

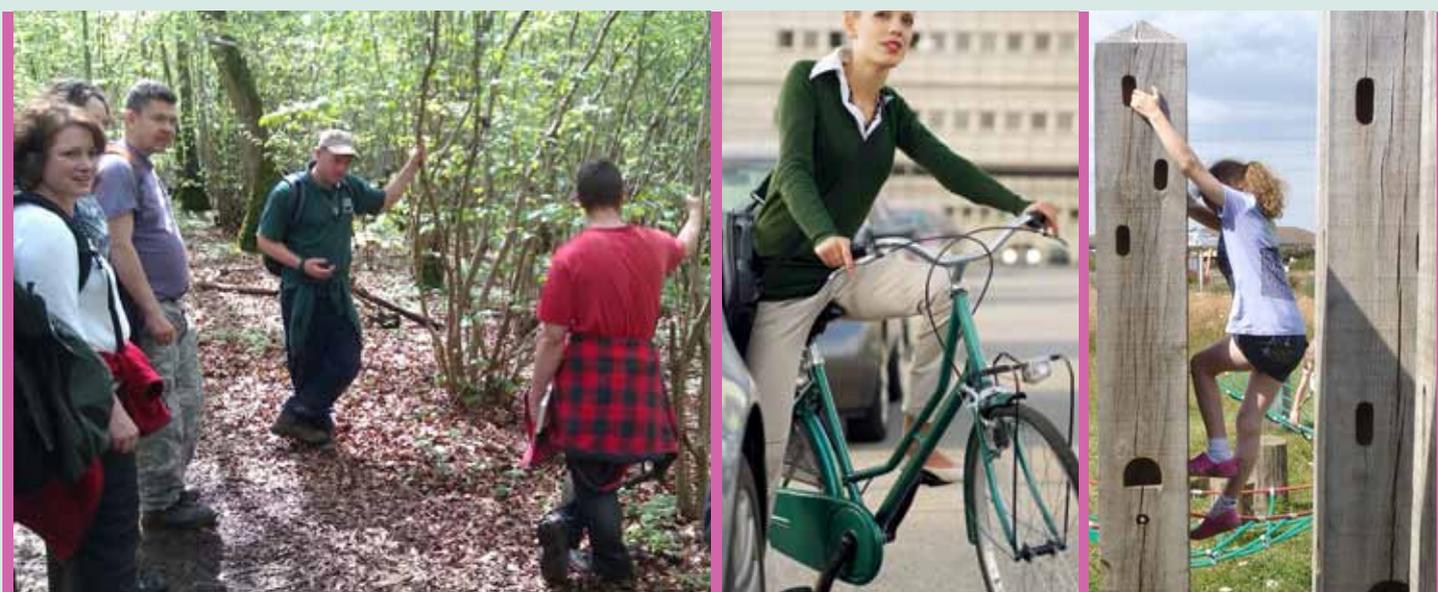


Gloucestershire
Conference

New, fully revised and updated edition

Active Planning Toolkit 2

Promoting and creating built or
natural environments that encourage
and support physical activity



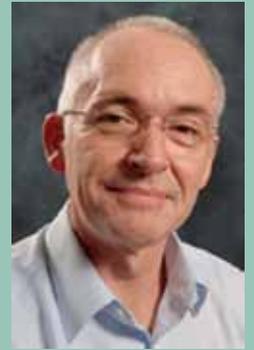
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Gloucestershire 
Health Community

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Foreword, Mike Kelly

It is clear that the way we layout our buildings and spaces has a huge influence on how much we move – this is the central principle behind the Active Planning Toolkit and the NICE public health guidance upon which it is based. This updated Active Planning Toolkit reflects the significant changes in planning policy that have taken place in 2012 and provides a more concise toolkit for planners to utilise.

Gloucestershire championed the importance of planning for health in 2011 with the publication of the first *Active Planning Toolkit* which provided a practical guide for planners to ensure that buildings, campuses and wider infrastructure support and encourage physical activity. This toolkit achieved widespread praise with a commendation from the Royal Town Planning Institute in recognition of the importance of building professionals in improving health through increasing physical activity.

Some people can be encouraged to take physical activity through attending exercise classes; however many people will only increase their physical activity as part of their daily routine, for example through

walking and cycling to get to work and to get to the shops. This is why the physical environment is so important if we are to tackle the burden of disease related to physical inactivity such as obesity, heart disease and diabetes.

Both toolkits have emerged in response to *NICE public health guidance PH08 and PH41*, which provide evidence based guidance on the promotion and creation of physical environments that support increased levels of physical activity. We hope that this updated toolkit will continue to be used by a range of influential organisations to encourage physical activity; including local authorities, engineers, planners, and architects.

I look forward to seeing the widespread use of the toolkit to inform planning and infrastructure decisions across England.

A handwritten signature in black ink, appearing to read 'Mike Kelly'.

Professor Mike Kelly, Director of the Centre for Public Health at NICE

Executive Summary

To be healthy, we all need to be physically active. Our modern lifestyles, however, tend towards being less physically active. The level of physical activity being taken by the population is low, and this is adversely affecting health. To help us become more active, developments in planning, urban design and transport need to help us build physical activity such as walking, cycling or climbing stairs into everyday life.

This Toolkit is a guide to creating active environments. It is intended for all those who influence how our environments change, including planners, developers and designers, as well as all those who are concerned with public health.

It is based on guidance from the National Institute for Health and Care Excellence (NICE) about what environmental changes will help us to get more active.

Healthy Lives, Healthy People (2010)¹, the Government's strategy for public health in England, explicitly recognises that the quality of the environment around us affects any community. Pollution, air quality, noise, the availability of green and open spaces, transport, housing, access to good-quality food and social isolation all influence the health and wellbeing of the local population. Within planning, The National Planning Policy Framework (NPPF, 2012)² makes clear that the key role of spatial planning is the delivery of sustainable development, which includes ensuring a strong, healthy and just society.

The strategic imperatives requiring collaboration between spatial planning, transport and health

organisations are thus very clear, as are the extent of mutual responsibility for delivering health aims in general and the promotion of physical activity in particular.

The Toolkit includes two 'scorecards'. The first scorecard helps to determine whether the strategic policy-making processes for health improvement and planning within local government are effectively aligned. The second scorecard looks at whether the policy framework for planning, transport, open space and related areas will be truly effective in increasing levels of physical activity.

'Active' environments have:

- Places that people need to visit, such as shops, parks, schools, within walking distance
- A mixture of different uses such as housing, employment, shops, schools or health facilities
- Pleasant and well-designed streets, which are suitable for all members of the community
- Priority given to the needs of pedestrians and cyclists
- Accessible and good quality green space, which caters for different members of the community
- Greenery incorporated into the overall environment.

This toolkit offers, to all those who determine changes to our environment, advice towards ensuring that future developments help to create healthy and active communities, supporting people to be more active as part of everyday life.

1 Introduction

1.1 Physical activity

“The benefits of regular physical activity to health, longevity, well being and protection from serious illness have long been established. They easily surpass the effectiveness of any drugs or other medical treatment. The challenge for everyone, young and old alike is to build these benefits into their daily lives.”³

But modern life has made us more inactive. We move around less and spend a lot of time sitting in cars or in front of screens. This guide is about how to create environments that can help people to build physical activity into everyday life.

1.2 What is this guide for?

The purpose of this guide is to offer practical advice for planners, developers, and all those concerned with public health and with the built and natural environment. It aims to be a straightforward and practical guide to help inform spatial planning and transport policy so as to promote physical activity. It is based on NICE guidelines in this area. NICE is internationally recognised for the way in which it develops recommendations, a rigorous process using the best available evidence.

This toolkit demonstrates how the health sector can work in partnership with spatial planners in order to significantly increase levels of physical activity. It equally aims to support planners in meeting a crucial part of the guidance in the National Planning Policy Framework relating to healthy and sustainable communities. It thus provides a common framework in which the new roles and responsibilities of local government in health improvement can be used to address this vitally important public health challenge.

Many people who work in planning, design or public health are aware of, to a greater or lesser extent, how the environment affects health. This Toolkit is intended to provide practical assistance in putting this general knowledge into actual practice.

1.3 Who is this guide for?

The toolkit is aimed at policy makers and practitioners in health, planning, transport and related sectors. It offers guidance to:

- Members and advisers of Health and Wellbeing Boards (HWBs)
- Those involved in the production of the Joint Strategic Needs Assessment (JSNA) and in formulating the Health and Wellbeing Strategy

- Clinical commissioners seeking to develop effective pathways to tackle conditions such as cardiovascular disease (CVD), type 2 diabetes, obesity and depression
- Local planning authorities involved in or seeking to influence HWBs
- Planners preparing and monitoring local plans
- Communities preparing neighbourhood plans
- Planners in development management appraising major development proposals
- Transport planners and those involved in the design of open spaces, schools and green space
- Commercial developers wanting good quality, attractive developments
- Third sector organisations seeking to promote physical activity and improve health using the environment as a context.

It is directly relevant to both strategic and operational levels.

1.4 How is this guide organised?

The toolkit has three sections:

- ‘Why physical activity’, briefly describes why being active is an important health and planning issue
- ‘Strategic collaboration for health’ sets out the policy and organisational context for action
- ‘Designing for physical activity’ explores transport, design and green space – the key elements of the spatial environment that can encourage and promote physical activity.

The toolkit incorporates ‘Scorecards’ to help in identifying and resolving some of the barriers to achieving active environments and in seizing opportunities. Sources of further information are signposted at the end of the document.

2 Why physical activity?

Promoting active lifestyles can help us address some of the important health challenges facing the UK today. Increasing physical activity has the potential to improve the physical and mental health of the nation, reduce all-cause mortality and improve life expectancy. It can also save money by significantly easing the burden of chronic disease on health and social care services and on the economy. Increasing cycling and walking will reduce transport costs, save money for the Government and individuals, improve air quality, contribute to meeting mandatory Climate Change targets and help the environment. More use of active travel can reduce traffic, congestion and pollution, improving the health of communities⁴.

2.1 Physical activity is good for health

We have evolved to walk and run, and being fit and active tends to make us feel good⁵.

Beyond that, Figure 1 below shows how physical activity reduces the risk of a range of diseases.

These health benefits apply to everyone participating, even those with other risk factors.

The full impact of a lack of activity on population health is only now coming to be fully understood. Physical inactivity is thought to be the fourth leading cause of death worldwide, and contributes to around 17% of all-cause mortality in the UK. This is one of the highest rates in the world, but it also means that the UK has the capacity to make significant gains in life expectancy if physical activity can be increased⁶.

Figure 1. Impact of physical activity on selected diseases

Health outcome	Link with physical activity	Strength of evidence
Cardio health	25-30% reduction in risk of cardiovascular disease, coronary heart disease and stroke	Strong
Metabolic health	30–40% reduction in risk of type 2 diabetes in at least moderately active people	Strong
Energy and weight	Physical activity helps to maintain weight and in maintaining weight after weight loss. (Physical activity alone will not achieve significant weight loss)	Strong
Musculoskeletal health	Risk reduction of hip fracture is 36% to 68% at the highest level of physical activity	Moderate
Cancer	Approximately 30% lower risk of colon cancer and approximately 20% lower risk of breast cancer for adults participating in daily physical activity.	Strong
Mental Health	20–30% lower risk for depression and dementia, for adults participating in daily physical activity.	Strong

[Adapted from 'Start Active, Stay Active' Table 1⁷]

2.2 How much physical activity?

The level of physical activity needed to achieve real health gains is relatively modest – the Government recommends 30 minutes of moderate intensity physical activity, such as brisk walking, five days per week, in bouts of at least 10 minutes. Current estimates are nationally that 39% of men and 29% of women aged over 16 meet this recommendation, based on self-reporting⁸. However, whilst these levels may seem promising, they should be viewed with some caution. Information from ‘objective’ measures of activity, taken from samples of adults wearing accelerometers, suggests a much lower figure, with only 6% of men and 4% of women meeting the Government’s recommendations⁹.

Helping those adults who are significantly inactive (i.e. engaging in less than 30 minutes of activity per week) will produce the greatest reduction in chronic disease. Improving the environment to provide more everyday opportunities for physical activity can have a real impact on overall health. The potential impact can be assessed using the ‘Health Impact of Physical Inactivity’ (HIPI) tool, developed to estimate how many cases of certain diseases could be prevented in each local authority in England if the population aged 40-79 were to engage in recommended amounts of physical activity¹⁰. This estimates that all causes mortality in England could be reduced by 18.1% (36,815 preventable deaths) if the whole population become active, and could be reduced by 12.3% (25,127 preventable deaths) if only 75% become active. The table below illustrates the potential impact at a local level, using Gloucestershire as an example:

Figure 2. Gloucestershire – Burden of illness & death from physical inactivity

Conditions preventable through physical activity	Total annual figure (2010)	Preventable if 100% active	Preventable if 75% active	Preventable if 50% active
Total deaths	2235	394	265	136
Coronary heart disease (emergency admissions)	977	106	72	37
Breast cancer (new cases)	421	85	57	29
Colorectal cancer (new cases)	309	61	41	21
Diabetes (prevalence)	24377	3229	2172	1115

[Source: Network of Public Health Observatories, ‘Health Impact of Physical Activity’ tool]

2.3 Physical activity and obesity

Physical activity is beneficial to everyone, including those who are overweight. For example, studies indicate that obese individuals who are physically fit have a lower risk of mortality compared with obese individuals who are not fit¹¹.

It is difficult to lose weight through exercise alone – dietary changes are necessary. However people who are active are less likely to become obese, and are more able to maintain a healthier weight following weight loss.

2.4 Physical activity, mental health and wellbeing

There is increasing evidence that physical activity can have a positive effect on wellbeing and mental health. Physical activity can increase positive mood, and raise self-esteem. This relationship has been found in children, adolescents, young adults, adults and older people, and across both males and females.

There is some evidence of the benefits of physical activity on depression, and there is mounting evidence that physical activity is beneficial as a treatment for people with both mild and severe anxiety.

Physical activity throughout the lifespan seems to have a positive effect on cognition, a protective effect against developing dementia, and can delay and reduce severity for those who have developed symptoms¹².

2.5 Physical activity and its benefits to the economy and society

- Lack of physical activity and obesity are placing major resource burdens on the NHS and the economy. It is estimated nationally that the cost of obesity and associated conditions could be £27 billion by 2015¹³
- It has been estimated that those who are physically active earn on average £6,500 more per year than those who are inactive¹⁴
- Investments in the walking environment are good value for money when compared with other transport investments¹⁵. WHO/Europe Health Economic Assessment Tool (HEAT) is designed to help in conducting an economic assessment of the health benefits of walking or cycling¹⁶
- Economic research from the US suggests that property in walkable neighbourhoods commands a premium over similar homes in less walkable areas¹⁷
- The costs of poor air quality, of which pollution from vehicles is a major contributor, are estimated at £15 billion per year¹⁸
- There are clear synergies between healthy environments, a low carbon future and sustainable communities.

2.6 Why is physical activity a planning issue?

There have been long-term changes in the spatial environment and in transport systems that have had a very significant impact on the amount of exercise that everyday life provides. Key trends include:

- Lower density dispersed developments that are car reliant
- Separation of residential areas from employment, retail and leisure
- Car dominated urban design with poor provision for pedestrians or cyclists
- Increased traffic speed and volume, making the environment less child and pedestrian friendly
- Severance of neighbourhoods caused by roads.

The amount of physical activity in everyday life has decreased considerably. For example, the National Travel Surveys have shown that the average numbers of miles walked per year has declined from 255 in 1975/6 to 187 in 2011. That is an average of 1.3 fewer miles walked each week.

Over the longer term there has also been a huge drop in cycling. In 1950, 12.4 billion miles were travelled by pedal cycle. By 1980 it had dropped to a quarter of that level at 3.2 billion miles and was 3.1 billion miles in 2011¹⁹.



Case Study 1 Tewkesbury Healthy Town 'Count me in'

Background

'Healthy Towns' was an initiative between central government and local communities, with matched funding, taking a coordinated approach to improving health in the local area. Tewkesbury was one of 9 'Healthy Towns' participating in the programme. The Tewkesbury Project ran from 2009 to 2011.

Aim

The project had three key delivery areas:

- Environment – decrease the use of motorised transport and promote active transport across the community
- Physical activity (PA) promotion – increase opportunities for local people to be physically active through increased provision and targeted PA promotion activities
- Healthy food – encourage and provide opportunities for residents to make healthy food choices.

What was done?

The programme was managed by a delivery board, with a range of people from different agencies. The County Council and Sustrans were particularly helpful in delivering a cycle network, which included completing a route around the new town and cycle parking facilities. Walk England conducted an audit of routes to local facilities and a number of '30 minute routes' were developed – routes that can be walked in half an hour and are located in the wards with the highest levels of deprivation.

Around 5000 households were offered information and guidance on how to become more active, including access to active travel, leisure walks and cycle rides.



An outdoor gym measuring 625m² was created in a local park, boasting facilities inspired by Olympic and Paralympic sports, including a basketball, football and tennis area, a climbing wall, an outdoor gym and an open area to encourage dance, aerobics and gymnastics.

Outcomes and lessons learned

The initiative was fortunate in being subject to a full evaluation by the University of Gloucestershire*. This evaluation methodology included longitudinal surveys, focus group interviews pre and post intervention, covering various groups in the community and the collection of engagement data. The researchers concluded:

Environment and transport

- There was evidence of positive change in attitude to cycling
- The perceptions of the importance of choice of transport for health and wellbeing improved, including for young people.

Physical activity

- 42% of those surveyed increased the amount of physical activity that they undertook each day
- 42% spent more time outside
- Longitudinal data showed knowledge, attitudes and behaviour increased in relation to physical activity.

Food choices

- More people knew about the '5 a day' recommendation
- 30% reported that they had improved their consumption.

Engagement

- A wide range of people attended or used the various interventions, with attendance being highest in the two most deprived wards
- As a consequence of the Healthy Towns initiative, there appeared to be increased community cohesion within the town
- There is evidence that perception of personal satisfaction with life as whole improved in 40% of the sample.

The researchers concluded:

"From the findings of this evaluation, complex community interventions appear to have the potential to engage communities, including those from deprived areas, and in some cases demonstrate improvements in behaviour, knowledge and perceptions of life satisfaction."

* Crone, D., James, D.V.B., O'Connell-Gallagher, N., Mahoney, M. and Gidlow, C. (2012). Tewkesbury Healthy Town Count Me In! Final Evaluation Report, August 2012. University of Gloucestershire.

3 Strategic collaboration for health

3.1 The need for a joint approach in promoting physical activity

The origins of modern planning come from concerns in the nineteenth and early twentieth centuries that environmental conditions – overcrowding, lack of sanitation, lack of open space, poor housing – were major contributors to high mortality rates in our towns and cities. That link between planning and public health was lost in later years, but today both public health policy²⁰ and the National Planning Policy Framework²¹ make it very clear to local authorities that promoting healthy communities is now a key objective. There is an explicit recognition that public health, planning and other sectors should work jointly to understand the health needs of the population, and the barriers to improving health and wellbeing.

Physical activity and health is a complex issue but it has often been secondary to other public health agendas rather than treated as an issue in its own right. In order to treat physical activity as a total health issue, there is a requirement to address the personal, social, economic and environmental factors inhibiting physical activity²².

Efforts to increase physical activity are likely to be more effective when health, planners and others work in partnership²³. Evidence reviews for NICE into spatial planning and health concluded that there are real benefits if health bodies:

- Engage with plan making at an early stage,
- Do joint appraisals
- Engage with planning applications, including pre-application negotiations with applicants on major schemes²⁴.

Figure 3 – The key NICE guidance on a strategic approach to physical activity levels

- Ensure local, high-level strategic policies and plans support and encourage both walking and cycling. This includes land use planning and development control
- Ensure the Joint Strategic Needs Assessment, the Health and Wellbeing Strategy and other local needs assessments and strategies take into account opportunities to increase walking and cycling
- Ensure the Joint Strategic Needs Assessments and local development and planning frameworks explicitly address the need for children and young people to be physically active
- Ensure planning applications for new developments always prioritise the need for people (including those whose mobility is impaired) to be physically active as a routine part of their daily life
- Align all 'planning gain' agreements with the promotion of heart health to ensure there is funding to support physically active travel
- Ensure walking and cycling programmes form a core part of local transport investment planning, on a continuing basis
- Transport plans should aim to increase the number of children and young people who regularly walk, cycle and use other modes of physically active travel
- Implement town-wide programmes to promote cycling for both transport and recreational purposes
- Assess in advance what impact (both intended and unintended) the plans and proposals are likely to have on physical activity levels
- Assess (ideally by doing a health impact assessment) the affect of planning and transport policies on the ability of their communities to be physically active
- Ensure a senior member of the public health team is responsible for promoting walking and cycling.

[See the 'More Information' section below for references to relevant NICE guidance]

3.2 Public health and planning policy

Public health strategy, as set out in Healthy Lives Healthy People (2010)²⁵ explicitly recognises the significance of the wider environment for people's health and for health inequalities. It calls for the environment to be adapted to make healthier choices easier. It recognises the importance of physical activity and points to ways in which joint action can encourage it through, for example, ensuring the availability of green and open space.

The National Planning Policy Framework (NPPF)²⁶ makes clear that the key role of spatial planning is the delivery of sustainable development, which includes ensuring a strong, healthy and just society. Planning should aim to support strong, vibrant and healthy communities with accessible local services that support its health, social and cultural wellbeing. It identifies the importance of the transport system, access to high quality open space and opportunities for sport and recreation to the health and wellbeing of communities.

Planning authorities should work with health organisations to understand community health needs and the barriers to improving health. Local Planning Authorities have a 'duty to cooperate' with other public bodies, including health organisations, in the preparation of their strategic plans²⁷.

3.3 Integration

The policy imperatives requiring collaboration between spatial planning, transport and health are clear, as is the extent of mutual responsibility for delivering health aims in general and the promotion of physical activity in particular.

The corporate responsibility of local authorities for local public health provision and for preparing a Joint Strategic Needs Assessment and Health and Wellbeing Strategy provides an ideal opportunity to implement the policy imperatives outlined above. To achieve the potential will require integrated working. Upper-tier local authorities will need to work with Public Health England, NHS England and with Clinical Commissioning Groups, District Councils (in two tier areas) and with other relevant bodies such as Local Nature Partnerships.

The challenge of securing effective collaboration in such a complex organisational landscape should not be underestimated. There are long-standing problems of silo working. However, drawing on a common evidence base, the Health and Wellbeing Strategy and the forum provided by the Health and Wellbeing Board should be able to provide the necessary framework to enable these to be overcome.

3.4 Assessment of health impacts in policies, programmes and projects

It may be necessary to subject some strategies or plans to a Strategic Environmental Assessment (SEA)²⁸ (which relates to programmes or policies) or an Environmental Impact Assessment (EIA)²⁹ (which relates to projects, for example some planning applications). The criteria are set out in the relevant European Directives. In the English planning system the requirements of the SEA Directive are deemed to be met so far as local plans are concerned by undertaking a Sustainability Appraisal (SA)³⁰. Considering health impacts is an explicit requirement in both SEA and EIA but the SA guidelines are ambiguous with regard to health, and have been under review for some time. Practice in both SA and EIA in the UK planning system has not always dealt with health comprehensively. It is thus important that the strategic framework for health improvement in the locality is accompanied by clear rules and explicit requirements as to how health, including the implications of physical activity, should be addressed in qualifying plans and projects.

Consistent and effective treatment of health in these high level assessments of plans and projects also demands a coordinated and timely response from the decision makers, whether in the case of public plans or projects or those submitted by the private sector. Upper tier authorities should agree a procedure and allocate clear responsibilities. In two-tier Counties this should be arrived at in collaboration with the District planning authorities and others. In either case the procedure should be subject to regular and if possible independent monitoring to ensure effectiveness.

3.5 Health Impact Assessment

Councils may wish to use specific Health Impact Assessment (HIA) in cases where statutory assessment does not apply or where there may be health impacts that will not be adequately covered by other assessments. Examples may include policies that do not demand an SEA and smaller projects, either initiated by the Council, for instance in housing or transport, or presented to it by the private sector for consent, and which fall outside the criteria for EIA. The purpose and techniques of HIA are well explained elsewhere and there is a diverse range of practice on which to draw³¹. Where HIA is used it should be part of the decision making process with feedback as the strategy or project evolves. It should not be, as is sometimes the case, applied late in the process. Using HIA as part of the decision-making process, increases the chance of enhancing positive and mitigating adverse health impacts.

Case Study 2 City of Stoke on Trent

Healthy Urban Planning Supplementary Planning Document (SPD)

Background

Stoke on Trent has long been active in promoting health. It is a member of the UK Healthy Cities Network, part of a global movement for urban health that is led and supported by the World Health Organization (WHO). Its vision is to develop a creative, supportive and motivating network for UK cities and towns that are tackling health inequalities and striving to put health improvement and health equity at the core of all local policies.

Aim

One of Stoke's key strategic aims is to: "Facilitate delivery of the best of healthy urban living in the development of the conurbation..."

The aim of the SPD is to provide a practical tool – for planners, developers and investors, health professionals and the public – to which to refer when involved in plan policy making, planning applications, pre application enquiries, and neighbourhood planning and regeneration projects.

What was done?

The SPD incorporates a Healthy Urban Planning Checklist, to be used in the preparation of planning policies and as part of the assessment of planning applications. Developers are asked to complete the checklist for developments of 10 or more dwellings.

The checklist covers five healthy planning principles:

1. Partnership and Inclusion
2. Healthy Neighbourhoods
3. Planning for Active Lifestyles
4. Protecting the Environment
5. Design for Safety and Well-Being.

Of particular relevance to this toolkit are sections in the checklist on access to open space, and the promotion of active travel.

For large-scale major developments, formal consideration of health impacts via Health Impact Assessment (HIA) is encouraged. 'Large scale, major developments' are defined as:

200+ residential units

10,000+ m² of non-residential development.

The objective of a HIA is to ensure that new

developments contribute positively to health, and that the impact of policies and proposals on the health of communities is considered at an early stage. HIAs should identify mitigation measures should any adverse impacts arise from the proposals.

HIAs will be peer reviewed by local university experts. The overall approach has been supplemented by training and development for planners, covering the rationale for healthy urban planning, and the use of the SPD.

Outcomes

The Healthy Urban Planning SPD was drafted before the publication of the National Planning Policy Framework. In the light of the NPPF, Stoke reviewed the draft SPD and concluded that the overall policy objective remains the same. It noted that: "the NPPF support promoting healthy communities' and its core planning principles require consideration of local strategies for health improvement in both plan-making and decision-taking." The SPD was adopted in February 2013.

While the SPD has only recently been adopted, Stoke had previously commissioned HIAs on a number of master plan options or Area Action Plans, and the plans are currently being reviewed in the light of the HIA recommendations.

Lessons learned

- The SPD is part of a holistic approach to health in the city, putting health at the core of local policies. It comes out of a history of integrated work on addressing health and health inequalities issues in the City
- An important part of success so far has been due to the commitment of City Council members
- Some planners were initially sceptical, but training and development has helped to gain acceptance
- The size criteria for triggering a HIA on 'large scale major developments' appear to work well
- In the long run, integrating HIA into other assessments could be an effective way of embedding the consideration of health impacts into planning decisions.



See: City of Stoke on Trent Local Development Framework Supplementary Planning Document Healthy Urban Planning

<http://webapps.stoke.gov.uk/uploadedfiles/Healthy%20Urban%20Planning%20Supplementary%20Planning%20Document.pdf>



3.6 Scorecard 1 – Strategic collaboration for health

The scorecard that follows applies to the delivery of health responsibilities in upper-tier unitary councils and in two-tier counties. It will help in identifying and resolving some of the barriers as well as seizing the opportunities created by the public health responsibilities of local authorities. It will help identify those areas whether technical, professional or cultural that would benefit from specific attention. It will help create the strategic context for the kind of focus on physical activity that reflects its significance in health promotion and the reduction of inequality and its importance in a range of specific disease pathways.

It takes the form of a simple checklist, based on the key concepts and evidence identified by NICE and others, and good practice outlined in the Toolkit so far.

Each question should be answered as objectively as possible and then allocated a green, amber or red traffic light. This provides a ready visual synthesis that will point up the areas where more needs to be done.

For each area, consider whether there are measures that could mitigate possible negative effects, or enhance positive effects.

Scoring:

Green for strong positive; a comprehensive and reliable coverage of the criteria.

Amber for partial; meaning some significant areas where there is no coverage or it is unreliable.

Red where there is little or no confidence that the criterion is being met.

At the end, the total of reds, ambers and greens will give an indication of progress, or whether further attention may be needed

Specific environmental actions are dealt with in Scorecard 2

Scorecard 1 Strategic collaboration for health	Green strong positive	Amber partial	Red Weak or no coverage	Mitigation/Enhancement Measures
Criteria				
All the local planning authorities are consistently engaged in the production of the Health and Wellbeing Strategy (HWS)				
The Joint Strategic Needs Assessment (JSNA), planning and transport evidence bases are linked and consistent.				
The JSNA draws on evidence of the links between environment and health issues and identifies the barriers to improving health and wellbeing within a spatial framework				
The potential for physical activity to contribute to improved health and wellbeing is comprehensively analysed, barriers identified and spatially relevant outcomes specified in the JSNA				
There is a framework for assessing the health impacts of programmes, policies and projects and responsibility for its consistent application is agreed at all levels				
There is an agreed method for ensuring consistency between health and planning and transport priorities				
Health, planning and transport strategies share agreed indicators and targets				
Health investment plans draw on development that contributes to health promoting transport and environmental projects				
Public health, planning and transport staff have a shared understanding of health issues and their links to the environment				
The HWS acknowledges the specific role of planning and transport strategies in health improvement				
The local plan(s) contain(s) policies aimed at promoting and protecting health and reducing health inequalities				
Transport strategies contain policies to improve health and address local barriers to health improvement				
The influence of the environment in health pathways and the role of planning strategies in facilitating healthy behaviours are reflected in Clinical Commissioning Group strategies				
TOTAL SCORE				

4 Designing for physical activity: guidelines and policies

The location, accessibility, layout and design of developments all affect the extent to which people are able to make healthy choices and lead active lives. In other words, places and buildings can improve the lives of people and communities.

Figure 4 – The key NICE guidance on active environments

- Ensure the physical environment encourages people to be physically active. Implement changes where necessary. Give priority to walking and cycling and create a comprehensive walking and cycling network
- Ensure local facilities and services are easily accessible on foot, by bicycle and by other modes of transport involving physical activity
- Ensure that walking and cycling are considered in plans to achieve specific health outcomes, and in relevant disease pathways
- Consider and address factors that discourage physical activity, including physically active travel to and at work. Tackle behavioural and physical barriers to walking and cycling such as vehicle speeds and poorly maintained footways
- Provide children and young people with places and facilities (both indoors and outdoors) where they feel safe taking part in physical activities
- Town planners should make provision for children, young people and their families to be physically active in an urban setting. They should ensure that open spaces and outdoor facilities encourage physical activity (including activities which are appealing to children and young people, for example, in-line skating)
- Physical activity facilities should be located close to walking and cycling routes
- Those involved with campus sites, including hospitals and universities, should ensure different parts of the site are linked by appropriate walking and cycling routes
- Ensure new workplaces are linked to walking and cycling networks. Where possible, these links should improve the existing walking and cycling infrastructure by creating new, through routes (and not just links to the new facility)
- Ensure buildings and spaces are designed to encourage people to be more physically active, for example by using stairs not lifts
- Implement school travel plans
- Ensure that the local environment around schools provides opportunities for walking and cycling
- Ensure school playgrounds are designed to encourage varied, physically active play
- Ensure that open space is reachable by active travel.

[See the 'More Information' section below for references to relevant NICE guidance]

The previous section looked at strategies and processes. This section considers the features that make for an active environment and offers guidelines for development.

Key features of environments that promote physical activity:

4.1 Urban Design

- A mixture of different types of uses, for example housing, shops, employment, leisure, within walking and cycling distance.

The mix of uses has a crucial effect on the potential for physical activity. Mixed development gives life to the area at different times of the day and evening. As well as residential areas, this can include shops, restaurants and cafes, offices and small-scale businesses. Clustering such uses together increases the number of people who will visit or pass by, which also improves the economic viability of each individual use.

- A range of everyday services and facilities within walking and cycling distance. These are often ideally located close to town or local centres. *It is intuitively obvious that people will walk if there is somewhere to walk to, and the evidence strongly supports this³². In other words, locating community facilities, within walking distance of home makes it more likely that people will go there by active travel means³³. Standards for accessibility should be defined. Illustrative criteria could include:*

- *Local shop, primary school, green space, bus stop, post box within 400m*
- *Local centre, pub or café, post office, park within 800m*
- *Health centre, secondary school within 1200m³⁴.*

Such standards may not always be easily achievable, particularly in existing settlements, but the principle of maximising access to facilities and services by active travel means is critical to building exercise into everyday life.

- Connected street patterns, with short trip distances between common destinations. *Street patterns should minimise the distance between origins and destinations by active travel means, and allow for several possible routes. Layouts dominated by cul de sacs tend to reduce connectivity and walking³⁵.*
- Residential streets that are not heavily trafficked. *Heavily trafficked roads and high vehicle speeds can be a significant barrier to accessing services and facilities, including open space, by active travel means. In addition, research has shown that higher levels of motor vehicle traffic on residential streets has a considerable negative impact on the social and physical environment, whilst residents*

identify numerous impacts on the psychological and practical quality of life. People living on busy streets were found to have fewer friends and acquaintances from the same street than those in light traffic streets³⁶.

- Areas that are attractive and easy to find your way around. *Areas are more walkable if they are 'legible' – i.e. if they have characteristics such as landmarks, boundaries, nodes where paths meet, which are distinctive and that enable people to find their way around³⁷. There is evidence to suggest that the extent to which an area is seen as attractive influences the extent to which it is used for activities such as leisure walking, running and cycling³⁸.*
- Residential areas designed to give priority to the needs of pedestrians, cyclists and children. *Fear of traffic and 'stranger danger' are the two major reasons why parents are reluctant to allow children to play outside. Current recommendations advise that pre-school children should be physically active for at least three hours a day and that school age children should do moderate to vigorous physical activity for at least one hour a day.³⁹ Designing residential environments to allow children to play safely outside, for example by providing playgrounds which are overlooked, using shared space and 'Home Zone' principles, makes it easier for parents to help their children achieve these targets^{40 41}.*
- Campuses or building complexes should be easy to access by active travel, easy to walk or cycle around, and offer opportunities for physical activity and exercise, for example at lunchtimes. *Campuses and complexes are groups of buildings with a similar function within defined boundaries. They frequently have private internal circulation that is not part of the normal public street pattern. They are often only accessible by car. Such complex are frequently vehicle dominated, and without proper footpaths or cycle routes.*



Such areas can include:

- Retail parks
- Business parks and industrial estates
- Office complexes
- Hospitals
- Universities and colleges
- Larger Individual buildings should have staircases that are prominent, visible from the entrance and readily accessible.

Use of stairs in non-domestic buildings is an excellent way of building exercise into everyday life. One minute of stair climbing and one minute of descending uses approximately 15 calories⁴².

In recent years, lifts have become the norm, with stairs relegated solely to the means of escape in case of fire. But prominent staircases tend to invite use.



4.2 Connections for active travel

Developments and buildings need to be designed to be part of an integrated movement network, so people can use active travel to move within and between them.

Plans should provide a comprehensive network of foot and cycle paths that is:

- **Connected** – provide a comprehensive linked network that connects with where people want to go – shops, homes, open space, public transport
- **Convivial** – pleasant to use, with scope for interaction with other users. Well lit and overlooked by houses, shops or places where people are around, not isolated
- **Conspicuous** – providing clear legible routes
- **Comfortable** – good quality well maintained street and landscape design, and protection from the intrusion of vehicular traffic. Provide seats and rest points for pedestrians (particularly important for elderly people). Avoid clutter.
- **Convenient** – Priority given to providing direct routes for those on foot or bike, rather than vehicles i.e. connect the streets for walkers and cyclists and design and manage junctions to give them priority⁴³.

Many of the above criteria apply to both to foot and cycle paths. In addition:

- Plan for a network of physically separated cycle paths. Current non-cyclists are deterred by the perceived dangers of road cycling and are more likely to cycle on segregated routes
- Make walking and cycling paths shorter and more direct than driving routes ('filtered permeability')
- Provide convenient cycle parking/storage for all homes, and at trip destinations, such as shops, parks, workplaces
- Public transport users tend to be more physically active than car commuters. Provision for cycle parking at all transport stops, and provision for the carriage of bikes, makes mixed mode travel more possible.

Walking, cycling and outdoor play are encouraged by:

- Reducing vehicle speeds through traffic calming and road design
- 20mph limits in residential areas
- Preventing parking on pavements and cycle paths
- Use of well designed 'shared space' approaches where vehicles, pedestrians and cyclists share a common area.

Plan for safe travel to school:

- Develop school travel plans that encourage active travel to schools
- Develop safe routes to school
- Ensure that the local environment around schools provides opportunities for walking and cycling.

Traffic congestion is exacerbated by children being driven sometimes quite short distances to school. Only 25 per cent of primary school pupils now travel home alone as opposed to 86 per cent in 1971⁴⁴. Apart from the physical health benefits, walking or cycling to school appears to improve children's powers of concentration⁴⁵.

Case Study 3 Cycling city and towns (CCT) programme 2008-2011

Background

This programme extended the cycling demonstration towns, which was used as a case study in the first edition of this Toolkit.

Aim

The aim was to investigate whether a whole town programme would result in a significant and sustained increase in the numbers of cyclists and frequency of cycling.

What was done

11 towns participated in this continuation programme and shared £43m from DfT, which generated a significant amount of matched funding. It is estimated that the overall investment from 2005 will have been £140m. The CCT programme attempted to tackle barriers to cycling through investment, promotion and building support and confidence. £30m was spent on capital projects and some £14m on revenue. 5 key themes emerged around which programmes and interventions were structured– workplaces, schools and young people, stations, universities and neighbourhoods. Investment ranged from Greater Bristol, £12m to Leighton Linlade, the lowest, £1.6m. The baseline survey confirmed that the overall levels of cycling were low in comparison with the best performing countries but that it varied considerably across the towns involved.

Outcomes

The full national evaluation is on-going as at January 2014 but interim results were published in 2011 (currently withdrawn) and each town has also posted

an 'end of programme report' all of which offer valuable insights. For instance, Bristol and South Gloucestershire invested almost £23m in the Greater Bristol Cycling City Project between 2008 and 2011. Their aims were challenging, looking to double the use of cycling for work and school for instance. The programme was very diverse incorporating infrastructure, signage, 20 mph zones, engagement with youth and business and the wider community, advice and training, and events. The end of programme report is very positive pointing to the fact that Bristol and South Gloucestershire scored very highly following the project in surveys of the quality of cycling provision with Bristol being named Number 1 cycling city in 2010. Reductions in cycle casualties and increases in use of up to 100% were recorded in Bristol.

A report in 2012 by Cavill and Buckland explores the potential health benefits in great detail*. The authors concluded that the most significant health benefits are to be gained from encouraging the 61% of people who were inactive/moderately inactive to cycle more. They speculated that if those of that group who had relatively fewer barriers to cycling in the future exercised more through cycling, there would be an estimated 300 fewer deaths per year across the CCTs.

Lessons learned

The formal evaluation of this programme has yet to be completed but the various end of programme reports indicate that investment in cycling infrastructure and programmes of engagement can increase cycling levels, create more positive attitudes to cycling, and may reduce cycling casualties.



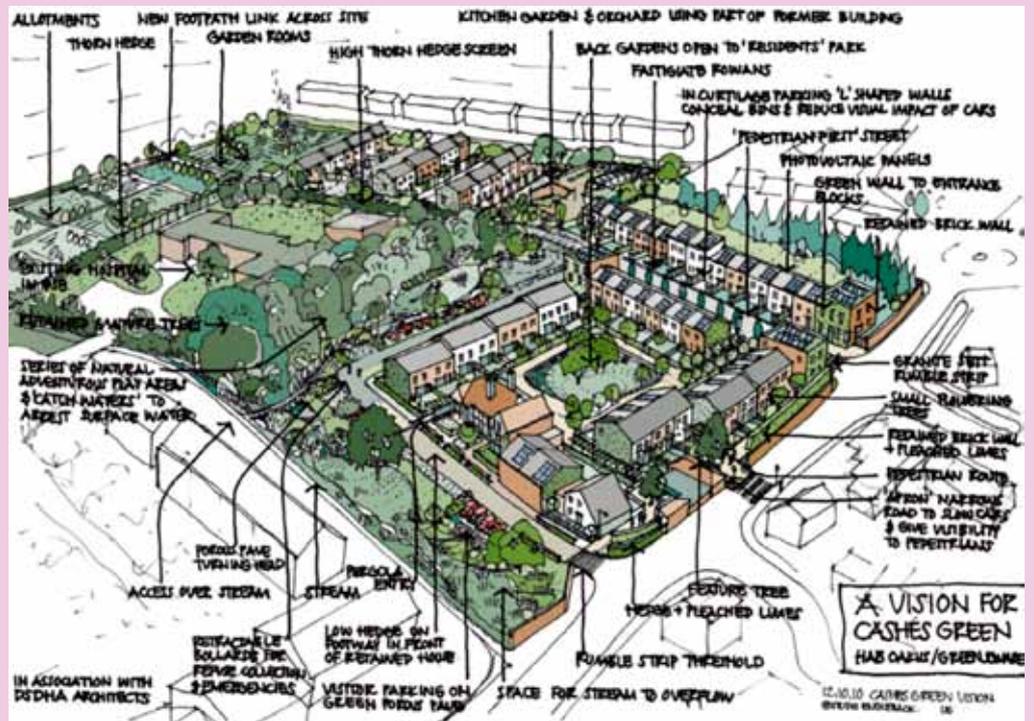
* 'Investigating the potential health benefits of increasing cycling in the Cycling City and Towns' N. Cavill and J. Buckland DfT 2012. <http://www.bhfactive.org.uk/userfiles/Documents/health-benefits-cycling-city.pdf>

Case Study 4

Applewood, Cashes Green Stroud

Background

Applewood, Cashes Green is a development of new homes on a former hospital site in an urban area of Stroud, Gloucestershire. The scheme includes 78 homes ranging from one-bedroom apartments to four-bedroom houses. Half of the properties are affordable homes for rent or shared ownership; the other half is for sale on the open market. The land is to be vested in a Community Land Trust.



Aim

The scheme aims to create a development of beautiful, environmentally-friendly housing at a price that most people can afford. The intention is to design specifically for the area, and enhance the site and the local community, rather than produce an 'identikit' housing estate.

What was done

The development area is within the town rather than on the urban fringe, and considerable effort was put into consultation with existing residents. Some changes resulted in the original thinking, for example retaining and re-using some of the existing buildings.

The scheme incorporates a number of features to enhance the development as a place to live an active life. They include:

- Houses designed to be open to the outside world, and to encourage outdoor activity
- Cycle storage space in every home
- Individual gardens and a shared garden square where children can play out safely
- Allotment space for growing food locally, open to all Stroud residents
- Layout designed around pedestrians and cyclists rather than cars and incorporating shared space and home zone principles
- Car parking on the site that blends in rather than dominates
- Good linkages to surrounding areas, opening access through what had been a fenced area
- A wildlife corridor through the site that also acts as a wild play area for children
- Significant investment in landscaping and planting.

Applewood is pioneering an Electric Bike Club, to encourage people to use more active travel (and feel confident that they can get back home again.)

Outcomes and lessons learned

The site is nearing completion, and market reaction to the development has been good so far. It will take time for the scheme to mature, but initial indications are that it is possible to create attractive, sustainable and well-designed schemes that are still financially viable. To produce such schemes, it may be necessary to challenge conventional approaches, for example on car parking.

Developer: HAB OAKUS <http://www.haboakus.co.uk/>

Architect: DSDHA <http://www.dsdha.co.uk/>

Landscape architect: Studio Englebeck <http://www.studioenglebeck.com/>

4.3 Green and open space

“The evidence showed that green space does more than pretty up the neighbourhood; it seems to have real effects on health and health inequality, of a kind that politicians, planners and health staff should take seriously⁴⁶.”

Access to open and green space has a positive impact on health. Spending time outside seems to have tangible benefits for physical and mental health⁴⁷.

The main mechanisms appear to be:

- Promotion of physical activity
- Respite, tranquillity and stress reduction
- Promotion of social interaction and community
- Reduction in environmental stressors, e.g. air pollution, noise, flooding.

Positive health effects include a decrease in health complaints and improvements in blood pressure and cholesterol. Prevalence rates for diabetes, some cancers, migraine and depression are lower in areas with more green space⁴⁸. Time spent in green areas tends to reduce stress and has a positive effect on physical and mental health and wellbeing. Surveys consistently show that parks and open spaces are highly valued by the public and contribute positively to overall satisfaction with the area.

The positive effects of green space apply throughout the socio economic spectrum, from most to least deprived areas. However, the most deprived areas in general have less actual open space per head available to them, and the space is often of poorer quality⁴⁹.

The extent to which access to green space increases physical activity levels is less clear, although people who live near to green space are likely to be more active. For many people physical activity is not the primary reason for using parks, they go for respite and tranquillity, and for social reasons, to meet others in a neutral space⁵⁰. Open space can provide the setting for social interaction, and help create a stronger sense of community, which is itself health-promoting.

Children in particular need to be able to play outside – it is fundamental to their happiness and wellbeing, and benefits their physical and cognitive development⁵¹.

As well as offering direct health benefits, well-designed green space is an essential element of sustainable development. It improves air quality, reduces carbon dioxide (CO₂) and airborne pollutants, reduces noise, and mitigates the urban heat island effect. It can reduce flood risk, and can be part of a Sustainable Urban Drainage System (SUDS).

From a developer’s viewpoint, properties on or near open space will tend to command a premium in the market⁵².



Case Study 5 – Gloucestershire and Wiltshire Wildlife Trusts and Gloucestershire Care Services NHS Trust: Green space, physical activity and health programmes

Aim

The aim of these projects by two neighbouring Wildlife Trusts in Gloucestershire and Wiltshire and an NHS health trust in Gloucestershire was to contribute to improved physical and mental health and wellbeing by providing the opportunity for people to get involved in physical activity within attractive green spaces.

What was done

Gloucestershire Wildlife Trust ran three projects: 'Seeing the Wood for the Trees', 'Rivers for Wildlife and People' and 'Proud to be Green'. These projects have invited people to get involved in various kinds of physical work on its reserves and green spaces, such as path clearance, scrub and invasive plant management, bat and bird box making. 'Proud to be Green' involved residents improving green spaces around their houses by erecting bat and bird boxes and establishing gardens.

Gloucestershire Care Services NHS Trust started a green gym with The Conservation Volunteers (TCV) back in 2010 at Cirencester Hospital. Since then, over 200 adults have volunteered in the orchards and surrounding woodlands, involving path construction, tree planting and scrub clearance. 200 school pupils have attended the annual 'apple days' where they have collected and pressed apples and learnt about 5



a day and the importance of bees through building bee houses.

Wiltshire Wildlife Trust has been running a wellbeing

project since 2008. This has an explicit health purpose, and had established links with the former PCT. It is used for referral of patients with a range of physical and mental health conditions. 348 places were made available and offered sessions in coppicing, tree felling planting and other activities. Referrals are made by community nurses, GPs, the mental health recovery team, social workers and MENCAP. The project is marketed widely to the health and voluntary sectors and to the public through libraries. Participants typically



have learning difficulties, depression or are reliant on wheelchairs.

Outcomes

The 4 projects in Gloucestershire have involved over 2000 people including over 1000 school children in a range of activities in the two years since 2010. Leaflets were produced to guide people around circular walks and a sponsored walk attracted over 200 people. Some were more intensively involved and given skills in conservation including the river environment. Regular volunteer groups continue to allow the opportunity for people to be physically active in the outdoor environment. The river project resulted in 1300 hours of practical work. The green gym project galvanised physical activity in the Cirencester area leading to the development of a walking and cycling map and a number of greenspace working parties.

In Wiltshire, the Trust monitors both the quantitative and qualitative outcomes. Results from late 2012 show that 75% of those completing 3 or 6 months moved on to a job, a volunteer role or education. Using established assessment measures, a significant improvement in mental health had been experienced in 75% of those leaving the scheme. The Trust is working to refine its evaluation processes.

Lessons Learned

These projects show that structured and well-organised schemes with the right support and that facilitate volunteering in the green environment, offer a valuable route for individuals with chronic conditions or who are facing barriers to the labour market. They can add significant value to what might otherwise be seen as only environmental interventions.

Gloucestershire Wildlife Trust

<http://www.gloucestershirowildlifetrust.co.uk/>

Gloucestershire Care Services NHS Trust

www.glos-care.nhs.uk

Wiltshire Wildlife Trust

<http://www.wiltshirewildlife.org/>

4.4 Key open space elements

Open space should be accessible to every household:

Illustrative standards:

- Infants play space within 200m of homes
- Equipped play area and local greenspace within 400m
- Park within 6-800m
- Larger area of natural green space within 2km.⁵³

Increasingly the emphasis is on joining these assets up in a network and of promoting a range of different uses wherever practical.

This can be approached by a combination of providing usable open space in new developments, and locating developments near to existing space. There are a number of open space standards in use for instance Natural England's Accessible Greenspace Standard⁵⁴ and Play England's Better Play Through Planning⁵⁵.

Preparing a Green Infrastructure (GI) Strategy, with public health input, can be a useful way of providing a comprehensive and long-term approach that promotes bio diversity and sustainability as well as human health⁵⁶.

Open space should be of good quality

Good quality open space that caters for a range of users should be:

- Safe and well overlooked
- Attractive and well laid out
- Provide for different types of use by different age, social or ethnic groups
- Include 'active' features such as running tracks, outdoor sports equipment, games pitches, as well as seats and drinking fountains to encourage active users.

There is good evidence that the quality of the design and the management of open space are key factors in the use that it gets. Concern about personal safety is the single most important deterrent to open space use. Different users have different needs, and requirements should be assessed locally. The evidence also suggests that programmed activities for different groups can significantly affect the level of use⁵⁷.

The 'Green Flag' award is a good benchmark for assessing the quality of open space⁵⁸.

Priority for open space development in areas of poor health status.

Planning and transport policies and open space strategies should be influenced by an analysis of where the most health-deprived areas are.

The evidence shows that areas of multiple deprivation and poor health status tend to have the least access to open space. It also shows that good quality green space can have an independent positive effect on health even in the more deprived areas. A positive strategy to improve health and reduce health inequalities will embrace a positive green space strategy⁵⁹.

Green space accessible by active travel

Transport and town planners should analyse accessibility to open space on foot, bicycle and public transport as part of all their plans and in assessing development proposals. The principle of 'semi-permeability' should be applied, giving easiest access to open space by active travel means. Ways of mitigating the impact of severance barriers such as major roads should be sought. Routes to open space should be designed and landscaped to be attractive and safe.

Small urban spaces in towns and cities

Small urban spaces such as squares, plazas or setbacks encourage walking by providing interest and relief to the townscape; places where pedestrians can rest, gather or just watch the world go by. This is particularly helpful to older people, and to people with young children. They should be planned as part of a green network.

Green streets and green developments

Viewing greenery has a positive health effect. Incorporating trees and planting into streets and into all developments, not just housing, should always be considered. Look for creative ways to increase green space in urban areas, using disused space, sustainable urban drainage, green roofs or gardens etc.

Playspace local to all children

Play is crucial to children's development, and opportunities for outdoor play have become restricted. Play England's 'Design for Play' makes a number of recommendations for creating successful playspaces, and for making the environment more 'playable'⁶⁰.

Schools, provide for a range of outdoor play

The needs of children vary enormously. These sometimes conflicting demands require careful balancing and active management. School grounds should provide:

- Informal and social areas, including soft grassed/planted areas and hard-surfaced recreational space
- Hard-surfaced games area, marked out for games such as netball and tennis, in the form of a multi use games area wherever possible
- Sports pitches⁶¹.

Community Involvement and partnership

Local people are best placed to know what they want from green space – one size does not fit all⁶². There are many successful examples where local people and organisations help to design and look after open spaces. Local Nature Partnerships may provide a forum for developing a vision for the local natural environment⁶³.

The following case studies show different approaches to the positive use of open space:

Case Study 6 – Crouch Hill Park

Background

Crouch Hill Park is an area of greenspace linked to a disused railway line in the London Borough of Islington. It was in poor condition and little used by the community. A proposal was developed to build a new school, renovate a youth centre and to enhance the access and landscaping of the open space.

Aim

To reclaim a semi derelict open space in a dense urban area and to provide a new school linked to the neighbourhood pedestrian network integrated with additional sporting and recreational facilities.

What was done

A new school, Ashmount Primary, has been built and is now operational. What was a former substation, has been renovated to provide a multi-functional youth centre and the whole site has been upgraded and linked to the adjacent footpaths and neighbourhoods. The new primary school by Penoyre and Prasad architects is 3 storeys because of the restricted site. This was the only site felt to be appropriate to rebuild what was a substandard school elsewhere in the borough. The building is of impressive design and incorporates state of the art energy measures, a roof top play area and a lift system accessible to the disabled.

Penoyre and Prasad Architects
Islington Borough Council

The youth centre has also been extensively and imaginatively renovated and has a high quality all-weather sports pitch. The site has been landscaped in a robust and imaginative way, whilst conserving the existing biodiversity, to link with footpaths into the adjacent housing areas and to the railway line path that runs alongside. The estimated cost is £14m.

Outcome

The scheme has rescued what was a forbidding and little used open space and provided invaluable and very high quality facilities and linked open spaces. It is thus already meeting the needs of a very wide range of people, young and old, in the community. The school building epitomizes the design criteria for promoting physical activity set out in this Toolkit within the constraints of a relatively very small site.

Lessons learned

The project demonstrated that a creative and integrated approach can create very productive synergies between separate funding streams and can generate substantial public enthusiasm and support. Quality pays. Parents on the site were delighted with the new school and the site:

“We are really pleased that they spent the money on what they did. The surrounding area needs to be as good as this”



Case Study 7 Springfields Park, Springbank Cheltenham – Regenerating a public space in a deprived community

Background

The Park is in an area that ranks high for multiple deprivations, and for health deprivation and disability.

The area is the focus of regeneration efforts, and there is significant new housing being built locally.

Aim

The scheme aimed to transform a flat, little used area of sports pitches, which had a well-deserved reputation for anti-social behaviour, into a vibrant asset, attracting people of all ages.

What was done?

As part of the regeneration, a Community Resource Centre, managed by the Hesters Way Neighbourhood Project, was located in one corner of the open space, and a lengthy community dialogue was started in which all local residents were contacted and invited to discuss their grievances and aspirations for the park. Nearby schools, businesses, residential homes and interested groups were asked to voice their opinion. A lack of amenity interest and serious criminal behaviour were identified as the main problems of the site. From these discussions a landscape architect drew up a plan. For a number of reasons, not least maintenance costs, the design is much less formal than might be the norm for Cheltenham.

Section 106 money related to nearby housing developments was key to achieving the transformation of the park.

Outcome

The park now has a young children's play area and a natural play area for older children, skateboarding, a football pitch, a new lacrosse pitch, tree and natural meadow planting, lakes and ponds, public art, and



a more formal garden adjacent to the Resource Centre. There is a track around the outside, which is used by joggers and dog walkers, and a number of paths across the park that connect the various housing areas that surround it. A lit cycle path runs through the site, and a wind turbine has been installed. The effect is that the park is now lively and busy. Discreet security is built into the design – there is dense prickly planting where the park adjoins housing, and large boulders, mounds and swales, which add to the appearance and interest of the park, and also prevent joyriding.

Security is helped by the active involvement of local people in activities such as tree planting and litter picking. The level of anti-social behaviour has dropped significantly. The Park has achieved and retained Green Flag status, one of only three parks in Cheltenham to have done so.

Lessons learned

- From an under used area, prey to anti-social behaviour, Springfields is now a well-designed and well-used park
- The involvement of local people was vital in the creation of the park, and is key to the park's continued success
- The park is the product of partnership – partnership among the authorities and organisations, the Hesters Way Partnership and local people
- Section 106 monies made the transformation possible
- A measure of its success is that new uses, not anticipated at the start are constantly being found
- Hesters Way neighbourhood Project are now applying the lessons learned from Springbank to another local open space.

Hesters Way Neighbourhood Project:

<http://www.hwnp.org/>

Peter Quinn Associates

Landscape architects:

<http://www.landscapemidlands.co.uk/>

Case Study 8

South Worcester Green Infrastructure Concept Statement

Background

'The planning system should contribute to and enhance the natural and local environment'.*

The proposed Worcester South Urban Extension area covers 153 hectares, and plans include 2552 dwellings, 14 hectares of employment land and retail, health, leisure and other facilities. The aim of preparing a Green Infrastructure Concept Statement, which is a non-statutory guidance paper, is to provide an early framework for the master planning of a comprehensive multifunctional green infrastructure specific to the Worcester South site.

What was done

The Concept Statement was prepared by working group including Worcestershire County Council, Natural England, The Environment Agency, Worcestershire Wildlife Trust and The Forestry Commission. The developers were involved in the discussions throughout.

The Concept Statement and the developer's Green Infrastructure Statement have a wide range of green proposals, including improving tree and green cover, linking existing and proposed woodland, creating green corridors, community orchards, a sizeable public greenspace allocation, and playing pitch and sport provision. Of particular relevance to active planning is the proposal for a network of safe and segregated pedestrian and cycle links throughout and beyond the site, including 13.4km of new footpaths and 10.5km of off-road cycleway. This serves several purposes:

Recreation/health uses: including public rights of way, circular routes and connections to off-site recreational destinations

Commuting uses: including access between all parts of the new community, to areas of greenspace and the new local centre/education facilities, and to Worcester City.

The long term delivery and maintenance of the green infrastructure depends on the establishment of an appropriate management body and one option being considered is a Community Development Trust (CDT). The Concept Statement notes that:

"The overall aims of a CDT include the ownership, maintenance and effective management of GI and other facilities, encouraging healthy lifestyles and the use of sustainable transport by residents and businesses

South Worcester GI: GI Corridors



and encouragement of community cohesion."

Outcomes

The proposals are going through the planning process, but the Concept Statement has clearly influenced the approach of the developer, as demonstrated in the submitted Green Infrastructure Statement.

Lessons learned

The approach is not primarily aimed at active planning, and does not have explicit health objectives. It does however demonstrate that a comprehensive green infrastructure approach can contribute towards environments that encourage healthy lifestyles. It is possible that more health benefits could have been realised had public health been involved from the outset

The environmental consultant in the project (EDP) concluded that the benefits of GI Strategy are:

- Improved planning certainty (risk management), particularly for the developer
- Demonstrable planning gain
- Improved property prices
- Consideration of long-term management solutions at the outset.

To be successful, a GI Strategy must:

- Be supported at a strategic level (not as an afterthought)
- Be informed by a thorough appreciation of the baseline evidence/ information
- Be responsive to viability issues.

Environmental Design Partnership (EDP):
<http://www.edp-uk.co.uk/index.html>

Worcestershire Wildlife Trust:
<http://www.worcswildlifetrust.co.uk/>

* National Planning Policy Framework DCLG 2012 para 109



4.5 Scorecard 2 – Planning and designing for physical activity

The aim of this ‘scorecard’ is to help decision makers in health, planning, transport and related fields to decide whether policies, schemes and proposals relating to the built environment, are more or less likely to promote physical activity as an outcome. It therefore covers local and transport plans as well as site and building design.

As in section 3.6, it takes the form of a simple checklist, based on the key concepts and evidence identified by NICE and others, and good practice outlined in the Toolkit so far.

Each question should be answered as objectively as possible and then allocated a green, amber or red traffic light. This provides a ready visual synthesis that will point up the areas where more needs to be done.

For each area, consider whether there are measures that could mitigate possible negative effects, or enhance positive effects.

Scoring:

Green for strong positive; a comprehensive and reliable coverage of the criteria.

Amber for partial; meaning some significant areas where there is no coverage or it is unreliable.

Red where there is little or no confidence that the criterion is being met.

At the end, the total of reds, ambers and greens will give an indication of progress, or whether further attention may be needed.

Scorecard 2 Planning and Designing for Physical Activity	Green Strong positive	Amber partial	Red Weak or no coverage	Mitigation/ Enhancement Measures
Urban Design and Transport Criteria The proposals demonstrate that they will result in enhanced facilities for pedestrians and cyclists and will result in increased physical activity				
New developments have a mix of compatible uses that will encourage walking and cycling				
Proposed developments are assessed to ensure that there are a range of everyday services within walking distance				
Street patterns in new developments are connected with short trip distances between common destinations				
There is a network of well-connected foot and cycle paths, and provision for cycle storage/parking				
Walking and cycling routes are legible, continuous and attractive				
There are traffic calming schemes in residential and other areas where pedestrian and cyclists are at risk				
There are a significant number of 20 mph zones in residential, town centre and other areas				
Employment sites and campus type developments are accessible by active travel and provide facilities for cyclists				
Movement around campus sites on foot is easy, convenient and pleasant				
All schools are accessible by safe walking and cycling routes				
Staircases in multi storey buildings are prominent, visible and accessible				
Building design, layout and facilities enable and encourage movement during the day				

Open Space Criteria				
There is an up to date qualitative and quantitative assessment of open space by hierarchy and by local area				
There is a Green Infrastructure strategy, prepared with public health input				
There are adopted standards for the optimum type quality, design and accessibility of open space				
Developments demonstrate that there is access to a range of open space within 5 minutes walk or less of every home				
Parks and open spaces are accessible by active travel, and barriers to access such as busy roads are recognised in accessibility assessments and addressed				
Planning for open space prioritises identified areas of poorest health				
The open space caters for the known differing needs of the catchment population				
The local community is involved in the design maintenance and management of open spaces				
Open space is designed and managed to 'Green Flag' standard or equivalent and actively encourages physical activity for all				
Design guides encourage developers to incorporate open space, trees and greenery in an integrated network throughout all developments				
Schools provide outdoor space to cater for different needs				
There is local provision for all children of different ages to safely play and be active outdoors				
TOTAL SCORE				

5 Conclusion

A healthy community supports healthy behaviours, and encourages:

'Active healthy lifestyles that are made easy through the pattern of development, good urban design, good access to local services and facilities; green open space and safe places for active play and food growing, and is accessible by walking and cycling and public transport.'*

Town planning and public health have common roots. Both grew from concern about the poor and unhealthy conditions of our nineteenth century cities. The changes in the urban environment that resulted from this concern had a dramatic effect on health and life expectancy. Today the rise in the prevalence of non-communicable diseases, lack of exercise and obesity presents new challenges.

Active Planning can help to make us all healthier, and can be a part of developing healthy and sustainable communities. This toolkit aims to promote the integrated actions needed to make this a reality, so that planning, design and public health can address twenty-first century health challenges, as our forebears did so effectively for the challenges facing them.

Physical activity has tremendous potential improve health, and to contribute to reductions in mortality and morbidity across a wide range of common health conditions.

Taking exercise, playing team or individual sports, or visits to the gym will improve the health of those who participate, but not everyone will get involved. The challenge is to build exercise into everyday life, so that the whole population can benefit. Changes in the built environment over the last half-century, with towns dominated by motor traffic and commercial buildings designed around the lift lobby, have made this more difficult. The challenge now is for planners, developers and designers, as well as for public health, is to reverse that trend, and create environments where being active is the simplest and the natural thing to do.

This Toolkit, which is based on the evidence reviews and advice from the National Institute for Health and Care Excellence (NICE), shows how to create active environments.

The recently published Planning Practice Guidance emphasises that local planning authorities should ensure that health and wellbeing, and health infrastructure are considered in local and neighbourhood plans and in planning decision making, and that public health, health service organisations, commissioners and providers, and local communities should work effectively with local planning authorities in order to promote Healthy Communities.

Spatial planning, transport and health organisations must work together to reverse the trend of physical inactivity to ensure that our surroundings and local environment keep us moving. This toolkit will help all groups to achieve this aim.

* <http://planningguidance.planningportal.gov.uk/blog/guidance/health-and-wellbeing/what-is-the-role-of-health-and-wellbeing-in-planning/>

More Information and resources

The Key NICE Guidance

(All available on the NICE website: <http://www.nice.org.uk/>)

PH8 Physical Activity and the Environment. 2008

PH17 Promoting physical activity, active play and sport for pre-school and school-age children and young people in family, pre-school, school and community settings. 2009

PH41 Walking and cycling: local measures to promote walking and cycling as forms of travel or recreation. 2012

The following NICE publications also have relevant recommendations or advice:

CCG 43 Obesity – guidance on the prevention, identification, assessment and management of overweight and obesity in adults and children. 2006

PH25 Prevention of cardio-vascular disease. 2010

PH31 Preventing unintentional road injuries among under-15s: road design 2010

Public Health Briefing PHB 3: Physical activity. 2012

PHB 8 Walking and cycling. 2013

The key top-level national policies that affect this whole field are:

Planning:

'National Planning Policy Framework' (NPPF). Department for Communities and Local Government 2012. https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/6077/2116950.pdf

This has been supplemented by 'Planning Practice Guidance' DCLG 2014 which contains an important section on the role of health and wellbeing in planning. <http://planningguidance.planningportal.gov.uk/blog/guidance/>

Public Health

Healthy Lives Healthy People: Our Strategy for Public Health in England. HMSO 2010 <https://www.gov.uk/government/publications/healthy-lives-healthy-people-our-strategy-for-public-health-in-england>

And the: 'Update and way forward' HMSO 2011 https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/216142/dh_129334.pdf

The 'Public Health Outcomes Framework' sets out desired outcomes for public health and how they will be measured.

<https://www.gov.uk/government/collections/public-health-outcomes-framework>

See also: 'Moving More, Living More: Olympic and Paralympic Games legacy' Cabinet Office and others 2014, which aims to promote physical activity and to have a more physically active nation as part of the legacy from the London 2012 Olympic and Paralympic Games.

<https://www.gov.uk/government/publications/moving-more-living-more-olympic-and-paralympic-games-legacy>

For the physiological and psychological evidence see:

'Physical Activity and Health – the evidence explained'. A.E. Hardman & D. J. Stensel. 2nd edition Routledge 2009.

For a discussion of the importance of physical activity to health see the series of articles in The Lancet Vol 380 No 9838 July 21 2012

<http://www.thelancet.com/series/physical-activity>

'Physical activity and stroke risk: a meta-analysis' Lee CD, Folsom AR, Blair SN. Stroke. 2003 Oct;34(10):2475-81.

This paper reviewed 23 studies and concluded that the evidence showed that moderate and high levels of physical activity are associated with reduced risk of total, ischemic, and hemorrhagic strokes.

'Urban design: health and the therapeutic environment' C. Moughtin, K. Moughtin, P. Signoretta. Architectural Press 2009

'Physical Activity and Mental Health'. Royal College of Psychiatrists 2012 – a useful brief introduction to the topic.

<http://www.rcpsych.ac.uk/healthadvice/treatmentwellbeing/physicalactivity.aspx>

'Let's get physical – The impact of physical activity on wellbeing' Mental Health Foundation 2013 <http://www.mentalhealth.org.uk/content/assets/PDF/publications/lets-get-physical-report.pdf>

For a recent review of the evidence on the environment and health, including getting people active, see:

'Healthy Built Environments – A review of the literature' Kent J; Thompson SM and Jalaludin B. Sydney: Healthy Built Environments Program, UNSW 2011 <https://www.be.unsw.edu.au/programs/healthy-built-environments-program/literature-review>

For a review of the economic impact of lack of exercise see:

'12 minutes more...The importance of physical activity, sports and exercise, in order to improve health, personal finances and the pressures on the NHS' Nuffield Health / LSE 2013
http://www.nuffieldhealth.com/sites/default/files/inline/Nuffield%20Health_%20LSE_Low-Fitness_Report.pdf

For 'Healthy Planning' see:

'Shaping Neighbourhoods – For local health and global sustainability' H. Barton, M. Grant, R Guise Routledge 2010 – an excellent overall guide to planning healthy communities.

'Healthy Urban Planning' H Barton, C. Tsourou WHO/ Spon Press 2000 – the World Health Organisation guide to planning for people.

'Responsive Environments – A manual for designers' I. Bentley, A. Alcock, P. Murrain, S. McGlynn, G. Smith Architectural Press 1985 – a detailed guide to urban design for liveable environments.

'Reuniting Health with Planning – healthier homes, healthier communities' A. Ross, M Chang TCPA 2012, emphasises the importance of integrated working between planning and health.
<http://www.tcpa.org.uk/pages/reuniting-health-with-planning-healthier-homes-healthier-communities.html>

The phase 2 report: 'Planning Healthier Places' 2013 looks at how the principles it identified should be applied to places.
http://www.tcpa.org.uk/data/files/Health_and_planning/Health_Phase_2/Planning_Healthier_Places.pdf

'Active Design Guidelines' NYC 2010 are New York City's pioneering guide to designing cities to be more active. http://www.nyc.gov/html/ddc/html/design/active_design.shtml

They have been supplemented by 'Active Design Supplement: Shaping Sidewalks', and 'Tools and Resources' 2013, which look in detail at pavement (sidewalk) design from the pedestrian perspective and include US case studies.
<http://centerforactivedesign.org/sidewalks>

'Delivering Healthy Communities' Royal Town Planning Institute GPN5 2009 – The RTPI's guide to healthy planning.
<http://www.rtpi.org.uk/knowledge/publications/good-practice-notes/gpn-5-delivering-healthy-communities/>

'Steps to Healthy Planning – Proposals for Action' - Spatial Planning and Health group (SPAHG) 2011. SPAHG is a group of planning and health experts that first convened as part of NICE's Spatial Planning and Health Programme Development Group.
<http://www.spahg.org.uk/>

For Active Travel:

See Transport for London 'Improving Walkability' Sept 2005 for more on the 5Cs and design of walkable environments.
<http://www.tfl.gov.uk/assets/downloads/tfl-improving-walkability.pdf>

For an ambitious and comprehensive plan for cycling see: 'The Mayor's vision for cycling in London. An Olympic Legacy for all Londoners' Greater London Authority 2013.
<http://www.london.gov.uk/sites/default/files/Cycling%20Vision%20GLA%20template%20FINAL.pdf>

'Living Streets' is a valuable resource for information and approaches to walkability.
<http://www.livingstreets.org.uk/>

'Manual for Streets' is the official guide to streets that: 'places people at the heart of the design process'
<https://www.gov.uk/government/publications/manual-for-streets>

For a review of the impact of transport and health see the BMA report: 'Healthy Transport=Healthy Lives' 2012. <http://bma.org.uk/transport>

For Green Space see:

Critical literature reviews:
'The links between greenspace and health: a critical literature review' K Croucher, L Myers, J Bretherton. Greenspace Scotland 2007.
<http://www.greenspacescotland.org.uk/links-between-greenspace-and-health.aspx>

'The health benefits of urban green spaces: a review of the evidence' A Lee, R Maheswaran. J Public Health (2011) 33 (2): 212-222

'Health and Natural Environments – An evidence based information pack' Natural England 2012
http://www.naturalengland.org.uk/Images/health-information-pack_tcm6-31487.pdf

For a critical review of the tools available to value green infrastructure see: 'Green Infrastructure – Valuation Tools Assessment' (NECR126) Natural England 2013
<http://publications.naturalengland.org.uk/publication/6264318517575680>

A world without play: A literature review J Gleave & I. Cole-Hamilton Play England 2012

<http://www.playengland.org.uk/media/371031/a-world-without-play-literature-review-2012.pdf>

For a pioneering study on the influence of proximity to green space on health inequalities see: 'Effect of exposure to natural environment on health inequalities: an observational population study'. Mitchell, R., & Popham, F. (2008). The Lancet, 372(9650), 1655-1660.

Guidance:

'Open Space Strategies – Best Practice Guidance' CABI Space & Greater London Authority 2009

'Community Green. Using local spaces to tackle inequality and improve health' CABI Space 2010

'Urban Green Nation. Building the evidence base' CABI Space 2010.

CABI is now part of the Design Council, but its reports from prior to 2011 are available at:

<http://webarchive.nationalarchives.gov.uk/20110118095356/http://www.cabi.org.uk/>

'Nature Nearby' Natural England, (NE265) 2011

<http://publications.naturalengland.org.uk/publication/40004?category=47004>

'Better Places to Play Through Planning' Play England 2009. <http://www.playengland.org.uk/resources/better-places-to-play-through-planning.aspx>

The Landscape Institute has published a useful position statement on the contemporary role that landscape plays in the creation of healthy places: 'Public Health and Landscape – Creating healthy places' 2013 <http://www.landscapeinstitute.org/policy/health.php>

'City health check – How design can save lives and money' is the Royal Institute of British Architect's recommendations on how urban and architectural design can create healthy, walkable environments in urban areas. 2013

<http://www.architecture.com/Files/RIBAHoldings/PolicyAndInternationalRelations/Policy/PublicAffairs/RIBACityHealthCheck.pdf>

Health Impact Assessment

For comprehensive guidance, information and examples see the HIA Gateway

www.hiagateway.org.uk

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Glossary

Accelerometer

A device to measure an individual's physical activity.

Active travel/active play

Travel or play that involves significant physical activity.

Clinical Commissioning Groups

Clinically led groups covering all of the GPs in their geographic area with responsibility for commissioning healthcare services for their local population.

Core Strategy

A type of Local Plan, setting out the overall spatial vision and strategic policies for the local area.

Environmental Impact Assessment (EIA)

An assessment required by European and UK law that identifies the environmental impacts of certain classes of proposed development projects.

Green Infrastructure (GI)

Green Infrastructure (GI) is a network of high quality green and blue (water) spaces and other environmental features. The greatest benefits are gained when it is designed and managed as a multifunctional resource capable of delivering a wide range of environmental and quality of life benefits for local communities.

Health Impact Assessment (HIA)

A combination of procedures, methods and tools by which a policy, programme or project may be judged as to its potential effects on the health of a population, and the distribution of those effects within the population.

Health and Wellbeing Board (HWB)

A statutory forum at County/Unitary Authority level where key leaders from the health and care system work together to improve the health and wellbeing of their local population and reduce health inequalities.

(Joint) Health and Wellbeing Strategy (HWS)

Strategies to meet local population's health and wellbeing needs as identified in the Joint Strategic Needs Assessments (JSNA) and produced by the Health and Wellbeing Board (HWB).

Home Zone

The 'Manual for Streets' describes Home Zones as residential areas with streets as places for people, instead of just for motor traffic. By creating a high-quality street environment, Home Zones strike a better balance between the needs of the local community and drivers. Involving the local community is the key to a successful home zone scheme.

Index of Multiple Deprivation (IMD)

A government index that combines data on health, economic, housing and social issues to provide a deprivation score at the small area level.

Joint Strategic Needs Assessment (JSNA)

A single framework setting out the needs of the local population ('hard' data i.e. statistics; and 'soft data' i.e. the views of local people), with analysis to identify major issues regarding the health and well-being of the population.

Local Development Framework (LDF)

A folder of **local development plan documents (DPDs)**, including, for instance a Local Plan and Development Management Policies that sets out the planning policies for the Local Planning Authority (LPA) area. It may contain **Supplementary Planning Documents (SPDs)**, giving further guidance and information on how policies in the Local Plan will be implemented. These may cover localities, or policy areas such as design guides, and could cover health issues.

Local Plan

A plan prepared by the Local Planning Authority (LPA) setting out strategic planning policies for the LPA area.

Local Transport Plan (LTP)

A plan prepared by Unitary and County Councils setting out its transportation strategy over the next 15 years.

National Institute for Health and Care Excellence (NICE)

An independent organisation responsible for providing national guidance on promoting good health and preventing and treating ill health.

National Planning Policy Framework (NPPF)

The National Planning Policy Framework sets out the Government's planning policies for England and how these are expected to be applied.

Natural Greenspace

Places where human control and activities are not intensive so that a feeling of naturalness is allowed to predominate.

Neighbourhood Planning

The power under the Localism Act given to town and parish councils or neighbourhood forums to shape local development by preparing Neighbourhood Plans that contain planning policies for the local area. Neighbourhood Plans must be in conformity with the strategic policies of the adopted Local Plan.

Permeability

The extent to which the urban environment allows or restricts the movement of people or vehicles. 'Filtered permeability' refers to layouts that allow some users to pass, for example cyclists, but restrict others, for example motor vehicles.

Public Health

'The science and art of promoting and protecting health and well-being, preventing ill-health and prolonging life through the organised efforts of society.' (Faculty of Public Health). Responsibility for public health at the local level moved from the NHS to local authorities in 2013.

Statement of Community Involvement (SCI)

The Statement of Community Involvement (SCI) shows how and when planning authorities intend to consult local communities and other stakeholders.

Strategic Environmental Assessment (SEA)

An assessment, required under UK and European law of the impact that a plan is likely to have on the environment, including on human health.

Sustainability Appraisal (SA)

An appraisal of the effects of a DPD that meets the requirements of the SEA Directive, to ensure that it is in accord with sustainable development as defined in the NPPF.



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