

Sustainable Urban Mobility

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People are moving back to the city, urban densities are increasing, and there is a large effort to invest in sustainable transport systems at the urban and inter-urban scales (Banister, 2008, Hickman and Banister, 2014, Newman and Kenworthy, 2015). There is emerging evidence of car usage declining in some of the larger Western cities (Millard-Ball and Schipper, 2010, Goodwin and Van Dender, 2013) and it is now time to rethink our approaches to sustainable urban mobility – we can be much more radical in providing high quality, accessible and low carbon transport for all. A key element here is to move away from looking at transport as a set of competing modes, and to see mobility as a set of integrated services that people can gain access to – using different modes within a journey and across space and time. There are five main elements that might form the core of such a transformation so that city transport is restructured as efficient, clean and accessible – and supportive of attractive urban living:

1. There is extensive investment in the public realm and streetscape, so that walking and cycling – the most efficient modes, in carbon dioxide (CO₂) emission terms – are given the greatest priority in central urban areas, including segregated routes, pedestrianised zones, with high quality linkages from the suburbs into the central areas.
2. Urban planning is orientated around the public transport system, with higher densities and mixed uses around key public transport nodes. Urban development and transport are well integrated and support the long term urban strategy. High levels of affordability are encouraged in housing provision, so that all income groups can live in attractive urban areas.
3. Multi-modal public transport becomes the dominant mode of travel in urban areas, particularly in the larger cities. There can be extensive investment in Metro systems, light rapid transit, rail, bus rapid transit and bus Investment according to context, with high quality interchanges allowing easy transfer between systems. The focus for investment is on improving the journey experience – so that ‘seamless travel’ becomes possible. Public transport is clean (hybrid and electric) and accessible, so that there is a dense network of services that provide door-to-door availability and accessibility for all.
4. The role of the private car is rethought – so there is much less priority given in terms of space and use of the street. The car is heavily taxed against CO₂ emissions, so that the vehicles become cleaner (hybrid and electric) and the size of the car can be reduced and made more suited to the urban environment. This would have clear implications for the use of space within the city, as substantial amounts of space currently used for parking could be released and made available for other uses, including public realm improvements, walking, cycling and public transport. New forms of car ownership are encouraged, meaning that ownership is replaced by leasing and sharing. This could be complemented by the use of technology in ensuring that all forms of transport have higher occupancy levels, and this would lead to further reductions in the numbers of motorised vehicles in the city.
5. Mobility in cities is reconfigured as an integrated service provided through high quality information and choices tailored to the individual user. This would respond to their particular requirements in real time, facilitated through mobile phone and Internet-based applications. This would make the best use of all forms of transport and all transactions would be electronic (ticketing, timetabling, interchange, organisation). There would be easy

movement across and between modes – so one monthly ticket is used across all modes to reflect the actual travel requirements of each and every individual.

This is what is meant by sustainable urban mobility, and the promotion of transport as a service that is both environmentally and socially sustainable, as well as being appropriate for the development of high quality cities. This provides the important intermediate stage in the transition from the car-dominated city to the car-free city.

Sources

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