Third stop - The Economy

Public transport brings economic benefits

- Poor infrastructure and congestion reduces productivity and the economic viability of a country and increases the cost of transport to the community, as well as having a high environmental impact.
- Dense compact cities are the most economic overall and costs are much higher in low-density sprawling cities. In developed countries with average or high density, the cost to the community of urban journeys accounts for 5-7% of GDP, when half the urban journeys are made by public transport, bicycle or on foot. This grows to 15% in sprawling cities. In developing countries, it can exceed 25% if density is low and level of car ownership is high with respect to income per capita.
- Traffic congestion is growing in all urban areas and has a measurable impact on an economy. Congestion costs today, on average, 2% of GDP or 120_ billion for Europe (15 countries).
- Decision-makers often draw the conclusion that growing traffic volumes and car ownership reflect peoples' desire to drive. The hidden external costs of transport clearly skew investment towards the private car, and bring higher long-term costs to the community. Equitable charging and regulation are paramount in developing the sector, in all countries.
- Public transport brings employment as it creates 2-3 times more jobs than private transport, and is more equitable for all.

UITP recommends

- Developing transport policies for the optimal use of economic resources. Maintaining consistency between land-use planning and transport policies to curb urban sprawl and the resulting rise in transport spending. High-density developments with robust public transport systems, combined with restrictions on vehicle use, limiting parking and urban pricing are the most economical. The wide choice of innovative transport systems available today means that both the developing and developed world can put efficient networks in place that are appropriate to their budgets and requirements.
- Promoting an urban way of life, centred on sustainable mobility, and developing public transport networks integrated with non-motorised modes (cycling, walking). Cities where these modes are dominant spend less on transport and are more sustainable.
- That governments agree fiscal advantages and design incentives to reward sustainable practises and procurement, such as the purchase of clean, light, efficient vehicles with high technological performance levels.
- Aiming for "zero growth in traffic" and setting a price on car use (with parking policies and urban road charging) in order to limit excessive private car use for urban travel. Public transport fares should be set at levels that allow quality services to be provided, and good enough to persuade motorists to use them.
- Earmarking the proceeds from parking and road tolls, as well as contributions paid by economic actors benefiting from the accessibility provided by the public transport networks (e.g. property developers, employers etc.) for public transport funding.
- Structuring and regulating paratransit and informal transport in less developed cities to increase mobility and facilitate access to safe affordable transport for all, especially the low income and most vulnerable members of society in an equitable fashion.

This document has been prepared by the UITP Working Goup for Sustainable Development. A full version of the brochure entitled "Ticket to the future - Three Stops to Sustainable Mobility can be downloaded from the UITP web site www.uitp.com

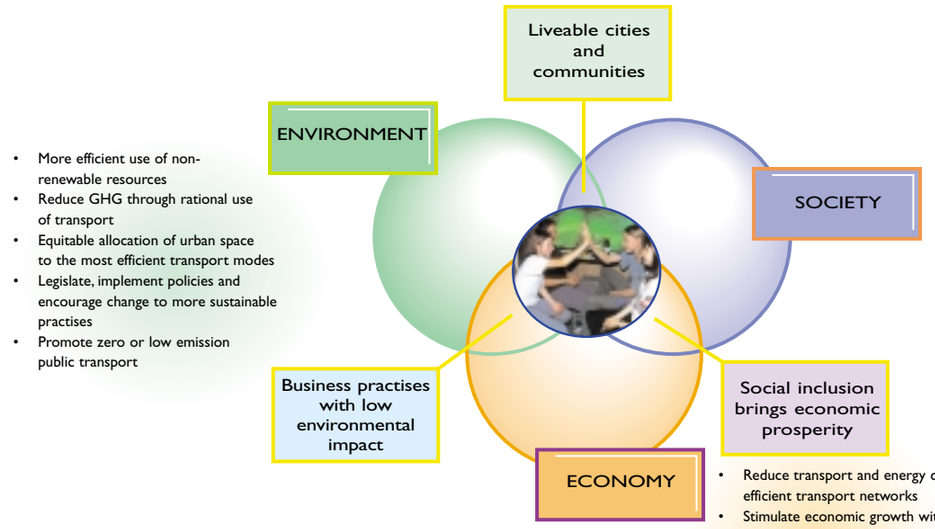
UITP • International Association of Public Transport
rue Sainte Marie 6 • B-1080 Brussels • Belgium • Tel: +32 2 673 61 00 • Fax: +32 2 660 10 72 • http://www.uitp.com

May 2003 • This brochure has been produced on environmentally paper

Ticket to the future

Three stops to Sustainable Mobility

The Concept of Sustainable Mobility



Sustainability can only be achieved when all three interlinking elements: the environment, society, and the economy are in balance.

A cornerstone of sustainable development

Sustainable transportation is an aspect of global sustainability, which involves meeting present needs without reducing the ability of future generations to meet theirs.

A sustainable transportation system is one that:

- allows the basic access needs of individuals and societies to goods, jobs, education, leisure and information to be met safely and in a manner consistent with human and ecosystem health, and with equity within and between generations.
- is affordable, operates efficiently, offers choice of transport mode for seamless intermodality and supports a vibrant economy.
- limits emissions and waste within the planet's ability to absorb them, minimises consumption of non-renewable resources, the use of land and the production of noise, and reuses and recycles its components as much as possible.

The transport sector is critical to future economic, social and environmental progress. The integration of economic and financial instruments into environment and transport policies is a step in the right direction but it is the duty of all mobility actors to promote more sustainable practises.

Creating a better future requires acting now for a more equitable present, and governments and businesses in all sectors need to be committed to policies and programmes that will improve the current mobility trends and patterns, and fundamentally shift our present habits of consumption and production.

There is an opening now for the public transport industry to take the lead in ensuring that the sector develops along sustainable lines. Sustainable mobility is environmentally sound, socially just and economically feasible and public transport performs strongly in all three areas. Public Transport is part of any solution, and is a dynamic actor in the sustainable future of cities. UITP, its members and the public transport sector as a whole are taking up this challenge and their commitment to the UITP Charter on Sustainable Development tracks this commitment.

First stop - Society

Cities, Transport and Sustainability

More people – more demand

- Urban populations will increase by 27% over the next 30 years. The provision of sustainable urban mobility becomes a top priority as more people migrate to urban areas.
- By 2030 the number of cities whose population exceeds 10 million will increase to 23 and 18 of them will be in the developing world, where cities already suffer from high rates of congestion, road accidents and air and noise pollution.
- In many parts of the world, demographic trends will lead to an ageing population less able to provide itself with individual mobility.

More Mobility - Safer

- Safe travel is a major concern to consumers of all ages and social classes.
- There is a direct relation between the numbers of people killed or maimed on the roads and the number of journeys made by car in a community. Road accidents are the primary source of death in the 15-30 year age group, accounting for as much as 40% of all accidental deaths in many countries. On average it is 5-10 times safer to travel by public transport (based on per passenger x km transported).

Mobility for all – a better quality of life

- High levels of congestion reduces the efficiency of all traffic and makes surface public transport services less reliable, less attractive and socially inclusive.
- Poor transport infrastructures further marginalises the poor, the less able and makes all travel less safe, increasing the risk of accidents for everyone.
- Healthy mobility habits start early and public transport brings independence to all, especially to women, the younger and older generations, ultimately lowering the cost of transport to the community.

UITP recommends:

- Development patterns that promote efficient integrated transport by sustainable modes, diminishing the health costs to the community due to accidents, lack of physical exercise and encouraging future desirable mobility habits in young people.
- That decision-making processes should be facilitated and reformed at international, national, regional and local levels to enable appropriate inter-agency departments to co-operate, advocate and implement coherent policies.
- Cities should plan transportation systems to achieve the best combination of modes and services that benefit the maximum number of people. Policies should encourage a change in consumption patterns and investments in fast, efficient public transport, bringing mobility to all.
- Rail and bus transport are much safer than private car travel and should be given priority. Better environments for walking and cycling encourage their use, complementing public transport, especially for short distance travel in urban areas.

Second stop - The Environment

Everyone's future

Transport - a major source of Greenhouse Gases

- Climate change is a global problem which requires every sector to play a role.
- The transport sector's share of greenhouse gasses is growing in both developed and developing countries.
- Carbon emissions from public transport are considerably lower per passenger transported, than for private cars.
- New technologies combined with more efficient management of transport companies help reduce environmental impact.

Urban air pollution in cities - a cause of death

- The risk from dying from a traffic accidents is already extremely high, particularly in developing countries, but according to WHO (World Health Organisation) every year more people die from the effects of traffic-related air pollution than are killed in car accidents.
- Private cars are the main cause of urban air pollution related to transport. Public transport even when not running at full capacity emits less pollutants on a local level than private cars.
- As the occupancy rates for cars decline, more and more cars come onto the roads, resulting in higher emissions despite cleaner engine technology.

Public Transport - better use of non renewable resources

- Transport is the largest consumer of energy and it still relies heavily on non-renewable fossil fuels. Public transport in urban areas offers far better energy efficiency than personal transport. The higher the modal share of public transport, the better the efficiency achieved.
- Energy use by bus or rail is 3-5 times more efficient than cars or aviation per person/km based on full loads.
- Urban space is also a limited resource impacting quality of life for all those living and working in a city. Public transport uses space more efficiently allowing all citizens to enjoy their city.
- Even zero emission energy effecient cars take up more space than public transport.

UITP recommends:

- Legislation be adopted that brings the maximum benefit in environmental terms, without creating heavy economic burdens for either the public or private sector, while still respecting the social aspects of sustainable development.
- The environmental impact of all transport should be mitigated by the promotion of collective low polluting, energy saving modes such as rail and public transport.
- For the lowest environmental impact, integrating all modes of transport must be a priority. Aiming at attaining maximum interoperability between private and public high occupancy networks, and supported by investment in infrastructure.
- The public transport sector itself must introduce environmental management systems to ensure it acts as efficiently as possible. Operators and the industry must adopt the best available practices in their own activities, promoting the use of cleaner technologies, noise reduction, driving techniques, and service optimisation.
- Low or zero polluting modes (on a local level) such light rail, metros and electric vehicles should be used to provide high occupancy mobility in inner cities. Dedicated rights-of-way and restricted access for private transport improves safety and air quality for all.
- Oil producers should market and distribute low sulphur (or desulphurised) diesel and lead-free fuel in all countries, but especially in developing countries, with the same conditions as diesel and leaded fuel today.