence the quality of life for residents (talking about mobility for example and related problems).

The importance of this phenomenon and the consequent need for information sources harmonisation has induced the main international bodies interested to ask for the development of survey and monitoring actions at local level based on a given set of recommendation sought to guarantee homogeneity and comparability at least of the main results.

The final aim of both visitor survey and marketing analysis is to define the actions to be developed in order to inform and educate visitors both on site, during their stay in the area, and in their city/region/country of residence, when they are expected to plan their visit. An example of the first type of actions is the promotion of alternative routes within the destination, through a better organisation and delivering of available information to visitors (e.g. electronic kiosks). As for marketing actions, to identify the channels/tools to be used to better organise independent and package visitors and to prevent visitor overcrowding: e.g. the media (TV, radio, magazines, etc.), travel operators, Internet.

5. TOURISM TRAVEL PLAN

The guidelines and methodology to develop a Tourism Travel Plan are alike to the ones suggested for developing both School Travel Plans and Company Travel Plans bearing in mind that the surveys and the possible measures are local-specific.

Nonetheless this material wants to offer an overview of the 3 main different steps needed for the development and implementation of a Tourism Travel Plan:

- Analysing phase
- Development of the Action Plan
- Evaluation

a) Analysing phase

The analysing phase could be structured in three distinct efforts:

- Interviews to the main tourist resorts, social and leisure facilities in order to have a clear picture of how tourists are currently reaching the sites.

- Accessibility analysis of the overall territory and of the single sites. This effort is extremely important because it gives a clear picture of the priority routes adopted and of the existent transport alternatives to private car use.

- Survey by means of a questionnaire submitted to a representative sample of the tourist population. The questions will need to scout both the modality used to reach the tourist areas and the modes of transport used to move within the tourist resort between the different facilities.

b) Development of the Action Plan

To develop the Action Plan it is important to examine the single analysing efforts (Interviews, accessibility, questionnaires) and ultimately combine their different results into an overall framework which defines the state-of-the-art and the possible measures to be implemented in order to improve transportation options for recreational travel and reducing automobile traffic in resort areas.

Tourist travel has predictable patterns and needs, and often occurs in areas that have unique environmental and social features that are particularly sensitive to degradation by excessive automobile traffic. The implementation of a Tourism Travel Plan may act to preserve the amenities that attract visitors to an area, whether it is an historic city center or a pristine natural environment.

The possible **measures to be implemented** in tourist areas to reduce the impact of individual car use are numerous and diversified and can include a variety of specific strategies to improve transport options, integrate alternative transportation into tourist activities, provide disincentives to driving, and promote alternative modes. These can include:

- Transit Improvements
- Shuttle Services
- Taxi Service Improvements
- Cycling and Walking Improvements
- Bicycle Parking
- Parking Management
- Traffic Calming, Speed Reductions and Streetscape Improvements.
- Car-Free Planning and Vehicle Restrictions.
- Marketing to encourage visitors to arrive without a car.
- Commute Trip Reduction programs for staff.
- Transportation Access Guides, which provide concise directions to reach destinations by alternative modes.
- Equipment Rentals (Bikes, Scooters, Skies, etc.).

Traffic to resort areas often peaks at particular seasons and times of the week. Visitors have particular mobility needs (e.g. travel between transport terminals, accommodations, restaurants and shops, tourists attractions, etc.) and baggage requirements (skis, surf boards, gifts to carry home). Tourist Transport Management must take these travel patterns and needs into account.

Many resort visitors will use alternative modes if they are convenient, enjoyable and Affordable. Tourism Mobility Management programs can involve developing car-free travel options and packages. This requires coordination to insure that visitors' mobility needs are served, and that such travel options are well communicated. When planning a trip, potential visitors must be assured that they can arrive at their accommodations, access local activities and attractions, and carry any baggage they need, reliably and in comfort without a car.

c) Evaluation and monitoring phase

Similarly to the updating and monitoring procedure adopted for the Company Travel Plans and the School Travel Plans it is important to define the most appropriate methodology to use in order to maintain the Tourism Travel Plans up to date. This is important because holiday resorts are often developing and modifying facilities and because the Mobility management activities must bear in mind the possible infrastructural changes occurred. At this purpose an efficient way could be to deliver a questionnaire to the sites' managers, define an agreement with the major tour operators and/or travel agencies in order to identify the tourists' modal choice when booking the holiday and organise a survey to a selected specimen of the temporary tourist population in order to have a structured and useful overview of the territory.

This procedure will have to be carried out either annually or six-monthly according to the specific characteristics of the resort. (i.e whether it has a double-season, such as mountains with skiing and golfing resorts or only the summer/winter season).

The main indicators to be evaluated are:

- Modal split of arrivals/departures
- Modal split of on-site movements
- Overall distances (veh*km) in private car within the tourist area (including arrivals/departures and the different movements)
- Energy consumption in the tourist area (including arrivals/departures and the different movements)
- Car land-use within the tourist area
- Polluting emissions in the tourist area (including arrivals/departures and the different movements)

6. CASE STUDIES

6.1 CASE STUDY 1: TOURISM MOBILITY MANAGEMENT PLAN THE CITY OF MALAGA

1 Summary Description:

Whereas the number of inhabitants of the city of Malaga does not reach 600,000, that of the global "Costa del Sol" famous region represents 1 million permanent residents, and up to 2 million during the peak tourist season! This duplication of the population of the metropolitan district places considerable strain on the region's transport infrastructures. Moreover, the wide extension of the resident and tourist areas favours the use of private vehicles and makes the provision of public transport more difficult than in a dense urban area. To address these increasing mobility problems, and reduce the consequent negative impacts on the environment, the Urban Municipal Agency commissioned the "City of Málaga Tourist Mobility Management Plan". This new plan includes the implementation of the following services:

- design of a new web-site as an information dissemination service orientated to tourist mobility,
- new tourist bus service,
- tourist maps and leaflets,
- funicular to the Gibralfaro castle,
- creation of the Metropolitan Transport Authority (MTA).

2 Initiator & partners :

Initiator : Málaga City Council
Partners : Collaboration with public transport operators

3 Objectives:

Analyse and improve tourist mobility management in the city of Malaga.
Improve the public transport offer and quality of service, including co-ordination of services for tourists.
Increase the public transport network information for all potential users.
Increase overall public transport use and intermodality, and reduce the negative impacts of private vehicles.

4 Obtained and/or expected results:

1. The first result is very positive in terms of public acceptance of the actions implemented.
2. A website dedicated solely to mobility in and around Malaga metropolitan area is under construction, in addition to the already existing website www.malagaturismo.com, which contains an interactive map of the city, tourist transport information and links to the sites of relevant PT operators;
3. The tourist bus service began operation in July 2001, and the data available indicates the initiative has been successful, with a particular increase in the tourist bus usage by hotel clients with special incentive tickets.
4. 30,000 copies of the tourist leaflets and 15,000 tourist maps were distributed.
5. The Smart card system was introduced in July 2001.

5 Future plans

1. A technical and economic study to determine the viability of the infrastructure project of the Gibralfaro Funicular has been commissioned.
2. Continue improving mobility management in general, and tourist mobility in particular.

3. Increase public transport use and intermodality for tourists, with the implementation of integrated tarification including transport facilities and tourist sites in coordination with the future Metropolitan Transport Authority.
4. Extend the accessibility plan and measures to the future Picasso museum.

6.2 CASE STUDY 2: A DIFFERENT ADVENTURE IN GENOVA VALLEY: (ITALY) MOBILITY MANAGEMENT FOR A TOURIST AREA.

Genova Valley is a tourist site in the Italians Alps, close to the renowned town of Madonna di Campiglio (Province of Trento). The narrow and long valley (17 km) is surrounded by the majestic peaks of Adamello Brenta group and by the Natural Park with the same name. Since the '70s-'80s, Genova valley is a requested destination for one-day excursions during the summer season. In July and August, around 37.000 vehicles drove through this valley, with peak of 1.300 car a day. A charge too heavy for a delicate natural area.

In the summer of 2002, '03 and '04, the "Adamello-Brenta Natural Park" administration decided to reduce the burden of cars on the valley, preserving at the same time its tourist vocation. The opposition of some local administrations to car regulation brought the Park to ask support to Eco-Institute in order to build a new strategy largley based on mobility management.
A new approach, based on turist needs and perceptions, was defined to promote sustainable mobility. Key factor for success was the capability to understand the specific leisure visitors' needs and combine them with new rules and behaviours oriented to sustainable mobility. Specific tourists' attitudes were used as a levier to induce changements. This approach increased satisfaction among visitors, attracted new tourists interested in enjoying natural areas and discouraged those having incompatible behaviour with new sustainable mobility regulation.

Main activities put in force were:

- Survey and monitor of visitors' attitudes and needs.
- Identification of a strategy enhancing local attractions coordinated with visitors interests and combined with sustainable behaviour. A slogan for the initiative was introduced "Genova valley: a different adventure".
- Implementation of light infrastructure measures.
- Implementation of a strong marketing initiative based on a corporate identity.
- Introduction of regulation to limit access by car.

Infrastructure measures regarded a new bus service to reach different sites in the valley (ticket costs 1€ per ride), bicycle rent service, new attractive pathways ("Waterfall trail") and limited and concentrated parking spaces.

Infrastructure and regulation was supported by an intense and relatively innovative marketing campaign based on corporate identity, advertising distributed months in advance in the region and signposting oriented to discourage the use of the car.

Thanks to the positive message of the overall campaign, also new restrictions were relatively well accepted by local administrations. A limitation to access in different section of the valley was added to the car parking fee already in force (4 €).

Results

The results of the mobility management initiatives were quite positive:

- the visitors' number remained stable;
- car modal choice decreased from 93% to 82%;
- the new public transport service reached 13% of modal share;
- car trips in the valley reduced theirs lengths and numbers: cars arriving at the end of the valley decreased from 46% to 18%;
- carbon dioxide emissions decreased of 18% (-12 tons) and those of carbon monoxide of 25% (-0,9 tons);
- space for parking was reduced of 13%;
- the costs of the initiatives were balanced by parking and public transport fees.

The Genova Valley example gave birth to the idea of a sustainable mobility plan for the all area around the National Park. The plan is currently under study.

6.3 CASE STUDY 3: THE INTRODUCTION OF AN INNOVATIVE MOBILITY SERVICE WITHIN THE SEASIDE RESORTS IN PROVINCE OF RIMINI: CAR-SHARING

In the framework of diversified mobility management activities promoted and organised by the Province of Rimini it was decided to introduce the car-sharing service.

The service was structured taking into consideration four target groups:

- The residents
- The companies
- The city users
- The tourists.

The tourists were considered a special target group which required a service organisation with particular characteristics. And therefore the regulation went beyond the most common rules which generally approach a car-sharing initiative with no changes if the user is a tourist. Namely, a "standard" service respecting the basic concept of car-sharing where individuals or businesses pay a membership fee to join, and some combination of a flat rate per hour, a per-km fee or both. Vehicles are parked in strategic, convenient locations around the city and reserved ahead of time. The car-sharing company or organization pays for the car, gas, maintenance, repairs, insurance, parking and cleaning.).

The impact on tourists' mobility within the territory and to/and form the territory were sought for whilst introducing this innovative service.
The introduction of the Rimini car-sharing therefore aimed at:

- offering new hospitality services at the seaside resorts and encourage tourists to visit also the inland regions;
- contribute to the reduction of summer road congestion between the different resorts and on the routes to/from the Province of Rimini by encouraging tourists to come to Rimini by plane, train and/or bus because they could use a convenient and flexible car-sharing service once on-site.

The car-sharing service started as a pilot project in the Summer of 2002 only for the tourist target group an over the years progressively consolidated as an innovative mobility service for the whole citizenship. The definitive activity started on 24 March 2003, and in only 6 months reached 170 members and from 335km in March to 6881km in August, the total number of journeys went from 9 to 423.

It is important to say that 50 of these 170 members were hotels which significantly contributed to promote the service during the high season (June, July, August) by acting as intermediaries between the users and the car-sharing provider allowing the tourists to use the car-sharing service without paying a membership fee.

A special initiative saw an agreement between the Province of Rimini, Trenitalia (national railways) and the Association of Small Top Quality Hotels which encouraged tourists to take a trip to Rimini by train travelling in first class whilst paying a second class ticket and then move around the Province using the car-sharing service and receiving a discount on the daily room rates.

6.4 CASE STUDY 4: SUSTAINABLE TOURISM TRANSPORT IN ZUG

60 % of trips in the Canton of Zug in Switzerland are related to leisure and tourist purposes, and 70 % of these trips are done by car. Still, Zug has a well-developed PT system, a dense network of bicycle and footpaths and a mobility centre. New mobility services are required to promote the use of sustainable modes for leisure and tourist trips. This project sought to promote sustainable tourism and leisure traffic in the Canton of Zug through the establishment of dedicated round trips with sustainable transport modes. Zug's most important leisure destinations are mostly frequented by families with children. Therefore, if the round trips were made attractive to young children, their parents would be more inclined to undertake them.

Four round trips were developed, including attraction points such as playgrounds, parks, and restaurants with small zoos. The sustainable transport modes that could be used to access these sites ranged from train and bus to cycling, walking and boat. The information and dissemination activities had to actively involve the target group of families with children and the round trips had to motivate them to undertake the trips. For the active promotion of the round trips, Action Days were set up. On these days, special activities such as free rental of in-line skates, organised races, and excursions to nearby attractions such as farms or nature reserves were organised in cooperation with local partners. The project was concluded with a final event on the Car Free Day, at an important leisure destination nearby the city of Zug. The highlight of the event was a Duck Race on the river, where children who had made at least two round trips could race with plastic ducks and win a prize. An innovative brochure was produced which at the same time was aimed at promoting the initiative and obtaining mobility behavioural data. The brochure contained two pages of information on each round trip, 4 stamp cards for children with on the back questionnaires for parents on their mobility behaviour, two pages of information about the project and two pages of information about the public transport network in the region of Zug. By submitting the stamp card on the Action Day with the survey questions completed on the back, children won a prize and mobility data were obtained at the same time. 10.000 copies of the brochures were distributed to public transport information and ticket sales centres, bakeries, and agencies of the Cantonal Bank of Zug. 500 posters advertising the Action Days were placed at all the points where the information brochures were available, at all schools within the Canton and at various public places. 20.000 flyers were distributed on all buses, in schools, and at the offices of Zug tourism. Information was also available on www.zugtourismus.ch

The number of people at the Action Days was lower than expected, but this was compensated by the attendance of the Final Event. In addition, the feedback from participants during the Action Days was very positive. Negative factors were the competition with other leisure activities organised at the same time, and the weather. The project also shows that the promotion of sustainable modes for leisure purposes is very difficult, primarily because people enjoy very different kinds of leisure activities, because they don't travel regularly to the same destination, and because they do not always use the same modes for the same leisure activity (contrary to commuter trips, where origin, destination and regularity of the trips remain almost

constant). The active involvement of target groups greatly helped to inform them of the existence of new services. Attention often can only be obtained through extraordinary activities such as the action days, competitions etc. Communication strategies that include something new are more likely to successfully raise awareness than those providing the same information time and again. In addition, feedback from people demonstrated that there is a need for multimodal and easily understandable information. A change in modal shift was not obtained. Most people that participated already made use of sustainable transport modes. A good range of alternative modes without car restrictive measures in unlikely to result in behavioural changes, and if these changes do occur, it will only be in the long term. The round trips will be promoted after MOST and repeated, but probably on fewer days. Discussions have already taken place regarding the implementation of round trips for other target groups such as guests of businesses within the Zug region.

6.5 CASE STUDY 5: WERFENWENG

Werfenweng is situated about 45 km south of the city of Salzburg on a plateau above the Salzach valley. It lies 1,000 m above sea level and has 650 inhabitants. The settlement consists of scattered groups of houses. 1,800 beds are offered and about half of the 190,000 overnight stays per year are counted during the winter season. As Werfenweng has not got a railway station of its own, the community is implementing several measures to improve its connection to the railway stop in Bischofshofen, which is in 14 km distance from Werfenweng. A dial-a-taxi-service has been established, called Werfenweng-Shuttle, and a luggage logistics program will soon be developed. In 1997 two electric vehicles were bought and now are offered in a local public car-sharing project. The cars can also be rented by visitors who arrived without their own car.

Project components

The following measures are implemented as part of the project:

- The establishment of a mobility management centre is a cornerstone of the project. It will promote integration between various means of transport, and travel information, and provide transport services including demand-oriented dial-a-bus-systems, booking and coordination for the car-sharing programme, and rental of bicycles and sports equipment.
- Streets will be redesigned to be more pedestrian- and cycle-friendly. This will allow visitors and inhabitants to walk unimpeded everywhere in the communities. Pedestrians are given priority to cyclists and motorized vehicles. The speed of motorized traffic will be adjusted to that of pedestrians. Cycling will be an important means of travel for visitors and inhabitants. It will be possible to rent bicycles e.g. from hotels or at public service points like the tourist information or the railway station. Public transport services will also transport bicycles. A network of cycling routes is prepared and information material on it will be provided.
- Information packages on car-free travel, and attractive car-free travel services will be provided. To relieve the visitors from their heavy load, a concept of door-to-door luggage logistics is implemented. Sports equipment will be offered for rent.
- Regional public transport is being improved, including railway, buses, taxis, lifts and the electric-car-rental. Information about regional car-free mobility will be provided, including an information map and suggestions for excursions using public transport.
- To allow environmentally sound freight delivery, a freight logistic concept is elaborated and a freight delivery center will be built on the edge of Bad Hofgastein.
- Conventional cars will be replaced by zero-emission-vehicles as far as possible. The aim is to finance the additional costs (compared to the costs of conventional vehicles) of 100 zero-emission-vehicles. It is also planned to replace the two now diesel-powered city buses in Bad Hofgastein by electric buses.

- An integrated travel information and booking system will be created. Upon entering a home address and an address for the desired destination, a user of the travel information system will be able to retrieve information about all options for car-free travel to the desired holiday destination. The travel information system may also serve as a regional information system, and can be used to inform visitors about the best transport for excursions or about the availability of car-sharing. This travel information system will be simple and easy to use.
- The number of parking spaces in the streets will be reduced.
- A new quality product ”car-free tourism”, including “all-inclusive-packages” with transfer to and from train stations and door-to-door luggage services will be developed.

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PART II COMPANY TRAVEL PLANS

1. TRAINING MATERIAL ON COMPANY TRAVEL PLANS

This training material is set up to help you understand what Company Travel Plans (CTP) are all about. This document will give you an overview of the reasons why and how Company Travel Plans should be developed and implemented. Following a step-by-step scheme you will be able to help the different organisations in developing their own CTPs.

The training material will give you the guidelines to develop a CTP of your own.
It provides the theoretical approach and operative steps to be done.

2. INTRODUCTION

Mobility management aims to increase sustainable travel by means of introducing a range of 'soft measures'. Examples of soft measures are education, information, awareness raising. Through using these types of measures it is possible to bring about a change in travel patterns such as the home-work trips. An integrated approach of mobility management measures for home-work journeys is the development and implementation of a company travel plan (CTP).

Companies or administrations often cause a lot of traffic, as their employees need to commute to and from work. With the amount of traffic rising every year, employers have a vital role to play in bringing about traffic reduction. Commuter trips add heavily to the volume of vehicles. On UK road, journeys to work make up more than a quarter of all miles driven by car or van[1].

Commuter trips have in common, that they take place in certain time intervals in the morning and evening. The main target group of Mobility Management in companies, the commuters, are relatively easy to approach: they have the same destination (their employer), they often have similar schedules to start and finish working and they can be informed and motivated by using communication channels in their workplace. These are characteristics that increase the chance of success of Mobility Management in companies.

A company travel plan is a simple idea with a big ambition: to change the way that people travel to work. Cost, convenience, and comfort all influence our decisions about the journeys we take. Travel plans set out to address these factors, re-framing travel choices with major improvements to the bus, cycling and walking routes that serve the work site. Cyclists are welcomed with secure parking and changing facilities. Bus services are adjusted to staff needs. Drivers can find car share partners through a matching service. Discounts, promotional offers and financial incentives make alternatives to solo driving more attractive. Car park restrictions and charges make driving less so.

Travel plans aim to reduce traffic 'at source'. They are one of a range of tools that address transport problems from a new direction: by managing demand for road space more effectively. These strategies are essential to relieve the burden of traffic on local communities and meet national targets for cutting the carbon emissions causing climate change.

This document sets out what a company travel plan contains and how it can help in changing travel patterns towards more walking, cycling, carpooling and public transport travel as realistic options for most commuters.

[1] National Travel Survey 1998/2000, DTLR, July 2001

3. COMPANY TRAVEL PLAN: A DEFINITION

A company mobility plan - also called a "green commuter plan" or "company transportation plan" - tries to bring together transport and other business issues in a co-ordinated strategy aiming at making better use of the company's resources. A company travel plan is a package of practical measures aimed at promoting sustainable forms of transport and reducing car use within an organisation.

Drawn up in consultation with both management and staff, a travel plan could include measures such as car share schemes, providing pool cars, providing bus and train ticket discounts, cycle parking, reducing deliveries and introducing flexible working practises.

From its origin in the United States, the concept of the company mobility plan has spread rapidly across Europe. A number of well-known companies are implementing mobility plans and a growing number are considering introducing such plans. E.g. Italy has set up a legal framework for Company Travel Plans. (see box).

Legal Framework for Company Travel Plans in Italy

In Italy a decree of the Ministry of Environment dated 27.03.1998, recognises the Company Travel Plan as one of the tools able to reduce the use of individual private cars, encouraging more ecologically sustainable means of transport. The Decree forces organisations (public or private) with more than 300 employees per single local unit, or with over 800 employees distributed amongst more local units, to identify a **Company Mobility Manager**. This person has the task to optimize the commuter traffic of the personnel, through the development of a Company Travel Plan.

In addition this same decree introduces the **Area Mobility Manager** (normally present within the Local Community Administration). This person has the task to coordinate the different Company Travel Plans within the Community, to seek synergies between measures planned and act as interlocutor between the companies with Company Travel Plans and the local mobility stakeholders (such as PT-providers).

The planning procedure, including the annual updates to be done consequently to the first drafting of the Company Travel Plan, should progressively obtain a car use reduction, air quality improvement, offer incentives for technological and organizational innovation and ultimately bring about economic, financial and social improvements to the company and its employees.

The Area Mobility Manager has therefore the task to involve both the companies and its employees, who play an important role in congestion phenomena and in the planning and management of alternative solutions.

4. REASONS FOR SETTING UP A COMPANY TRAVEL PLAN

Travel plans can deliver a range of benefits for large and smaller businesses, local authorities, and public sector organisations. Evidence from the Netherlands and the United States, borne out by early examples in the UK, has shown that even the most “basic” travel plans can achieve 3-5% reductions in the numbers of employees travelling to work alone by car. Plans with large discounts on public transport and restrictions or charging for car parking can achieve 15-30% reductions, and some even more, over a period of – typically – two to four years.

Travel plans can bring significant benefits to a company and its employees, such as:

- Operational benefits
- Employee benefits
- Image enhancement
- Business performance

4.1 Operational Benefits

Accessibility is essential for any organisation. If it is easier to get to a organisation, employees’ punctuality will improve and it will be easier for customers to access the organisation and for the organisation to dispatch goods.

The development of a travel plan can help to create a better environment for pedestrians and cyclists, with cleaner air and local streets less congested too. Fewer cars will be arriving at the workplace thus the site will become less congested, more attractive and more accessible.

Travel plans also offer solutions to parking problems:

- Reducing the demand for parking and helping to solve problems of workplace car park overcrowding.
- Car parking costs reduced - the capital cost, rent, maintenance, lighting, and security.
- Re-allocating existing car parking to provide more spaces for customers and visitors.
- As fewer car-parking spaces are needed for staff, land normally used for parking is available for more productive and profitable uses.

4.2 Employee benefits

Recruitment: A travel plan can assist employers to recruit suitable, skilled candidates for vacant posts by helping remove transport barriers. Wider travel choices, increased flexibility, savings and benefits enhance the staff recruitment and retention package.

Health benefits: The more sustainable transport modes include bicycling and walking – and this contributes to health. The employees can be less stressed, healthier, more productive and punctual. Improved health as a result of extra exercise by those walking and cycling can reduce absenteeism and increase productivity. It is now widely agreed that 30 minutes a day of moderate exercise, such as cycling or walking, protects against many forms of ill health. In addition, the stress and fatigue of driving can be reduced through increased travel by public transport and through driver training. The sustainable modes also cause much less accidents. There will be a reduced number of accidents on the journey to work, with consequent cost and sick-leave saving.

4.3 Image enhancement

With increasing concern for environmental issues, an employer may wish to show that he is conscientious, environmentally-aware, by developing a travel plan. Producing a travel plan will improve a company's environmental image. This could lead to new business opportunities, and wider recognition of the organisation. Besides, there will be better relations with citizens living nearby the company by reducing parking pressure and noise, which will help the company to be a good neighbour.

4.4 Business performance

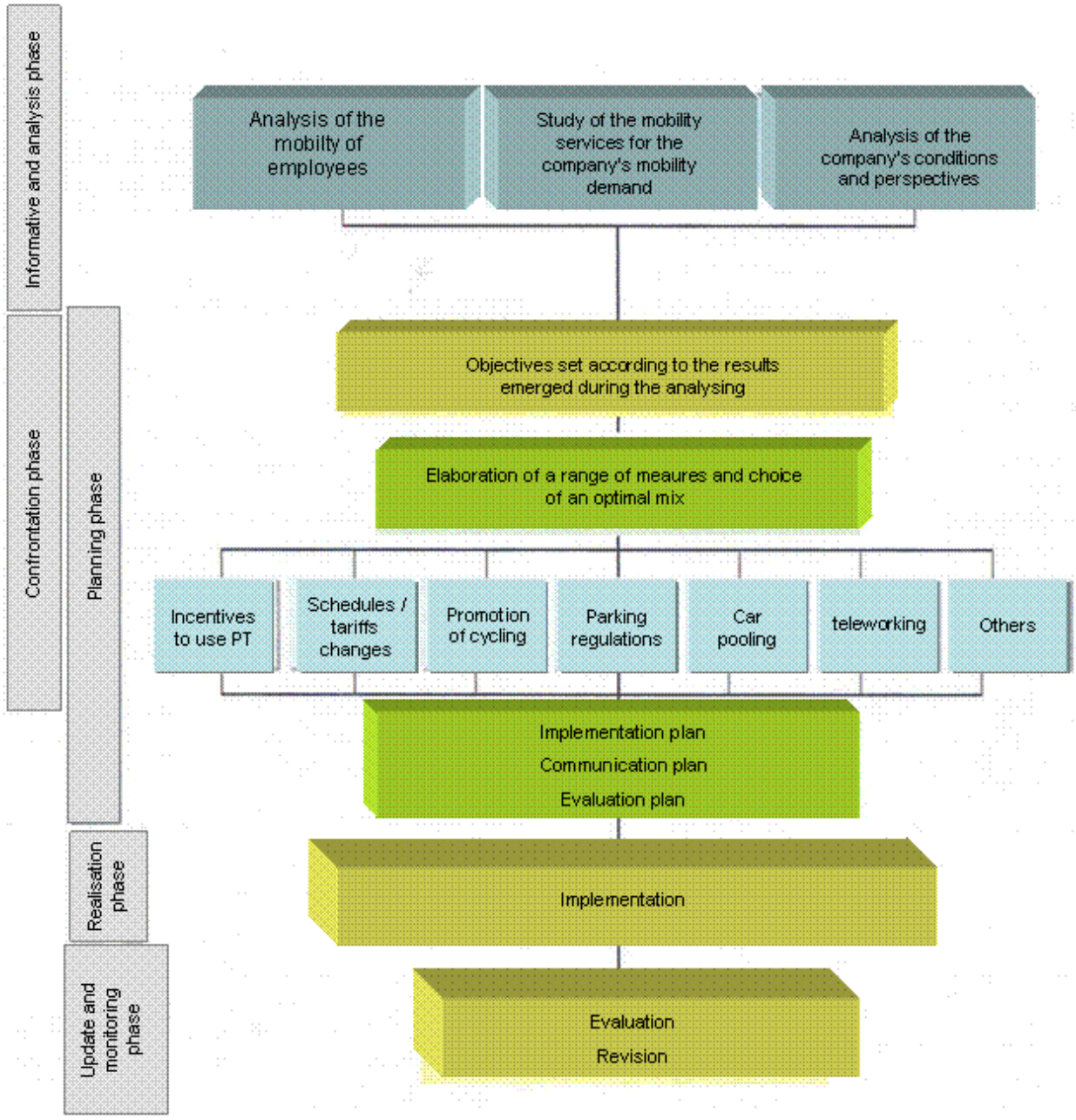
A travel plan can lead to reduced transport overheads such as the provision of company cars, a reduction in business mileage costs, and a reduction in workplace parking spaces. Many travel initiatives are eligible for substantial capital allowances and tax concessions.

The use of the car for business travel is often automatic but not always the only option or the most efficient use of company resources. The alternatives can be cheaper, faster - particularly for longer journeys, and may afford the opportunity to prepare for meetings, etc. *"An hour lost in a traffic jam during a work-related journey is one hour of paid work."*

5. DEVELOPING A COMPANY TRAVEL PLAN: DIFFERENT PHASES

The main purpose of a Company Travel Plan is to reduce the individual use of private cars in home-work travel. In order to successfully pursue this aim, a coordination and consultation effort is needed to involve all stakeholders (entrepreneurs, employees, transport companies, local authorities, trade unions, citizens).
This inclusive way of adopting measures will ensure the maximum support necessary for a successful and effective implementation of a Company Travel Plan.

Following diagram sums up the fundamental elements and the different phases needed to develop a Company Travel Plan.



As you can see from the diagram, a Company Travel Plan can be organised and schematized in five main phases:

1. Informative and analysis phase
2. Planning phase
3. Confrontation phase
4. Realization phase
5. Update and monitoring phase

5.1 Informative and analysis phase

It's the starting phase, the most important and delicate one, on which the success of all the Plan depends. During this phase all the necessary information is gathered:

- employees' travel behaviour
- available resources on-site (a kind of business audit: addressing existing costs for business travel, cost of car parking, fleet cars, etc.)site accessibility
- spatial analysis (geo-positioning)

The analysis of the travel behaviour is generally done by means of a written questionnaire survey, while the external spatial field analysis is done by geo-positioning the information on the territory and analysing the accessibility of the sites.

5.2 The planning phase

Once the analysing phase is pursued it is necessary to

- set objectives and achievable targets It is very important to set targets for reducing the number of staff travelling to work alone by car. Looking at the results of the staff survey and spatial analysis it should be possible to draw up some idea of how many people can change their current method of getting to work. Separate targets can be set for increases in cycling, walking, public transport and car sharing. The main target is usually "a percentage reduction in daily staff car trips to the office". Reductions of 15 - 20 % are fairly typical of successful schemes to date. Any target set should be both realistic and challenging. Targets are often phased so as to increase with time. For example - Surrey County Council's Transport Plan - 10% in the first year and further 10% in the second year.
- identify a set of measures coherent to the needs and to the specific characteristics that have emerged in the complex analysis phase.

To be successful and effective the set of measures should be a correct and balanced mix. Together they should fit into real strategies which may be structured as follows:

- Persuasion strategy, All measures planned within the persuasion strategy can be perceived as "very soft measures". they are characterised by information and communication aimed at generating awareness of the problem and at positively changing the daily behavioural travel habits;
- Concession strategy, the measures within this strategy want to actively encourage and convince the persons towards modal shift and therefore are characterised by concrete actions such as the improvement of the Public Transport services; monetary agreements (discount on season tickets) to promote Pubic Transport, offering financial support for the purchase of ecologic vehicles (e.g electric bicycles/scooters);

- Restriction strategy, the measures within this restriction strategy tend to be perceived as “harder” and may include pricing schemes to deter the use of individual private car use, such as the introduction of restrictive parking management schemes.

Potentially there are a large number of measures that may be introduced in order to encourage modal shift. Nevertheless, it is important to consider the results of the analysis phase and the needs/expectations of the stakeholders in order to define the most successful package of measures to be proposed to the employees. This is because to achieve a substantial modal shift consent and participation must be systematically sought for.

The measures introduced to encourage modal shift and therefore reduce individual car use typically are: *(for further detail see Focus 4: Choice of measures)*

- Walking
- Cycling
- Efficient car use
- Flexible working hours
- Public / collective transport

5.3 Confrontation Phase

In this phase the Mobility Manager has an intermediary role between the interested personnel, top management’s needs, the employees and all the other stakeholders (such as Public Transport companies, local authorities, trade union, other companies in the same business park). In this phase the availability and feasibility of the proposed activities have to be verified. This means that a series of meetings have to be organised to encourage and ensure harmonization and thus a success of the planned activities.

To ensure effectiveness and efficiency for the identified set of measures it is vital to develop a precise communication plan (for more detail, see focus 3) in order to inform and sensitise the stakeholders involved.

The confrontation phase has to be a constructive phase and has to “open the doors” to the realization phase of the strategies identified within the Company Travel Plan.

The strategies will have to be analysed, shared and accepted by all the parties concerned and the activities to be carried out shall be added to the drafting of the single document (the Company Travel Plan.)

5.4 Realization phase

Once the correct set of measures has been identified and the company’s management has decided upon the budget to dedicate to, the realisation phase of these measures can start. The Mobility Manager has to start organising the actions, coordinate the initiatives and verify that the services are being deployed.

The Public Transport Company may modify its time schedules; bicycle racks may be installed close to the company entrance; dedicated parking slots may be reserved for carpoolers; monetary agreements may be defined with shops for tele-shopping, etc.

The variety of measures to be implemented is immense!

Furthermore, what needs to be kept in mind is that all the phases (and in particular the realization phase) need to have dedicated communication activities in order to attract sponsoring, to inform about the measures introduced and to gain acceptance and raise awareness among employees for sustainable mobility.

5.5 Update, Monitoring and Evaluation phase

In order to maintain an updated overview of the company's mobility situation concerning the commuter travel, usually a questionnaire is handed out to new employees. This procedure allows a quick and simple updating methodology of the existing database. For what the monitoring is concerned periodical sample surveys must be carried out to compare the effectiveness of the measures introduced and of the communication activities undertaken. These periodical sample surveys allow to verify and evaluate the degree of participation of the employees to the Mobility Management actions undertaken.

The evaluation of the Company Travel Plan

To evaluate the effectiveness of a Company Travel Plan it is important to use as reference the following table:

On the basis of the aggregation of the data gathered during the survey undertaken among the employees in the analysis phase, it is possible to register the initial value of indicators, and estimate the value of indicators once the measures have been introduced. This latter estimation is done on the basis of the forecasts done on the willingness to modal shift declared during the survey.

Indicator	Present value(1)	Estimated value(2)	Value after(3)
N° of cars owned per 100 employees			
N° of cars used per 100 employees			
N° of bicycles used per 100 employees			
N° of PT users per 100 employees			
N° of carpooling users per 100 employees			
Average "door to door" time			
Total Km travelled with all transport means			
Employees' Degree of Satisfaction			

The first two columns of the chart are completed in order to compare the present day value (1) and the estimated value before the implementation of the Company Travel Plan (2). The third column, which is conceptually like the two previous ones, needs to be completed during the evaluation phase following the monitoring of the Company Travel Plan (one year after the realisation phase). Therefore the comparison between the data registered in the third column and those of the first, both calculated according to the survey, allows an evaluation of the effectiveness of the implemented measures.

Based on the indicators from the table, the Local Authority/Energy Agency, with standard procedures, can calculate the polluting emissions and CO_2 ones, and consequently evaluate the environmental and energetic improvements that the home-work commuter Plans have created.

6. GETTING STARTED …

1. Identify the transport problems and make the case for action.
2. Ensure there is both commitment from management and funding. Consult with staff and unions as early as possible. Set up a working group of members of all departments, unions and senior managers and nominate someone to act as a information point.
3. Raise awareness and gain the support of staff. Talk to local authorities and let other neighbouring companies know of your intentions. If possible appoint a member of staff as travel co-ordinator.
4. Survey staff to find out how people are travelling to and from work, how many people use cars for business; is a car park really needed and who could work from home? Plot employees' homes onto a map with the office in the centre and then see easily who could car share and who could cycle, for example. Rail routes and bus services can also be plotted. This information can be used as a starting point and a basis to measure success or failure of schemes implemented in the Transport Plan.
5. Review the information received and select the best and most appropriate options for reducing the need for staff to travel to work alone in the car. There are no right or wrong ideas to include. What is selected is very much dependent on the company and its surroundings.

7. CAPITA SELECTA

This section will analyse in more detail four crucial aspects of a Company Travel Plan. You might find these details useful when developing the exercise presented in section 6 of this training material and they might serve as checklist when you will tackle a “real” Company Travel Plan.

Topic 1: The preparation of the survey on travel behaviour of employees
Topic 2: The elaboration of the questionnaires
Topic 3: The communication plan and activities
Topic 4: The choice of the measures

7.1 Preparation of the survey on travel behaviour of employees

The accurate selection of questions in the questionnaire is extremely important for obtaining a high response. For this reason although standard questionnaires are available it is important to include components of interest considering the specific working habits, business organisational criteria, management’s needs, etc. This fine tuning must be done in synergy between the Mobility Manager, the Human Resources dept. and any other relevant internal department.

Another important aspect to be identified is the way of distribution of the survey and data collection. It’s expected to hand out the questionnaires, as it often happens, with the wage, together with a cover letter. For a higher response it is better to make the employee feel personally addressed, he/she will normally be more inclined to respond. Therefore it is recommended to deliver the questionnaires personally (through responsible persons in the different units of the company).

For the gathering of the questionnaires, ballot boxes will be placed in strategic spots around the companies.

Before distributing the questionnaire it is always advisable to discuss its structure and contents with the Trade Unions’ representatives.

To facilitate and make the elaboration and analysis phase more efficient a database in Microsoft Access will be elaborated. It will be also useful for the creation of the geo-positioning of all the employees.

7.2 Elaboration of the Questionnaires

The elaboration phase of the questionnaires needs particular focus. It includes: the input of raw data, the processing of the data and presentation of the conclusions. An example of a questionnaire is given in section 9.

- The first task will be the input of the collected survey data in a database. The numeric and graphic processing may be conducted in Microsoft Excel. The data needs to be summarised and the dynamics of employees’ systematic mobility will be immediately displayed.
- The second task is the spatial distribution analysis of the modal allocation of employees on a specific territory (geo-positioning) to better understand the travel behavioural trends and therefore identify the necessary actions to undertake. This may be done using MapInfo technology.
- Lastly, an accessibility profile of each site involved must be developed.

Exclusively by means of all the mentioned analysis (cognitive analysis of data collected, geo-positioning of employees, site accessibility) the best set of measures possible will be identified.

The outputs of the analysis, the measures, and the identified goals will be discussed with the Company's Board before drafting the Company Travel Plan.

All the results from the cognitive analysis, the graphs, the charts and the itemization of the strategies and the identified strategies will be included in the Company Travel Plan.

7.3 Communication Plan and Activities

Do good things and talk about it! It is recommended taking this slogan in mind co-ordinating all company activities to encourage use of sustainable modes. Internal promotion is needed to inform the employees about the measures that are in place and about their success. The employees should be encouraged to try new modes of transport. External promotion is necessary in terms of raising image of the company, to encourage your own employees to continue and to encourage other companies to do the same. In the field of promotion activities, possibilities are unlimited. But the overall aim is to raise the image of the sustainable transport modes.

To raise acceptance for activities aimed at the employees it's recommended that members of the board take the lead and are treated in the same way as other employees. Function, status or position within a company should not be criteria of decision - if senior management retain free parking spaces whilst other staff have to pay, this will seriously undermine the mobility plan . Board members, who are the leaders of the company in every way, should also take the lead on mobility measures.

If a working group is set up to help run the transport plan and take decisions, it is important that a member of every department is represented. It is helpful to include someone from any publicity section to promote activities 'in house'.

Raising awareness through leaflets, notices and staff newsletters is one of the first stages of drawing up a transport plan. It provides an opportunity to let people know more about the plan before they are asked to take part and encourages open discussion. Staff should be continually updated on progress and made aware of any successes. Each new stage and initiative introduced in the transport plan should be publicised as well as the plan overall.

Ideas for publicity include:

- Flyers with payslips
- Leaflets
- Posters
- Articles in staff newsletters
- Information in staff induction packs
- Exhibition stands in canteen areas

Using electronic mail or a company's intranet may also be appropriate. Special events such as Car Free Day and National Bike to Work Day should be used to promote alternative forms of transport. The publicity should continue along with the progress of the plan - milestones or markers such as the 50th person to join a car sharing scheme provide good publicity opportunities.
Local press may also be interested in a company transport plan and what it means. This will help to promote the environmental image of the company.

7.4 Choice of concrete measures

Each site will have its own problems to tackle, so every travel plan will be different. Much depends on the size and location of the company. Remember that some measures, such as car sharing, can become more viable if you get together with neighbouring companies. Various guides to developing a company travel plan provide reasonable detailed lists and/or descriptions of the possible measures and actions that form part of a CTP 'toolkit'.

The measures and actions identified within CTP's can be broadly categorised as follows:

i. Walking
ii. Cycling
iii. Efficient car use
iv. Flexible working
v. Public transport

In the following we give you some examples of actions you can undertake in these categories.

i. Walking

Many journeys are less than 3km/ 2 miles long - a distance, which would only take 40 minutes to walk. Walking provides an ideal form of exercise and relaxation. In the UK, currently only 1 in 10 commuter journeys are made on foot.

Benefits

- Good exercise - healthy
- Reliable in terms of time taken
- It's free!
- Don't need any equipment
- Sociable
- Promotes a good company image of civic responsibility
- Sets up a productive dialogue between employees and employers, showing the employer to be thoughtful and responsive
- Reduced car parking pressure with more staff leaving the car at home

Barriers

- Concern about the weather
- Can't walk for long journeys
- Many people are worried about safety

Encouragement

- Ensure that the footpaths are kept clear and well lit
- Publicise the routes
- Look into the possibility of running a “virtual bus” where people agree to walk a route together
- Work with the local council to ensure adequate sign posting for the routes - this will also help visitors and improve awareness
- Push for better maintenance of pedestrian routes, ensure footpaths are well lit,
- Consider allowing “comfortable clothes” in the office, suitable for walking to work

ii. Cycling

Cycling is easy, an ideal form of exercise, quicker than walking, sociable and good for health. In the UK, more than half of all car journeys are less than 7,5 km/ 5 miles, an easy cycling distance. It can take 5 minutes to park a car and another 5 minutes to walk to the office by which time the journey could have been cycled. Research has shown that cyclists have lower levels of stress, less risk of heart attack and a fitness level equivalent to someone 10 years younger.

Benefits

- Cycling offers many health benefits and increases fitness
- Cycling is fast and efficient: cyclists can cut through traffic and so journey times are more predictable
- Reduced car parking pressure - 10 bikes can be parked in the space of one car
- Promotes a good company image of civic responsibility
- Cycling is pollution free and enjoyable
- It costs very little to maintain a bike compared to a car and cost per journey is free
- Changing and washing facilities can be used by a range of employees besides cyclists
- Sets up a productive dialogue between employees and employers, showing the employer to be thoughtful and responsive

Barriers

- Not owning a bike or having the confidence to try cycling
- Fear of accidents
- Put off by bad weather, although on an average journey of 15 minutes into work, it only rains on 9 mornings a year!
- Lack of good cycle parking and changing/washing facilities at the work place

Encouragement

- Provide secure (covered) bike parking - cycle stands or lockers
- Promote the health benefits of cycling
- Provide showers and clothes lockers
- Identify and publicise suitable routes for cycling to the work place and investigate the creation of cycle lanes with the local council’s help
- Offer interest free loans for people who want to buy a bike
- Investigate the opportunity of discount for staff at local cycle shops
- Set up a Bicycle Users Group, who can offer support and advice
- Loan equipment to mend punctures etc.
- Pool bikes - buy company bikes instead of company cars

- Provide reasonable cycle kilometre/mileage allowances
- Consider allowing staff to wear “comfortable clothes”, suitable for cycling, in the office

iii. Efficient car use

Research has shown that 80% of people who travel to work by car do so alone. Car sharing is a practical way to reduce car use while still allowing a certain amount of flexibility and independence.

Benefits

- Can halve the cost of getting to work
- Provides team building opportunities and a chance to talk with colleagues
- A more relaxing journey with less driving stress
- If all staff car shared with just one colleague current parking requirements would be reduced by half
- Setting up the scheme also encourages a productive dialogue between employees and employers

Barriers

- Fear of being unable to get home in an emergency
- A need to keep to set schedules
- A possibility of being less able to stop off on the way home
- Giving up time alone
- Fear of being forced to share with an unpopular colleague

Encouragement

- Set up a car share data base to match staff work routes, and time of journey as well as starting point
- Guarantee a ride home in case something happens to the arrangements in unforeseen circumstances
- Benefits or offers, tokens for example, when employees sign up
- Dedicated parking for people who car share, closer to the office and cheaper
- Car share coffee clubs could be set up to encourage potential car sharers to meet
- Provide pool cars or bikes for those who need a car during the day for work

Some companies buy or lease vans or minibuses so that employees can share journeys. Users are charged a fee representative of their share of the operating and capital costs. In some cases the driver travels free.

iv. Flexible working

It may be possible for staff to vary their hours, avoiding rush-hour travel, or work from home, even if only occasionally. Some companies set up local telecentres for employees to work nearer home. It may be possible to allow staff to work 9 days out of every fortnight or 4 days a week, assuming longer working hours for each working day.

Home or teleworking is quite often done in conjunction with conventional working patterns. The amount of people teleworking is steadily increasing. In the spring of 1998 there were approximately a quarter of a million teleworkers in Britain.

Benefits

- Staff find it easier to balance work and home life
- Cutting journey time for staff can mean more efficient working
- Telecentres and the home environment are often quieter and easier to work in than the office
- Reduced car parking pressure
- Promotes a good company image of civic responsibility

Barriers

- The relevant technology needs to be in place
- Other people in the office often have to cope with extra calls
- There can be cases where clients have difficulty getting hold of employees/their contacts
- There are insurance and health and safety implications
- Individual staff heating and lighting their own homes cannot be seen to be a benefit in environmental terms and staff may not be keen to pay

Encouragement

- Promote the idea and make staff aware of the opportunities
- Ensure that the relevant technology is available
- Review the core working hours, opening the office earlier in the morning and closing later at night

v. Public transport

In the UK, only one in 20 journeys to work is made by rail. Less than one in ten commuter journeys are made by bus although they are a more popular choice in towns. Many people would use the buses if they were more reliable or the information on routes was more easily available. Several employers have been able to arrange discounted fares or improved services with their local bus operators. “Quality Partnerships” between councils and operators can increase passenger numbers and the image of bus travel locally.

Benefits

- Reduced car parking pressure. There is no need for the expense of parking or the stress of finding somewhere to leave the car
- Traffic free, no congestion
- Passengers can work whilst travelling
- Any fare discounts or travel cards can often apply to leisure journeys too
- Sociable, a chance to chat with friends or colleagues
- In some cases, better access to traffic-restricted town centres
- Using public transport removes the stress of driving in congested traffic
- Bus lanes can mean that buses arrive sooner that the car
- Train travel, according to statistics, is safer than car travel and less polluting
- Staff can use existing park and ride as part of an integrated transport journey
- A large number of staff travelling by public transport promotes a good company image of civic responsibility

Barriers

- Negative perception of reliability
- Understanding the bus routes can be confusing to start with
- Lack of services on desired routes
- Low image status
- High fares
- Lack of connecting services
- Distance from suitable station
- Difficulty of carrying heavy and bulky objects

Encouragement

- Ensure that timetables are readily available, using displays or a Journey Planner on personal computers so that staff can have easy, readily available information on train and bus times
- Work with public transport operators to provide extra services where applicable
- Negotiate staff discounts
- Run a shuttle bus to staff to and from the nearest station
- It may be possible to set up a Travel centre within the company, selling bus and train tickets and to negotiate staff travel passes
- Work with bus companies to improve bus routes and shelters. It may be possible to add new, more relevant bus stops for staff and better seating and shelters
- It may be necessary to offer a guaranteed ride home (a taxi alternative for example) for people who fear being stranded
- Push for the provision of bus lanes

8. CASE STUDIES

8.1 Case study 1: Administration of the City of Ghent, Belgium

Motivation:

- Setting a good example as a public authority
- Supporting the introduction of the mobility plan for the city centre, which turns the city centre into a large pedestrian zone and reduces traffic circulation and parking for cars
- Supporting the city's cycling plan.

Solution: Promotion of sustainable transport modes.

These included the following :

- Urban planning

— Concentrating most of the city's administrative services on one location which has very good public transport accessibility

- Provision of bicycles for service trips

— Pool of bicycles for service trips

— Introduction of police officers on bicycles

- Incentives for the users of sustainable modes

— A reimbursement of 0,15 Euro/ km for every km of the home to work journey which is not made by driving alone (also applies to car-pool passengers)

— A reimbursement of 0,15 Euro/km for every km in service traffic done using your own bicycle

- Promotion campaign.
  In 1996, an important promotion campaign was organised in favour of the sustainable transport modes, including the following measures:

— Individual travel advice and distribution of car-pool matching lists

— Car-pool promotion meetings

— A free test ride with public transport

— A prize for employees spotted using a sustainable transport mode

— Introduction of parking charges for staff

Success

The financial measures resulted in an increase of 2,7% in the use of sustainable transport modes. The 1996 promotion campaign caused a reduction of 10 to 14% in solo car use in the period immediately following. In particular, cycling has become more and more popular among the civil servants: 20% of the whole workforce comes to work by bike, which is high for an urban environment.

8.2 Case study 2: A group of companies in the city of Brescia (Italy)

Five companies: ASM (municipal services such as heating, waste management, electricity); IVECO (truck industry); LONATI (machinery producer for manufacturers); ORI MARTIN and ALFA ACCIAI (two steel industries) associated to promote mobility management activities and draft each a Company Travel Plan.

Motivation:

- Encouraged by the Area Mobility Manager (Local Authority)
- Financed by the Lombardy Region through a call for proposals
- In search of image enhancement due to the high environmental impact the companies have on the territory

Activities:

In the project a number of diversified activities were organised:

- Training courses for the company mobility managers
- Media seminars and press conferences to keep the public aware of the activities
- Drafting of Company Travel plans
- Organising and realising of measures to encourage modal shift. These activities included: :

— Encouragement of cycling

— Agreements with the public Transport company to give better information and offer yearly passes at a convenient tariff (plus a free test ride with public transport

— Distribute communication material (plus develop dedicated area on the intranet) to sensitise the employees on the sustainable mobility issue and inform on the services introduced

In addition, ASM organised a car pooling service offering to a specific target group (for the pilot phase and to all the employees in the definitive phase) a fleet of methane cars, free of charge, in order to encourage modal shift from individually used private cars to carpooling solutions with teams varying from 3 to 5 members. The initiative has been a significant success and ASM is now intending to exit th pilot phase and therefore open this opportunity to all the employees.

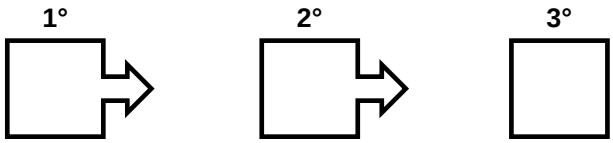
9. EXAMPLE OF A QUESTIONNAIRE

SPECIMEN OF A QUESTIONNAIRE FOR A COMPANY TRAVEL PLAN

Section 1: House-Work Displacement characteristics

Q.1 Which means of transport do you usually use to travel from Home-Work way?

Write in the box the number that corresponds to the modes of transport used, found in the list below. If you use more than one modality (e.g. car+bus, or train+bus) please mark the appropriate sequence.



1. Walking
2. Bicycle
3. Motorbike/motorcycle
4. Urban bus
5. Sub-urban Bus
6. Train
7. Car
8. Other (spec._____)

If you don't use the car or the motorbike/motorcycle to reach your work place proceed to Q.2, if not go straight to Q.3

Q.2 Could you have an available car to reach work?

❑ Yes	❑ No

Q.3 Do you use the same modes of transport both during the summer and the winter time?

❑ Yes (always)
❑ Yes, but sometimes I use
❑ No, I use other means of transport

Mark which (max 2):
❑ Walking
❑ Bicycle
❑ Motorbike/motorcycle
❑ Urban Bus
❑ Sub-urban bus
❑ Train
❑ Car
❑ Other

Q.4 On your way back do you usually use the same modes of transport that you used going?

- ❑ Yes, (always)
- ❑ Yes, but sometimes I use
- ❑ No, I use other means of transport

Mark which (max 2):

- ❑ Walking
- ❑ Bicycle
- ❑ Motorbike/motorcycle
- ❑ Urban Bus
- ❑ Sub-urban bus
- ❑ Train
- ❑ Car
- ❑ Other

Q.5 Overall, how long do you take to travel from House to Work?

There: _____min.

Back: _____min.

Q.6 How far is your home from your work place?

Km:_____

Q.7 For what reason have you chosen the modes of transport that you use for reaching your work pace? *(mark max 3)*

- ❑ Cheapness
- ❑ Difficulty in parking
- ❑ Security
- ❑ As an alternative to a stressful means of transport
- ❑ Health
- ❑ Time taken
- ❑ Comfort
- ❑ Accompanying of people
- ❑ Independence
- ❑ No other alternative
- ❑ Lack of public transport
- ❑ Poor connections
- ❑ Irregular trips
- ❑ Stops too far away
- ❑ Lack of a direct connection
- ❑ Other_____

Q.8 Express an evaluation on the Public Transport offer available for your home-work journey

	Good	Satisfactory	Unsatisfactory	Poor
Comfort	❑	❑	❑	❑
Reliability	❑	❑	❑	❑
Time taken	❑	❑	❑	❑
Information (times, lines, etc.)	❑	❑	❑	❑
Accessibility of stops	❑	❑	❑	❑
Adequacy of fares	❑	❑	❑	❑

***Section 2:* Job characteristics**

Q.9 What kind of working schedule do you have?

- ❑ 5 days
- ❑ 6 days
- ❑ shifts
- ❑ Part-time
- ❑ Other (spec._____)

If you are a shift worker go straight to Q.11

Q.10 Referring to the last working week, what was your working schedule?

	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
Entering Time						
Leaving Time						

Q.11 Usually, do you move within the city for work?

- ❑ No
- ❑ Yes, using a private vehicle
- ❑ Yes, using a corporate vehicle
- ❑ Yes, using a taxi
- ❑ Yes, using Public Transport

***Section 3:* Employees' Profile**

Gender:	*Age:*
❑ M ❑ F	❑ Less than 20 yrs ❑ 21 - 30 yrs ❑ 31 - 40 yrs ❑ 41 - 50 yrs ❑ 51 - 60 yrs ❑ Over 60 yrs
Professional qualification:	*Working Location:*
❑ A ❑ B ❑ C ❑ D ❑ E ❑ F *(varies from company to company and country to country)*	❑ A ❑ B ❑ C ❑ D ❑ E ❑ F

Address: _____

Zip.: _____ City:_____

If to reach your working place you use the car or the motorbike/motorcycle you are kindly requested to continue with the following questions (section 4) if not we thank you for the cooperation!!!

Section 4: dedicated to who usually uses the car or the motorbike/motorcycle to reach work

***Section 4:** Car and motorbike/motorcycle users' characteristics*

Q.12 The vehicle you use to travel to work, it is used as:

- ❑ Driver (go straight to question 13)
- ❑ Passenger (go straight to question 14)

Q.13 Where do you usually park once you've reached work?

- ❑ On the road, free of charge
- ❑ On the road, paying
- ❑ Paying car park
- ❑ In corporate Parking
- ❑ Other (specify_____)

Q.14 Do you think there are parking problems close to your working place?

- ❑ Yes
- ❑ No
- ❑ I don't know

Q.15 Is the journey you do to reach your work place bound? (e.g. to accompany/ take back children to/from school, accompany the partner to work or other)

- ❑ Yes
- ❑ No

Q.16 Would you be prepared to use Public Transport (PT) to reach your work?

- ❑ No
- ❑ Yes

If the following condition would occur:
(mark max 2)

- ❑ Reimbursement, also partial of pass
- ❑ Presence of exchange parking areas along the way
- ❑ Company vehicles that connect with the main stops of the Public Transport
- ❑ Stops of Public Transport closer to working place
- ❑ More reliability of Public Transport (e.g.. keeping Schedule of trips)
- ❑ The purchase of travelling pass would allow me to take advantage of discounts or specific conventions
- ❑ Other (spec._____)

Q.17 Would you be prepared to practice CAR POOLING (share the car trip with other colleagues – as driver or passenger – sharing expenses)?

❑ No

❑ Yes

If the following condition would occur:
(mark max 2):

- ❑ Accessibility of a system that would get me in touch with people that travel the same way and at the same time
- ❑ I would have to pay for parking my car
- ❑ If during working hours I could use company vehicles for possible displacements
- ❑ Reserved Car pooling parking areas would be available
- ❑ The displacement time taken wouldn't be more than 5/10 minutes longer than the present one
- ❑ If, when necessary I could be reimbursed for use of taxi
- ❑ Other (spec._____)

Q.18 Would you be prepared to use the BICYCLE to reach work?

❑ No

❑ Yes

If the following condition would occur:
(mark max 2):

- ❑ The bicycle would be given/offered by my company
- ❑ I would have to pay for parking my car .
- ❑ There would be better and safer cycling lanes
- ❑ Availability of changing rooms/ showers
- ❑ If during working hours I could use company vehicles for possible displacements
- ❑ Take advantage of conventions for purchasing the equipment
- ❑ Take advantage of discounts for insuring the vehicle against theft
- ❑ Other (spec._____)

THANKS FOR THE COOPERATION!

10. EXERCISE

A company is situated in the multifunctional city centre of a City with about 300.000 inhabitants. The company is a big store and employs 550 people (balanced gender). Parking in the companies surrounding is limited for a maximum of 3 hours and you have to pay 1,8 Euro per hour. The company itself only has 25 own parking spaces.

The access of the company by public transport can be estimated as good.

Design a mobility plan for this company including the following items:

- Measures to reduce home-to-work solo-car traffic.
- Measures to encourage non-motorized modes of transport
- Measures to encourage public transport use

Consider constructional, organisational and financial measures. Establish an awareness and information plan and implement some „testing new behaviour“actions.

Maybe it is helpful to use the „Toolbox for Mobility Management in Companies“ www.mobilitymanagement.be.

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PART III SCHOOL TRAVEL PLANS

1. TRAINING MATERIAL ON SCHOOL TRAVEL PLANS

This training material is set up to help you understand what school travel plans (STP'S) are all about. This paper will give you an overview of the reasons why school travel plans should be developed and implemented in your region. Following a step-by-step scheme you will be able to help schools and local authorities in developing their own STP's.

The training material will give you some tips in setting up a STP of your own. It provides theoretical approaches and some practical examples. Information on case studies and ways to find funding are included for your benefit.

2. INTRODUCTION

Mobility management aims to increase sustainable travel by means of introducing a range of 'soft measures'. Examples of soft measures are education, information, awareness raising. Through using these types of measures it is possible to bring about a change in travel patterns such as the home-school trips. An integrated approach of mobility management measures for home-school journeys is the development and implementation of a school travel plan (STP).

How children get to school is one of the general indicators of sustainable development.

Each day during the school term millions of pupils and their parents travel from home to school in the morning, and make the return trip in the afternoon. Many pupils living close to school walk, with those living further away travelling mainly by bus or by car. The school journey affects public transport patterns, causes localised congestion around schools and contributes to the sharp road traffic peak around nine o'clock each morning.

Over the past 20 years the proportion of children travelling to school by car has almost doubled, yet many live close enough to school to walk. Many older children would like to cycle, but are worried about safety, or their school may lack secure cycle storage facilities. Other pupils would like to travel by bus, but there may not be a service available at the right time. If one is available it may be too expensive, particularly for families with two or more children, or else children may feel intimidated by bullying or other anti-social behaviour.

Whatever the reason, over the past 20 years there have been big changes in the way that children travel to school. Car use has doubled, bus and train patronage have remained steady, and the proportion of pupils walking or cycling has decreased sharply. These trends reflect increasing car ownership, and a corresponding decline in the number and length of adult journeys made on foot or by bicycle. Driving to school causes congestion: in urban areas in term time, nearly one in five cars at 8.50 a.m. is on the school run.

It is our aim to reduce car use on the school run by creating conditions, which will allow far more children to travel safely to school on foot, by bicycle or on the bus.

We know that many parents fear both traffic and 'stranger danger', although the likelihood of being killed in a traffic accident is about 40 times greater than the risk of death following abduction by a stranger. The numbers of child pedestrians and cyclists killed and seriously injured have been reducing in recent years, but more needs to be done to help children walk and cycle safely on the school journey.

Travel is of major concern for many schools, with its impact on pollution and road safety. Developing and implementing a mobility plan for schools - called a "school travel plan" - can be a very useful instrument. The major aim of a STP is to stimulate the number of environmental friendly trips to school and to increase traffic safety at the school gate and on the routes to school.

We want to bring about a step change in home to school travel patterns to cut congestion and pollution, but also to allow many more pupils to take regular exercise.

All parents want their children to travel to and from school safely. They want safe and attractive routes for walking and cycling or – where they live some distance from school – a high quality, frequent and

affordable bus service. Many children want to travel independently, along well-maintained streets, or on convenient, safe and clean buses.

This document sets out what a school travel plan contains and how it can help in changing travel patterns towards more walking, cycling and bus travel as realistic options for most school pupils.

3. SCHOOL TRAVEL PLAN

3.1 Definition

A school travel plan (STP) is a document with an outline of the school's needs and problems regarding travel to and from school. It is a tool to make travel to and from the school by pupils, parents and teachers more sustainable and safe and aims to:

- reduce car travel
- improve safety and the environment for walkers and cyclists
- help improve facilities for walkers and cyclists
- help improve bus and train services

A school travel plan is a document produced by a school in conjunction with the local authority. It encompasses all the issues relevant to journeys to and from the school and includes concerns about safety and health, and proposals for ways to make improvements.

It is a means to bring together the ideas and contributions of different groups of people, to help to solve problems.

The 'Road Safety Strategy for Wales', January 2003, explains that:

''school travel plans aim to encourage schools to identify and solve problems associated with the school journey (especially those related to safety). The plans are produced by the schools themselves and do not have to include physical measures to improve routes but instead are a 'way of living and learning'.''

A school travel plan can compile initiatives and actions concerning information, education, awareness raising, transport organisation and the infrastructure.

STP's are created in partnership with the local authority, the school management, parental committees, pupils and possibly the public transport company. In a school travel plan each partner takes up his own responsibility.

3.2 Reasons for setting up a STP

A school travel plan is a series of practical steps for improving children’s safety on the school journey. But the plan also contributes to the benefits of the wider community.

Traffic reasons

The traffic junction at a school gate seems very difficult to unravel. This is why we keep looking for solutions to break the vicious circle of parents driving their children to school with their car because of the traffic safety.

STP's are not just about travel but also about improving health and broadening education. They contribute towards making the local community greener and improving quality of life. The benefits to schools, pupils, parents and the local environment can be considerable. Some of these can include:

- Improved highway safety around the school

- Reducing accidents and danger on the journey to school
- Improved road safety education and awareness for children through pedestrian and cycle training, enabling parents and children to choose walking, cycling and public transport with confidence
- Cutting congestion at the school gate
- Draw attention to local issues and builds links between schools, parents and the wider community
- Give children the opportunity to have a say in decisions that affect them
- Allow links to be made with the transport operators

Only a positive and constructive co-operation between all the different involved partners can ensure a sustainable solution. That's why the most successful STP's are those that engage the whole school and the relevant partners in an effective way.

Health reasons

We know that children develop travel preferences in the early years of primary school, and that a third of children would like to cycle when they start secondary school. We believe that most parents, children, schools and their communities want to reverse the trend of recent years, and that our proposals will encourage children to make more environmentally friendly and healthy travel choices.

The amount of daily exercise taken by children has decreased in recent years, which has contributed to the growing proportion of children who are overweight and obese. Childhood obesity – now affecting 8.5 per cent of 6 year olds and 15 per cent of 15 year olds – often leads to obesity in adulthood. Adults who maintain their correct weight and are physically active have a reduced risk of chronic conditions such as Type 2 diabetes and heart disease. Increasing the number of pupils walking and cycling to school will combat rising obesity and improve the health of our children. An improved fitness of children by increasing walking and cycling through the implementation of a school travel plan is a major benefit.

Environmental reasons

Reduced traffic congestion and pollution near and around the school by introducing a STP is of major concern for all parties involved.

Urban and Rural areas

School travel plans can and should be developed in both urban and rural areas. Cutting car use poses particular challenges in rural areas where there is often greater reliance on the car for travel to school, because public transport is limited, the average home to school journey is longer, and there are fewer footways and street lights. Road accident rates are also higher in the countryside. Rural communities should be encourages to find innovative ways to reduce car use on the school run, which may differ from solutions that are appropriate in towns and cities.

3.3 Developing a School Travel Plan

Setting up a school travel plan should always be looked at as an integrated approach that is also incorporated in other travel planning from the local authority. It's also important however to integrate the development of a STP with other school plans so as to reduce the burden that is put on schools.

Developing a STP should never lead to any inappropriate burden in a school. Setting up a STP in a school should therefore always be linked to learning goals and educational attainment levels for all grades such as those for geography, physical health, citizenship work, etc. It may make sense for groups of local schools to produce travel plans together, for example, if they belong to the same school sport coordinator partnership.

The STP is a basis for measuring change, and, when approved by the governing body, it can become a formal statement of school policy. School travel plans have attracted government support as they are seen as a way to help reduce the number of unnecessary car journeys.

School travel plans are co-operative ventures, and their success depends on informing, consulting, and involving everyone with an interest in the project. This includes pupils, parents, teachers, governors, school premises manager, local residents, councillors, health promotion officers, and perhaps public transport operators. Representatives of these groups need to be actively involved in working out the details of the STP, and everyone who might be affected, for example all parents, should be consulted about proposals.

A really useful start is to form an action group or committee. Perhaps give it your own local name. Yours could be a fairly formal group, which meets at the school, though some people have found an informal group works just as well. Seek the support of your local authority school travel adviser / co-ordinator. Many local authorities now produce their own excellent guidelines to help schools prepare a STP, in print or on websites, and some supply a template to simplify the process.

A school travel plan working group should be set up to get the project off the ground and keep it going. This small group might consist of the head-teacher, parents, pupils, governors / school board members and a local authority officer, yet the whole school community will need to be involved in some of the stages, especially the consultation.

The main elements will be common to all STP's but each plan is unique because it is produced and owned by a particular school, and addresses that school's needs. The following list is a good basic guide to what a school travel plan should contain:

- a brief description of the location, size and type of school;
- a brief description of the travel/transport problems faced by the school/cluster of schools. (This should include all pupils' travel needs: journeys to and from school at normal start/finish times, journeys to attend pre-and after-school events and journeys made during the school day to attend activities at other locations;)
- the results of a survey to identify
- how children currently travel to/from school and
- how they would like to travel to/from school;
- clearly defined targets and objectives;
- details of proposed measures;
- a detailed timetable for implementation;
- clearly defined responsibilities;
- evidence that all interested parties have been consulted; and
- proposals for monitoring and review.

Essentially the plan is a statement of problems which need to be addressed and a strategy for overcoming or reducing them by a number of initiatives, which will make journeys to and, from school safer and healthier. The initiatives will often include promotional activities, training, better facilities, enhanced public transport services, and safety improvements to the physical environment.

A school travel plan works by looking in detail at children's needs on the school journey. Parents, governors, teachers and children work together to find the right solutions for their school. By involving the

local authority and other outside agencies it can be made safer and easier for children to walk, cycle or use public transport. A plan can be geared to the needs of a primary or a secondary school.

Ideas include a rota for parents to accompany younger children on a 'walking bus', cycle stands at the school and low fare deals for children using public transport. A school 'safety zone' can transform children's journeys with crossing points, traffic calming and lower speed limits on nearby roads.

The school can make some changes independently, while others rely on support and funding from the local authority or other agencies.

Lots of schools have already made the school journey safer and easier for their children. Most find the benefits are well worth the time and resources needed.

Following a school travel plan at Wheatfields Junior School, St Albans, UK, the number of eight to nine year olds walking to school rose from 45% to 75%.

A successful school travel plan usually depends on the energy and enthusiasm of one or two people who are acting as champions for the project. From the outset, there needs to be someone who is prepared to make arrangements and co-ordinate the initiative. If this is you, make contact with others who will share some of the organising and help get the project started.

A school travel plan is developed in different steps. There are several things you need to know, especially:

- how children usually travel to and from school (walking, cycling, using public transport, coming by car or car sharing with another family), and whether they are accompanied by an adult
- where children are travelling from (the school will have this information)
- what routes children are using for the school journey
- which places are considered to be dangerous for walking or cycling, and why
- details of any accidents or 'near misses' that have taken place on the school journey
- any other difficulties children have in making the journey on foot or by bicycle
- any problems there are with bus or rail services and where a new service might be helpful
- how children would like to travel if they had the choice, and whether they own a bike or have a bus pass

A STP is developed in 3 different steps:

1. Analysing phase
2. Development Action Plan
3. Evaluation

3.3.1 Analysing phase

Consultation with the school should establish how pupils currently travel to school and which are the key issues relating to sustainable and safe trips to school for pupils, parents, staff and governors.

The first step for the school action team is to find out more. How are children making the journey? What do they and their parents think the problems are? Pupils can be involved in recording their own travel patterns as part of their class work. A large-scale map of the school catchments area makes an eye-catching display and provides a good focus for discussions with both children and parents. Surveys are used to collect more information.

Survey maps can be made clearer by adding street names and landmarks such as newsagents, shops, etc. You don't need to survey the whole school - you could sample one form in each year, or start with years four to eight, where walking or cycling independently is more likely to be a current issue.

Work out beforehand how the survey results will be analysed. Some schools have passed this job to students at nearby colleges or their own sixth form. If the school or a parent can collate the results on a computer spreadsheet then this makes the task simpler.

To collect this information ready-made forms are available (see chapter 7), though you may want to change these for your school or local community specifically. It is particularly useful to include an easy-to-read map of the school environment and a plan of the school grounds showing all entrances. Children and parents then mark their route to school and the places where they feel unsafe.

To gain a quick 'snapshot' of travel choices across the school, class teachers can ask pupils for a show of hands on how they made the journey that day. Collecting these figures on a regular basis allows you to monitor the progress of the project. In chapter 7 you can also find the ready-made classroom forms and school forms to help teachers in getting this ‘snapshot’.

To support the snapshot findings, it is important to find out what are the most important walking and cycle routes to school? It is possible to collect this information via the use of “transportation circles”. For young children we presume that 15 minutes of travel time from home to school is more than enough. Within 15 minutes they should be able to walk a stretch of 750m to 1 km and cycle 3 to 4 km. On a map you can draw a transport circle of about 750 meters surrounding the school (with the school being the centre of the circle) to indicate which pupils live in the “pedestrian zone” (within a range of 750m of the school). By drawing other circles you can indicate the “cycling zone” (within a range of 3km of the school). In a second step pupils can indicate their home on the map and see if they live in the pedestrian, cycle or bus/car zone from school, and which pupils live within the “cycling zone”.

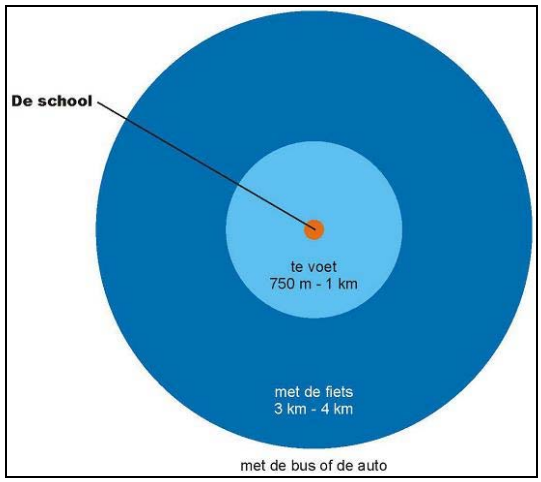


Fig. 3.3.1. A transportation circle

In addition to this, you determine the prioritised routes of your school travel plan by drawing the dominantly used school routes.

A. What are the bottlenecks in the direct vicinity of the school?
B. What are the bottlenecks on the school routes?
C. What are the bottlenecks in transport organisation?

These steps will identify the key issues for pupils, parents, staff and governors. These might include traffic problems outside the school gates, reasons for not walking or cycling to school, issues relating to start and finishing times and after school activities. The majority of the information in this section will have to come from a brainstorm with the working group and a consultation carried out with pupils, parents and staff.

If you choose to survey more in depth, then you need to survey a sample of both children and parents. Where children are travelling to school unaccompanied, their parents may not know about details of the journey such as favourite short cuts. Also, it's important to find out the views of parents, as they usually make the final decision on how their children travel.

Reaching parents can be difficult, though some schools have managed a good rate of return by sending forms home. Another approach is for a group of volunteers to catch the parents who pick children up after school, and fill in the forms using face-to-face questions. This can be a good time to get people talking, especially if you put up a display about the project nearby/at the school entrance. To save resources of sending the questionnaires to the parents, they can also be delivered via the children in the classrooms. Teachers can then ask children to bring back the filled in forms on a certain day.

To present the results from the surveys, they can be brought together on one large map to show the main routes used and the places that are perceived as unsafe. This will indicate where the danger points – black spots - are and will help you set priorities for action in the following phase of setting up your STP. The results of the surveys will also highlight other concerns, giving you a good picture of travel to the school and the issues your school travel plan has to address.

As a STP is not a stand-alone project from the school, but requires co-operation with the local authority, the survey findings can also form the basis of your discussions with the local authority. Try to persuade them to come and see the problems for themselves. This can be done for example by organising a bike trip or walk along the black spots that are described in the survey results. In collaboration with the STP team, the local authority should be able to put forward a range of measures to improve safety.

The results from the survey should of course also be presented in the first place to all parties involved in the school: management, pupils, teachers, parents. Presenting the survey results in school can generate a lot of interest and raise awareness about travel choices. Findings can be fed back to the whole school community in different ways - through an assembly, an exhibition or a parents' meeting. This is also an opportunity to explain the ideas for improvements that have come from both the school and the local authority, and invite further comments from everyone. Be sure to seek the views of any disabled children or adults who come to your school. Proposals can be illustrated with pictures, maps or models - they don't have to be perfect to be useful!

Finally it might be interesting for your school community or local authority to present the findings of the surveys to the residents living in the school environment. You might invite residents to come to a meeting or visit an exhibition after school. If you can take an exhibition out onto the street you will involve a wider cross-section of people.

3.3.2 Action Plan

Taking the results of your survey it is time to incorporate them into an action plan.

Consider the results of the surveys and the ideas that have come from parents, children, staff and the local authority. Outside agencies may be able to help you with the process if they are not already on board. Look at all the actions the school can take independently as well as those that require local

authority support. Decide which measures will work for your school. While some actions can be taken straight away, others will be long-term plans, for which you will need to find support and funding. It is very important to define a clear timing for your actions: when making an action list, put which initiatives you plan to do this or next school year (short term), in 2-4 years (medium term) or in 5-10 years (long term) time. An example of such an action list, you will find under chapter 7.

Your action list will effectively be a 'first draft' of your school travel plan. Add to this what it is you are hoping to achieve, for example, a reduction in traffic at the school gate, a decrease in the number of children driven to school and an increase in the number of children who walk or cycle. You could set some targets for these, with help from your local authority. If you need to, you can adjust them later, but it helps to have something to aim for. We advice you to monitor your school's progress on a regular basis, at least once a year.

Various guides to developing a school travel plan provide reasonable detailed lists and/or descriptions of the possible measures and actions that form part of a STP 'toolkit'. The measures and actions identified within STP's to address the barriers to environmentally friendly mode use can be broadly categorised as follows:

- Walking initiatives
- Cycling initiatives
- Public transport initiatives
- Engineering initiatives
- Enforcement initiatives
- Education programmes (for pupils and parents)
- Promotional activities
- Others

To determine which actions or measures should be planned in the action list it is important to set objectives, goals and aims based on the results of your survey. An objective describes how your school is going to make the changes you are trying to achieve with the STP.

For each of your objectives set a target i.e. what change you hope to see over a given period. Targets need to be measurable, realistic, set over a specific time period and linked to an objective. For example:

- to increase the number of pupils cycling to school to 12% by July 2007
- to inform pupils, parents and teachers of the benefits of green transport each academic year
- to improve access to the school site for pedestrians by September 2007

Finally develop initiatives that will enable you to meet your targets and deliver your objectives. Ideally, your initiatives are situated in the domains of mobility education, transport organisation, infrastructure and awareness raising. It is imperative that having set out what you want to achieve you have an action plan in place for achieving it. In this action plan, it is very important to set a time frame for each action you want to undertake.

Some actions, a school can decide on and realize on her own, but for most initiatives cooperation with other partners, the local authority in particular, is essential.

The contribution of schools can be very diverse. Schools can support information activities for their teachers, pupils and parents on sustainable modes of transport or safe routes to school. They can raise

awareness through different initiatives in a way to stimulate walking and cycling to school. The local authorities can engage themselves to initiate infrastructure measures to ensure traffic safety in the school environments as a way to stimulate sustainable modes of transport. They are also an ideal partner to spread information and start or support awareness raising activities.

The following gives you an overview of different initiatives that can be incorporated in a STP.

Walking initiatives

Children need to take part in regular physical activity to stay fit and to develop active lifestyles for their future health. An hour a day is the recommended minimum - and the school journey can help towards this. In the long term, being active helps protect against many health problems such as heart disease. Next to the physical benefits, it's also a social benefit for children to walk in group, under guidance or with their parents to school, the journey to school is a great time to chat to your child, find out how things are going at school and talk about things you see on the way. You can notice seasonal changes and meet up with other families as you walk. By walking with your child you can help them build up their pedestrian skills over time, so that when they start making journeys alone they will be better prepared for coping with traffic. Besides, research has shown that by being physically active, it reduces stress and raises self-esteem. Once children are ready to make their own way to school, then the journey becomes a chance to gain independence and self-confidence.

Examples of walking initiatives are:

- **Walking Bus**

This is the single most common initiative to appear in all school travel plans internationally. A walking bus can be described as:

"A walking bus usually has at least two adult volunteers (a 'driver' at the front and the 'conductor' at the rear) who walk along an agreed route, collecting all children waiting at designated 'bus stops' and walking them to school. After school, they walk back along the same route. There is a maximum of 8 children per adult."

Having adults available to walk with children along a set route, many parental concerns about their child's safety can apparently be alleviated. The walking bus also provides an opportunity for children to learn road safety rules in preparation for independently walking to school later on.

- **Walking Wednesdays**

Establishing a regular day of the week where children are encouraged to walk (and sometimes cycle) to school. Incentives are often offered for walkers or for the classroom with the most walkers.

- **Walking from bus stops**

Picking up children coming with public transport to school at the bus stops to guide them walking to school. This might often be the trigger for parents to let their children use public transport knowing that their child will be accompanied to cross roads from the bus stop to the school.

Cycling initiatives

Regular cycling protects against heart disease, stroke and other illnesses, and raises self-confidence and well being. Most children own bicycles and many would like to use them for the school journey, but very few do. Traffic danger is the main reason, with cyclists among the most vulnerable road users. But where schools have the benefit of a network of cycle routes and slower speeds, the whole picture changes, and cycling can become a popular choice for travel to school. Cycling gives children more freedom and has great benefits for health: regular cycling can add years to life.

Examples of cycling initiatives are:

- **Bicycle pools**

A Bicycle pool can be described as:

"cycling with a small, clear recognizable group of children under supervision of an adult"

Almost identical to the Walking Bus we can see that bicycle pools are increasingly common in Belgium and partly in the UK. Even in New Zealand people are starting with projects on bicycle pooling.

Setting up a bicycle pool is an example of an initiative you can realise on a short term. Even in one month time you can have a bicycle pool going on in your school!

As a guidance, we suggest the following time plan:

Week 1: Choose a coordinator in your school (this can be a parent or a teacher) and organise an information evening about bicycle pooling. At this information evening all practical questions from parents can be answered (insurance, routes, cycling skills...). It is interesting to invite the local police officer to this kind of information evening.

Week 2: Ask parents if they are interested in joining/supervising a bicycle pool group. You can do this by giving the pupils a form that their parents have to fill out or by talking with parents at the school gate. At the end of your information evening you could even ask the interested people to stay 5 minutes extra and already set a new date to discuss the implementation of a bicycle pool.

Week 3: The school coordinator assembles the information and looks for possibilities of setting up a bicycle pool. On a large map of the school environment pupils interested to be involved in a bicycle pool and interested adults are indicated. This will clearly show if groups can be formed. The next step is to find the most safe routes to school.

Week 4: Bring together interested parents and invite them to start pooling. Practical agreements can be made during that meeting, routes can be discussed in cooperation with the local police officer.

Remark: It is recommended to start on a small scale: For example 2 groups of children pooling only on Wednesday and Friday. When this works out well, you can expand the pooling.

- **Bicycle racks and shelters**

Cycle routes alone are not enough to make cycling to school a practical option. Cycle parking will be needed, preferably in a covered area overlooked by classrooms or offices, and convenient for the main entrance. Stands or racks should allow the cycle frame, and not just the front wheel, to be locked to them using a 'D-lock' or something similar. Smaller stands may be required for primary age pupils. While providing secure stands, schools need to make pupils and parents aware that if a bike is stolen the school will not be held liable. Many insurance companies will cover bicycles under a standard household contents policy, provided they are locked securely. Separate insurance may be necessary for more expensive bikes.

- **Cycling training**

Young cyclists need training to prepare for riding on roads. In some countries such as the UK, local authority road safety departments offer cyclist training for children aged ten and above, and can be invited into school to run courses. In other countries such as Belgium and Austria cycle training is offered to schools via co-operations between mobility organisations, sports federations, traffic safety organisations and local authorities. In those countries where no such training is offered, it may be possible for schools to set up their own scheme using existing guides. Instructors for cycling training should be experienced adult cyclists who have received training from a road safety officer and who have pedagogical skills. Research shows that the most effective courses are those which include on-road training. Children learn more if they take the course over several weeks rather than one or two half days. Problem-solving approaches, which teach 'cycling awareness', appear to make children safer cyclists than more traditional, instruction based courses. As with pedestrian training, it is important to make it clear that courses will not automatically equip children to take to the road. These decisions have to be made in the light of local conditions and remain the responsibility of parents and children.

- **Safety gear and advice**

Cyclists are safer if they are more visible. Schools and local authorities can help by selling discounted reflective clothing and accessories. Children should be advised to carry spare batteries for lights and change them as soon as they run low. Helmets can reduce the severity of head injuries in accidents (though their effectiveness diminishes with speed). Helmets should be properly fitted, have a 'CE' mark and should meet either the European standard BS EN1078:1997, or the American standard SNELL B95. When setting up a project on traffic safety and especially cycling, you might convince companies from your local community to support the project by providing safety gear for the children.

- **Maintenance checks**

Cycles ridden to school should be fully roadworthy and properly maintained. Within the UK we see that some schools offer classes in cycle repair. In other countries it is often the local police that can help the school by organising a yearly bicycle check. Sometimes grandparents or the local bicycle shop owner is involved in the school to help children maintain their bikes.

- **Cycle permit schemes**

We have seen that in the UK, some schools operate with a ‘cycle parking permit scheme’. This is a contract, drawn up between the school, the pupil and the parents, to set out the conditions for cycling to school and obtain the parents' consent. Permit forms set out the school's cycling policy, while emphasising that the decision on whether the child is competent to cycle remains with the parent. Forms can also include advice on safety and insurance and provide a record of the bicycle's make and serial number. Schools need to decide what conditions they wish to attach to permits. These might, for example, include that:

— the bicycle is roadworthy and has passed a maintenance check
— the cyclist has completed an approved training course
— the bicycle will be securely locked in an approved area
— the cyclist will follow a 'good cycling code'

Public Transport initiatives

Travelling to school by bus or coach has a better safety record than travel by car. In the UK, around a fifth of all journeys to school are made by bus, and some schools have had great success in promoting and improving bus services.

To improve bus services you need to work in partnership with your local authority and public transport operators. Only in close co-operation it is possible to help you make decisions on what improvements are needed, and start negotiations with local operators.

Possibly because fewer school travel plans have been implemented in secondary schools where students generally liver further away and public transport is more justified, only very few measures are known.
Some examples however of actions stimulating the use of public transport are:

- **User friendly information**

Schools are well placed to publicise school bus services and public transport services to parents and children. Timetables and leaflets can be displayed in the school foyer, sent home on a regular basis or be available at the school website. Timetables are often hard to understand. By involving students in the design, schools may be able to produce materials that are more readable and more appealing. It is also helpful if children can be taught how to use timetables. In Belgium, knowing how to read a timetable is part of the learning goals. By learning the children how to read the timetables, plan a trip by public transport and actually doing it, they can be stimulated to use PT more often.

- **Low fare schemes**

In co-operation with the local authority and the (local) bus companies, some schools have negotiated low fare deals for pupils. With the help of the school in promoting the offer, bus use picks up and can cover the cost of the discount. In some countries, such as Belgium and The Netherlands these kinds of initiatives are taken by the local authority but sometimes need to be spelled out to the schools.

- **Convenient times and routes**

Buses may not run along the best routes or at the best times to meet pupils' needs. By working in close cooperation with the local authority and the bus operators, schools have succeeded in:

— changing routes to make them more convenient
— changing times to fit with the school day
— introducing new bus services for areas poorly served by existing transport

Your survey results and information about numbers of children coming from different areas can help in deciding what changes would be useful. Postcode maps can be overlaid with existing bus routes to identify gaps in the service. The school can then write to the parents of children living in the area to ask if they would use a new service.

- **Meeting the needs of the school journey**

Parents will be happier and more easily convinced about younger children using school buses or public transport if the services are geared to their needs. This could mean:

— the bus picks up and drops off at convenient points in the area rather than official bus stops
— a few parents ride as escorts and help sort out any problems that come up
— children can make their way from the bus stop to school without crossing a road
— services are extremely reliable - buses that don't come on time are likely to cause particular problems for children trying to get home after school
— the driver has a positive attitude towards children
— the bus is attractive, clean and modern

- **Behaviour on board**

Children's behaviour on buses can range from lively to loutish. This can obviously cause tension with drivers and other passengers, and may even lead to the withdrawal of services. Schools can keep problems in check by introducing a behaviour code for bus users. Assembling children into groups for different buses before they leave school can prevent a scramble and ensure no one gets left behind. Some bus companies in the UK have run successful sessions in schools to explain how behaviour on board affects safety. It is also possible to make an arrangement with the bus company that any complaints

drivers or other passengers might have on the behaviour of school children are reported immediately to the school. Once pupils know that the school management follows this up they will alter their behaviour. Children can also be encouraged to put forward their own views and help work out ground rules for using public transport.

- **Sharing the ride**

Car journeys to the Royal School in Hampstead, London, UK have been cut by 24% thanks to car sharing – car pooling, parent-run minibuses and greater use of public transport.

Some schools have successfully encouraged parents who drive their children to school to car share or carpool. This can be particularly useful when children are travelling longer distances to school.

Families often make their own car sharing arrangements informally, but the school can help by keeping a register of parents who are interested in sharing the school run with others living nearby. This can work as follows:

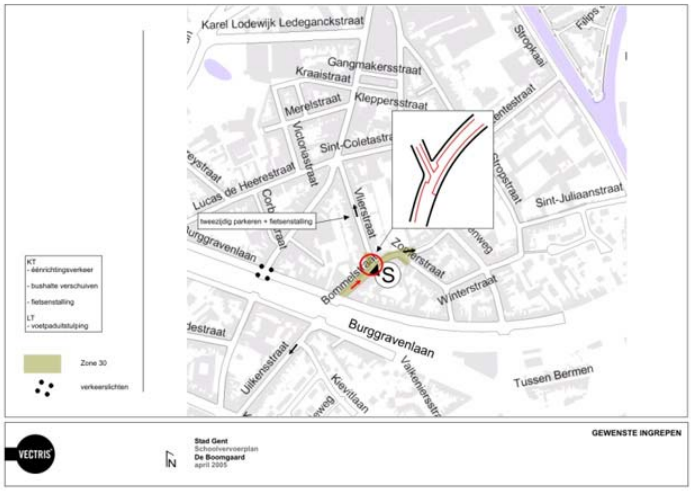
- a letter home explains that the school is supporting car sharing to reduce traffic, and lets each family know how many other families in the same area also have children at the school, without giving out names and addresses
- parents who are interested in car sharing are asked to put forward their names and contact details, on the basis that this information will be passed to others who have expressed an interest
- interested parents who live reasonably close to each other are then given each other's details. The school explains that it is up to families to contact one another, decide whether they are happy to share the run, and make arrangements
- Carpooling is often offered to those parents who live to far away from school to let their children walk or cycle

Engineering measures

Engineering or infrastructure measures associated with STP's are treated in several ways in different countries. In some countries (e.g. in Flanders region of Belgium) it's a condition from the local government that a school travel plan is developed before any engineering measures are planned or implemented. In this way the local authority can ask schools which initiatives in the field of education, transport organisation, awareness raising they will take linked to the action plan.

Changes in road design can make the whole environment around the school more welcoming for walkers and cyclists. This means creating safer crossing places, slowing down traffic and giving more space to pedestrians and bicycles. Measures may be needed to tackle danger spots and create a 'safety zone' around the school. The whole effect is an area where walking and cycling is not only safer, but also easier and more enjoyable.

The identification of engineering measures is an integral part of a school travel plan development process. Sometimes engineering measures are commonly associated with STP's, while in other cases local authorities clearly choose to put more emphasis on soft measures and only solving the most urgent problems with 'cheap' infrastructure measures.



The implementation of traffic calming measures, particularly ‘school speed zones’ of 20 mph / 30 km/h are common in Europe. Examples of traffic calming measures are speed bumps or speed tables at dangerous cross-junctions. Within STP’s the engineering measures identified and implemented could largely be considered as “minor” infrastructure improvements.

The most commonly considered and adopted roading-related minor measures include:

- Improvements or installation of crossings to access the school – these could be ‘kea’ crossings, zebra crossings, improved signage
- Improvements to footpaths and/or cycle paths/lanes to access the school. In some instances these may be shared pedestrian and cycle paths
- The creation of drop-off zones near the school entrance, including changing parking restrictions, creating “kiss and ride” lanes (where parents can pause to let their children out, but may not leave the car unattended)
- Establishment of sign-posted “recommended” routes to school
- Establishment of “park and walk” sites – this doesn’t necessarily involved infrastructure modification but may require obtaining permission from the owner of the parking site and the installation of signs
- Improved street lighting

The key to meeting safety concerns is safety measures that give a real reduction in road danger. In the Netherlands, as cycling has become safer, casualties have fallen, even though the number of people cycling has risen. Plans for changes in road layout around the school should incorporate safer cycle routes. In co-operation with the local authority and cycling organisations, schools can identify the best

routes for traffic-free and traffic-calmed cycling. This may mean clearing, surfacing and lighting muddy tracks to make them usable cycle paths, creating cycle tracks alongside roads, or marking cycle lanes on roads while enforcing slower traffic speeds. Junctions can be redesigned to give priority to cyclists. Cycle routes should be continuous.

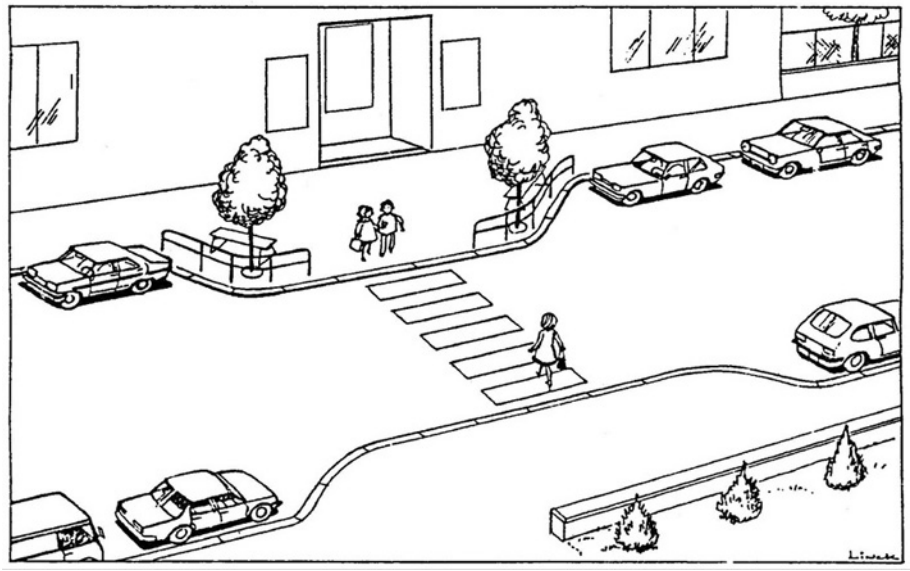
Local authority traffic planners and engineers can work with the school to put together a design proposal for the area. Both sides of this partnership have plenty to contribute. While the engineers know about different ways of managing traffic, it is the parents, children and teachers who are experts on their school journey. If you have difficulty gaining support and commitment for safety changes from your local authority, then you could put forward your own design proposals as a starting point. Making highway changes is a lengthy process. Time has to be allowed for consultation and decisions. It is not unusual to wait a year before measures are in place!

Some ways to make routes safer…

- The beginning of a school area is marked out as a 'gateway' with signs and road markings. Make sure that people recognise the area as a ‘school environment’!
- At a raised junction the road is brought level with the pavement. Cars have to slow down while pedestrians can cross more comfortably.
- Footpaths allow walkers to avoid traffic altogether, but need to be well surfaced and well lit.
- Pinch points make the road narrower so the traffic slows down, while pedestrians don't have so far to cross.
- Toucan crossings are like pelican crossings, but can be used by both pedestrians and cyclists.
- Cycle tracks can be routed away from the road or created along pavements or verges.
- Special motifs can be used to make a trail, guiding children along the safest routes.
- Road humps reduce speeds very effectively. They can have gaps at the side, which allow cyclists to pass freely.
- Road humps on zebra crossings encourage motorists to approach more slowly, making it more safe for pedestrians to cross.
- Pedestrian refuges slow down traffic and allow pedestrians to cross the road in two stages. A dropped kerb makes it easier to cross.
- 20mph / 30 km/h zones reduce pedestrian accidents and deter drivers from using the area as a rat-run.
- Cycle lanes help protect cyclists from traffic.
- Yellow zigzag lines restrict parking outside schools. In co-operation with the police, the local authority can give the restrictions force of law.

- Chicanes are alternately spaced build-outs on opposite sides of the road that can slow vehicles down.
- Speed cushions slow vehicles down like other road humps but are more 'bus-friendly'.
- Pinch points, chicanes and refuges can be built to be 'cycle-friendly'.

School entrance as it could be School entrance as it is



Enforcement measures

In the early days of implementing new mobility management rules, enforcement by police is often used to help establish new behaviour patterns. The police enforcement is then not on going, but can be repeated at specific schools if it is needed or requested.

Some examples of enforcement measures are:

- **Police control**

In some cases the school action group can ask the police to regularly control the parents parking behaviour at the school gate. Sometimes it's not enough if the school management asks parents to park their cars correctly or even show that their behaviour is endangering other children. In that case, police enforcement can help.

- **Red cards / flowers**

Pupils learn in the classroom what correct and incorrect parking behaviour is. After observing traffic in the school environment they are in a position that they can make a distinction between correct parking behaviour and behaviour that is causing problems for others. In some cases, actions are implemented where the pupils hand out red cards to those parents who have wrongly parked their car and reward parents with a self-made paper flower who are behaving correctly.

Education / information actions

There is a wide variety of educational programmes offered through or alongside a school travel plan. In some countries traffic and mobility education is compulsory in schools (including the UK, Belgium and Austria). In other countries schools can 'opt in' for road safety education programmes.

Examples of education measures are:

- **Extra training for teachers**

Teachers are offered extra training or on-the-job training in different subjects. In some schools the management selects a few teachers that are responsible for traffic and mobility. Those teachers might be willing to follow extra training where they can learn more about teaching methods on traffic and mobility or learn about new traffic safety rules.

- **Mobility journal**

Teachers ask the children in the classroom to develop a mobility journal for a certain period of time. In their mobility journal they note down which trips they make and with which mode of transport. After the survey time children discuss their mobility behaviour in small groups, sometimes realising that for the same distances they use their bike in the free time but are driven by their parents to come to school.

- **Traffic education routes**

In Belgium some local authorities and schools have developed traffic education routes. These are a number of roads that are specially marked in the school area that children can use with their parents or teachers to learn traffic safety rules. The traffic education route represents all kinds of cross-junctions and different traffic situations that one can be confronted with in travelling from home to school. By marking these routes especially it is also clear for outsiders that traffic education can be going on as they pass by, so they should be extra careful.

Promotional activities

There are a wide range of promotional activities undertaken to encourage children to walk or cycle to school.

Examples are the “car free” days or weeks, the “I walk to school” initiatives or the “International walk to school day”. In Belgium, the campaign “Safe and environment friendly ways to school” is launched each year for 400 primary schools. The campaign contains several measures and actions such as the ‘traffic snake game’. The traffic snake game is played in the 400 schools over a one-week period where children are encouraged to use sustainable modes of transport. When they do so, they earn points for the class. When enough points are gained, the class can place their card on a large snake banner. The objective is to fill the whole snake by the end of the week. If this is achieved, all of the children win a prize. Next to the game the schools are also asked to set up other initiatives during this week such as traffic and mobility education, walking initiatives, bicycle pooling.

It is important that the actions a school is planning are known. The local community, the residents, the public transport company…should at least know that the school has developed a STP. The plan needs to be known. Give it suitable publicity. If the STP is a few pages long, it helps to have a leaflet or poster version highlighting the main targets and proposed actions, which can be displayed around the school and inserted into newsletters to parents.

Seek opportunities to reinforce the aspirations underpinning the plan; for instance the leaflet or some actions that where videotaped could be shown at assemblies, 'new parents' induction meetings, or PTA meetings. Inviting media coverage of special events helps to spread the word, and can be a morale booster for those involved.

There should be reference to the STP in the school prospectus and on the school's website, and it could be part of a home school agreement. Ask the governing body / school board to approve the STP as part of the school's development plan - and to review it annually. The plan will need to be regularly modified to reflect the school's changing needs and circumstances.

Examples of successful school travel plans that have been implemented can be found under chapter 8.

4. PLANS FOR MONITORING AND REVIEW

A completed plan is:

- a reference point for future change
- a way of demonstrating the school's commitment – to parents and to the local authority
- a basis for funding
- an assurance of continuity if key individuals (parents) move on

Having devoted valuable time to developing your STP you will want to ensure work towards your objectives is on track. It may be that some of the things you planned are no longer relevant or things have happened sooner than you planned.

When evaluating a school travel plan, there are two important questions that should be considered:

1. Did traffic safety ameliorate?
   Here, you can look at traffic safety at the school gate but also on the routes to school.
   - Are there fewer accidents at the school gate and on the school routes?
   - Did the perception of traffic safety increase?

2. Are more pupils coming to school in an environmental friendly way?
   - What is realised concerning transport organisation?
   - What is realised concerning information, awareness raising and education?
   - What effects did these initiatives have on the school's transport?

To find out, you can use the 'snapshot' method.

We have seen that with a sustained encouragement from the school, a much higher than average proportion of pupils walk and cycle to school. Therefore monitoring and evaluating the work in the STP is important.

Schools need help from many other agencies to put in place measures identified in their travel plans: the number and importance of partners will vary depending on the circumstances of each school. In rural schools, for example, bus operators will be important partners, whereas the local transport authority will be crucial in any area where parents want traffic calming, better road crossings, changes to the road layout or subsidised bus fares.

After developing the school travel plan, having identified the key barriers in the school environment, setting up an action plan, implementing different measures, it is of equal importance to monitor the progress and evaluate the results at regular times.

5. FUNDING

Developing a school travel plan can start without a lot of money. Securing funding takes time, so don't be too easily put off by apparent difficulties. Changes to the road layout, such as speed humps or cycle lanes, will depend on funding from your local authority. Therefore it is important to start with a good co-operation with different partners from the start of your project.

Sometimes local authorities will be the initiator of developing a school travel plan. In that case, funds don't necessarily need to be found. In other cases the schools or other agencies will be the initiator leading to the inevitable question of funding.

A first step in finding the funding could be to make a case to your local authority.

Your local authority should welcome the opportunity to help you develop your plan. Obviously, councils have to draw up priorities, and schools may find they have to wait their turn for local improvements. But this shouldn't stop the authority from helping you to develop your proposals and making them part of their long-term plans. If you meet a real lack of co-operation, think about ways of moving school travel further up the council's agenda. This could mean campaigning through the local media or organising events to draw attention to traffic danger in the area. Examples exist of schools holding a street festival outside the school. With permission from the police, the road was closed at the end of the day, when it would normally have been jammed with parents' cars. The local press were invited and briefed about the problems, which then made a splash in the evening paper.

While some measures cost very little, others will rely on particular types of funding. Many of these are local authority based:

- pedestrian and cyclist training are generally provided by road safety departments, although schools often supply volunteers to help with sessions
- resources such as posters, badges and leaflets may be available from other departments
- improvements in bus services are most likely to be funded by either the national authority or in some countries the local authority under the passenger transport budget or even by bus operators themselves.

Changes to the road layout, cycle parking provision and alterations to school grounds and entrances can require substantial funds. A pedestrian refuge can cost around € 6000 or £5,000.

In the different European countries, different sources of funding can be found or addressed. In this we provide you with examples of the UK, Belgium, The Netherlands, France and Italy.

United Kingdom

In the UK, the highway authority's local transport budget is the most likely source of funding. Most money for local transport schemes has to be bid for from central Government, which provides the council with a block sum on the basis of its local transport plan. This is a five-year plan, which sets out how the authority will meet the transport needs of its area.

Safer travel to school is an important part of the Government's integrated transport policy. Government guidance says local transport plans should include a strategy for reducing car use and improving children's safety on the journey to school. Local authorities which fail to take account of Government guidance when drawing up their plans are unlikely to receive all the funds they ask for.

Ask to see your authority's local transport plan. Find out:

- what commitments it makes to safer routes for school journeys
- how priorities will be set for funding safer routes schemes
- what priority will be given to your school

Councils must consult extensively in drawing up local transport plans, so make sure your school is involved in the process.

Funding may also be available from a variety of other sources.

- Local employers have been known to provide cycle stands, reflective jackets, school road signs and competition prizes.
- 'Planning gain' funding is money paid by a developer to provide a community benefit as a condition of planning permission. If there are proposals for a major development such as a housing estate or supermarket in your area, it may be possible to finance safety improvements to local roads in this way. Contact the planning department at an early stage.
- The New Opportunities Fund has been set up to fund health, education and environment projects across the UK with National Lottery money. Safer routes to schools and school travel plans may be eligible for funding under the programme called Green Spaces and Sustainable Communities, which was launched in 2000. Other programmes may also offer opportunities for funding. For contact details see resource file.
- The Single Regeneration Budget could be an option for funding safer routes schemes in areas of low income and high unemployment in England. This provides a flexible fund for local regeneration schemes and is administered by the Department of the Environment, Transport and the Regions. For more information contact the Government Office for your region. For information about similar schemes in Scotland, contact the Scottish Office, in Wales, the Welsh Office and in Northern Ireland, the Department of the Environment, NI.
- Your local education authority may be worth approaching for help in funding specific improvements such as cycle racks, traffic-free entrances and additional locker space, although money is always scarce. New building projects can provide an opportunity to incorporate cycling facilities and other site improvements. If your area is an 'education action zone', this may provide a source of funding. It helps if you are able to demonstrate that travel improvements will raise school standards, for example by providing transport for an after-school club.
- Your local health authority may be able to provide support for part of your project, as part of its health promotion strategy. Ask whether funding could be available through local 'health improvement programmes' or 'health action zones'.
- The Safe and Sound Challenge, run by the Department of Health, invites schools in England to bid for prizes of up to £6,000 with proposals for imaginative and practical ways of getting children to school without depending on private cars.

Belgium

In Belgium the responsibility for transport and mobility policy is divided over the Federal government and the two regional governments (Flanders and the Walloon region).

Under the policy guidelines of the Flemish Government, schools that are located within 200 metres of a regional road have to ensure that the road environment and multi-modal travel patterns meet given criteria. The schools that fall within this caveat are encouraged to produce a school travel plan. This integrated plan contains in particular:

- an analysis for each transport mode, an analysis of the routes taken to and from school. The school indicates the most important routes, the main problems, the gaps, etc., for each transport mode. The Flemish Government then uses these indicators to co-ordinate the reconstruction to the mobility needs of the school,
- several measures to increase the number of journeys made by environmentally sustainable and less threatening modes between home and school. The schools receive infrastructure investment on the condition that they actively promote and encourage environmentally sustainable travel behaviour.
- The best results are achieved when the municipalities can undertake small improvements in infrastructure in the school surroundings as an act of good will. Others are planned as an integrated concept within the module 10-agreement with the region road maintenance and require a long-term vision.

France

The national government is responsible for road regulations, vehicle requirements, taxes, duties, etc. National land use planning scheme designed is undertaken by the National spatial planning administration (DATAR, délégation à l'aménagement du territoire et à l'action régionale). Multimodal scheme of collective services for transport of people and goods (Schémas multimodaux de services collectifs de transport de voyageurs et de transport de marchandises) are also the responsibility of national government as are the Agglomeration roads files (DVA, dossier de voirie d'agglomération). Rules of Local Coherence scheme for agglomerations (SCOT, schema de cohérence territoriale), which defines the main trends of the development of the agglomeration (urban planning, main transport infrastructures), are fixed in the SRU law (Loi Solidarité et Renouvellement Urbain). Rules of Urban Mobility Master plans (Plans de Déplacements Urbains PDU) for urban areas, created to co-ordinate the use of all transport modes especially by the appropriate assignment of roads and the promotion of less pollutant and less energy costly modes, are fixed in the LOTI law (Loi d'Orientation sur les Transport Intérieurs). The Ministry of Transport (Direction des Transports Terrestres DTT) delegates subsidies for public transport infrastructures.

At regional level, a Plan Contract, regional framework signed between the state and each regional council, defines the achievement of regional road, rail, air and ship infrastructure, the time schedule and the distribution of the costs. County roads and pupils transport is a County government responsibility. Communities of municipalities (communautés de communes), communities of agglomerations (communautés d'agglomérations) and other local institutions have the following responsibilities: local roads and other public infrastructures. Local Coherence Schemes (SCOT) and Urban Mobility Master Plans (PDU).

The PDU sets out the principles governing the organisation of people and freight transport, traffic flow, parking policies, urban roads management, mobility management, encouragement of public transport, car pooling, cycling and walking, and travel safety in an urban area. Its objectives is to co-ordinate the use of all transport modes, especially by the appropriate use of the road network, and promotion of less pollutants and less energy costly modes. All the agglomerations of more than 100,000 inhabitants (almost 60 agglomerations) have to implement their PDU. The smaller ones can also implement their PDU voluntarily. It is generally within the framework of the PDU that STP's are developed.

Regarding funding possibilities, local authorities willing to develop a STP can obtain a subsidy from the MEDD, the French Ministry for the Ecology and Sustainable Development via the ADEME, the French Agency for the Environment and Energy Management amounting to 50% of the study costs (VAT excluded). In the Brittany region, local authorities located within the Rennes metropolitan area can obtain

from Rennes Métropole a subsidy corresponding to 40% of the study and implementation costs of the STP. For obtaining this grant, the local authority has to require the service of a third party to carry out the work (e.g. an energy agency). One should note that out of these 40%, 20% are given directly by the ADEME to Rennes Métropole.

The Netherlands

In the Netherlands there are several funding possibilities to finance a 'Traffic Snake' project. The main focus of the project 'Traffic Snake' is to reduce the amount of cars in the direct surroundings of a primary school. Children and their parents are stimulated in a positive way to go to school by bike or on foot. This improves the traffic safety, the environment and the health of the children. Structural possibilities to finance a Traffic Snake project in the Netherlands can be found in four different themes and on three different levels.

	1. Traffic Safety	**2. Environment**	**3. Health**	**4. Mobility Management**
Local level	Municipality (funding up to 100%)	Municipality (funding up to 100%)	Municipality (funding up to 100%)	-
Regional level	ROV / POV (funding between 50% - 75%)	-	-	-
National level	-	SenterNovem CO_2 reductieplan (www.co2reductieplan.nl) (funding up to 60%)	GGD	SenterNovem MOVE (www.move-mobiliteit.nl)
International level	-	-	-	-

The finance for a project on international level is not (yet) very structural supported. Original there was a project called 'Emotions' within the call for proposals in SAVE. This project financed the development of the Traffic Snake in The Netherlands. The Traffic Snake was a part of this project during the period 2002-2003. This project was funded by the EU, but there is not a structural EU-funding for projects like the Traffic Snake.

6. EXERCISE

Design a mobility plan for a school

A school with about 1200 pupils (primary and secondary level) has traffic congestion and chaos problems in the morning when school starts. In the direct surroundings of the school already some severe accidents happened. The current situation is that most of the pupils are brought to school as car passengers even though the public transport access is very good. Design a Mobility Plan for this school that includes:

- measures to reduce home-to-school-car traffic
- measures that increase safety in the schools area
- an awareness plan
- suggestions for teaching contents for the field of mobility (special view on the above mentioned problem)

7. CHECK LISTS

Checklist actions

When developing your STP you can make use of the following checklist as menu of ideas to help you draw up your school travel plan.

Travel awareness:

- advise new pupils and parents on school travel policies and arrangements
- include a safer routes map, school travel policies and arrangements in the prospectus
- include school journey details in arrival packs sent to new families
- set up a school journey notice board
- look at travel choices and safer routes to school as part of class work.

Local safety:

- develop traffic management proposals for pedestrian safety in the school area
- develop proposals for a network of safer cycle routes serving the school.

Walking and cycling:

- set up a walking bus scheme
- hold regular walk to school events
- offer practical pedestrian training
- create car-free entrances
- hold cars back until pedestrians and cyclists have left school in safety
- review visibility of school uniform
- review homework timetable to check on how much children carry home
- request crossing patrols at difficult crossing places
- provide adequate storage for school books, cycling gear and outdoor clothing
- install secure cycle shelters
- offer on-road cycle training
- advise on cycling safety and arrange regular cycle maintenance checks
- set up a cycle permit scheme
- hold regular cycling events.

Public transport:

- provide public transport information at school
- explore options for new services, better routes and low fare promotions
- introduce a code of behaviour for school bus users.

Sharing the ride:

- set up a parents' car sharing scheme
- set up a parent-run minibus.

Personal safety:

- offer sessions for children and parents on personal safety

Survey example

As mentioned in the first step of developing a school travel plan, it is advised to organise a survey for pupils and/or parents. Please find below an example of a survey from the UK

School Travel Survey for Pupils and Parents / Guardians
Please fill out this form and then take it home for your parents / guardians to sign.

Name of School:

_____

Name:

_____

Postcode: _____

What year are you in? (please put a number)

1. How do you come to school on most days? (please circle).

If you come to school in more than one way then please put a 1 by the method you use for the biggest part of the journey and then tick the others you use.

- ❑ **Walk Taxi**
- ❑ **Cycle Car**
- ❑ **Bus/Train* Mini-Bus**
- ❑ **School Bus Other (please state)** _____

2. Why do you come to school that way? (please circle)

- ❑ **Easy for you or your parents Cheap**
- ❑ **Distance from school – near Not many footpaths**
- ❑ **Distance from school – far Personal Safety**
- ❑ **No bus or train available Other reasons (please state below)**

_____

_____

_____

*Timetabled Bus or Train Service

3. If you came to school by car, how many people travel together? (Please put number)

Adults **School children**

4. If you are a passenger are you . . . (please circle)

- ❑ **Dropped off by parent on their way to work?**
- ❑ **Dropped off by someone else on his or her way to work?**
- ❑ **Dropped off by parent not on their way to work?**
- ❑ **Dropped off by someone else not on his or her way to work?**

(Please put a tick in a box)

5. If you walk or cycle is there anything that would make your journey safer or easier? For example, better cycle storage, better footpaths, better crossing facilities or cycle training.

_____

_____

_____

_____

6. Are there any reasons why you feel unsafe on your journey to and from school?

_____

_____

_____

If there are particular places where you feel unsafe please list these below

_____

_____

_____

7. How do you go home from school each day?

- ❑ **Walk Taxi**
- ❑ **Cycle Car**
- ❑ **Bus/Train* Mini Bus**
- ❑ **School Bus**
- ❑ **Other (please state)**

*Timetabled Bus or Train Service

8. Why do you go home that way? (please put a tick in a box)

- ❑ **Easy for you or your parents Cheap**
- ❑ **Distance from school – near Not many footpaths**

- **Distance from school – far Personal Safety**
- **No bus or train available Other reasons** (please state below)

_____

_____

_____

9. How would you like to travel to and from school?

_____

Why?_____

10. Have you been involved in an accident on your way to or from school in the last year? (Please circle)

Yes No

Please give details if possible

_____

_____

11. Do you own a bicycle? Yes No (Please circle)

If so, do you wear a cycle helmet?

Yes No

12. Do you have a bus or train pass? (Please circle)

Yes No

13. Do you wear any reflective or fluorescent clothes when you walk or cycle? (Please circle)

Yes No

Would you like to? (Please circle)

Yes No

14. Do you take part in a "walking bus" on your journey to school? (Please circle)

Yes No

Would you like to? (Please circle)

Yes No

15. Are there any other comments you would like to make about the things that influence the way you travel to school?

_____

_____

_____

Parents / Guardians Section:

1. Do you agree with your child's comments on this form? (Please circle)

Yes No

If not, please state why not

_____

_____

_____

2. Do you have any additional comments you would like to make about your child's journey to and from school?

Snapshot

To find out how your pupils are coming to school you can easily use the 'snapshot' method for which you can use the classroom forms and school forms as illustrated below.

TRAVEL PATTERNS OF THE PUPILS
SCHOOLFORM - AUTUMN/WINTER

HOW DO PUPILS MAKE THEIR JOURNEY TO SCHOOL?

After having collected the travel patterns of all pupils on the classroom forms, you can bring together the data of the several classes on this school form. The school board or another person of the school involved can do this.

Name of the school: _____ **Address:** _____ _____ **Tel.:** _____	**Contact:** _____ **Position:** _____ **Date:** _____

Number of pupils per year

1st year:	2nd year:	3rd year:	4th year:	5th year:	6th year:	Total
Number of pupils: _____	Number of pupils: _____	Number of pupils: _____	Number of pupils: _____	Number of pupils: _____	Number of pupils: _____	Number of pupils: _____

Transport mode	1st year:	2nd year:	3rd year:	4th year:	5th year:	6th year:	Number	%
Carpool								
By car								
Walking bus								
By foot								
Bicycle pool								
By bike								
By tram								
By bus (public)								
By school bus								
Total								

HOW DO PUPILS MAKE THEIR JOURNEY TO SCHOOL?

To gain a quick 'snapshot' of travel choices, the class teacher asks pupils for a show of hands on how they made the journey that day. Then, the teacher fills in how many pupils used which main mode of transport (largest distance) to make their journey to school.

Name of the school: _____

Class and number of pupils: _____

Name of teacher: _____

Date: _____

Transport mode	**Number of pupils**
Carpool[2]	
By car	
Walking bus[3]	
By foot	
Bicycle pool[4]	
By bike	
By tram	
By bus (public)	
By school bus	

[2] A carpool: take along children in your car that don't belong to the family when travelling to school

[3] A walking bus usually has at least two adult volunteers (a 'driver' at the front and the 'conductor' at the rear) who walk along an agreed route, collecting all children waiting at designated 'bus stops' and walking them to school. After school, they walk back along the same route. There is a maximum of 8 children per adult.

[4] A Bicycle pool: cycling with a small, clear recognizable group of children under supervision of an adult.

EXAMPLE OF AN ACTION LIST

WHICH CONCRETE INITIATIVES DO YOU ALREADY TAKE OR IS YOUR SCHOOL GOING TO TAKE REGARDING TRANSPORT ORGANISATION?		Already exists	No	Yes*
General	- Authorized supervisors - local community staff			
	- Authorized supervisors - teachers			
	- Authorized supervisors - parents			
	- Police supervision			
By foot	- Set up a walking bus			
By bike	- Organize a bicycle pool			
	- Install decent bicycle sheds			
	- Re-organize bicycle school entrance			
School bus	- Re-organize pick-up point			
Public transport	- Organize supervision to the bus/train station			
Carpool service	- Organize a carpool			
Organisation school entrance	- Re-organize the school entrance(s)			
Parking organisation	- Reduce parking possibilities at the school entrance			
	- Organize a 'Kiss & Ride'			
	- Re-organize long-term parking of teachers			
Other initiatives				

8. EXAMPLES

8.1 Safe routes around the world (www.saferoutestoschool.org.uk)

The safety, health and independence of young people is a growing global concern. We celebrate the best of what's happening to support it in the international Safe Routes to School community

USA

The US Congress has passed a Transportation Bill with authorisation for a national Safe Routes to Schools (SRS) Program. A major new stream of funding from the federal government gives new weight to the urgent need to address obesity and inactivity in over one third of American youngsters. Sustrans' SRS model has been acknowledged as an inspiration for America's national SRS program.

Read more about SRS in America on www.saferoutestoschools.org.uk or visit Califiornia's SRS website www.saferoutestoschool.org

Canada

'Active and Safe Routes to School' have announced that Toronto's Sustainable Transportation Education Program is to be continued. The student-driven scheme promotes environmentally sustainable transport and physical activity to high school students in Toronto. With finance secured, schools were being recruited to take part in the project for 2005/06.

Also 'Active and Safe Routes to School' have introduced a stepped range of programmes. Schools involved with Walking Wednesdays can join the 'Iwalk Club' before graduating to a 'Walking Tour of Canada' or the new 'Walk Around the World Challenge'. More on SRS in Canada at www.saferoutestoschool.ca and www.goforgreen.ca/asrts

New Zealand

New Zealand's national Energy Efficiency and Conservation Authority (EECA) has published a report on global walk to school initiatives, to assess which would be most suitable for a national promotion. The research investigates successful projects in the UK, US, Canada and Australia, and highlights those that promote a lasting change in travel to school. As its transport sector currently consumes over 40 per cent of New Zealand's energy, the NEECA is aiming for a 20 per cent energy efficiency improvement by 2012. Read the report at www.iwalktoschool.org/downloads/Report_IWALK_Promotions.pdf

France

Enthusiasm in many of the Départements to reduce car use for the school journey is high despite the lack of any national initiative. The French approach has many similarities to the UK and features school travel plans and Pedi Bus - walking buses. The Association des Départements Cyclables focussed on cycling to school in their annual Congress held in early September. There were many good news stories including regions funding safe cycling routes, and schools bike parking projects which have led to 2/3 of pupils cycling to school on summer days.

Scotland

The Scottish Executive has committed up to £150,000 funding to support Sustrans SRS project. Awarded by the Scottish Executive's Enterprise, Transport and Lifelong Learning Department the grant recognises the importance of promoting safe and sustainable travel issues. The funding will pay for the promotion of

partnerships between school travel coordinators and other policy areas, and between local authorities and organizations that encourage safe and active school travel. It will also enable Sustrans to support schools via initiatives such as School Champion Training. SRS in Scotland started in 1995 and now shares information with over 1,000 schoolcontacts.

Northern Ireland

A staged scheme to promote and support the SRS initiative across 40 schools in Northern Ireland began in April. The Accelerated scheme is improving signage and road markings outside schools, providing education and awareness resources, promotional materials and improved facilities within school grounds. Next up the scale is the Enhanced scheme which includes work to develop school travel plans, infrastructure improvements and measures and events to support sustainable transport. Contact: stephen.hewitt@drdni.gov.uk or visit www.travelwiseni.com

8.2 An example from the UK: Right from the start

How can new schools be certain of getting appropriate safe routes measures - and funding - as early as possible? When it comes to new schools, the local authority is frequently both the developer and the planning authority. The Department for Education and Skills (DfES) wants money earmarked for new build projects to be used within the school site only. So who funds off-site measures?

Section 106 planning agreements often require developers of new schools to contribute to road safety improvements and draw up and maintain a school travel plan (STP).

The off site measures identified in these travel plans can be paid for by the developer or from the highway authority's Local Transport Plan funds.

Inevitably, establishing an 'appropriate' contribution can be a drawn out process with some horse-trading required. A successful outcome has been achieved at Bradley Stoke in South Gloucestershire.

The developers of a large residential estate and adjacent secondary school agreed to construct and finance link routes to the school, tactile paving, street lighting and safe crossings as part of the Private Finance Initiative package.

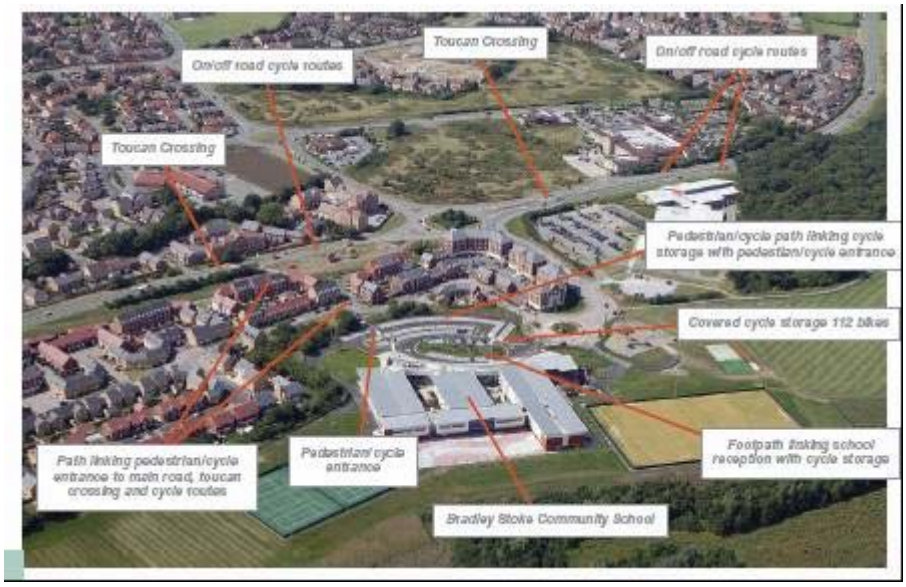
School travel adviser Bethan Morris met the new headteacher and governors to move the STP forward and set travel precedents. Currently just 180 first year intake pupils are at the school and during a recent visit Bethan counted 52 bikes in the new cycle shelter – a good sign that road safety concerns have been successfully addressed by the school travel plan.

To ease negotiation between council departments, some authorities are developing their own supplementary planning guidance:

Merseyside TravelWise and their partners are scrutinising the performance of new developments and drafting a supplementary planning document intended to become formal guidance. It will include minimum levels of accessibility for all, links between schools and their communities, and special consideration for cycling and pedestrians - and all in the light of the area's regeneration objectives

Yorkshire and Humber TravelWise has published Guidance on Development and New Schools with suggestions on site location and design, and safe connections to the community.

Contacts:
bethanmorris@southglos.gov.uk
sarah.dewar@merseytravel.gov.uk
graham.riley@leeds.gov.uk



8.3 Province of Rimini "School for the air!" project

The aim of the project was to develop the first School Travel Plan in the Province of Rimini in the Emilia-Romagna Region, Italy. The objectives pursued in the project were:

- To improve the access to the high schools involved in the project with the intention to promote collective sustainable modes of transport (PT and school buses), slow mobility (pedestrian and cycling mobility) and inter-modal means of transport ;
- To increase the safety of the tracks and access routes which lead to the high schools;
- To analyse and become more aware of the modes of transport used by the students in order to identify possible areas of intervention;
- To encourage the students to change one's own habits achieving a more rational use of the private car, ultimately promoting the use of PT within the City of Rimini and its periphery along with generating a greater propensity to intermodality;
- To increase sensitivity of the students towards sustainable mobility issues introducing the road education theme.

The realisation of the project managed to involve directly the students through the organisation of a series of meetings / focus groups with the students' representatives. Furthermore, the cooperation of a whole class was needed in order to analyse in depth the technical instruments used to develop the school travel plan and discuss about the results emerged from the study.

The project was characterised by two distinct but intertwined type of activities:

- a technical activity for the development of the School Travel Plan, STP, (survey on the demand of mobility, analysis of the accessibility of the site, development of the measures to be implemented)
- a training and sensitising activity on sustainable mobility themes directed to the students.

The meetings/focus groups with the students were used to issue specific knowledge and analyse the on-going activities (mobility management, data collection and analysis, possible measures to be implemented – using as theoretical base the practical experience the students were living through the development of their Travel School Plan).

The main results of the School Travel Plan show that 25% of the students reach the school by private car travelling within the city for max. 2,5 km. Nonetheless, 65% of these students declare that they are prepared to modify this behaviour if:

- the public transport service becomes more reliable
- the overall travelling times are reduced
- safety is increased for cycling journeys (i.e cycling lanes needed)

The proposed measures to improve the accessibility to the school sites and the overall mobility of the students focused on three main areas of intervention:

- Encouragement of the use of bicycles (through the creation of sheltered parking areas; the definition of agreement with specific shops for the purchase of bicycles and necessary equipment and for the maintenance; infrastructural interventions to increase safety);
- Promotion of Public Transport (for the students who buy the annual student pass diversified tariff agreements for numerous shops were given)
- Endorsement of alternative vehicles (such as electric bicycles and on site installation of recharging spots)

Ultimately, to communicate to all the students about this School Travel Plan project and inform on the interventions the local authority was about to develop during the annual end of year School Music Party a dedicated stand on sustainable mobility. Alternative vehicles (electric bicycles and LPG scooters) were exhibited, T-Shirts with the project's logo "School for the air!" were distributed together with an explicative leaflet on the most important results of the School Travel Plan survey concerning the modal habits of the students.

The final activity of the project was the preparation of a video by a group of students aimed at explaining to other students what a School Travel Plan is and sensitise on sustainable mobility.

8.4 A summary of a Belgian STP

<table>
<tr><td colspan="2">Location (country, city)</td><td colspan="3">Belgium, Geel and Mol</td></tr>
<tr><td colspan="2">Type of school</td><td colspan="3">Primary schools</td></tr>
<tr><td colspan="2">No. of students/pupils</td><td colspan="3">Approximately 4500 pupels were target of the STP's.
13 (out of 16) schools in Geel participated
13 (out of 25) school from Mol entered the campaign.</td></tr>
<tr><td colspan="2">Age range</td><td colspan="3">6-12 (focus on 9-12)</td></tr>
<tr><td colspan="2">Rural/Urban area</td><td colspan="3">Rural areas, neighbouring cities</td></tr>
<tr><td colspan="2">Type of roads around the school</td><td colspan="3">Regional and local roads cross the different school environments</td></tr>
<tr><td colspan="2">Socio-economic status of school (or area)</td><td colspan="3">Small towns in the urban area of city of Antwerp. The city centres attract a lot of car traffic because of their extensive commercial and educational facilities. On the outskirts are industrial operations that generate heavy traffic. Geel and Mol are neighbouring municipalities who are somewhat in competition with each other in economic terms.</td></tr>
<tr><td colspan="2">Other relevant demographic information</td><td colspan="3"></td></tr>
<tr><td colspan="2">STP document completed (year)</td><td colspan="3">2002</td></tr>
<tr><td rowspan="2">Motivation fo undertaking STP</td><td>Safety</td><td colspan="3">Safety has been a huge policy issue in Belgium in the last 2 years. The issue has been raised by new initiatives (such as the National Staten General on road safety), by the media in general and by nation-wide campaigns such as Bob (drink-driving) or Lifeline (a national campaign directed at children).</td></tr>
<tr><td>Other</td><td colspan="3">The mobility convenant and possibility to receive financial subsidies when developing and implementing a STP.</td></tr>
<tr><td rowspan="2">Identified barriers to walking and cycling</td><td>Safety</td><td colspan="3">Increasing road safety was the main focus of the project, ensuring that children old enough to travel alone to school can do this in a safe environment.</td></tr>
<tr><td>Other</td><td colspan="3"></td></tr>
<tr><td colspan="2" rowspan="2">Specific targets adopted in plan (e.g. 10% reduction in children being driven to school; etc)</td><td rowspan="2">5% reduction in the number of pupils aged 9-12 driven to school</td><td colspan="2">Other information about the STP measures/initiatives:</td></tr>
<tr><td>Is the initiative on-going or is it "one-off"?</td><td>Date completed or implemented</td></tr>
</table>

Measures identified within the STP document	**1. Walinkg initiatives**	Traffic education route	ongoing	2003
	2. Cycling initiatives	Geel developed an educational programme, focussing especially on cycling to encourage and inspire pupils to travel safely and with respect for the environment.	ongoing	2003
	3. PT initiatives	Encouraging the use of PT by organising field trips with PT	ongoing	2002
	4. Engineering measures			
	5. Enforcement measures			
	6. Education programmes/ measures	Integrating themes from the local mobility plan in the transport and mobility education Integrate the development of a school travel plan in the programme. Encourage safe and sustainable mobility behaviour among teachers, pupils and parents. The MoI mobility centre expanded it's existing traffic education programme, requiring pupils to consider what transport modes they used and their benefits and disadvantages. Demonstration sessions for teachers, explaining how to work with new materials and new educational targets.	ongoing	2002
	7. Promotional activities	Awareness raising actions Overall TAPESTRY campaign in Geel and MoI	ongoing temporarily project	2002 2002-2003
Implementation steps – including timing and order of steps		Creating support for the project: Sept-Oct 2001 Information on the local mobility plan: Oct-Dec 2001 Support in development and implementation of the STP: Nov '01 – Sept '02 Awareness raising actions: Sept '01- Sept '02 Development traffic education routes: Nov '01- Jun '02		
Monitoring programme in place?		Yes, the monitoring scheme was based on the TAPESTRY survey questionnaires.		

Description of evaluation (type, quality, who is involved, etc)		The survey was conducted among pupils aged 9-12 year in 10 schools in Geel and Mol. Six schools were situated in Geel, four in Mol. The group of schools in Mol can be further divided into two sub-groups: - one group of two schools had been the setting for many traffic safety and sustainable transport activities (as was the case for all schools in Geel) - The other group of two schools didn't develop or implement a STP and had les experience with actions in transport and mobility. This group was used as the control group. The total size of the target group during the TAPESTRY campaign week was about 4500 pupils. The specific age of 9-12 years was chosen for two reasons: (1) the pupils should be able to answer a well-structured questionnaire written at their level; (2) they should be more or less able to travel on their own to school. A random sample of pupils was used, aiming at responses of at least 25 pupils per school. The before questionnaire was pre-tested in one school. In the before survey (May 2002) the written questionnaires were distributed among the fourth and fifth grade of these schools. The number of pupils varied between 23 and 113. In Mol, 79 pupils belonged to the control group. More or less the same group was interviewed once again in November 2002. About six weeks after the campaign took place. The interview method was the same, namely a written survey held during school hours in the classroom under the supervision of a teacher. In the control schools this was done by the project manager. The age group was now 10-12.
Impact on:	**Safety**	Awareness of the problems caused by high numbers of cars at the school gate were high prior to the campaign with approximately 65%. There was no significant change after the implementation of all actions.
	Mode use	Given the stated objectives to achieve a 5% reduction in car journeys, perhaps the most important and relevant results is the change in behaviour. This shows a statistically significant increase in the proportion of children cycling to school (40.6% → 50.5%) and a corresponding decrease in those travelling by car (47.8% → 37.3%, which represents a decrease of 20%!)
	Perceptions/ Awareness/ Attitudes	According to the response patterns of boys and girls, it appears that girls were more in favour of the car because of it's convenience in travelling from door-to-door: 29% of the girls were in favour of the car and 'only' 20.3% of the boys. There were statistically significant differences in opinions between boys and girls on the following issues: costs, comfort and coolness. The fact that a mode is cool is more important for boys than girls.

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Other relevant information	www.eu-tapestry.org

9. REFERENCES

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EMOTIONS Photo CD

MOBIEL21: Photo Traffic Snake on cover

PORTAL Photo CD

ZUALLAERT G., DE BENT V., (2001). 'Het schoolvervoerplan. Hoe verhoog je zelfstandige en milieuvriendelijke verplaatsingen van en naar school?', Langzaam Verkeer, Leuven.

10. APPENDIX

Summary of the mains steps to develop a successful STP

1. Start up a work group

Involve relevant partners: school board, teachers, parents, pupils, community, public transport company

2. Analysing phase

- Make an inventory of:
  - The way pupils travel to school (snapshot method)
  - The bottlenecks in the direct vicinity of the school
  - Bottlenecks on the school routes
  - Bottlenecks in transport organisation

3. Action plan

- Secure funding!
- Make an action plan based on the results of the analysing phase. Don't forget to set a clear timing for the different initiatives. Set out which concrete goals you want to achieve.

4. Evaluation phase

Evaluate your school travel plan by asking:

- Did traffic safety ameliorate?
- Are more pupils coming to school in an environmental friendly way?