

# More Sustainable Planning - Experience from England

**Dr Chris Gossop**

## **Outline**

In a revised approach to planning forming part of its national sustainable development strategy, the United Kingdom seeks to promote a more economical, less car dependent, use of land. The paper discusses the ways whereby the approach is being pursued in England, and through case studies drawn from London and Bristol assesses some of the first results.

## **Introduction**

The United Kingdom has set itself the goal of reducing carbon dioxide emissions by 20% by 2010 compared with 1990 levels. This remains an essential part of our sustainable development strategy, notwithstanding the failure of the world climate talks two years ago to reach any full international agreement on how to curb greenhouse gas emissions.

A reduction of even 20%, modest compared with the reduction that will eventually be needed, poses great challenges to decision-makers. It requires a change of direction, in which growth will be cleaner and in which we can do more with less. In some sectors progress is encouraging. For example, the houses that are being built today are significantly more energy efficient than those constructed only 10 years ago, and the older stock is gradually being upgraded to higher standards. It goes without saying that there is scope to do much more on this front.

In other sectors of activity, the trend is still in the wrong direction, with more resources being used, not less. In the case of transport, for example, vehicle distances driven are still increasing year on year, and greenhouse gas emissions grow in parallel. As in numerous other countries, this is, in part, a reflection of established and developing patterns of land use and the movement of people and jobs over many decades. As a generality, we have become more spread out, journeys have become longer and we have become increasingly dependent upon the car.

The purpose of this paper is to explore the extent to which planning intervention can help to curb such trends and thus contribute to sustainable development. It starts with a brief historical perspective - why are we where we are now? It then describes some key policy developments affecting the operation of land use planning within the United Kingdom and charts some of the progress that is being made. The paper includes two case studies, the Temple Quay office development in Bristol and London's Greenwich Millennium Village.

I make two caveats. First, this paper focuses mainly on developments within England. I recognise that there is much to be learnt from the different approaches being pursued in other parts of the UK following devolution. The National Assembly for Wales, for example, is developing a national spatial plan which is seen as a tool for sustainable development in that part of the United Kingdom. Secondly, the views expressed are my own and they should not be taken as necessarily representing the position of my employer, the Planning Inspectorate.

## Historical perspective

Britain was the first country to industrialise. Initially, the new inventions in iron making and textile manufacture were exploited in dispersed locations and there was no great effect upon urban growth. Towards the end of the 1700s this changed as coal displaced the water wheel as the principal source of power for the new industries, and as industry became concentrated on the coal fields and later adjacent to bulk transport. The result was the development of industrial towns from almost nothing, as well as the further growth of existing towns that were themselves well placed to become industrial centres.

Up until about 1870, British cities stayed relatively compact and the rapidly growing industrial population was accommodated through increasingly high densities. This was governed by the fact that people had to walk to work, there being no effective public or private transport for most of the population. This all changed with the introduction progressively of the horse drawn bus and tram, the electric tram and then the motor bus. From the 1860s the railways began to cater for commuter traffic and in London the world's first underground line opened in 1863.

These new systems had a profound effect upon urban growth, and new housing development, facilitated also by the ready availability of cheap land, hugely extended the built up areas of cities and towns. The process of suburban growth and decentralisation speeded up between the two world wars, with London tripling its built up area. The new housing, whether constructed by the local authorities for former slum dwellers, or speculatively built for the growing numbers of owner occupiers, provided a standard of living conditions that few of the new suburbanites could previously have dreamt of (*Hall, 1992*).

Gradually, however, a reaction began to set in to the consequences of this unconstrained growth, this urban sprawl. In particular, it was taking up vast areas of agricultural land, including land of the finest quality. Also it was placing the worker increasingly far from his or her workplace, and the resultant road traffic was leading to increased traffic congestion. This reaction, and the galvanising effect of the Second World War were to lead to the first effective piece of planning legislation, the 1947 Town and Country Planning Act.

The achievements of that Act and of those that followed are plain to see. The planning system that they established has, in the main, prevented settlements from merging through the 'ribbon development' that was typical of the 1920s and 1930s. It enabled firm boundaries to be defined for our towns and villages so that, in most cases, it is instantly clear where a settlement finishes and where the countryside begins. Our big cities have been prevented from sprawling ever outwards through the designation in England of Green Belts. Throughout the United Kingdom 30 new towns were designated, providing homes as well as jobs for some 2 million people (*Department of the Environment, 1996*). Fine landscapes have been given special protection. What would these crowded islands have looked like had there been no land use planning over the last 50 years?

However, while the achievements of planning need to be recognised, the pattern of land use that it has helped to shape is a highly car dependent one. Much of the housing development of the 'planning era' has itself been of a relatively low density and, all too often, it has been remote from services, so that the car is a necessity for most journeys. Out of centre superstores have supplanted many village stores, and often the small supermarkets of our country towns, again at the expense of road congestion and dependence on the car. And the town bypass has become a typical location for the business park, those decentralised, largely office, complexes set in a park-like setting. Again, these are highly car dependent and they can be vast consumers of land. In sum, the planning era has seen a continued spreading out of development, a pattern of growth that has contributed to the increasing distances being driven (*Gossop and Webb, 1993*).

As I shall discuss later, there has been an attempt over the last ten years to rein back on some of these trends which are now recognised as unsustainable. This new planning approach stemmed initially from the debates at Rio de Janeiro ten years ago and it needs to be seen in parallel with our national strategy on sustainable development.

## **Sustainable development strategies in the UK**

The first United Kingdom sustainable development strategy was published in 1994 (*Department of the Environment, 1994*). This followed the recommendation of the Earth Summit that individual countries should prepare strategies and action plans showing how they proposed to implement key parts of the agreement reached at the Summit.

The UK strategy sought to reconcile the desire to protect the environment with the achievement of higher standards of living. Thus, its implementation did not mean any reduction in economic development. Rather, a healthy economy would help to meet people's needs, while development and environmental improvement often went hand in hand. Decisions throughout society had to be taken with the environmental implications fully in mind.

The present Government's strategy *A Better Quality of Life (Department of the Environment, Transport and the Regions, 1999)* seeks to secure 'a better quality of life for everyone, now and for generations to come'. Importantly, a social dimension has been added to the Government's objectives. Thus, taking into account its two environmental components, the strategy's objectives are as follows:

- social progress which recognises the needs of everyone;
- effective protection of the environment;
- prudent use of natural resources;
- maintenance of high and stable levels of economic growth and employment.

The four objectives are seen as mutually reinforcing. Thus, nationally as well as internationally, everyone should be able to share the benefits of increased prosperity and a clean and safe environment. A poor environment is incompatible with quality of life and it may threaten long-term economic growth because of climate change.

The supposition that we can break the link between economic growth and pollution/resource use has been strongly questioned by environmental groups. Clearly it is of crucial importance to the strategy which freely admits that, if we are to break that link, we will need to improve the 'carbon intensiveness' of our activity, towards a so called Factor 4 change whereby outputs are doubled and inputs are halved.

## **Planning for sustainable development**

*A Better Quality of Life* sees land use planning as an important mechanism to secure the integrated delivery of its four objectives. Thus, planning policies should promote regeneration, social inclusion and more sustainable patterns of development. To those ends, planning has become re-focused on three linked themes. First, planning should consciously seek to reduce the need to travel, especially by car. Second, it should promote accessibility to jobs and services by public transport, walking and cycling. Third, it should seek a more economical, less car dependent, use of land in which priority is given to the re-use of previously developed land – 'brown field sites' - and to bringing empty buildings back into new uses.

In England, these messages are made operational through Planning Policy Guidance Notes (PPGs). PPGs set out the Government's policies on different aspects of planning. Local planning authorities must take their content into account in preparing development plans. They may also be material to decisions on individual planning applications and appeals.

## **PPG13 Transport**

In terms of sustainable development policies, the 'landmark' PPG was the 1994 revision of PPG13 Transport (*Department of the Environment, 1994*). In its latest form, PPG13 (*DETR, 2001*) seeks to integrate planning and transport at the national, regional, strategic and local levels to:

- promote more sustainable transport choices for both people and for moving freight;
- promote accessibility to jobs, shopping, leisure facilities and services by public transport, walking and cycling; and
- reduce the need to travel, especially by car.

The guidance goes on to specify the sorts of measures that will be required to deliver these objectives. These should inform development plans and the consideration of planning applications. Through these mechanisms, it is intended that local authorities should, among other things:

- actively manage the pattern of growth to make the fullest use of public transport;
- focus major generators of travel demand in city, town and district centres, and near to major public transport interchanges;
- locate day to day facilities in local centres so that they are accessible by walking and cycling;
- accommodate housing principally within existing urban areas, and plan for increased intensities of development (for both housing and other uses) at locations that are highly accessible by public transport, walking and cycling;
- in rural areas, locate most development in local service centres designated in the development plan to act as focal points for housing, transport and other services;
- ensure that the strategies in the development and local transport plans, as well as transport investment priorities, are closely linked; and
- use parking policies, alongside other planning and transport measures, to promote sustainable transport choices and reduce reliance on the car for work and other journeys.

It will always take time before the messages of radically new planning policies, such as those in PPG13, result in actual change on the ground; for example, there are bound to be committed schemes 'in the pipeline' based on former planning permissions. However, there are clear signs that the nature of development is shifting in accordance with national guidance and the sustainability objectives of development plans. There has, for example, been a great reduction in proposals for out of town shopping developments, with developers concentrating once again upon in-town locations, even though this may require a revised and smaller format. An excellent example of a business development that follows the new planning approach is that currently under construction at Temple Quay in Bristol, a port and industrial city in the south west of England.

### **Case Study - Temple Quay, Bristol**

*Formerly a railway marshalling yard adjacent to the historic Temple Meads Railway Station, this 23 ha site had been unused for many years. Under a master plan stemming from 1998, the land is being comprehensively redeveloped for offices and related uses. Already, it is one of Bristol's principal employment centres with some 4000 people working there. It benefits from*

*excellent public transport links. As well as being next door to the main railway line with its frequent services to London and other destinations, both national and local, it is served by a number of bus routes and there is a regular ferry boat service along the river system into the centre of Bristol. In addition, a corridor of land adjacent to the development has been reserved for a future mass transit system.*

*The development includes a new headquarters for the Planning Inspectorate (PINS), as well as accommodation for a number of Government offices and agencies. The building that contains PINS, Temple Quay House, has particularly strong green credentials. It has a sophisticated system of natural ventilation and cooling and, in conjunction with the use of `intelligent' lighting and controls, this enables the development to show energy consumption levels of about half those of a traditional air-conditioned building (Pease, 2001). Moreover, advantage has been taken of the superb public transport links to limit the number of parking spaces for both staff and visitors.*

*The designers of this compact, medium rise development have achieved a good human scale development that incorporates a range of shops and restaurant facilities, a well-used public square, and links to the riverside. Temple Quay is now virtually complete and a follow on development involving a brown field site on the other side of the river is now planned. This will be more mixed in its use, comprising offices along the river frontage and housing behind. It will be linked to the first phase of Temple Quay by the present pedestrian bridge.*



*Fig.1 Temple Quay, Bristol, a new compact and accessible business quarter*



*Fig.2 Temple Quay House – energy efficient offices*

## PPG3 Housing

PPG3 deals with a range of planning issues relating to the provision of housing. It conveys several key messages. Thus, policies should recognise the housing needs of all in the community, including those in need of affordable or special housing. In tandem with PPG13, it seeks to secure more sustainable patterns of development and better use of previously developed land. Great emphasis is placed on the need for good design, and on the creation of sustainable residential environments.

Sustainable residential environments are seen to have a number of ingredients. In line with reducing the need for travel by car, larger housing developments should preferably be located around major nodes along good quality public transport corridors. The PPG also promotes mixed use development, for example through greater provision of flats over shops. In contrast to the situation in many continental European countries, in the UK this remains the exception rather than the rule.

The principal message of the Urban Task Force, chaired by Lord Rogers, is that to be successful, regeneration needs to be design led (*Urban Task Force, 1999*). This is carried through to PPG3 which encourages local planning authorities and developers to think imaginatively about designs and layouts that make more efficient use of land without compromising the quality of the environment. The aim should be to create places and spaces with the needs of people in mind, places that have their own identity while respecting and enhancing local character. They should focus on the quality of the environment being created, giving priority to the needs of pedestrians rather than those of the car and they should promote energy efficiency.

Efficient use of land means two things. First, it means recycling and re-using land wherever possible, and avoiding green field sites. The target for England is that by 2008, 60% of additional housing should be provided on previously developed land and through conversions of existing buildings. Secondly, it means accommodating more dwellings on a given area of land. On average, new development in England is built at a density of 25 dwellings per ha, but more than half of all new housing is at less than 20 dwellings per ha. In the Government's view, this represents a level of land take that can no longer be sustained. For the future, it has been made clear that densities should be of at least 30 dwellings per ha net.

Limits are also to be placed on residential (off-street) parking provision. Local authorities are required to revise their parking standards downwards, particularly in areas where services are readily accessible by walking, cycling or public transport.

From the perspective of many other countries, the 30 dwellings per ha minimum density must seem an extremely modest aspiration. Nevertheless, as a minimum requirement to be applied right across England, it represents an important step forward. For the more accessible locations, PPG3 is clear that significantly higher densities should be sought.

The move towards the greater use of previously developed land and towards higher densities will undoubtedly pose major challenges for all those involved. If we look back at past attempts our success rate has been mediocre. Examples abound of the medium to high density housing schemes of the 1960s and 1970s that have slid socially to become the problem estates of the present. We must learn from the past - from what has worked, and what has failed to work.

In physical terms, we must plan, design and manage renewal areas in the round, so that the "public realm", the spaces between the buildings and the connections to surrounding areas, receive as much attention as does the design of the buildings themselves. But there will be little point in building physically more sustainable forms of development, if we fail to provide equally for social well-being and accessibility to jobs. In short, the sustainability themes of the Government's national strategy must be operated together.

London's Greenwich Millennium Village, the subject of my second case study, is a ground-breaking example of a scheme where most, if not all, of these components would appear to be in place.

## **Case study - Greenwich Millennium Village**

*Greenwich Millennium Village stems from English Partnership's Millennium Communities Initiative that seeks to deliver some 6000 dwellings through a number of 'urban village' developments across the country. The aim is to create inclusive communities and to demonstrate the very best practice in terms of sustainable development.*

*The present Greenwich project will result in the development of almost 1400 homes in the southern part of the Greenwich Peninsula. It is a key part of the regeneration plan for this large swathe of formerly contaminated land, now best known for its controversial, though architecturally striking, Millennium Dome.*

*The Millennium Village, being developed by a consortium led by Countryside Properties and Taylor Woodrow, benefits from excellent public transport connections to other parts of London. The recently extended Jubilee underground line enables one to reach central London in just a quarter of an hour, while the major employment centre of Canary Wharf across the river is just one stop away.*

*The project seeks to reduce the dependence of residents upon the car. The village already benefits from a dedicated bus link to the underground station and other destinations, and there are well-developed footpath and cycleway links. The layout does not exclude car owners but vehicles have to be parked below ground or in discrete parking garages some distance from the dwellings. This means that the streets serving the houses can be pedestrian in scale, as well as freed up for the pedestrian.*

*The area will be well served by local facilities. There are already a primary school and a health centre immediately adjacent to the village, and there are plans to build shops, bars and restaurants that will be within a few minutes' walk.*

*The Millennium Village follows a master plan drawn up by the Swedish based architect Ralph Erskine. Erskine's layout seeks to create a close-knit community living in a mixture of houses and apartments. These are arranged around a central village green and a lake forming part of an ecology park. At a more detailed scale, the dwellings are grouped around communal landscaped areas in a way that is reminiscent of London squares.*

*The village is architecturally mixed. The Phase 1 apartments, up to 10 storeys in height, have views eastwards over the Thames or front the central lake. With their barrel-vaulted roofs and their splashes of colour they create a dramatic skyline along this key riverside frontage. Phase 2 with its two to three-storey houses and apartments is more traditional in its appearance. It is similarly of modular construction, allowing residents to adjust their homes as their circumstances change. It includes 14 live/work units, having residential accommodation in the upper two storeys, and separately accessed work space at ground floor level.*

*Some 80% of the dwellings will be for sale on the open market. However the remaining 20% are to be managed by the two housing association partners, the Moat Housing Group and Ujima Housing Association, for those for whom a direct purchase would be beyond their means. It comprises a mixture of rental homes and dwellings for shared ownership whereby tenants take a stake of up to 75% in the property and pay rent on the rest. To maximise social inclusion, the housing association units are to be located in small clusters right across the village.*

*All the housing is extremely energy efficient. This derives from, among other things, its orientation, the materials used in its construction, and its use of intelligent lighting systems as well as efficient kitchen appliances. As another mark of its green credentials, the village is to be served by a combined heat and power plant that will generate electricity on site, while providing much of the heating for the houses.*



*Fig.3 Recently completed housing at Greenwich Millennium Village*



*Fig.4 Phase 1 housing viewed across the ecology park*

## **Discussion**

Much of the remaining brown field land on the Greenwich Peninsula is to be redeveloped by an international consortium, Meridian Delta Ltd. Under recently agreed arrangements, a 20,000 seat arena is to be constructed within the Dome, and this is to be complemented on the land to the south by a mixed use development comprising homes, shops, offices and leisure facilities.

Taken together with the Millennium Village and the wider Development Framework prepared by Greenwich Council, this is a good example of 'joined up' planning where the eventual whole should amount to far more than the sum of its parts. The Peninsula is an important laboratory for progressing our thinking on the practicalities of sustainable development.

At the level of London, the success of the Peninsula developments, as well as that of comparable housing and mixed use schemes, will be critical to the long term vision for the City set out in the emerging London Plan. Over the next 15 years, London is set to accommodate 700,000 more people and the current version of its Spatial Development Strategy (*The Mayor of London, 2002*) says that this must be done in a way that safeguards existing green spaces and does not encroach upon the Green Belt. It can be done only through making London a more compact, more intensively developed city. But that is another story!

Greenwich Millennium Village, as well as Temple Quay, are two of the more noteworthy examples of how planning is adapting to meet the new imperatives of sustainable development. There are many other English or British examples that I could have cited. There are, of course, many good schemes from around the world, and it is important that planners share this

experience with their colleagues in other countries, as I have sought to do. We need to learn from each other, about approaches that are successful, and about schemes where, with hindsight, things might have been done better – in that way we can help prevent others repeating our own mistakes.

Obviously, more sustainable planning – even if this relates to the comprehensive spatial planning advocated by the EU rather than mere land use planning – can be only one ingredient of a sustainable development strategy. But that it must be such an ingredient is in no doubt. As I stated in my introduction in connection with the UK, the planning system has many achievements to its credit. Its task now is to take on the new challenges of shaping or reshaping development in ways that place less pressure upon the environment, and that create places that function more sustainably, in environmental as well as in social and economic terms.

## References

- Department of the Environment (1994) *Sustainable Development: the UK Strategy* HMSO;
- Department of the Environment (1994) *Planning Policy Guidance Note 13: Transport* HMSO;
- Department of the Environment (1996) *Sustainable Settlements and Shelter. The United Kingdom National Report: Habitat II* HMSO;
- Department of the Environment, Transport and the Regions (DETR) (1999) *A Better Quality of Life: A strategy for sustainable development for the UK* The Stationery Office;
- DETR (2000) *Planning Policy Guidance Note 3: Housing* The Stationery Office;
- DETR (2001) *Planning Policy Guidance Note 13: Transport* The Stationery Office;
- Gossop, Chris and Webb, Adrian (1993) *Planning for a Sustainable Environment: A report by the Town and Country Planning Association (Chapter 7)* Edited by Blowers, Andrew, Earthscan Publications Ltd, London;
- Hall, Peter (1992) *Urban and Regional Planning. Third edition* Routledge: London and New York;
- Mayor of London (June 2002) *The draft London Plan: Draft Spatial Development Strategy for Greater London* Greater London Authority;
- Pease, Martin (2001) "The DETR Temple Quay Project", *Planning Inspectorate Journal* Spring 2001, Issue 22.
- Urban Task Force (1999) *Towards an Urban Renaissance: Final Report of the Urban Task Force chaired by Lord Rogers of Riverside* DETR.