

C 2.3 URBAN AREAS AND INTEGRATED URBAN TRANSPORT

Recommendations to Decision makers

Human powered transport

To promote the use of human powered forms of travel, there needs to be a more effective integration between transport and land use policies. Although in western countries, more attempts are made to provide dedicated cycle and pedestrian facilities, this may not be the case in developing countries where the provision of more road space for car users is seen as a better way of managing the congestion.

Education, better land-use planning policies and design guidelines are some of the main areas which should be considered for further investigations. Other incentives such as funding for improved walking and cycling infrastructure should also be seriously considered as an incentive to authorities in developing countries.

Mega-cities

All sampled mega-cities have different elements of sustainability in their transport systems; walking and some forms of public transport, together with cycling. Their transport systems may be contributing to an improved standard of living collectively, but it is not being shared equitably by all sections of the community. Nevertheless, whilst transport policies and plans have elements which head towards sustainability, the development in reality is still heading in the wrong directions. The environmental indicators also demonstrate that they are not generating the greatest possible improvement in the quality of life. Further studies should be carried out to learn lessons from the existing mega-cities and to share the knowledge with other cities which might become a mega-city in the future.

Congestion

In the developed countries, congestion preventive measures (regulatory, soft/technical measures or infrastructure construction) should be mixed in order to develop a consistent and effective set of traffic and transport policies. In developing countries, the infrastructure construction is an important way to mitigate congestion. In order to ensure effectiveness and sustainability, land use and modal shift policies should be integrated.

The adequacy of such mixed traffic and/or transport policies may differ significantly from city to city and from country to country. Because individual cities and countries have different socio/economic/political backgrounds, different demographic sizes and characteristics, different nature/degree of congestion problem, different level of existing infrastructure provision, and different level of economic development, the cities/countries may therefore require their own unique sets of traffic and transport policies in order to develop effective measures which are able to combat traffic congestion.

Technical aspects

Human powered transport

To encourage a higher share of travel mode by walking and cycling, it is important that land use planning policies are complemented by effective measures. It is important to have a combination of measures including contra flow system for cycle lanes, traffic calming measures, facilities for bike and ride, cycle parking facilities, safety and comfort measures in roads and at intersections and appropriate signage and marketing. Knowledge sharing

and transfer of good design examples to developing countries needs to be given a high priority status.

Mega-cities

All sampled mega-cities have urban development and transport plans, but all cities are behind target in their implementation of transport plans to varying degrees.

Does this mean that sustainability cannot be achieved by intervention in transport systems? Will change occur in other ways, for example as Tokyo's population declines as a result of Japan's falling fertility rate? Will personal motorised mobility decline as fossil based fuels become more scarce and expensive? We have not been able to manage it so far.

Congestion

Congestion can be managed in many ways including infrastructure provision and regulatory measures. In cities and countries with high levels of infrastructure, regulatory measures tend to show more effective control of congestion. They should be supported by soft and technical measures such as: road telematics, mobility management and reallocating road space for public transport and non-motorised transport modes.

Regarding infrastructure provision, it has been frequently stated that an increase of road traffic capacity may induce additional traffic and thus on the long run the level of congestion would be no better than before. This notion, however, may not undermine the necessity of infrastructure provision by itself, because expanded road transport capacity may well contribute for example to regional economies.

As a long term measure, it is advisable to concentrate new land uses in the vicinity of good public transport connections.

Recommendations to PIARC

From the points raised above, the following research and studies are recommended:

In the field of mitigating congestion in urban areas, a better understanding and deeper knowledge is needed to ensure the sustainability of traffic and transport policy. In the long term, it is necessary to enhance research on the relationship between land use/development pattern and transport systems including the road and public transport networks:

- Efforts should be continued in developing an understanding of the profile of non-motorized users in urban areas both in developing and developed countries. Good design practices in western countries should be shared with authorities in developing countries.
- There is a need to study optimum land-use development strategies that balance the need for economic development with the need to reduce congestion and to save the environment from harmful effects of traffic and transport.
- Study strategies and new initiatives in the use of parking policies to limit urban congestion.

There is a further need to exchange information, experience and views on measures to alleviate, prevent and manage urban transport problems. In spite of the diversified problems, information on and experience in certain cities or countries may well be informative and may present a good reference for other cities/countries.