

Velo Mondial 2006 – Durban, South Africa

**CYCLING BENCHMARKING: THE UTBI PROJECT FROM THE PERSPECTIVE OF
BRESCIA, A PARTICIPATING CITY**

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ABSTRACT

This paper presents the results of the first two years of Urban Transport Benchmarking Initiative, promoted by the European Union, from the angle of the thematic working group on Cycling.

The analysis of the barriers encountered during the projects is an occasion to discuss the different problems to tackle in the field of cycling, at the technical but also organisational and institutional level.

The paper ends with the description of the effects on cycling policies of one of the participating cities, Brescia in Italy ,where also a site visit was organised, which is struggling to increase the modal share of cycling.

INTRODUCTION

The concept of benchmarking has been widely used by many different types of organisation, especially in industries, in order to gain some understanding of the best practices. The process involves comparing operational performance with similar institutions, organisations or enterprises, through the collection of data for performance indicators, as a means of self analysis and help to identify key differences between participating organisations. Site visits or case studies are often used to showcase best practices, because this helps participants to understand more fully how the best practices have been developed. This is not simply a case of “following the leader”, but of constructively integrating the best practices that leading organisations have established into existing procedures.

In 2003 this concept was used in new project called Urban Transport Benchmarking Initiative, promoted by the European Union and managed by a consortium of three companies (TTR, UITP and REC). This initiative, which has now just started the third year, has the aim to compare transport policies among different European countries, through the benchmarking exercise.

Annually a group of participants representing local and regional urban transport stakeholders including public and private sector organisations and associations of users from 35-40 cities, are divided up to a maximum of 5 thematic working groups on topics agreed by the participants, which during the first year were: Behavioural and Social Issues, City Logistic, cycling, Demand Management, Public Transport Organisation & Policy. Year two of the Urban Transport Benchmarking Initiative was launched in September 2004 and the five themed working groups established during year one of the initiative continued to evolve their chosen topics but due to a lack of sufficient interest from participating cities the City Logistics group ceased its activities in February 2005 and was not replaced because of the advanced stage of the project.

All the groups collect the figures for a set of common performance indicators in order to give a common framework about the different participating cities (the region or city basic figures, urban passenger, freight transport, road safety, etc.) and they select a set of thematic indicators during the site visits (3 per year), where the participants undertake a comparative analysis and experiment best practices. Up to now more than 10 different cities have been visited by working groups from the Urban Transport Benchmarking Initiative.

The results of the data collection and the site visits are then disseminated also through the website (<http://www.transportbenchmarks.org/>).

The process of Urban Transport Benchmarking is very fluid, responding to the issues which are raised by urban transport stakeholders, rather than following a rigid process which has been predetermined. In this way the subsidiarity principle is being fulfilled, because the recommendations about urban transport best practices are made by a network of urban transport operators, user groups, local authorities and municipalities, rather than a single centralised institution.

THE CYCLING THEMATIC WORKING GROUP

The author of this paper, who works for the University of Brescia alongside Prof. Maurizio Tira, has been participating since the first year of the UTBI in the working group on

cycling, also in representation of the Municipality of Brescia (an Italian town with about 200.000 inhabitants). The University has close links with the Municipality of Brescia and are working to assess transport in the area, especially data on safety and accidents. The UTBI cycling group, being led by Oliver Hatch and Pascal Van den Noort (Velomondial), focuses on the the range of policies and promotional measures that have been adopted by cities seeking to encourage cycling.

The first year

During the first year the cities participating in the working group were Brescia, Copenhagen, Lyon and Oxford. The small number of participants in this group can partially be attributed to the fact that the working group started much later than the others in the Urban Transport Benchmarking Initiative. The time pressure that the group encountered meant that there was only time for two site visits, to Copenhagen and Lyon, although these visits provided an excellent opportunity for the working group members to learn about the interesting practices displayed in other cities. Due to the short timescale a set of indicators were drawn up based upon existing definitions used for data collection by other cycling networks. This helped the participants to discuss about the data availability in the different contexts and to talk about the different approaches to cycling. Data corresponding to the indicators chosen were then collected by the working group and analysed by the working group's rapporteur and expert.

The indicators were selected in order to be able to answer to two research questions, which were developed by the participants during the Lyon site visits:

- "To what extent has cycling become mainstreamed in each city as far as both policy and practise is concerned?"

The result of the discussion is that most cities have begun the process of mainstreaming cycling through formulation of specific cycling policy and integrating cycling with wider policy. Some have gone further through the implementation of significant levels of infrastructure and research efforts to understand the drivers behind cycling (e.g. Copenhagen Bicycle Account) or attempts to integrate cycling with public transport. Cycling is generally being integrated with public transport modes to different degrees and more integration is apparent on trains.

More effort is required regarding direct contact with cycle users and other groups to establish their views. Integration of cycle parking within the planning process is another example of where cities are attempting to mainstream cycling.

- "What part have infrastructure and marketing played in achieving current levels of cycle usage, and what part is it expected they will play in the future?"

In most cities cycle space represents only a limited proportion of the total road network (about 5%), except for Copenhagen which led the way with about 45%. There is, then, a clear link between the levels of expenditure of Copenhagen on infrastructure measures and the degree of actual cycling in the city. More work is needed however to provide additional parking facilities at public transport interchanges. Cities obviously believe that by having a cycle network or recommended routes this can only encourage cycling. Indications that infrastructure is being utilised to allow more cycling (such as within bus lanes, contra one-way streets, or across junctions) is clear, but the quantifiable extent to which these are actually having a positive effect on cycling is not and more research is needed to establish the link between infrastructure and 'new' cycle use.

Promotion of cycling receives much less expenditure than infrastructure and maintenance, perhaps because it is inherently difficult to measure the role that marketing plays in influencing any audience. In this context attempts are being made through the use of maps and websites to communicate cycle routes and specific programmes to encourage more cycling but it would be necessary to establish which marketing tools are the most effective in order to justify increased expenditure.

A part from the specific research questions, the process of analysis of the data showed that most cities are collecting information on cycle trips made but methods of data collection vary. Anyway it was agreed that a key figure is represented by the modal split for cycle trips under 5 km (in the case of Brescia is not available) and most cities have targets for improving cycle and safety.

On the other hand, there was no real consensus between cities in terms of the changing policy issues encountered because issues seemed to be specific to the city according to prevailing political interests, physical environment or culture.

The level of cyclists KSI varied amongst cities and it is not possible to give specific reasons for this variation. Copenhagen are studying a link between the degree of cycle safety and cycling speed.

All cities are promoting the concept of 'Safe Routes to Schools'.

At the end of the first year some recommendations were made by the working group:

- The perception of the group was that many of the examples of physical infrastructure demonstrated by Copenhagen, although representing good practice, would be difficult to actually implement in other cities. This was because of the historic nature of the way road networks had developed and therefore a lack of space available to implement such drastic change. An issue of resource availability and also the cultural change required to accept such measures (as well as a demonstrated need for such measures), was something that also had to be proved in order to make such changes.
- On the other hand, the possibility of developing a similar tool to the 'Bicycle Account' within cities was considered a lot more realistic. With further information being gathered on cycling needs and performance, there might be hard data to recommend allocation of resources and guide future policy. The collection of time-series data would also be welcomed.

The second year

The main aim for working groups during the second year of the Urban Transport Benchmarking Initiative was to develop the findings established during year one of the project, as well as continue to try and identify interesting practices through the use of both quantitative data and qualitative analysis.

One of the main recommendations from year one of the Urban Transport Benchmarking Initiative was that the working group should attract more cities in order to improve the validity of the benchmarking exercise. This has been successful with the group achieving a stable membership of six cities: two cities (Oxford and Lyon) ceased to be involved in the Urban Transport Benchmarking Initiative, but Aalborg, Brescia, Copenhagen, Glasgow, Malmö and Prague participated in the group during the second year of the project.

The site visits to Copenhagen, Brescia and Glasgow, provided a useful insight into the cycling practices applied in other European cities and the site visit in Brescia was the first site visit in which two groups met to discuss the links between their chosen themes.

Another recommendation from the group's final report in year one of the benchmarking initiative was to develop the baseline of broad information collected by the group in order to focus upon specific issues relating to increasing the uptake of cycling in cities and measuring the impacts of policies.

In order to pursue these aims the thematic data indicators the group collected during year one were re-defined and supplemented with additional questions before the data was collected by the working group:

- "How does the city measure the effects of its cycling policies and reflect this in programme review?"

The figures collected by cordon counting appear to be lower than the modal share data submitted by the cities. Anecdotal evidence suggests that the most accurate measures of cycling use are individual user surveys, which are much more accurate, but the most challenging to administer.

The participants in the group suggested the most useful data for policy monitoring related to:

- Cycle network length
- Cycle accidents
- The statistical risk of cycling
- The availability and use of cycle parking
- Formal surveys of cyclist travel behaviour
- The extent of engagement with employers and schools to promote cycling

Cycling targets set in the cities can be specifically related to the existing coverage of the cycle network and the extent of cycle use. In cities where the cycle networks have been extensively developed to compete with private car access the emphasis is upon encouraging modal shift. In cities where the cycle network does not rival car access the main target is to increase the size of the cycle network in order to provide the means for greater cycle usage.

- "Which marketing techniques are being used to engage specific audiences?"

The approaches to the marketing of cycling are individual to the aims of each of the working group cities. Glasgow and Brescia have focused specifically upon targeting the needs of children travelling to school sustainably and the needs of their parents (e.g. safe, independent or supervised, access to school). Conversely the activities in Copenhagen and Malmö have been devised to gain greater political support for cycling in the cities, as well as encouraging cycling as a replacement for commuter and shopping trips otherwise performed by car.

The diversity of marketing approaches applied in relation to cycling in the working group cities provide an excellent opportunity for a shared learning experience. The example of the Safe Routes to Schools activities which have been implemented in Glasgow and Brescia were of particular interest to other members of the working group and the examples of good practice evident in Glasgow are available in the site visit summary. The cities agreed that as well as the benefits from carrying out 'cross-city' analysis (i.e. benchmarking), the Urban Transport Benchmarking Initiative had also been valuable in terms of internally reviewing progress within their cities.

- "How can cycling be integrated with modes of public transport to encourage mutual demand uptake?"

Formal fiscal support for the integration of cycling and public transport modes is sparse and dialogue between public transport and cycling professionals remains limited. Greater

formalisation of exchanges between these transport stakeholders and including the issues in cycling policy monitoring could help to encourage greater intermodality in the working group cities.

Although it is possible to suggest that having a bicycle available during the whole journey is generally very practical, it has so far not been possible for any city to introduce urban bus services capable of carrying bicycles, yet this has been attained on metro and train services to some extent.

Secure cycle parking and cycle hire facilities are increasingly becoming available in the cities in the working group and are likely to become relatively commonplace amongst larger cities in the next 5 years. This technical development is then likely to filter down to public transport interchanges in order to facilitate combined journeys. These would involve securely parking one's bicycle at a public transport stop/station in order to enable the remainder of a journey to be completed on foot and/or by using public transport modes.

The third year

Year three of the Urban Transport Benchmarking Initiative was launched on September 2005 and involved working group discussion sessions in order to finalise the themes for the third year of the benchmarking initiative.

The cycling working group is now formed by the following participating cities: Brescia, Copenhagen, Malmo, London, Glasgow.

As an activity for, and output from, year three of the Urban Transport Benchmarking Initiative this group aims to develop a template for cycling policy evaluation. This should be a document setting out guidelines on the successful collection of cycling data and demonstrating how this information can be used to monitor the success of cycling policy. Although the continuation of data collection should be relatively straightforward, the significant level of effort required (e.g. by any new cities joining the group) to begin such a benchmarking process should not be underestimated. For future analysis work it was agreed to be more appropriate to separate the thematic indicators into a group of 'background' indicators and a group 'core target' indicators.

Finally particular consideration has been given to developing the links with the public transport related working groups and/or inviting local public transport operators from the cities in the working groups to participate in the Cycling working group. The idea is to develop a series of strategies for improving cycling and public transport intermodality in their cities as the focus of the group's activities for year three.

The first site visit held in year three was a joint one with the Behavioural and Social Issues working group in Santander (Spain 1-2 December 2005), where it was discussed about a series of integrated indicators, in order to consider the potential gains which could be achieved across two different strands of urban transport. In separated meeting, the research questions were better defined and further joint working with the public transport-related working groups were planned.

For what the cycling working group is concerned, it was agreed to choose a core set of indicators and to go deeper in the best practices, especially to understand which are the different measuring tools.

THE PARTICIPATION OF BRESCIA TO THE UTBI

During the two years of the UTBI it has been clear that the barrier to the transfer of good practice is often the inability of authorities to convince colleagues of their benefits and why they should commit to them and for Brescia this has been very evident.

The participation of Brescia in the Urban Transport Benchmarking Initiative was possible because of the interest in cycling of one of councilors. The Municipality had no specific office or technicians working specifically on this subject and cycling fell between different policy areas. These are the reasons, together with the lack of funds, why the University participated in the UTBI in representation of the Municipality. The main problem that Brescia felt during the first year was not being able to locate the data required to benchmark some issues, especially on cycle usage.

Cycling data which has some practical use for policy monitoring and ongoing evaluation are gathered in a relatively piecemeal fashion from an assortment of local stakeholders and from a range of sources. Mechanisms for the collection of data are relatively unclear and the University had to do ad-hoc surveys to have some data and this often required some effort.

Some of the information required for this benchmarking activity has been derived from annual reviews of local transport policies, although in many cases the focus upon cycling is limited.

The involvement in the Urban Transport Benchmarking Initiative has provided the impetus to collect and analyse data relating cycling and during the second year there was a bigger involvement of the Municipality in collecting the data.

Furthermore a new technician was part-time employed in order to manage cycling policies with the following tasks: cycling infrastructures maintenance, coordination of the different sectors related to cycling, data collection, management and contacts with the cycling associations and participation to the UTBI project.

Thanks to this new activity some good experience started, like the new bike point, managed by a cycling association and financed by the Municipality, where cyclist can go to ask for information, give advice and point out problems. The Municipality answers with some actions, like the first survey on cycle usage, made during the European sustainable mobility week.

During the second year the first joint working group visit was organised in Brescia between the Cycling group and the Behavioural and Social Issues in Public Transport working groups and included a workshop session in order to consider the links between the themes. In this event the participants especially from the countries who represent the best practice, could cycle along the city cycle net and consider that it was not so bad as the city was convinced. This was useful to incite the Municipality to go on with the cycling policies and to think about other aspects to improve, i.e. marketing.

For Brescia the participation in the UTBI has been useful, even if probably the third year will be even better, because it will help to identify those indicators that are most crucial to measuring cycle criteria and allow the city to go on promoting cycling and to get more political support.

By collecting more data on the benefits of implementing measures within cities, further understanding and a basis for approaching key decision-makers can be made.

REFERENCES

- Bresciani C. 2005 "Una migliore vivibilità dei centri storici attraverso l'uso di indicatori di integrazione tra pianificazione urbana e dei trasporti.", in Pezzagno M., Sandrini K. (eds) I centri storici Atti della XI Conferenza Internazionale "Vivere e camminare in città.", Tipografia Camuna, Breno
- Busi R., Pezzagno M. (eds) 1998 Mobilità e sicurezza degli anziani, Atti della V Conferenza Internazionale "Vivere e camminare in città.", Ufficio delle pubblicazioni ufficiali delle Comunità europee, Lussemburgo
- Busi R., Pezzagno M. (eds) 2005 Vivere e camminare in città : politiche per la sicurezza nella mobilità: dal livello comunitario al livello comunale Atti della VI Conferenza Internazionale "Vivere e camminare in città.", Tipografia Camuna, Breno
- Busi R., Pezzagno M. (eds) 2005 Mobilità pedonale e trasporto pubblico Atti della VII Conferenza Internazionale "Vivere e camminare in città.", Tipografia Camuna, Breno
- Busi R., Pezzagno M. (eds) 2005 Pianificazione urbanistica e progetto di infrastrutture per la sicurezza e la qualità nella mobilità pedonale Atti della IX Conferenza Internazionale "Vivere e camminare in città.", Tipografia Camuna, Breno
- Christensen, P. 1993 Mulige resultatindikatorer for tiltak mot hjem- og fritidsulykker. TØIrapport, 162/1993
- Jiménez-Beltrán D. 2000, Premessa, in EEA, Stiamo andando nella direzione giusta?, Indicatori relativi all'integrazione tra le politiche dei trasporti e dell'ambiente nell'Unione Europea, Transport and Environment Reporting Mechanism, TERM 2000 - Sintesi EEA, Copenhagen
- Maternini G. (eds) 1994 La sicurezza del pedone in città. Il Caso di Brescia (Vol. 1), Sintesi, Brescia
- Maternini G. 1998 La pianificazione urbanistica e la mobilità, Dipartimento d'Ingegneria civile, Technical Report n° 3, Brescia
- Maternini G. (eds) 2000 Metropoli e mobilità - Il caso di Brescia, Verso un manuale di pianificazione metropolitana (Vol. 6) Sintesi Editrice, Brescia
- Maternini G., M. Tira (eds) 1994 Metropoli e mobilità: il caso di Brescia. Lineamenti di intervento (Vol. III), Ed. Sintesi, Brescia.
- Maternini G. 2000, Metropoli e mobilità. Il caso di Brescia. Verso un manuale di pianificazione di aree metropolitane, Collana diretta da R. BUSI, Volume VI, Ed. Sintesi
- May A. D. 2003 Guida Per I Decisori Deliverable N.15
- Minken H., Samstad H., Pütz K. 2001 Proposal for objectives and indicators in urban land use and transport planning for sustainability, TØI working report, 1183/2001
- Pezzagno M., Sandrini K. (eds) 2005 mobilità non motorizzata e risorse territoriali Atti della X Conferenza Internazionale "Vivere e camminare in città.", Tipografia Camuna, Breno
- Pezzagno M., Sandrini K. (eds) 2005 I centri storici Atti della XI Conferenza Internazionale "Vivere e camminare in città.", Tipografia Camuna, Breno
- Pileri, P. 2002 Interpretare l'ambiente: gli indicatori di sostenibilità per il governo del territorio, Alinea Editrice srl, Firenze
- PROSPECTS (<http://www-ivv.tuwien.ac.at/projects/prospects.html>)
- Smith N., Hatch O. 2004 Cycling Working Group Report – Final Report The Urban
- Smith N., Hatch O., Taylor N. 2005 Cycling Working Group Report – Final Report The Urban
- Taylor N. (2005) Transport Benchmarking Initiative Year two finalreport
- Tira M. 1999 "Comfort, sicurezza e accessibilità, Paesaggio Urbano", Maggioli, Rimini, mag.-giu, 58-63

- Tira M. 1999 Sicurezza nel traffico urbano e analisi di applicabilità alle diverse situazioni italiane in C. Beguinot (eds) Urbanistica e mobilità, Università degli Studi "Federico II", Napoli
- Tira M., Zavanella L. 2000 Les objectifs de qualité urbaine et de sécurité routière dans la planification de la mobilité: deux visions différentes à travers le Plan urbain de trafic (PUT) de Brescia et le Plan de déplacements urbains (PDU) d'Aix-en-Provence, RTS – Dossier n° 69, Paris
- TRANSPLUS 2002. Deliverable 2: Assessment of integrated land use and transport planning strategies.
- TRANSPLUS 2002. Deliverable D.5.1.: Review of current practices for promoting participation in the urban planning process
- TRANSPLUS 2002. Deliverable 2.2 Supporting models and indicators
- TRANSPLUS 2002. Analysis of Land Use and Transport Integration Indicators (excerpt from reports D2.2 and D3)
- TRANSPLUS 2003. Final Report Achieving sustainable transport and land use with integrated policies
- TRANSPLUS 2003. Deliverable 6 – TRANSPLUS Guidelines Achieving sustainable transport and land use with integrated policies
- Vande Walle S., Steenberghen T. 2001 The use of indicators for integrated spatial and mobility planning in European cities ,15th ICTCT workshop infrastructure planning and design