

MOVILIZATION, A TOOLKIT OF MEASURES TO IMPROVE CYCLING IN  
EUROPEAN AND LATIN AMERICAN CITIES



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## ABSTRACT

MOVILIZATION, towards accessible cities, is a program subsidized by the European Commission in order to implement cycling promotion measures in European and Latin American cities. It is two-year program with a budget of € 1.100.000.

Experiences of the project partners in a previous project "Integration of cycling in the traffic engineering of Latin American and European medium sized cities" (see [www.ubalcyclinginfo.org](http://www.ubalcyclinginfo.org)) on which MOVILIZATION is based, can be summarized twofold: the city studies executed in the previous project have proven that in many cities cycling can substantially contribute in developing a sustainable transport system. Cycling not being the solution but as part of the solution, was the meaning of many city representatives.

Also urban planners and architects expressed their need to obtain more tools and knowledge for implementing campaign materials and measures as to improve cycling in their cities. Finance for infrastructure was seen less important than education programs to improve safety for cyclists. En general the need for a kit of tools to implement in campaigns was asked for in several occasions.

It was recognized by project members that cycling has a huge potential in most of the cities but also they had to admit that constraints as lack of traffic safety are hindering the promotion of this mode of transport.

By means of developing a toolkit for cities, which contains campaign materials, implementation of (simple and cheap) traffic measures, and the development and implementation of traffic education materials, this project MOVILIZATION aims to improve cycling conditions and therefore the cycling climate in the participating cities. This project is mostly useful for cities where cycling is already a common issue. However, cities, which are in the phase of developing cycling can, also benefit from the project results (for more info see [www.movilization.nl](http://www.movilization.nl))

## Introduction

Transportation systems define the quality of life for millions of city-dwellers worldwide. Unfortunately, the negative impacts of urban transport, including hazardous levels of air pollution, congestion, noise, sprawl, and threats to public safety, restrict the potential for greater economic growth and happiness. The rise of mega cities, with populations over ten million, has only amplified these problems. Growth rates of private vehicle ownership in the developing world continue to soar, despite the fact that automobiles are major consumers of non-renewable energy and major contributors to carbon emissions. These trends underscore the need to find timely and environmentally sustainable solutions to urban transport dilemmas.

In April 2005 the MOVILIZATION project started with 10 participating members of which 2 cities from Europe and 6 from Latin America. Participation of the cities depended on their willingness to develop a local program on improvement on cycling conditions. Two external members, IBC, from the Netherlands and FOVUS, university Stuttgart, Germany are providing external input during the process.

In the first phase of the project every city elaborated several proposals, which were discussed in a general meeting in which all the participants discussed the quality of the contributions. After a short period of adjustments the best proposals were selected and the project coordinator liberated financial means.

The cities are now in the process of implementing their own proposals and during this process a monitoring and evaluation program is measuring the effects of the implementation of the several promotion campaigns. (See table 1)

**Table 1: participating members and projects for implementation (source: MOVILIZATION 2005)**

Members	Measures
Utrecht, the Netherlands	Creating parking facilities in old neighbourhoods
Utrecht, the Netherlands	Signalisation for cyclists in new suburbs to maintain modal split till aprox.30 %
Utrecht, the Netherlands	Development of a cycle map in collaboration with regional actors and cycle advocacy groups
Rio de Janeiro, Brazil	Development of a bicycle map which indicates safe routes for cyclists
Rio de Janeiro, Brazil	Educational campaigns (use of bicycles, folders and billboards) for cycling promotion
Rio de Janeiro, Brazil	Education of professionals

Florianópolis, Brazil	Infrastructure combined with traffic education activities
Stuttgart, Germany	Practicable + safe parking facilities for bikes; folders about parking facilities for bikes in the city centre
Loja, Ecuador	Traffic education campaign
Barranquilla, Colombia	Campaigns for education, organize seminars, cycling campaigns, make a website, organize traffic education lessons for various user types
Valledupar, Colombia	Traffic education campaign together with infrastructure
León, Nicaragua	Infrastructure adoptions combined with education and promotional activities
FOVUS, University Stuttgart, Germany	Project adviser
IBC, the Netherlands	Project adviser and coordination activities

## 2. Methodology

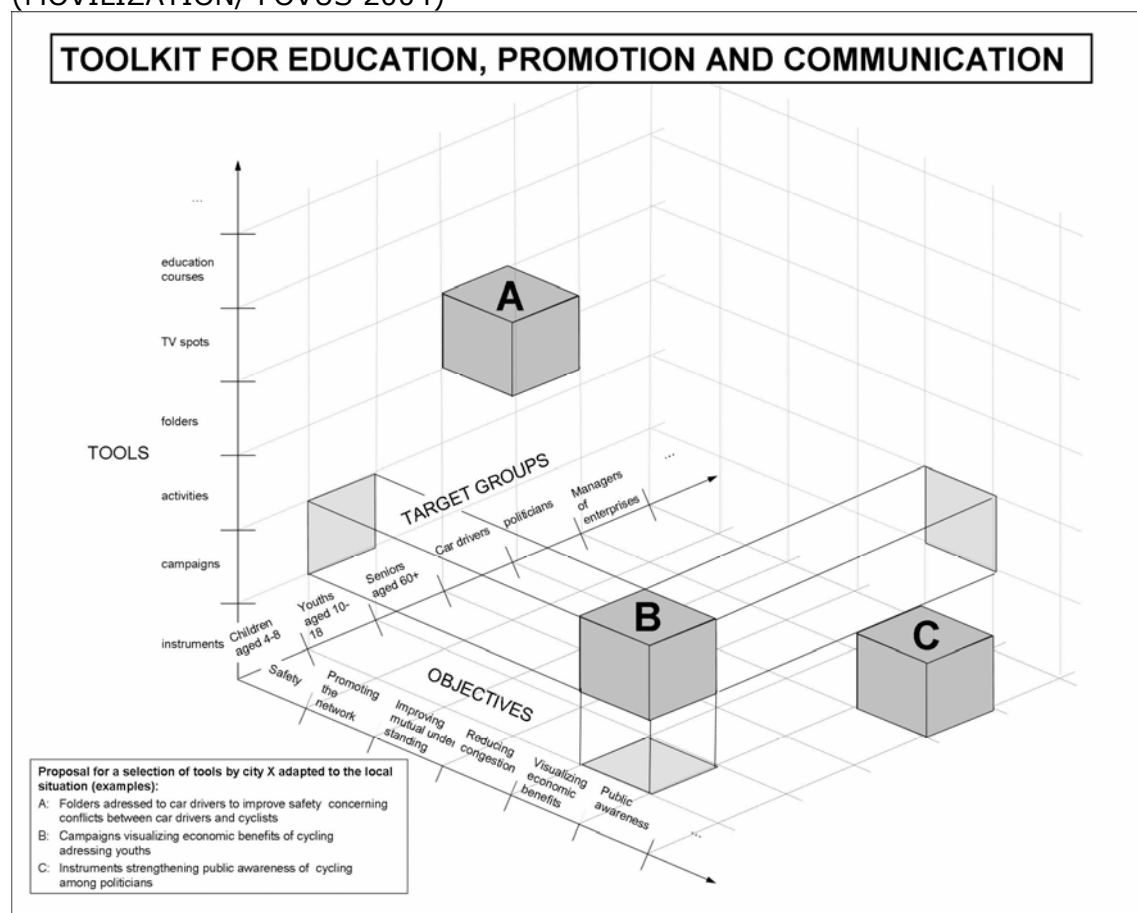
### 2.1 Methods of implementation

The methodology of using a toolkit of measures makes it possible for each city to choose the most adequate set of strategies and tools according to the local situation including the political, economical, cultural and institutional context.

The picture shown below illustrates the selection of tools (campaigns, activities, media,) depending on the selection of an objective and a target group. The cubes show the possible combinations of objectives, target groups and adequate tools. Three examples for the selection of tools are shown in the graph.

In addition to this toolkit a manual for planners is developed which deals with finding the fitting combination of tools according to the specific situation of a city. In addition to the manual basic courses in marketing should support planners which are mostly technicians and thus not so familiar with marketing and promotion means. Cost-benefit analyses can furthermore support planners in argument building towards decision makers.

**Figure 1: Toolkit for education, promotion and communication**  
(MOVILIZATION/ FOVUS 2004)



By giving priority to flexibility for participating cities the project gives way to the different local setting in which the projects goals have to be implemented.

This methodology also coincides with the model of complementarities as it is based on the idea of ownership of the project participants as much as possible of the products and activities to be developed and implemented.

## 2.2 Arguments for the methodology

As earlier have shown, there is no problem to unify cities in Europe and Latin America in acknowledging the serious problems traffic causes in the cities. Also there is a general agreement on the fact that improving cycling conditions may improve the efficiency of the traffic system as a whole. However when it comes to implementation of measures it was evident that the differences between cities asked for a "personal city approach".

So the combination of agreement on general goals with efficiency and a demand led orientation on implementation of activities, conclude in the

development of a toolkit of measures from which every member city can take best fitting modules.

The chosen interactive approach, has proven to be successful. The possibility given to the city functionaries to make a diagnosis on their actual traffic system and in the second stage of the project, to develop a strategy on how to create an integrated cycling policy, is a sound basis for the improvement of cycling conditions.

Envisaged effects are:

- Less congestion of motorized traffic
- Less accidents and less severe accidents
- More bicycle friendly climate
- Integration of the cyclist in the perception of car and bus drivers
- Higher number of cyclists

The possibility to develop indicators for measuring the effect of the activities is also an integrated part of the project. In the city documents elaborated in the previous project figures of the modal split are available. They can offer a sound basis to evaluate the effects of different activities developed during the project. (see: [www.urbalcyclinginfo.org](http://www.urbalcyclinginfo.org))

**Table 2: expected results and specific goals of projects for implementation per member city (source: MOVILIZATION 2005)**

<b>Members</b>	<b>Expected results</b>	<b>Specific goals</b>
Utrecht, the Netherlands	Creating parking facilities in old neighbourhoods	less bicycle theft in the old neighbourhoods, higher ownership of bicycles in the old neighbourhoods
Utrecht, the Netherlands	Signalisation for cyclists in new suburbs to maintain modal split till aprox.30 %	better knowledge of some bicycle routes, higher use of these routes
Utrecht, the Netherlands	Development of a cycle map in collaboration with regional actors and cycle advocacy groups	better knowledge of some bicycle routes, higher use of these routes
Rio de Janeiro, Brazil	Development of a bicycle map which indicates safe routes for cyclists	increase of the use of bicycles with safety (safe routes)
Rio de Janeiro, Brazil	Educational campaigns (use of bicycles, folders and billboards) for cycling promotion	increase number of cyclists; promoting safe behaviour among cyclist, drivers and pedestrians
Rio de Janeiro, Brazil	Education of professionals	starting a process of urban re-education in schools focusing transportation issues

Florianópolis, Brazil	Infrastructure combined with traffic education activities	20 % growth of bicycle users; 60 % reduction of accidents; satisfied inhabitants
Stuttgart, Germany	Practicable + safe parking facilities for bikes; folders about parking facilities for bikes in the city centre	less theft and damage, use of good bikes, more cyclists
Loja, Ecuador	Traffic education campaign	More understanding for cyclists and more safety
Barranquilla, Colombia	Campaigns for education, organize seminars, cycling campaigns, make a website, organize traffic education lessons for various user types	awareness of politicians, less accidents, more cycling
Valledupar, Colombia	Traffic education campaign together with infrastructure	More understanding for cyclists and more safety
León, Nicaragua	Infrastructure adoptions combined with education and promotional activities	improved traffic safety especially for cyclists; reductions of traffic accidents; higher status for cycling/ cyclists
FOVUS, University Stuttgart, Germany	Project adviser	
IBC, the Netherlands	Project adviser and coordination activities	

Also the possibilities to quantify impact of more cycling by calculating accident rates before and after activities, gives insight in effects of the project activities.

## 2.3 MOVILIZATION and previous activities

The project MOVILIZATION builds strongly on the earlier executed project " Integration of the bicycle in the traffic engineering in Latin-American and European medium sized cities" (see [www.urbalcyclinginfo.org](http://www.urbalcyclinginfo.org)). The antecedents of the previous project are a solid basis for the actual project MOVILIZATION.

Several reasons can be given to support this statement:

Network established and continuity

The two seminars organized in the cities of Florianópolis and Rio de Janeiro have given the participating cities an enormous stimulus

regarding the possibilities of cycling in their own home situation. On the one hand participants could gather information from other participating cities and external partners during presentations and discussions. Also the fact that Florianópolis and most of all Rio de Janeiro had a lot of cycling infrastructure to show was of utmost importance in the capacity building of the urban planners, which participated in the seminar workshops.

#### Advance products of the previous project

Before the city partners gathered in the first seminar in Florianópolis in October 2002 they had to elaborate the first part of a city document. This first part contained a diagnosis of facts and figures on the actual transport and traffic situation in the respective cities.

One of the important data namely the modal split data of the participating cities will be used for measuring the influence and impact of the B project.

The change in behaviour in using the different modes of transport on behalf of the campaigns and other tools implemented during the project period of this B project should be monitored. As the start position of the cities is already documented in the studies, which the participating cities executed in the first, A project a good basis is already present. The fact that the cities have already executed this type of investigation makes it also easier to monitor and evaluate the impact of the MOVILIZATION project because the methodology of how to do this kind of investigation is already present.

Another issue, which relates the project ‘ Integration of the bicycle in the traffic engineering in Latin-American and European medium sized cities’ with the MOVILIZATION project is the fact that in the last project possibilities to implement minor infrastructure measures are included. Examples of what kind of infrastructure measures might be used are discussed in the two seminars and examples of integration of this kind of relatively simple measures were given. Also the Handbook which is a product of the Type A project can fill the eventual gap in expertise.

The need for training programmes for planners on marketing strategies, and cost benefit analyses have been discussed during the seminars of the previous project. In offering this activities there is also a strong link between demands formulated the first project and the possibility to executed this during MOVILIZATION.

However most important is the fact that participating member cities during the project “Integration of the bicycle in the traffic engineering in Latin-American and European medium sized cities”, developed a common vision regarding city development and the role of traffic and the bicycle in this process: ***Agreement on the vision makes it easily and understandable for cities from different continents and cultures to be partners in a project build on this developed vision.***



## **2.4 Procedures for internal evaluation**

More than in the first project phase emphasis will be laid on internal evaluation aspects. As development and implementation of different tools is now the main objective, it seems logical to look at the effects and results of the implementation process.

The fact that in the process the interchange of experiences between city partners and the external partners is highly valuable also makes it necessary to develop a good internal evaluation system.

Last but not least evaluation is necessary as an internal tool for the effectiveness of the main objective itself: Arguments in the form of fact and figures are part of the capital of the project campaigns in order to change behaviour of the users of different transport modes. Evaluation of figures on modal split and changes in the perception on cycling will be the main indicators for success or failure of the activities developed and implemented during this project.

## **2.5 Characteristics of the participating cities**

The starting position of the participating cities is not equal regarding the share of cyclist in the modal split of the participating cities. However the vision that cycling can benefit for several reasons the efficiency of the traffic system, the sustainability of transport and the quality of public space and thus the living conditions of the urban populations is shared by all the cities participating.

Some examples:

The coordinating city of Utrecht is in the process of fast growing sub urbanization. Therefore the municipality is concerned that growing travel distances might negatively influence the actual high share of cyclist in the modal split of Utrecht. The tools of the MOVILIZATION project in Utrecht will be used to try to maintain the actual high level of cyclist.

In the situation of Rio the Janeiro the starting point is not the need for much more cycling infrastructure but to look for solutions to raise the use of the actual infrastructure. Emphasis will be put on: changing a substantial part of recreational cycling towards "utility" or transport cycling. Also there is a need to promote cycling as a part of the transport chain, which means to promote the combination of public transport with for and after transport by bicycle. The MOVILIZATION project can offer tools in promotion campaign on these items but also exists the possibility to implement some (simple) parking conditions that can function as pilot in Rio and for other cities.

The situation in which the city of Stuttgart defines itself is a little in between the situation in of Utrecht and Rio de Janeiro. An existing cycle

infrastructure, which is still continuously being improved, is combined with promotional activities to increase the number of cyclists. Participation in MOVILIZATION is expected to offer concrete implementation tools to reach this goal.

In the situation of León there is also a considerable amount of cyclists. The main concern in the León situation is the safety of cyclists. On the one hand the city of Leon tackles this problem by constructing separate cycle paths but by participation in the MOVILIZATION project, it aims to improve traffic safety including safety for cyclists by introduction of soft factors.

In the situation of cities as Loja and Florianópolis the amount of cyclists is less than in other participating cities. In the categorization of cities used in the previous project these cities were named as starters. Shopping in the toolkit of the MOVILIZATION toolkit offers possibilities for these cities to improve the soft factors of cycling. That means improving the cycling climate by on the one hand showing the advances of cycling for transport of recreational use. On the other hand the MOVILIZATION project offers these cities possibilities to lower their accident rates. As high accident rates normally can be interpreted as important constraints for cycling the toolkit in an indirect way also improves cycling conditions.

## **3 Conclusions**

### **3.1 Improving the situation of the local authorities**

As far as the participating cities are concerned, the advantages of the bicycle for the community are mostly linked to the quality of life, the quality of the urban environment and to long term saving by means of:

- A direct reduction of traffic congestion through the falling number of cars, and an indirect effect by the better fluidity reached for public transport and the combination of public transport and the bicycle.
- Savings of space on road and parking areas and hence reduction of investments in maintenance costs.
- A general improvement of life quality in towns because of less air and noise pollution, more and better public spaces.
- By creating spaces (on Sundays) for recreational activities as cycling, running and skating, public space is returned to the public. A side effect is that cycling will be stimulated. But the most significant effect is that traffic to the outside of the cities is avoided and thus the motorized traffic involved.

The common structures in most of the cities predict, that in reality there is a big 'community', which could be affected with the topic

'bicycle planning and promotion'. But they do not understand themselves as a community. Therefore it is a special task to create sensibility about cycling in all these groups.

The different groups and actors often speak their own language and have their own views on cycling issues and problems. This has to be more respected when efforts are done to create a bicycle friendly climate in a city. The lack of objective information is perhaps one of the points, why it is often so hard to win decision makers in several positions for the topic. The aim of the project /campaigns could improve the situation in different problem fields, which are sketched underneath:

- The pro's for cycling are intellectual known and should also be internalised in acting – from professional actors as well as by the public opinion
- Cycling is often seen as a marginal topic of transportation planning: perhaps one of the reasons, why the needs of non-motorised transport are neglected, when scarce space in the streets has to be divided or in case of new buildings, when the needs of bicycle users are not considered,
- The behaviour of local politicians, directors, professors and professionals in general is a multiplier effect for others (e.g. cycling to work)
- The costs for infrastructure move in foreground when measures have to be prioritised
- The cooperation of the different actors involved is insufficient; very often there is lack of coordination of different types of measures; some towns have given good examples to deal with coordination and cooperation,
- There is a lack of information in the public. The problem of desiderative public awareness and its importance for success is as well known from public transport systems
- Psychological strategies, which appeal to the bad conscience, are not accepted.

In this problem fields the project is focused on destructing prejudices and to offer argumentation to help to planners. The positive event of the campaigns will also show the decision makers that the silent rules of "in our cities such measures don not help/work" can be broken.

### **3.2 The technical and managerial capacities of the target groups and/or partners.**

As the technical capacities of the participants is considered, the project MOVILIZATION offers possibilities to improve most of all technical skills for combining relatively cheap infrastructure measurements with several marketing tools. Without insight in the effectiveness of marketing strategies no effect will be expected, therefore the project will include a training program on this issue.

By offering a toolkit of measures the participants must be able to develop criteria to decide which measures are the most effective in

their local situation. During the seminar- workshops training will be given on this items also.

The alone fact that city officials are involved in an international project gives has already a certain impact on the importance of the project in the internal organization. The possibilities offered by the MOVILIZATION project are manifold as:

- Expertise building on marketing aspects on campaigns
- Expertise building on matters of cycling promotion measures
- Network development in an international context
- Expertise building by coordinating local activities in a relatively new working field.
- As the character of many of the activities of the project MOVILIZATION will be in the field of campaigns and marketing, the multiplier effect as such will be easily observed in a changing attitude towards the goals identified by the local partners. However it should be emphasized that no good campaign or set of measures can be implemented without a solid basis of facts and figures. These sets of facts and figures will be the basis of the description of the toolbox in which according to the illustration 1. Other cities than the members of this project can, according to their own characteristics and goals, choose the tools they find adequate, copy them and implement it in their own cycling promotion strategies.

Access to the toolbox of measures, including the criteria why member cities have chosen certain tools while neglecting others is of utmost importance to achieve high multiplier effects. Dissemination actions as planned on international forums, including publication are therefore necessary. The project website also fulfils an essential role in this process.

Another interesting phenomenon, which will probably have an interesting multiplier effect, is the public private partnership. As in the city of Rio the Janeiro an interest from the local railway company is expressed in partnership on cycling promotion (by e.g. facilitating safe parking) , it can be expected that this experience can be copied to other municipalities and public transport companies.

En general it can be observed that the more effective the implementation of the measures of the toolkit will be, the more logical it will be that partners in the campaign will continue financial contributions. It cannot be emphasized enough that documentation on the effects of the implementation of tools is essential for financial as well as institutional sustainability and continuance. It is therefore that dissemination of project results is such an important issue in this MOVILIZATION project.