

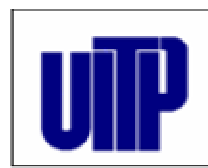
# Urban Transport Benchmarking Initiative Year Two



## Annex A3.1

### Cycling Working Group Annex to final report

July 2005



# Annex A3.1

## Cycling Working Group

Annex to final report

Prepared for

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Directorate General for  
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by



Author(s)	Neil Taylor
Quality Control	Sarah Clifford
Project Manager	Kieran Holmes
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## **1. INTRODUCTION**

This document represents Annex A3.1 of the Urban Transport Benchmarking Initiative's year two final reports and contains information in support of the final report of the Cycling working group.

Section 2 of this annex contains the data guides from year one and two of the Cycling working group, which participants received to assist them in the collection of the thematic indicators and contains full definitions for all of the indicators collected. Section 3 contains summaries of the interesting practices observed at the working group's three site visits which took place in Copenhagen, Brescia and Glasgow during year two of the Urban Transport Benchmarking Initiative.

## **2. DATA GUIDE FROM YEARS ONE AND TWO**

This section of the annex was taken from the data collection guide circulated to participants in the working group in order to assist with the collection of the data collected for the second year of the project. As well as providing the participants with an in depth record of the indicators agreed for collection during the working group's second round of benchmarking the guide included answers to frequently asked questions regarding the benchmarking process. The main guidelines for the collection of data are outlined below and the remainder of section outlines the definitions of the indicators collected by the group.

### Guidelines

This document aims to help the cities participating in the Cycling working group to present their data for the project. The aim is to try and make as many meaningful comparisons as possible by looking at the data the participating cities supply. Below are a few useful notes which are important for the participating cities to consider before they begin compiling their data.

- The project team acknowledges that differences in the definitions and collection methods used to obtain data are certain to vary between cities. It is therefore very important that where pre-existing definitions for data indicators are used (as opposed to those stated in this document) the cities define what the figures mean; otherwise the data collected will be of no use.
- The recommended study year for the project is 2002, because it has been assumed that very little data will be available for 2003. It is recognised that cities will have varying levels of data. Where cities do not have data for 2002 please supply data for the nearest year for which data is available. As before this does not matter as long as it is clear what the figures represent. Please provide time series data where this is available and state which year each figure applies to. In every case where the data refers to a year other than the elected study year (2002) please state the year the specific data refers to.
- In this document the study areas have been loosely defined because it is recognised that each city will have data relating to varying geographical areas. All that matters is that the data is locally defined and consistently relates to the same area throughout the study.
- Please enter the data that corresponds to each of the indicators into the data collection form which is presented in an MS Excel spreadsheet.
- If there are any questions concerning the availability of an indicator or if any clarification is required please contact the working group rapporteur by e-mail at: [katherine.mcwilliam@ttr-ltd.com](mailto:katherine.mcwilliam@ttr-ltd.com).

a. Modified Common Indicators

Code	Indicator	Comments
<b>Indicators that extend beyond UTBI common indicators</b>		
A.1	Does the city measure modal share in terms of cycle trips made - YES/NO? If YES, how is it measured?	<p>Brescia do not have modal split data for the city, only the region - regional data is collected through phone interviews for trips above 20 minutes. Perhaps Brescia could change this collation method/criteria for the next round of benchmarking.</p> <p>Oxford collect data on-street using automated machines or manual counting.</p> <p>It was thought that even if a city did not collect detailed information on modal split, it would still be a good idea to pose the question as this might respectively stimulate new data collection in this area.</p>
A.2	<p>Modal share in terms of number of bicycle trips under 5km as a % of all trips under 5km ('all trips' should include bicycle and motorised transport, but NOT walking).</p> <p>[Note - This indicator should give an idea of the potential for cycling. If cities do not have bicycle trips defined as under 5km, then all bicycle trips can be used instead (most bicycle trips are under 5km anyway). Please ensure you state this. When working out the percentage, the number of trips for all motorised modes MUST be under 5km].</p>	

b. Additional Background Indicators

Code	Indicator	Comments
<b>Background Indicators</b>		
B.1	To what extent is cycling policy integrated with transport planning policy and overall city planning?	
B.2	Does the city have a cycling policy – YES/NO? If YES, when was it introduced?	
B.3	Does the city have targets to: <ul style="list-style-type: none"> <li>- Increase use?</li> <li>- Improve safety?</li> <li>- Other... (explain)?</li> </ul>	

	What are the respective time-scales for these?	
B.4	Are the objectives of the cycling policy monitored – YES/NO? If YES, how?	
B.5	What have been/are the changing policy issues in your city since the policy was introduced?	
B.6	Which are the main obstacles to more cycling in your city?	
B.7	<p>Cyclists killed / injured:</p> <ul style="list-style-type: none"> <li>- per total population?</li> <li>- per total number of KSI from all road accidents?</li> </ul>	<p>KSI (Killed or seriously injured) is a term frequently used by authorities to combine these counts - adopted both by Oxford and Copenhagen. Brescia instead count deaths separately from injured persons. Brescia can however derive the number of cyclists from either count. Caution should be taken when comparing to trip length, as the definition for the boundaries in which trip length is measured needs to be confirmed precisely, e.g. city/region. Percentage figures should be used as opposed to averages which can be distorted by outliers.</p> <p>The total for KSI can be obtained from common indicator 6.1</p> <p>Consideration of the time period over which these are measured will be necessary - averaging over a 5 year period is common. Other 'rates' that could be measured are: per number of cyclists; per number of trips; as a proportion of trip length.</p>

c. Bicycle Utilisation Indicators

Code	Indicator	Comments
<b>Bicycle Utilisation</b>		
C.1	Km / person / day.	It was thought that these 'cycling use' indicators could be tied in and analysed with the KSI/accident indicators to provide an indication of potential 'risk' to cyclists. Copenhagen of course already have an indicator specifically assigned to 'cycling risk'.  Regarding the definition of 'person', if cities have disaggregated data e.g. for different age groups, this should be sent to the project team collectively. Then the project team will decide whether it is possible to compare across cities according to this detailed level or whether comparison will be made at a more general level (depending on the data other cities have sent). Where cities have disaggregated data, they MUST define the characteristics of this.
C.2	Trips / person / day.	
C.3	Number of bicycle repair workshops.	When carrying out analysis of this indicator, it might be worth considering whether any training courses are implemented which encourage home repair, therefore decreasing the need for service at an actual workshop.
C.4	Number of bicycle thefts per 1000 inhabitants per year.	

d. Bicycle Infrastructure Indicators

Code	Indicator	Comments
<b>Cycling Infrastructure</b>		
D.1	Can cycles be taken with you on public transport – YES/NO?	If YES, which modes?
D.2	Using this scoring system, state whether there is sufficient bicycle parking at public transport interchanges?	1 = No parking 2 = Limited or less than sufficient parking 3 = Sufficient parking 4 = Sufficient parking with some spare capacity 5 = Too much parking
D.3	Does the city have a 'cycling	If YES, are the following used to publicise

	network' – YES/NO?	it: - Signage? - Maps? - Website?
D.4	Does the city have 'recommended routes' – YES/NO?	If YES, are the following used to publicise them: - Signage? - Maps? - Website?
D.5	What is the total annual budget specifically for cycling in terms of the following:	- Infrastructure? - Maintenance? - Promotion?
D.6	Can bicycles use bus lanes – YES/NO?	
D.7	Does the city allow cycle use of one-way streets in both directions – YES/NO?	If NO, does the city plan to?
D.8	What is the number of 'public cycle parking spaces' per 1000 inhabitants?	
D.9	Are there specific measures to assist cyclists at traffic junctions – YES/NO? If YES, which types of measures are present?	
D.10	<p>[Only to be completed if cities have the respective detailed data. A total figure for length in km of all cycling features is already requested under the common indicator 2.1]</p> <p>Total length in km of the following cycling features: - Lanes? - Tracks? - Routes?</p> <p>Definition of the different types of features should be made clear when collecting this information (2 examples of definitions are given in the 'comments' column opposite).</p>	<p>[Definition 1 – better for e.g. Copenhagen?] - Lanes (on-road, mixed with other traffic) - Tracks (on-road, not mixed with other traffic, segregated) - Routes (off-road)</p> <p>[Definition 2 – better for e.g. Oxford] - Lanes (on-road, mixed with other traffic) - Tracks (off-road but immediately next to the carriageway) - Routes (off-road and away from the carriageway, i.e. like the green routes promoted in Copenhagen)</p>

e. Cycling Initiatives

Code	Indicator	Comments
<b>Cycling Initiatives</b>		
E.1	Does the city regularly consult citizens / bike users / others on cycling policy?	
E.2	Does the city / do others provide cycle training (proficiency) for adults and/or children?	
E.3	Are the following given to the city administration to promote cycling: <ul style="list-style-type: none"> <li>- Bicycles for use?</li> <li>- Distance allowance (i.e. currency unit / distance unit)?</li> <li>- Other financial incentives to cycle?</li> </ul>	This indicator attempts to show whether the authority has a certain level of commitment to promoting cycling internally, which could subsequently show their potential/dedication for promoting it externally.
E.4	Is cycle parking required/requested to permit the following types of new development taking place: <ul style="list-style-type: none"> <li>- Office?</li> <li>- Retail?</li> <li>- Housing?</li> </ul>	
E.5	Does the city have a program to actively promote 'new' cycle use?	
E.6	Does the city promote safe routes to schools – YES/NO? If YES, how does it do this?	
E.7	Is your city a member of national or international networks promoting cycling?	
E.8	Would it assist your work if cycling was given greater priority at the EC level?	

f. Recipe for Success

Code	Indicator	Comments
<b>Recipe for Success</b>		
F.1a	Which of the following indicators are used to measure the effects of cycling policies?	Cordon counts Risk (KSI) per total distance Bridges and tunnels accessible to bicycles or designed for bicycles General 'use' of cycle parking Existence of a cycle training programme and associated material % of children having received cycle training Existence of a signing strategy (e.g. naming or directional information) Behaviour (e.g. do you carry out before/after surveys regarding the deployment of measures) Do you engage with schools? If so, how? Do you engage with employers? If so, how? Other indicator...
F.1b	What statistics are used regarding the following indicators?	
F.1c	What is the source and mechanism of collection for the following?	
F.1d	How do you rate the method of collection for the following?	
F.1e	How accessible is the following data (ease of collection)?	
F.1f	What is the frequency of collection for the following?	
F2	Does the city use the following to reflect on programmes?	Annual Review Statistical report (e.g. the Copenhagen Bicycle Account) External assessment/audit Internal audit/review Consultation of cycle users and others Letters/complaints (e.g. from the public to politicians)  What are your targets for cycling and how are they set? Is there the opportunity to engage with politicians about programmes? Do you engage with politicians about programmes? If so, how?

g. Integration with Public Transport

Code	Indicator	Comments
<b>Integration with Public Transport</b>		
G.1	Mechanisms to integrate cycling and public transport...	<p>Is there a policy to link cycling and public transport?</p> <p>Is there a budget to develop this?</p> <p>Are there any campaigns to promote integration?</p> <p>What dialogue exists between cycling and public transport professionals?</p>
G.2	Are the following issues being addressed?	<p>Access by bicycle to/within public transport sites/stations</p> <p>Bicycle parking at public transport sites/stations</p> <p>Carriage of bicycles on public transport services</p> <p>Hire and services, e.g. Park &amp; Ride initiative with facilities for bicycles</p> <p>Costs of integration to the user, e.g. ticketing</p> <p>Mapping and signage provision</p>
G.3	If you are not already doing so, do you plan to address the following issues?	<p>Access by bicycle to/within public transport sites/stations</p> <p>Bicycle parking at public transport sites/stations</p> <p>Carriage of bicycles on public transport services</p> <p>Hire and services, e.g. Park &amp; Ride initiative with facilities for bicycles</p> <p>Costs of integration to the user, e.g. ticketing</p> <p>Mapping and signage provision</p>

h. Marketing

Code	Indicator	Comments
<b>Marketing</b>		
H.1	Mechanisms to integrate cycling and public transport...	Yes/No
H.2	<p>Do you actively market to the following specific audiences? If so, how?</p> <p>Politicians (influencing)</p>	<ul style="list-style-type: none"> <li>- Merchandise</li> <li>- Bicycle type and style</li> <li>- Working with celebrities, e.g. Malmo's book of celebrity cyclists</li> <li>- Rewards</li> </ul>

	<p>Tourists                  Children (consideration of age split and those involved in the school run)                  College and university students                  Non-cycling adults (those that currently cannot or will not cycle)                  Women (the mode split indicator should perhaps also consider gender split)                  Promoting utilitarian cyclists                  Over 50 year olds ('baby boomers')                  Unemployed and low-income earners                  Immigrants and new residents to the city                  Other...</p>	<ul style="list-style-type: none"> <li>- Incentives, e.g. agreement with manufacturer/retailer to allow money off cycle equipment, etc</li> <li>- Partnerships, e.g. with retailers or local/regional/national cycling campaign groups</li> <li>- Video/DVD/TV promotions</li> <li>- Websites</li> <li>- Special events, e.g. Bike Week</li> <li>- Special campaigns, e.g. TravelSmart individualised marketing</li> <li>- Cycle maps</li> <li>- Briefings/meetings, e.g. regarding politicians</li> <li>- Research</li> <li>- Other...</li> </ul>
<p>H.3</p>	<p>Which policy area is the marketing linked to regarding each audience below?</p> <p>Politicians (influencing)                  Tourists                  Children (consideration of age split and those involved in the school run)                  College and university students                  Non-cycling adults (those that currently cannot or will not cycle)                  Women (the mode split indicator should perhaps also consider gender split)                  Promoting utilitarian cyclists                  Over 50 year olds ('baby boomers')                  Unemployed and low-income earners                  Immigrants and new residents to the city                  Other...</p>	<ul style="list-style-type: none"> <li>- Health</li> <li>- Accessibility</li> <li>- Mobility management</li> <li>- Time saving</li> <li>- Cost saving</li> <li>- Environmental</li> <li>- Freedom/choice/independence</li> <li>- Social inclusion (a sense of belonging/pride, image – cycling needs to be trendy)</li> <li>- Sustainable tourism</li> <li>- Congestion</li> <li>- Other...</li> </ul>

### 3. GOOD PRACTICE CASE STUDIES FROM SITE VISITS

#### 3.1 Copenhagen, November 11<sup>th</sup> & 12<sup>th</sup> 2004

On the morning of Day 2 of the site visit Niels Jensen (Copenhagen City Council) led the group on a tour of various cycle measures in Copenhagen. In contrast to the group's year one visit to Copenhagen which featured a tour on-foot, this year cities were able to hire bicycles which allowed two key advantages:

- To see the city from another road-user perspective
- Coverage of a wider geographical area

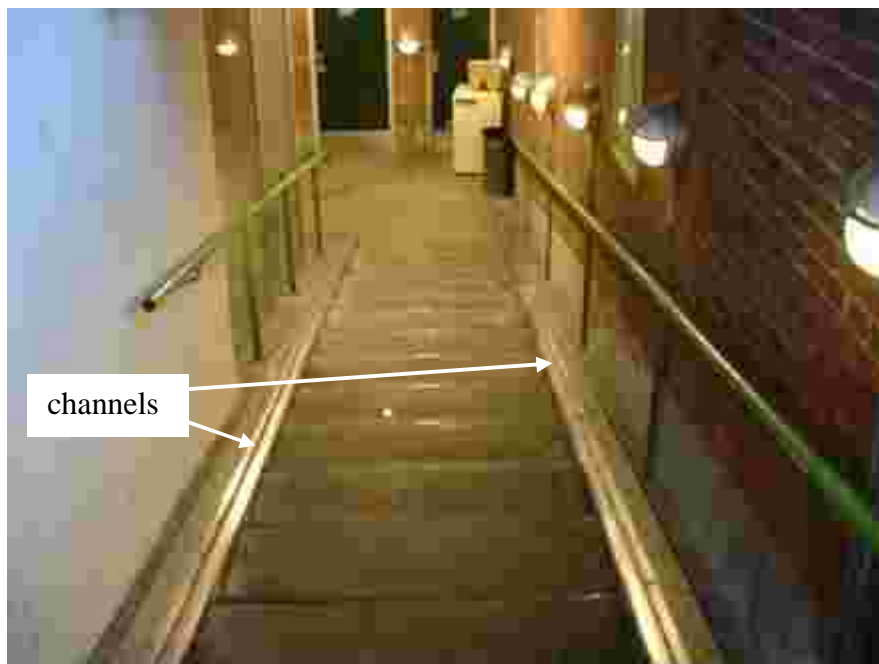
#### **Bicycle hire**

The bicycle hire was located close to the central train station and is thus very accessible for train users. The group collected their bikes from an underground lock-up which also included a bicycle shop.

**Figure 3.1 to 3.3: Cycle hire facility in Copenhagen**



**Figure 3.4: A tunnel connects the pavement level with the underground facility and has channels either side to fit the wheels of bikes and allow smooth carriage in and out.**



**Figure 3.5: Cycle shop and entrance to cycle hire bay.**



### New infrastructure

The group were taken to two sites where construction of new cycle paths next to the carriageway was underway. The two pictures below display a new cycle path which allows safe passage for cyclists but also runs parallel to space for pedestrians and therefore access to public transport.

**Figure 3.6 to 3.9: New cycle lane under construction in Copenhagen**



### Priority for cyclists

Priority for cyclists is a common feature in Copenhagen. Below is a set of miniature traffic lights for cyclists (in the municipality of Fredericsberg) and examples of the blue paint used on roads to notify drivers of crossing cyclists.

**Figure 3.10 and 3.11: Cyclist priority at busy junctions in Copenhagen**



More street furniture below and the photo on the right displays the physical interface between a 'Greenway' and an oncoming road.

**Figure 3.12 and 3.13: Greenways are segregated form the roadspace through street furniture and signage**



## Greenways

Copenhagen has a series of 'Greenways' which consist of designated space for cyclists and pedestrians. The Greenways cut across urban areas and are isolated from the conventional road network. The example below is often used by commuters or for leisure purposes.

**Figure 3.14: A Copenhagen “Greenway”**



### 3.2 Brescia, March 14<sup>th</sup> and 15<sup>th</sup> 2005

The site visit to Brescia was jointly attended by the Behavioural and Social Issues in Public Transport and the Cycling working group. The site visit was made possible by a number of individuals and organisations from Brescia including:

- Maurizio Tira and Chiara Bresciani of the University of Brescia
- Claudio Bresciani and Valeria Ventura of the Municipality of Brescia
- The Managing Director, Andrea Mazza and other staff at Brescia Mobilita
- The Deputy Mayor for Brescia (Transport and Environment)

The two working groups were welcomed by the Deputy Mayor of Brescia (Transport and Environment) and the Managing Director of Brescia Mobilita. Two presentations were then given to the cities on the topics of cycling policies/plans in Brescia and the planned transport projects/facilities in Brescia.

The Brescia technical visit took place on the afternoon of Monday March 14<sup>th</sup> 2005 and involved a cycling tour of the old town and the southern area of the city. The following sites of interest were visited:

- The cycle routes through central Brescia and the old town area of the city.
- The “LAM” High Mobility lines which are segregated urban bus lanes being constructed on the most heavily congested routes in the city.
- The pedi-bus routes through the southern areas of the city which offer a safe, traffic free route to school for children.
- Cycle parking infrastructure at numerous local sites of interest and at one workplace in the city

### Presentation on Cycling Policies and Plans in Brescia

This presentation provided information on prevailing levels of cycling in the city, as well as various plans for improving cycling in the future.

The city of Brescia has nearly 200,000 people living in its administrative area and covers an area of over 90km<sup>2</sup>. The city sits within the regional Province of Brescia which itself has a population of over 1 million inhabitants and covers an area of nearly 5,000 km<sup>2</sup>.

Mode share of the bicycle is dwarfed by the private car according to recent statistics, but the Municipality has intentions to improve the situation in a number of key areas:

*Infrastructure maintenance* – annual inspection of cycle paths, including bicycles to be ridden on them.

*Network length extension* – promotion of new cycle routes and connection with cycle tracks on rural roads and other parts of the province. The diagrams below show the cycle network length in 2001 (44km) alongside the intended 200km length for the future. At present the network is about 115km.

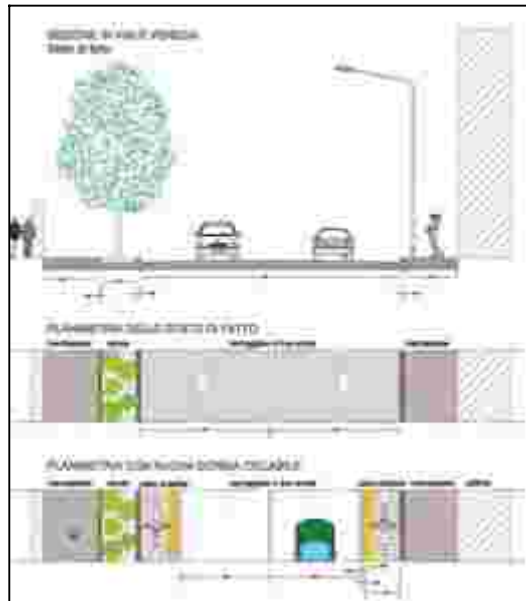


**Figure 3.15: Cycle network (2001)**



**Figure 3.16: Cycle network (200X)**

**Figure 3.17: An example of technical work undertaken by the Municipality to install space for cyclists.**

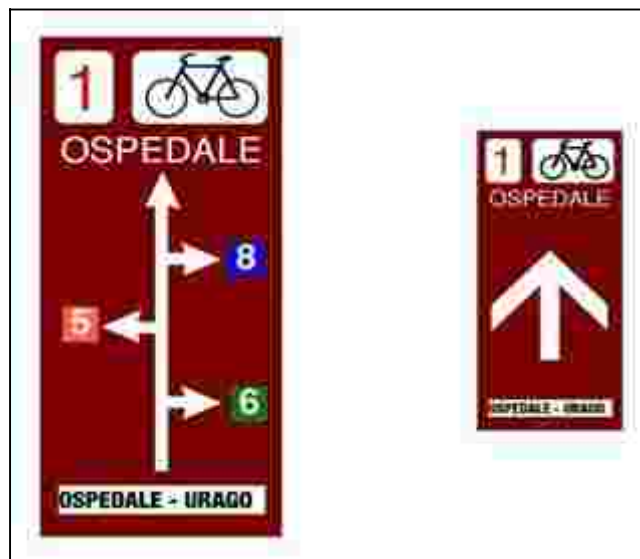


*Bicycle parking* – improvements for parking at the train station and major bus stops and the integration of parking with historical areas.

*Road safety* – safer road layouts, black spot treatment (e.g. traffic calming and 30km/h zones), integrated safety management. A database is currently used to plot accident data on GIS maps.

*Directional signage and cycle maps* – planned in a closely co-ordinated process. The Municipality have carried out a project which aims to provide dedicated signage for cyclists according to FIAB (Italian Federation of Bicycle Friends). A cycle map (1:15,000) is also being produced which provides information on routes, repair shops and cyclist associations.

**Figure 3.17: Directional signage planned to be introduced in Brescia**



*Information and campaigns* – communication strategies for cycle training (e.g. teaching the health benefits of cycling, promotional days, cycle training for children). A CD-ROM has been produced which gives details of cycle network characteristics, the health benefits of cycling and recommendations for improving safety. This training tool is aimed at school children (aged 3 to 14 years) as part of their education on these issues.

### **Presentation on METROBUS and LAM**

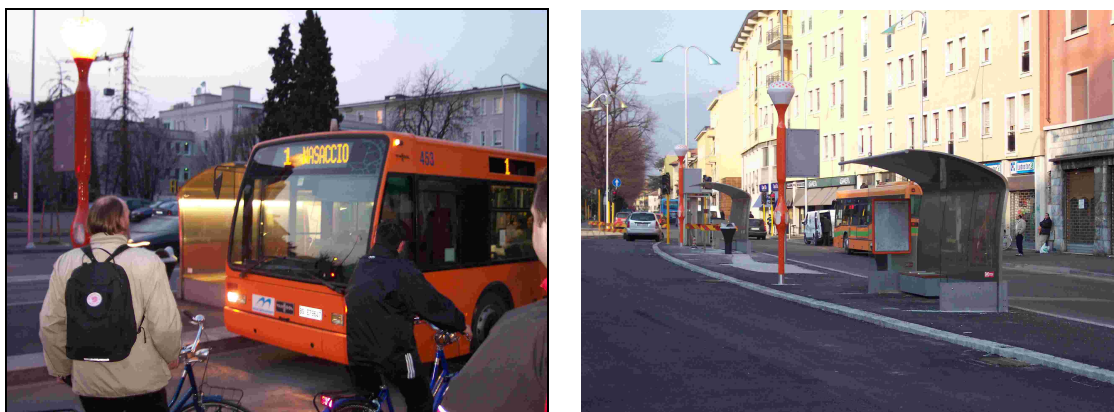
The groups were told about two major infrastructure projects taking place in the city. The first is called ‘METROBUS’ and is a 635 million Euro project to install a driverless ‘light metro line’ in the city. The project is due to open in 2011 and will include 13.1km of track and 17 stations. Much of the track will be located underground due to gradients in the area.

The technology is similar to that used in Copenhagen where a similar system exists. It is hoped that the METROBUS will increase public transport passengers by 20-25% (there were 35 million public transport users in 2004).

The second project presented was called ‘LAM’, which is a rapid transit bus network due to be operational by 2006. Initially, two lines (LAM 1 and 2) will be built and will incorporate dedicated road space and traffic light priority in order to increase the commercial speed of the service. Other innovations include an integrated fare system with regional bus lines and real-time information at bus stops. It is hoped that LAM will increase public transport patronage by about 6%. The dedicated lanes for the LAM will also be available for cyclists to use and the network is being designed alongside the regeneration of ten urban areas in Brescia, which were previously dominated by traffic. Plans for the future include an extension to the network (LAM 3) as well as feasibility studies that consider freight movement and more facilities for pedestrians.

The High Mobility Lines were observed on several occasions during the cycle tour of the city and below are some images of the sites visited, some of which are still under construction:

**Figure 3.18 and 3.19: High Mobility Line infrastructure in Brescia**



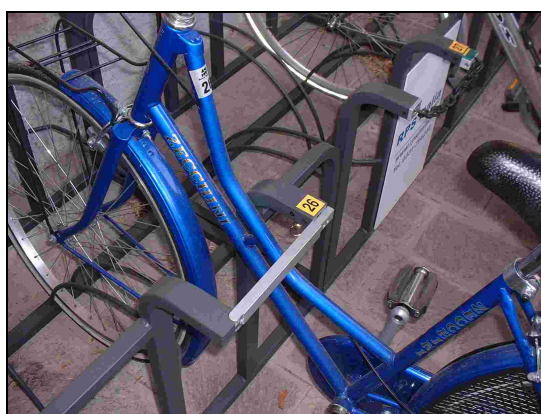
## Cycle Tour of Brescia

The two working groups were taken on a bicycle tour of Brescia lead by the Deputy Mayor. This allowed participants to gain a better understanding of the layout of the city, as well as to observe a number of infrastructure features designed for cycling and walking. Some of these are detailed below.

**Figure 3.20 and 3.21: The participants were able to undertake the tour using bicycles owned by the Municipality**

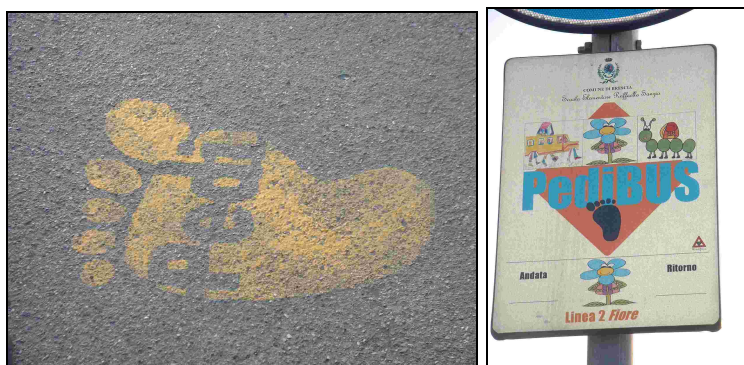


**Figure 3.22 and 3.23: A bicycle storage facility was demonstrated which uses a key-card locking system for security.**



Participants were taken to an area where children are involved in a scheme called 'Pedibus'. This is a walking bus initiative designed to co-ordinate safe and healthy travel to school. Markings are made on the path to display the route they take and signage promotes the concept.

**Figure 3.24 and 3.25: Pedibus street markings and signage in Brescia**



Brescia has a variety of cycle route types, for example:

- One-way segregated cycle space next to the carriage way
- One-way segregated cycle space on-road
- Two-way cycle path in historic park area next to the carriage way

The pictures below demonstrate

**Figure 3.26 shows a city-bound route with good segregation (left) and figure 3.27 shows also markings across junctions to encourage driver awareness of cycle routes (right).**



### 3.3 Glasgow, May 12<sup>th</sup> and 13<sup>th</sup> 2005

The group was welcomed by Robert Booth (Director of Land Services) who gave a brief overview of Glasgow's commitment to the promotion of cycling. Three presentations were then given to the cities on:

- Cycling in Glasgow (Allan Maclean, Cycling Officer, Land Services)
- School Travel Plans in Glasgow (Katy Gillies, Senior School Travel Plan Officer, Land Services)
- Promotion and Marketing of Cycling (Michael Addiscott, Cycling Scotland)

A fourth presentation was later given to the group which gave a more strategic view of transport policy in Glasgow and an explanation of the structures in place to incorporate cycling:

- Transport Policy in Glasgow (Marshall Poulton, Head of Policy and Planning, Land Services)

In the afternoon, the group were given bicycles and taken on a cycle tour of Glasgow. The tour started in the city centre and include a visit to a local primary school where children presented the work they had done on their School Travel Plan. The tour then continued to demonstrate the variety of cycle network routes and infrastructure in Glasgow. More details can be found in Section 5 of this report.

### **Presentation on Cycling in Glasgow**

Allan Maclean (Cycling Officer) explained that the Council has a Cycling Unit comprised of himself, a Team Leader (Jonathan Plant) and a Cycling Technician (John Walker). Together they are responsible for such aspects as network expansion, project implementation and continued promotion of cycling. Much of the work involves retrofitting the existing road network with provision for cyclists. Levels of cycling are measured using automatic counting devices. At present there are 120 km of cycle network. Targets for expansion are 250km by 2008 and 375 by 2012. This represents an average 24km extra per year and is complemented by the intention to have a 30% reduction in traffic levels in the city centre.

### **Discussion**

Glasgow have been looking to combine cycle use with bus lanes. One group member suggested however that bus routes were not necessarily suitable for encouraging new cyclists as it required confidence to cycle alongside buses in a designated lane (especially when drivers are looking to keep to a tight schedule). The behaviour of drivers can be improved by establishing bus quality corridors which respect the presence of cyclists. Inherently it is also a good thing if bus passengers can observe close up the presence of cyclists alongside their vehicle as it helps to remind them that there are other forms of transport that would possibly complete the same journey.

It is not the case that the car should be 'banned' in the short-term as it is sometimes the most appropriate form of transport. More recognition of transport choices throughout the seasons however is needed, e.g. cycling in the summer and perhaps using the bus in the winter.

It was acknowledged that (in the UK) financial years and the requirement to spend funds by a certain date, made it difficult to initiate and manage implementation of projects. Issues also arise from capital expenditure, e.g. in the case of a TV advert Glasgow did for cycle promotion, once this money had been used, it was not recoverable.

When looking to expand a cycle network (as in Glasgow) it is important to do this within a set framework so that progress against clear objectives can be measured. Brescia for example wants to have their framework for expansion in place first before they divert resources to its promotion.

### **Presentation on School Travel Plans in Glasgow**

The presentation given by Katy Gillies was usually aimed at parents of school children but gave the group a good idea of the necessary considerations for encouraging school travel plans.

The key points were:

- The importance of gaining participation from teachers, parents and others was expressed.
- The potential for school travel plan work to form part of the child's curriculum, e.g. relevance to learning maths and science.
- The potential to raise health awareness and increase levels in health by encouraging children to seek more physically active forms of travel. At present only 1 in 4 boys and 1 in 3 girls are meeting the targets for physical activity. Obesity is a serious threat in the UK.
- How adopting alternative travel behaviour can lead to gains in social interaction amongst children.
- The problem is often not about convincing the children of the benefits but about convincing their parents who are concerned about safety and security of options other than the private car.
- Initiatives such as the 'Walking Bus' can be effective, but require significant supervision.

## **Discussion**

More ideas are needed about how the labour requirements for carrying out School Travel Plan survey work can be satisfied. By getting the children more actively involved in this part of the process, there are certain benefits that could form part of their curriculum. Children can also feel a better sense of ownership of the Travel Plan as they have helped to compile the data and present it using tables and graphs, etc. In Denmark, children get involved by identifying the safety blackspots that exist on local roads. Glasgow are currently also looking into a range of software for carrying out this sort of work. Glasgow are developing a School Travel Plan 'template' which can be used to gain a consistent approach by schools. School Travel Plans are becoming 'umbrella' initiatives for other activities such as 'Safe Routes to Schools'. They should be seen as the focal point for which other activities are included.

Measuring the health benefits of reverting to alternative modes has been carried out in recent times, but it was clear that this was needed over a much longer-term basis to identify a sufficiently clear picture. Assumptions often need to be made and this should be made clear when making calculations.

The health data shown in the presentation was obtained from a household survey. It was argued that much more accurate data could be obtained by asking children to carry a 'health monitor' with them which spontaneously records heart rate. Malmo has also done much work with schools and the consideration of health.

The possibility of introducing 'individualised travel planning' for children was mentioned as a way of encouraging transport alternatives through direct marketing, e.g. Travesmart ([www.sustrans.org.uk](http://www.sustrans.org.uk)).

## **Presentation on the promotion and marketing of cycling**

Michael Addiscott of Cycling Scotland explained that the primary target of marketing was to reduce the dominance of the car. The main issues presented were:

- Direct versus passive forms of communication and the effectiveness of each.

- Whether to enforce or encourage voluntary participation in changing transport behaviour. Obviously, overkill of either of these techniques can lead to people either being dissuaded if the enforcement is too strong or resorting to the laziest option if it is left to them make the decision about whether they will change.
- It is important to be able to back up promotional statements and activities with hard infrastructure which is in place and operational, otherwise an increase in positive behaviour initially can quickly fade. One participant posed the question, do we deserve people's attention, i.e. is there a 'pull' in place?
- A sales-led approach is what is arguably needed in order to convince people of the attractiveness of alternative modes.

## **Discussion**

It was recognised that politicians do not have the critical mass behind them when it comes to pushing alternative modes of transport. The political risk involved is a barrier and could be rectified by a greater level of awareness.

The group suggested that it was important for people to be able to 'try before you buy' when it comes to taking up cycling. The benefits of schemes which allow people to use a bike for a test period first should not be underestimated, as this can help to identify whether the bicycle is suitable for their needs before investing in a bike.

It was agreed that there was definite value in forming partnerships. Representatives for cycling, walking and public transport should lobby together in order to make more of an impact on the car culture.

The fact that 'local' gains in encouraging alternative modes can influence 'national' gains in transport behaviour should be sold more often and not lost sight of when pursuing local projects.

## **Presentation on Transport Policy in Glasgow**

Marshall Poulton (Head of Policy and Planning, Land Services) explained that the Land Service department covered all aspects of roads, transport and parks (i.e. all black and green space). The department is considerable in size and employs 3000 people. Glasgow is one of the most densely covered cities in Europe in terms of its green space (32%).

The city is waiting for the introduction of a national transport strategy being devised by the Scottish Executive and due for the end of 2005. At the next level is a first draft regional strategy as well as local strategies in place for current direction. As such, the city follows a 'bottom-up' (local up) approach regarding transport development.

The city features a high proportion of public transport use (68%) and has a good strategic rail system. Annual traffic growth at 1.8% is relatively stable. Possible projects for the future include a tram system for the harbour side, further expansion of Park and Ride capacity, and application of intelligent transport systems.

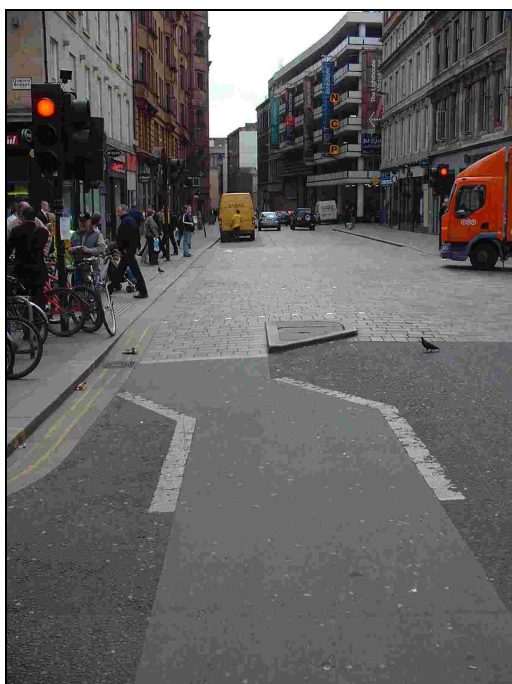
## Bicycle Tour

In the afternoon of Day 1, the group were taken on a bicycle tour led by Allan Maclean (Cycling Officer). Some of the highlights are displayed below.

**Figure 3.28: Allan Maclean explains the prospective route to the group whilst they pick up their bicycles.**



**Figure 3.29 and 3.30: Intelligent traffic lights provide priority signalling in Brescia**



The group were shown cycle infrastructure in the city centre which included priority signalling to allow bicycles through. A speed device located on top of traffic lights is able to observe the speed of oncoming cyclists and change signals accordingly.

**Figure 3.31: Cycle parking located in the city centre.**



**Figure 3.32: Shared bike and bus lanes in Glasgow**



The group was taken along bus lanes which allow shared use by cyclists. Glasgow is planning to increase the numbers of lanes like this.

**Figure 3.33 and 3.34: School travel plans in Glasgow**

The group were taken to Annette Street Primary School where pupils gave a presentation on the Travel Plan they had recently completed. The School is looking to introduce new cycle parking on the premises and it already has a special notice board which communicates the work done by the school regarding transport and other environmental/sustainability activities.

**Figure 3.35 and 3.36: Green Routes in Glasgow have automatic counters installed to monitor cycle traffic**

The group was taken on a number of 'green routes' throughout the city, as well as some of the commuter routes used by cyclists. Above (left) is an example of a route which follows the River Clyde. Above (right) an automatic cycle counter is shown which records data using embedded cables in the path. The post to the side is used to store the data which is collected by connecting a portable computer.

**Figure 3.37: Erl Wilkie (Chief Executive of Cycling Scotland) talks to Niels Jensen (City of Copenhagen) about various cycling issues**



**Figure 3.38 and 3.39: Signage in Glasgow promoting the showcase “Kelvin way” route**



The Council have a developed a showcase cycle route called the ‘Kelvin Way’. This has been promoted using TV advertising and is an example of a well established cycle infrastructure suitable for both commuting and leisure. Above (left) signage indicates the presence of the cycle network, as does the sign (above right) which gives information on a national cycle network route.