TRANSPORT: TRAVEL AND MOBILITY

Sustainable urban policy has focused on reducing the dominance of private car use. Many designers and planners argue that cities can be designed to create amenity-rich urban neighbourhoods that stimulate the use of public transport, walking and cycling. But such an approach 'faces a number of major hurdles,' say Jenks and Jones. In the absence of constraints such as road pricing or parking restrictions, the car looks set to remain the king of the road. And evidence suggests, they say, that even if urban neighbourhood design could stimulate greater use of local amenities, it is probable that the savings generated may well be used for wider travel. Overall, the assumption that redesigning urban form can bring about a substantial change in travel behaviour is 'open to question'.

The extent to which residential location choice is the consequence of household travel preferences is a key question, suggests project results. 'Traditional urban forms characterised by moderately high densities of housing, mixed land-uses, proximity to public transport and grid-pattern road layouts are definitely linked with lower levels of car availability, which in turn are associated with lower trip frequencies and shorter travel distances.' Overall, add the editors, car ownership levels increase with decreasing population density and increasing distance from a city centre. In the highest density areas, limited parking supply and regulatory control can also play a role in limiting car demand.

However, self-selection of residential location on the basis of travel preferences was 'not found to be a major influence on car travel, with other influences such as household income being a strong influence on car ownership'. Project outputs suggest that although car ownership is lessened in higher density areas, it influences trip-making behaviour but has no measurable effect on distance travelled. Local travel is influenced by the frequency of use of a number of key services and facilities, declining with distance from home.

The relationship between travel and urban form is not simple, conclude the editors. 'At the neighbourhood level, the analysis suggests that (re)designing a neighbourhood *per se* will not necessarily bring substantial change to travel behaviour. Other measures will be needed to secure a fully 'sustainable' shift in travel behaviour, for example relating to the higher taxation and pricing of fuel, increased regulation and stronger direct management of travel demand.'

Higher urban densities in some UK cities were found to be strongly associated with a reduction in total green space coverage. In Europe, urban extensions try to build in green space and SUDs

ENVIRONMENT: ECOLOGY AND BIODIVERSITY

Given that an increasing proportion of the world's population lives in urban areas, the project explored the relationships between urban form, green space and biodiversity in terms of population density, the patterns of coverage of different land use types, and the degree of connectivity of different patches of land cover. Higher urban densities were found to be strongly associated with a reduction in total green space coverage, and to influence their connectivity. 'Increased population density has implications for essential elements of the local ecosystem that are mediated by green space: the regulation of water and temperature regimes, carbon sequestration and the provision of pest control and pollinators across the urban landscape.' One striking relationship between biodiversity and density is given by the incidence of bird species. 'Levels of bird species richness showed a hump-shaped relationship with housing density, rising initially as density increased, but then declining sharply at highly urbanised locations.' The results also suggested that reductions in the scale and quality of green space through higher densities lead to substantial restrictions on recreation and experiences of nature, especially for children. The analysis suggests that there are opportunities for policies designed to improve the environmental and ecological performance of urban areas for any given level of urban density.

SOCIAL ACCEPTABILITY

A sustainable city must be a place where people want to live and work, say the editors. Social acceptability comprises two broad concepts: social equity, or ease of access to local services, facilities and opportunities, and sustainable community or positive 'quality of life', which takes in high levels of social capital and/or social cohesion (local pride, social interaction, safety and stability). Research findings show that for most aspects of sustainability of community or