Mobility in cities database

- User friendly database of 120 urban mobility indicators in 50 cities
- Analysis of the role of public transport and recommendations for sustainable mobility
- Information on the evolution of urban transport policies in 30 cities

Planning, decision-making and research in the field of urban transport all need reliable and comparable data. The Mobility in Cities Database developed by UITP responds to this need and provides urban transport professionals with quantitative and qualitative data on the economics of urban mobility based on the study of a sample of 50 cities from around the world (1).

Public transport advocacy
The economic and environmental benefits of sufficiently dense urban development patterns supported by an efficient public transport network are well established. This study provides fresh data to further strengthen arguments in favour of public transport. Effective policy messages and practical recommendations are developed through the analysis of the data.

Comparisons between cities
The study allows informed comparisons between cities. The data is presented in a standardised way, which allows cities to be compared at a glance. The large number of cities enables like with like comparisons to be made and the wide range of indicators means that sophisticated analyses are possible. Information on urban transport policies implemented at city-wide level enable an understanding of differences in performance between cities.

A source for further research
Such a wealth of data can be used as a basis for analysing many aspects of urban transport. The analysis developed by UITP focuses on the role of public transport but many extensions are possible.

(1) This project follows in the steps of the Millennium Cities Database for Sustainable Transport. Added Value The project results are available on a user-friendly CD-ROM which contains the following:

Database
The database contains a set of 120 indicators collected in a sample of 50 cities worldwide using 2001 as the year of reference. The easy-to-use interface enables the database to be searched by location, by theme or by a combination of the two. Data may be exported into a spreadsheet format for further use. Each indicator was carefully defined and the geographical perimeter of each city was clearly specified. Collected data were adjusted to fit with those definitions. The availability-rate of data is over 90%.

Analysis and recommendations
The analysis focuses on the determinants of the cost and the performance of the urban transport system and shows to what extent a higher use of public transport means a lower cost of transport for the community and lower energy consumption for transport. It also emphasises the compared performance of public transport and private cars. Public transport attractiveness factors are identified. Finally, the analysis describes the evolution of public transport networks and their performance between 1995 and 2001.

City fact sheets
City fact sheets show the evolution in the situation and performance of cities in the wake of transport policies implemented at local level. More precisely, city fact sheets contain information on policies and actions undertaken or planned during the 1991-2001 and 2001-2010 periods respectively, in 30 cities, in the fields of:

- **town planning and transport** (limiting of urban sprawl, integration of town and public transport planning, rules capping the construction of parking spaces);
- **demand management and control of car traffic** (parking restrictions and regulations, controlled access to city centre, pedestrianised areas and low traffic zones, urban toll);
- **development of public transport** (investment, extension of reserved routes and priority schemes, improvement of service quality, price scale);
- **organisation and integration**.

The analysis report and the city fact sheets are available in English, French, German and Spanish.

**The cities:**
- A fact sheet is available for this city
- Amsterdam
- Helsinki
- Rome
- Chicago
- Athens
- Krakow
- Rotterdam
- Dubai
- Barcelona
- Lille
- Seville
- Hong Kong
- Berlin
- Lisbon
- Stockholm
- Melbourne
- Bern
- London
- Stuttgart
- São Paulo
- Bilbao
- Lyons
- Tallinn
- Singapore
- Bologna
- Madrid
- Turin
- Tunis
- Brussels
- Manchester
- Valencia
- Budapest
- Marseille
- Vienna
- Clermont-Ferrand
The indicators

Background information on the city
Definition of the metropolitan area
Definition of the Central Business District
Population
Urban population density
Urban population + job density
Proportion of jobs in the Central Business District
GDP per inhabitant (EUR)
Public transport modes operated

Private transport infrastructure
Length of road per thousand inhabitants
Length of motorway per thousand inhabitants
Length of road per urban hectare
Length of motorway per urban hectare
Parking spaces per thousand jobs in the Central Business District

Public transport infrastructure
Length of reserved public transport routes per thousand inhabitants
Length of reserved public transport routes per urban hectare
Park & ride facilities per thousand inhabitants
Park & ride facilities per urban hectare

Private passenger vehicles: supply and use
Passenger cars per thousand inhabitants
Motorcycles per thousand inhabitants
Private passenger vehicles per thousand inhabitants
Average annual distance travelled per private passenger vehicle
Average passenger car occupancy rate

Taxis and collective taxis: supply and use
Taxis and collective taxis per thousand inhabitants

Road traffic
Annual private passenger vehicle kilometres per kilometre of road
Average speed on the road network

Public transport supply
Total public transport vehicles per million inhabitants
Buses per million inhabitants
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<th>Indicator</th>
<th>Unit</th>
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<td>Light rail vehicles per million inhabitants</td>
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<td><strong>Mobility and modal split</strong></td>
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<td>Daily trips per inhabitant</td>
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<td>Daily mechanised and motorised trips per inhabitant</td>
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<td>Average duration of a private motorised trip</td>
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<td>Average duration of a public transport trip</td>
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<td>Annual private motorised passenger kilometres (including taxi) per inhabitant</td>
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Annual motorised passenger kilometres per inhabitant
Annual public transport journeys per inhabitant
Annual public transport passenger kilometres per inhabitant

**Public transport productivity and operating cost**
Average public transport place occupancy rate (passenger kilometres / place kilometres)
Recovery rate of public transport operating expenditure by farebox revenue
Average operating cost of one public transport vehicle kilometre
Average operating cost of one public transport place kilometre
Average operating cost of one public transport passenger journey
Average operating cost of one public transport passenger kilometre
Average public transport farebox revenue per journey

**Cost of transport for the traveler**
Cost of one private motorised passenger kilometre for the traveller
Maximum cost of one hour of parking (off-road) in the Central Business District
Maximum cost of one hour of parking (roadside) in the Central Business District
Cost of one public transport passenger kilometre for the traveller

**Cost of passenger transport for the community**
Road network investment, operation and maintenance expenditure in % of urban GDP
Public transport investment expenditure in % of urban GDP
Cost of passenger transport for the community in % of urban GDP
Cost of private motorised transport for the community in % of urban GDP
Cost of public transport for the community in % of urban GDP
Annual road network investment, operation and maintenance expenditure per inhabitant
Annual public transport investment expenditure per inhabitant
Annual cost of passenger transport for the community per inhabitant
Annual cost of private motorised transport for the community per inhabitant
Annual cost of public transport for the community per inhabitant

**Energy consumption for passenger transport**
Annual energy consumption for passenger transport per inhabitant (at vehicle)
Annual energy consumption for passenger transport per inhabitant (at source)
Energy consumption per private motorised passenger kilometre
Energy consumption per public transport passenger kilometre (at vehicle)
Energy consumption per public transport passenger kilometre (at source)
Energy consumption per road based public transport passenger kilometre (at vehicle)
Energy consumption per road based public transport passenger kilometre (at source)
Energy consumption per rail based public transport passenger kilometre (at vehicle)
Energy consumption per rail based public transport passenger kilometre (at source)

**Passenger transport polluting emissions**
Annual polluting emissions due to passenger transport per inhabitant
Annual polluting emissions due to passenger transport per urban hectare

**Passenger transport fatalities**
Annual passenger transport fatalities per million inhabitants
Annual passenger transport fatalities per billion motorised passenger kilometres

**Private motorised transport and public transport (comparisons)**
Motorway length / Reserved public transport route length / Average speed on the road network / Average public transport speed
Cost of one private motorised passenger kilometre for the traveller / Cost of one public transport passenger kilometre for the traveller
Cost of one private motorised passenger kilometre for the community / Cost of one public transport passenger kilometre (excluding investment) for the community

Annual road network investment, operation and maintenance expenditure / Annual public
transport investment expenditure
Annual private motorised passenger kilometres / Annual public transport passenger kilometres
Annual cost of private motorised transport for the community / Annual cost of public transport for the community
Energy consumption per private motorised passenger kilometre / Energy consumption per public transport passenger kilometre (at vehicle)
Energy consumption per private motorised passenger kilometre / Energy consumption per public transport passenger kilometre (at source)