

## ECONOMIC VIABILITY

Economics is a key influence on urban form, and policy cannot work counter to spatial market forces in the long term, note the editors. CityForm explored to what extent the spatial economy is likely to constrain change, and found that arguments in favour of higher densities 'are based on too simplistic a concept of agglomeration economies, which does not take into account cities as dynamic entities with spatial land use patterns subject to change.'

The urban dispersal 'alternative', partly the inevitable outcome of market forces, has the drawback that the existing longstanding urban dispersal trends have substantially increased commuting distances and travel to work, as well as infrastructure costs. These 'externality' effects are not considered by individual market decision-makers in their decentralisation decisions

CityForm's evidence suggests that policies aimed at supporting cities' potential to adapt existing urban form in ways that move towards economic sustainability are welcome. However, analysis of the housing market shows that many households prefer low density housing. There appears to be a household life-cycle element to residential location choice: younger and non-pensioner single households live in the central city areas, but move out to the suburbs as they move through the family life cycle. It may be difficult to encourage more concentrated urban forms without significant changes to the underlying forces of city housing markets, particularly where concentrated poverty makes market-led urban redevelopment unviable.

## INTENSIFYING NEIGHBOURHOOD DENSITY

A major theme of many sustainability protagonists is the need for higher residential densities to enhance sustainability. As CityForm demonstrates, 'these arguments are not entirely founded on empirical analysis'

The consortium's detailed investigation of Govan, a working class area of Glasgow, shows that a systematic tool can be applied to restructure cities into a series of sustainable neighbourhoods – featuring amenities within walking distance of peoples' front doors and local centres directly linked by public transport – although it makes clear that those embarking on such a task will need 'the courage not to compromise too soon, given the substantial upheaval involved'.

Do residents of new 'sustainable' housing developments, asked CityForm, behave more sustainably than the population in general? The group's findings were, perhaps surprisingly, more negative than positive. Households living in 'sustainable' developments only appear to behave more sustainably with regard to home-based resource efficiency activities, such as water and energy use. Behaviour toward recycling and frequency of use of local facilities are equivalent to national benchmarks. When it comes to other activities, such as travel to work by car, owning (or having access to) a car, social participation, encouraging wildlife and composting, they behave less sustainably than the population in general.

To put these findings in context, the authors note that the nature of high density living may make activities as outdoor composting and encouraging wildlife in gardens difficult. Research into private gardens demonstrates that individual decisions made by landowners can result in large scale effects on environmental conditions, yet conservation biology has yet to incorporate the urban environment into conservation planning exercises, note the authors.

The interpretation of some relationships between urban form and dimensions of sustainability must be treated with care. In studying links, for example, between density and social outcomes it is essential to control for the influence of intervening variables that may exert significant influence and so affect conclusions. For example, poverty in particular is a key influence on the social sustainability of a neighbourhood.

To sum up more than five years of detailed analysis, the editors conclude that their findings raise as many questions as they answer – although when studied in detail, the analysis can provide strong strategic insight for policymakers. Lifestyles, including the use of cars, are not necessarily determined by urban physical form, suggest Jenks and Jones, although they may be influenced and constrained by it. 'Consumption in its broadest sense is more broadly determined by incomes and social class. This is reflected in the patterns of the spatial viability of new housing development being more dependent on the socio-economic status of a neighbourhood than any particular feature of urban form.'

■ *Dimensions of the Sustainable City* is published by Springer at £90 Series: Future City, Vol. 2, Jenks, Mike; Jones, Colin (Eds.). 1st Edition, 2010, XIII, 282 p. 58 illus. in color, Hardcover ISBN: 978-1-4020-8646-5



In general, efficiently designed, mixed use and moderately high density development has a lot going for it. It can provide high quality infrastructure, quality of life, richer biodiversity, and has a relatively smaller environmental footprint

Dr Shibu Raman, CityForm consortium

The EPSRC grant was GR/520529/01, and the research involved many people. The key researchers are all acknowledged in the book *Dimensions of the Sustainable City*, and those who undertook particular aspects of the work are listed as authors of each of the book's chapters.

## FUTURE DIRECTIONS

'The CityForm research has made a real impact outside the UK. The research approach and methodology have been adapted to the Indian context, where rapid urbanisation is creating challenges for long-term sustainability. The CityForm-India research network is jointly funded by the EPSRC, British Council and the Indian Government and brings together academics, practitioners, built environment experts and policymakers from Europe and India in an international research exchange on sustainability and urban form. A similar collaborative research project is beginning to investigate the challenges and solutions of urbanisation in Africa. Equally there is a need to develop methods and tools that allow an integrated analysis, to find the way through the complex relationships that exists in cities'.

■ Dr Nicola Dempsey and Dr Shibu Raman, CityForm See [www.cityform.org](http://www.cityform.org) for more details