European Platform on Mobility Management

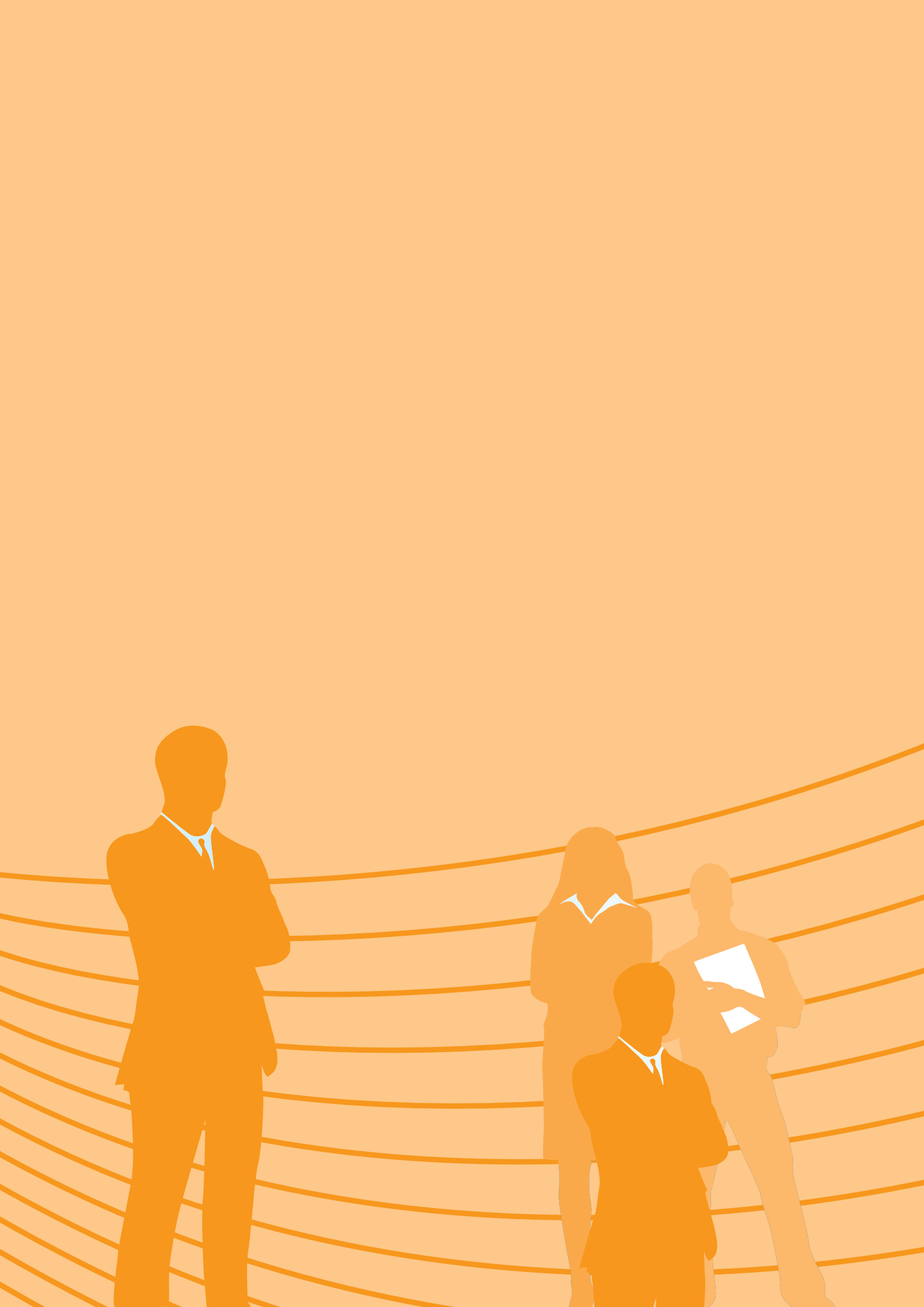
EPOMM

Managing mobility for a better future

Mobility management:

The smart way to sustainable mobility in European countries, regions and cities

www.epomm.eu



Mobility management: The smart way to sustainable mobility in European countries, regions and cities

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Reader guide

- The effects of the examples marked with an asterisk* are calculated in Appendix 2.
- The 12 countries with examples have been grouped into 4 sets, the chapter numbers in brackets.
  Northwest countries: Netherlands (2), the United Kingdom (3), Belgium (4)
  Central countries: Switzerland (5), Austria (6), Germany (7)
  Romanic countries: France (8), Italy (9), Portugal (10)
  Scandinavian countries: Sweden (11), Finland (12), Norway(13)

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Preface

Mobility management, often called 'smart mobility', is a cost-effective instrument for bringing mobility and transport more in line with sustainability. It is complementary to technology and infrastructure measures and it is the additional key needed to achieve sustainable mobility on the local, national and European levels. Therefore current budget cuts should not endanger measures and solutions for sustainable mobility. On the contrary the need for developing and implementing cost-effective measures like mobility management is increasing. It is urgent that we solve the wide variety of sustainability problems caused by transport, particularly environmental, health and social burdens to our citizens. Moreover we need to shift the current unbalanced modal split and decrease the enormous dependency of today's transport on fossil fuels, which result in high economic costs. The concept of 'mobility management' has evolved from these concerns: it is the smart management of mobility needs. Mobility management is a relatively new approach, still in its early stages, but nonetheless developing rapidly in an increasing number of European countries.

Just as seeing is believing, likewise showing the benefits of mobility management is the best way to convince people. Hence, this report provides an overview of best practices in mobility management from the current 11 Member States of the European Platform on Mobility Management (EPOMM). These Member States have achieved impressive results in delivering smart mobility management actions. This EPOMM report provides inspiring case studies and is meant to serve as a source of inspiration for interested countries and the European Union as a whole. The best practises detailed here cannot simply be "copied and pasted", as the contextual environments differ among countries, however they can provide ideas and proven concepts which are worth disseminating amongst countries and on the European level.

The aim of this brochure is to share these international experiences and offer a glimpse behind the curtain of EPOMM member countries. The brochure is based on a Dutch report written and published in 2012 by KpVV , EPOMM's National Focal Point in the Netherlands, which has garnered a wide variety of insights into mobility management from all over Europe.

EPOMM found the experiences of its Member States worth sharing, as they contain a contemporary overview of mobility management in practice. The brochure therefore provides a thorough summary of the approaches taken in each EPOMM Member State and Switzerland and furthermore features some of the best examples of actions taken in all EPOMM Member States.

There is much that cities, regions and countries can learn from each other and EPOMM's hope is that this learning process, which builds on best available practice, will accelerate the widespread implementation of mobility management in Europe. EPOMM therefore will further facilitate sharing knowledge and practical expertise and continue in playing a leading role to promote mobility management all over Europe.

Robert Thaler, President of EPOMM
Odette van de Riet, Vice President of EPOMM

EPOMM, the European Platform on Mobility Management, was founded by a number of committed Member States. EPOMM's aim is to function as the knowledge hub for mobility management and to disseminate the concept in order that it becomes integrated in Sustainable Urban Mobility Plans (SUMPs), as well as in national and European mobility strategies. EPOMM fulfils this function in four ways:

First, EPOMM facilitates the exchange of knowledge and experiences among policy-makers, stakeholders, experts and practitioners. EPOMM is a knowledge network of people and countries that meet regularly to exchange their experiences in mobility management. The highlight of the year is the annual European Conference on Mobility Management (ECOMM). This exchange of knowledge is further supported by a monthly newsletter.

Second, EPOMM has developed a broad range of tools:

- The European Modal Split Database (TEMS) provides the modal split data for more than 350 cities across Europe. Even though calculation methods (urban scales, journey types, etc.) are not the same from one country or one city to another, it allows comparisons as a first approach, which is better than the previous lack of data.
- The EPOMM evaluation tool MaxEva facilitates the evaluation of mobility management projects, compiling data on an ever-growing number of MM projects throughout Europe.
- Two policy evaluation tools are aimed at supporting the evaluation processes (MaxQ and MaxSumo) – the MaxSumo method can be used on MaxEva.
- Several web-based policy development tools (MaxExplorer, MaxLupo and MaxSem), can be used to develop mobility management measures.
- Mobility management monitors per country and for the EU, which provide insights into developments in mobility management.

Third, EPOMM facilitates policy transfers among countries, cities and regions, for which standardised policy and best practice transfer processes have been developed. Moreover, EPOMM acts as a training agent, helping trainers find the right format and reach the right audience.

Fourth, and finally, EPOMM puts emphasis on raising awareness amongst national and European stakeholders that mobility management is not just a local or a regional issue, but should be part of the agenda of national and EU policies. EPOMM's aim is that national and EU decision makers undertake initiatives to stimulate and support mobility management.

More information on EPOMM can be found in Appendix 3 and on www.epomm.eu.

1 Smart Travel development in Europe

1.1 How it all started in the Netherlands

In 1986, the American concept of Transport Demand Management was introduced in the Netherlands. The first initiatives to reduce car use in business travel and home-to-work journeys fell under the heading of "Transport Management". The emphasis was on a regional approach and cooperation between government agencies and companies. The goal was to decrease the number of individual commuter car trips by 20%. Companies mostly developed transport plans and encouraged the use of bicycles, public transport and carpools. After a successful start (20% to 30% decrease in car use), transport coordination centres were formed and transport management gained national attention in the Second Structural Plan on Traffic and Transport (1990). For further developments in the Netherlands, see Chapter 2.

1.2 Other European countries

Mobility management spread from the Netherlands to other European countries. In 1991, Germany started with information centres in Hameln and Frankfurt, which informed travellers about sustainable transport. This resulted in the growth of public transport. At around the same time, France started with "soft" measures and multimodal travel information. In 1996, mobility management in France was given a push by legislation on air quality and energy consumption. In 1998, the first national working group on company transport planning started. In the mid-90s, mobility management also made its appearance in the United Kingdom. In 1995, some employers, government agencies and hospitals started company transport planning (green commuter plans). The success of these rapidly spread to schools, airports and recreational venues. Networks such as the Association for Commuter Transport and TravelWise promoted development in this area. Around 2000, mobility management acquired advocates in countries such as Sweden, Finland, Italy, Spain and Austria. In 2004, the view was directed eastward to the new Member-States of the European Union.

1.3 EPOMM

In 1997, when the Netherlands held the Presidency of the European Union, the Department of Transport, Public Works and Water Management organised the first European Conference on Mobility Management (ECOMM) in Amsterdam (the 18th session of this congress will take place in 2014). This success led to the establishment of the European Platform on Mobility Management, again under the initiative of the Netherlands. (See the preface and Appendix 3 for more information on EPOMM)

1.4 Definitions

EPOMM uses this definition: *"Mobility management is a concept for promoting sustainable transport and dealing with the question of car use by modifying the habits and behaviour of travellers. The core of this mobility management is formed by "soft" policy measures such as information and communication, organisation of services and the coordination of activities of the various partners".*

"Soft" measures often promote the effectiveness of "hard" measures such as infrastructure (from bicycle paths to tram lines). In contrast to "hard" measures, mobility management often does not require large investments and has a more favourable cost-benefit ratio.

The European term "soft policy measures" does not communicate as strongly as the term "smart travel". Smart is seen more often internationally: smarter choices (United Kingdom), smarta resor (smart trips, Sweden), kulje viisaasti (smart mobility, Finland) and Gscheid Mobil (cleverly mobile, Munich).

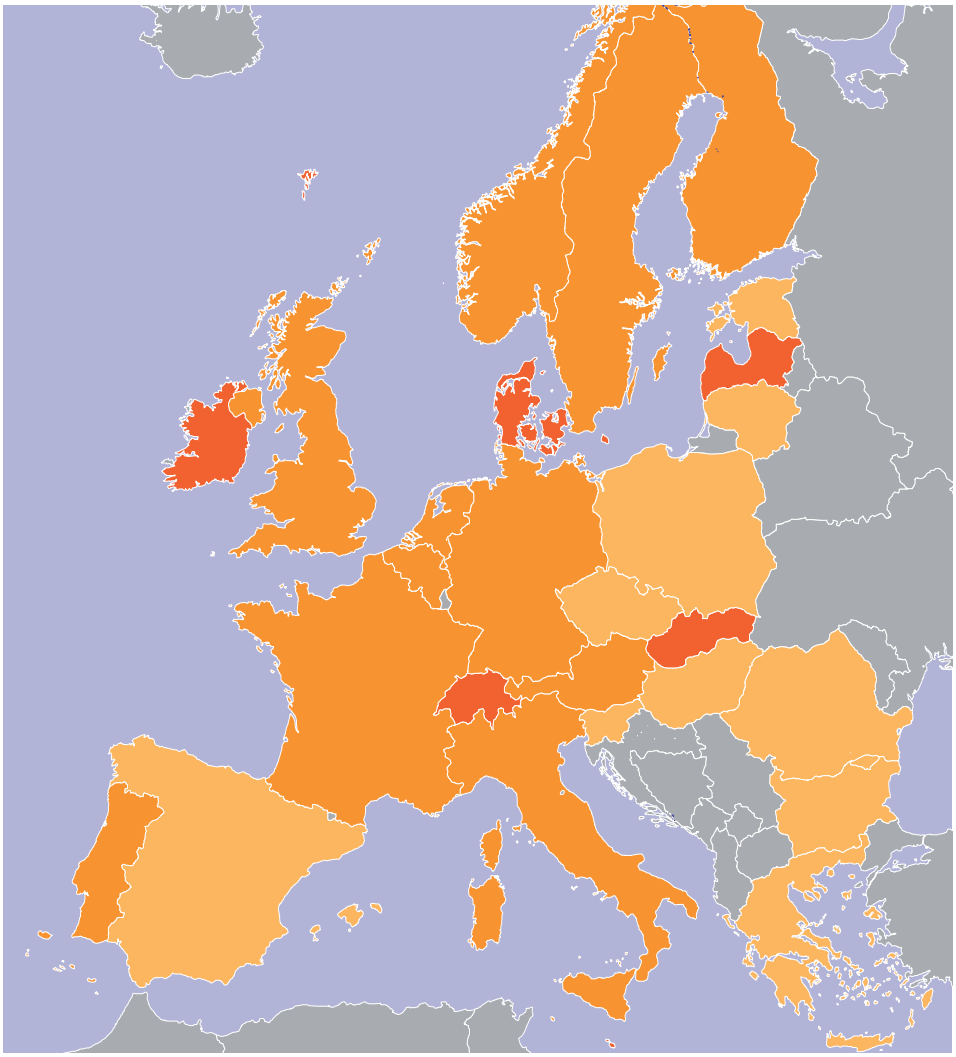
- The European definition emphasises government actions, such as the provision of (travel) information and the organising of cooperation. Business interests seem subordinate.
- In most countries the term "mobility management" needs a lot of extra explanation, whilst smart mobility is often easily understood.

1.5 Developments

EPOMM compiled state of the art reports on mobility management from European countries from 2007-2012. Its analysis delivered the European Mobility Management Monitors (accessible here: *www.epomm.eu/index.php?id=2687*). This is the most up-to-date picture:

- Mobility management is undergoing extensive development. More and more countries are becoming involved with it. In addition, more and more projects are being started. Topics such as climate change and health are high on the agenda. Mobility management is not "business as usual" anywhere, but things are moving in this direction in Western Europe.
- The definition differs from one country to another. In some countries, mobility management is not yet known. Sometimes it has a different name: travel planning, smart travel, sustainable mobility or green travel.
- Each country has its own emphasis. In the Netherlands the emphasis is on accessibility. Sweden emphasises climate and attractive cities. In Germany and Switzerland, it is more a matter of energy savings. Austria focuses on green jobs and Belgium chooses sustainable traffic and transport. France also puts attention on social inclusion and mobility solutions for people facing economic or social difficulties.
- Not all countries have a national policy on mobility management. The question "Which ministry should I call?" is answered in various ways. It is generally found in the Department for Transport or Environment, or sometimes in Energy. National governments primarily deal with laws and (financial) regulations, policies and national schemes. Countries with mobility management on their national agendas are often in the forefront. In most countries, mobility management is primarily a matter for regions and municipalities.
- The number of experts is increasing, and they are exchanging more knowledge and experience via European projects and international networks.
- There are also threats: politicians with a primary focus on car traffic, land-use developments that promote car use (shopping malls at the edge of the city), and people's resistance to changing their travel behaviour. Proving the effectiveness of smart travel remains a challenge.

Countries in the European Mobility Management Monitor 2012

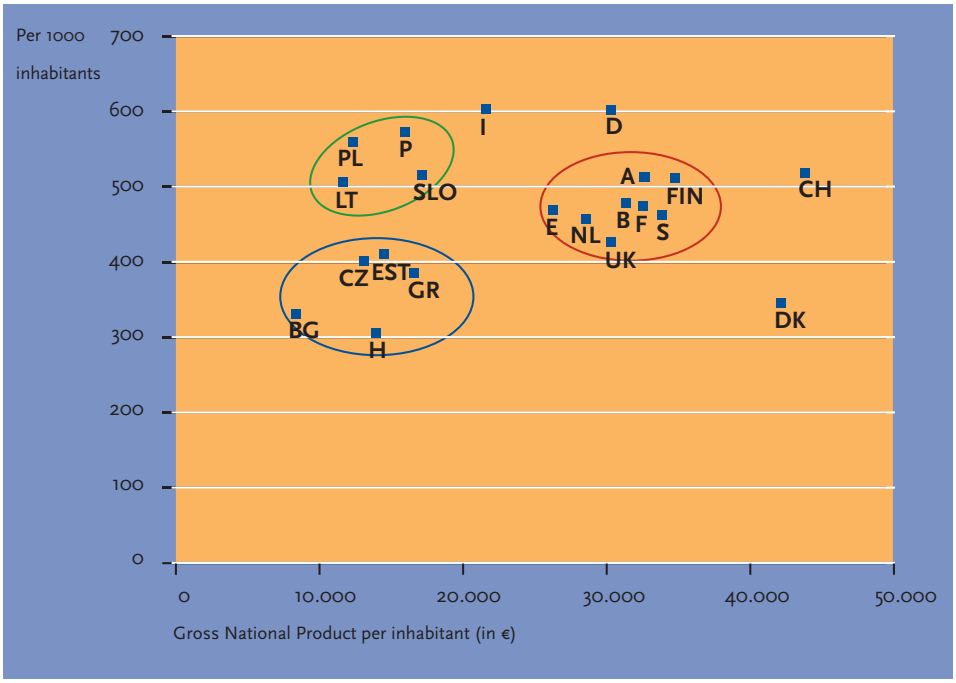


EPOMM member
EPOMM-PLUS partner
Not a member or partner, but in *Mobility Management Monitor*

1.6 Front-runners

Roughly speaking, mobility management is best developed in high-income Western European countries. National governments are often very much focused on infrastructure, and mobility management is a neglected child. Front-runners in mobility management are Austria, Belgium, France, the United Kingdom, the Netherlands, Sweden and Switzerland. In Germany, Finland, Norway, Italy, Portugal and the Czech Republic, MM is on the rise. In most of the front-runner countries, the Gross National Product is high and car ownership is relatively low (see diagram) – it is noteworthy that these countries also have relatively few traffic deaths.

Figure
Relationship between car ownership per 1,000 inhabitants (vertical) and Gross National Product per inhabitant in Euros (horizontal) (2009).



1.7 Strategies

According to the European Mobility Management Monitor, there are three strategies for mobility management:

- **Policies and laws:** National policy documents provide a framework for mobility management. There are also national promotion programmes, for example in Germany. Furthermore, laws can provide stimulus. In some countries these are laws regarding climate or air quality. Italy and the Spanish autonomous region of Catalonia requires mobility management by employers. The Brussels metropolitan region requires transport planning by companies and schools.
- **Fiscal measures:** Various countries recognise fiscal measures for sustainable mobility, such as reimbursement for public transport or bicycles, .businesses supplying bicycles for their employees, etc. There are also measures for reducing car use, such as the CO_2 tax for rental cars in Belgium.
- **Awareness raising and promotion:** All of the countries examined participate in European Mobility Week. There are many campaigns for promoting bicycling, walking and public transport.

Counterproductive measures

There are also regulations that promote the car, such as high rates per kilometre for reimbursement of home-to-work travel, company cars, and obligatory provision of parking spaces. For example, Swedish municipalities can obtain funds for infrastructure, but not for multi-year programmes on mobility management, and in many countries it is not possible to reserve parking spaces for car sharing cars.

1.8 European policy

Mobility management is not yet established as a legal term, but is is achieving a more and more prominent place in European traffic and transport policy:

2001 In the White Paper "European Transport Policy for 2010", the European Commission encouraged more conscientious car use. The Commission also emphasised the importance of spatial planning to prevent unnecessary growth of car traffic. The White Paper sought to uncouple economic growth from mobility growth and wished to promote alternative transport means.

2007 The Green Paper "A New Municipal Culture" places municipal mobility on the agenda. The starting point is subsidiarity: here, communities, regions and states are responsible for themselves.

2009 In preparation for the new White Paper, behaviour change has become a current topic. The Municipal Mobility Action Plan contains 20 measures, including the promotion of safe walking and bicycling and campaigns for sustainable travel behaviour.

2011 Publication of the new White Paper "Transport 2050 - Roadmap to a single European transport area", which focuses on a competitive and economical transport system.

White Paper 2050

The European Commission emphasises the importance of municipal mobility. Most of the European population lives in urban regions, and 85% of the Gross Domestic Product is earned there. Thus cities are the drivers of the economy, but also need to be liveable for the inhabitants.

Climate and energy problems are faced by all cities across Europe and worldwide, but the causes are local, as are the negative effects: traffic jams, air pollution, CO_2 emissions, traffic accidents, noise overload, and health problems. Cars using fossil fuels are a growing cause of the problem. Solutions are possible, and necessary, specifically in cities. Therefore the White Paper speaks of a "new mobility culture" for cities, where walking, cycling and public transport will be central instead of the car. Network mobility and car-independent lifestyles must be promoted along with cleaner vehicles.

The White Paper, which outlines the policy through 2050, has as its principal goal the efficient use of energy to eliminate dependence on oil. This will also contribute to a better climate. A traffic system must be developed that "supports economic growth, strengthens competitiveness and offers high-quality mobility services with more efficient use of resources. In practice we should work towards transport means that use less energy and cleaner energy, make optimal use of modern infrastructure and cause less damage to the environment and important natural resources such as water, land and ecosystems".

The White Paper should contribute to reaching the worldwide goal of restricting global temperature rise to less than 2°C. This means 80% to 95% less emissions in 2050 compared with 1990. In the transport sector, emissions are still increasing, but great reduction is possible. The White Paper formulates a goal for the transport sector (road, rail, water and air) of 60% less greenhouse gas emissions by 2050 compared to 1990 levels. This will start with a reduction of 20% by 2030 relative to 2008.

This requires not only behaviour change, but a cultural shift in the mindset of travellers, as well as in the outlooks of politicians, officials and organisations that determine municipal mobility policy. Mobility management raises awareness and draws attention to sustainable mobility, while providing instruction and influencing travel behaviour.

Core concepts in EC transport policies are seamless travel and municipal travel planning. In seamless travel, the emphasis lies - more strongly than in our transport network - on the needs of travellers for good connections and seamless transfer between transport modes.

A SUMP (Sustainable Urban Mobility Plan) is comparable to a municipal traffic and transport plan. The starting point is a coherent area; thus this may also be a regional traffic and transport plan. SUMP answers the question of how the municipal or regional mobility policy contributes to sustainability goals. Here, "sustainability" is broader than climate or energy alone: attractive cities and open space for healthy living and working are also involved. According to Fred Kent, "If you plan cities for cars and traffic, you get cars and traffic. If you plan cities for people and spaces, you get people and space".

1.9 Financing

Since 1996, the European Commission has financed studies and projects in the area of mobility management, such as CIVITAS, Max, Momentum, Mosaic, Most and Tapestry. For more information on these projects: see *www.epomm.eu*

Financing of structural and cohesion funds, as well as community and environmental programmes is also possible. The European Investment Bank finances projects in the area of municipal mobility. The European *Mobility Management Monitor* 2010 gives an overview of European financing possibilities.

EPOMM is urging the European Commission to pay more attention to mobility management in terms of policy and financing. This in turn will contribute to reaching European policy goals in terms of accessibility, health and climate.

1.10 Conclusions

The demand for mobility management in Europe is growing, especially in cities and regions that are aware of the disadvantages of car use. This is achieving a stronger position in European and national policy. In Western European countries this means moving from loose initiatives to a structural approach. European policy places emphasis on urban travel. Specifically in cities a change is necessary: the car is dominant, and that must change. Smart measures are able to support this change. In the European Commission's vision, mobility management contributes to a new mobility culture in cities. Awareness and behaviour change are necessary, in addition to "hard" measures such as provision for bicycles, public transport and networks.
The Mobility Management Monitors show that "hard policy" is also necessary in the form of regulations and fiscal measures.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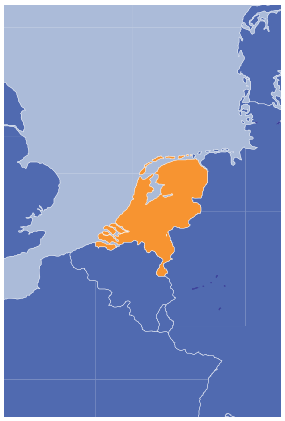
2 The Netherlands



Inhabitants: 16,7 M

2.1 Developments

In 1989, the national government took the pioneering step of introducing mobility management in seven business areas. Their successes led to mobility management occupying a strong position in national transport policy. The Second Transport Structure Plan (1990) contained measures such as road pricing, doubling the number of public transport users, cycling, carpooling, company Mobility Management (MM), and strict parking standards.

In 1994, research revealed that mobility management was 10 times more cost effective in solving congestion problems than building new infrastructure. This resulted in a second boost for mobility management, placing the subject even higher on the agenda. However, the ensuing national policy proved to be based too heavily on blueprint thinking. Due to political rivalry, a HOV-lane scheme near Amsterdam failed. As a result of this, many people concluded that demand strategies are not effective. Consequently, mobility management lost its momentum.

The new millennium showed a revival of mobility management. During large-scale roadworks for two orbital roads near Amsterdam, hindrance was marginal, owing to an effective packaging of measures. This resulted in a new 'belief' in mobility management. Today, Rijkswaterstaat (the national road authority) has fully incorporated mobility management in large-scale road construction and maintenance projects. In 2006, a conflict between business and government on compulsory MM led to the creation of a task force on MM in which the business sector, unions and governments cooperated.

Today the national government strongly supports the implementation of mobility management, in close cooperation with the business sector, which is organising its own network to maintain the momentum. A national scheme, Beter Benutten (Better Usage), implements measures in ten urban regions. Major projects include rush hour avoidance, which rewards commuters for not driving to work during the morning peak, pedelec promotion, and promoting teleworking and flexible working patterns. Smart mobility cards and mobility budgets support the demand for flexible working and flexible mobility patterns. Commercial service providers offer such smart mobility solutions to companies. This resulted in a new development: a shift from the government pushing mobility management to a business-to-business market.

Photo page 16: András Ekés.

2.2 Case studies

2.2.1 MM during road works around Utrecht*

Region of Utrecht	630,00
Subject	MM and congestion MM by employers, information and promotion

Because of major road works on the A2, the largest motorway situated near Utrecht, Rijkswaterstaat started the Utrecht Bereikbaar (Utrecht Accessible) project in 2008. This project was characterised by close cooperation with large companies.
The business sector therefore recognised this as a business-led initiative, instead of as a governmental project. Some 20,000 employees received the Utrecht Bereikbaar Pass, which provided access to bus, tram, train, PT-bikes, internet hotspots, express coaches and Park and Ride facilities. The Rijkswaterstaat and the province and city of Utrecht coordinated their transport communication efforts, including real-time traffic information.

The target was reached: 2,000 - 4,000 fewer cars on the road during peak hours, with 40% of the passholders using the pass three or more days a week. As 40% of these passholders had previously travelled by car, this marked a reduction in car traffic of approximately 5,000 cars a day. Many users stated that they wanted to continue using the Pass and would return to using their cars if the initiative were stopped. However, when the road works were completed, there was no longer a need for Rijkswaterstaat to finance the Pass. In 2012, all subsidies ended. At least 50% of the participating companies will continue using the Utrecht Bereikbaar Pass, as it is an easy and inexpensive way to deal with their employees' mobility, while also helping to manage parking problems and allowing companies to prove their societal responsibility.

2.2.2 Pedelec promotion*

Arnhem-Nijmegen city region	740,000
Subject	MM and congestion, information and promotion

In 2012, the Arnhem-Nijmegen city region subsidised pedelecs for commuters. 630 employees purchased a pedelec. Previously, 65% of them had travelled to work by car. Today, only 23% use their cars to travel to work. Each of these participants drove 74 fewer kilometres a week on average. Participants received a 600 Euro subsidy for purchasing a pedelec. At least 50% of the participants said that they would not have purchased a pedelec without this subsidy.

A pedelec is used for 10% of all bike trips in the Netherlands, although the average age of these cyclists is rather high. Many regions promote pedelecs as a solution for home-to-work travel.

2.2.3 Avoiding peak traffic (Spitsmijden) in the region of The Hague*

The Hague city and region	1,000,000
Subject	MM and congestion, MM by employers, rewards and feedback

In 2005, the first Spitsmijden (Avoiding Peak Traffic) pilot project was started in the region of The Hague. Research was conducted in order to determine whether a rewards system helped car drivers avoid driving during rush hour. In fact, peak traffic avoidance is the opposite of road pricing. In the first pilot, 340 car drivers tried to avoid driving during peak hours (7:30–9:30) on the A12 motorway between Zoetermeer and The Hague over a period of 50 weekdays. The reward offered was from €3 to €7 per trip avoided or a smart phone with GPS.

The number of trips was reduced by 21% per day. Most of the participants avoided peak traffic by leaving home earlier, and in their opinion it was rather easy to change their travel patterns. 43% of the participants stated that they wanted to help reduce congestion, while 33% said they participated because of the reward.

Comparable projects during roadworks even led to reductions of 37% (2,900 participants) on the A6 Hollandse Brug near Almere and 39% (2,700 participants) on the A16 Moerdijkbrug near Dordrecht.

Currently, the focus is shifting toward changing travel habits and new rewarding methods, such as gaming.

2.2.4 Rabobank: a new way of working

Utrecht City	320,000
Subject	MM by employers

Rabobank, a large Dutch bank, started with a new way of working aimed at creating an attractive and inspiring job environment. Employees are given freedom and responsibility to do their job in the way that suits them best. This results in a motivated staff, higher productivity and less road traffic.

In Rabobank's view it will become increasingly difficult to attract highqualified staff; therefore, it's important to offer employees responsibility and personal development. Flexibility, for example in combining child care with a job, will be an increasingly dominant factor in employment.

Rabobank focuses on results and quality of work. The time or place of working is no longer relevant. This vision of 'the new way of working' therefore includes far more than teleworking alone. Three elements have been implemented:

- Changing the physical environment: Rabobank's new headquarters in Utrecht reflects the view that the office is a meeting place and a place for exchanging ideas and knowledge. Working places are flexible, resulting in a more efficient use of the office building.
- Changing the virtual environment: Modern technology makes it possible to work independent of time and place. All employees receive a laptop and smartphone and have access to data and systems everywhere.
- Mental transformation: The new way of working requires a management shift from control to trust. This requires an investment in managers and employees.

2.2.5 Mobility vouchers for small and medium-sized enterprises

Subject	Schemes to promote MM, MM by employers

With a mobility voucher, companies with between 25 to 250 employees get free mobility advice (worth € 1,500). This is intended for research into possibilities for mobility management; for example, it makes clear how employees reduce travel costs, increase productivity and reduce parking problems. A second voucher supports the implementation of recommended measures. This voucher is worth € 4,500 up to a maximum of a maximum of 50% of the costs of the measure. Consultants who advise the companies need to be certified as mobility voucher consultants.

The scheme started in July 2010 and ended in 2011. In October 2011, approximately 3,500 companies (from all over the country, but mainly from the Randstad area) requested a scan, while 1,400 companies ordered the 2nd voucher. The scheme was promoted by strategic partners in the business sector and regional partners, since there was generally little governmental communication about the scheme.

A group of consultants drew conclusions from research conducted about the 100 companies that were advised. Many of the companies had never given priority to mobility issues, as they thought their arrangements were rather good. While car use remains popular, the interest in mobility budgets is growing. Many company locations are not situated within reach of railway stations. Interest was raised in the PT-bike, a mobility option as yet still unknown to the companies studied. About half of the employees live closer than 15 km to their workplaces, while only 25% travel by bike, pedelec or scooter. Consequently, cycling has much room for growth. Companies could save money and increase productivity by shifting from cars and car leasing to more sustainable travel options and to teleworking.

The voucher scheme has become a popular tool for creating awareness among smaller companies, which represent a large part of the work force.

Successful campaigns

" The Netherlands have interlinked mobility management and facilities management in a smart way. I find that attractive. But I never hear anything about successful campaigns in the Netherlands. Do you not know how to approach this? "

Ivo Cré, Project Manager, POLIS - Transport network for European cities

2.2.6 Mobility budgets in the Yacht Company*

Yacht is situated in many Dutch cities, not one specific site	
Subject	MM by employers, rewards and feedback

Yacht is a Dutch company specialised in recruiting highly educated people and interim management. Yacht works from 14 locations in the Netherlands. Of its 2,700 employees, 75% use a company car, which generates 85 million car kilometres annually. Yacht wanted to reduce mobility costs and CO_2 emissions, thus displaying its corporate responsibility while remaining an attractive employer. The key measure was the implementation of a mobility budget for employees.

With the mobility budget, employees can choose not to use a company car. Instead, they can choose between a public transport pass, participating in a bike scheme or a mobility budget. The mobility budget means that the employee receives a grant equal to 120% of the budget for a company car (VAT excluded). This budget can be used for travelling or for purchasing a PT pass. Since 2007, it is also possible to claim all travel costs for commuting and for business trips via a Mobility Budget internet application. The gross remainder of the budget is granted at the end of the year. This scheme therefore provides a financial incentive to use sustainable modes of transport or to work at home, as this is less expensive than driving a car.

At the same time, the number of car types from which employees may choose was reduced, which lowers the purchase costs. Today, Yacht employees can only choose economical and clean vehicle types. In order to reduce fuel consumption, Yacht promotes the following options:

1. Plan smart: combine meetings in order to reduce trips;
2. Choose smart: Only use the car when it is really necessary;
3. Drive smart (eco-driving): drive calmly, safely and in an environmentally friendly way.

In Yacht's vision, the best car trip is a car trip is one that does not occur at all. This implies that employees must make smarter choices with regards to travelling. Yacht's mobility policy is based on three main pillars:

1. enhancing the personal needs of employees in order to be an attractive employer;
2. making mobility policies part of the corporate responsibility;
3. raising awareness about mobility costs among employees and management in order to manage mobility costs.

Yacht uses the mobility budget system developed by Mobility Mixx, a company that allows employees to select their personal mix of mobility solutions in a way that benefits sustainable travelling.

Not all employees will be interested in a mobility budget, especially those to whom PT is unavailable or those who frequently visit their customers. In order to promote cost reduction, Yacht has used a 'dashboard' programme since 2007. It provides an

overview of vehicle mileage, fuel statistics, traffic fines and car damage, resulting in discussions on the work floor and support for the idea of competition in driving inexpensively and responsibly. Managers may reprimand those employees who frequently damage their cars or have high traffic-related fines.
In 2006, approximately 200 employees chose not to use a company car. In 2007, when the Mobility Mixx budget system was introduced, 410 employees (15%) made use of this system.

Employees are satisfied with the system, as it offers freedom of choice. The mobility budget is seen as positive and attractive.

In 2008, 85% of all company cars were low-emission models, of which 64 were hybrid cars. This also resulted in financial benefits for Yacht, as these vehicles are supported by fiscal benefits.

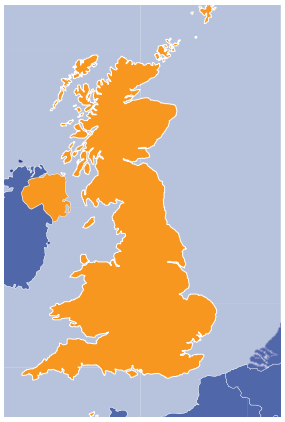
2.3 Conclusions

The Netherlands has quite a history in mobility management. The national government has taken a strong lead in this, and much experience with both successes and failures has been acquired. The Netherlands has been a case study in the evolution of MM. Having started with a governmental focus, mobility management is now shifting towards a market-based approach, in which mobility providers offer services to companies that want to reduce costs, be good employers and offer their employees flexible working patterns.

A Dutch characteristic is the culture of consensus, with the Social Economic Board playing a key role in uniting governments, employers and employees. When these actors share the same vision, this is regarded as being more effective than enacting legislation, and this is what has occurred with mobility management. Companies are now more aware of mobility management, and labour unions understand the need for flexible working patterns. Meanwhile, government must provide support and create the right conditions for MM to thrive.

MM in the Netherlands focuses on workplace travel, in order to reduce congestion during peak hours. Environmental targets have not yet played a major role, and in most cases mobility management is not regarded as a tool for creating more attractive cities. The Dutch also have not paid much attention to promotion and communication, but this is now rapidly changing. Mobility for schools and the elderly are relevant issues, although this is not yet regarded as mobility management. More attention is being paid to hospitals and sites that attract many visitors.

3 United Kingdom



Inhabitants: 62.3 M

3.1 Developments

The attention paid to mobility management in the United Kingdom is greater than in other European countries. It is even broader than in the Netherlands. Thus the United Kingdom is also more advanced than the Netherlands. London is to be regarded as the European front-runner in terms of both scope and innovation.

The term *mobility management* is not widely used however; *mobility* refers to the transport of elderly and handicapped individuals. The terms *travel planning* or *smarter choices* are often used. There are also some other differences in terminology: In the UK, *car sharing* does not mean sharing cars but rather the sharing of car journeys - which is called *carpooling* in most other European countries. The UK also uses the terms *ride sharing* and *lift sharing*. For what most other European countries call *car sharing*, the UK mostly uses the term *car clubs*.

In the mid-1990s, the *Association for Commuter Transport* and the *TravelWise* association were founded. Since 2008 they have been working together as *ACT TravelWise*. Networks of employers, government agencies and advice bureaus were formed, which set their shoulders behind the development of this area. The initiatives quickly led to national policy. Many initiatives were stopped because of the economic crisis, however this does not detract from the fact that there is a lot to be learned [from them].

In England, four ministerial departments are active in mobility management:

- *Department of Transport:* has a department of sustainable mobility that includes bicycling and smarter choices.
- *Department of Business Innovation and Skills:* deals with the development of the market for electric transport.
- *Department for Energy and Climate Change:* works on reducing CO_2 emissions.
- *Department for Health:* promotes walking and bicycling under the name of *active travel*.

Responsibility for local transport rests with the devolved administrations in Northern Ireland , Scotland and Wales - e.g. in 2013 the Welsh Government proposed the Active Travel Bill to foster walking and cycling via both campaigns and infrastructure measures.

In the UK, mobility management is a national topic and it has a broader focus than in many other countries. It includes reducing traffic congestion, increasing accessibility, quality of life, climate and health - thus it extends beyond business and home-to-work travel.

Photo page 22: London European Partnership for Transport

Topics in UK policy:

- WTP: *Workplace travel planning* (mobility management for employers)
- STP: *School travel planning* (mobility management for schools)
- RTP: *Residential travel planning* (mobility management for residential areas)
- PTP: *Personalised travel planning* (individual marketing and travel advice)
- VTP: *Visitor travel planning* (mobility management for tourists)
- *Station travel planning* (provisions for transfer at stations)
- *Shopping centre planning* (mobility management for shopping centres)
- *Car clubs* (car sharing).

The *Smarter Choices* programme of the *Department for Transport* embraced experimental projects in all of these areas. The projects are conducted and evaluated throughout the country. Large behavioural effects were seen, whilst the costs were relatively low. This led to the question of what happens when a city carries out *smart measures* over a longer-term period. The department made ten million Pounds available and challenged English cities to come up with interesting proposals. Three cities were designated as *Sustainable Travel Demonstration Towns*: Darlington, Peterborough and Worcester (see case 3.2.3 below).

The approach of mobility management with employers makes one think of how things went in the Netherlands in the 90s. At that time, thick transport plans were written (green commuter plans), whilst employers were seldom motivated to get started with them. And just as in the Netherlands, results were achieved at sites where the need was the greatest. Still, this method also seems to be relatively unsuccessful in the United Kingdom, and is declining as a result.

In addition there is a development in the direction of *Local Travel Plan Networks* (LTPNs), i.e. factory areas and office parks that develop an action plan along with a mobility broker. The most successful projects are those with the goal of reducing car traffic, such as the LTPN of Heathrow Airport.

3.2 Good examples

3.2.1 London overview *

General	
Metropolitan London Region	13,900,000
Greater London	8,300,000

London was one of the first cities confronted with enormous accessibility and environmental problems. Therefore the city became the front-runner in the area of sustainable mobility. It is not the "hardware" (infrastructure) that provides the tone, but rather the "software" *(smart measures)*.

London is known in the professional world for the introduction of the *Congestion Charge* (toll) in the centre. This led to a great decrease in car traffic: 18% in the first year (2003). In 2005 this declined by a further 3% when the charge per trip was increased from 5 to 8 Pounds (from 6 to 9.50 Euros). Now it costs car drivers 10 Pounds if paid in advance or on the same day, or 12 Pounds if paid the following day.

Less well known is the fact that London is highly active in mobility management and has achieved outstanding results. The city is divided into 33 boroughs (districts). The Mayor of London bears the responsibility for traffic management, among other things. This is organised in the *London Transport Strategy*. The *London Plan* and the *London Economic Development Strategy* contain the principal topics on which the *Boroughs* are to work. The policy shows great coherence and also recognises climate goals.

Traffic policy is developed and executed by *Transport for London*. TfL collects the *Congestion Charge* and manages public transport - buses, Tube, DLR (Docklands Light Railway) and some river transport - among other tasks.

There was previously a department for *Smarter Travel*, but after a reorganisation, TfL works with various teams on *travel awareness, Workplace Travel Plans* and *School Travel Plans*. It is noteworthy that mobility management primarily promotes walking and bicycling. However, this is not surprising as the use of public transport is already extremely high - so high that entry into some Tube stations is closed during rush hour to ease the flow of travellers. If Londoners start to walk and bicycle more, capacity will be freed up on public transport.

Most Londoners do not have the city map in their heads, but rather the Tube map (i.e. the metro is generally called "the Underground" in the UK and "the Tube" in London). If you ask a Londoner where they live, they often specify their closest Tube station. The Tube map is not to scale, so distances sometimes appear longer than they are. If you want to go two stops away, it is often faster to walk than to take the long travel routes through the deep stations. TfL is promoting walking using well-designed way-finding signs and walking maps on the streets of Central London.

According to unofficial sources, bicycle use increased substantially after the 2005 terrorist attack which killed 50 people on the bus and Tube network. The official explanation, and without doubt an additional reason, was the Congestion Charge. The bicycle network has been growing rapidly. High-speed bicycle routes (Cycle Superhighways) have also been developed, with further expansion planned. In July 2010, following Paris' example, Mayor Boris Johnson introduced the bike sharing scheme, Barclays Cycle Hire (named for the sponsor Barclays Bank) with 5,000 bicycles at 315 locations.

The Barclays bicycles were soon nicknamed “Boris Bikes”. From the start, use has been high: 90,000 users made 1.4 million trips during the first three months. In March 2012, the scheme was expanded to 8,000 bikes and 570 docking stations, with considerable spread to East London to meet travel demand for the London Olympics. Safety is an important consideration as many accidents occur because drivers are not yet accustomed to having cyclists on the roads.

For home-to-work travel, TfL is reaching out to large companies as well as small and medium companies. To encourage employers, TfL works with *quick wins:* companies with transport plans receive money for measures that can be implemented quickly, are inexpensive and give immediate results. This is handy, effective and gives the companies support for more measures. TfL bases this approach on the insight that

infrastructure measures in combination with "soft" measures produce the greatest effect. After two Cycle Superhighways were set up, TfL made contact with companies in the vicinity of the routes to supply bicycle facilities for employees. TfL used to advise companies in the vicinity of the routes on how to supply bicycle facilities for employees - due to austerity measures, this activity has been reduced. The data shows an average of 13% less car use.

Employers are still hesitating about teleworking from home. One result for Londoners is that they would need to squeeze onto overcrowded Tube trains less frequently and spend less on expensive childcare. However, teleworking has not yet become well established. The number of people working from home scarcely increased between 2001 and 2009, while it doubled in the Netherlands during this period. This is due to the hierarchical work culture. In the run-up to the Olympic Games in 2012, companies were asked to minimise their requirements for moving around. Teleworking was one of the options.

Noteworthy points:

- Marketing plays a principal role. Pointing out personal interests is effective. People are more receptive to personal arguments such as financial benefits, health and safety *(What's in it for me?)*. Climate discussions are important for society but are of less interest to individuals.
- *Transport for London* is the only organisation planning and executing the policy. It is a point of contact for residents and companies. This creates clarity.

3.2.2 *Better Bankside* in London

Regional development and financing	
MM by employers	
Metropolitan London Region	13,900,000
Greater London	8,300,000

Better Bankside is a Business Investment Zone (BIZ) on the south bank of the Thames. The area is known among other things for the *Tate Modern Gallery*. In a Business Investment Zone, businesses are required to contribute to a fund. This is used to improve the quality of the area. In the Netherlands, an experiment is also being conducted with such a law. In most BIZs, the focus is on making the area "clean, healthy and safe". Better Bankside has added mobility into this equation. Activities include:

- Second *Master Travel Plan* (mobility plan) for 2011-2015
- Installation of bicycle racks in the vicinity of Cycle Superhighways (with *Transport for London*)
- Rental bicycles and bicycle campaign for employees
- Promotion of walking
- More attractive public spaces

These activities mesh with the needs of businesses. The fund is also attracting "new money": when *Better Bankside* invests in projects, it provides co-financing. This arrangement involves businesses in mobility management and encourages government agencies to participate. Such a setup would be interesting for the Netherlands.

Picture: Better Bankside.

3.2.3 Mobility Marketing in Darlington, Peterborough and Worcester *

Urban and regional MM	
Information and promotion	
Culture and lifestyle	
Darlington	98,000
Peterborough	173,400
Worcester	94,000

The English cities of Darlington, Peterborough and Worcester have worked successfully on mobility management. Between 2004 and 2009, they invested in measures to encourage more sustainable mobility behaviour amongst residents. This resulted in a 9% decrease in car traffic. In comparable cities, car travel decreased by 1% as a result of the economic crisis.

Residents were the principal target group. Measures included promotion of walking and bicycling, marketing of public transportation, travel information, mobility campaigns and personal approaches to residents. Teams of 6 to 10 people performed the activities. Mobility management in businesses and schools was limited.

The use of buses increased from 12 to 22% (comparable cities: 0.5% decrease). Bicycle riding increased from 10 to 30% (elsewhere 9% decrease). The number of trips by foot increased from 3 to 13% (elsewhere 9% decrease). These changes provided many benefits: fewer traffic jams, more sustainable traffic, lower emissions, better air quality and less traffic overload. Darlington was able to attract new employers without creating extra traffic. The growth centre of Peterborough was able to deal with urbanisation without investing in new infrastructure. There is little space in the old inner city of Worcester. There was no support for bicycle paths and bus lanes. Now that car use is declining, there is more interest in further reducing car use.

According to the UK Department for Transport (DfT), each kilometre of traffic queue costs 20 Euro cents per person. Saving one kilometre [of queue] costs only 4.4 cents. The programme led to an annual savings of 17,500 tons of CO_2, fewer people injured in accidents and better air quality. The Department for Transport concluded that this approach has proven cost-effective and is worthy of following, and therefore financed the measures. The three cities received a total of 10 million Pounds (12 million Euros). It was noted in earlier trials that behavioural influences primarily work if several measures are performed simultaneously. To investigate whether this was really true, DfT conducted experiments in the three cities over several years. This showed that a multi-year approach with marketing campaigns is both effective and delivers great value, although the investment is considerable.

Worcester
Choose how you move

3.2.4 *The Big Wheel Campaign* in Nottingham *

Urban and regional MM	
Information and promotion	
Culture and lifestyle	
Nottinghamshire	749,000
Nottingham	267,000

The Big Wheel Campaign in Nottingham informs regional residents and companies about all forms of transport: train, tram, bus, P+R [Park and Ride], bicycling, walking and carpooling. The campaign was set up to solve a well-recognised problem: as there are many different government agencies, carriers and other parties responsible for mobility, no one has the big picture in mind. Availability of information is low and it is not clear what the government wants. The *Greater Nottingham Transport Partnership* developed one brand name for all their initiatives: *The Big Wheel*. This resulted in high levels of satisfaction with public transport among the city's population.
In contrast to many British cities, public transport use increased. The economy is also flourishing: Notttingham is in the top 5 English shopping cities. Effective public transportation is key to this.

The carriers need good marketing, since they are dependent on income from ticket sales. In most cases, the government and carriers are not the issuer and the recipient of contracts respectively, but are partners. *Quality Bus Partnerships* are agreements between local governments and carriers for better public transport in their area. The agreements cover, for example, travel information, stops, frequencies, map integration and the extension of lines.

Anyone who wants to know how to simplify public transport should look to Nottingham's example. The network of lines was greatly simplified. Each bus line has its own colour. The colour is also found on the route map and at the bus stops. If you want the green bus line, the bus itself is green. Scheduling is also simplified. For example, the bus to the P+R passes by every 10 minutes. This is also clearly noted on the bus. Thus it is not necessary to memorise a complicated schedule. Finally there are special bus lines with unique brand names: the *Skylink* brings you to the airport, the *Medilink* to the hospital, the *Citylink* brings you from the P+R to the city and four *Worklinks* go to industrial parks. See *www.thebigwheel.org.uk*

3.2.5 Addenbrooke's Hospital in Cambridge

Land use planning and financing	
MM by employers	
Cambridgeshire	789,600
Cambridge	126,000

Cambridge is a good example of a municipality that uses *Planning Policy Guidance 13. PPG13* are statements of the Government's national policy. It aims to integrate planning and transport at the national, regional, strategic and local level, and to promote more sustainable transport choices both for carrying people and for moving freight. In Cambridge, there are a maximum number of parking spaces for the 7,000 employees and a goal for the market share of car and public transport. This will necessarily decrease car use by staff. Later, goals will also be adopted for the transport of visitors. The municipality will support this with better bus routes, a new bus station, better P+R provisions and a discount on bus tickets. The bicycle route network is also being expanded (not only for the hospital). Finally, the municipality supported the installation of bicycle parking racks and showers.

3.2.6 Highways Agency in the United Kingdom

MM and flow
Land use planning and financing

The *Highways Agency* is responsible for the national roadways in England. These consist of motorways (M roads) and the lower grade A roads. This Agency is also supposed to contribute to the sustainable mobility agenda of the *Department for Transport*. Increasing the road capacity is becoming more and more difficult, and therefore demand management is gaining ground. Traffic management, ramp metering and route information are also high on the agenda. New infrastructure is only possible if other possibilities are exhausted.

The highways network should not be impaired by new developments in principle. Therefore the intention is to reduce the transport demand for new locations. For this reason the *Highways Agency* requires a mobility plan for new developments to reduce the effects on major highways. This requires cooperation with local governments.

Initially it was only necessary to submit a mobility plan. Later, construction could not start until after the Highways Agency had approved the plan. This was done only if the construction plan would not cause problems for traffic on the main roadways. The Highways Agency regularly co-finances and works with local mobility management – which according to studies supports the sustainability of mobility. The interplay between national and local responsibilities is complex, but the Agency is striving for long-term success.

This long-term effect has not yet been demonstrated, but successful mobility plans have been implemented at 11 locations with a favourable cost-effectiveness. Here also the

recession is throwing a spanner in the works. Many plans have been dropped. It is also difficult to achieve success for mobility management in a technocratic organisation, even at a favourable cost-benefit ratio of 1 to 4.

The experiences of the *Highways Agency* are interesting, since traffic flow on main highways has priority. While the Dutch Department of Public Works (Rijkswaterstaat) is effective in reducing traffic obstacles in the event of temporary problems, the *Highways Agency* is working on "permanently reducing obstacles."

3.2.7 *"Cycling on Prescription"*

Sustainability, energy and health
Schemes to promote cycling
Culture and lifestyle

Exercising regularly prevents obesity. Therefore the *National Health Service* (NHS) encourages walking and bicycling. The NHS sets up cycling programmes with municipalities under the heading *Cycling on Prescription*. Patients suffering from obesity or depression are encouraged to bicycle. During Dr Bike workshops, they (re)learn how to ride a bike and how to do simple repairs on their own bicycles. They can also participate in bicycle trips, and there are buddies that will help cyclists identify good, safe routes.

In addition, the United Kingdom has recently started to use the *Health Economic Assessment Tool* (HEAT). Using this model, government authorities calculate the economic benefits of walking and bicycling as a result of fewer traffic deaths. This tool was developed by the *World Health Organization* and is to be used in cost-benefit analyses for measures promoting cycling and walking. The idea is that healthy travel will yield many cost advantages.

The *Department for Transport* supports this method. Municipalities that approach the DfT for funding for facilities and campaigns for walking and cycling will have a better chance if they can show, using HEAT, that public health will improve. The health sector has an interest in stimulating walking and bicycling and is therefore an interested partner. The British approach shows that health can also play a role in the financing of mobility management. See *www.who.int/roadsafety/decade_of_action/en*.

3.2.8 *School travel plans* *

Local and regional MM
Promotion schemes
Culture and lifestyle
Rewards and feedback

A great deal of attention is paid to school children's mobility in the UK: what you learn when you are young, you will do when you are older. The goal is to prevent a "back-seat generation." In addition, dropping off and picking up children from school is often a reason (or excuse) for driving to work. If a solution is found for the drop-off and pick-up problem, it will be easier, for example, to take the bus to work.

Walking and cycling to school is important to promote healthy active lifestyles. However, this can be controversial, as parents' primary concern is for their children's safety, and therefore they may not wish to allow them to cycle or walk to school, and particularly may be worried about letting them go by themselves. Parents are amenable to initiatives taken by their own children. From the government's viewpoint, *School Travel Plans* are inexpensive and easy to achieve. London spends an average of 2 Pounds per child per year (2.2 Euros) on a rewarding investment. In some London boroughs (districts), all schools have a *School Travel Plan*. Between 2005 and 2008, *School Travel Plans* accounted for a 6.4% reduction in car traffic around schools. This amounts to 21 million car kilometres and 3,803 tonnes of CO_2.

The Welsh Government's programme "Safe Routes in Communities" includes routes to school and funds capital works with the aim to encourage walking and cycling; and to improve accessibility, safety and social inclusion within communities. Funding includes cycle paths, footpaths, secure cycle facilities including lockers and changing areas, and traffic calming measures.

Walk on Wednesday

A simple but effective campaign is Walk Once a Week or Walk on Wednesday (WOW). Since 1995, 300 million children at 1,900 schools have taken part. In participating schools, the number of children who walk is 9% higher than average. Each child who participates receives a badge once a month. The popular badges were designed by children in a national competition. A child can collect 11 badges per year. The campaign, which results in crocodile lines, costs 2.32 Pounds per child per year (2.75 Euros).

Walk on Wednesday helps municipalities and the health care sector to reach health goals. It is inexpensive and easy to carry out. Children "get it" and like to participate. The reward is great and they find it fun to stick together when they are walking. In addition, it is more fun for children to walk by themselves than to have their parents transport them in the back seat. It's like a flock of ducklings: two-thirds of the children walk to school with someone else. *Walk on Wednesday* was set up by *Living Streets,* a national campaigning organisation for pedestrians and public spaces. Elementary schools in Kent and Medway saved 230,000 car trips through this activity. See *www.walktoschool.org.uk* and *www.kmwalktoschool.co.uk*.

Walking School Bus

The *Walking School Bus* is also interesting. A *Walking School Bus* is a group of children who walk to school with one or more parents. This can be informal, for example with two families, but also with larger groups who arrange a meeting point, a "schedule" and a plan for parent involvement. One variant of the *Walking School Bus* is the bicycle train. The *Walking School Bus* deals with the dilemma that parents think it is too dangerous to let their children walk to school. The initiatives can be organised at a grassroots level by parents and children themselves. Schools and municipalities can also try to organise one or more walking school buses. There are many walking school bus initiatives in other European countries, e.g. the Netherlands and Belgium.

3.3 Conclusions

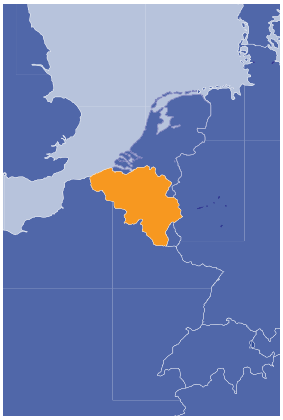
Mobility management is developing rapidly in the United Kingdom. London, Europe's largest metropolis, is the front-runner. A lot is also going on outside of London.
Worth noting:

- Mobility management is broad, but at the same time there are good systems in place, not only in terms of accessibility and climate, but also in terms of health and economic advantages. All kinds of organisations are active in this area.
- Mobility management is not limited to employers and reducing traffic jams, but also takes place in schools and shopping centres, and through spatial planning.
- Mobility management is embedded in policy, laws and regulations. Through *Section 106*, mobility issues must be considered in plans for new developments and construction plans. The *Highways Agency* also wants to bring about decreased car traffic and gets actively involved in local projects.
- The prerequisites for the development of mobility management are present: networks, training, associations and even quality standards.
- The experiences of London, as well as other cities, show that marketing is a prerequisite for success. It ensures structural changes in behaviour. The *School Travel Plans* have a long-term perspective: when young children are taught to ride bicycles or walk to school, a back-seat generation will be prevented.
- Government agencies in the UK focus on cost effectiveness. Many projects are evaluated from this viewpoint. As a rule, mobility management has a favourable cost-benefit ratio. The structure often provides extra stimulus.

Picture: Dawn Haines.


OPGELET ZWENKT UIT !
78 ZEVERGEM DEN BEER
5039
WE WILL ROCK YOU
mijn lijn.be
Altijd en overal info over jouw persoonlijke route

4 Belgium



Inhabitants: 10.3 M

4.1 Developments

Belgian traffic experts often look to the Netherlands: language is no barrier, and the Netherlands has been ahead of Belgium for a long time. Sometimes, however, the order is reversed: think of the Belgian "BOB" and bicycle junctions. There is an abundance of developments around mobility management in Belgium, although sometimes they are inhibited by the lack of unity between the federal government, the three regions (Flanders, Wallonia and the Brussels-Capital Region), provinces and municipalities. In a country with such a strong car culture, it is not easy to change mobility patterns. The company car has a very high status and represents 45% of all newly sold cars. The awareness is growing that this should be changed.
For updates see: *http://www.epomm.eu/docs/MMM_2011_Belgium_final.pdf*

4.2 Good examples

4.2.1 Commuting diagnoses in Belgium

Policies and regulations
MM by employers

In 2003 the Belgian federal government required employers with more than 1,000 employees to provide information on their commuting situation. The obligation applies to companies as well as public institutions. The information is valuable for formulating policy. The data includes more than survey results; it encourages dialogue between employers and employees and thus development of an active mobility policy. Factories and institutions must complete a form for each location with more than 30 employees, with recommendations from the works council. This leads to a treasure trove of data, but also a guide full of practical examples with resulting effects. Surveys were done in 2005 and 2008.
Some results:

- Locations with a mobility coordinator show a more even distribution of transport modes with less car use: 55% compared with 60%.
- In the case of employers with bicycle reimbursements, bicycle use is 10%. In plants without such reimbursements, it is 7%.
- Within companies that organise carpools, the share of carpoolers increases from 3 to 7%.
- Within companies with a railway station closer than a distance of 1 kilometre, 21 per cent take the train and 56% drive. At locations more than 1 kilometre from the station an average of 4% travel by train and 76% bycar .
- Within companies that finance public transport via third-party payers, train use increases from 8% to 18%.
- Information about public transport makes the number of train users increase from 9% to 15%.

- Within companies where a minimum of 50% of the employees had a parking place in 2005 but no longer in 2008, car use decreased from 70% to 64% and train use increased from 7% to 11%.

See *www.mobilit.fgov.be/nl/index.htm*

4.2.2 Mobility plans for events in Belgium

Leisure traffic
Policy and regulations
Urban and regional MM

Events cause mobility problems. Governments, organisers, surrounding residents, and travellers would benefit from streamlined organisation. In the Netherlands a great deal of attention is paid to guiding traffic streams in good pathways. Belgium has a lot of experience with stimulating public transport and bicycling. This is useful for events in cities, but also at locations outside of cities, such as the *Rock Werchter* festival.

The Flemish traffic engineering foundation offers event organisers free advice on mobility plans. This offer is also available to attractions and meeting centres.

Ghent manages mobility around events well Picture: Traject mobility management.

Antwerp and Ghent help organisers with their mobility plans. In Brussels a mobility plan is required for events with more than 1,000 visitors. *Brussel Mobiel* helps in this. Among other things, there is a guide with tips for better accessibility to the event. Event organisers must produce these plans to improve accessibility and contribute to sustainable mobility:

- multimodal access information
- mobility plan that encourages attendees to leave their cars at home
- signage plan aimed at pedestrians, bicyclists, car drivers and local traffic
- circulation plan with use of police
- parking plan for cars and bicycles.

Depending on the type and size of the event, organisers should take measures such as a car pool system, transport providers or combination tickets. Carpooling to events is interesting: people with the same interests can get into contact with one another. See *www.gentevenement.be* which offers background information for event organisers. The site also contains a tool with which organisers can determine what permits they need, which municipal departments can provide them, and what measures they should take at the site regarding waste, noise and mobility.

4.2.3 School travel plans in Flanders

Urban and regional MM	
Policy and regulations	
Flanders	6,300,000

Mobility covenant for schools in Geel and Mol*

Previously Geel and Mol, two municipalities in the Kempen area, involved schools in mobility. This took a lot of "massaging": lobbying the schools to improve the traffic situation had not borne fruit prior to this time. With a mobility covenant, the municipalities worked with these schools on solutions. Of the 40 schools, 25 participated. Together they developed school plans with education packs for students, teacher training, promotion of safe bicycling routes, information for parents and programmes such as car-free school days. The school environment was improved at a number of points. In addition, a traffic education centre was started. The number of students brought in by car decreased from 48% to 37%. The campaign cost about 8 Euros per student (for a total of 6,000 students). In Geel, the programme was supported by the local businesses.

Octopus plan in Flanders

The Flemish pedestrian movement started in 2005 with a campaign for safer routes to school and a safer environment. The required 30-kilometre zones for schools formed the impetus: municipalities and schools wanted to know how to proceed. The *Octopus* plan encourages schools to deal with bottlenecks with the municipality. The goal was for students to be able to travel independently. In 2008, 500 schools and 100 municipalities participated. At the end of 2011, there were 1,362 schools. Also in the Netherlands, some municipalities are also using *Octopus*. The *Octopus* plan helps schools to make traffic safer and improve mobility. Behaviour, management, education and signage are essential. *Octopus* offers help such as:

- structured approach to mapping school routes and meeting points
- suggestions for resolving bottlenecks
- website for communication between parents and municipalities
- materials (fluorescent clothing, informational packs, mobile traffic radio, banners).

The Octopus plan in action. Picture: SOAB.

Sustainably to school in Flanders

Thanks to the action plan "Sustainably to school" of the Flemish region from 2007, many Flemish schools have a school travel plan. This action plan also includes student travel. The STOP (acronym in Dutch) principle from the action plan is based on a hierarchy in modes: Walking, Bicycling, Public transportation and Car. Schools with a school travel plan can receive subsidies. If you want to receive funds for student transport, you must first set up walking and bicycling for students who live in the vicinity. They must also look at possibilities with the public transport company, "De Lijn", for including student travel in bus lines.

4.2.4 *Mijn Korte Ritten* in Flanders*

City and regional MM	
Marketing and communication	
Obtain rewards and feedback	
Culture and life style	
Flanders	6,300,000

In 2011, the Mijn Korte Ritten campaign was carried out for the seventh time. The goal is to promote walking and bicycling for short trips. The campaign is run every spring. Groups of people sign a short-trip contract and promise that for one month they will make 20% of their short car trips in a different way. All trips come under consideration: to athletic clubs, work, stores, child care. All possible groups can participate: companies, (athletic) associations, groups of friends and neighbourhood committees. Participants register their car kilometres saved and receive back an overview of their calories burned and emissions saved and costs. They motivate each other since they can compare scores with one another. The organiser gives out prizes to the participants, for example a bicycling and hiking weekend, bicycle bags and trip checks for the train. In 2011, a famous television presenter was once again the figurehead for the campaign. In 36 municipalities, 136 groups took part, with a total of 1,368 participants.

They saved:

- 18,182 short trips
- 143,394 kilometres by car
- 5,736 grams of particulates
- 23,517 kg of CO_2
- 45,886 Euros in private costs
- 65,961 Euros in social costs.

The participants burned 7.1 million kilocalories, which according to the organisation corresponds to 23,712 pieces of pie à la mode or 56,909 ham and cheese sandwiches.

Campaign images from Mijn Korte Ritten Pictures: Mobiel21.

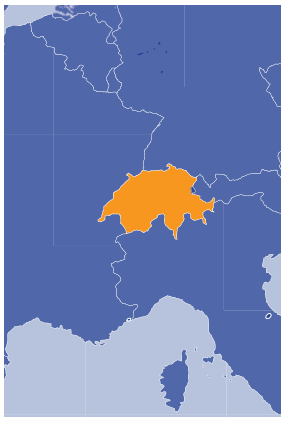
4.3 Conclusions

Despite the complex government structure and the status of the (company) car, the Belgians have worked hard on mobility management in recent years. The approach in Flanders is particularly appealing as they chose structural embedding in municipal traffic management and cooperation with the operators of De Lijn. In the states, the federal diagnoses of the commuter traffic stimulate interaction between employers and employees and capacity rules support the change to bicycles and public transport. One difference in Flanders is that the traffic agency relies on traffic technology, while Flanders views the traffic problem more broadly and moves toward spatial order and mobility management. The complex organisation of the government requires tricky manoeuvring between various demands of employers and employees. All levels support mobility management. "Less government" means that projects such as the Flemish commuting funds help with co-financing. Also the various campaigns are simply more appropriate. They are designed such that the results can be made clearly visible. The campaigns often run over several years, which increases the chance of recognition by the public.

Bike Experience Brussels: Brussels cyclists coach peers who would like to start cycling in the city


HOTEL
36
SCHWEIZERHOF
HOTEL
SCHWEIZERHOF
HOTEL
BUS

5 Switzerland



Inhabitants: 7.9 M

5.1 Developments

Public transport in Switzerland is excellent: an efficient track network and space planning along public transport lines in the cities. Because of its mountains, Switzerland must make efficient use of its scarce flat areas. The spatial policy is strong and includes stimuli for mobility management. Mobility management has been improving for the past 10 years. The reason is due to energy policy.

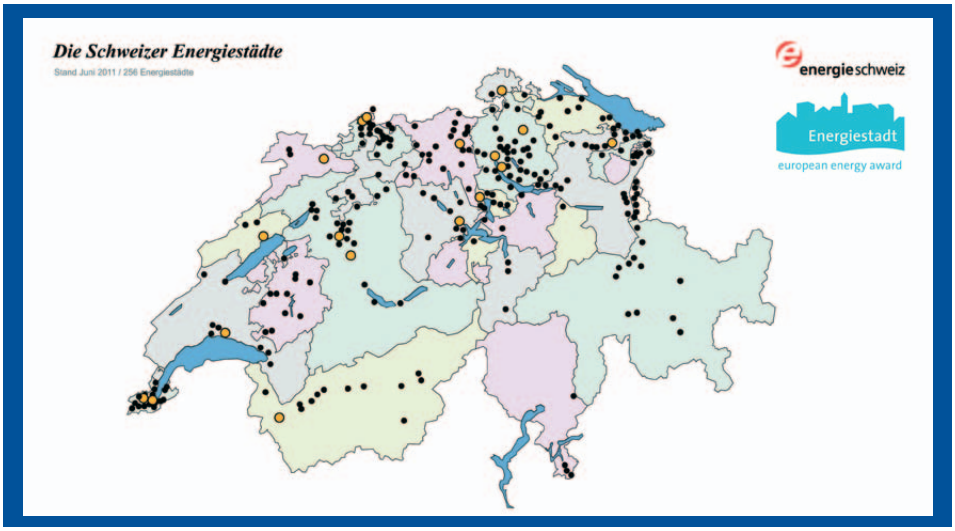
5.2 Good examples

5.2.1 *EnergieSchweiz*

Sustainability, energy and health
Rewards and feedback
Schemes to promote sustainable mobility

Since the 1990s, *EnergieSchweiz* has been an action programme of the Ministry of Energy. Since 2005, the partial programme, *Energiestadt*, has encouraged municipalities to work on mobility management. Municipalities that work on energy policy can earn the label of *Energiestadt*. A maximum of 88 points can be earned for mobility out of a total of 500. In 2011, 146 municipalities achieved the rating of *Energiestadt*. To obtain this, they had to take measures in the area of:

- spatial planning
- construction and housing
- energy and water management in government buildings
- energy from waste
- mobility.



Swiss municipalities with the "Energiestadt" label. Source: EnergieSchweiz

The goals of the label are to stimulate local energy policy, establish quality goals and carry out a visible energy policy. The label is a benchmark, and *SwissEnergy* publishes the performance of the municipalities. Participation is voluntary and there are no obligatory measures. However, a minimum number of points are necessary to receive the energy label. Municipalities can promote themselves with the label. The *EnergieStadt* logo can be placed under the city name sign and on letterhead. Not all municipalities have the ability to take measures in the area of energy and mobility. The first contact with the municipalities determines which measures are feasible and which are not. This determines the maximum score. At least half of the score must be achieved to come under consideration for the label. Mobility involves:

Category	Measure	Points (max)
Policy	Municipal traffic and transport plan based on reducing car use	10
Mobility management	Introduction of mobility management into municipal organisation	2
	Clean vehicles and eco-driving in the municipal organisation	2
Traffic and parking	Parking management	8
	Smoother flow on main roads, lower maximum speeds	6 10
	Better open spaces for bicyclists and pedestrians	2
Walking and bicycling	Attractive and safe footpaths with signage	10
	Attractive and safe bicycle paths with signage	10
	Adequate bike racks	6
Public transport	Better public transport	10
	Priority for public transport	8
Mobility marketing	Information and advice	4
	Programmes, events and campaigns	4

See *www.energiestadt.ch/d/joomla/downloads/label/87_Massnahmen_2007.pdf*

5.2.2 *Tax laws in Switzerland*

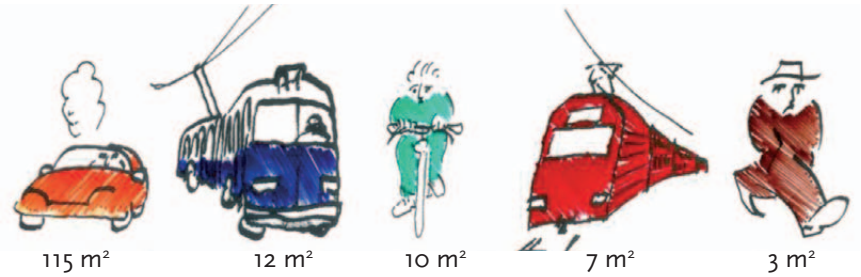
Policy and regulations

The tax laws promote sustainable mobility. For example, children must attend school in their own neighbourhood unless they have a reason to change. If so, they can ask the municipality for permission. This prevents long car rides. If it is impossible to make an entire trip on public transportation, permission can be requested to use the Park & Ride space. Reimbursement for car costs can only be received when there is proof that public transport is not an option. This is applicable only to a small percentage of the population. The "standard" option is therefore public transport, and those who do not wish to use it will feel the drawbacks of their choice.

5.2.3 Zurich

Urban and regional MM	
Land use planning and financing	
Information and promotion	
Zurich (canton)	1,400,000
Zurich	385,000

Zurich is a "classic" in the area of sustainable mobility. It is short on space, confined as it is between Lake Zurich and the mountains. This requires strict spatial planning. Visibility is high: almost every year the city is among the top three most livable cities in the world. The traffic policy must be understood in view of high construction density, low car use and low energy consumption. Their vision is that public transport, bicycling and walking should account for the growth in mobility. There is really no space for cars, and car use limits the already scarce space for other functions. In addition, reducing energy use is considered advantageous, therefore Zurich gives priority to non-motorised rather than public transport.



Space requirements per traveller in Zurich (source: City of Zurich Public Works)

Zurich is known for its extensive network of rail and tram lines. After the local trains were transformed into an urban railway network in 1990 (26 lines and 176 stops), the use doubled doubled over a ten-year period. The network will be expanded in the coming years.

The extensive S-bahn network in and around Zurich provides fast, direct and comfortable connections.

The city parking policy was tightened in 2010. The number of private parking spots must decrease, and space is being made for carless residential forms. Car ownership has declined over a ten-year period, and 45% of households do not have a car. There is a lot of demand for residences without parking spaces. The multifunctional complex Kalkbreite shows that this can be done: the project includes 100 residences, shops, restaurants and a cinema. There are 10 parking spots, 293 bicycle parking spots, 3 tram lines and 1 urban railway stop in the vicinity.

Impression of the 'Kalkbreitecomplex' (under construction)

Zurich is not expanding the number of parking places in the central city. Many above-ground spaces are being "moved" to underground garages. In this way new pedestrian walkways are being formed. The goal is to eliminate most street parking spots. This creates enormous amounts of space for bicycling, walking, green space and play areas. This will have an enormous effect on the quality of the street and the quality of life in Zurich.

The parking policy in Zurich is a pillar of the mobility policy. Most measures relate to parking on one's own land. The parking memorandum regulates the maximum number of parking spaces for new buildings. The better the public transport is in an area, the stricter the parking standard. The parking standard also relates to the road capacity and air quality.

Zurich has a programme for mobility management in companies and schools, and is working on a different "mobility culture." It is especially interesting how the city anchors mobility management in spatial development. *Sihlcity* is the most outstanding example.

5.2.4 *Sihlcity* in Zurich*

Land use planning and financing	
Zurich (canton)	1,400,000
Zurich	385,000

Sihlcity is a multifunctional complex at the edge of Zurich, one and a half kilometres from the inner city. It is the textbook example for mobility management in the development of a project. *Sihlcity* shows how effective it can be to take the mobility demands of a location into account and to make firm agreements in the planning stage.

Sihlcity is easily accessible with public transport Picture: Sihlcity.

Sihlcity opened in 2007. The complex contains 98,000 m² of shops, offices, leisure venues and apartments. 2,300 people work there and 10,000 visitors come in each day. There are only 850 parking spaces for all these people. According to the space structure plan of the canton of Zurich, *Sihlcity* is a much visited location: more than 3,000 trips per day on more than 100 days per year. Such a location can only be developed on sites with adequate road capacity, excellent accessibility for public transport and a good bicycle network. Excellent accessibility means a maximum of 300 metres from an urban railway station or a maximum of 150 metres from a bus-tram junction (with a frequency of at least 8 arrivals per hour).

To receive building permits, the project developers had to sign a contract that provided:

- financial contribution for better public transport
- financing of access routes to the area
- provision of at least 600 and at most 850 parking spots
- paid parking
- a maximum of 8,800 car trips per day to the location (and a penalty if the number is more than that)
- home delivery service.

The municipality provided for multimodal travel information and for an attractive environment. The transport company provided for the marketing of public transport to *Sihlcity*. The project was developed in a time period when the market for such complexes was nearly saturated. Therefore it was interesting to see whether the mobility concept worked. It has indeed been the case: there are 3,000 visitors daily. Less than 30% of them arrive by car. This is not many for a location at the edge of the city. The quota for cars seems adequate: on average 3,600 per day arrive. This is also true because renters of retail space are not permitted to use the parking spaces. Therefore staff must arrive by bicycle or public transport.

Since mobility management was embedded in the contract for the construction permit and sanctions were established, it was possible to guarantee from the beginning that car use would be low. The regional space structure plan provided the framework. As there were no legal impediments for maximising the number of car trips, Zurich chose to create a framework and issue specifications to project developers. This keeps the government from having to think of and carry out all measures by itself at a later stage.

In Zurich, new developments are obliged to provide attractive public spaces for pedestrians Picture: Sihlcity.

Mobility Management as negotiation point

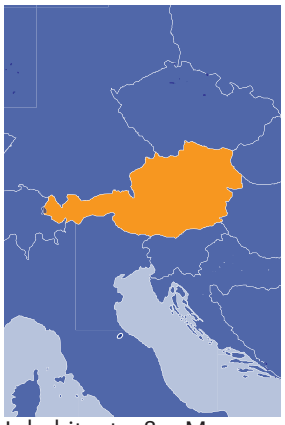
MM might be a negotiation point between project developers and municipalities. Besides the legal obligation there is more 'room for freedom'. For example: a local government can allow more dense building when a project developer applies mobility management solutions or finances them.
That is particularly interesting in popular settlement areas where problems of congestion or parking occur. It is crucial to have binding agreements, which include measurement of effects, and to decide from the beginning how much "room for negotiation" is allowed.
For example, when implementing mobility management, parking regulations could specify that a company would have less parking in the construction.

5.3 Conclusions

Swiss perfectionism also shows up in terms of mobility. The planning policy is often strict but effective, e.g. parking policy specifies maximum parking standards. Mobility management is well incorporated in "hard" measures: it is invariably a subject to consider during new spatial planning, through parking standards and negotiations with developers who seek construction permits. In all aspects, from tax laws up to and including the mobility policy of cities, priority is given to public transport, bicycling or walking or a combination thereof, and only then the car . In addition, Switzerland demonstrates that mobility management is more than a one-time programme. The Swiss railways have chosen a position as the stage manager of chain mobility. *Energiestadt* stimulates municipalities each year to work on sustainable mobility through their certification and benchmarking programme. In addition, the connection between tourist routes and public transport is so well regulated that tourists are pleased to use it.

Picture: Sihlcity.

6 Austria



Inhabitants: 8.4 M

6.1 Good examples

6.1.1 klima:aktiv mobil – Austrian support programme for environmentally friendly mobility*

MM by employers
Information, promotion, marketing and communication
Sustainability, energy and health
Urban, local and regional MM
Leisure traffic
Schemes to promote sustainable mobility
Policy and regulations
Rewards and feedback

klima:aktiv mobil - national programme for supporting environmentally friendly mobility - Achievements 2007-2013 and outlook for 2020

The klima:aktiv mobil programme is part of the klima:aktiv climate protection initiative from the Federal Ministry of Agriculture, Forestry, Environment and Water Management (also called "Lebensministerium"- Ministry of Life). It has established itself as an important tool for increased climate and environmental protection in the field of mobility and transport. klima:aktiv mobil offers free technical advice and financial support for the development and implementation of climate protection measures in transport. Supported by the Austrian Climate and Energy Fund, the klima:aktiv mobil funding programme is the central pillar of klima:aktiv mobil's offerings.

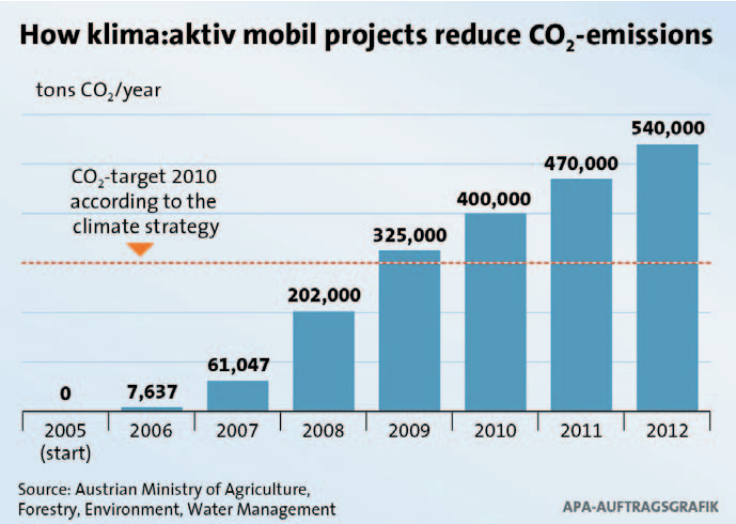
What has been achieved? – Successes in 2007–2012

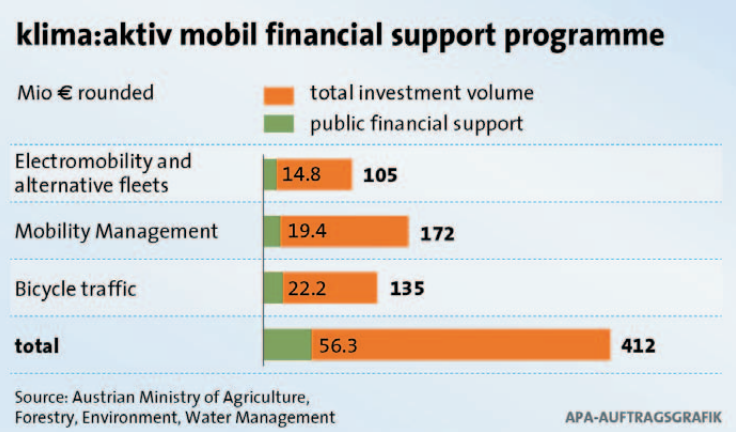
The broad national roll-out of the programme in 2007 was based on the lessons learned of various pilot projects in Austria and on analysing international experiences. The klima:aktiv mobil programme achieved impressive results during its first programme period:

- 4,000 climate-friendly mobility projects were initiated and were implemented by 2,800 companies, 500 cities and regions, 500 tourism enterprises and 200 schools
- 12,400 alternative vehicles for municipal and company fleets were financially supported, including 10,900 e-vehicles as well as 1,700 charging stations
- 112 bicycle projects (infrastructure, logistics, awareness) were funded, leading to the expansion of the bicycle infrastructure in all 9 Austrian Federal States and major cities
- 980 driving school instructors were upgraded to certified eco-driving trainers
- 4,600 green jobs were secured or created

Picture page 54: Alpine Pearls.

The graphs below show how 56.3 million Euros of public funding were spent for these environmentally friendly mobility projects during the first programme period from 2007-2012, which led to a total investment of 412 million Euros. These projects have been achieving an annual CO2 emissions reduction of 540,000 tonnes.





klima:aktiv mobil has already been awarded twice as a European best practice by the EU Public Service Award. In 2012, the programme was evaluated by the Wuppertal Institute for Climate, Environment and Energy and the Austrian Institute for SME Research and was highlighted as an excellent example of a comprehensive, integrated programme which aims to have a relevant impact on climate protection.

Start of the second programme phase in March 2013 – outlook 2020

Based on the positive results of the first programme period, the klima:aktiv mobil programme of the Federal Ministry of Agriculture, Forestry, Environment and Water Management is now being extended until 2020 in agreement with the Federal Ministry of Finance. Both the independent evaluation conducted by the respected Wuppertal Institute and the Austrian Court of Audit issued very positive assessments and recommended continuation and further development. Thus tried and tested methods will be retained and improved, and new priorities will be set.

Cornerstones of klima:aktiv mobil's portfolio for 2020
The cornerstones of klima:aktiv mobil are the are the advisory programme, the funding programmes, awareness raising efforts, partnerships, and training and certification. They include:

- Mobility management for companies, property developers and fleet operators; cities, municipalities and regions; tourism, leisure and youth; children, parents and schools;
- Eco-driving training for drivers of cars, trucks, buses, tractors and construction vehicles;
- Promotion of bicycle traffic, infrastructure, rental, parking facilities (new) and electric-biking
- Promotion of alternative vehicles and a new focus on electromobility including plug-in hybrids, e-buses, trolleys, range extenders and an eco-bonus for using renewable energy;
- New: job tickets, alternative vehicles and expansion to include large enterprises;
- New: bonus for cooperative networking among funded partners;
- New: well-integrated packages of measures in infrastructure, logistics and awareness will receive better funding than isolated measures;
- New: Special campaigns for youth mobility, schools and kindergartens.

About 10 Million Euro of funding will be provided in 2013, the first year of the second programme period. By extending klima:aktiv mobil until 2020 and securing the necessary financial resources, the Lebensministerium is ensuring the support of companies, municipalities and associations in the implementation of climate-friendly MM and transport projects on a long-term basis.

The klima:aktiv mobil programme is dedicated to contributing to national and EU-wide policies and objectives, and in particular to the EU energy and climate targets for reducing CO_2 emissions and increasing renewables and energy efficiency by 2020. It is therefore also dedicated to the implementation of the Austrian climate protection law, the Masterplan for Cycling - with the national target of doubling cycling in Austria by 2015 - and the recently launched plan for electro-mobility in and from Austria. klima:aktiv mobil is not only aiming for synergies in environment, health and mobility, but also for providing an essential impetus for the economy and securing jobs as defined in the Austrian Masterplan for Green Jobs. The programme is also looking to share international best practice and establish cooperation, such as with the UNECE-WHO Transport, Health and Environment Pan-European Programme (THE PEP) and the European Platform on Mobility Management (EPOMM). With the support of klima:aktiv mobil, mobility can be managed in a more climate-friendly, energy-saving and efficient manner, which, at the same time, will strengthen the economy and communities and improve the quality of life of citizens.

For additional information, visit:
www.klimaaktivmobil.at; *www.lebensministerium.at*; *www.mobilitaetsmanagement.at*
For more information about the 4,000 project partners of klima:aktiv mobil and the projects that have been implemented, please visit *www.maps.klimaaktiv.at*.

6.1.2 Illustrative examples of klima:aktiv mobil implementation projects

Bicylce and public transport measures of the Austrian Federal State and City of Salzburg

Salzburg has the second largest modal share of cycling in Austria at 16%. A bicycle traffic coordinator has been at work for 20 years. The decision to build more bicycle paths, start a bike stand offensive and initiate other measures was made within the framework of the "bicycle path programme" supported by the klima:aktiv mobil funding programme. With the support of klima.aktiv mobil, Salzburg decided to build more bicycle paths and extended its network by more than 60 kilometres. The result has been an annual CO_2 reduction of 1,286 tonnes.

To foster environmentally friendly mobility management, Salzburg offers a discount of 20% to annual public transport ticket owners. Salzburg supports the spread of JOBTICKETS – employees from companies that co-finance the Job-ticket receive the annual ticket at half-price. The CO_2 reduction has been equivalent to 3,075 tonnes per year.

The Austrian Post is klima:aktiv

Austrian Post AG is the leading logistics and postal services provider in Austria. Its main business activities include the transport and delivery of letters, direct mail items, print media and parcels. With more than 9,000 vehicles, it has Austria's biggest fleet. Since 2012, the Austrian Post of one of Austria's e-mobility regions is successively changing its vehicle fleet over to electrical vehicles. Supported by the klima:aktiv mobil funding programme, the Austrian Post already has 265 electric vehicles at its disposal. The Post AG is a pioneer - it is ensuring that the more than 100 million kilometres a year that they cover on deliveries is organised in such a way to reduce emissions, noise and energy consumption. By doing so, they have saved approximately 1,000 tonnes of CO_2 emissions annually.

Regional Mobility Management - Plan B in Vorarlberg

The local authorities of Vorarlberg aim to increase bicycle traffic by up to 20% by the year 2015. In particular they want to encourage the public to use bicycles for short to medium distances. In order to reach this ambitious goal, the cooperation of all local authorities is necessary. In the Lake Constance area, the municipalities of Bregenz, Hard, Kennelbach, Wolfurt, Lauterach and Schwarzach are working together with the consulting firm m-prove on regional mobility projects entitled 'Plan B'. To ensure the safety and security of bicycle users and to improve the accessibility of this main cycle route (which included several obstacles such as road junctions, the motorway and a river), a bicycle and footbridge were installed with the support of the klima:aktiv mobil funding programme. They have reduced annual CO_2 emissions by about 1,000 tonnes.

6.1.3 Mobility centre in Graz*

Urban and regional MM	
Information and promotion	
Public transport and seamless travel	
Styria	1,200,000
Graz	262,000

Graz was the first Austrian city with a mobility information centre. It is directed towards residents. It was opened in 1997 and is located in the centre of the city. The centre is set up to:

Mobility information centre in Graz. Picture: FGM-AMOR/ Mobil Zentral.

- bundle all information on traffic
- promote public transport
- inform the public about new forms of transport (e.g. carpooling, car sharing)
- conduct marketing campaigns.

All of these contribute to one another. Lack of information is an important reason for people not using public transportation. Anyone who wants information can phone, email or visit. In the mobility centre, one can:

- get information about transport and discount campaigns
- buy transport cards and subscriptions
- get tourist information
- book international train trips
- bike and pedelec rental
- get advice (for companies)
- get answers to questions (bicycle insurance, handicapped accessibility, 30 km zones)
- submit complaints.

The Austrian Mobility centres have been a success. In 2003, an additional 180,000 Euros in income was generated for the regional transport company in Styria. The higher satisfaction levels and the benefits for other transport forms are not included in this. The number of visitors to the mobility centres tripled between 2003 and 2009.

Mobility centres can be found in various cities in Germany, Italy, Austria, Portugal, Slovenia and Sweden. Such centres fit very well into a strategy for more sustainable mobility in urban regions. They support the citizens with advice and services with an eye toward changing travel behaviour. Frequently this involves more than public transport alone; it also involves awareness raising and sustainable mobility.
See *www.motiva.fi/files/3066/Posch_Mobility_management_and_its_meaning_in_Europe.pdf*

6.1.4 *Alpine pearls* in the Alps

Leisure traffic	
Information and promotion	
Region Salzburg	528,000
Werfenweng City	819

Alpine pearls is a network of tourist communities that are at the forefront of sustainable tourism and offer enjoyable and convenient arrangements for this. The network started in Werfenweng, the flagship of sustainable tourism in Austria. Since it was established in 2006, 24 alpine communities from Germany, France, Italy, Austria, Slovenia and Switzerland have become members.

The climate-neutral amenities are focused on relaxation, pleasure and culture. They make it possible to enjoy the Alps and at the same time, protect nature. Sustainable mobility is an important part of this. The principle is that a car is not needed during a vacation and can be left at home, though this is not required. The cities offer a vacation without headaches due to road congestion, traffic noise, emissions and air pollution.

Sustainable tourism in Werfenweng: people that turn in their car keys when they arrive, get access to a range of sustainable transport options

The amenities make sustainable mobility fun with activities such as hiking, Nordic walking, mountain biking, horseback riding, electric vehicles and subways, cross-country skiing and snowshoeing. Travelling by train and bus is part of the travel experience, especially when the path leads over spectacular (train) routes.
The village of Werfenweng in Salzburgerland is an outstanding example of sustainable tourism. It offers summer and winter facilities for families, singles and athletes. One can wander over the alpine meadows, swim in lakes and enjoy the traditions of the Austrian countryside. Tourists are given a mobility pass upon arrival. People who come by car are given the pass only after they turn in their car keys to the tourist office. The pass offers:

- shuttle bus to the (international) train station of Bischofshofen in the valley
- rental of electric vehicles, (electric) bicycles, mountain bikes and a broad scope of "fun vehicles" (tandem, Segway).
- rental cars that run on biogas
- excursions to interesting spots
- tours with guides.

See *www.alpine-pearls.com*

6.2 Conclusions

The Austrian klima:aktiv mobil programme is one of the most advanced and most comprehensive. It showcases how how the establishment of a national supportive framework programme can motivate and stimulate the actors relevant for transport: companies, cities, regions, tourism , fleet and transport operators, schools and youth. The programme has proven that everyone can make a contribution to achieve environmentally friendly mobility.

With its funding, klima:aktiv mobil has also achieved an essential impetus for private and public investment, for stimulating new business opportunities and economic developments, and also for creating new job opportunities and in particular for green jobs. Based on these successful results, the klima:aktiv mobil programme is now extended until 2020.

Important conclusions on the basis of the klima:aktiv mobil showcase and lessons learned
A programme for mobility management on national level can really make a difference as it closes the gap from single local projects to the national level and provides a supportive framework.

Such a programme should therefore approach all relevant actors: cities, municipalities and regions; companies and public services; leisure and tourism operators; construction companies and land developers; schools and youth groups. The measures promoted should be tailor-made to match needs and linked to achieve clear targets such as CO_2 reduction. They can comprise company mobility management, multimodal mobility, eco-driving, electromobility with renewable energy, promotion of cycling, walking, public transport, awareness raising and much more.

A national programme should be clearly designed as a tool to contribute to EU and national strategies and objectives. A programme should therefore be target oriented:
- environmental targets - reduction of air pollutants and CO2 emissions
- health targets - promotion of physical activity
- energy targets - increase of renewable energy and energy efficiency
- mobility targets - environmentally friendly modal split
- social targets like the provision of fair mobility choices
- economic targets - creation of new business opportunities and green jobs

A national programme should be designed in a comprehensive way offering technical advice and financial support, including awareness raising campaigns, but also training and certification initiatives.

From a structural point of view, it is important to have a ministry – in the Austrian klima:aktiv mobil case, it is the Ministry of Environment – as a strategic leading and supporting force in the designing, financing and controlling of such a national programme. For practical implementation, a professional operative management and financial support mechanism is also important - in the klima:aktiv mobil case, this is the Austrian Energy Agency and the Kommunalkredit Public Consulting.The programme should follow a partnership approach involving the relevant national, regional and local authorities, business organisations and innovative enterprises, as well as other important stakeholders.

Additional added value can be achieved by sharing good practice on the European level, such as through EPOMM or THE PEP, to help others and to gain practical stimulus to further develop national programmes.

The Klima.aktiv programme puts companies and municipalities in the spotlight as its partners (here with the Austrian Minister of Environment Mr. Nikolaus Berlakovich at an awards ceremony in 2012)
Foto: Kerschbaummaer, BMLFUW.


FR VQ 741

7 Germany

Inhabitants: 81.7 M

7.1 Developments

In Germany, mobility management was long limited to a group of experts and there was little activity, with a few exceptions. For a long time, the emphasis was placed on good organisation of transport and creation of good facilities, for example for public transport. The emphasis lay, and still lies, on the "hard" edge of mobility. However, there are also "soft" initiatives. For example, car sharing started in 1983 *(StattAuto)*.

7.2 Good examples

7.2.1 *Demotorisation* in Germany

Urban and regional MM	
Culture and life style	
Region Baden-Wurttemberg	10,700,000
Ulm City	122,000

BMW, Volkswagen and Mercedes are also signalling that younger people see the car less and less as a sacred cow. This international trend is called *demotorisation*. The car manufacturers are hesitant to make large investments in new plants. They also see that exhaustion of fossil fuels is inescapable. Under pressure from the economic crisis, they are looking for new mobility solutions that will fit into the market. This apparently explains their interest in car sharing. For example, Daimler launched the car sharing concept *Car2Go* in Ulm and Austin, Texas (United States). By 2013, *Car2Go* has expanded to to 16 North American and European cities. BMW has a comparable concept (*DriveNow*) in 5 cities, and Volkswagen has started operations with *Quickcar* in Hanover.

BMW invests in car sharing with the formula "Drive Now' Picture: BMW.

Picture page 56: Trendy Travel.

Daimler placed 200 Smart cars for sharing in Ulm. A smart phone app allows users to see whether a car is available in the vicinity and to reserve it simply by pressing a button. The car is left at the destination, or can be kept for the return journey,however as fees are charged by the minute, this can be quite expensive. This form of car sharing is also called *one-way car sharing,* since the car does not have to be returned to the same location where it was picked up.

7.2.2 *Gscheid Mobil* in Munich*

Urban and regional MM	
Promotion of sustainable mobility	
Information and promotion	
Culture and life style	
Munich	2,700,000
Munich City	1,400,000

Several years ago, Munich started a trial in which new residents received a welcome pack with information about how to travel in the city. This deals with all forms of transport, fees, leisure destinations, environmental zones, bicycle rental, parking, bicycle racks, etc. The tone was encouraging: bicycling and riding on public transport are pleasant and efficient. A car can also be used, but there are many traffic jams and it is not good for the environment. Interested residents were given personal travel advice and a trial fare card. This helped people over the threshold. The results were positive. From then on all new residents received the information pack at the municipal desk and also received a telephone call some time later. The project was financed by the city and the Municipal Transport Company. Approaching new residents is a foundation of mobility management. Other subgroups in the programme *Gscheid Mobil* (Bavarian term for "smart travel") are:

- children and youth
- the elderly
- employers
- poor people, migrants and tourists.

New citizens in Munich get an information package and personalised travel advice
Picture: VCCR.

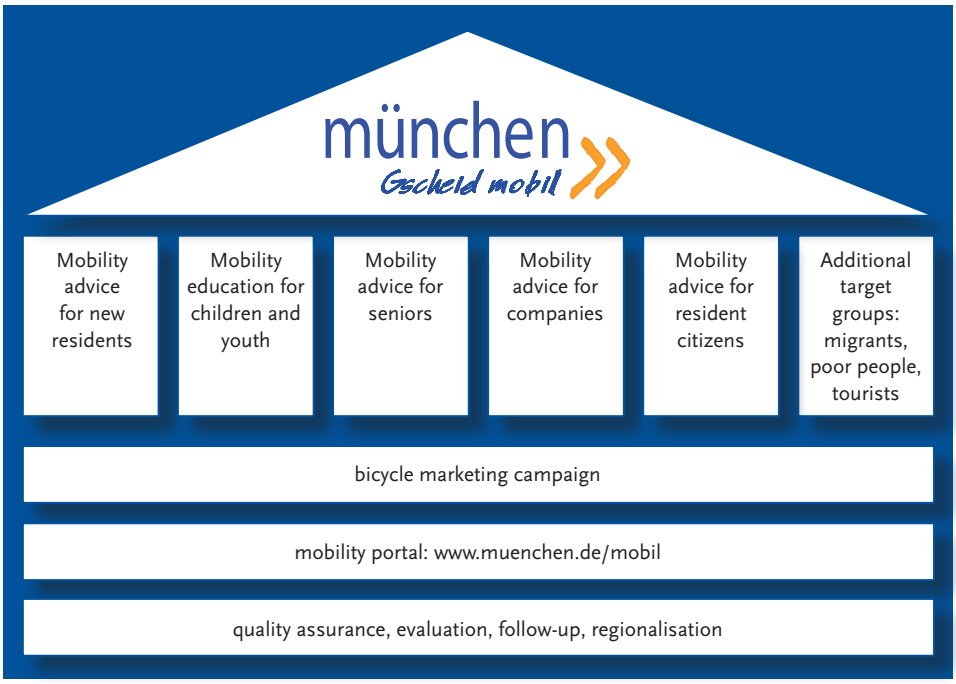
For each subgroup, the city seeks a natural time to make contact. For this reason, it partners with organisations that have good contacts. New residents receive information packs. Migrants are reached through the naturalisation process. An educational centre with lessons and materials is being developed for students.

Picture: András Ekés.

There is a website with travel information and a spectacular bicycle campaign: *Radlstar*. Thus Munich has a total approach for mobility management, through which the city strives toward the following goals:

- 50% less CO_2 emissions in 2030 than in 1990
- switching to sustainable energy
- priority for measures that result in less car trips and more sustainable travel.

The Munich approach can serve as a model for the way in which cities and regions can change travel behaviour. Munich developed a strategy for each subgroup.



7.2.3 *Radlstar* bicycle campaign in Munich*

Information and promotion	
Marketing and communication	
Culture and life style	
Rewards and feedback	
Region Munich	2,700,000
Munich City	1,400,000

Cyclists in Munich were able to have their picture taken with their bicycle. Photographs were placed on a website where the public could vote to decide who would be the Radlstar (bike star) of Munich. The winner received a prize of 4,000 Euros from the mayor during the grand finale in the city's central square. This resulted in a lot of positive publicity.

The winner was a 16-year-old student. He collected about 1,000 votes using Facebook. The cyclists were asked what they thought about bicycling in Munich. The most important description was, "It is fun". *Radlstar* is an excellent example of an emotional campaign that characterises bicycling as a positive life style.

Andy wins the Radlstar elections .
Pictures: Munich

7.2.4 Car-reduced district of *Vauban* in Freiburg*

Urban and regional MM	
Landuse and financing	
Culture and life style	
Region Baden-Wurttemberg	10,700,000
Freiburg City	224,000

In 1992, the south German city of Freiburg bought a vacant military field. Along with the residents of the area, the city developed the sustainable district of Vauban with 5,500 inhabitants and 600 jobs. This environmentally sound area was completed in 2006. The residences use little energy, and the area is well-known for its many solar panels. The transportation goal is to minimise car use as much as possible. Parking is permitted only on the edges of the area. Vehicles are permitted into the car-free zone only for pick-up and drop-off of items to homes. A maximum speed of 5 kilometres per hour is permitted in residential streets. Shops, schools and daycare centres are within walking distance. Buses and trams stop in the neighbourhoods. Residents who do not have cars do not contribute to paying for parking spots, nor even to the cost of the land. This means a considerable cost savings, since a parking space costs an average of 18,000 Euros. Anyone who needs a car occasionally can get one of the shared cars. Residents who share a car can travel for free in the city for one year and are given a discount card for the train.

In Vauban/Freiburg sustainable modes are central to the transport policies
Picture: Trendy Travel.

Vauban is one of the largest projects in *car-free living* in Germany. The district is attractive and liveable. There is high density construction, nevertheless there are a lot of green spaces as traffic does not take up much space. The area is popular with young people and families. They are proud of the sustainable character. Although not everyone wants to live in such an area, there is a group who find this concept attractive. It fits well with an urban lifestyle in which a car is only occasionally necessary. Vauban is the textbook example. More and more European cities are working on such sustainable districts or "building blocks." For example, in Berlin there are apartments in which a shared car is included in the purchase.

Sustainability in Vauban
Picture (l): Young-germany.de
Picture (r): Trendy Travel.

7.3 Conclusions

The development of mobility management for employers is still in its infancy in Germany. In the hierarchical structure of German companies, it takes a lot of energy to force a breakthrough, but larger companies are now implementing mobility management. This takes time, but once it is regulated, it appears to become well-entrenched. In the cities, the integrated public transport system provides strong public transport with dense coverage, attractive fares and good networks. The customer is king here more than in the Netherlands. The use of public transport in large cities is high. Public transport connects to car sharing and P+R. Younger people are less dependent on cars, as bicycles are becoming more popular, and living in "green districts" is rising. National and local campaigns promote less car-dependent lifestyles, and the new generation is also tackling the rigid business culture. The car industry is working on new car sharing concepts.

8 France

Inhabitants: 65 M

8.1 Developments

Sustainable mobility policies and, therefore mobility management issues, are currently planned and encouraged by the Ministry of Ecology, Sustainable Development and Energy. The policy is mostly applied from the "top-down" through laws and regulations, although local authorities play the main investor role through planning and financing mobility projects. Cities with more than 100,000 inhabitants are required to have a sustainable urban mobility plan. This describes how to proceed with traffic, public transport, walking, bicycling, carpooling, awareness raising and mobility management. Local public transport authorities therefore also play a main role in mobility planning. It is planned to transform them into "sustainable mobility organising authorities" also dealing with parking, logistics, walking, bicycling and new mobility services issues. Mobility information centres fit well into this. Cities with more than 250,000 inhabitants must also have a plan for reducing pollution and improving air quality, as well as any local authorities exceeding legal air pollution limits or facing air quality problems. For these reasons, various regions are promoting mobility management for companies. In some regions, mobility plans are even obligatory.

8.2 Good examples

8.2.1 *Versement transport* in France

Policies and rules
Public transport and networks
Urban and regional MM

The *versement transport* ("transport tax") is an urban transport tax. In urban areas with more than 10,000 inhabitants, companies with more than 9 employees must pay the tax: 0.55% to 2.6% of the total salary costs. The percentage depends on the size of the area and the quality of the public transport. With this income stream, the local transport authorities finance public transport, along with other local authority levels, central government and the European Union. France has a number of cities that reintroduced trams with part of the money from the *versement transport*. The tram is often an icon for new quality in inner cities and thus a form of city marketing. Various cities have replaced unsightly traffic routes with high quality public spaces, allowing better modal connections between various transport modes. The tram often rides over grass strips and provides better networks between key points in the metropolitan area and the city centre.

Picture page 71: Cycling along the banks of the Rhône in Lyon using Vélo'V bikesharing

Mayors are elected every six years in France. In order to make it possible to open (tram)lines within their term, decision-making often proceeds rapidly. The *versement transport* can help them to finance these projects. This gives them clout.

8.2.2 Lyon incubator *

City and regional MM	
Lyon greater metropolitan area	2,143,000
Grand Lyon perimeter	1,282,000

Lyon, the third-largest city in France, is one of the leading French cities for mobility management. Over a ten-year period, the municipality greatly reduced the number of car trips. For this purpose, the city invested heavily in public transport and bicycle sharing. It also introduced a strict parking policy. Now public transport, cyclist and pedestrians have priority over car traffic. New public transport lines were set up, and there was investment in new material and Park & Ride lots on the edge of the city. Lyon's vision is attractive to car drivers as it offers them greater choice.

Lyon was the first city with a modern bike sharing system, which was set up with JC-Decaux in 2005. *Vélo'V* (pronounced Ve-love) has been extremely successful. The system has been copies by many cities around the world, including Paris, which learned from the experiences of Lyon. *Vélo'V* accounts for 19,500 trips per day, equivalent to one quarter of all bicycle trips (the modal share of bicycles is 3%). This has contributed to wider acceptance of bicycle use in the city, and as a result, many residents have bought their own bicycles.

The Vélo'V bike sharing project was copied by Paris and has been replicated around the world. Picture: Leonard Gay.

Another poster project was the regeneration of the Berges du Rhône area(Banks of the Rhone). In 2007, a five-kilometre zone along the left bank of the Rhone river, which was occupied by parking lots, was redesigned to create a natural leisure area inside the city centre, removing the cars and parking to give space to pedestrians, joggers, cyclists, and terraces. The city has embraced this riverside area, and this has brought about a new urban dynamic. Grand Lyon is now carrying out works on the banks of the Saône river to develop a 30-kilometre walking path, which successively crosses natural and urban landscapes.

8.2.3 Financial mobility management in Grenoble *

MM for employers	
Urban and regional MM	
Promotion of sustainable mobility	
Grenoble greater metropolitan area	666,000
City of Grenoble	400,000

The Grenoble area is also active in mobility management. There is a good reason for this: the city is hemmed in between the mountains, and as a result faces high pollution problems. Everything imaginable is being applied to reduce car travel, including mobility management. The Chamber of Commerce is the driving force behind a co-ordination centre that advises employers. This agency selected a financial approach, with arguments of interest to employers: mobility management can save companies money and improve their organisation. Grenoble has chosen a systematic approach. An evaluation is made for each company and results are based on which mobility agency should most logically approach the company. Not only are large companies approached, but also medium-sized and small companies: this ultimately ensures the greatest amount of opportunity. A study is done for each company and progress is followed through a special IT system.

Since 2004, a mobility plan has been developed for 300 companies. These businesses represent half of all jobs. In 2008, approximately half of the plans were executed. This led to 4,000 fewer car trips per day for commuting and 10% fewer car trips in the participating companies.

The STMicroelectronics Company (2,400 employees) is one example at the top. This company started with mobility management in 1999 to prevent having to build a new parking garage. Other goals were fewer emissions and less stress (travellers have less stress when bicycling and riding public transport than when sitting in traffic jams). The company supported extensive measures, which resulted in a decrease from 80% car use to 54%. The goal is to have a maximum of 40% of journeys made by car.
In 2008, the Chamber of Commerce and STMicroelectronics won the EPOMM award for the best government initiative and the best employer initiative, respectively.

8.3 Conclusions

France is putting a lot of energy into sustainable mobility and mobility management. As a result of a historically strong top-down culture, it is more difficult to compare the Netherlands with France than with Anglo-Saxon countries. One has to note the way that French cities are reducing car use, independently of any legislation, with the help of transport planning, investments and, of course, mobility management.

This is often the case with important projects that usually have an impact over an entire district or even at a city scale: tram lines, bicycle sharing and car sharing projects. Open space is becoming more and more "open" for cyclists, pedestrians and green spaces. This is happening gradually, but continuously, with the growing help of mobility management tools.

9 Italy

Inhabitants: 60.3 M

9.1 Developments

In Italy, the Ministry of Environment, Land and Sea is in charge of the policies of Mobility Management at national level. The actions and measures for growth and sustainable development in Italy are "hinged" in European strategy (Europe 2020 and Europe in 2050). This includes programmes, directives and regulations for the protection of the environment, which also represent the drivers for competitiveness and growth of the Italian economy.

The concept of Mobility Management was introduced in 1998 in a decree of the Ministry of Environment. It introduced the role of the mobility manager for companies with more than 300 employees in one local office. A second decree in 2000 provided structural funding for MM and expanded the scope to school travel, travel plans for all highly-frequented sites, and mobility managers for entire areas. These developments have resulted in Mobility Management in Italy being predominantly understood and carried out as a site-based activity. Nevertheless, different "soft" measures, such as information and communication activities, new organisational schemes of innovative services, and coordination of the activities of different partners are already operative.

Since 2007, the Italian government has supported sustainable mobility in local municipalities by means of a programme of actions allocating 239 million Euros to 9 types of measures, including the promotion of Mobility Management:

- Delivery of services and infrastructure for public transport
- Upgrading vehicles with low emissions and enhanced mobile information
- Streamlining delivery of goods
- Park and ride and intermodality
- Fuels with a low environmental impact
- Promotion of the Mobility Manager
- Additional services to local public transport (car sharing, taxi, etc.)
- Promoting cycling
- Implementation of specific actions to increase the safety of users

Good examples

9.2.1 AREA C in Milan: from pollution charge to congestion charge

Air quality	
Urban mobility management	
Mobility management and congestion	
Name	Area C (Congestion charge)
Timeframe	Starting 16 January 2012
Coordinator	City of Milan
Funding	Lombardy Region and City of Milan
Concept	Road access restrictions can help achieve a better quality of life in Milan

The Congestion Charge "Area C" started operating in Milan on 16th January 2012 following the positive response from the referendum. The scheme is now in force on weekdays from 07:30-19:30, with no charge on weekends or public holidays. However, the latest revision of the scheme introduced a free entrance slot on Thursday evenings: entry is allowed as of 18:00 instead of 19:30 to encourage weekday shopping.

The fee is €5 for all vehicles - bicycles, scooters, electric cars, and vehicles for disabled people are exempt. Hybrid, methane powered, LPG and biofuel cars were admitted free up to the end of 2012. Residents have 40 free daily entries per year and then pay a reduced daily rate of €2 from the 41st day onwards. Entrance is forbidden for most pre-EURO 2 vehicles.

Cars entering Area C are detected by a system of 43 electronic gates equipped with Automatic Number Plate Recognition. Data on environmental pollution is obtained from Environmental Monitoring Stations deployed in the city. The system had strong support from the city's politicians (elected in 2011), who believed in the need for a

transition to a more effective charging scheme, primarily to tackle congestion. AMAT, the Environmental Mobility Agency of the Municipality, is responsible for planning, implementing and monitoring the impacts of the AREA C system.

9.2.2 Padova Cityporto: a successful model of urban logistics

Schemes to promote mobility management	
Sustainability, energy and health	
Urban and regional mobility management	
Mobility management and congestion	
Name	The Cityporto
Timeframe	Starting in 2004
Coordinator	City of Padova
Funding	Ministry of Environment, Veneto Region and City of Padova
Concept	An urban consolidation centre located in the freight and logistics "village" Interporto Padova, with an environmentally friendly fleet of 10 hybrid and CNG vehicles, a dedicated ITS system, and a set of coordinated local rules for urban freight transport.

The Cityporto model is based on a voluntary subscription: freight transport operators can choose to join the initiative and thus benefit from easier access to the city centre for freight delivery, rather than continue to access the city according to general time-slots.

Once the operators join the project, they must deliver their goods to a dedicated logistics platform in Interporto Padova. The daily delivery plans are managed by supported ITS technologies. Cityporto low-impact vehicles leave the platform and cover the "last mile" in the most sustainable way, both in terms of loading capacity and number of delivery trips. To date, 55 operators have joined the scheme.

Cityporto vehicles are allowed to:

- enter the city 24hrs a day;
- use reserved public transport lanes;
- use dedicated loading bays for their load/unload operations.

The next step for Padova Cityporto is to expand the service to express delivery, which is booming because of the wide and continuing spread of e-commerce.

The Padova city logistics model was a pioneering entity in Italy and a long established best practice in Europe. Several initiatives are currently ongoing in Italy following this model, such as in Aosta, Como, Brescia and Verona.

9.2.3 The "Liberated Seafront", a new permanent pedestrian area in Naples

Sustainability and health	
Urban and regional mobility management	
Mobility management and congestion	
Culture and lifestyle	
Name	Liberated Seafront
Timeframe	Starting in 2012
Coordinator	City of Napoli
Funding	City of Napoli and Campania Region
Concept	In April 2012, the City of Naples hosted the fourth regatta of the America's Cup World Series. A special mobility plan was adopted including a wide pedestrian area all along the "Lungomare Caracciolo", the scenic city seafront. This pilot project has now been turned into a fixed measure.

For the hosting of the 2011-2012 America's Cup World Series, a special Mobility Plan was adopted by the municipality: it included the reorganisation of the traffic in the most important area in Naples, a Special Limited Traffic Zone, as well as the development of new provisions for public transportation and parking. The plan was a real challenge because the location was not outside of the city, but in the centre along the scenic seafront, the "Lungomare Caracciolo".

The benefits of these measures for the city of Naples have been remarkable: the increase in liveability, the reduction in congestion and pollution, together with the increase in the average speed of public transport, convinced the municipality to make the restrictions permanent, with the aim of further exploiting the great potential of the seafront.

The adopted measures were in line with the objectives set in the city's General Plan for Urban Traffic (PGTU). In November 2012, the Municipal Council approved the establishment of three different but continuous Limited Traffic Zones (LTZ), of which the "LTZ of the Sea" includes the pedestrianised seafront. This became fully operational on 1st April 2013, when all cameras at electronic gates were installed and access permits were distributed to residents. The "LZT of the Sea" is in operation from Monday to Friday between 08:30-18:00, while the other two LTZs are in operation from 07:00-18:00.

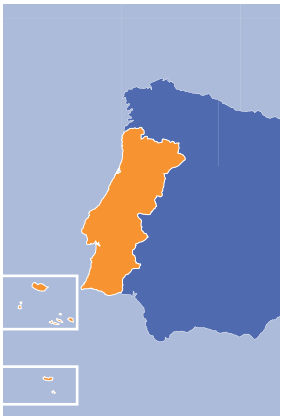
Before the implementation of these measures, 30 meetings were organised among the relevant stakeholders (associations, citizens' committee, restaurateurs' and shopkeepers' consortia, parking operators, tourist guides, council for taxi and car-hire with driver services, environmental associations, etc.) in order to include them in the decision and to receive proposals and suggestions. Thanks to the municipality's commitment, citizens are now aware of the potential of their seafront.

9.3 Conclusions

Within Mobility Management in Italy, it is the north of the country which is leading the way in terms of innovation and proactive planning, although some examples are also present in the south. It is predominantly in the northern cities, where atmospheric pollution problems are more critical than in the other parts of the country, where we find better public transport services, more efficient bike and car sharing schemes, logistic platforms for goods, long cycle lanes, separate traffic lanes reserved for public transport, as well as a higher number of vehicles running on LPG and methane. Consequently, it is in the north of the country that Mobility Management measures have a better chance of success, and they are also implemented with greater frequency to tackle the more critical air quality problems. There are 866 Mobility Managers operating in Italy, with 66 of them at city level and 800 in companies.


BOLIDE
AVEIRO A PÉ
Bairro da Beira-Mar
Aveiro on foot
Beira-Mar

10 Portugal



Inhabitants: 10.6 M

10.1 Developments

Mobility Management in Portugal did not have a systematic approach before 2008, although several MM measures were developed by local authorities before that time.

The fact that the country has only two levels of public administration - central, provided by the Ministries with an overall national and strategic approach on mobility, and local, assured by 308 municipalities, but not a regional level - can act as an obstacle to the dissemination of MM.

The Institute for Mobility and Transport (IMT) is a central stakeholder in the field of mobility management in Portugal. It has worked to deliver a national strategy for accessibility, mobility and transport called "Mobility Package", publically launched in 2011, which includes:

- National directives on mobility;
- Guidance on accessibility, mobility and transport on municipal land use planning;
- Guide for mobility and transport plans (PMT – name adopted in Portugal for SUMP);
- Set of brochures for technical and thematic support on sustainable mobility and PMT (11 brochures published in this phase);
- Guide to mobility plans for companies (large and medium-sized trip generators/ incentives).

Pacote da Mobilidade
Território, Acessibilidade e Gestão de Mobilidade

This work resulted in the proposal of legislative packages (national directives on mobility), technical guidelines, national and local workshops, coordination of local stakeholders, and further communication and technical support of some mobility management concepts and projects (such as the development of several SUMPs/ PMTs, such as in Algarve Central, Olhão or Aveiro).

CICLANDO
Plano de Promoção da Bicicleta e Outros Modos Suaves
2013 › 2020

Project "Cycling and Other Soft Modes Promotion Plan"

Recently, an initiative from the Portuguese Parliament led to an interministerial working group (integrating different areas, including transport, education, economy, health, road safety, environment, land use, sustainable development and municipalities), which developed the first National Cycling and Soft Modes Promotion Plan ("CiclAndo", which is a combination of cycling and walking in Portuguese). The project had public participation during the first phase (with stakeholder hearings for contributions and an enquiry for institutions and individuals), and was concluded and submitted to the Government in November 2012.

Overall, awareness about MM has grown in Portugal, especially in the last years. This was also evident from the "Land Use, Accessibility and Mobility Management Conference" organised by IMT in 2010, which constituted a landmark in MM, including national and international experts, representatives from EPOMM and CIVITAS, and a significant public participation (over 600 participants).

Nevertheless, MM initiatives are still not very common and the understanding of MM is not completely clear for many local authorities, stakeholders and planning professionals, although universities and professionals are slowly integrating MM concepts into their work.

European programmes, such as CIVITAS, IEE, INTERREG, and European regional structural funds (QREN), or central government funding (PIDDAC) have supported some important mobility management initiatives across the country. All documents from the Mobility Package and CiclAndo may be found on *http://www.imtt.pt*

10.2 Good examples

10.2.1 Site-based travel plans and transport services at Coimbra Hospital (Central Region)

Sustainability, energy and health	
Urban and regional mobility management	
Mobility management for employers	
City of Coimbra	143,000
Central Region	2,327,000

Characteristics of the City of Coimbra

- Growing use of private vehicles (72% of commuter journeys)
- Strong concentration of health services (central hospitals and university centre)
- MM as a concern for municipal authorities despite management limitations

Coimbra's approach for solving mobility problems is derived from MM, as the city sought to develop a site-based travel plan in its hospitals. The plan mainly concerned the Coimbra Oncological Hospital (IPO) employees, but mobility management actions extended to other hospitals and in later phases targeted all visitors. The main objective was to contribute to a more sustainable modal shift by emphasising other means of transportation besides the private car.

Real time information on PT in IPO Hospital Coimbra

Some of the more significant measures are

- Personalised travel planning;
- Car pooling;
- Improved pedestrian conditions;
- Improved cycling conditions;
- Campaigns promoting sustainable mobility;
- Parking management scheme.

The key results of this measure have been

- Modal shift of 10.3% from private car to public transport;
- 28% increase in public transport revenues from employees of the hospital;
- Contribution to energy efficiency in the city: a reduction in overall energy consumption for travel of 15% or 0.31 MJ/km;
- Mitigation of CO_2 emissions: savings of 13 g/km corresponding to a reduction of 273 tonnes of CO_2 during the first year of mobility plan implementation.

After many decades focused on traffic management activities, Coimbra now acknowledges that mobility management solutions, especially travel plans, are a practical and valuable way of dealing with the city's mobility challenges.

This project was developed under the CIVITAS MODERN programme, which included other important and complementary measures, such as the Mobility Centre or the driving simulator. Results can be found in:
http://www.civitas.eu/index.php?id=79&sel_menu=182&measure_id=687

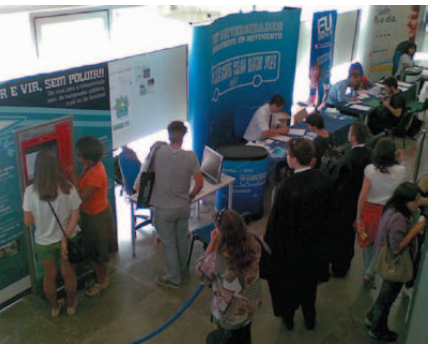
10.2.2 Addressing first-year students to use public transport in Almada (Lisbon metropolitan area)

Schemes to promote mobility management	
Mobility management for schools	
Information and promotion	
Culture and lifestyle	
City of Almada	174,000

Characteristics of the City of Almada

- South bank of the Metropolitan Area of Lisbon
- University campus on Monte da Caparica (outside the city of Almada) with around 7,500 students.

Public transport information point



Based on the assumption that first-year university students are more likely to rethink their mobility, a campaign was created to address over 1,000 students on their mobility behaviour. The campaign was developed in the framework of the European project SEGMENT, which was funded under the Intelligent Energy Europe programme. The concept was simple: design a campaign to convince students to use public transport by encouraging them to subscribe and receive a personalised travel plan at the university.

The campaign was led by AGENEAL (Energy Agency of Almada) and the Almada City Council, in the scope of Almada's Local Strategy for Sustainable Mobility, based on SEGMENT's methodology, which assumes that people are more willing to change travel behaviours when they undertake big changes in life (change house, work, school).

Implementation

1. Survey of first-year university students (from the Technology and Science Faculty), which were then segmented according to the sustainable mobility marketing segmentation processes. The results showed support for public transport and soft modes.
2. Design of the campaign by AGENEAL and Almada Municipality.
3. Creation of a software route calculator in cooperation with the greater Lisbon pub-

lic transport operators consortium Transporlis (which already has an online route planner).

4. Continuation of the campaign during the "Welcome Week" for first-year university students: distribution of Personalised Public Transport Travel Plans, home-to-university private PT routes, maps, timetables and brochures.

Results & Evaluation

- Calculation of more than 1,000 Personalised Public Transport Travel Plans.
- Positive reactions from students, as starting university is a key moment for such a campaign offering 'help' and 'advice'.
- Public transport use increased although at the expense of walking, while car use remained at the same level.
- There could be replications if other cities developed a PT route calculator.

This case can also be found on MaxEva:
http://epomm.eu/maxeva/index.php?id=2&proj_id=118 and
http://www.eltis.org/index.php?id=13&lang1=en&study_id=3804

10.2.3 Eco-driving in Funchal (Autonomous Region of Madeira)

Policy and regulations	
Schemes to promote Mobility Management	
Urban and regional Mobility Management	
City of Funchal	112,000

Drivers training on Horarios do Funchal

Characteristics of the City of Funchal

- Funchal is the capital of Madeira, an island situated in the Atlantic Ocean
- Very difficult orographic characteristics, with steep hills

Funchal's steep hills make driving around the city expensive in terms of financial and environmental costs. To minimise the negative impacts, Funchal has worked towards fostering eco-driving habits among drivers of both the public transport fleet and professional passenger drivers (i.e. taxi drivers). The project was led by Funchal's public transport operator and the municipality, which teamed up to design eco-driving procedures tailored to the topography of the city.

Methodology and measures implemented

- Study the eco-driving procedures that best suit Funchal's topography;
- Conduct eco-driving training for all transport operators;
- Evaluate drivers' performance after the training;
- Testing, modifying and carrying out new eco-driving training;
- Convey eco-driving to the general public through awareness campaigns.

Trafilog, the system which made the project viable

- Trafilog provided location-based solutions through real-time GPS data of all vehicles. It could also send real-time alerts to the control room and to the drivers, for example feedback on driving times, fuel consumption and estimated costs including maintenance.

- 10 buses were equipped with the Trafilog flow meters. As the drivers were monitored, a tutoring scheme was designed and carried out within a pilot period of 6 months in 2011.

Results

- Eco-driving campaign and training contributed to reduce drivers' fuel consumption by 6%.
- The buses equipped with the Trafilog system contributed to a 2% decrease in CO_2 emission levels.

All in all, the main breakthrough of the measure was the chance to collect and disseminate (at the European level through the CIVITAS network) in-depth details about driving attitudes.

No.	Target	Rating
1	290 professional drivers (CMF and HF) trained in eco-driving principles and attitudes	✲
2	Reduction of public transport fuel consumption by 6% (measured before and after the launch of the monitoring)	Buses **O** Municipal vehicles ✲ ✲
3	Reduction in the number of accidents related to bus drivers subject to personal monitoring	**NA**
4	Reduction in the amount of aggressive turning, breaking and acceleration by at least 2% among bus drivers subject to monitoring	✲✲✲
5	Reduction of transport related emissions in buses: CO2, NOX and PM by at least 2%	✲✲
6	Increased eco-driving knowledge among professional drivers and citizens	**NA**

NA = Not Assessed **O** = Not Achieved ✲ = Substantially achieved (at least 50%)
✲✲ = Achieved in full ✲✲✲ = Exceeded

Source: Evaluation Report CIVITAS Mimosa *http://civitas.eu/docs/MIMOSA_FUN_6_1_MRT.pdf*

10.2.4 "All of us are pedestrians" campaign in Aveiro

Schemes to promote mobility management
Information and promotion
Culture and lifestyle

Located in the centre of Portugal, in a region with a long tradition of cycling, though this has been lost to some degree in the last few decades, Aveiro has focused on the quality of public space in the town centre. In 2000, it became a pioneer in Portugal with the introduction of a free bike share scheme, "BUGA", but it had previously undertaken considerable work in improving the environment for pedestrians in its historical centre. Aveiro also had plans for revitalisation of local commerce in its city centre. The IEE-funded project Active Access (August 2009 - July 2012) provided the opportunity to implement methodology and measures to change the behaviour of citizens, to promote walking and increase their awareness of quality of public space.

"Win Wheels to Shop by Foot" campaign

I don't step on your car, don't step on our sidewalk

Methodology and measures implemented

Within the Active Access project, Aveiro developed several actions with stakeholders:

- Walkability Audit – with politicians, local stakeholders, media and citizens;
- Street surveys – perceptions and attitudes of citizens were collected with the help of a professional school;
- Press conferences and website;
- Street Exhibition – graphic works by students on design concepts to promote walking;
- Walking Map of Aveiro – with distances in minutes by foot - see Eltis Case Study *Walking Map to change mental maps in Aveiro, Portugal*;
- Two international seminars about the importance of walking and public space.

As a result of these experiences, the campaign "All of us are pedestrians" was designed and implemented. This campaign aimed to encourage pedestrian mobility, improve the local economy, raise the awareness of car drivers, and give residents the ability to reprimand motorists and take care of their street.

"Win Wheels to Shop by Foot" is the slogan that shopkeepers displayed in their stores to encourage their customers to enter the raffle to win a shopping trolley. The prize of shopping trolleys was to answer one of the main complaints about shopping by foot - the weight of carrying goods - and to modernise the image of those using the local commerce.

Awareness raising leaflets were sent to all residents, accompanied by a letter from the mayor. Residents and shopkeepers were empowered by being given the opportunity to post leaflets on the windshields of illegally parked cars and thus assert their rights.

Active Access Street Posters were put near the main squares and pedestrian areas, warning about the damage that illegal parking causes - the degradation of public space and the cost to public institutions - as well as the risk to pedestrians.
More information on this project can be found on *http://ape.aveiro.pt/*

10.2.5. Mobility Management at the National Mail Service

The National Mail - CTT Correios de Portugal - has around 14,000 employees, 3,200 vehicles, with 31 million kilometres driven per year. CTT has developed an enterprise-wide strategy for sustainable development. The concentration of services in Lisbon provided an opportunity to introduce several mobility management measures.

«With you, delivering mail without polluting» campaign

- Services in Lisbon were concentrated from 7 buildings to one building with good PT accessibility and adequate parking management, providing 10 bikes for workers;
- Before the move, a survey identified mobility habits and environmental impact;
- Flextime working, teleworking, video conferences, conference calls;
- Free public transport tickets campaign and route optimisations;
- Awareness campaigns, with personal travel plans and eco-driving training;
- Gradual substitution of the fleet: In May 2013, the fleet had 2 electric distribution vehicles (2/3 m^3), 9 hybrid vehicles, 5 electric scooters, 180 electric bikes (pedelec) and 38 normal bicycles, both for mail distribution and small errands. With an additional 150 pedelecs and bicycles in 2013, a further reduction in CO_2 emissions of 50 tonnes per year will be achieved.

With these measures, it was possible to reduce operational costs, reduce energy use by 8%, reduce emissions by 9% and improve fuel efficiency by 3%.

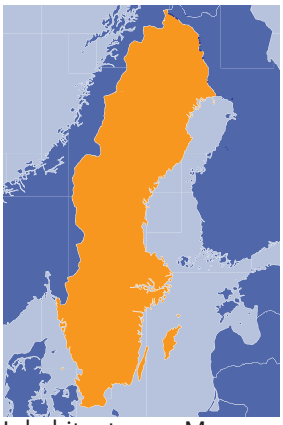
10.3 Conclusions

MM has been growing in Portugal, especially in the last few years. The country benefits from the existence of technical guidelines and methodologies that encourage the development of mobility management.

However, the unclear legal and political framework in the area of mobility, together with financial restrictions due to the recent crisis and EU-TROIKA intervention, may put the implementation of some strategic issues in danger, delaying the general introduction of MM throughout the country. We must remember that, despite all efforts, the last population Census (2011) shows a worrying change in modal share, with an increase in private car usage (63% of all commuters journeys) and a decrease in public transport journeys and walking (20% and 16%). Although the economic crisis in the last few years has contributed to a change in habits (with less journeys, especially by car) in favour of a more sustainable mobility, it has also brought several cuts in financial support. This has led to a reduction in transport investment, with significant cuts to services and fare increases on public transport and, consequently, fewer users (e.g. in Lisbon, public transport users decreased 20% between 2011 and 2012).

Portugal joined EPOMM in 2008 and MM activities are raising awareness in the country, through conferences, workshops and training. Municipalities are starting to make MM an integral part of their mobility and transport policies, sometimes with innovative and efficient projects being put in place. Little by little, bus transport, bicycles and walking are becoming an increasing part of day-to-day life changing the look of cities.

11 Sweden

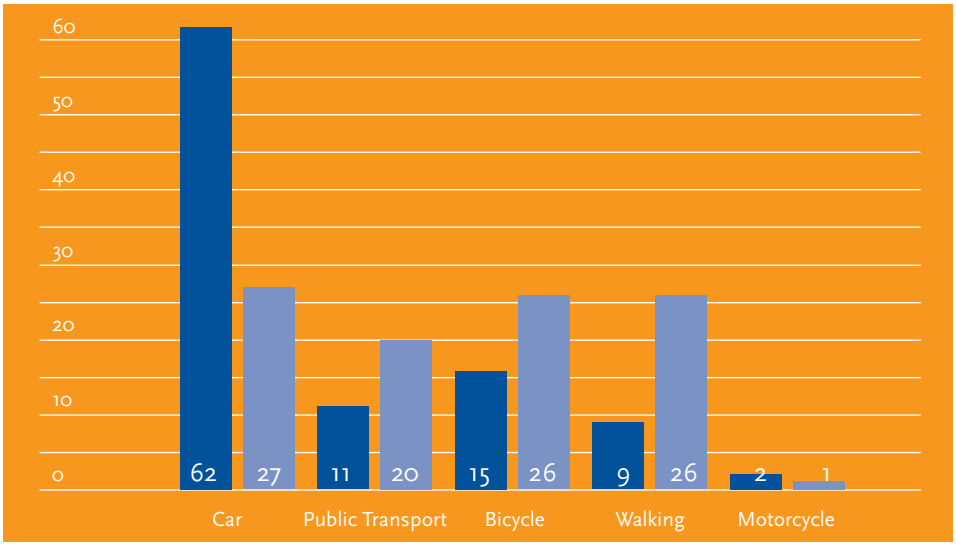


Inhabitants: 9.4 M

11.1 Developments

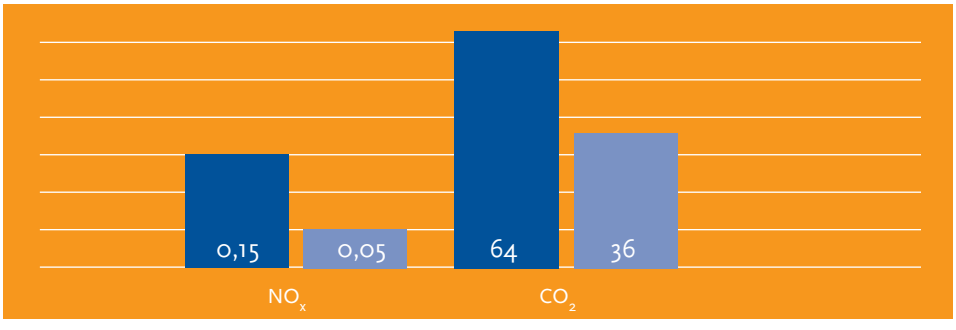
When thinking of Sweden, most people imagine a wide-open, sparsely populated land. Aside from Stockholm and Gothenburg, is mobility management really necessary in this country? In fact, Sweden is a leader in this area. Mobility Management is not just about accessibility and flow, but is also about environment and energy. In addition, Swedish cities want to be livable and attractive. Good spatial planning and sustainable travel are indispensable for this reason.

Sweden has great ambitions. Integrated thinking is high on the list of priorities. Sweden is working on "PTx2" (doubling public transport use) with Gothenburg, Sweden's second largest city, out in front. Although public transport use has already doubled, Gothenburg is going for an additional PTx2 (in terms of the fraction of motorised trips). Sweden has been working on clean vehicles for years. With many large Volvos on the roads, CO_2 emissions per kilometre is almost the highest in Europe. However, Sweden is addressing this problem seriously, and as such, they also have the greatest decrease in emissions in Europe. Cities such as Gävle, Lund and Örebro are working successfully on fewer car trips. Sweden has been very effective with behaviour change campaigns - for example, "No ridiculous car trips" in Malmö - and as a result, 12,000 people are using their cars less often for short trips.



The 'Mobility Coaching' project in Gothenburg caused a significant decrease in car use by commuters. The graph shows the modal split for home-to-work travel and the average NOx and CO2 emissions (in kilos per month per person)

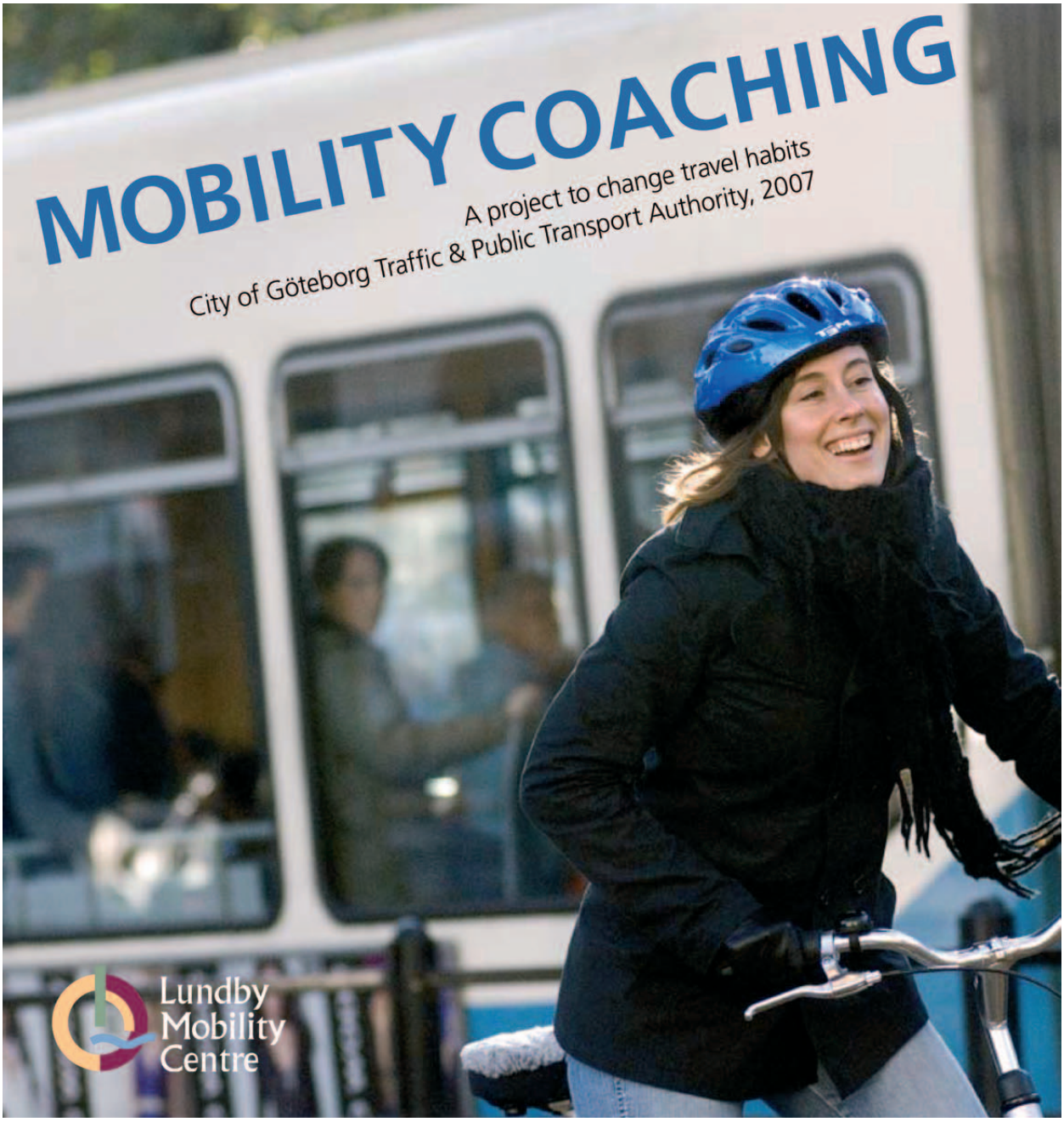
before
after



Picture page 94: Green Umeå.

Swedish projects are often well prepared, with a clear and logical structure. In many projects, serious thought is given to the traveller's viewpoint: "Yes, we know that it is difficult to change behaviour, but it is possible and you will feel better if you do it." The projects extend a helping hand, encourage people to try it, and reward good behaviour. To know whether this will accomplish something, the Sumo [System for Evaluation of Mobility Projects] method was developed. This follows people in their behaviour-changing process and ultimately calculates its effects on mobility, climate and/or health. In this way, insight is achieved into the effects. If the results look good, this provides political support for going ahead with it.

Picture: Gothenburg city



11.2 Good examples

11.2.1 *LundaMaTs* in Lund*

Urban and regional MM	
Sustainability, energy and health	
Information and promotion	
Culture and lifestyle	
Rewards and feedback	
Region Skåne	1,200,000
Lund City	83,000

In the 1990s, Lund developed the urban mobility plan, *LundaMaTs*. *MaTs* stands for *MiljoAnpassat Transportsystem* (sustainable transport system). LundaMaTs is the textbook example of sustainable urban mobility policy to reduce automobile use and promote cleaner transport. The measures in Lund themselves are unique: more bicycling, promoting public transport, improving spatial development, cleaner vehicles and behaviour campaigns. However, Lund is special in its ambition to significantly reduce car driving. In Lund, it was not just nice words: the policy was actually carried out. This was successful as a result of the strong correlation between the measures: the car use in this city decreased. The emphasis was placed on positive stimulation of sustainable transport and not on harsh measures to limit car use.

The mobility centre of Lund informs inhabitants and coordinates programmes and campaigns. Examples include kitchen table discussions for residents who need information. During such a discussion, the residents can be signed up for the bicycle campaign or a trial of public transport. The bicycle campaign also includes two health examinations: before starting and after completion.

Many Swedish cities have followed the example of Lund. Lund provides inspiration primarily for a multi-year vision of reducing car traffic. The way in which the city accomplishes this differs from the mobility policies in Dutch cities, for example. Lund shows that their method is effective.

11.2.2 *No ridiculous car trips* in Malmö*

Urban and regional MM	
Information and promotion	
Culture and lifestyle	
Region of Skåne	1,200,000
Malmö City	280,000

Malmö discovered that half of all car trips made in the city were less than 5 kilometres. The municipality decided to do something about it. Malmö found it "ridiculous" that traffic is jammed and expensive infrastructure is necessary, while many trips are short and people only get in the car out of habit or convenience.

In 2006, Malmö started the campaign "No ridiculous car trips". Residents were challenged to write about their most nonsensical car trips for a chance at winning a prize. Anyone who wrote such a description would feel its meaning and resolve to do something about it. In 2007, the campaign resulted in 12,000 inhabitants making fewer short trips by car. Almost all residents appreciated this somewhat confrontational campaign. It is noteworthy that the project team consisted primarily of sociologists and psychologists and scarcely any traffic experts. The professional design of the campaign was appealing, and the results showed that the investment was profitable.

See *http://www.copenhagenize.com/2010/09/no-ridiculous-car-journeys-malmo-sweden.html*

Pictures: Jens Lennartsson

11.2.3 *Mobility coaching* in Gothenburg

Sustainability, energy and health	
Urban and regional MM	
Information and promotion	
Rewards and feedback	
Culture and life style	
Region Västra Gtaland	1,600,000
City of Gothenburg	550,000

The district of Lundby in Goteburg is a testing ground for campaigns relating to sustainable mobility, which are coordinated by the district mobility centre. The *mobility coaching* project is noteworthy. Residents who use their car at least 5 days a week can sign up for the campaign. They pledge to walk, bicycle or take the bus at least 3 times a week. In return, they are given a coach [personal trainer]. 68 people joined and 20 were given a personal trainer. The rest were able to participate in one of the three groups that best fit these three personality types:

- "challenge me"
- "put me under pressure"
- "lazy and comfort-seeking".

The participants were given a health test, received personal travel information and could attend lessons on health, movement and self-motivation. The project led to a considerable reduction in car use. There was more walking (greatest effect), more bicycling and more travel by public transport. Success was not achieved in demonstrating health effects, but various participants did engage in more daily movement and felt fitter. Apparently the most important factor was the communication effect. The campaign received a lot of mention in the local media, and the participants stopped colleagues and friends and talked to them about leaving the car more frequently. As in Malmö, this effective project was professionally designed.

See *www.visionlundby.goteborg.se/english/pdf-english/mobility_coaching_pop_eng.pdf*

Picture: City of Gothenburg

11.3 Conclusions

Although Sweden scarcely has traffic jams, it provides a great deal of inspiration. The country seeks sustainable and attractive cities and tries to contribute to achieving climate goals through sustainable mobility. Even the smallest communities participate in bicycling campaigns, car sharing and cooperative purchase of clean vehicles. Long-lasting city traffic policies to reduce auto use have been successful in various cities. For example, Lund shows that the strategy for sustainable mobility is rewarding. Also, Sweden is very creative with appealing behaviour campaigns that motivate people to participate in sustainable travel behaviour.

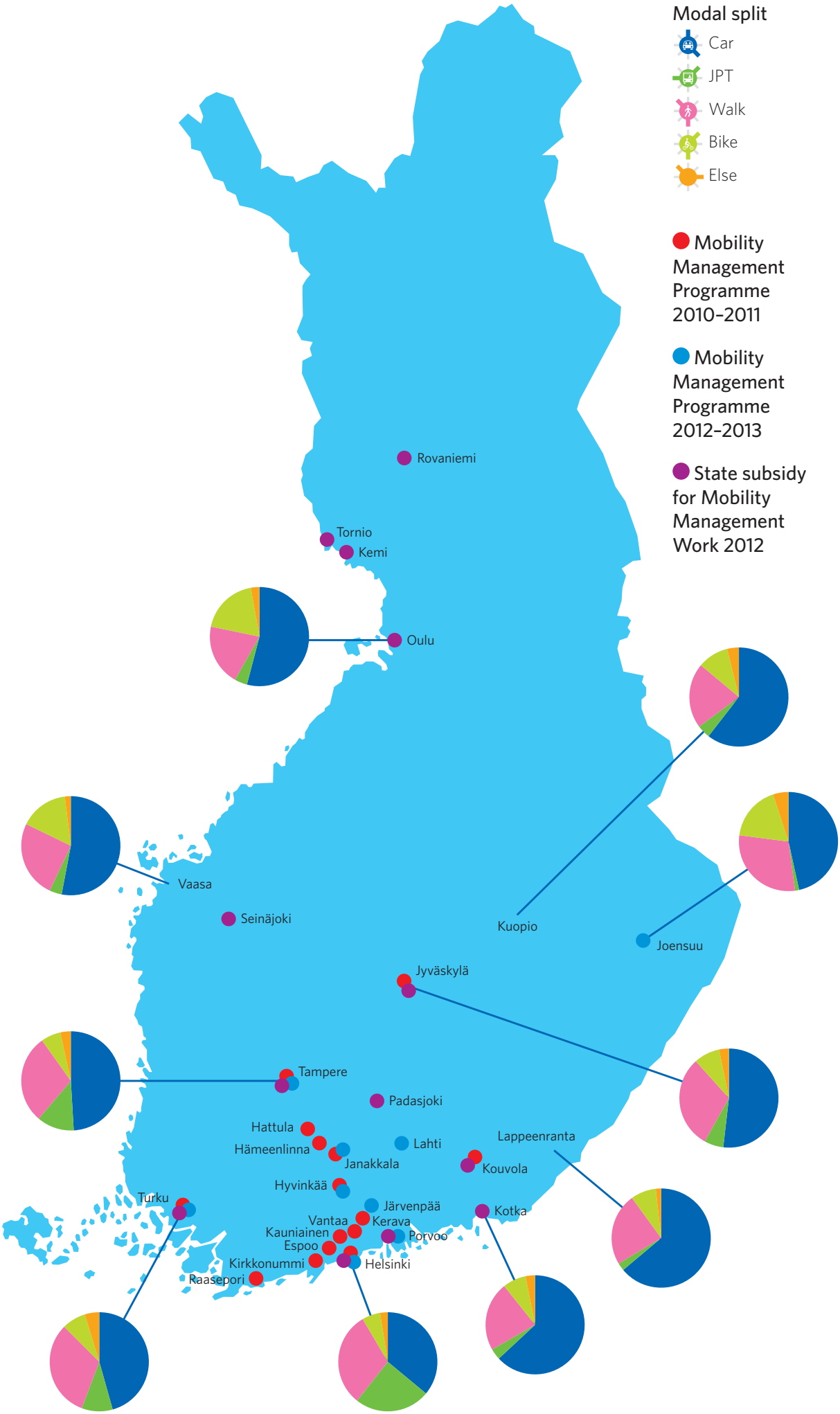
Struggling

"Other European countries can benefit from a better understanding of travel behaviour and the influences on it. This is undoubtedly also true for us in Sweden. Although we know quite a bit, we are still wrestling with various questions."

Jesper Johansson, Swedish Platform on Mobility Management (SWEPOMM), Stockholm (Sweden)

Picture: Green Umeå.

Each year, many Swedish cities reward inhabitants that cycle.


Modal split
Car
JPT
Walk
Bike
Else
Mobility Management Programme 2010–2011
Mobility Management Programme 2012–2013
State subsidy for Mobility Management Work 2012
Rovaniemi
Tornio
Kemi
Oulu
Vaasa
Seinäjoki
Kuopio
Joensuu
Jyväskylä
Tampere
Padasjoki
Hattula
Hämeenlinna
Janakkala
Lahti
Lappeenranta
Kouvola
Hyvinkää
Turku
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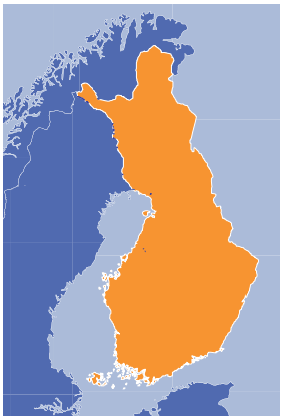
Kirkkonummi
Helsinki
Raasepori

11 Finland



Inhabitants: 5,4 m

11.1 Developments

With an area of 338,000 km², Finland is one of the largest countries in Europe. Even though most Finns live in the southern parts of the country, the largeness of Finland greatly shapes its transport policies strategy. The low density of population makes cost-effective public transport possible only in big cities, and it favours the private car as the only mobility option (58% of Finns' daily trips are by private car).

Mobility management started to gain attention from 2000. So far, MM activities have been led by the Ministry of Transport and Communications along with the Finnish Transport Agency, which is responsible for MM in Finland and is the main funder of local mobility projects. However, MM has only been identified as a tool to achieve the long-term national transport strategy since 2009. Since then, stakeholders and decision-makers have carried out more concrete steps to promote public transport, walking, cycling and economical driving.

The Climate Policy Programme for 2009-2020 from the Ministry of Transport and Communications notably established the national Mobility Management coordination within the Finnish Transportation Agency. Motiva was contracted to coordinate the national Mobility Management work, and to set up a far-reaching network to link all MM stakeholders in Finland. The network, called LIVE, has become the second largest national MM network in Europe as it connects almost 500 professionals interested in the field of Mobility Management.

The Mobility Management work in Finland has included two national Mobility Management R&D Programmes, the first of which was started in 2010. There were 13 projects at the time. These were led under the following themes: making MM action plans for 5 regions of Finland, promoting public transport, promoting cycling, promoting travel planning in companies and at school, promoting car-pooling, and promoting services within a close radius to households. The Ministry of Transport and Communication and the Finnish Transport Agency financed the programme. The second Mobility Management R&D Programme started in 2012 and also includes 13 projects. There are new regions involved and new financers included, such as the Ministry of the Environment and The Fit for Life Programme. The themes for the ongoing programme are the promotion of walking and cycling and leisure mobility.

In 2012, the state subsidy for Mobility Management was introduced, and it has continued for 19 regions in 2013. The amount of state subsidy can be up to half of the total costs of the work. The state subsidy was given to some regions which already had done Mobility Management, but also to some new regions. In a nutshell, Finland has managed to organise and advise MM initiatives at both the national and regional level.

12.2 Good examples

12.2.1 Bike-at-work Campaign in the Turku region (Southwest Finland)

Sustainability, energy and health	
Urban and regional mobility management	
Mobility management by employers	
Information and promotion	
Culture and lifestyle	
Timeframe	May to October 2012
Coordinator	Valonia (the Service Centre for Sustainable Development and Energy of Southwest Finland)
Funding	Finnish Transport Agency and Finnish Ministry of Environment (part of the Mobility Management Programme)
Concept	Promote cycling by putting bikes at companies' disposal for a month, which workers would use for short workday trips instead of a company car or a taxi

The idea for the project is based on a study that showed that a ten minute biking experience increases the uptake of cycling by changing people's attitude towards cycling.

Companies, organisations and public administrations could borrow a bike from Valonia, which had five bikes to lend. The bikes had previously been customised by local artists so as to be easily recognisable. The borrowed bike would become the 'company bike', thus replacing the company car or taxi.

The promotion of the campaign was made highly visible in the local media and on social networks. Notably, Facebook proved very effective for the Bike-at-work event, as most people got information about the project through this channel.

More than 20 organisations took part in the campaign, and some of them are considering getting a company bike. People's experience and feedback turned out to be very positive, with the campaign proving to be a success. Both aims of the project were achieved, as employer's were sensitised to possible MM measures, and the campaign offered people a new and positive insight into cycling.

12.2.2 The Liikkuva ("moving") Project in different cities around Finland

Mobility management for schools	
Information and promotion	
Timeframe	2012-2013
Coordinator	Youth academy
Funding	Finnish Ministry of Transport and Communication and Finnish Transport Agency (part of the Mobility Management Programe)
Concept	The project aims to encourage 13-19 year-olds to travel smart on their school and leisure trips. During the project, there are visits to primary schools, high schools and vocational institutes where the drama workshops are used for young people to reflect on their personal mobility choices for school and leisure trips. In addition, there are school visits to encourage young people to implement smart travel projects in their school.

By the beginning of 2013, the project had already reached over 2,000 pupils in the drama workshops. In the workshops, pupils consider the choices they make in everyday mobility via a story of a fictional figure. In this way it is easier to handle, for example, situations where friends affect one's choices. The workshops don't only consider fictional situations. At the end of each workshop, each of the young people challenge themselves to travel smart, pointing out one concrete action they are going to accomplish. Most of the challenges have included walking or biking to school and hobbies instead of public transport or getting a lift from parents.

The project is continuing until the end of 2013, and more results will be available then. The teachers are asked to follow the challenges to determine what results have been achieved.

12.2.3 The winter cycling capital of the world in Oulu (Northern Finland)

Schemes to promote mobility management	
Sustainability, energy and health	
Urban and regional mobility management	
Mobility management and congestion	
Information and promotion	
Culture and lifestyle	
Timeframe	Since 1972
Coordinator	Municipality of Oulu
Funding	Municipality of Oulu, Finnish Ministry of Transport and Communication and Finnish Transport Agency
Concept	Develop an extensive cycling network, notably practicable in winter, and change people's attitude towards cycling (long-term prospects)

Referred to as the winter cycling 'miracle', Oulu's cycling network and attitude towards cycling is the result of a forty-year continuous project. Since 1972, the Municipality of Oulu has been taking action by way of 'cycling plans' so as to develop a genuine strategy in land use and traffic planning. Oulu's priorities have focused on maintenance, especially in winter, to keep the cycle paths practicable. The city has therefore been divided into nine maintenance areas, including five maintained by private contracts.

The latest action plans aim at further improving winter cycling awareness (locally, nationally and internationally), designing a route planner, and encouraging business opportunities revolving around cycling, health and new technologies. Moreover, Oulu is increasingly collaborating with the Oulu Region to connect bicycle routes together (e.g. cycle path connection between Oulu airport and the town centre). The results of this sustainable strategy are astonishing, as Oulu now disposes of over 600km of bicycling network for 190,000 inhabitants, and has a cycling modal share of 22%.

More importantly, the satisfaction surveys on cycle paths maintenance conducted by Oulu keep scoring very positive results year after year. Cycling all year long has become a 'normal thing' in Oulu (even for the elderly). Active promotion and dedication to change people's attitude towards cycling has thus proven successful over time.

12.3 Conclusions

Finland started later than other leading MM countries and pioneers. Finland uses lessons from these countries and adapts measures via international networks. Many local projects initiated lately have proved successful and mobility management funding is becoming more structured and the national coordination has had a great impact on making the mobility management action plans viable.

Over the next few years, the MM work will still need to be established, integrated and spread. The aim is that there will be permanent MM activity in all the major regions, and also in many active smaller towns and regions in all parts of Finland. To achieve these goals, there needs to be established practices, networks and resources for the MM work.

The integration of MM measures specifically to the planning of traffic infrastructure and transport services is a target at the national, regional and municipal level. The integration should work in both directions: while the MM measures need to be integrated into the planning process, encouraging people to travel sustainably relies on efficient transport services and infrastructure.

Even though MM has been mainly done within the transport sector, it is important to encourage cooperation between different sectors like land use planning, education, health and wellbeing actors, and service development.

These aims, combined with focusing on different target groups in MM work, will strengthen the role of Mobility Management as an important tool in transport policy in Finland.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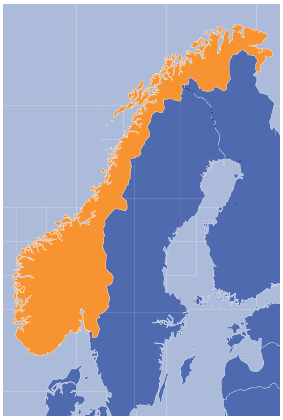
3
2
Fjord1

13 Norway



Inhabitants: 5.1 M

13.1 Developments

Focus was given to Mobility Management in Norway in the White Papers of 2002 and 2007. Businesses were to be stimulated to take a greater responsibility for trips made by their employees and some policy guidelines were given. In light of the development in the subsequentyears, the policies can mostly be characterised as broken promises.

In recent years, national reduction goals on local pollution and CO_2 emissions have put pressure on the transportation sector to take action. Another White Paper in April 2012 set a goal that all growth in personal transport in metropolitan areas shall be accommodated through public transport, cycling and walking.

This goal is adopted in the National Transport Plan for the period 2014-2023. Achieving such a goal is ambitious and can only be reached if all stakeholders are pulling in the same direction in their efforts to facilitate attractive, functional and environmentally friendly urban regions.

The Government will introduce new holistic urban mobility agreements, through which the State, counties and municipalities shall jointly manage the development of the transport system in urban areas towards the climate policy goals.

These agreements will describe the objectives and measures to reach higher modal shares for public transport, biking and walking including land use policy. This implies that the existing city transportation packages based on cordon tolling have to be renegotiated. As an incentive, the Government has allocated an unspecified lump sum of 3.4 billion Euros of national funds as an impetus to negotiations on the mobility agreements.

Additionally, the new National Transport Plan presents a toolkit for urban areas based on already applied measures like tolling, parking restrictions, public transport improvements, land use changes, biking and pedestrian measures. The challenge for the years to come will be the integration of mobility management measures into these new agreements.

Knowledge on mobility management measures have been more widespread after implementation of a growing number of projects on topics like car sharing, ridesharing, mobility planning and standardised travel surveys for businesses, city bike systems, promotion of walking to school, and teleconferencing. Increasing participation in European Mobility Week has also attracted more interest in travel awareness raising campaigns. Unfortunately the effects of measures are scarce, either because evaluation is lacking or projects are not yet evaluated.

13.2 Good examples

13.2.1 National Walking Strategy

National MM
MM and health
Walking

The Norwegian Ministry of Transport and Communications authorised The Norwegian Public Road Administration (NPRA) to develop a national strategy for pedestrians and walking. The result has been the National Walking Strategy for Norway, which has made it the second country in the world to have such a strategy.

The development of the Walking Strategy has been based on a vision that "It should be attractive to walk for all". The main areas addressed will be 1) requirements for cooperation between different institutional actors, 2) design of the physical environment, 3) demand for service and maintenance, 4) better interaction in traffic, 5) how to promote a walking culture, and 6) need for more research and better planning tools. Long-term objectives, targets for the period 2014-2023, and strategies to achieve these targets within the six main areas have been identified. Monitoring will take place at both the national and local level based on a set of indicators.

The strategy was published in February 2012 and a more detailed scheme on monitoring, reporting and evaluation is under development.

13.2.2 Cost-benefit analysis of alternative public transport funding (Oslo, Bergen, Trondheim and Stavanger)

Policy and regulations	
Land use planning and finance	
Public transport and seamless travel	
Concept	The four biggest cities in Norway were analysed for the welfare implications of alternative urban transport funding schemes. Four reports were compiled to find the best way of financing public transport in urban areas.

The main objective of the project was to analyse the welfare implications of alternative urban transport funding schemes in the four largest cities in Norway: Oslo,

Bergen, Trondheim and Stavanger. Three alternative funding models were analysed and various funding parts put together.

One of the main conclusions from the study is that the urban environment, like housing density, parking restrictions or road user charging, will play an important role as a funding element for urban public transport. Different cities have different challenges and opportunities in the design of public transport. However, 'road pricing' will have a mixed effect; the subsidy demand will increase by €7.3 million in the short-term and the optimum level will decrease by €24 million in the long-term.

It was found that even though an optimal public transport service presupposes increased subsidies, the converse is not necessarily true. More subsidies do not automatically generate an economically optimal service. The public transport companies will operate according to standard business criteria, maximising their own profit rather than the social economic benefit. The question is therefore whether it is possible to find an optimal funding mechanism for the public transport companies, which reconciles the incentives of the public transport companies with the socio-economic objectives of the authorities.

13.2.3 Zero Rally

Schemes to promote MM
Sustainability, energy and health
Leisure traffic
Information and promotion
Culture and lifestyle

A "Zero Rally" race for zero emission cars has been organised each year since 2009. The rally showcases the latest technology in cars, charging solutions and filling options. Last year's event was a great success. During Christmas 2012, a Norwegian TV channel broadcast that year's race, with several famous Norwegian personalities taking part in the fast-paced entertaining race. Aksel Lund Svindal, the first Norwegian male alpine ski racer to win gold in four consecutive world championships, was one of the participants (see picture).

13.3 Conclusions

Climate policies are expected to be a driver for a major shift in transportation policies in cities towards more sustainable solutions. There is a growing understanding that a wider spectrum of measures is needed to reduce the car mode share. In this enlarged toolkit, we believe there is room for mobility management measures, either applied separately or preferably linked to push measures like congestion charging and parking restrictions.

There is also a need to promote more use of travel plans for businesses, but also for public authorities. So far MM and land use planning have not been very developed in Norway. The linking of mobility plans to plans for new buildings and usage changes in Stavanger is however a very positive example. In the future, the holistic urban mobility agreements can be a major break for MM in land use planning.

With the help of EPOMM, NPRA hopes to gain recognition and adoption of Mobility Management as an important element of sustainable transport policies and practices.

The widespread use of tolling in Norwegian cities generates substantial revenues that can be used for transportation purposes. So it is more a question of changes in priorities than lack of resources that will hinder the adoption of mobility management into transportation planning and policies.

Conclusions →

14 Conclusions

Overall conclusion

The demand for mobility management in Europe is growing, especially in those cities and regions that are aware of the disadvantages associated with car use. Mobility management is also gaining a stronger position in European and national policy, which means a shift from sectoral approaches to more structured and integrated initiatives. European policy places special emphasis on travelling in and between urban agglomerations, but the urban hinterland and peripheral regions should not be neglected. Specifically, change is needed in cities and regions where cars dominate and the situation for public transport, cycling and walking is deteriorating – areas where citizens are losing free choice in mobility options. Mobility Management will help to bring about this change: enabling free and fair choices of mobiity services, improving the environment and quality of life for our citizens, but also making transport more efficient while providing new opportunities for the economy. Smart travel will contribute to a new mobility culture in cities. In addition to "hard" measures, such as cleaner transport technologies and better infrastructure for cycling, walking and public transport and its networks, new innovative mobility packages, sharing systems and intermodal services are necessary, as well as raising awareness and behaviour change.

EPOMM's *Mobility Management Monitors* for 25 countries reveal that the more integrated transport policies are, the more successful they will be. To achieve sustainable mobility, clever packages of incentives, awareness raising, regulations and fiscal measures are needed, combined with infrastructure, technology and mobility management. And last but not least, creating alliances, sharing and transferring good practices, and providing supportive frameworks for mobility management – at the national and European level – are key factors needed for success.

Lesson 1: Government spurs on smart travel

Should governments put effort into mobility management? The answer is clearly yes. Experience in many countries shows that governments properly enhance smarter choices by providing the framework, as shown in the following examples:

- Business improvement districts in the United Kingdom, which promote financing through private parties
- National support programmes to promote mobility management are important push factors, such as the successful klima:aktiv mobil programme in Austria, offering national government support to cities and regions, companies, tourism, schools and youth for environmentally friendly mobility projects
- Maximum parking standards in Switzerland
- Discussions that encourage transport companies to market themselves
- Mobility covenant in Flanders for cooperation with public transport
- The *versement transport*, which French regions have set up to finance public transport and other sustainable travel
- Fiscal measures in Switzerland
- Policy for sustainable municipal mobility in France

Stimulation programmes are a good start, but we must also maintain the hard edge: anchor sustainable mobility in spatial planning, tax laws and parking plans.

Lesson 2: Do it for the city and its citizens

Mobility management is highly positive for cities and regions. Mobility management contributes to a number of goals, including:

- Attractive, sustainable and liveable cities with space for walking, bicycling and green areas (see Freiburg, Lyon, Nottingham and Zurich)
- Healthy citizens who are not overweight thanks to active transport means, such as walking and bicycling (see Cycling on Prescription, Walking on Wednesday and Walking School Bus in the United Kingdom, Masterplan for Cycling in Austria)
- Climate change reduction and lower energy consumption; in many communities, traffic is the largest source of CO_2 emissions (see EnergieSchweiz in Switzerland, HM Skåne in Sweden, klima:aktiv mobil programme in Austria)
- Preventing congestion on urban roads and on highways (see Avoiding Peak Traffic in the Netherlands)
- A sustainable economy with green jobs (see klima:aktiv mobil programme in Austria). Municipalities and urban areas can embed mobility management in their mobility policy, as well as in their spatial planning, health, environmental, and economic policies. They can formulate multi-year goals for sustainable mobility in their cities and release budgets for structural measures.

Lesson 3: Serve target groups

In order to reach these goals, mobility management serves several target groups:

- Staff of large employers and medium and small companies (see klima:aktiv mobil in Austria)
- Students (see school travel planning, Octopus plan and Sustainable to School in Belgium, and school travel plans in the United Kingdom)
- (New) residents (see Gscheid Mobil in Munich)
- The elderly (see Gscheid Mobil in Munich)
- Tourists and tourist operators (see SchweizMobil in Switzerland and klima:aktiv mobil in Austria)
- Visitors to events (see mobility plan for events in Belgium, greening events in Austria).

The strategy for each target group can differ, from not promoting just one single mode, to providing the best possible service for target groups with various solutions. It is important to learn more about the various target groups that should be influenced: what are their characteristics, motivations and resistance?

Lesson 4: Apply marketing to change behaviour

Structural campaigns for changing travel behaviour are still in their infancy. Such campaigns require professional marketing backed by serious budgets. In cooperation with service providers, government agencies, travel coordination centres, transport companies, and tourist offices, mobility centres should be set up where (new) residents and visitors can get information and tickets and buy (trial) subscriptions for all forms of sustainable travel. Activities and campaigns must be conducted in a truly

professional manner (see national klima:aktiv mobil campaigns with annual focusses on cycling, ecodriving, e-mobility and recently energy saving in Austria and Lund in Sweden) in order to move target groups toward different travel behaviours, preferably with the help of ambassadors (or other high-profile 'shining examples') and the media. The actions taken can be simple: use small rewards to entice people to not use their cars for a few weeks for short trips, commuting or daily errands (see Belgium). Individualised marketing with personal information on sustainable mobility is an especially productive way to forge new paths (see Gscheid Mobil in Munich).

Lesson 5: Mobility requirements for construction projects

New car trips resulting from new developments should be prevented; for example, regional governments may impose demands on the provision of environmentally friendly accessibility by public transport, walking and cycling or car sharing of new projects for residents, employers and visitors. Examples include:

- Limiting the number of car trips and parking spots (see Planning and Policy Guidelines 13 in the United Kingdom and Sihlcity in Zurich)
- Minimum requirements on accessibility for bicycles and public transport (see Sihlcity in Zurich)
- Participation in financing higher frequency of public transport (see Sihlcity in Zurich)
- Set up of car-less or car-free residential zones (see Vauban in Freiburg).

In this way, property developers are made responsible for limiting car mobility. If these requirements prove too big a step for regional governments, they can also negotiate with project developers regarding accessibility and parking standards (see Aargaumobil in Switzerland).

Lesson 6: Create more alliances

Investment in new alliances with unexpected parties and concepts is extremely effective, as can be seen in the examples below:

- Companies: the business sector is interested in new ways of working and teleworking (see the Netherlands). Mobility management fits in very well with these new concepts.
- Schools: school travel plans usually require small investments but yield relatively high rewards
- Energy companies: not only can they inform their subscribers about insulation, they can also include information about mobility
- Healthcare insurers: they may finance bicycling or walking campaigns.

Creating alliances with the economic sector, companies, regions and cities, but also with NGOs, is a key pillar of the Austrian klima:aktiv mobil programme that has gained over 4,000 partners - more than 2,800 companies, 500 cities, 500 tourism operators and 200 schools and youth groups - implementing CO_2-reducing mobility projects, saving 540,000 tonnes of CO_2 per year so far.

Lesson 7: Get national governments involved

National governments can include mobility management in their national policies. EPOMM's *Mobility Management Monitors* reveal that mobility management is most developed in countries where the national governments have developed dedicated policies. This can be done with laws, (new financial) regulations and stimulation programmes (as for example in Austria). The federal government can also develop strategic alliances (see Lesson 6). National authorities can play an active role in ensuring that the extra trips stemming from new land developments result in good pathways from the outset; for example, the development of an area may not result in extra car traffic volumes on local highways (see Highway Agency and Shell Haven in the United Kingdom). The klima:aktiv mobil programme in Austria is a good example of how the national government can set up a target-oriented supportive framework at national level to stimulate and support climate friendly mobility management in companies, cities and regions, tourism, fleet operators, schools and youth groups.

Lesson 8: Make public transport better and simpler

Good public transport can play a key role in mobility management (see Germany, various French cities, Flanders, Vienna and Switzerland). Offering attractive subscription prices and making public transport simpler (see Switzerland, Vienna, Nottingham in the United Kingdom), will win new travellers. Cycling as well as car sharing are natural partners for public transport. Lofty ambitions can get the wheels in motion (see PTx2 in Sweden) and make it it more attractive for third parties to contribute funds for public transport.

Lesson 9: Make cycling, walking and public transport networks more convenient

There are many network connections (car sharing, bike racks at stations, public transport bicycles, Park & Ride), but often the overall responsibility is missing. The public transport authority therefore should hire a mobility manager, ensure multimodal travel information and signage at connection points (see SBB network manager in Switzerland), and stimulate the development of convenient phone apps, for example for easy multimodal navigation or simple access to car sharing services.

Lesson 10: Change the culture and make people aware

Promoting a "sustainable mobility culture" and making people aware of the part they play in it is a long-term issue. Culture change and awareness raising thrive on emotion, experience and interesting activities. Inspiring programmes include:
Mobility coaching (Gothenburg) and measures aimed at getting people over the hump in terms of changing modes of travel. In Austria, Germany and the Netherlands, younger people are developing a new mobility culture. Emotional marketing strengthens the development of such a mobility culture; for example, campaigns to make cycling popular, like Cycle Chic and Radlstar. Elderly people and immigrants also need extra support. In addition, this helps to make the car no longer the standard op-

tion or even to completely "rule it out" in travel cost regulations. If successful, these actions will no longer be considered "oddball behaviour" but rather reflect the spirit of the times. European Mobility Week is a good means of getting the general public interested in sustainable mobility.

Last but not least: Monitoring and Evaluation

There is much that can be learned from the experiences of other countries, specifically Austria, Belgium, the Netherlands, Sweden and the United Kingdom: giving projects a structured form, then following up and evaluating them. This will result in projects that respond better to "human factors" and will increase the success rate. All projects supported by klima:aktiv mobil in Austria have to quantify the CO_2 reduction effect as a precondition for getting public funding. More and more projects use the MaxEva tool on the EPOMM website (www.epomm.eu), which also includes the MaxSumo approach. This is mostly used in Sweden and shows to what extent travel behaviour change really happens. Proof of success is a compelling argument for continuation. By showing that mobility management is indeed cost-effective, the efforts will bear fruit.

Appendix 1: Lists

1. Mobility Management Measures

Category	Examples
Information	Travel information in advance and en route, information centres, web sites, apps
Promotion	Promotional campaigns, personal travel advice, target group-directed measures (for employers, the elderly, students, residents), individual marketing, trial cards, discount campaigns
Organization and coordination	Car sharing, carpooling services, demand-dependent travel, pre- and post-public transport (PT bicycles, train, taxi), transferring (Park & Ride, Bike & Ride), multimodal transport passes (Mobility Mixx, NS-Business Card)
education and training	Eco-driving, training of hotel and store personnel, bicycling or public transport courses for seniors, young people, immigrants
location-related measures	Mobility Management for employers, schools, events, shopping centres, recreational facilities, government agencies, hospitals or residential areas, bridges, tunnels, corridors (roadworks)
flexible in time and place	Teleworking, reducing the number of hospital visits, Peak Avoidance, other visiting hours (government agencies, banks, health care), flexible work hours, self-scheduling
supportive measures	Parking management, setting up (bicycle) racks for new offices and residences, financial measures, pay-to-drive, fee integration in public transport, combination tickets (event + public transport)

(Source: EPOMM, http://epomm.eu/index.php?id=2590 - Definition of Mobility Management in 15 languages)

2. In cities and regions with mobility management

- There are campaigns and promotional measures for walking, bicycling and public transport
- Availability of personal travel advice that helps reduce car use
- Employers may reimburse staff for public transport use to encourage less driving to work
- Car and bike sharing services can be found within walking distance of homes
- Schools have a mobility plan to allow children to walk to school safely
- Local mobility centres will have ideas for outings and leisure destinations which can be reached by public transport
- The government will apply mobility management within its own organisation
- The land use planning policy will provide incentives for project developers to restrict driving by employees and visitors.

(Source: EPOMM, http://epomm.eu/index.php?id=2590 - Definition of Mobility Management in 15 languages)

3. Countries with mobility management policies:

- Promote sustainable travel and reduce negative consequences of the car
- Have a vision of mobility management and how it contributes to goals for climate, health and flow
- Have a vision regarding the roles and responsibilities of government
- Decide how they will involve parties such as cities and regional authorities, companies, employers and employees, tourism operators, schools, youth groups, hospitals, the environment and energy sector, public transport authorities, housing and project developers
- Put mobility management on the agenda of the national government and the EU to develop EU-wide supportive frameworks to broadly stimulate mobility management
- Ensure that space planning policy contributes to more sustainable transport, less car use and shorter trips. This will make cities more liveable.
- Incorporate mobility management in building permit processes
- Have a taxation system that promotes public transport, bicycling, teleworking and smart mobility management
- Have country-wide campaigns to modify mobility behaviour
- Stimulate networking to exchange knowledge and experience
- Promote research and innovation for mobility management
- Embed mobility management into university education and provide mobility management training for persons working in mobility-related sectors.

(Source: EPOMM)

Appendix 2: Effects of projects

Municipal and regional mobility management					
Country	**State or region**	**Project**	**Goal/description**	**Effect**	**Economic performance**
D	Freiburg	Vauban	car-free living	Vauban is a popular city district	Residents save the cost of a parking space: € 18,000
D	Munich	municipal mobility plan	reduced car traffic and increased sustainable mobility	decrease in car traffic in inner city: 50% decrease in car traffic within the ring: 50%	unknown
F	Lyon	municipal mobility plan	liveable and attractive city	20% decrease in city car traffic since 2002	unknown
NL	The Hague	Avoiding peak traffic	rewarding employees when they don't drive to work during peak hours	21% less car trips during peak hours every day during the project	n/a
NL	Utrecht	MM during road works	reduce hindrance during road works	5,000 less cars during peak hours	n/a
S	Lund	LundaMaTs	sustainable mobility policy	2000-2008: - structural decrease in car use: 4% - 20 million fewer kilometres by car - bincrease in cycling and walking: 11% - reduction in CO_2 emissions: 4,400 tonnes - strong public support for smart travel	400,000 Euros per year for marketing
UK	Leeds	Carpool lane on A647	better regional accessibility	A647 corridor 1997-2002: increase in capacity from 1.3 to 1.43; 20% increase in bus riders	unknown
UK	London	Congestion Charge	less car traffic to inner city	21% decrease in car use to inner city	unknown
UK	London	Barclays Cycle Hire	promotion of bicycle use	1.4 million trips by 90,000 users after 3 months	£140 M for 6 years (including £25 M from sponsor Barclays Bank)

Stimulation programmes					
Country	**State or region**	**Project**	**Goal/description**	**Effect**	**Costs**
A	Country-wide	klima:aktiv mobil	lower greenhouse gas emissions, finding partners and promotion of green jobs	2007-2012: 4,000 project partners (2,800 companies, 500 cities, 500 tourism operators, 200 schools and youth groups) reduced 540,000 tonnes CO_2 per year; 4,600 jobs gained, 950 eco-driving trainers educated and certified	Public financial support for klima:aktiv mobil projects 2007-2012: €56 M, induced total investment €412 M
F	Grenoble	regional mobility management	fewer car trips in residential area	out of 300 mobility plans for employers, 150 were implemented; 4,000 fewer car trips per day in 2004-2008 period (10% reduction per company)	unknown
NL	Arnhem-Nijmegen	Pedelec promotion	reducing congestion by encouraging employees to travel to work by pedelec	65% decrease in car trips amongst participants	€385,000

Mobility management by employers					
Country	**State or region**	**Project**	**Goal/description**	**Effect**	**Costs**
B	Various employers	third-party payers for public transport	promotion of commuting by public transport	increase in train use from 8% to 18% at employers who pay a share of PT	unknown
B	Various employers	providing information on PT to employees	promotion of commuting by public transport	increase in train use from 9% to 15% at employers who pay a share of PT	unknown
B	Various employers	carpooling	promotion of carpools for commuting	Increase in share of carpoolers from 3% to 7% among employers who promote it	unknown
B	Various employers	compensation for bicycling	promoting of bicycling for commuting	share of bicycling is 3% higher at companies that promote bicycle use	unknown
B	Various employers	reduction of parking spaces at companies	discouraging car use	reduction in car use from 70% to 64%; increase in train use from 7% to 11%	unknown
F	Grenoble	mobility management at STM Microelectronics	fewer car trips for commuting	between 2004 and 2008 the car share decreased from 80% to 54% among the 2,400 employees.	unknown
NL	Yacht company	Mobility budgets	reduce mobility costs and emissions	7.5 % of the employees chose not to use a company car. 15% use the mobility budget	n/a
UK	London	Heathrow	less car use and less CO2	car share decreased from 80% to 62% between 1992 and 2010	unknown
UK	London	Parking cash	employers turn over parking spaces	20% decrease in car use	unknown

Mobility management by schools					
Country	**State or region**	**Project**	**Goal/description**	**Effect**	**Costs**
B	Geel and Mol	school mobility plan	safer travel and fewer drop-off/ pick-up trips by car	decrease in number of students transported by car from 48% to 37%	€ 48,000
D	Munich	walking bus	encouragement of children walking to school	20% of participating children were previously transported by car	unknown
S	Umeå	Smarta resor	less car use for short trips in primary schools	reduction of car use for short trips from 60% to 30%	unknown
UK	Various locations	Walk on Wednesday	promotion of walking to school	300,000 children at 1,900 schools participated since 1995	£ 2.32 per child per year

Marketing & communication (multimodal)					
Country	**State or region**	**Project**	**Goal/description**	**Effect**	**Costs**
D	Munich	dialogue marketing new residents	reduction in car use	Car -3.3% PT +7.6% Cycling -5.5% CO2 -12 tonnes/year	€ 175,000
D	Munich	dialogue marketing current residents	promoting sustainable travel behaviour	car -7% / walking +4% / bus +3% CO_2 savings 68.5 tonnes/year	unknown
S	Gothenburg	Mobility coaching	teaching different travel behaviour	August 2006 - February 2007: Car: from 62% to 28% PT: from 11% to 20% bicycle: from 16% to 26% walking: from 9% to 26% 6 of 68 participants got rid of their cars multiplier-effect via media	unknown
S	Lund	dialogue marketing	greater awareness and motivation to alter travel behaviour	35% less car use vs 10% in control group	unknown
UK	Darlington, Worcester & Peterborough	Sustainable travel demonstration towns		car -9% walking +13% bicycling +44% bus +18% peak: -6% home-to-school travel CO2: -50 kg/resident Safer traffic and better air quality, health, quality of life and equal opportunities for everyone. No need for increased car infrastructure. More support for anti-car policies.	£ 10 million over 3 years for 3 cities: £ 1.1 million per year per city
UK	Nottingham	The Big Wheel Campaign	increased regional accessibility	change in trend: PT increasing again (10% between 2000 and 2008); economy flourishing: mobility policy is a success	£ 270,000 year for marketing
Misc.	100 cities worldwide	dialogue marketing	Breaking through habitual behaviour by informing residents	decrease in car use: 6% - 14% increase in walking, bicycling, PT: 4% - 32%	cost-benefit ratio 1:30

Marketing and communications (public transport)					
Country	**State or region**	**Project**	**Goal/description**	**Effect**	**Costs**
A	Graz	Mobility information centre	better information and services for PT, pre- and post-PT transport and car sharing	5,500 client contacts per month (2006)	extra income for PTA companies: €180,000 (2003)
D	Frankfurt am Main	PT marketing	promotion of PT use	growth in travellers by 13% (2001-2009)	unknown
D	Hannover	Hannovermobil	extra clients for public transport	Of the 1,000 participants, 33% got rid of their cars (or delayed purchase)	extra profit for PT companies: € 65,000/year
S	Gothenburg	trial programme of PT for 50,000 employees	growth of public transport	3% growth in PT use	unknown

Marketing and communications (walking and cycling)					
Country	**State or region**	**Project**	**Goal/description**	**Effect**	**Costs**
B	Flanders	To the store with bells ringing	Promotion of bicycling to the store	2011 programme (5 weeks): 88,000 participants in 208 communities 15,053 participating stores 1 million bicycle trips CO_2 reduction: 4.5 tonnes	unknown
B	Flanders	My short trips	Promotion of walking and bicycling on short trips	2011 programme (4 weeks): 136 groups with 1,368 participants in 36 municipalities; savings: 18,182 car trips, 143,394 kilometres by car, 5.7 kg fine particulates, 23.5 tonnes CO_2, 7.1 million kilocalories burned	Savings: €45,886 private costs, €65,961 social costs
B	Flanders	I Kyoto	Increasing awareness of sustainable mobility in commuting	2010: 7,500 participants in 233 companies; 25% tried not using their cars; 4% (185 participants) still were not using their car 1 year later	unknown
D	Munich	bicycle campaign Radlstar Munich	development of bicycle culture (share from 14% to 17%)	great publicity; much positive media attention; campaign increases trend; share of bicycles in 2011 is 17%	€ 1 million/year
D	10 German cities	Kopf an: Motor aus (brain on: engine off)	promotion of bicycle use	123 million fewer car kilometres and 25,000 tonnes less CO_2 emissions	€ 2 million
S	Malmö	No ridiculous car trips	Less car use for short trips	12,000 people use the car less frequently for short trips	€ 100,000

Regional development and financing					
Country	**State or region**	**Project**	**Goal/description**	**Effect**	**Costs**
CH	Zurich	Sihlcity	promotion of sustainable mobility in space planning	Sihlcity functions well; 30% of visitors arrive by car: 3,600 cars per day (maximum is 8,800); bicycle delivery service: 50 trips per day.	developer financing facilities +2 year use of bus and tram lines
UK	Cambridge	Addenbrooke's Hospital	decrease in solo car use: from 50% in 2000 to 45% in 2005	solo car use in 2005: 38%	unknown

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Websites

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www.aeneas-project.eu	Mobility management for the elderly
www.allinx.eu	Network for mobility managers
www.civitas-initiative.org	Stimulation project and exchange platform for clean mobility in cities
www.eltis.org	News and practical examples on municipal mobility
www.epomm.eu www.epomm.eu/maxeva www.epomm.eu/tems	International mobility management, including knowledge bank, MAX tools and Mobility Management Monitors

www.mobilityplans.eu	Sustainable Urban Mobility Plans
www.momo-cs.eu	EU project on car sharing
www.trendy-travel.eu	Practical examples of emotional marketing
www.klimaaktivmobil.at	All information about the national klimaaktivmobil programme in Austria
www.maps.klimaaktiv.at	Virtual map with access to all partners of klima:aktiv mobil
www.mobilitaetsmanagement.at	All about company mobility management in Austria

Appendix 4: Experts consulted

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