

Non-motorised transport: overview and case studies

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Structure of the presentation

- Introduction;
- Non motorised transport as an element of integrated urban / regional transport system;
- New ideas increasing attractiveness (competitiveness) of non motorised transport – based on NICHES, TRENDSETTER and BUSTRIP projects;
- Cases;
- Resume.

Introduction

Energy matters: (European Energy and Transport. Trendsto 2030 – 2005 update):

- final consumption of energy in transport in sector in 2030 will raise and is projected to be about 21% higher than in 2000;
- Price of oil was assumed as ca. 45 USD per barrel in 2010;
- How to decrease energy consumption in transport sector?

Routism among urban transport planners

- Initial stage of development of non-motorised modes of transport was very low in 1990 in Poland;
- It started to change in 90-ies in cities;
- First (and sometimes only) activity was building biking routes...;
- ...Without additional activities cocentrated on other modes of transport;
- Biking and pedestrian network should be a part of urban transport system.

Integrated bike system needs:

- Biking lanes;
- Bike & ride hubs increasing intermodality in urban area;
- Zones with reduced car traffic;
- Limitations for individual car in the citycentre (at least parking fees);
- Promotional and educational activities;
- Parking places for bikes in schools, trading centers, companies...;
- Public bike system concentrated at least in centre of the city;

NMT – a new hope for PT

- NMT if correctly integrated could result in increase of market penetration of PT in the city;
- Bikes could serve as feeders to railway stations and major PT hubs – effective range of bike in urban area is ca. 5 km (20-25 min. journey)
- Almost 1/3rd of all urban travels are made on the distance shorter than 3 km;
- Bikes could reduce pressure of individual motorization – 36% bikes, 33% PT, 26% ind. motor., 5% pedestrians (Kopenhagen)

Integrated bike system: first steps

- Improvement of quality of existing biking lanes (reduction of accidents);
- Well projected and readable crossings reducing conflicts between road users (drivers, bikers, pedestrians);
- Popularity of small roundabouts;
- Small architecture friendly for bikers (balustrades near stops);
- Developing bike corridors integrated with attractive places of the city.



Small architecture in Örebro, Sweden

BUSTRIP about cycling and walking

Increasing the modal share for walking, cycling and public transport requires an integrated programme of plans, policies and programmes across the urban area that

- increase the attractiveness of walking, cycling and public transport
- discourage personal use of cars, and
- provide information and incentives to encourage walking, cycling and the use of public transport - ***INTEGRATED MARKETING***

TRENDSETTER about cycling

- A combination of soft measures (e.g. marketing, children's education) and hard measures (e.g. B&R, bicycle lanes) is successful to increase cycling.
- Health and safety arguments are often more successful than environmental arguments.
- Sheltered and theft-protected bicycle racks, especially close to metros, commuter trains and bus stops, are effective measures.
- Bicycle training for children should be supported. This can establish suitable travel habits for future generations.

Control

- Graz uses Bicycle Policy Audit (BYPAD) – a method to analyse the strengths and weaknesses of a city's cycling policy. Not only are measures and results of the cycling policy considered.
- An even bigger concern is how the process is incorporated into political and administrative structures.

NICHES about cycling

- New and Innovative Concepts for Helping European Transport Sustainability;
- Selected 12 solutions that might increase PT competitiveness, reduction of emissions, etc.
- One of the recommended solution – Pubic Bikes

Public Bikes

- Public Bicycles are innovative schemes of **rental** or **free** bicycles in urban areas. They differ from traditional, mostly leisure-oriented bicycle rental services as they provide fast and easy access and can be used for daily mobility with one way use being possible. Public Bicycles can be seen as part of the public transport system and offer the user a highly flexible travel option for inner urban trips.

Public Bikes in Lyon

- 2000 bikes;
- Each bike used 16 times a day (in summer);
- 2 million trips during first 6-month period;
- They replaced about 150 000 individual car trips;
- Use of bikes increased by 44% within the year;

Integration: B & R infrastructure



Örebro railway station, Sweden



Bike Station in Bremen, Germany

Access restrictions to selected areas: support for pedestrians and bikers

- Car free zones (complete prohibition);
- Strolling zones (allowance for cars but broader pavements, limited parking space);
- Vehicle restriction zones (some kinds of vehicles are prohibited, i.e. trucks);
- Environmental zones (older vehicles prohibited);
- Congestion charging (fee during entering the zone);
- Zone – model parking (closer to centre of the city – more expensive parking fee).

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