UCL for RICS Foundation Literature Review

page 2

## Sustainable Urban Development: how we could produce it how we could pay for it

#### Literature Review of Selected Research Clusters and Topics

The following literature reviews on each topic are by no means exhaustive. The intention is to provide an adequate starting point for further elaboration. The topics have been grouped to correspond to the clusers of proposed work set out in Volume 1, and bibliography is listed separately under each topic.

#### Cluster A: Containment, densification and re-use.

#### Topic A 1: Supply constraints in growing areas / containment areas

#### Nutshell formulation

London, the South East and much of prosperous England experiences very powerful constraints on the availability of space. Rising and changing demands for residential, commercial and public space have to compete for built space and for development land in the context of

- (a) the policies for the containment of development and urban growth which have been so effectively pursued by national and local governments in England for decades,
- (b) the tendency of these regions to attract investment at the expense of other regions and countries.
- (c) environmental concerns which are widely assumed to reinforce the justification for containment policies.

#### Sustainability issues

The causes and the sustainability consequences of this endemic situation have only been partially examined and understood. Research so far, has shed some light on some of those issues (like the effect of containment on land and housing prices) but on others we can only hypothesise. These issues include at least:

- (i) acute problems for the social sustainability of low-income, mixed-income and ageing communities in cities, towns and villages as housing rents and prices escalate and the need to use a car becomes even more acute (Fairlie S., This Land is Ours, 1996).
- (ii) indirect problems for the economic sustainability of business (especially in highly competitive and export sectors) deriving from the effects of high housing costs upon the costs of recruiting and retaining labour (Bover et.al., 1989; Cameron, 2001) and the out-bidding of non-high-end/high-return business; parallel problems arise in public services with national pay scales (Edwards, 2000b, 2002)
- (iii) direct effects on business, public service and national growth in general from the high costs of space, alleged sub-optimal land use location, capital exports for house purchases abroad, re-direction of capital from other sectors into housing and waste of business resources in obtaining planning permission (Evans, 1988, 1991; Hall et al., 1973).

- (iv) a development and construction sector adapted to surviving profitably in conditions where markets are highly volatile and development gains/losses tend to swamp considerations of productivity (Ball, 1983; Cullen, 1982) with knock-on effects on the sustainability of skilled labour (retention and training) (Clarke, forthcoming).
- (v) powerful income and wealth redistribution effects (Fischel, 1985; Frieden, 1979; 1982, Hall et. al, 1973; Herington, 1984; Simmie, 1993) for example from the "less well-off house purchaser to the rural landowner" (Hall, 1973b:402) or to landowners in general (Brueckner, 1995) and from renters and new households to house owners. This is a rather interesting finding given the extent of homeownership in British society. These effects, are combined with increased numbers of people unable to enter the mainstream labour and housing market. Elkin et.al. (1991) argue that most new manufacturing investment is occuring in areas beyond the reach of the inner city poor. These developments have profound macro-economic and distributional impacts, feeding social exclusion and straining the limited state welfare budget. However, Cheshire and Sheppard (2001) argue that although the distribution of planning benefits is unequal "Overall the process of land use planning generates very slight reductions in inequality...at a very considerable cost." (ibid: 24-25).
- (vi) a complex web of positive and negative environmental outcomes. On the one hand they are related to issues such as the, positively capitalised, value of increased amenity created by the preservation of open access land (Brueckner, 1995; Cheshire and Sheppard, 1995), the preservation of valuable natural habitats, aesthetically pleasing natural scenery and, finally, of agricultural land for food production (CPRE, 1992, 1993) which is rather less important today than it was 30 years ago. On the other hand they are related to
- a) the building stock, for example increased densities and intensification (Bramley et.al, 1995; Cheshire and Sheppard, 1989; DoE, 1992), smaller plot and house size, lower quality standards (Cheshire and Sheppard, 1995; DoE, 1992; Evans, 1988,1991),
- b) the patterns of travel which are in some respects extended rather than contained by containment (Hall et.al., 1973; Ota, 1995) and
- c) potentially increased waste streams, increased land and water pollution from pesticides and fertilisers used in gardens, energy (in)efficiency not only for transport but also for heating and lighting and air pollution caused by excess commuting and urban sprawl.(see topic 2)

However, research also shows that the density response to price increase is relatively limited with price increases mostly absorbed by change in type of housing (Bramley, 1996). Relaxation of planning controls would probably lead primarily to increases in plot and secondarily in house size (Cheshire and Sheppard, 1989) and thus to explosive expansion of urban areas but not significant price decreases (in total, not per sq.m.) (Bramley, 1993a, 1993b; Brueckner, 1990). The same prediction is made by DoE (1992). However these findings are based on studies of change in current markets and therefore, enduring relaxations might produce stronger price effects.

These problems however are not necessarily a consequence of containment. The argument behind the recent surge in 'growth management' measures in sprawling US cities was similar and the experience of Portland suggest that growth boundaries do not have easily predictable/attributable results (Phillips and Goodstein 2000; WBCSD, 2001:3-22). For a review of the vast US literature on sprawl a good starting point is

Diamond and Noonan, 1996; Ewing, 1997; Gordon and Richardson, 1997; and Fischel, 1990 (bit dated).

- Ball M. (1983) Housing policy and economic power. London: Methuen
- Benfield F. (et al.) (2001) Solving sprawl: models of smart growth from communities across America. New York: NRDC
- Bover O., Muellbauer J., Murphy A. (1989) 'Housing, wages and UK labour markets.' Oxford Bulletin of Economics and Statistics **51**(2), pp. 97-136
- Bramley G. (1996) 'Impact of land use planning and tax subsidies on the supply and price of housing in Britain: reply to comment by Alan W. Evans.' Urban Studies **33**, pp. 1733-1737.
- Bramley G. (1993a) 'The impact of land use planning and tax subsidies on the supply and price of housing in Britain.' *Urban Studies* **30**(1), pp 5-30
- Bramley G. (1993b) 'Land use planning and the housing market in Britain: the impact on house building and house prices.' *Environment and Planning A* **25**(7), pp. 1021-1051.
- Bramley G., Bartlett W., Lambert C. (1995) *Planning, the market and private housebuilding*. London: UCL press.
- Breheny M., Congdon P. (eds.) (1989) *Growth and change in core region*. London:Pion Brower D. (et.al) (1989) *Understanding growth management*. Washington DC: The Urban Land Institute.
- Brueckner J.K. (2000) 'Urban sprawl: Diagnosis and remedies', *International Regional Science Review* **23**(2), pp. 160-179.
- Brueckner J.K. (1995) 'Strategic control of growth in a system of cities', *Journal of Public Economics* **57**(3), pp. 393-416.
- Brueckner J.K. (1990) 'Growth controls and land values in an open city', *Land Economics* **66**, pp. 237-248.
- Cameron G., Muellbauer J. (2001) 'Earnings, unemployment and housing in Britain' *Journal of Applied Econometrics* **16**(3), pp. 203-220.
- Cheshire P.(2000) 'Building on brownfields: the long term price we pay' *Planning in London* **33**, pp. 34-35.
- Cheshire, P and Sheppard S (2002 unpublished) 'Taxes versus regulation: The welfare impacts of policies for containing sprawl' Paper presented at the ERES2002 Conference, Glasgow.
- Cheshire, P. and Sheppard S (2001 unpublished) 'The Welfare Economics of Land Use Planning' *LSE web site www.lse.ac.uk*
- Cheshire P., Sheppard S. (1995) 'On the price of land and the value of amenities.', *Economica* **62**, pp. 247-267.
- Cheshire P., Sheppard S. (1989) 'British planning policy and access to housing: Some empirical estimates.', *Urban Studies* **26**, pp. 469-485.
- Clarke L. (forthcoming) From craft to qualified labour in England: A comparative approach.
- CPRE (1992) The lost land. London: CPRE
- CPRE (1993) The regional lost land. London: CPRE
- Cullen A. (1982) 'Speculative housebuilding in Britain. Some notes on the switch of to timber-frame production methods.' *Proceedings of the Bartlett International Summer School on the Production of the Built Environment* **4**, pp. 4/12-4/18.
- DoE (1992) The relationship between house prices and land supply. London: HMSO.
- Diamond H.L., Noonan P.F. (1996) Land Use in America. Washington DC: Island Press

- Evans A (1999) 'The land market and government intervention' in Cheshire P., Mills E. (eds.) *Handbook of Regional and Urban Economics: Volume 3, Applied Urban Economics*. Amsterdam: North Holland.
- Evans A.W (1996) 'The impact of land use planning and tax subsidies on the supply and price of housing in Britain.' *Urban Studies* **33**, pp. 581-585
- Evans A.W. (1991) 'Rabbit hutches on postage stamps: Planning, development and political economy' *Urban Studies* **28** (6), pp. 853-870
- Evans A (1988) No room! No room! The costs of the British town and country planning system. London: IEA
- Evans A.W. (1987) *House prices and land prices in the South East: A review*, London: House Builders Federation.
- Edwards M. (2002) 'Wealth creation and poverty creation: global-local interactions in the economy of London', *CITY* **6**(1) pp. 25-42.
- Edwards M. (2000a) 'Property markets and the production of inequality' in Watson S.,. Bridge G. (Eds.) *A Companion to the City*. Oxford, Malden MA: Blackwell, pp. 599-608
- Edwards M. (2000b) 'Sacred Cow or Sacrificial Lamb? Will London's Green Belt have to go?' CITY **4**(1), pp. 105-112.
- Elkin T., Mc Laren D., Hillman M. (1991) *Reviving the City: Towards Sustainable Urban Development*. London: Friends of the Earth.
- Ewing R. (1997) 'Is Los Angeles-Style Sprawl Desirable?' *Journal of the American Planning Association* **67**(1), pp. 107-126.
- Fairlie S., This Land is Ours (1996) Low impact development: Planning and people in a sustainable countryside. Charlbury, Oxon: Jon Carpenter Publishing.
- Fischel W. (1990) Do growth controls matter?: A review of empirical evidence on the effectiveness and efficiency of local government land-use regulation. Cambridge, MA: Lincoln Institute of Land Policy.
- Fischel W. (1985) The economics of zoning laws: a property rights approach to American land-use controls. Baltimore: John Hopkins University Press
- Gordon P., Richardson H.W. (1997) 'Are compact cities a desirable planning goal?' Journal of the American Planning Association **67**(1), pp. 95-106
- Hall P., Gracey H., Drewett R. and Thomas R. (1973) *The Containment of Urban England Vol. II.* London: Allen and Unwin.
- Henneberry J. (1995) 'Developers, property cycles and local economic development: the case of Sheffield' *Local Economy* **10**(2), pp. 23-25,
- Henneberry J. (1999) 'Convergence and Difference in Regional Office Development Cycles' *Urban Studies* **36**(9) pp. 1439-1465.
- Herington J.M. (1984) The outer city. London: Paul Chapman
- Joseph Rountree Foundation (1993) *Planning, the market and private housebuilding.*York: JRF
- Lambert P.J. (1993) *The distribution and redistribution of income.* Manchester: Manchester University Press.
- Lincoln Institute of Land Policy (1995) *Alternatives to sprawl*. Cambridge, MA: Lincoln Institute of Land Policy
- Mitchell J. (1990) Containment: breaking the mould. Planning for housing in the south east and the potential contribution of private sector new settlements. MPhil Thesis, London UCL
- Monk S., Whitehead C. (1999) 'Evaluating the economic impact of planning controls in the United Kingdom: Some implications for housing' *Land Economics* **75**(1), pp. 74-93

- Munton R. (1983) London's Green Belt: containment in practice. London: Allen and Unwin,
- Ota M. (1995) Office decentralisation: London and Tokyo. Unpublished PhD thesis. London: UCL
- Pennington M. (2000) Planning and the political market: Public choice and the politics of government failure. London: Athlone Press.
- Phillips J., Goodstein E. (2000) 'Growth management and housing prices: The case of Portland, Oregon' *Contemporary Economic Policy* **18**, pp. 334-344.
- Regional Studies Association (1990) Beyond green belts: Managing growth in the 21<sup>st</sup> century. London: RSA.
- Royal Town Planning Institute (1989) *Planning achievements in southern England*. London: RTPI
- Simmie J. (1993) Planning at the Crossroads. London: UCL press
- World Business Council for Sustainable Development (2001) *Mobility 2001: World mobility at the end of the twentieth century and its sustainability.* Geneva: WBCSD.

#### Topic A2: Is higher density the answer?

#### **Nutshell formulation**

The urban sustainability debate is a case where policy-makers are pushing forward measures of largely unknown effectiveness, based on insufficiently tested assumptions. This is in itself an unsustainable practice, contradicting the precautionary principle whereby policy switches with unknown consequences should not be pursued. British urban policy, as expressed through the Urban Task Force Report (Urban Task Force, 1999a), the Urban White Paper (DETR, 2000a), the UK sustainable development strategy (UK Government, 1994) or policy documents like PPG3 (DETR, 2000b) and PPG 13 (DETR, 2001), seems to be based on the assumption that building at higher densities is a "good thing". Good because it will increase efficiency by reducing the need for travel and energy consumption, good because it will save open land and valuable habitats, good because it will create more equitable and liveable urban environments. British politicians are not the only or the first to follow that path towards the revival of 'centrism' (Breheny, 1996). The Commission of the European Communities (CEC, 1990, 1994) has set the tune in the early '90s. A high priority is for research which unpacks the relationships between higher density (and the various ways of measuring it) and the environmental, social and economic outcomes which are supposed — or alleged — to flow from it.

#### Sustainability issues

A general thrust towards denser housing and commercial building is clearly an expedient work-around for landowners, developers and planning authorities in areas of excess demand, as we see in the Mayor's Spatial Development Strategy for London. This does not mean it is an optimum strategy anywhere or everywhere. Hall (1999) argues that "...if you have the buoyant market demand for urban space, ...then you can take the densities up to Islington or Chelsea levels, ...but if you don't, ...then you should work to bring people back in by giving them the kinds of densities they understand and like." Other research (i.e Breheny, 1997; HRF, 1998) shows that British consumers do not favour dense urban living in their totality, some would not even consider a flat as a housing option. Overall a great variety of preferences exists, one that cannot be accommodated by today's housing market but could not possibly be satisfied by a complete turn into much denser forms of building and living. Some problems of density policy flow from the wrong people being housed at the wrong densities/housing types.

For example many blocks of high rise flats unpopular with families, have gained a new lease of life when re-used by childless people; many semis in low-density suburbs are occupied by students sharing or by elderly people unwilling or unable to care for the large gardens they happen to have.

Economists accept that demand for housing space grows with income growth. Insofar as citizens are seeking, and are able to afford more floorspace per person, more built space will be necessary just to satisfy a static population - and to keep catchment populations of local services constant. The promotion of higher, or lower, densities thus poses questions of social equity, the answers to which appear to be mixed: higher density improves access to facilities and public transport use but it also means "less domestic living space" (Burton, 2000). Troy (1996a, 1996b) also questions the equitability of urban consolidation, although in an Australian context. A most vivid debate on the issue, albeit within a very different context (see below) comes from the USA. Gordon and Richardson have systematically tried to criticise higher density living (see Gordon and Richardson. 1997). Their argument is based on their belief in market efficiency and unfettered consumer preference as expressed through sprawl. In response, Ewing (1997) not only argues that sprawl is a clear case of market failure, in disagreement with consumer's preferences, but also makes a strong case in favour of 'active planning' as a means to minimise the costs associated with sprawl and to provide consumers with their preferred living and working environment while increasing producer's profit.

Density increases over certain ranges will preclude the use of some technologies like domestic food production, including permaculture, but will facilitate the use of other technologies for waste re-cycling and energy generation and use, like CHP (Owens, 1992). A higher density future could trigger dramatic changes in the construction process and vice versa. For example, Anderson et. al. (1996) indicates that 'smart buildings might favour densification. It might be argued as well that at the moment, when density pushes building heights radically upwards, the buildings are likely to have more embodied energy and use fewer renewable materials although, as Maunsell (2002) argues, this does not have to be necessarily the case. On the other hand, denser conurbations might reduce requirements for heating/cooling and lighting (Anderson et. al., 1996; DETR, 1998). Recently, Fulford (1996) found that developers view sustainable urban patterns in a favourable way but would also require the state to come up with a set of consistent policies that would lift uncertainty and would allow the industry to adapt.

A strong argument in favour of higher densities is the comparatively lower energy consumption per capita that characterises this form of living (ECOTEC, 1993; Newman and Kenworthy, 1989a, 1991). This is a very important finding in an age of global warming. However Breheny (1995, 1997) amongst others, argues that the potential energy consumption benefits expected from compaction/containment will probably be "disappointingly low" and they will definitely come at a cost (see topic1). Under that light, a combination of policies involving 'technological fix' solutions, the planning system and the price mechanism is worth considering (Banister et. al., 1994). The apparent uncertainty may be explained by the non-deterministic relationship between urban form and urban structure (Anderson et. al., 1996). The conclusion that "there is little research on the relationship between urban form, density and energy consumption" (DETR, 1998:47) seems justified.

A further weakness in the density debates results from the fact that they are often conducted as though, if higher densities were adopted, they would be imposed

retrospectively on everyone. In fact they could influence only about 1% of the housing stock per year and thus slightly change the available mix, unless ofcourse someone launches a 1960s-type mass demolition and densification programme. As the DETR (1998) argued, the benefits of higher density do not occur in a linear fashion either. The marginal benefit as far land and energy consumption is concerned appears to be decreasing as density rises.

This debate however would greatly benefit from clearing the misconceptions about what higher density means: High density urban areas in the USA are low density compared to the UK, not to mention continental Europe. The following quote from Gordon and Richardson (1997) referring to the US, really says it all: "The compact city proponents argue in favour of densities of 5-6 units per acre". In comparison Rudlin and Falk (1999) characterise 5 units per acre, to be found in Hertfordshire, as "low density detached" and put it on the one extreme of the spectrum with Singapore and Hong Kong at the other. The second, formalistic, distinction is made in Breheny (1992) between density as 'load' on developed land and as population ratio in the totality of a land area. The first form would allow for dense neighbourhoods with ample open space in-between, the second would mean a 'blanket' coverage with high density buildings. Practically this means that high-rise does not necessarily translate into high density, as a matter of fact British planners during the 60s found it very difficult to accommodate in the new high-rise flats, all the people whose houses they previously demolished.

- Anderson W.P, Kanaroglou P.S, Miller E.J. (1996) 'Urban form, Energy, and the Environment: A Review of Issues, Evidence and Policy', *Urban Studies* **33**(1) pp. 7-35
- Banister D., Watson S., Wood C. (1994) *The relationship between energy use in transport and urban form. Working Paper 10.* London: Planning and Development Research Centre, The Bartlett, UCL.
- Breheny M. (1997) 'Urban compaction: Feasible and Acceptable?', Cities 14, pp. 209-217
- Breheny M. (1996) 'Centrists, Decentrists and Compromisers: Views on the Future of Urban Form' in Jenks M., Burton E., Williams K. (eds.) *The Compact City: a sustainable urban form?*, Andover:E & F N Spon.
- Breheny M. (1995) 'The compact city and transport energy consumption'. *Transactions of the Institute of British Geographers N.S.* **20**(1), pp.81-101.
- Breheny M. (1992) 'The contradictions of the compact city' in Breheny M. (ed.) *Sustainable Development and Urban Form.* London:Pion, pp. 138-159.
- Brueckner J.K. (1995) 'Strategic control of growth in a system of cities', *Journal of Public Economics* **57**, pp. 393-416
- Burton E. (2000) 'The Compact City: Just or Just Compact? A Preliminary Analysis' *Urban Studies* **37**(11), pp. 1969 2006.
- Commission of the European Communities (1990) *Green Paper on the Urban Environment*. EUR 12902. Brussels: EC.
- Commission of the European Communities (1994) Charter of European Cities and Towns: Towards Sustainability. Brussels: DGXI, EC.
- Crampton, G R (1991) 'Residential density patterns in London: any role left for the exponential density gradient?' *Environ. Plan. A* **23**(7), pp.1007-1024.
- DETR (2001) PPG13: Transport. London: The Stationery Office.
- DETR (2000a) Our towns and cities: The future. London: The Stationery Office.

- DETR (2000b) PPG3: Housing. London: The Stationery Office.
- DETR (1998) The Use of Density in Urban Planning. London:DETR.
- ECOTEC (1993) Reducing Transport Emissions Through Planning, London: HMSO
- Elkin T., Mc Laren D., Hillman M. (1991) Reviving the City: Towards Sustainable Urban Development. London: Friends of the Earth.
- Ewing R. (1997) 'Is Los Angeles-Style Sprawl Desirable?' *Journal of the American Planning Association* **67**(1), pp. 107-126.
- Fulford C. (1996) 'The Compact City and the Market: The Case of Residential Development' in Jenks M., Burton E., Williams K. (Eds.) *The Compact City: a sustainable urban form?*, Andover:E & F N Spon.
- Goodchild B. (1994) Housing design, urban form and sustainable development. *Town Planning Review* **65**(2), pp. 143-157.
- Goodchild B. (1985) 'The significance of density' *Housing Review* **34**(4), pp.130-131.
- Gordon P., Richardson H.W. (1997) 'Are compact cities a desirable planning goal?' Journal of the American Planning Association **67**(1), pp. 95-106
- Hall P. (1999) Sustainable cities or town cramming? London: TCPA
- Housing Research Foundation (1998) *Home Alone.* London: National House Building Council.
- Jacobs A.B., Appleyard D. (1987) 'Toward and Urban Design *Manifesto' Journal of the American Planning Association*, **53**, pp.112-120
- Jenks M., Burton E. and Williams K. (eds.) (1996) *The Compact City: a sustainable urban form?* Andover:E & F N Spon.
- Kenworthy J. (1992) 'Urban consolidation: an introduction to the debate'. *Urban Policy and Research* **9**(1), pp. 78-99.
- Llewelyn-Davies (1994) *Providing More Homes in Urban Areas*. Bristol: SAUS publications.
- Maunsell F. (2002) Tall buildings and sustainability. London: Corporation of London.
- Newman P., Kenworthy J. (1991) 'Transport and Urban Form in 32 of the world's principal cities'. *Transport Reviews* **11**(3), pp. 249-272.
- Newman P.G.W., Kenworthy J.R. (1989a) 'Gasoline consumption and cities a comparison of US cities with a global survey.' *Journal of the American Planning Association* **55**(1) pp. 24-37
- Newman P.G.W., Kenworthy J.R. (1989b) Cities and Automobile Dependence: A Sourcebook. Aldershot: Gower.
- Owens S. (1992) 'Energy, Environmental Sustainability and Land-Use Planning' in Breheny M. (ed.) *Sustainable Development and Urban Form*. London: Pion, pp. 79-105
- Owens S. (1986) Energy Planning and Urban Form. London:Pion
- Pratt D. (1998) 'Urban Compactness, Social Labour and Planning' *Proceedings of the International Summer School on the Production of the Built Environment BISS* **17**, pp.195-208.
- Rudlin D., Falk N. (1999) *Building the 21<sup>st</sup> Century Home: The sustainable urban neighbourhood.* London: Architectural Press.
- Rudlin D. (1998) Tomorrow: A peaceful path to real reform: The feasibility of accommodating 75% of new homes in urban areas. London: Friends of the Earth
- Troy P.N. (1996a) The perils of urban consolidation: a discussion of Australian housing and urban development policies. Sydney: The Federation Press
- Troy P. N. (1996b) 'Urban Consolidation and the Family' in Jenks, M, E Burton and K Williams, (Eds.) *The Compact City: a sustainable urban form?* Andover: E & F N Spon.

UK Government (1994) Sustainable Development: The UK Strategy. London: HMSO Urban Task Force (1999a) Towards an urban renaissance: final report of the Urban Task Force. London: Spon

Urban Task Force (1999b) *But would you live there? Shaping attitudes to urban living*. London: Urban Task Force .

Williams K., Burton E., Jenks E. (eds.) (2000) *Achieving Sustainable Urban Form*. London: Spon

#### Topic A3: Land re-use: is it always best?

#### **Nutshell formulation**

Land re-use is treated as a panacea, a cure for all modern urban ills. In policy terms it is usually coupled with two other concepts: containment and higher density development (see topics 1,2). The proposition is that previously-developed land can and should accommodate as much as possible of forecast growth. This is the philosophy behind the Urban Task Force Report (1999), the Urban White Paper (DETR, 2000) and more concrete policy directives such as PPG3. The argument goes that if Britain is not to be 'concreted over' while towns and cities sink deeper into decay, flows of new investment capital have to be redirected from greenfield development to brownfield redevelopment. On the other hand, many people voice their concern over the impossibility of such a redirection and regard some release of undeveloped land as the only way forward (see topics 1-2).

#### Sustainability issues

From indications in the construction statistics, namely the drop in housing construction, we can hypothesise that the construction industry is hard pressed to change well established ways, techniques and structures of production with potential negative effects on its competitiveness, its profitability and its survival in the current form. Institutionalist approaches might be particularly helpful on that respect. (see Adams and Watkins, 2002; Ball 1998a, 1998b and for a promising recent approach see Gruneberg and Ive 2000a, 2000b).

It is not known what the effect of land re-use may be on the price of new and old built space. Prices may indeed rise in the short run but re-adjustment of the industry and production of new types of built environment may eventually lead to lower prices. Similarly unknown are the potential effects on land price. Very little is known as well on the final effect of internalisation of externalities or the creation of new ones as far as land re-use is concerned. (See bibliography on topics 1 and 2 especially Pryce, 1999 and Bramley)

There is no assurance that policy reflects social needs and aspirations. City living, might not be suitable for everyone and might be desired by even fewer. However, people who might want to live in the city might find it too difficult to acquire or rent a suitable type of property (i.e. flats). Is it acceptable to limit people's choice and how do these limitations occur? It remains unknown what the social results of 'forced' denser urban living might be, they might not always be positive. (Overlaps with density discussion for references see topics 1,2)

Previously-used land might have significant amenity and environmental value (Box and Shirley, 1999). This will be lost if land is uncritically re-used. Sometimes it might be

better to try to blend used rural land into the surrounding natural environment, rebuilding it might repeat a 'mistake' once made.

It is unclear whether cities can actually cope with the extra burden that will be put on their infrastructure at a macro-scale. Transport, education, health, waste management may all require huge extra investment in order to cope with new demand in certain areas while in other areas re-use might increase utilisation levels of pre-existing underused infrastructure. In both cases the effects on economic and social sustainability are potentially significant but remain largely un-researched.

#### Bibliography:

- Adams D., Watkins C. (2002) *Greenfields, Brownfields and Housing Development.* Oxford: Blackwell Science.
- Ball M. (1998a) 'Institutions in British property research: A review', *Urban Studies* **35** (9), pp.1501-1517.
- Ball M. (et.al.)(1998b), *The economics of commercial property markets*, London: Routledge.
- Box J., Shirley P. (1999) 'Biodiversity, brownfield sites and housing'. *Town and Country Planning* **68**, pp. 306-309.
- DETR (2000) Our towns and cities: The future delivery of urban renaissance. London: The Stationery Office.
- Gruneberg S., Ive G. (2000a) *The economics of the modern construction firm*. London: Macmillan.
- Gruneberg S., Ive G. (2000b) *The economics of the modern construction sector*. London: Macmillan.
- Pryce G. (1999) 'Construction Elasticities and Land Availability: A Two Stage Least Squares Model of Housing Supply Using the Variable Elasticity Approach', *Urban Studies* **36**(13), pp. 2283-2304.
- Urban Task Force (1999) Towards an urban renaissance: final report of the Urban Task Force. London: Spon

#### Cluster B: Regeneration funding does not enable rehabilitation to compete on level terms with new building; similar effects with housing; VAT bias etc.

#### Nutshell formulation

A fundamental part of a sustainable approach to the built environment is the rehabilitation of urban areas that have suffered from the effects of technological/economic/social changes. As Gripaios (2002) summarises, in the UK the impact of such changes has been particularly acute in and around former industrial towns and cities especially in northern regions (de-industrialisation, collapse of heavy industry, labour market mismatch, etc.), coastal resorts (collapse of traditional tourism), but also within some of the richest regions as the new profile of the economy tends to increase social inequalities. As regards the built environment, a fundamental policy strategy has been to attract private sector property investment (Healey, 1991, Jones and Watkins, 1996, Lawless and Robinson, 2000) while the state provided funds to stimulate new investment and development in the affected areas, usually by covering the extra risks and costs associated with investing/developing in those areas (gap-funding). In principle, new investment would provide the space and the jobs to turn around the areas' fortunes by incorporating them into the mainstream economic dynamics (Turok, 1992).

The results of this approach towards the role of state and private funding have been variable. Some areas have been extremely successful in attracting private investment, others not so.

#### Sustainability issues

Part of the problem seems to reside in the nature of the funding instruments themselves and their requirements, which seem inadequate to deal with the diversity of situations faced by declining urban areas, a fact recognised by the UTF (2000, 1999) and the subsequent Urban White Paper (DETR, 2000). Funding rules and audit regimes appear to have been developed mostly with new buildings in mind. Whereas this might suit some areas, it does not help in refurbishing premises and retaining occupiers in town centres under risk of being abandoned (often in favour of new buildings nearby developed with the help of those same funds). Often it is easier to demolish existing structures and build anew, with all the waste of resources this implies, than to refurbish, even where that would be a better strategy on other grounds.

All this adds to the bias towards new buildings in financial and fiscal policy in general, exemplified in the differential rates of VAT for new as opposed to refurbished buildings (some of those aspects have been addressed in the 2001 budget). There is some evidence that regeneration funding in support of commercial property in its current form is biased towards larger projects, developers and institutional investors, which might suit only London and some specific locations in a few provincial cities.

There where also indications that effectiveness suffered because of poor targeting which neglected the needs of consumers in favour of producers (McGreal et. al. 2002) Despite that bias, there are indications that investment patterns in urban regeneration are changing, and are moving "...away from 'flagship' projects towards smaller value, risk averse schemes." (Adair et. al 1999: 2038). With the end of the previous regime of 'gapfunding' due to European competition rules, there is still a chance to devise a replacement complemented with tax incentives and disincentives (Evans and Bate, 2000; UTF, 1999). There is a need for the new regime to adequately tackle the diversity of situations in which investment in the built environment could promote urban regeneration.

- Adair A., Berry J., McGreal S., Deddis B., Hirst S. (1999a) 'Evaluation of Investor Behaviour in Urban Regeneration' *Urban Studies* **36**(12), pp. 2031-2045.
- Adair A., Berry J., McGreal S., Hirst S. (1999b) 'The effectiveness of private sector finance in urban regeneration' RICS cutting edge conference.
- Adair A., Berry J., McGreal S., Deddis B., Hirst S. (1998) *Accessing Private Finance:*The Availability and Effectiveness of Private Finance in Urban Regeneration.

  London: RICS
- DETR (2000) *Our towns and cities: The future delivery of urban renaissance*. London: The Stationery Office.
- Evans B., Bate R. (2000) A Taxing Question: The Contribution of Economic Instruments to Planning Objectives. London:TCPA
- Gripaios P. (2002) 'The failure of Regeneration Policy in Britain' *Regional Studies* **36**(5), pp. 568-577.

- Guy S., Henneberry J., Rowley S. (2002) 'Development Cultures and Urban Regeneration' *Urban Studies* **39**(7), pp. 1181-1196.
- Healey P. (1991) 'Urban Regeneration and the Development Industry' *Regional Studies* **25**(2), pp. 97-110.
- House of Commons (2002) *The need for a new European regeneration framework.*London: The Stationery Office.
- Jones C., Watkins C. (1996) 'Urban Regeneration and Sustainable Markets.' *Urban Studies* **33**, pp. 1129-1140.
- Lawless P., Robinson D. (2000) 'Inclusive regeneration? Integrating social and economic regeneration in English local authorities.' *Town Planning Review* **71**(3), pp. 289-310.
- McGreal S., Berry J., Lloyd G., McCarthy J. (2002) 'Tax-based Mechanisms in Urban Regeneration: Dublin and Chicago Models' *Urban Studies* **39**(10), pp. 1819-1831.
- Turok I. (1992) 'Property-led urban regeneration: panacea or placebo?' *Environment and Planning A* **24**(3), pp. 361-379.
- Urban Task Force (2000) Paying for an urban renaissance. London: RICS
- Urban Task Force (1999) *Towards an urban renaissance: final report of the Urban Task Force*. London: Spon

#### Cluster C: Market specialisation

#### Topic C1: Market specialisation and the spatial concentration of market activity

#### Nutshell formulation

The complexity of property markets (user, investment and development) in the UK had led to the consolidation of highly specialised market segments, both in the demand and the supply side, with their own rules, players and geography. Financing mechanisms are different between but also within markets. Investors, developers, agents, etc. active in the office market are not the same as those in the housing market. Similarly, those operating in the London market are not the same as those in Manchester or Newcastle. In fact, it tends to go further than this, with clear differences even between those at the 'investment-grade' end of the office market (dominated by institutional investors, large developers and property companies and specialised consultants) and the rest, or those whose focus is in the prime pitches of the City of London, the West End and Canary Wharf. On the other hand, demand-side market research tools well-established in other industrial markets' research are practically unknown in real estate (Reimer and Lausberg, 2002) probably because "...real estate research, ...is somehow distanced from the dynamics of demand" (Guy and Harris, 1997).

#### Sustainability issues

On the positive side, this is a reflection of the degree of 'maturity' of the market, capable of serving effectively several diverse interests and expectations, and therefore part of the conditions that make it the most open and professional in Europe. On the negative side, specialised segmentation causes serious distortions that might compromise economic, social and environmental sustainability:

The dominance of the office investment market by institutions means that the geography and type of office development is confined by the locations and types institutions are prepared to accept. In contrast to the majority of literature describing 'rational' property investment decisionmaking, well summed up in Gallimore and Gray (2002), there is evidence in the work work of Clark (1998a, 1998b) or Gallimore and Gray (ibid.) that this

may be less a reflection of rational economic calculation by developers and investors than of a self-reinforcing mechanism combining pre-conceptions and habits, conservative approaches to perceived risk and sentiment/herd instinct. As a result of those practices, investment and the supply of premises are concentrated in a few places, and attempts at attracting investment to alternative locations and cities have been costly and of only limited success. The extreme concentration of decision-making power into a small number of firms (and consequently portfolio managers) based in London might explain part of that unresponsiveness (Gentle and Marshall, 1992; Mackay and Molyneux, 1996; Martin and Minns, 1995) another part might be explained by insufficient information. There is research showing the reluctance of institutions to invest in English regions away from London even when rent and yield conditions would indicate otherwise (Henneberry, 1999). This indifference of investment capital to regional variations does not only mean that some regions do not realise their full potential as investment destinations but also that their present and future economic growth is undermined (Henneberry J., Rowley S., 2000; Henneberry, 1999; Martin and Minns, 1995). At the same time investors do not maximise the returns from their choice to invest in property.

The compartmentalisation and specialisation of market sectors potentially militates against mixed-use environments and product diversification in general. The fact that each sector has developed its own rules, practices, expertise and financial mechanisms means extra costs for property products stretching across sectors. These could result from increased complexity of project appraisal, difficulties in assembling differentiated finance, more complex property management systems and more complex risk and profit assessment procedures. Lizieri et.al. (1997) and Gibson and Lizieri (1999) for example. have highlighted the negative effects of valuers' practices on product innovation and differentiation. In order to circumvent these problems, developers have often zoned a mixed-use development into single-use parts (e.g. the housing bit and the office bit), which are then treated as separate developments, each addressing its own separate investor and market sector. Results so far have been variable, even in the more prestigious examples (e.g. Brindleyplace), and more often than not the potential and vibrancy of real mixed-use environments have not been achieved. These effects are rather exacerbated by the lack of information on demand characteristics. According to Harris (1996) this lack of knowledge leads to oversupply of particular types of office space, for example overspecified air-conditioned space.

- Ball M., Wood, A. (1994) *Does building investment affect economic growth? Some long run evidence from the UK*. Discussion Paper in Economics 8/94, Birkbeck College, University of London.
- Clark G.L. (1998a) 'Why convention dominates pension fund trustee investment decisionmaking' *Environment and Planning A* **30**, pp. 997-1015.
- Clark G.L. (1998b) 'The anatomy of corruption: the practice of pension fund trustee decisionmaking' *Environment and Planning A* **30**, pp. 1235-1253.
- Gallimore P., Gray A. (2002) 'The role of investor sentiment in property investment decisions' *Journal of Property Research* **19**(2), pp. 11-120.
- Gentle C., Marshall N. (1992) 'The deregulation of financial services industry and the polarisation of regional economic prosperity', *Regional Studies* **26**, pp. 581-585.
- Gibson V., Lizieri C. (1999) 'New business practices and the corporate property portfolio: how responsive is the UK property market?' *Journal of Property Research* **16**(3), pp. 201-218.

- Guy S., Harris R. (1997) 'Property in a Global-risk Society: Towards Marketing Research in the Office Sector" *Urban Studies*, **34**(1), pp. 125-140.
- Henneberry J., Rowley S. (2000) *Property Market Processes and Development Outcomes in Cities and Regions*. RICSF Research Papers 3.9. London: RICSF
- Henneberry J. (1999) Convergence and Difference in Regional Office Development Cycles'. *Urban Studies* **36**(9) pp. 1439-1465.
- Harris R. (1996) Less a castle, more a condominium. Gerald Eve Research Report. Lizieri C., Crosby N., Gibson V., Murdoch S., Ward C. (1997) Right Space, Right Price? A Study of the Impact of Changing Business Patterns on the Property Market. London: RICS Books.
- Mackay R., Molyneux P. (1996) 'Bank credit and the regions: A comparison within Europe' *Regional Studies* **30**(8), pp. 757-763
- Martin R., Minns M. (1995) 'Undermining the financial basis of regions: the spatial structure and the implications of the UK pension fundsystem'. *Regional Studies* **29**, pp.125-144.
- Reimer A., Lausberg C. (2002) 'Real estate market segmentation. Results of an empirical study of the demand for office space in Germany' Paper presented at the ERES 2002 Conference, Glasgow.
- Turok I. (1992) 'Property-led urban regeneration: panacea or placebo?' *Environment and Planning A* **24**(3), pp. 361-379.

### Topic C2: Big schemes with internal networks versus streets with plots (or 'development parcels versus streets & plots')

#### Nutshell formulation

Most of urban development in the UK is being based upon large parcels of land which can accommodate several buildings and a sizeable part of the infrastructure that serves them (e.g. roads, open spaces, water, and energy). This is a historical product of a combination of mutually reinforcing factors such as: Patterns of landownership, the ways the development industry and development finance have evolved in the last two centuries (see topic 5) and finally a mixed set of deep-rooted perceptions regarding the superiority of 'suburban' settings, urban design and urbanism in general (see Aalen, 1992; Hebbert, 1999). The provision of large plots is a practice ingrained in the planning system which, in the post-war redevelopment for example, favoured "...large-scale schemes which would burst conventional plot boundaries..." (Hebbert, 1998) and even today is biased towards "...allocating land in large blocks rather than a number of smaller sites." (DoE, 1992:49). This situation contrasts with the one predominant in parts of continental Europe, as well as in many other parts of the world, in which the dominant mode of urban development is based on the incremental development of relatively small individual plots with single buildings, organically tied to the urban fabric through the street.

#### Sustainability issues

Much can be said in favour of the 'development parcels' system whose origins date back to the 17<sup>th</sup> century. In principle, it allows for a more coherent approach to the development of a whole area, and can simplify its long term management since ownership tends to be less fragmented. It also allows for a more holistic treatment of the public realm and better location of facilities within a 'parcel' and therefore it is better suited to the fashionable 'masterplan' approach. Combined with standardisation of

building types it allows for substantial economies of scale. The historical example of Georgian 'town squares' (where many externalities are internalised) is a case in point. Also (because there might be overarching property rights), it makes it less difficult to redevelop whole areas when economic/social changes make their current uses redundant.

However, this system as it was shaped by post-war doctrines about urban form, has become inconducive to the mixed-use, varied and intensively lived-in environments found in many continental cities, where the street, a connector rather than a separator, is a key locus of urban life. (see Cowan, 1998; Tibbalds, 1992). Edwards' account of the transformation of the plans for Milton Keynes from 'street-focused outward looking' to 'block oriented, inward-looking' is a most eloquent depiction of both the spirit of those times and the rationale behind it (Edwards, 2001). The 'parcel' systems therefore tends to produce the disjointed spaces found in suburban Britain, where apparently coherent but usually mono-functional chunks of city are separated from one another by strips of no man's land containing transport infrastructure to access the various development parcels. Characteristically enough, 18<sup>th</sup> century London was also presenting a disjointed image, especially if it was compared to Rome or Paris, However, back then, the institutional setting allowed for successful control within the parcels i.e within the 'great estates'. Today, this sort of control is either unfeasible/untebable/not pursued (social housing estates) or performed through the price mechanism (exclusive developments). The former sometimes end up as sunken estates, which, as Pritchard (2000) shows, take a lot of effort and imagination to turn around. The latter leads to gated communities.

Despite those problems the 'parcel' system remains resistant to change. This should come as no surprise. Partially because its promotion by the state (House of Commons, 2002) has shaped over the years the development industry and its system of financial support and partially because it accommodates for the need the development industry to look for economies of scale. There are indications, (Adair et. al. 1999, Guy et.al, 2002) that thinking in terms of development 'parcels' probably prevents the emergence of alternative ways of producing, selling and owning urban environments. The latter could perhaps address more successfully the issues of re-use and re-vitalisation of cities and the provision of affordable housing.

- Aalen F. (1992) 'English origins' in Ward S. (ed.) *The Garden City. Past, present and future* London: E. & F.N. Spon, pp. 28-51.
- Abercrombie P. (1943) *Town and Country Planning (2<sup>nd</sup> ed.)*. Oxford: Oxford University Press.
- Adair A., Berry J., McGreal S., Deddis B., Hirst S. (1999) 'Evaluation of Investor Behaviour in Urban Regeneration' *Urban Studies* **36**(12), pp. 2031-2045.
- Cowan R. (1998) *The Connected City. A new approach to making cities work.* London: Urban Initiatives.
- DoE (1992) The relationship between house prices and land supply. London: HMSO. Edwards M. (2001) 'City design: what went wrong at Milton Keynes?', Journal of Urbar
- Edwards M. (2001) 'City design: what went wrong at Milton Keynes?' *Journal of Urban Design* **6**(1), pp. 73-82.
- Engwicht D. (1999) Street reclaiming: creating liveable streets and vibrant communities. Gabriola Island: New Society Publishers.
- Guy S., Henneberry J., Rowley S. (2002) 'Development Cultures and Urban Regeneration' *Urban Studies* **39**(7), pp. 1181-1196.

Hebbert M. (1999) 'A city in good shape. Town planning and public health.' *Town Planning Review* **70**(4) pp. 433-453.

Hebbert M. (1998) *London: more by fortune than design.* Chichester: Wiley. House of Commons (2002) *The need for a new European regeneration framework.* London: The Stationery Office.

Pritchard D. (2000) 'On the edge: regenerating a Dublin suburb' *CITY* **4**(1), pp. 65-80. Tibbalds F. (1992) *Making People-Friendly Towns*. London: Spon Press.

#### Topic C3. Housing demand deficiency in small zones.

#### Nutshell formulation

While the markets for space in the south of England are overheating, other regions, especially in the North are faced with declining and in some cases completely collapsed housing markets particularly at the local level. Low demand is felt across both the social housing and the private sector (Bramley and Pawson, 2002; Lowe et. al., 1998). Although this is a relatively new phenomenon in the UK it is much older in the US (Wilson, Margulis and Ketchum, 1994). What is particularly striking is the suddenness with which low demand appears and the speed with which it proceeds into abandonment (Power and Mumford, 1999). The causes of low demand as reviewed in Bramley and Pawson, (2002) can be attributed to wider economic and social forces (i.e. changes in employment and migration patterns), changes in consumer preferences (i.e. shift towards homeownership, preference for suburban housing types) and social changes at the neigbourhood level (stigmatisation through the accumulation of negative features and/or perceptions) but measures are mostly taken at the local level and have rather ambiguous results. In many cases, Local Authorities and regeneration agencies in those areas are resorting to demolitions of buildings most of which are in very good condition in order to re-establish some sort of scarcity. On occasion, the demolished properties had just been built or refurbished with regeneration money (Lowe at. al. eds., 1998)

#### Sustainability issues

It is rather scandalous that in 1998 more than 215.000 homes have been empty for more than a year and social housing vacancy ratios where on the increase (Holmans, 1999:23, Empty Homes Agency quoted from UTF, 1998: 249) while at the same time new future household projections show an increase of more than 4 million households within the next 15 years and new need for social housing is estimated at around 90.000 until 2011 (Holmans, 1995; Holmans, Morrison and Whitehead, 1998). Regional disparities, which partially explain that paradox, are not new, however Bramley and Pawson (2002) speculate that "various adjustment mechanisms" are no longer functioning as well.

The first consequence is that the government's ambitions for an urban renaissance are seriously undermined, a threat recognised by the Social Exclusion Unit (1998). Consequences for households and businesses trapped in such areas of persistent excessive supply can be dire as far as the value of their assets is concerned and may lead families into poverty and business into bankruptcy. Their role as property owners in re-enforcing the 'vicious cycle' can also lead to results opposite to their expectations. In such markets, there is little incentive for social and private landlords to invest in housing maintenance let alone for new investors to move in (Lowe, et. al. 1998).

Small or large scale demolition programmes might have significant environmental and social consequences. They tear up the urban and social fabric, re-enforce negative perceptions and force people to re-locate (Power and Mumford, 1999). The environmental effects might be potentially positive (new natural habitats or amenity spaces if the demolitions are part of a programme aiming at creation of such spaces) but usually the newly created empty space is turned into a junkyard. The environmental consequences of demolition waste disposal, air pollution with dust particles etc are negative by definition. As they are performed today, demolitions may exacerbate the downward spiral instead of at least providing space with high amenity value for densely built up areas. Even when re-building/re-furbishing takes place, there is no assurance that the new schemes will prove successful in social or economic terms. They might fail to overcome the negative externalities while upsetting communities and social networks and may lead to ineffectual expenditure of public and private money. In some cases such schemes had to be abandoned almost immediately after completion.

The economic success of such desperate measures is rather unsubstantiated. Resources are spent to destroy costly invested public and private capital (UTF, 1999). The devaluation of investment in public infrastructure (i.e schools) should be added to that cost. This puts extra pressure on the budgets of the agencies concerned while at the same time generating unknown sets of costs and benefits.

- Bramley G., Pawson H. (2002) 'Low Demand for Housing: Incidence, Causes and Uk National Policy Implications.' *Urban Studies* **39**(3), pp. 393-422.
- Bramley G., Pawson H., Third H. (2000) Low Demand Housing and Unpopular Neigbourhoods. London: DETR.
- DETR (1999) Unpopular Housing: National Strategy fot Neighborhood Renewal. Report of Policy Action Team 7. London: DETR.
- Gripaios P. (2002) 'The failure of regeneration policy in Britain' Regional Studies **36**(5), pp.568-577.
- Holmans A.E., Simpson M. (1999) *Low Demand. Separating Fact from Fiction*. Coventry: CIH.
- Holmans A.E., Morrison N., Whitehead C. (1998) How many homes will we need? London: Shelter.
- Holmans A.E. (1995) Housing Demand and Need in England. York: Joseph Rountree Foundation.
- Lowe S., Spencer S., Keenan P. (eds.)(1998) *Housing Abandonment in Britain: Studies in the Causes and Effects of Low Demand Housing*. York: University of York.
- Murie A., Nevin B., Leather P. (1998) *Changing Demand and Unpopular Housing. Working Paper Number 4*. London: Housing Corporation.
- Power A., Mumford K. (1999) The slow death of great cities? Urban abandonment or urban renaissance? York: JRF
- Social Exclusion Unit (1998) *Bringing Britain Together: A National Strategy for Neighbourhood Renewal.* London: The Stationery Office.
- Urban Task Force (1999) *Towards an urban renaissance: final report of the Urban Task Force*. London: Spon
- Wilson D., Margulis H., Ketchum J. (1994) 'Spatial aspects of housing abandonment in the 1990s: the Cleveland experience', *Housing Studies* **9**, pp 493-510.

# Cluster D: How durable is today's (mainly house-) building output - materials, specification, flexibility and extensibility, quality of design?

#### **Nutshell formulation**

Some parts of the British built environment have proved highly popular and durable, thanks in part to their flexibility, form and function. Georgian and many Victorian terraces and some versions of the 20th century suburb, lend themselves to vertical and horizontal extension and to internal rearrangement and are thus flexible in responding to changes of use and to occupier needs. Some former warehouse and industrial buildings are also finding new lives as flexible living and / or working space. Maintenance and upgrading can thus use DIY skills, small savings and small building firms. Contemporary housing output, however, frequently has characteristics of plot size, floorspace, configuration and technology which limits the scope for such adaptation. Such historical housing output has offered, somewhat by accident, structural flexibility and a level of sustainability. The question is what will today's housing output offer us in 50 years time?

#### Sustainability issues

In a detailed survey of British developers, Marsh, Lucas and Jones concluded that developers will adopt 'sustainability' criteria in their developments when the market gives them a positive motive for doing so - when occupiers, buyers and users show that they will pay the best rents and prices for more sustainable buildings. The other key influence to which developers will respond is the attitude of lenders and investors - those who finance development or buy completed schemes as investments or who (especially in the housing market) lend to owner-occupiers to finance purchase. The developers reported that they were reluctant to respond to cajoling from central government or to pressures - often inconsistently applied - coming from local authorities.

Whilst the above takes a somewhat conventional market/profit view of technical/ecological adoption, there is arguably another view point. Consumers, influenced by the sustainable/eco agenda become reluctant to accept the profit premium demanded by investors, particularly when cost and price factors become more transparent to end users. Inevitably, such views can then also become policy objectives forced up into and adopted by central government. To counteract such potential commoditisation, developers will try hard to hold onto the niche/premium argument. Innovative use of building materials combined with more flexible building techniques have led to efficient 'volume' production. At the heart of this, lies the use of timber frames and pre-finished offsite assembly instead of the traditional masonry approach. The catalysts have undoubtedly included increasingly demanding building regulations especially on thermal performance - and the need to adjust speculative output quickly to a volatile market, but to what extent has longevity and lifetime been affected? Can properties last as long as their predecessors which were built of stone and brick? What potential impact is there of significant maintenance and refurbishment costs that may arise decades from now? For example with the predominance of glass and curtain walling in high density residential units, what attention is paid to long lasting components?

In terms of social sustainability, do the constraints of contemporary private housing designs cause the frequent need to move, and thus inhibit the formation and survival of local communities? Are there constraints on the ability of families to take in their elderly

or dependent relatives and thus realise the notion of 'community care'? What about the balance of form and function, energy planning and sustainable patterns of use of space over time? To what extent should developers focus on mixed residential development strategies instead of homogeneous outputs based on fixed, rather than flexible form and function?

One group of actors which has the scope to determine and exert leverage over development are social housing providers and it is here that much innovation is to be found. Longevity, lifetime performance, maintainability and perhaps flexibility appear to be high on their agenda. The revival in the UK of investor ownership of rental housing could also prove a spur to longer-term perspectives being reflected in the market signals transmitted back to developers.

- Barlow J. and Duncan S. (1994) Success and Failure in Housing Provision. European Systems Compared, Elsevier Science, Oxford
- Balchin P. (1996), Housing Policy in Europe, Routledge, London
- Bhatti M. (2001) 'Housing Futures? The Challenge from Environmentalism' Housing Studies 16 (1), pp. 39-52.
- Courard L., Rademaker C., Teller P. (2001) 'Environmental Evaluation of Materials & Building Processes' Materials and Structures 34 (241), pp. 404-412.
- Doling J. (1997) Comparative Housing Policy. London: MacMillan.
- Edwards M., Marsh C. (2001) 'Sustainable Property Development' in Layard A., Davoudi S., Batty S., (eds.) *Planning for a Sustainable Future*. London: Spon.
- Foss R. (2001) 'Sustainable Building', Construction Specifier 54 (7), pp. 32-41.
- Guy S. (2001), 'Sustainable Buildings, Meanings, Processes and Uses' *Built Environment* **28** (1). London: Alexandrine Press.
- Guy S., Shove E. (2000) 'A Sociology of Energy, Buildings, and the Environment: Constructing Knowledge, Designing Practice'. London: Routledge.
- Housing Corporation (2000) Scheme Development Standards F2-18/00, <a href="http://www.housingcorp.gov.uk/">http://www.housingcorp.gov.uk/</a>
- Housing Corporation (2002) *Foundations for the Future*, <a href="http://www.housingcorp.gov.uk/">http://www.housingcorp.gov.uk/</a> Joseph Rowntree Foundation (1997) *Building Lifetime Homes*, Report 2, York: JRF
- Joseph Rowntree Foundation (1997) *Reducing the Impact of Housing on the Environment*, Report H211, York: JRF.Kleinman, M. (1996) Housing, Welfare and the State in Europe, Edwards Elgar, Cheltenham.
- Marsh G. (2002) 'Zero Energy Buildings', Refocus 3(3), pp. 58-61.
- Marsh C., Lucas K., Jones P. (2002) Research report on Sustainability and Property Development, London: The Rees Jeffreys Road Fund
- Powell J A., Cooper I., Lera S. (1984) 'Designing for Building Utilisation' London: E & FN Spon.
- Sjosttrom C. (2001) 'Approaches to Sustainability in Building Construction' *Structural Concrete* **3**, pp. 111-120
- Terrapin Ltd (2002) 'Sustainability Building a Better Way of Life' *Building Engineer* **77** (8), pp.16-17.

## Cluster E. Pockets of concentration of class and ethnic groups / tenures: and funding collective facilities

#### Nutshell formulation

British towns and cities exhibit widely different patterns of concentration and segregation (as against mixing) of ethnic groups and of social classes. Further variations are found elsewhere in Europe and (typically with more extreme levels of segregation) in the USA. These patterns are the outcome of complex interactions of housing market processes, welfare regimes, the cultures and preferences of the groups concerned and the access they have, given their economic position and the opportunities open to them. Segregation is often blamed for triggering inter-ethnic conflict and for nurturing extremist political activity. On the other hand clustering of communities is often seen as having benefits for the sustainability of cultures or religions, for the support of community business and for mutual self-help.

#### Sustainability issues

Supply constraints dominate in the South East but the opposite is the case in the North. Ethnic minority communities have a strong focus in London but are also densely present in many Northern and Midland towns and cities. These communities fall into an income spectrum from poor to rich but some are —to varying degrees—united through culture and/or faith.

Common issues pervade all segments of these communities, yet some have distinct problems. Underlying this for many is a strong owner-occupier streak and, among Muslims, a predominately, faith- and culture-based aversion to interest financing. Transgenerational issues such as parental care and inheritance are now beginning to manifest themselves in communities which are in their second or third generation. Whereas first generations often showed strong locational loyalties (or were forced together by lack of choice) ultimately reinforcing segregation, newer generations are sometimes keen to pioneer entry into other areas. Many ethnic minority groups have a strong requirement and concern for space and form to accommodate large or extended families. However, this incurs a cost premium and is not well served by current developer thinking, or by social housing providers (RSL's). Whilst some may be able to afford large dwellings, many cannot.

Some ethnic minority groups - for example first generation Bangladeshis - live mainly in social housing while others - for example many Pakistanis - are relatively able and keen to be owner-occupiers but are faced with large families who when married require their own housing with parents needing to stay with some of their children. Price inflation in the South East is leading to some very serious pressures building up in ethnic minority areas (and for poor whites). Will this have the potential to reduce segregation as gentrification invades and dilutes areas of former concentration? Or is the imperative of some communities to remain in a particular area contributing to additional price inflation on a micro-level?

Interestingly the argument of self-segregation has been seriously challenged by new research on housing patters (Philips), which shows that whilst there may be a continuing desire for clustering amongst many South Asians for cultural and security reasons, this does not equate to a desire for social segregation from other groups. Linked to this is that economic prosperity has resulted in a greater degree of social demand.

In the North, falling or static prices could be reinforcing segregation as owner-occupiers have no great need to move or cannot realise any equity value from their homes. Interestingly, where ethnic minorities have settled in districts of large housing, price inflation has, anecdotally increased at a higher rate than in similar areas of small housing.

Many ethnic minority groups have also widened their interest in the built environment to include community and religious institutions. With self employment, and business ownership being core economic activity in many minorities, commercial property and office space and access to it, is becoming very important and there are cases where community savings are retained and invested within semi-distinct sub-economies. Supply constraints and space and form requirements are now leading to new models of financing and acquisition among some minorities. These are more collective-based, relying on mutual self-help.

- Allen J., Goran C. (2001) 'Multiculturalism & Governing Neighbourhoods'. *Urban Studies* **38** (12), pp.2195-2209.
- Arbaci, S (2002) 'Patterns of ethnic and social-spatial segregation in European cities: are welfare regimes making a difference?' in *Immigration and Place in Mediterranean Metropolises* Eds. M. L. Fonseca, J. Malheiros, P. White, N. Ribas-Mateos and A. Esteves. Lisbon, Luso-American Foundation
- Bowes A., Dar N., Duncan S. (1998) *Too White, Too Rough, Too Many Problems; Pakistani Housing Strategies in Britain*, Report 118, York: Joseph Rowntree Foundation.
- Bramley G., Morgan J. (1998) 'Low Cost Home Ownership Initiatives in the UK' *Housing Studies* **13** (4), pp. 567-586.
- Cameron S., Field A. (2000) 'Community, Ethnicity & Neighbourhood' *Housing Studies* **15** (6), pp. 827-843
- Edwards M. (2000) 'Property Markets and the Production of Inequality' in Watson S., Bridge G. (eds.) *A Companion to the City.* Oxford, Malden MA: Blackwell.
- Goodchild B., Cole I. (2001) 'Social Balance & Mixed Neighbourhoods in Britain since 1979' *Environment & Planning* **19** (1), pp. 103-122.
- Herbert A. (1996) *Credit Use & Ethnic Minorities*, Report 10. London: Policy Studies Institute.
- Jospeh Rowntree Foundation (1998) *Ethnic Minorities in the Inner City*, Report 118. York: JRF.
- Lee P., Muir A. (1999) 'Spatial & Social Divisions within British Cities: Beyond Residualisation' *Housing Studies* **14** (5), pp. 625-640.
- Musterd R., Ostendorf W. (eds.) (1998) 'Urban Segregation and the Welfare State: Inequality and Exclusion in Western Cities', London and New York: Routledge.
- Philipps D. (2002) *Housing Patterns in the Asian population of Leeds & Bradford*, ESRC research, Leeds, Leeds University.
- Philipps D. (1998) 'BME Concentration, Segregation & Dispersal in Britain' *Urban Studies* **35** (10), pp.1681-1702.
- Platt L., Noble M. (1999) *Ethnic Groups & Low Income Distribution*, Report 249. York: Joseph Rowntree Foundation.
- Ratcliff P. (1998) 'Race, Housing & Social Exclusion' *Housing Studies* **13** (6), pp. 807-818.

- Sodhi D. (et. al.) (2001) The Diverse Needs of BME Communities: An Annotated Bibliography of Housing & Related Needs Studies. Manchester: Ahmed Iqbal Ullah Race Relations Archive
- Symes M., La Tourelle D., Karn V., Todd M. (2000) 'Issues in the Development of Social Housing for Ethnic Minorities' *Journal Of Architectural & Planning Research* **17** (4), pp. 304-329.
- Symes M., Karn V. (1998) 'The Production of Social Housing for Minority Ethnic Groups in Britain' *Open House International* **23** (2), pp.14
- Taylor M. (1999) 'Combating the Social Exclusion of Housing Estates' *Housing Studies* **13** (6), pp. 819-83

### Cluster F. Social housing production / rehabilitation / funding; sustainability with rising rents and benefit dependence.

#### Nutshell formulation

Most regions of the country, and especially those in the south are facing dramatic affordable housing shortages. The phenomenon is not restricted to urban areas only: many rural areas are facing acute shortages of housing at prices within the budgetary constraints of local people. In areas with strong demand for second and retirement homes, decent affordable housing is even scarcer. Social housing provision remains marginalised and undergoes significant restructuring. RSLs are finding it hard to cope with their hybrid role and central government support is inadequate. Policies to tackle the problem are over-dependant on provision of social housing through planning gain and lack any attention to positive measures that would directly increase production of social housing.

#### Sustainability issues

- i) Economic competitiveness is undermined because private business and public services are finding it difficult to recruit at current salary levels. This situation can potentially lead to salary increases greater than productivity gains, higher inflation, business relocations or closures etc.
- ii) The ever-increasing pressure for extraction of affordable housing through planing gain agreements may indeed have a perverse effect on total housing output by reducing profitability of marginally profitable projects thus reducing overall supply and exacerbating overall housing shortage. Recent work anyway argues that planning gain deals may have little effect on the total output of social housing which is primarily dependent on the funding coming through the Housing Corporation. However, if planning gain is to become the long-term source of social housing then means may need to be found to ensure that land owners' expectations for disposal prices can adjust downwards.
- iii) The social housing sector has historically lacked the flexibility, the funding and capacity to actively complement market housebuilders. However, in recent years the situation has been reversed. Central Government for its own (mainly public sector borrowing) reasons has aggressively promoted large scale stock transfer and creative private sector funding (securitisation). Allied to this has been legislation to remove 'close to market' rent policies. By 2012 the sector will be expected to deliver affordable rents well below those in the private sector. This includes removing differentials between local authority (LA) and RSL rents. For traditional RSL's this represents a threat to income

streams whilst for many ex-LA RLS's it is an opportunity to raise rents. The ramifications are potentially immense. It is traditional RSL's that have been at the forefront of new housing production but with the removal of close to market policies, will ex-LA RSL's pickup the baton? Closer study indicates that it is unlikely as many newer RSL's have prioritised updating exsiting social housing stock rather than new development.

- iv) Social housing,, primarily at the hands of local authorities has meant marginalisation, stigmatisation, poor design and undermined the potential of whole urban quarters because of externalities linked to 'sink estates'. With many of these being transferred out of local authorities will the same mistakes be repeated or offered limited treatment on a fragmented basis. Polling of a number of newer RSL's indicates a determination not to fall into developing mass, homogenised large scale estates but to offer mixed and unique developments. However, the South East has now taken a course to deliver huge numbers of housing to ease demand pressures. What influence and role will the social housing sector have?
- v) Sustained shortage of affordable housing can mean that established local communities are broken up and people end up migrating or commuting. This has detrimental environmental consequences, exacerbates housing and labour market overheating and may potentially increase the need for expensive state welfare provision to replace family and community networks severed by the involuntary migration.
- vi) While the concept of lifetime costing is respected among professionals it is very patchy in its implementation. Cases abound of high-quality new and recent housing going into rapid decline because funding for land and construction was not matched by funding (or institutional practices) for taking responsibility for management, care and maintenance.
- vii) Whilst rent restructuring is planned, what impact on sustainability and communities could Housing Benefit reform have? With high rents, many households faced the housing benefit trap but in an forecast of a low interest rate future, ill thought-out reforms of the housing benefit system is bound to have an impact on social housing production.

- Bramley G., Pawson H. (2002) 'Low Demand for Housing: Incidence, Causes & UK National Policy Implications' *Urban Studies* **39**(3), pp.393-422.
- Crook T., Currie J., Jackson A., Monk S., Rowley S., Smith K., Whitehead C. (2002) *Planning gain and affordable housing: Making it count*. York: Joseph Rowntree Foundation.
- Crook A.D.H., Whitehead C.M.E. (2002) 'Social Housing & Planning Gain' *Environment & Planning* **34** (7), pp.1259-1280.
- Turner B, Whitehead CME (2002) 'Reducing Housing Subsidy: Swedish Housing Policy in an International Context' *Urban Studies* **39**(2). pp. 201 217.
- Edwards M. (2002) 'Wealth creation and poverty creation: global-local interactions in the economy of London' *CITY* **6**(1), pp. 25-42.
- Gallent N. (2000) 'Planning and affordable housing: from old values to New Labour' *Town Planning Review* **71**(2), pp. 123-147.

- Gallent N. (2001) 'Housing, Homes and Sustainability' in Layard A., Davoudi S., Batty S. *Planning for Sustainable Future*. London: Spon.
- Gallent N., Baker M., Wong C. (1998) 'Securing Housing Choice: New Opportunities for the UK Planning System' *Housing Studies* **13** (3), pp. 425-438.
- Holmans A., Morrison N., Whitehead C. (1998) *How Many Homes Will We Need? The Need for Affordable Housing in England.* London: Shelter UK.
- Housing Corporation (2001) Rent Restructuring. www.housingcorp.gov.uk
- Hughes J. (1999) 'Happy Returns: The Individual Investor as a Source of New Capital for Rented Housing in a time of changing Social Welfare Structures' *Housing Studies* **14** (4), pp.507-524.
- Joseph Rowntree Foundation (2000) Building Homes on Used Land. York:JRF.
- Malpas P. (1999) 'Housing Associations & Housing Policy in Britain since 1989' *Housing Studies* **14** (6), pp.881-893.
- Murie A. (1997) 'The Social Rented Sector, Housing & The Welfare State in the UK', *Housing Studies,* **67** (4), pp.437.
- Murillo F. (2001) 'Private/Public Partnership, the Compact City & Social Housing: Best Practice for Whom?' *Development in Practice* **11** (2/3), pp. 336-343.
- Oxley M. (1999) 'Institutional Structure of Social Housing Finance in the UK' *Urban Studies* **36** (4), pp.673-682.
- Tickell J. (2000) 'RSL's in the 21st Century', Axis 55 (4), pp.12-13.

### Cluster G. Car-dependent development forms / transport dependence

#### Sustainability issues

The cumulative and un-intended effects of growing car ownership and (especially) of car use include some down-sides. While some of these may gradually be ameliorated as engines become cleaner and more efficient, an expectation not shared by everyone (Schipper, 1992) others appear to be endemic (see Vasconcellos, 2001): increasingly extended home-work and home-services patterns which waste time and cause mounting congestion; those without cars, in many types of locations, are immobilised; drivers have to spend time and fuel ferrying non-drivers around. Some lateral thinking is required about ways forward.

One set of issues relates to the suburbs – there are many "nice" solutions that can be introduced in the denser urban centres and even in many renewal areas, (Newman and Kenworthy, 1999; Scheurer, 2000, 1998) but the solutions available in the suburbs are less obvious as suburbs have been constructed for the car. The related costs and benefits of measures like Transport Demand Management, and car dependent urban forms have been explored in Litman (2002, 2000).

A second set is in the growth of long distance travel (both nationally and internationally) – this relates to both freight and passenger travel. It reflects (World Business Council for Sustainable Development, 2001) new organisational structures, including the use of logistics etc in distribution, flexible specialisation, new high technology industries, just-in-time manufacturing processes, inventory minimisation etc. This all creates demand for new types of buildings and spatial organisation to accommodate for road based growth in long distance commuting and in business related travel.

In addition to the distance-related aspects, there are the opportunities offered through Transport Demand Management, pricing, regulation and transport planning (for example, Transit Oriented Development), and technology. It seems likely that even with the strongest politically acceptable forms of pricing and a hard push on environmentally sound technology, we are still a long way short of achieving sustainable transport (World Business Council for Sustainable Development, 2001). A way to move strongly in the sustainable direction is to push on these two policies and to reinforce them with land use planning measures to encourage shorter journey lengths and modal shift – there are also good opportunities to increase load factors in lorries and cars (and public transport). This is where there are strong links with our other headings on density, mixed-use, green belt alternatives, urban renewal, intensification, reuse etc.

Another heading here is the size of settlement. Banister, 1992 suggests an optimal size of 25000, others suggest the polynucleated Dutch form with a nuclei of 50.000 households. At this sort of level, there will be a wide range of services and facilities provided, so that trip distances can be kept to a minimum – also opportunities for jobs. Research by ECOTEC (1993) found a negative correlation between urban size and transport energy consumption: average weekly distance travelled by car is growing further down the urban hierarchy. This suggests that new settlements are not an option (unless large), and that intensification and town extensions are preferable (even if the green belt is used). Towns of medium size are attractive to residents and it is relatively easy to provide a good quality public transport system.

Technology also has a potential role in substitution for journeys to work and business – much work on this, but inconclusive. Nijkamp and Salomon (1989) do not consider massive deconcentration as a likely result of innovations in telecommunications. Gillespie, (1992) argues that new communications technology could promote dispersion on the one hand but also extends the influence of the city, the end result on the urban form will probably be a matter of context. The greater flexibility in times of travel and location of work etc are attractive, but this does not necessarily lead to new patterns, only greater variability and complexity in travel – also the potential for services and shopping remotely etc. There are clear social and distributional issues in access to technology and ability to use it though.

- Banister D. and Berechman J. (2000) *Transport investment and economic development*, London: UCL Press.
- Banister D. (1992) 'Energy use, transport and settlement patterns' in Breheny M. (Ed.) *Sustainable Development and Urban Form.* London, Pion, pp. 160-181.
- Cervero R. (1998) *The transit metropolis: a global enquiry*. Washington: Island Press. ECOTEC (1993) *Reducing Transport Emissions Through Planning*. London: HMSO
- Gomez-Ibanez J. (1991) 'A global view of automobile dependence review of Newman
- P. & Kenworthy J. Cities and Automobile Dependence: A Sourcebook.' *Journal of the American Planning Association* **57**(3) pp. 376-379
- Gillespie A. (1992) 'Communications technologies and the future of the city' in Breheny M. (Ed.) Sustainable Development and Urban Form. London: Pion
- Litman T. (2002) The costs of automobile dependency and the benefits of transportation diversity. Victoria: Victoria Transport Policy Institute.
- Litman T. (2000) An economic evaluation of smart growth and TDM: social welfare and equity impacts of efforts to reduce sprawl and automobile dependency Victoria: Victoria Transport Policy Institute.

- Newman P., Kenworthy. J. (1999) Sustainability and Cities: Overcoming Automobile Independence. Washington DC: Island Press
- Newman P.G.W., Kenworthy J.R., (1989a) 'Gasoline consumption and cities a comparison of US cities with a global survey.' *Journal of the American Planning Association* **55**(1) pp. 24-37
- Newman P.G.W., Kenworthy J.R., (1989b) *Cities and Automobile Dependence: A Sourcebook*. Aldershot: Gower.
- Nijcamp P., Salomon I. (1989) 'Future spatial impacts of telecommunications' *Transportation Planning and Technology* **13**, pp. 275-287.
- Rabinovitch J, Leitmann J. (1992) *Environmental innovation and management in Curitiba, Brazil*. Urban Management Programme, Working Paper No. 1. Washington DC: World Bank.
- Safdie M. (1998) *The city after the automobile: an architect's vision,* Boulder, CO: Westview Press.
- Scheurer J. (2000) Car-free housing in European cities: a survey of sustainable residential development projects. www.murdoch.edu.au/research/carfree.html.
- Scheurer, J. (1998) 'Car-free housing in Europe: a new approach to sustainable residential development' *World Transport Policy & Practice* **4**(3): 16-20.
- Schipper L. (1992) 'Energy efficiency scenarios in the OECD countries-what to do when CO2 comes calling' *Energy Studies Review* **4**(3) pp. 213-220.
- Vasconcellos E. (2001) *Urban transport: environment and equity*. London: Earthscan. World Bank (2001) *Cities on the move: a World Bank urban transport strategy review*. Washington DC: World Bank.
- World Business Council for Sustainable Development (2001) *Mobility 2001: world mobility at the end of the twentieth century and its sustainability*. Geneva: WBCSD.

### Cluster H. The funding of collective needs from land development

#### Nutshell formulation

The gross profits from land and property development (especially in high-demand regions) have increasingly been seen as a potential source of funding for a bewildering range of needs. The funding of substantial amounts of social housing is dependant on them (Bramley, 1993, Crook et. al. 2002) as are the supply of infrastructure connections for new developments, the improvement of public transport and of interchanges, expansion of school and service capacity and the general revenue needs of local authorities (Campbell et. al, 2000). Since these exactions have yet to be codified (either as a tax or as a tariff or through new-town-type land development) they produce uncertainty in the land and development markets (Goodchild and Henneberry, 1994) and can threaten the sustainability of urban developments. That issue, closely knitted with the issue of transparency has been recognised in the recent Planning Green Paper (DTLR, 2001a) As with all fiscal issues, unintended consequences can be severe.

#### Sustainability issues

From all three points of view (environment, economy, society) private urban space needs to be embedded in a high quality public realm, with good infrastructure and services. This is even more necessary today given the policy drive towards higher densities. Who is going to pay the capital and running costs of all this? There have been many approaches:

(i) Ebenezer Howard argued that towns, as they grow, generate potential rents and values which can be captured as public (collective) revenue to finance all these things

without the need for taxation (Howard, 1985). A weak form of this idea was embodied in the New Towns (a great British innovation) and to some extent enabled Hong Kong to prosper under British colonial rule through low taxation.

- (ii) A private version of this approach is to be seen in some privately promoted new towns around the world and, on a smaller scale, in large-scale leasehold developments in the 18th and 19th centuries (Hebbert, 1998).
- (iii) The state can in principle pick up the bill (through taxation and/or borrowing) with the benefit returning to society, and the state, through growth in GDP and in public welfare. This has been common in European social democracies. However, most Western European countries have developed a system of impact fees. In France for example, the Local Authorities can levy the TLE (Tax Locale d'Equipement) to fund infrastructure but area-based initiatives like the ZAC and the PAE do exist as well as site-specific, case by case charges. All those measures however are standardised and codified in a fixed set of regulations. In comparison, in the case of the Docklands the environmental and social gains were rarely secured and the revenue flows were never secured for collective use.
- (iv) On a principle that established residents of an area should not have to shoulder these costs for developments which house new residents, systems have been developed, mainly in the USA, to force these costs to be borne by private developers of new urbanisation (for an idea of how the US system works see amongst others Nicholas et. al, 1991). They can then pass these costs on, either back to landowners as lower land prices or onwards to customers who occupy the new spaces. (Huffman et.al, 1989). However, even under the US system, the taxpayer still has to bear a significant percentage of the costs (Lillydahl et.al., 1988).

In the UK today we seem to be in the worst of all possible worlds. The orthodoxy of minimising public spending has ruled out the new-town-type and the simple state responsibility (i) and (iii). Private versions have never been tried on a large scale. We are stuck with Section 106 (or to a lesser extent with other agreements like Section 278 highways agreements and water/sewage infrastructure charges). In some ways this is a piecemeal and confusing version of US exactions/linkage fees. This works very badly in the UK for a whole variety of reasons: It combines less well with our flexible and discretionary planning system than with a fixed zoning system. According to Grimley (1992) it leaves a lot of room for arbitrariness, causes delays, relies on the financial circumstances of the developer and fails to link into a strategic framework. It is also potentially prone to corruption.

However, Ennis (1996) claims that planning obligations can actually speed up the process and increase the likelyhood of a development happening. If the regime really matured on a standardised basis, or if it was replaced by a standardised fee similar to the standard authority-wide financial tariffs that the DETR proposed recently (DETR 2001b, ODPM, 2002), it would probably cut into the expectations which have built up about land and property values and could de-stabilise the position of institutional and other investors.

Research shows that impact fees would be mostly absorbed by the landowner (Goodchild and Henneberry, 1994). Ennis (1996) on the other hand shows that who bares the cost depends pretty much on the type of market the developer is addressing. However, a drop in land and property prices would indeed be of wider social benefit in

areas of overheated markets. The impact of such a land price drop on issues like the provision of 'affordable housing' is rather unpredictable.

Insofar as it raises the private costs of development it could further increase regional and intra-urban imbalances in where development takes place. Even so, Goodchild and Henneberry (1994) claim that the same would apply in the case of impact fees based solely on "some measure of actual infrastructure impact". However, given the recent policy turn towards land re-use, the introduction of standardised impact fees or other betterment taxation could be a useful tool to divert development away from the greenfields (see topic 10)

- Bramley G. (1993) 'Land use planning and the housing market in Britain: the impact on house building and house prices.' *Environment and Planning A* 25, pp. 1021-1051.
- Campbell H.J., Ellis H., Gladwell C, Henneberry J.M. (2000) 'Planning obligations, planning practice and land-use outcomes'. *Environment and Planning B* **27**, pp.759 –775.
- Crook T., Currie J., Jackson A., Monk S., Rowley S., Smith K., Whitehead C. (2002a) *Planning gain and affordable housing Making it count.* York: Joseph Rountree Foundation.
- Crook A.D.H., Whitehead C. (2002b) 'Social Housing and Housing Subsidies, Planning Gain and Betterment Tax: A Critical Assessment of Using the Planning System to Provide Affordable Housing'. *Environment and Planning A* **34**(7), pp.1259 –1279.
- Department of Transport, Local Government and the Regions (2001a) *Planning:*Delivering a Fundamental Change. Planning Green Paper. London: Department of Transport, Local Government and the Regions
- Department of Transport, Local Government and the Regions (2001b) *Planning Obligations, Delivering a Fundamental Change.* London: Department of Transport, Local Government and the Regions
- Ennis F. (1996) 'Planning obligations and developers' *Town Planning Review* **67**(2), pp. 145-160.
- Goodchild B., Booth C., Henneberry J. (1996) 'Impact fees: a review of alternatives and their implications for planning practice in Britain' *Town Planning Review* **67**(2), pp.161-181.
- Grimley J. R. (1992) The Use of Planning Agreements. London: HMSO.
- Goodchild B., Henneberry J. (1994) Impact Fees for Planning, London: RICS
- Healey P., Purdue M., Ennis F.(1993) *Gains from Planning: Dealing with the Impact of Development*. York: Joseph Rowntree Foundation
- Hebbert M. (1998) London: more by fortune than design. Chichester: Wiley.
- Howard E. (New rev. ed. )(1985) Garden cities of to-morrow. Eastbourne: Attic.
- Huffman F.E., Nelson A.C., Smith M.T., Stegman M.A. (1989) 'Who bears the burden of development impact fee?' *Journal of the American Planning Association* **Winter**, pp. 49-55.
- Lillydahl J. H., Nelson A. C., Ramis T. V., Rivasplata A., Schell S. R. (1988) 'The Need for a Standard State Impact Fee Enabling Act.' *Journal of the American Planning Association* **Winter**, pp 7-17.
- Nicholas J.C., Nelson A. C., Juergensmeyer J. C. (1991) *A Practitioner's Guide to Development Impact Fees.* Chicago: Planners Press APA.
- Office of the Deputy Prime Minister (2002) Sustainable Communities, Housing and Planning and Sustainable Communities, Delivering Through Planning. London: ODPM.