

Royal Commission on Environmental Pollution Study on Urban Environments, Well-being and Health

Please direct all correspondence to: [enquiries@rcep.org.uk](mailto:enquiries@rcep.org.uk)

**This work represents a review of the literature available on the aforementioned topics, and should in no way be seen as a new research or a new contribution to the field it discusses. All material is derived from existing research in the field.**

# **DESK STUDY:** **AN OVERVIEW OF THE LITERATURE ON URBAN ENVIRONMENTS**

## **Introduction:**

Towns and cities exist to serve people's needs (Levy 2000). In urban academic literature and policy documents it is agreed that the functioning of urban areas should be to maximise the quality of life of the people that live and work in such areas, without compromising the quality of life of those who reside outside their boundaries. It is also widely accepted that quality of life is a complex subject. The health and well-being of individuals and society, which strongly affects quality of life, is influenced by all aspects of the urban environment, including natural, built, social and economic environments. A key theme that emerges from literature, which will be the first to be examined in this report, is the multi-faceted nature of health and well-being. The varied determinants of health and well-being in the urban environment (for example urban deprivation and housing quality) is well documented in both academic and policy related literature. It will be seen that many aspects of the urban environment do directly and indirectly enhance the health and well-being of both urban and non-urban residents.

Despite this, one of the most prevalent themes that emerges from literature, and the second to be discussed in this report, is the abundance of problems that exist in urban areas that negatively affect health and well-being and therefore quality of life. The issues that are best documented include those of environmental quality, overcrowding, pollution, noise and congestion. In addition to the existence of these problems, another major theme that emerges, and the third to be discussed, is the fact that these urban environmental problems are not fairly distributed throughout urban areas and populations. Issues of environmental justice in urban areas are high on government policy agendas and abundant in academic research. Since these environmental problems are a result of decisions that have been made in the urban environment, the impact that all urban decisions can have on health and well-being becomes apparent. The fourth theme to be discussed is therefore the importance of making health concerns a priority driving force behind urban decision making. It will be seen from literature that although this theme has been relatively neglected in the past, it is beginning to assume greater importance.

Decision makers in many aspects of the urban environment are discussing how best to maximise the health and well-being of all urban dwellers. However, because quality of life is such a nuanced issue, affected by many aspects of the urban environment, there is debate concerning which decisions are the most appropriate to take in order to minimise environmental problems and maximise health and well-being. There are certain urban decisions in particular that are the centre of much debate in literature. These decisions, including ones concerning urban design, density, transport systems and housing, form the discussion of the fifth section of this report.

The sixth major theme that is dominant in academic literature and policy publications is the need for a more holistic, overall approach to the urban environment, in order to provide a framework for appropriate decision making. Two such approaches that are repeatedly discussed in literature, but which still remain uncertain, are those of sustainable development and the participation of communities. Other approaches that are present in literature, but are not afforded as much attention, are those of self-sufficiency, urban metabolism, and the ecological footprint.

The final section will discuss the implications of these themes in academic literature and policy related documents, for prevailing policy discourses. It is especially acknowledged in literature that different policy areas will have to become more joined up in order to maximise quality of

life through urban decisions. The report discusses examples of good practice that could be followed, and suggests areas that need further research.

Summary of key points that emerge from literature that will be examined in this report:

- 1: Aspects of the urban environment (natural, built, social and economic) that influence health and well-being.
- 2: Urban environmental problems that have a negative effect on health and well-being.
- 3: Uneven distribution of urban environmental problems.
- 4: Incorporating health concerns into the decisions that shape the urban environment.
- 5: Debate surrounding certain urban decisions: urban design, density, transport and housing.
- 6: An overall approach to the urban environment to inform urban decisions.
- 7: Implications for prevailing policy and future policy directions, drawing on examples of good practice.

## **1: Aspects of the urban environment (natural, built, social and economic) that influence health and well-being.**

The majority of the total world population lives in urban areas so it is important to cope with the challenges that these areas face (Paddison 2001). In the Western world one of the biggest challenges has been a trend towards suburbanisation, and the ‘apparently inexorable exodus of businesses and relatively wealthy people from the major conurbations’ (Town and Country Planning Association - TCPA). The challenge is one of deteriorating urban areas and burgeoning suburbs (Brebbia et al 2000). This is an ever-present theme in much urban literature and explains the formation of the Urban Task Force by the UK government, whose aim it was to ‘identify the causes of urban decline in England and recommend practical solutions to bring people back into cities, towns and urban neighbourhoods’ (ODPM 1999). This process of revitalising urban areas, known as the ‘urban renaissance’, has received much attention in literature. As the TCPA suggests, ‘a rediscovery of the joys and advantages of urban living was obviously needed: the iconography of city living had become mostly negative, yet the sprawling car-dependant pseudo-suburbia invented in the 1970s and 1980s

in the shire counties was obviously unsustainable and offered a hollow quality of life’. Even if the quality of life in suburban areas was indeed ‘hollow’, it must have been perceived as better than the quality of life in urban areas that people were escaping from. In order to make urban living more attractive therefore, urban quality of life would have to be improved.

In addition to retaining urban residents, there is a responsibility of all levels of government to look after the welfare of urban inhabitants. Paddison (2001) for example suggests that sustainability in an urban setting refers to the goal of meeting welfare and utility levels for the city’s population. Paddison defines urban sustainability as the ‘non-decreasing welfare level to the local population in the long run without jeopardising the development options of the surrounding territories, and which contributes to the reduction of the negative effects on the biosphere’. Meeting this welfare level would also require ensuring a good quality of life for urban dwellers. This key theme of urban quality of life that emerges is well summarised by Frick (1986): ‘improving the quality of life in urban areas should be the principle objective of urban design and planning’.

Quality of life is however a complex concept (Riseborough 2000). As research in London from the Department of the Environment (1996) shows for example, perceptions of the quality of London are ‘strongly determined by the spheres of activity of different groups of people that vary enormously’. Academic findings (Lan Yuan et al 1999; Riseborough 2000) suggest however that although an individual’s perception of a good quality of life depends on subjective

experience, that there are sufficient components of quality of life that are common to most members of society and therefore it is possible to measure some key elements that contribute to quality of life. Broad agreements on what are important components of quality of life in urban neighbourhoods are summarised below (taken from Riseborough 2000).

<b>Environment</b>	<b>Important component of quality of life.</b>
Physical	air quality, derelict land, open space, noise, traffic, litter
Built	building type, tenure, condition, appearance, affordability.
Social	education, community participation, services and leisure, crime, health, mental health
Economic	employment, income

Since quality of life is such a multi-faceted concept (Lan Yuan et al 1999) it is generally accepted in literature that determining the quality of life of urban residents is complicated. Despite this, most components of quality of life are in some way affected by well-being, satisfaction, health and standard of living etc (Lan Yuan et al 1999). Most urban literature focuses on the concept of ‘health’ as a determinant of quality of life. Health is however also a complicated concept. The concept has become so complex because there has been a considerable realisation in literature that they health is affected by most aspects of the urban environment.

As Aboutorabi and Abdelhalim 2000 suggest, the ‘traditional definition of health as the absence of diseases has in recent decades been modified to include a broader concept’. They argue that health, according to the World Health Organisation (WHO) definition is ‘a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity’ (WHO 1992). Human health is affected by the sum of environmental conditions in an integrated manner; the conditions within the biological, physical, built and social environment interact together (Aboutorabi and Abdelhalim 2000). This multi-dimensional concept of health is present in much literature on the urban environment and accounts for the broad range of disciplines that have written on aspects of health and well-being in urban settings, including psychology, fitness, town planning, residential design and social exclusion. Since health is a multi-dimensional concept, academic and policy literature (WHO; Department of the Environment; Hoggett et al 1999) also strongly suggests that the determinants of health must be much more than simply ‘the provision of hospital and medical service’ (Davies and Kelly 1993). Below is a summary of the different aspects of the urban environment identified in literature as influencing health and well-being.

<b>Aspects of urban environment that influence health</b>	<b>Source</b>
housing; social services; living and working conditions; quality of physical and socio-economic environment; quality and accessibility of care services.	WHO Healthy Cities
unemployment; the natural environment; welfare.	Department of the Environment 1995
urban deprivation; housing quality; access to services; transport infrastructure; ethnic and cultural variation; income, education, occupation, poverty	Schell and Ulijaszek 1999
social segregation; degradation of living space, unemployment; social exclusion; transport	WHO 2000 Barton and Tsourou

social determinants of health: work and unemployment; social cohesion; social exclusion; transport	WHO 1998
broad range of public policies administered by local governments	Davies and Kelly 1993

It is apparent from urban literature that health is affected by many aspects of the natural, built, social and economic urban environments, the same environments that contain important components of quality of life. The WHO argues that the root causes of ill health are indeed social, economic and environmental in nature.

Since health is affected by many aspects of the urban environment, the enhancement of the quality of life of both urban and non-urban residents, is also affected by many factors. There are many features made apparent in urban literature that contribute to a high quality of urban living. It must be noted however that most literature highlighting the benefits of urban living is government policy related, whilst academic literature tends to concentrate on the problems, inequalities and potential solutions present in urban areas.

It is evident from policy literature that the benefits urban areas bring to health and quality of life stem from the high concentration of people, infrastructure and activities. As will be discussed in greater depth below, the high densities of urban areas mean that fewer car journeys have to be made, which affects pollution levels, air quality, congestion, noise and protection of the natural environment, all of which have an influence on quality of life. Higher densities also mean there is less pressure to build on land outside urban areas which both protects these areas for the people who live and work there and preserves much cherished countryside, both of which contribute to a high quality of life. Additionally, higher densities result in greater efficiency in the use of energy (De Roo and Miller 2000), for example it takes less energy to heat an apartment block than it does in a low density housing estate with an equivalent number of households. It has been argued in a report of the Urban Task Force (1999) that higher density living also means that there may be enough support for local services to keep them open. It is also contended in the report that higher densities can also lead to a stronger sense of community, but this contention is debated elsewhere (see Paddison 2001).

Urban life can also be a solution to the 'blights of unemployment, poverty, ill health and crime' (Local Government Association – LGA- 1998). The sources of strength in urban areas include technological innovation, centres of excellence in education and health and a wide range of businesses and industries (LGA 1998). The benefits that urban areas bring to quality of life stem from the concentration of opportunities and choices.

## **2: Urban environmental problems that have a negative effect on health and well-being.**

Despite the fact that urban areas, through their concentration of people, places and opportunities, bring many benefits to the quality of life of urban inhabitants and surrounding areas, the existence of urban problems, and the negative effect these have on health and quality of life, are far more prevalent in urban literature. As Berce-Bratko (2001) suggests, cities always present certain problems in their very concentration of human occupancy of space. Despite the fact that certain businesses and people are leaving urban areas, the number of households in urban areas is expected to increase. For example in London, the number of households is projected to increase by 26,000 each year, with 80% of the growth being one-person households (Llewelyn-Davies Consultants 1998). If not suitably addressed, problems in urban areas are likely to intensify with

the increase of urban inhabitants Below is a summary of some of the environmental problems most cited in literature, which impact on health and quality of life in urban areas.

<b>Environmental Problems</b>	<b>Source</b>
Environmental problems with an impact on the natural environment: - atmospheric pollution -water pollution -depletion of energy resources -solid waste disposal Environmental problems with an impact on the social environment: - noise -congestion	Paddison 2001
-water supply -disposal of sewage -control of air pollution -over-consumption	De Roo and Miller 2000
-waste management -air quality -noise and water pollution -traffic congestion -loss of open space -degradation of urban landscape	Pender et al 2000
-traffic congestion -disaffected citizens, -physical decay -institutional breakdown -crime.	Partners for Liveable Communities 2000.
-deteriorating areas -traffic congestion	Brebbia et al 2000
-energy consumption -air, water and noise pollution -traffic congestion -waste management -over-crowding -sanitation -housing -open spaces	Lan Yuan et al 1999
-psychological stress -crowding -noise -commuting -litter -air pollution -poor structural conditions of housing	Schell and Ulijaszek 1999

It can be seen that literature suggests there exists a plethora of problems in the natural, built, social and economic urban environments. The most prominent and recurrent problems in literature are however ones relating transport, ‘particular emphasis on the environmental problems arising from auto-orientated cities’ (Lan Yuan et al 1999), residential conditions and pollution/ waste.

Often in urban literature, these problems are discussed in terms of urban environmental quality, specifically, declining environmental quality (Brebbia et al 2000). Environmental quality does not just refer to the natural environment, but also the social and the economic. Below is a table summarising the indicators of environmental quality found in urban literature. Similarities can be made with the table of environmental problems above.

<b>Environmental Quality Indicators</b>	<b>Source</b>
-air quality -biodiversity -water quality -waste disposal	Pender et al 2000
-water quality -air quality -transport -trees -atmospheric condition -green areas -social infrastructure: schools, health centres, community centres -employment	Brebbia et al 2000
-job opportunities -good learning opportunities -safe, secure places to live -accessible healthcare -quality and affordable housing -sustainability (population density, waste, air pollution, congestion) -green space -good public transport -shopping and leisure facilities -arts/culture	Local Government Association 1998

If it is assumed that environmental quality and quality of life are linked, then it can be seen from the literature that many different aspects of the urban environment will influence quality of life. It can also be seen from the literature that differing components of the urban environment pose as serious problems for health and quality of life. Managing all these issues and problems in order to maximise quality of life will therefore be a difficult task.

### **3: Uneven distribution of urban environmental problems.**

This difficult task of managing the various problems that affect quality of life in urban areas is further complicated by the fact that these problems are not evenly distributed throughout urban populations and places. Both academic and policy literature agrees that the impacts of urban environmental problems are not distributed equitably among all urban communities (Lan Yuan et al 1999) and that people on low incomes are often those worst affected by environmental problems ((Joseph Rowntree Federation 2001). British urban areas experience a significantly uneven distribution of environmental goods and bads within their boundaries (Atkinson and Dietz) and urban populations do not experience the same urban feature (Schell and Ulijaszek 1999). Problems in the natural, built, social and economic urban environments are disproportionately burdened on lower income groups. This fact is acknowledged in most literature that discusses urban environmental problems.

The WHO in 1992 argued that ‘there is a strong and obvious association between the health status of people and their social and economic conditions.’ In particular in literature, differences between the health status of socio-economic groupings is discussed in relation to transport and housing. As Schell and Ulijaszek (1999) argue, ‘car access and housing tenure are powerful predictors of mortality’.

#### Transport:

The WHO healthy cities programme states that urban mobility is an important element of social equity. Services, education, employment, leisure and goods should be accessible to all urban citizens regardless of whether they own a car. However, citizens in the poorest parts of cities have the lowest car ownership rates. The WHO goes on to say that public transport can provide access and has clear environmental advantages. It can be seen from much other urban literature however, that public transport at the moment is no solution. For example, public transport with government subsidy may only be available in limited areas, and poor communities may have to bear the full cost of privately run services (Fletcher and McMichael 1997). Additionally, black and ethnic minority groups living in the poorest communities are often worst served by public transport (London Women and Planning Forum 2000). Although recognizing that accessibility is crucial for all, the Department of the Environment in 1996 stated that in London, choice of transport modes is not evenly available, with particular groups in society and geographical parts of London being disadvantaged.

#### Housing:

The work by Weisner (1990) and (1991), drawn upon by Aboutorabi and Abdelhalim (2000), contends that the effects of noise, over-crowding, ugliness and pollution are common factors causing stress in an urban residential environment and can lead to urban psychological illnesses such as depression. Weisner (1990) also argues that the occupation of buildings, particularly high-rise and those of poor visual quality, causes periods of illness to some people. High-rise buildings, which will be discussed in more depth below, can cause feelings of alienation, despair and isolation, which replace feelings of social integrity, inclusion and the sense of community. The levels of crime, drug taking, and other social problems are also reported to be very high in this type of built environment (Weisner 1991).

In addition to the uneven distribution of transport and housing problems in urban areas, another ever present theme in urban literature is the fact that different urban environmental problems, which are disproportionately experienced, reinforce each other. The unemployed for example, who experience disproportionate socio-economic problems, are also relatively concentrated in

areas which suffer from physical decline (Hill 2000). Additionally, problems such as poverty, poor housing, homelessness, lack of basic public facilities such as transport, job insecurity and unemployment, which affect physical and social health, can also have an effect on mental health (Hoggett et al 1999). Economic problems can lead to social and psychological problems such as hopelessness and demoralisation (Frick 1986).

The issue of uneven distribution of urban problems, and different problems reinforcing each other, is further problematical because differences persist not only within specific urban areas, but also between different regions of the country (Schell and Ulijaszek 1999). Differences exist for example between old urban industrial areas and inner London, and the rest of the UK (Schell and Ulijaszek 1999). These means that all levels of government, not just local, will have to be involved in achieving solutions. Davies and Kelly (1993) similarly argue that since inequalities in health are linked to social and economic inequalities, that urban areas will have to advocate policy changes to national governments, in order to address the basic determinants of health. Social and economic circumstances that are important to health are often beyond individual control (Wilkinson and Marmot 1998). It is therefore the responsibility of the government to ensure that everyone has the education and access to jobs required to achieve full potential (Urban White Paper 2000) and in addition, specific areas need to be prioritised, such as East London, which has not benefited from recent development (The London Plan 2004).

Since it is the government's responsibility, both local and national, to address the existence of urban environmental problems, their uneven distribution, and their impact on health and quality of life, all government policy decisions concerning the urban environment will have to seriously prioritise health issues, their determinants, their effects and their distribution.

#### **4: Incorporating health concerns into the decisions that shape the urban environment.**

It can therefore be seen that health concerns need to be woven into, and in some cases need to direct, the urban decision making process of both national and local governments. It is not only the responsibility of governments to address these concerns, but it is ultimately their policies which drive urban problems. Urban environmental problems and their distribution, which impact on health and quality of life, are a result of the decisions that have been made in many aspects of the urban environment. The decision making process therefore needs to be sensitive to urban problems and their relationship to health and quality of life.

In the past however, the incorporation of health issues into the decision making process has been relatively neglected. For example, an explicit connection between urban environmental decisions and quality of life has only become apparent in both academic research and policy publications over the past 5-10 years, with the connection being more prevalent in academic findings. Prior to recent thought, the importance of all urban decisions to health and quality of life was not given enough consideration. 12 years ago in 1992 for example, the World Health Organisation (WHO) stated that although human health depends on the urban environment and is affected by development, it is not sufficiently considered in environmental policies and development plans. More recently in 1997, academic research highlighted the relative failure of health concerns in the setting of urban development agendas (Fletcher and McMichael 1997). Furthermore in 1998, a Local Government Association framework aimed at improving the quality of life in towns and cities stated that 'most urban regeneration initiatives have given little emphasis to social issues' and that 'government departments involved in health, welfare and education have not been involved in the regeneration initiatives' (LGA 1998).

Despite this past neglect however, health concerns are beginning to be incorporated into to urban decision-making process, and the significance of doing so is beginning to assume greater importance in literature. The Department of the Environment for example, argues the case for the inclusion of health issues within regeneration. The WHO also now contends that modern public health calls for comprehensive and systematic efforts that address health inequalities and urban poverty; the needs of vulnerable groups; and the positioning of health considerations in the centre of economic, regeneration and urban development efforts.

It is not simply enough to state that health considerations need to be, and are beginning to be, incorporated into the urban decision-making process. Health and quality of life are complex issues affected by many different aspects of the urban environment. An improvement brought to one person through a change in for example the built environment of an urban area might indirectly negatively affect the health and quality of life of another urban resident.

## **5: Debate surrounding certain urban decisions: urban design, density, transport and housing.**

Since the incorporation of health concerns into urban decision making processes is so complex, there is much debate surrounding which decisions in the urban environment would be the most appropriate to take in order to minimise environmental problems and maximise health and quality of life. 4 urban decisions in particular are the focus of much heated debate in urban literature. These decisions are ones concerning design, density, transport and housing policies.

### Design

The WHO suggests that urban planners should be encouraged to integrate health considerations in their planning strategies, with emphasis on equity and well-being. There exists much debate in urban literature however, over what planning designs would best maximize health and quality of life. One of the most prominent debates surrounding design decisions is that of where to cite different functions in a city, in order to reduce the environmental problems experienced by residents.

The government's Planning Policy Guidance on housing states that we must improve access between housing, jobs, local services and local amenities by planning for mixed use. Similarly a report of the Urban Task Force in 1999 states that urban developments should seek diversity; encouraging a mix of activities, services, incomes and tenures within neighbourhoods. It is clear from government rhetoric that there is a belief in mixing different functions of an urban area together. A report from the Department of the Environment (1996), on the topic of planning for London's urban environment, suggests that there are many benefits of having a mix of uses and a diversity of attractions in London. These include having a range and variety of facilities, accessibility, reduced need to travel, liveliness through the day, choice and convenience. The only disbenefit mentioned is the incompatibility of some uses.

There is more uncertainty and debate in academic literature over the appropriateness of mixed use. The positive influence that locating different functions together will have on travel patterns is however, generally agreed upon. Below is a summary of the advantages and disadvantages of mixing land uses, taken from urban academic literature.

<b>Advantages of mixing uses</b>	<b>Source</b>
Zoning often produces excessive separation of land uses, can be dull and leads to extreme dependence on the automobile for most daily activities.	Levy 2000 (1)
Zoning originated to separate incompatible uses at the turn of the century but now manufacturing is cleaner and can be located close to housing	Levy 2000 (2)
A wider mix of uses, including employment, needs to be achieved at nodes on public transport in order to reduce car dependency.	TCPA
<b>Disadvantages of mixing uses</b>	<b>Source</b>
Zoning avoids the juxtaposition of incompatible land uses	Levy 2000 (1)
Locating activities with significant negative environmental impacts too near residential areas may reduce the environmental quality enjoyed by residents	De Roo and Miller 1997

Tibbald, quoted in Parfect and Power (1997), also encourages the mixing of uses in urban design. Tibbald additionally highlights some other important considerations that need to be taken into account in design decisions, for example the promotion of intimacy and visual delight in the built environment and the encouragement of the freedom to walk about. Levy (2000) suggests that this encouragement is also an important consideration, by suggesting that design should be for the pedestrian, not the automobile. Other considerations, according to Barton and Tsourou (2000) include the impact that urban planning can have on social networks, for example through urban renewal or through the non-existence of common meeting places, access to work opportunities and the sufficiency of housing. Barton and Tsourou argue that when planning, there should be a focus on the provision of local jobs, facilities and open space, and of accessibility by foot. Rob Cowen (see Urban Environment Toady, 2002) also suggests that the approach to urban decision should be aimed at enabling people to interact with each other.

It can therefore be seen that there are many factors to consider when making decisions on the design of urban areas. Maximising health and quality of life through the design layout of urban areas is not an easy task. Another decision in the urban environment, and the one that has probably received the most attention in both academic and policy literature, is the decision of what the density of urban areas should be.

### Density:

Urban locations are essentially areas of high density. Although classifying higher or lower densities depends on individual perception, and on the method of measuring density (for example people per hectare, Town and Country Planning Association) there still exists much theoretical debate in literature about whether the decision to have higher densities in urban areas would maximise quality of life. This debate has arisen from many challenges that face urban areas. As Levy (2000) suggests for example, Europe has a higher population density than much of the US, therefore more emphasis is placed on concentrating development and on using the more scarce land more efficiently. There is also the challenge of accommodating the expected growth in urban areas, particularly London, without encroaching on the precious green spaces within urban areas (The London Plan 2004) or sprawling into surrounding greenfield sites (it is current policy that building on greenfield sites should be a last resort; Planning Policy Guidance 3). Urban sprawl is also seen as something to be avoided not just because of the advancement into surrounding land, but also because reinforces the need to travel and increases dependence upon private motorised transport to do so, leading in turn to increased traffic congestion, energy consumption and polluting emissions (WHO). These problems are most acute where residential densities are low and where daily activities (home, work, shopping) are widely separated. There is a sharp increase in car use where land use densities fall below 50-60 people per hectare

(WHO). The implications of this are that development will have to take place more intensively, leading to higher densities (The London Plan 2004). Intensification will consist of development on previously undeveloped land, redevelopment, and increasing the number of activities on land (Williams et al 2000). This has generated much debate in literature over the benefits and consequences of higher densities, as seen in the table below.

<b>Advantages of a high density in urban areas</b>	<b>Source</b>
Reduced Travel Demand	Wills et al 2001; World Health Organisation; Town and Country Planning association; De Roo and Miller 2000; Portnov and Erell 2001; Williams et al 2000; Llewelyn-Davies Consultants 1998
Access to facilities (schools, shops, jobs), independent of ability to afford a car	Wills et al 2001; Williams et al 2000; The London Plan 2004; Llewelyn-Davies Consultants 1998
Access to public transport	The London Plan 2004; Llewelyn-Davies Consultants 1998; Town and Country Planning association
More sustainable	Wills et al 2001; Williams et al 2000; Town and Country Planning association
Resource efficiency/ energy efficiency	Wills et al 2001; Williams et al 2000; Town and Country Planning association
More liveable environment, variety and excitement	Wills et al 2001; Town and Country Planning association
Spare development of rural land	Portnov and Erell 2001; Williams et al 2000
Under-utilised land is wasteful	Town and Country Planning association
<b>Disadvantages of a high density in urban areas</b>	<b>Source</b>
Increased traffic congestion and parking pressure	De Roo and Miller 2000; Williams et al 2000; Town and Country Planning association; Llewelyn-Davies Consultants 1998
Increased pollution (air, noise, litter)	De Roo and Miller 2000; Williams et al 2000; Town and Country Planning association
Loss of green or open spaces	De Roo and Miller 2000; Town and Country Planning association
Loss of privacy	De Roo and Miller 2000
Increased crime	De Roo and Miller 2000
Erosion of local character	De Roo and Miller 2000
Loss of neighbourliness/ community spirit	Town and Country Planning association
Harder to manage	Aboutorabi and Abdelhalim 2000
People prefer lower densities	Town and Country Planning association; London Women and Planning forum 2000
High density will mean high rise	Schell and Ulijaszek 1999; Department of the Environment 1996
Loss of light/ view	Town and Country Planning association

Since much of this debate is only theoretical however, it is necessary to consider further the affects of high density living on the quality of life of the inhabitants of the ground. Research by De Roo and Miller (2000) showed that overall, residents were inclined to say that intensification had made their areas worse. WHO studies also show that 80% of people anticipating leaving their present home, would presser to move to a house with a garden, suggesting the in appropriateness of higher density living for all. Additionally, Williams et al (2000) claim that whereas many of the benefits claimed for intensification are at the strategic level, most of the impacts are local and often negative. There is insufficient coverage in literature on the uneven distribution of the effects of intensification and higher density living, and also on the importance of some aspects of the debate relative to others.

### Transport:

Another major area of debate in literature is how decisions concerning transportation can be made to maximise health and quality of life in urban areas. This area receives much attention in both academic and policy related urban literature and its importance is represented in the contention of Brebbia et al (2000), that 'the key to sustainable cities is sustainable transportation'. Like urban density however, there is debate in literature on how best to maximise quality of life through transportation. Transport is seen as something that is both positive to quality of life (as it enhances mobility and accessibility to jobs, services and opportunities) and something that is negative as it leads to congestion and pollution problems to name but a few.

As the London Women and Planning Forum (2000) suggests in relation to women specifically, but which is relevant to all urban residents, transport is an essential part of life as it determines access to a wide range of resources, including employment, child care, education and health. It is not the availability of transport per se that is criticised in much urban literature though, rather it is private motorised transport. This type of transport is agreed in literature to negatively affect quality of life in a big way, and is generally argued to not be necessary for accessibility, which can be attained through other modes of transport.

The ways in which private motorised transport affects quality of life are very diverse. As Brebbia et al (2000) suggest for example, in large cities with a rising proportion of private transport relative to public transport, traffic jams increase, so reducing environmental quality and mobility for everyone. Fletcher and McMichael contend that the impact of the motor car on quality of life includes, traffic danger, anxiety, loss of autonomy, noise, air pollution, lack of exercise, destruction of communities and excessive movement of goods. The WHO similarly argues that nearly all (97%) of Europe's urban citizens are exposed to air pollution levels that exceed EU quality objectives for particulates, with motorised traffic being a major source of these. They also argue that noise in urban areas is a serious and growing problem and that 80% of it comes from road traffic. Additionally, in a 1995 survey of EU urban citizens, 51% gave traffic as the main reason for complaining about their environment, with two other transport related issues, air quality and noise, being cited by 41% and 31%. High volumes of traffic also discourage people from walking on the streets and letting their children play there, contributing to the progressive weakening of the sense of neighbourhood and local community.

Brebbia et al (2000) argue a point that is consistent in much urban literature, that the only way to reconcile the conflicting requirements of accessibility and environmental quality, is by the promotion of better public transport. They suggest that there is a need to increase the comfort, frequency, convenience and reliability of public transport. They additionally argue that the full costs of road travel should be charged to road users. The Urban Task Force (1999) suggests that we should target 65% of transport public expenditure on projects that benefit pedestrians, cyclists and public transport users. They also contends that where people do wish to drive and park, then the environmental costs of this choice should be reflected in car parking charges. They

additionally suggest that car parking space absorbs vast tracts of urban land that could be better used to improve urban services and the environment. The Department of the Environment in 1996 similarly argued that increased opportunities should be created to walk, cycle or take public transport.

Decisions concerning urban transportation also have links to decisions concerning urban design and planning. Planning can for example have a role in improving pedestrian access public transport (Llewelyn-Davies Consultants 1998). As the Urban White Paper (2000) suggest, carefully planned developments within existing urban areas can increase the number of people who can easily walk to jobs, shops, leisure and other facilities, including public transport interchanges, which reduces traffic problems.

Although is much debate surrounding urban transport therefore, it can be seen that there is more agreement in literature that they way to achieve accessibility whilst reducing the use of the motorised car, is through improving public transport, and access to public transport through better design.

### Housing:

The final debate to be discussed centres on how decisions concerning urban housing can be made to maximise health and quality of life. Although this area is frequently mentioned in urban literature, it is often in relation to the type of housing that would result from higher urban densities, and the negative effect the higher densities would have on quality of life, which are discussed above.

The Urban White Paper (2000) argues that we may need to accommodate up to 3.8 million extra households by 2021. Specific to London, the amount of space devoted to the residential environment is much higher proportionally than most other European capitals, so the supply of housing will require a more efficient use of urban land (Department of the Environment). This issue is likely to be similar for other UK urban areas. Because of the increased demand for housing in urban areas in the future, the problems associated with housing are likely to increase.

One of the major problems discussed in literature concerns that of equity in urban housing. Knowing the right decision to make in order to improve housing and thus quality of life is complicated because improving quality for some can have negative effects on others. For example urban renewal, which improves the quality of urban housing, in fact demolishes a great deal of low-rent, low-quality housing (Levy 2000). In effect, improvements to housing push up prices and mean that some urban residents are excluded from living in certain areas. The development of London Docklands for example, excluded many unemployed and unskilled people from living there (Parfect and Power 1997). But in developed countries, whilst the physical standards of housing are sound for the majority of the population there is still dissatisfaction with housing quality and neighbourhood safety (Aboutorabi and Abdelhalim 2000) meaning there is a need to regenerate areas and improve the quality of housing. In order to maximise the quality of life for all urban residents therefore, decisions must be made in urban housing that improve the quality of the residential environment without excluding certain groups from it. In addition, not excluding certain populations will involve providing the variety and choice in housing needed to meet the needs of the future (Planning Policy Guidance 3). 70% of new households over the next 20 years will need to be single person households for example (PPG 3).

The debate over what decisions to make in urban housing also has links to decisions concerning urban density and transport. The Urban Task Force (1999) argues that if increasing demand for housing is to be accommodated without substantial further loss of countryside, then most new

development will have to take place in towns and cities on previously developed land. The government's target is that 60% of additional housing in England should be provided on previously-developed land, recycled 'brownfield' sites or by re-using existing buildings (PPG 3). The government also recommends seeking a greater intensity of development around places with good public transport accessibility (PPG3).

It can therefore be seen that many different aspects of the built environment affect the kind of influence urban decisions will have on health and quality of life. Making the right decision will therefore be a very complicated task. This task would perhaps be made easier by having a comprehensive approach to making urban decisions.

## **6: An overall approach to the urban environment to inform urban decisions.**

It would be impossible, in every urban decision, to consider all the impacts that different aspects of the urban environment have on different members of urban populations, because there exist many linkages and complications. It is therefore more useful to make decisions which maximise health and quality of life, and minimise environmental problems, especially those for those who disproportionately experience them, by situating those decisions into a wider framework for the urban environment. Such a conceptual framework, that appears in most academic and policy related literature in the urban environment, but whose precise meaning remains uncertain, is sustainable development.

### **Sustainable Development as a framework for directing decisions in the urban environment:**

The definition of sustainable development referred to in literature still broadly refers to that of the Brundtland Commission, namely sustainable development being development that meets the needs of the present generation without compromising the ability of future generations to meet their own needs. Because this definition is so broad, there is much confusion as to how it could be applied to urban areas. Despite this confusion, the concept should not be ignored because of its potential as an over-arching framework for directing decisions in the urban environment.

Most of the problems that affect urban areas can be applied to the concept of sustainable development. The major challenges facing London for example, are accommodating population and economic growth whilst assuring benefits are shared as widely as possible by all Londoners and limiting adverse environmental impacts (The London Plan 2004). The way urban areas reconcile the demands of economic growth, resource conservation and environmental protection (a central concept in sustainable development), will determine the success of improving the environment (Lan Yuan et al 1999). Additionally, health is fundamentally an ecological matter, which is dependent on an optimal balance between populations and their environments. The way in which we choose to run our cities will be critical to the future ecology of the planet itself. We need to look after the things that look after us (another central component of sustainable development) (Fletcher and McMichael 1997). Health and sustainable development are also connected because the concern for the environment and economy in sustainable development is born out of a concern to improve the quality of life of human beings (Barton and Tsourou 2000).

Because urban environmental problems are so strongly linked in to the concept of sustainability, when making a decision in the urban environment, the decision maker could ask 'which decision is the most sustainable'. It is likely that the most sustainable decision will benefit the quality of life of urban residents. A sustainable decision in transport for example, would be one that allows for accessibility and economic development, without creating too much pollution and destruction to the environment, which negatively affect quality of life. It can be seen that this sustainable

decision covers many of the aspects discussed in the transport section above. Similarly a sustainable planning decision would allow for development, without unnecessarily using up undeveloped land, again incorporating many of the key aspects discussed above.

Despite the usefulness of the concept, before it can be applied to the urban decision making process its precise meaning has to be refined. Although most urban literature is peppered with the phrase 'sustainable development', it is often unclear exactly what the literature is referring to. For this reason it is useful to consider other frameworks that could direct the urban decision making process. Another one of these frameworks that has received much attention theoretically in literature, but which has not been as rigorously empirically researched, is that of community involvement.

### Community Involvement:

The concept of involving the community as a framework for driving the urban decision making process, is premised on the idea that in order to maximise the quality of life of urban residents, it is appropriate to ask them what they think needs improving.

The Urban White Paper (2000) states that people have a right to be involved in deciding how their town or city develops and that real change will not be achieved unless local people are in the driving seat right from the start, tailoring strategies to local needs. The government has instigated key measures to enhance community involvement by supporting individuals and communities to take their ideas forward, through the 'New Deal for Communities' scheme, and a Neighbourhood Renewal Fund of £800m over 3 years, that will be given to local projects (Urban White Paper 2000). The Local Government Association (1998) also contends that the future of urban areas will depend on people's ability and willingness to belong to and take part in improving their living and working environments. Additionally, international prescriptions, namely the WHO, suggest that communities need to be mobilised and empowered (Davies and Kelly 1993).

Deliberations from the Urban Summit in 2002 however, revealed that whilst community involvement is vital to successful regeneration, improvements are needed as to how this is done. Communities need help and training to understand processes and contribute effectively to developments. Additionally, as Paddison (2001) argues, the term community is often used in public policy as it conveys connotations of empathy and localness and harnesses a new relationship between state and society; one of partnership and shared responsibility, but there in fact exist many complications with term. Communities are no longer simply territorially based (Paddison 2001) and it is possible to belong to more than one community. Additionally, communities exclude those who are not classed as a member of the community, and the involvement of communities is based on the premise that there is internal cohesion within the community, which is not always the case (Paddison 2001). In fact, communities that are at war with themselves, and are therefore unlikely to partake in community projects, are usually communities that are deprived materially and socially (London Women and Planning Forum 2000). A US report found that 75% home ownership in an area is required to create cohesive communities as a sense of investment in a neighbourhood is needed for community spirit (London Women and Planning Forum 2000). There are therefore also issues of equity caught up with the use of community involvement as a means by which to drive the decision making process.

Whilst the concept of involving communities in decision making may seem logical, (because involving residents in the decisions that will affect their quality of life could deliver the best results) there exist many complications that need to be overcome before the concept can be properly adopted.

There remain 3 more over-arching frameworks that could guide the urban decision making process that will be discussed. These frameworks appear in much urban literature as a brief statement, but lack deep consideration, especially in more recent academic publications and in policy documents. The 3 frameworks are self-sufficiency, urban metabolism, and the ecological footprint. There is considerable linkage between the concepts.

#### Self-sufficiency:

This concept is itself strongly linked to that of sustainable development, the essence of it being that sustainability is intimately connected with some degree of self-reliance at the regional level (Portnov and Erell 2001). Self-sufficiency brings many benefits to the environment and therefore to quality of life. Directing decisions to increase self-sufficiency would therefore have positive effects on quality of life. One of the benefits that self-reliance brings, is to social interaction. As mobility increases and density decreases (conditions associated with less self-containment) social segregation occurs and social networks are scattered (Frick 1986). Another benefit is that of waste containment, which reduces the negative effects on those who live outside urban areas. The WHO (1998) contends that human and solid waste should be recycled locally wherever possible. Additionally, notions of self-sufficiency are advantageous because if urban areas or communities are of the sufficient size, scale and density, they will support basic local amenities in a neighbourhood and minimise the use of resources (ODPM 2003). Notions of self-reliance are also linked to the possibility of better community involvement. The concept of the urban village for example, is linked to notions of community commitment and a sense of place (Biddulph et al 2002).

#### Urban Metabolism:

The core of the urban metabolism metaphor is that urban areas are more than just an agglomeration of individuals and buildings; they are whole organisms (Freestone 2000). Considering the entirety of the urban environment when making decisions would result in more comprehensive, rather than piecemeal decisions (Freestone 2000). This would involve looking at the linkages and interrelated nature of all urban problems and aspects of the urban environment, which should result in decisions which better improve quality of life. Another aspect of viewing urban areas as organisms involves seeing these areas as entities into which resources flow and out of which wastes flow. Metabolism is the total flow of materials into and out of the system (Rodney 1994). Better acknowledging that the city discharges waste, water and air pollution to the countryside (Paddison 2001), might result in taking decisions that aim to decrease this flow. In an more ecologically sustainable city there should be maximum use of obtainable resources within the city and fewer residuals resulting from human activities (Lan Yuan et al 1999). Cities presently consume land, air, water and fuel at rates that are not sustainable. Some cities however achieve a high quality of life for their inhabitants by utilising relatively little energy and generating minimal waste (Lan Yuan et al 1999).

#### Ecological Footprint:

The ecological footprint of a designated population is the area of productive land and water ecosystems required to produce the resources that the population consumes, and assimilate the wastes that the population produces (Pender et al 2000). The effects of cities extend far beyond their boundaries as cities are fed with food and energy from very distant places and impress ecological footprints on non-urban people and lands (Schell and Ulijaszek 1999). Urban areas, with their concentrations of population, invariably require an area of productive land greater than their urban boundary to maintain their population, but the majority of footprints are too large and

we are living beyond our ecological means (Pender et al 2000). If a framework in decision making was adopted to reduce the ecological footprint, it might lead to environmental benefits and hence improve the quality of life of both urban and non-urban residents.

Regardless of whether any of these approaches should be adopted as an overarching framework to direct urban decisions, urban policy as it stands will have to change in order to maximise the quality of life of urban residents and minimise urban problems. Aspects of the natural, built, social and economic environments, which affect quality of life, have to be appropriately considered and integrated in the policy decision-making process.

## **7: Implications for prevailing policy and future policy directions, drawing on examples of good practice.**

In order to discuss how urban policy needs to change, so that decisions are made which consider all aspects of the urban environment and maximise quality of life, it is important to firstly examine what current policy is. A statement by the deputy Prime Minister (PPG3) summarises the key sentiments that appear in urban policy, 'We want to see thriving communities in our towns and cities, what Lord Rogers calls an Urban Renaissance; we need to make efficient use of land. Land is a finite and precious resource, which we must conserve wherever possible; we must respect our countryside. That is why we have set a national target that 60% of new homes should use recycled land or buildings.' This statement, as with the Urban White Paper, does not explicitly link policy decisions in the urban environment to improving health and quality of life, although the importance of doing so is acknowledged in the White Paper 'urban policies are not just about bricks and mortar, but about improving peoples prosperity and quality of life...we must address the poor quality of life and lack of opportunity in certain urban areas. For the most deprived, we will target special help to achieve decent minimum standards'. Although the White Paper stresses the importance of improving economic performance, reducing the impact which urban living has on the environment and getting the design and quality of the urban fabric right by making efficient use of the available space and environmental resources, it does not explicitly mention how all these different aspects of the urban environment work together to influence health and quality of life. Although a framework for sustainable development in planning has been developed at the local level (Regional Planning Bodies (RPBs) and Local Planning Authorities (LPAs) have to draw up their plans with a view to contributing to sustainable development, ODPM), this approach still needs to be better integrated with other aspects of the urban environment. It can therefore be seen that although prevailing policy recognizes the importance of integrating various urban sectors with quality of life concerns, urban policy still needs to become more joined up, a contention that has received much attention in urban literature.

### Joined-up Planning:

Since health and quality of life are complicated problems, they will require comprehensive solutions. As Riseborough (2000) argues, there are lots of different programmes that aim to make a part of life better, but 'joined-up' solutions are needed. The labour government has reaffirmed the need for multi-agency partnership working to solve urban problems (Hill 2000). It has stated for example that 'although comprehensive, all-embracing spatial strategies are likely to be difficult to develop in practice, we are committed to a more integrated approach' (ODPM).

The Labour government has for example established the Department of the Environment, Transport and the Regions to integrate environment, planning and transport (Hill 2000). But a

wider framework for urban areas that directly considers health and quality of life is still needed. Likewise, although the Urban White Paper states that ‘each town and city now needs to develop a vision for its future and plan how to achieve it. It should do this through a local strategic partnership involving the community, the council, service providers, voluntary groups, business leaders and consulting everybody with an interest at stake’ this approach itself needs to be joined-up with a wider framework for urban areas, and with specific urban, and public policy departments.

A similar theme can be seen at the supra-national level. The WHO programme healthy cities for example, seeks to ensure that health issues are addressed in plans for development by many key development sectors, including industry, housing, local government, agriculture and transport, stressing the importance of collaboration between health and development sectors (Fletcher and McMichael 1997). Since different development sectors are themselves interlinked however, simply the incorporation of health concerns into separate development agendas will not be sufficient to improve quality of life. What is required, and what is acknowledged elsewhere by the WHO, is inter-sectoral planning and city-wide partnerships.

Tackling urban problems needs to be more integrated (Local Government association 1998), partnerships at all levels work best. As the European Commission thematic strategy on the urban environment states, ‘a high quality and healthy urban environment is unlikely to emerge spontaneously through the multitude of decisions taken independently by the different authorities, businesses and individuals active in the different sectors of an urban area. A clear vision and an overall strategy and action plan to achieve agreed objectives and targets are necessary’. Health practitioners will need to form partnerships with agencies in economic development, transportation, housing, education and community organizations (Wilkinson and Marmot 1998) and these agencies will have to form partnerships with each other. The social, economic and physical environments are the key to improving health and reducing inequalities, so a joint commitment of a variety of agencies is required (Bruce et al 1995).

These partnerships and joined up planning will be difficult to manage and organise, so it is useful to examine some existing examples of good practice that could be followed elsewhere. One such example can be seen from the recent London Plan, launched by the Mayor of London, Ken Livingstone, in 2004. This plan tries to join-up many different aspects of the urban environment and is therefore more likely to positively affect well-being.

**Different aspects integrated in the London Plan 2004:**

- sustainable patterns of development
- good design of buildings spaces and places
- an improved and expanded public transport network and reduction in dependence on private car
- integration of transport planning and spatial development
- social inclusion
- directing growth to where it is most needed, ie areas of social and economic deprivation
- equality of access to homes, jobs, services and leisure
- provision of more affordable housing
- promotion of policies for education, health, safety, skills development and community services

Another example of good practice that could be adapted is that of San Francisco (taken from City and County of San Francisco). San Francisco’s programme on health, equity and sustainability recognises that building resources for good health means that ‘public health agencies must work beyond their traditional roles and coordinate efforts with government agencies and community organizations that may not see public health as their primary mission. For example, although

agencies responsible for health have not traditionally worked together with those responsible for housing, by creating safe and affordable housing, we can prevent multiple health and social problems’.

Although following good strategies like these might help to integrate different aspects of the urban decision making process, and hence maximise quality of life, there is still a way to go before there is an accepted overarching framework for guiding urban decisions. Much more research still needs to be done to structure this framework. Urban literature suggests in particular that further research is needed into the links between social inequalities and health inequalities (Davies and Kelly 1993) and into the development of a systematic method for working out what improvements to poor neighbourhoods could make a difference to quality of life (Risebough 2000).

## **Essential Reading**

Aboutorabi and Abdelhalim, 2000. The Impact of Environmental Quality on Human Health.

Barton and Tsourou, 2000. Healthy Urban Planning. A WHO guide to planning for people.

City and County of San Francisco, program on health, equity and sustainability.  
[www.dph.sf.ca.us/eh/phesmain.htm](http://www.dph.sf.ca.us/eh/phesmain.htm)

De Roo and Miller, 2000. Compact Cities and Sustainable Urban Development.

European Commission. Thematic Strategy on the Urban Environment.  
[http://europa.eu.int/comm/environment/urban/thematic\\_strategy.htm](http://europa.eu.int/comm/environment/urban/thematic_strategy.htm)

Lan Yuan et al, 1999. Urban Quality of Life – critical issues and options.

Marmot and Wilkinson, 1998. WHO – The Solid Facts, social determinants of health.  
[www.who.dk/document/E59555.pdf](http://www.who.dk/document/E59555.pdf).

Planning Policy Guidance 3 – Housing.  
[www.odpm.gov.uk/stellnet/groups/odpm\\_planning/documents/page/odpm\\_plan\\_606933.hcsp](http://www.odpm.gov.uk/stellnet/groups/odpm_planning/documents/page/odpm_plan_606933.hcsp)

The London Plan: A Summary, 2004. Highlights from the Mayor's Spatial Development Strategy for Greater London.

Town and country planning association online. [www.tcpa.org.uk](http://www.tcpa.org.uk)

Urban Task Force Report, 1999. Towards an Urban Renaissance

Urban White Paper: Our Towns and Cities, 2000.  
[www.odpm.gov.uk/stellent/groups/odpm\\_urbanpolicy/documents/page/odpm\\_urbpol\\_608358.hcsp](http://www.odpm.gov.uk/stellent/groups/odpm_urbanpolicy/documents/page/odpm_urbpol_608358.hcsp)

WHO - Healthy Cities.  
[www.odpm.gov.uk/stellent/groups/odpm\\_urbanpolicy/documents/page/odpm\\_urbpol\\_608462.hcsp](http://www.odpm.gov.uk/stellent/groups/odpm_urbanpolicy/documents/page/odpm_urbpol_608462.hcsp)

## References

### Academic Literature:

Aboutorabi and Abdelhalim, 2000. The Impact of Environmental Quality on Human Health.

Atkinson and Dietz. Public perceptions of environmental equity : an English urban context.

Berce-Bratko, 2001. Can small urban communities survive?

Biddulph et al, 2002. The urban village : a real or imagined contribution to sustainable development.

Brebbia et al, 2000. The sustainable City – Urban regeneration and sustainability.

Bruce et al, 1995. Research and Change in Urban Community Health.

Davies and Kelly, 1993. Healthy Cities.

De Roo and Miller, 1997. Urban Environmental Planning.

De Roo and Miller, 2000. Compact Cities and Sustainable Urban Development.

Erell and Portnov, 2001. Urban Clustering. The benefits and drawbacks of location.

Fletcher and McMichael, 1997. Health at the Crossroads – transport policy and urban health.

Freestone, 2000. Urban Planning in a Changing World.

Frick, 1986. The quality of Urban life. Social, psychological, and physical conditions.

Hill, 2000. Contemporary Political Studies. Urban Policy and Politics in Britain.

Hoggett et al, 1999. Urban regeneration and mental health in London.

Lan Yuan et al, 1999. Urban Quality of Life – critical issues and options.

Levy, 2000. Contemporary Urban Planning.

Levy, 2000. Urban America: Processes and Problems.

Llewelyn-Davies Consultants, 1998. Sustainable residential quality; New Approaches to urban living.

London Women and Planning Forum, 2000. Women and Urban Renaissance. Our Vision for Future Cities.

Mokhtarian and Schwanen, 2003. The extent and determinants of dissonance between actual and preferred residential neighborhood type. Environment and Planning B: Planning and Design, volume 31(5) p 759 – 784.

Paddison, 2001. Handbook of urban studies.

Parfect and Power, 1997. Planning for Urban Quality: Urban design in towns and cities.

Partners for liveable communities, 2000. The Liveable City (US). Revitalising Urban Communities.

Pender et al, 2000. Environmental Indicators for the urban environment – Ireland.

Riseborough, 2000. Regenerating Neighbourhoods and improving the quality of life, The tool book.

Rodney, 1994. Urban Environmental Management: Environmental Change and Urban Design.

Schell and Ulijaszek, 1999. Urbanism, Health and Human Biology in Industrialised Countries.

Urban Environment Today, 2002. Issue 157.

Williams et al, 2000. Achieving sustainable urban form.

Wills et al, 2001. Urban Planning and Management.

### **Academic Literature On-line:**

Town and country planning association online. [www.tcpa.org.uk](http://www.tcpa.org.uk)

Joseph Rowntree Federation. [www.jrf.org.uk](http://www.jrf.org.uk)

### **Policy-related Documents:**

#### **Local government:**

Local Government Association, 1998. Realising the Potential in Urban areas: a framework for improving the quality of life in our towns and cities.

Local Government Association, 2000. Learning for an Urban Renaissance – a draft manifesto for urban learning.

The London Plan: A Summary, 2004. Highlights from the Mayor's Spatial Development Strategy for Greater London.

#### **Local government: non-UK:**

City and County of San Francisco, program on health, equity and sustainability.  
[www.dph.sf.ca.us/eh/phesmain.htm](http://www.dph.sf.ca.us/eh/phesmain.htm)

#### **UK National government:**

Department of the Environment, 1996. London's Urban environment – Planning for Quality. BDP Planning.

Planning Policy Guidance 3 – Housing.

[www.odpm.gov.uk/stellnet/groups/odpm\\_planning/documents/page/odpm\\_plan\\_606933.hcsp](http://www.odpm.gov.uk/stellnet/groups/odpm_planning/documents/page/odpm_plan_606933.hcsp)

Sustainable communities: building for the future, 2003.

[www.odpm.gov.uk/stellent/groups/odpm\\_communities/documents/page/odpm\\_comm\\_022184.hcsp](http://www.odpm.gov.uk/stellent/groups/odpm_communities/documents/page/odpm_comm_022184.hcsp)

Urban Summit, 2002. [www.urbansummit.gov.uk](http://www.urbansummit.gov.uk)

Urban Task Force Report, 1999. Towards an Urban Renaissance

Urban White Paper: Our Towns and Cities, 2000.

[www.odpm.gov.uk/stellent/groups/odpm\\_urbanpolicy/documents/page/odpm\\_urbpol\\_608358.hcsp](http://www.odpm.gov.uk/stellent/groups/odpm_urbanpolicy/documents/page/odpm_urbpol_608358.hcsp)

The UK government's response to the Royal Commission on Environmental Pollution's 23<sup>rd</sup> report environmental planning.

[www.odpm.gov.uk/stellent/groups/odpm\\_planning/documents/page/odpm\\_plan\\_023027.pdf](http://www.odpm.gov.uk/stellent/groups/odpm_planning/documents/page/odpm_plan_023027.pdf)

### **International Policy:**

European Commission. Thematic Strategy on the Urban Environment.

[http://europa.eu.int/comm/environment/urban/thematic\\_strategy.htm](http://europa.eu.int/comm/environment/urban/thematic_strategy.htm)

A WHO guide to planning for people. Barton and Tsourou, 2000. Healthy Urban Planning.

WHO - Healthy Cities.

[www.odpm.gov.uk/stellent/groups/odpm\\_urbanpolicy/documents/page/odpm\\_urbpol\\_608462.hcsp](http://www.odpm.gov.uk/stellent/groups/odpm_urbanpolicy/documents/page/odpm_urbpol_608462.hcsp)

WHO – The Solid Facts, social determinants of health. Marmot and Wilkinson, 1998

[www.who.dk/document/E59555.pdf](http://www.who.dk/document/E59555.pdf).