

mobile2020

# Cycling in liveable cities



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# IMPRINT

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## Table of contents

Chapter 1: Foreword	04
Chapter 2: Introduction	05
Chapter 3: How to start	07
Chapter 4: Offering services for cycling	11
Chapter 5: Bike promotion	13
Chapter 6: Sources for further reading	18



## Chapter 1: Foreword

With this brochure “Cycling in liveable cities” we want to provide some help and inspiration to professionals who deal with cycling at municipalities: urban planners, committee and council members, but also to other interested parties who think about cycling as a daily mode of transportation.

The basis of our explanation is that the decision of people to use the bicycle as an everyday means of transport is not just influenced by infrastructure alone. Therefore we reflect on importance of cycling for individual use and benefits for the city, and integration of cycling into urban planning. To encourage the practical implementation activities for cycling at municipalities we discuss briefly on how to start, on offering services for cycling and on bike promotion activities. For further reading we

Throughout the pages of this brochure we will guide you to sources for further reading on best practice examples for implementation. In the printed inlet pages you will find information on relevant stakeholder organizations to promote cycling in your country.

This brochure is prepared within the frame of the IEE project mobile2020.

We hope you find it useful!

## Chapter 2: Introduction

### Why is cycling important?

A liveable community is one that provides many travel options for residents and visitors: pedestrians, cyclists and public transport are given as much priority within the street environment as are the motor vehicle users. In practice, a car does not fulfil all our needs to move around. Even where motor traffic flows are acceptable in terms of throughput, private motor vehicle use is still something to be managed and minimised in the interest of air quality, energy conservation, accessibility and the quality of stay in settlements.

By combining measures to promote walking, cycling and public transport, towns can succeed in lowering the car use rate. If the car users are offered attractive options especially for their short distance travels, they can experience a lot of advantages for themselves and for their community. Short distance travels up to five kilometres suit much better to walking and cycling than to car usage. Key advantages are listed here:

Cycling can be an effective route to improve traffic safety and as an active mode of transport it offers an effective antidote for the harmful health effects of a sedentary lifestyle

- Adults (aged 18-65 years) should get at least 150 minutes of moderate-intensity exercise per week. Walking or cycling as a means of transport in this context is seen as a moderate physical activity, suitable for achieving recommended activity levels<sup>1</sup>.
- Cycling and walking are essential for the development of orientation and motoric skills as well as self-esteem of children and teenagers.
- Costs for parking space of a car are considerably higher compared to a bike parking.
- Cycling helps to create space: 7-9 bikes could fit on 1 car parking space.
- Cycling and public transport are friends: it can be easy and convenient to combine the use of both modes.

Whether you cycle or walk for whole journey, or simply part of it, you know it will be a health benefit as a result!





### What are the benefits for your city /town?

Higher bicycle use in municipalities can offer advantages that are mainly linked to the quality of life, the quality of environment and to long-term savings made through the<sup>2</sup> :

- Falling number of cars in circulation, as more inhabitants are choosing the bicycle as mode of transport to go to work.
- Increased appeal of public transport for commuters if a combination of public transport and bicycle is made available.
- General improvement to the quality of life in towns, e.g., less air pollution, noise, better public places, while accommodation (particularly for families) becomes more attractive.
- Space savings - on the road and in parking areas, and hence a reduction in investments in roadways, and the possibility of making a different use of public space
- Reduced traffic will increase attractiveness of town centres where the public space is made available for accommodation and commerce, culture and leisure
- Less severe deterioration of historical monuments and reduced maintenance costs, e.g., less frequent cleaning.
- Reduction in investments and costs for the public authorities (car parks, maintenance, new infrastructures, etc.).

### How cycling is integrated into urban planning?

Successful cycling policies are developed as part of an integrated transport policy for all modes of transport and should be reinforced by other policies - land-use, urban development, and even socio-economic policies, as these policies influence each other.

Each municipality has a different approach to cycling - some implement an independent bicycle policy, while others integrate bicycle policy into other planning documents of e.g., general development plans, transport and traffic policy, etc. A city with a strong bicycle culture usually has well-developed infrastructure, extensive facilities supporting a large amount of ordinary cyclists in the urban landscape. However, it is important to emphasize that communication towards behavioural change for achieving a more frequent bicycle use in urban transport is not subordinated to cycling infrastructure. Infrastructure and services as well as image and prestige of cycling in a city are an expression of a specific mobility culture.

The decision of people to use the bicycle as an everyday means of transport is not just influenced by infrastructure alone!

The Figure 1 shows that cycling mobility is a system containing a whole set of different elements that allow an adequate use of the bicycle as a mode of everyday transport.

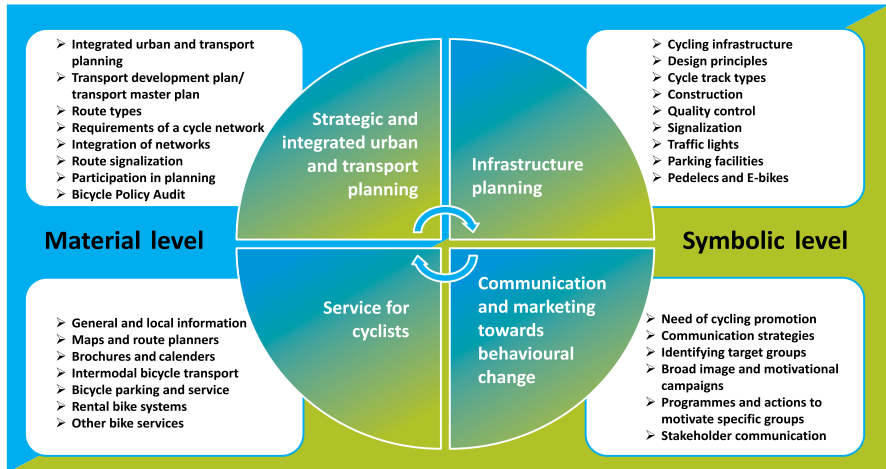


Fig. 1: Cycling as a system containing material level and symbolic level considerations (Source: mobile 2020: Handbook on cycling inclusive planning and promotion (2012))

Cities well-known for their advanced cycling culture have been investing in utility cycling for decades and now score the highest rates of urban cyclists.

## Chapter 3: How to start

Campaigns and investments in cycling infrastructure are inextricably linked and frequently complement each other. However, before any investments in cycling infrastructure are made, it is crucial to analyse the situation in your city in order to make the best use of resources and create a suitable network. A small, interconnected and functional network of cycling lanes and paths promotes urban cycling, and presents an open invitation to those who don't cycle at all or only occasionally. The goal is to focus on areas with the highest demand for transport services but, at the same time, avoiding the fragmentation and discontinuity in your cycling network.

Any initial decisions related to the cycling network are tied to the basic typology of the network's use. A good place to start is an area with lots of inner city traffic. This could be



an area with one or several schools which need to be connected with a near-by residential area or an industrial or commercial area in the proximity of a neighborhood. Another option to start would be a traffic node such as a major train or a bus station which is used for the daily commutes.

The experience from across Europe highlights the correlation between having safe infrastructure in place and the amount of cycle traffic. In Copenhagen, the construction of cycle tracks has resulted in an increase in cycle traffic of 18-20%<sup>3</sup> on these roads. The infrastructure, programs, and policies needed to increase walking and cycling are well known and tested, with decades of successful experience in many European cities. One key lesson is that no single strategy is sufficient. As shown by a recent international review of the literature, communities must implement a fully integrated package of measures<sup>4</sup>. Campaigns are an inherent part of any effort and in combination with infrastructure construction can be a powerful and cycling encouraging tool.

Higher levels of bicycle infrastructure are positively and significantly correlated with higher rates of bicycle commuting<sup>5</sup>.

### Cycling to school

In many countries, bicycles aren't seen as a full-fledged means of getting to and from school. This is so despite the fact that distances between home and school are often less than 3 km, about 10 minutes on a bicycle for a child<sup>6</sup>. In some communities, cycling to school is promoted in campaigns but otherwise receives little or no attention. Typically, children bike to school rarely and often even less after puberty. Safety concerns are frequently cited as the reason although this issue can be tackled by making safe cycling connections between school(s) and nearby residential areas. In most CEE communities, however, the infrastructure is lacking or missing entirely. The following examples demonstrate the existing potential and show that when conditions are right, students will cycle to school.

### Safer Road to School in Bologna, Italy

The Safer Road to School project aimed to develop sustainable alternatives to reduce traffic and pollution around schools, hence to enhance safety and encourage cycling to school. The city of Bologna decided to make bike paths safer by separating them from car traffic and

3 Jensen, S.U., Rosenkilde, C. & Jensen, N., 2007. Road safety and perceived risk of cycle facilities in Copenhagen. Presentation to AGM of European Cyclists Federation, pp.1-9.

4 Pucher, J. & Buehler, R., 2010. Walking and Cycling for Healthy Cities. Built Environment, 36(4), pp.391-414.

5 Dill, J. & Carr, T., 2003. Bicycle Commuting and Facilities in Major U.S. Cities: If You Build Them, Commuters Will Use Them. Board, National Research Council, Washington, DC, 1828(1), pp.116-123.

6 Baltic Sea Cycling - Inspiration book.





improve safety where children are crossing roads<sup>7</sup>. The project set a goal of realizing safe pedestrian crossings, cycle lanes, roundabouts, intermediate traffic islands and the instalment of traffic lights. For more information please look up the Safer Road to School project at [www.civitas-initiative.org](http://www.civitas-initiative.org).

## How Kids Discover the World by Bike - Projects at German Schools

As part of the German Road-Safety network a lot of attention has been devoted to cycling to schools. The all-around approach includes cooperation between the administration, police, teachers, parents and non-profits to reduce the risk of accidents to and from school by bike. Several concepts have been introduced, including bicycle-pooling, cyclist training and map production. The initiative contributes significantly to the current network of 30+ cities. For more information please see:

[http://eltis.org/index.php?id=13&study\\_id=2509](http://eltis.org/index.php?id=13&study_id=2509).

## Implementing Mobility Measures at Schools in Austria

In Austria, a pilot project Schoolway.net aimed to implement mobility management measures at schools in order to encourage children, parents and teachers to travel to school by bike and increase self-reliance in traffic. Sixteen schools participated in an awareness campaign and school mobility management plans. Cumulatively, the project reached almost 85,000 pupils and 5,000 teachers. For more information please see:

[http://www.eltis.org/index.php?id=13&study\\_id=1341](http://www.eltis.org/index.php?id=13&study_id=1341).

## Cycling to work

Many cities are paralyzed with rush-hour motor traffic in the mornings and evenings. As a result, our cities are noisy and polluted and cardrivers as well as other traffic participants suffer from additional stress endemic to the overwhelming traffic. What makes the traffic situation even worse is the fact that most cars carry three empty seats. Such a transport

7 The "Safer Road to School" project. <[http://www.civitas-initiative.org/index.php?id=79&sel\\_menu=16&measure\\_id=701&back\\_id=30](http://www.civitas-initiative.org/index.php?id=79&sel_menu=16&measure_id=701&back_id=30)>



scheme is not just inefficient; it is detrimental to our well-being. Cycling, on the other hand, requires much less space and can help towns avoid traffic jams or reduce the amount of land used for streets.

Cycling to work, together with cycling to school, are focus priorities. Getting workers to change their mobility behavior does not necessarily require big financial incentives: small stimuli are more realistic to apply and these can have a positive impact and in many cases a larger effect - e.g. safe parking at work places, small services as lockers or a room for cycling wear in the cold season. Cycling to work has become a widespread practice in many countries and cities across Europe. It is practiced travel behavior, and municipalities, and NGOs launch campaigns which shall promote and increase cycling to work even more as highlighted in the examples below.

### **Bike appointments in Linz, Austria**

The project intended to encourage the employees of the local authority of the city of Linz to increase their use of bicycles when travelling to an appointment in the city. During the pilot project several departments (ca.400 employees) of the local authority had bicycles at their



disposal, as well as access to showers and lockers in the parking garage of City Hall. Each office had three bicycles which were all parked in a newly constructed bicycle parking lot created by converting two parking spots for cars into parking spots for bikes. The initiative was successful and there were plans made to convert a greater number of car parking spaces into the new bicycle storage facility available for all the employees (around 2,500) of the administration. For more information please see:

[http://www.eltis.org/index.php?id=13&study\\_id=1416](http://www.eltis.org/index.php?id=13&study_id=1416).

### **Campaign “Cycle to Work”**

After many years as a staple of cycling promotion in the Western Europe, Cycle to Work is making inroads into the CEE region (the year 2012 marked a second anniversary of the campaign in the Czech Republic). The purpose of the campaign is to motivate companies and employees to support responsible mobility so that they leave their cars at home and start commuting to work by bicycle. Employees usually compete in small teams in order to maximize the

distance they have cycled over a period of time. In some of the front-running countries, such as Denmark, the campaign involves two percent of the population. In the Czech Republic, the organizers offer bike consultancy and professional assistance (e.g. infrastructure building, incentive programs, etc.) to the participating companies free of charge.

## Feeder cycling

Feeder cycling refers to cycling being a component of so called intermodal transport. Promoting intermodality means making it as easy as possible to use more than one mode of transport during a single journey<sup>8</sup>. Feeder cycling connects daily use of bicycle with other forms of public transport. It therefore supports both cycling to school and work but also all other activities like shopping, leisure etc. In general, the concept of feeder cycling is likely to be used on longer distances, i.e. travelling from city to city or, in a large metro area, from a suburb to the city center. Initiatives that promote intermodality include bike & ride or ride & bike, which combine the use of a bicycle with public transport during a journey chain. A key prerequisite is good integration of cycling infrastructure into the rest of the transport infrastructure. Only then can feeder cycling become an innovative and effective form of transport.

## Looking for the optimal mix

Treated separately, both, cycling and the public transport are suboptimal means of transport due to their inherent limitations. Only if their strengths are combined, a perfect transport mix is formed able to out-compete individual motorized traffic. Having biking fully incorporated in the public transport scheme is no longer an exception. Many countries of Western Europe spearheaded the pursuit of intermodality, long time ago. Combined, cycling and public transport allow for door to door travelling as well as travelling over great distances. Nevertheless, such combination can only be functional if sufficient parking facilities are provided. If successfully implemented, the provisions will result in less congestion, noise and air pollution and will increase the share of cycling, which further has a host of benefits. Challenges should be met by improving and redesigning public transport routes so that the infrastructure network become much more accessible and interconnected with trains, buses and park & ride stations.

Whether it is infrastructure investment or a campaign designed to attract more cyclists, multimodality should be the underlying concept of any cycling development. Integration of cyclists in the present transport schemes and curbing the endless intrusion of motorized traffic will eventually lead to a more effective, healthier and enjoyable travelling and commuting for everyone.

8 European Cyclists' Federation < <http://www.ecf.com/cycling-tourism/intermodality-bike-and-train-tram-tube-bus-ferry-plane/>>.



## Chapter 4: Offering services for cycling

Promoting cycling as an everyday mode of transport in cities and towns means to have in mind service measures for cyclists as well. Services for cyclists include all kind of infrastructural and non-infrastructural features which:

- Help to make everyday cycling easier and more convenient
- Give cyclists the feeling of being a fully accepted part of the transport system

Service is an essential part when considering cycling as a systemic approach!

Service measures can cover a wide range, like information on brochures, and maps, public transport integration, bike sharing schemes, bicycle parking, but sometimes these can be small and smart little things, like do-it-yourself, internet and mobile services.

### Public bike sharing systems

Bike sharing systems can be successfully implemented in cities to expand and integrate cycling into multimodal transportation schemes. However, there is a huge variety of different bike sharing systems with different technical and institutional backgrounds. For cities, the bike sharing system can serve as an initial boost for cycling as a daily transport option (including an option of intermodality) which creates a demand for additional cycling infrastructure



investments. For users, the bike sharing can provide an opportunity to try out the cycling as the 24/7 service of public bikes provide advantages, e.g., spatial flexibility, easy access to the bike and no necessity for personal maintenance and repair work.

In recent years bike sharing has been successfully implemented in some of the eastern European cities. You can read more on examples of bike sharing systems in: mobile 2020: Handbook on cycling inclusive planning and promotion (2012).

Slogan: Bike sharing systems can be a useful addition to existing means of transport in cities, but introduction of such system will always be suited to local conditions of a city!

## **Bike parking services**

Cyclists have to leave their bicycle somewhere when they arrive at their destination or use another mode of transport. Bicycle parking facilities are needed at various locations e.g. at home, work places, universities and schools), on the street, at public transport stations.

**Providing of convenient bike parking services becomes a very important issue to encourage cycling at municipalities**

By planning of cycling systems in the planning departments at municipalities it is important to take into consideration that parking services may comprise more than the simple provision of an adequate bicycle parking infrastructure. It is also essential to know that parking service sometimes only needs little or no infrastructural measures and that accompanying services are important as well. You can read more on bicycle parking services in: mobile 2020: Handbook on cycling inclusive planning and promotion (2012).

## **Chapter 5: Bike promotion**

### **Instruments for municipalities**

On top of the rational - informative and convincing arguments in favour of cycling, marketing actions are increasingly used for promotion of cycling because infrastructure alone does not bring the desired increase in cycling levels at municipalities. Today marketing actions are instruments in the toolbox of cycling promotion. Bike actions can emotionalize cycling. Actions can be regarded as a planning challenge and part of a new concept of administration.

You can read more on experience with marketing actions to promote cycling in: [www.nrvp.de/cye](http://www.nrvp.de/cye) , S-7/2012.

### **Municipal cycling campaigns**

Campaigns may be an effective instrument to promote cycling. Such instrument is used to great advantage by the local planning authorities, associations and businesses to modify the behaviour and attitudes of selected target groups in favour of cycling. Examples of successful campaigns are found elsewhere. Here we present experience from Denmark on ways in which campaigns have successfully affected behaviour and attitudes<sup>9</sup>:



Active engagement	Knowledge alone is not enough; participants have to get out there and bike! Experience shows that longer time is needed to get people engaged for cycling.
Active involvement	A campaign need to offer something the participants want, and campaigns have to show that there is a choice worth considering.
Relevance	The target audience `s needs, situation and wishes need to be identified in advance if the campaign is to be experienced as relevant. Generally speaking, the more homogeneous the target group, the more effective the communication. If you aim at everyone, you hit no one.
Immediacy and ownership	The target audience has to feel that their immediate concerns are addressed and it is their campaign. Many communities successfully incorporate local activities into national campaigns.
Role models	The role model effect can be used to advantage, i.e., actively involving people who can serve as an example to others due to their personality, their work or their social status.
Competition	Everyone loves to win! Competition is often the bait needed to get people to join a campaign or activity. Prizes are generally an extremely motivating factor. The prize need not necessarily be large and expensive: the lure is in the competition itself. The prizes, of course, have to be attractive to the target audience and have a clear bearing on the campaign motivating message.

### **Institutionalizing and promoting cycling at municipality**

There are stakeholders in each country who can contribute to promote and develop cycling. Institutionalizing a pro-cycling policy will involve cooperation of several sectors of the administration. The ideal situation would be for the political authority to decide to introduce a policy in favour of cycling, to set aside a budget for this policy, to organize a professionally skilled team to carry out practical measures and to ensure that selection criteria which promote cycling are applied at all levels of the administration<sup>10</sup>. Even if the ideal situation and conditions for promoting of cycling are not possible, however, it is still possible to take into account cyclists in traffic matters of a municipality.

Institutionalizing and promoting cycling at municipality can take different forms and models: from less formal structures to developing of organized networks. Irrespective of the selected form and model, it is important to identify stakeholders who can be actively involved in this process and to create networks for cooperation and collaboration.

To help you, we are presenting information on relevant stakeholder organizations to promote cycling in your country with this brochure and in electronic format: [www.mobile2020.eu](http://www.mobile2020.eu)

## Cycling coordinator

One of the ways for promotion of cycling at municipality is possible through instrument like the Cycling coordinator. The profession of the Cycling coordinator helps to bring together all issues related to cycling through the task to include the cycling related issues in planning processes and to disseminate the cycling concept. At the same time the Cycling coordinator is also a contact person for inhabitants to cycling related issues and thus people have the real chance to quickly achieve changes within the local cycling system. Here we present an example from Germany on job description and responsibilities of a Cycling coordinator:

- Conducts public outreach activities like cycling campaigns and strengthens relationship with City and State Governments as well as with individual businesses;
- Represent cyclists interests in cities;
- Create new ideas or concepts for environment, air quality and economic development issues related to cycling;
- Support in the fields of education, safety and security of cyclists and other road users;
- Support to increase the number of people who walk or ride bicycles;
- Promote the co-benefits of cycling for the urban transport system;
- Develop print and media information providing important news and information for pedestrians and cyclists;
- Plan and promote cycling related events, conferences and workshops;
- Propose and design bike routes, bike lanes and bike paths;
- Plan for repairing damaged roads and sidewalks, creating sites for parking bicycles;
- Suggest regulations or traffic rules, such as speed limits or new stop signs (in order to ensure the safety of pedestrians and cyclists);
- Act as a link between city and state lawmakers and to propose necessary legislation that will support the needs of pedestrians and cyclists and the goals of the cycling programme.

A Cycling coordinator can ensure that even with small budgets and small measures the interests in cycling continue to gain popularity and the needs of cyclists are taken into account in all transport/ mobility related projects in a city.



## Lobby for cycling

If a city is very motivated to promote cycling, it is possible to voluntarily take up some obligations and thus lobby for a culture shift towards cycling. There are several strong international organizations and networks inviting municipalities to act. Here we present an example of the Charter of Brussels: <http://www.ecf.com/manifesto/charter-of-brussels/>

Undersigned cities commit themselves:

- To set a target of at least 15% for the share of cycling in the modal split of trips for the year 2020 and of further growth if this target already is achieved;
- To set a target of -50% for cyclists running the risk of having a fatal accident for the year 2020;
- To work on a bicycle parking and “anti- bicycle theft policy”;
- To participate in and to set up projects to increase cycling to school and to work;
- To contribute to more sustainable tourism by investing in measures to improve and to increase bicycle tourism;
- To cooperate closely with the bicycle user organizations, the bicycle retailers organizations and the bicycle industry organizations and other stakeholders as the police, consultants and expertize centers, architects and builders of infrastructure to achieve the targets, and call upon all other European cities to follow our example.

## Facilitating a cycling culture

Finding and implementing cycling policies to help municipalities to build-up or improve a culture of cycling is a challenging task. Several international projects have dealt with this issue and have elaborated and presented good practice examples and recommendations for local level to act. You can read more on international experience in mobile 2020: Handbook on cycling inclusive planning and promotion (2012).

For your inspiration here we present some tips for facilitating a cycling culture<sup>11</sup>:

- Don't just focus on single categories of mobility; in order to determine the use of public space and potential strategies for change it is important to analyse the behaviours of all different modes.
- Involve as many stakeholders as possible, and tell them what you want to do and why.
- Normalize cycling at the planning level by including it in existing processes.



- Cycling is local and requires a local approach. Borrowing ideas from other cities is great, but be sure to consider your own local context and how you may need to adapt solutions to your needs.
- Cities need to address conflicts between pedestrians and cyclists with legible shared space design and information campaigns.

## Chapter 6: Sources for further reading

Numerous information sources are available to share experience and knowledge and to help you in developing of a cycling culture at your municipality. Here we present some sources where you will find a lot of material for further reading:

- An international project mobile 2020 is implemented in 11 CEEC countries to promote more biking in small and medium sized towns  
Mobile 2020 project website: [www.mobile2020.eu](http://www.mobile2020.eu)
- Project source: Handbook on cycling inclusive planning and promotion (2012) available at website: [www.mobile2020.eu](http://www.mobile2020.eu)
- The urban mobility portal ELTIS facilitates the exchange of information, knowledge and experiences in the field of urban mobility in Europe. Created more than 10 years ago, ELTIS is now Europe's main portal on urban mobility. Portal: [www.eltis.org](http://www.eltis.org)
- The European Cyclists Federation (ECF) is the umbrella federation of the national cyclists associations in Europe. ECF website: [www.ecf.com](http://www.ecf.com)

