1. Mobility, transport, infrastructure
1.2 Mobility and vehicles concept

BEST PRACTICE IN URBAN MOBILITY

Tony Marshall - 26 May 2010
Cities are seen by some as problems to be overcome.

Others see them as the key to a more sustainable future.
Why urbanisation matters
half the world is urban
Shrinking Cities

Last 30 years, more cities in the Developed world shrank than grew

SHRINKING CITIES IN THE 1990s
• UK 49 cities
• Germany 48 cities
• Italy 34 cities
• Russia 100 cities
• USA 39 cities
More people, more cars - 2 billion vehicles by 2020?

Historical & projected increases in global motor vehicle numbers

Car Ownership per 1,000 population of driving age 2007

Morgan Stanley

Number of motor vehicles - Billions
What might this mean?
In 2005 the number of vehicles in use worldwide exceeded 1bn. In European cities, 20-25% of urban space is devoted to transport activities, compared to only 7-11% in Bangkok and Calcutta.

Source: P Hall and U Pfeiffer, Urban Future 21, 2000
having trouble breathing?

Between 2000 and 2004, production of passenger cars in China jumped from 605,000 to 2.32M. More people are driving cars, and the number of motor vehicles other than two-wheelers in the world is expected to double in the next 15 years to 1.3bn.

Source: www.peopleandplanet.net/doc.php?id=627
will your city drown?

By the end of this century sea levels are likely to rise by 28-43cm or dramatically more if rapid melting of the Greenland and Antarctic ice sheets occurs. 22 of the world’s major cities are at risk of flooding from coastal surges.

Source: IPCC Report, Climate Change, 2007 and Munich Re Group, Megacities - meganisys, 2005

flooding
how many centenarians will you know?

There are currently 580M people over the age of 65 in the world, with 355M of them in developing countries. By 2020 70% of the world’s elderly will be in developing countries.

Source: Old Age and Ageing in Africa, IFA Global Conference, June 2006

ageing population
The overweight now outnumber the malnourished. While 800M people in the developing world are chronically malnourished, more than 1bn people now have a BMI (body mass index) that makes them clinically overweight, and at least 300M are obese.

Source: http://www.who.int/topics/obesity/en/
are there two cities within each city?

poverty

One fifth of the world’s population live in countries where many people think nothing of spending $2 a day on a cappucino. Another fifth of the population survive on less than a dollar a day.

The UN notes that for women to be adequately represented in their country, at least 30% of parliamentary seats should have a female representative. Only twenty out of the 192 UN members - including Rwanda, Mozambique and Burundi - have reached or exceeded the 30% mark.


who acts on your behalf?

representation
Launched at the
World Economic Forum
Davos, January 2009
The overarching strategy is to make greener travel more convenient. This usually includes a range of approaches, rather than a single, "silver bullet" solution.

The Bogotá Transmilenio has reduced travelling time by 32%, cut gas emissions by 40% and decreased accident rates by 90%.

Source: http://c40cities.org/bestpractices/transport/bogota_bus.jsp
The Octopus card can be used to pay fares for all public transport in Hong Kong and to make purchases for consumer products at many stores in the city, being accepted by more than 1,000 merchants.

Source: http://en.wikipedia.org/wiki/Octopus_card
The Stockholm congestion charging trial reduced CO₂ emissions by 14% and traffic by 22%, while travel times inside the zone reduced by 30-50%.

Source: [http://c40cities.org/bestpractices/transport/stockholm_congestion.jsp](http://c40cities.org/bestpractices/transport/stockholm_congestion.jsp)
low-carbon private vehicles

Japan plans to build hundreds of quick-recharge stations before plug-in hybrids enter the market in 2009. Japanese drivers will be the first in the world to be offered plug-in cars by the major carmakers.

Source: www.peakoiltaskforce.net
More than 80% of today’s road freight trips in European conurbations are of distances below 80 km and can be defined as urban or urban-regional transport.

Source: www.bestufs.net/bestufs2_bpi_handbook.html
In London, the rephasing of the traffic signals to allow greater pedestrian crossing time contributed to a 35% reduction in pedestrian road deaths and serious injuries.

Source: Greater London Authority, Information London, 2008, p.31
Transportation emerges as the top megacity infrastructure challenge by a large margin. It is the infrastructure area that stakeholders believe has the biggest impact on city competitiveness. They are also keenly aware of its environmental impact (e.g., air pollution) and are keen to move to greener mass transit solutions.

Future Urban Accessibility and…

Gender  Health  Carbon  Poverty