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Planning and Enabling Healthy Environments

Incorporating a template
for planning policy

June 2021



This resource is in three parts:

- Planning and Enabling Healthy Environments (this document)
- A Supplementary Planning Guidance (SPG) Template for Healthy Weight Environments
- Case Studies

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Foreword



“A Healthier Wales can be achieved by enabling opportunities for connecting with the natural and historic environment, enabling access to tranquil areas, tackling airborne pollution and other environmental risks and the promotion of active travel and encouragement of healthier lifestyles with the benefit of improving physical and mental well-being.”

Planning Policy Wales, Edition 11 [2, p. 120]

There has been a growing momentum in Wales that recognises the need to establish ‘healthy environments’ in order to enable and promote healthy behaviours. This has been supported in recent years by Welsh Government, regional and local spatial planning authorities, and health policies and systems which have built on core themes contained within the Well-being of Future Generations (Wales) Act 2015 [3], the Planning (Wales) Act 2015 [4] and the Public Health (Wales) Act 2017 [5]. To support the practical realisation of the aims of these Acts specific guidance such as Planning Policy Wales, Edition 11 (PPW) [2] with its focus on ‘placemaking’, the Development Plans Manual, Edition 3 [6] and the obesity strategy for Wales ‘Healthy Weight Healthy Wales’ [7] have been developed and published.

This resource promotes a better understanding of the broader environmental and social barriers that impact on health, well-being and inequalities, and enables policies and plans that can ripple out to benefit individual physical and mental well-being, community and environmental health. Being conscious of these relationships offers further opportunities to increase the effectiveness of efforts to create healthy environments, by linking them to policy areas such as the environment, deprivation and education.

The Supplementary Planning Guidance (SPG) template for healthy-weight environments in Appendix 1 is a template which can be adapted for use at a local level using evidence from this resource. This evidence based resource and SPG together present an opportunity to harness a planning system that can realise its own potential to positively impact on and influence the future health and well-being of the people of Wales.

This resource and SPG template were developed before the COVID-19 coronavirus pandemic. The contents have since been updated to reflect the significant societal changes that have taken place, or are anticipated to occur, as a result of the pandemic.

The experience of the pandemic and policies to address it such as social distancing and approaches to public and private space, can and should with reflection, come to influence spatial planning and places and spaces that are health promoting. There will undoubtedly be a great deal of future work and research, examining all dimensions of the COVID-19 outbreak and its long-term consequences, including for health and well-being. For example, in July 2020 the Wales Health Impact Assessment Support Unit (WHIASU) undertook a health impact assessment of social distancing policies in Wales: 'A Health Impact Assessment of the 'Staying at Home and Social Distancing Policy' in Wales in response to the COVID-19 pandemic' [8].

Whilst this work is not able to anticipate exactly what these consequences may be, we do have some initial indications. For example, measures such as social distancing and self-isolation have highlighted differential experiences in the population in relation to accessing the existing provision of public spaces for physical activity and play. This has been reflected in Welsh Government's Building Better Places which is the pandemic recovery document for the planning system in Wales ([9]).

As discussed in Section 5 Enabling Well-being Through Good Neighbourhood Design, there are a range of interlinking strategies that can create neighbourhoods, towns and cities which either engender or undermine the creation of healthy and accessible environments. For example, few things will highlight more clearly the need for easily accessible, attractive, public spaces for physical activity, than being confined to a flat without a garden for long periods of time. As can be seen throughout this resource, access and barriers to healthy environments are often influenced by deprivation levels, and COVID-19 has likewise highlighted these inequalities. Whilst any stringent measures to restrict free movement and socialising will have an impact on some individuals' well-being and mental health, these will be exacerbated for those who face further barriers in benefitting from green and blue space.

Another early indicative shift is recent increases in bicycle sales [10], suggesting that there may well be a long term increased preference for active travel such as cycling and walking, over more crowded modes of public transport



and their potential for increased virus transmission. This may both galvanise and necessitate a more urgent approach to how travel networks and town centres can become safer and more accessible for pedestrians and cyclists.

Councils in built up areas such as Cardiff are proposing changes to city centres and transport networks that will enable social distancing whilst supporting local businesses and the economy. These include increasing pavement widths via reduced street parking and road capacity; encouraging park and ride schemes; growing



opportunities for active travel such as temporary cycle lanes; and bringing forward existing proposals for pedestrianisation [11]. Again, it is difficult to anticipate to what extent these changes will become a permanent feature of urban areas in Wales. However, COVID-19 has created circumstances which have required a rapid perceptual shift in how we approach the design of public spaces and infrastructure. This necessity, twinned with the existing support and evidence laid out in this document, has the potential to filter through into a 'new normal', accelerating and supporting many of the approaches highlighted in the report [12].

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About this resource

The **purpose** of this resource is to assist local authority planning policy and development management officers, national and local public health team practitioners, environmental health representatives, national advocates and policy makers for planning and health, and developers in Wales to contribute to the creation of healthy environments, including for healthy weight.

It will achieve this by providing context and information on the current barriers to creating healthy environments, relevant planning policy and different approaches for achieving these environments at national and local levels. It contains case study examples from Wales and the United Kingdom (UK) of Local Authorities (LAs) who have already utilised innovative and practical actions to overcome the challenges that many people face in sustaining healthy lifestyles. The template for Supplementary Planning Guidance (SPG) for Healthy Weight Environments (See separate Planning and Enabling Healthy Environments: Supplementary Planning Guidance for Healthy Weight Environment document) provides the context and information to contribute to the creation of local healthy environments and support local land use policies and Local Development Plans (LDPs).

The document provides an up to date and practical tool in the form of an SPG template for Healthy Weight Environments for those who wish to use the planning system to work towards creating environments which achieve both planning and public health goals to address obesity, diet, physical activity, social cohesion and mental well-being. As this work was originally conceived as a tool for addressing increasing levels of obesity across Wales, it still maintains special emphasis on the causes of obesity and the strategies for halting this trend. However, as part of stakeholder discussions it became clear that both public health and planning officers wanted a more wide-ranging document that would consider a broader range of topics and provide evidence sources and enablers for health and well-being. The COVID-19 pandemic, and the increased morbidity and mortality risk for those who are classed as obese, is another urgent call to shape environments that are health promoting and not obesogenic. This document recognises that addressing the broader determinants of weight involves a consideration of how to create more healthy environments as much as addressing health behaviours. It articulates why LAs may find it beneficial to use an SPG to achieve this and provides evidence to support such an SPG.

This resource and SPG template is aimed at a range of audiences and provides a comprehensive overview that some readers may already be familiar with. For example,

Section 1 covers planning policy in Wales and contain details which planning officers will be well versed in. The document can be read in it's entirety or used as an evidence reference and supportive resource for specific topics, for example air quality and soundscape (Section 7).

The **Supplementary Planning Guidance template** (see separate document) is **flexible** and can be **adapted** by LAs to create an SPG that can be used in the planning process to contribute to healthy-weight environments in line with LDPs and national policies. The SPG can encourage a collaborative approach between developers, LAs, planning officers and other relevant agencies (including health), to compile accurate data and evidence, to create and maintain standards, and to establish links to other relevant policies and strategies. It provides a **framework** which can be populated with the most appropriate data, evidence and recognised standards, which can simultaneously link to other relevant policies, both locally and nationally.



The **SPG template acts as both a point of reference and a platform** that can be **shaped**, if required, to fit particular local population needs and contexts. Alternatively, it can be utilised as it is. Getting this balance is important and may require patience and refinement.

As noted in Planning Policy Wales (PPW), while underlining the importance of sustainable places and placemaking: *"The intrinsic value of a place to people or communities is particularly important, which may be due to aesthetic, cultural, spiritual or historical reasons and planning authorities are best placed to understand these."* [2, p. 14]

Section 1: Introduction



“The growth aspirations of the National Development Framework are an opportunity to shape and grow, renew and regenerate our cities and towns and create sustainable, healthy places which embed green infrastructure.”

National Development Framework 2040, Consultation Draft [13, p. 26]

An extensive range of policies and Acts, both in Wales [Figure 1] and in the United Kingdom (UK) as a whole have identified and confirmed the inherent link between ‘placemaking’, and health and well-being. These provide a rationale and an opportunity for the planning and public health systems to work together to create environments that can improve and support overall health and well-being. The national ambition to create healthy environments is one that recognises the complex factors that contribute to individual and community health and well-being. Elements such as a healthy weight, good mental health and well-being, and community cohesion are parts of a whole that are sustained and enriched by having complimentary policies, infrastructure and opportunities in place.

In this resource, there are several examples of how placemaking and creating healthy environments can build a framework which can sustain the full breadth of well-being for individuals and communities. Increased awareness amongst spatial planners of the potential for particular planning solutions in one area to ripple out and benefit other areas, may lead LDPs and planners to consider, adjust or broaden the nature and scale of a project. The document can also provide additional context and relevance to national policies and reinforce justifications for decision-making. For example, embedding green infrastructure in towns and cities can create a chain of interlinking events: it encourages active travel, can promote reduced car travel, can enable and promote healthy-weight, improves air quality, encourages local play, improves community cohesion, reduces isolation, and supports mental well-being and so on. A range of ambitions laid out in PPW [2], Future Wales (the National Development Framework (NDF)) [13] or the Well-being of Future Generations (Wales) Act [3] can be supported with one intervention [Case Study I]. This resource draws out the potential for beneficial links such as those outlined above, signposts to evidence and places them in the context of the national planning and development framework.

1.1 Background Context

The process of devolution for Wales and a subsequent series of Acts over the years, such as the Wales Act 2017 [14], gave Wales discrete powers to create distinct policies that were more relevant to the history, culture, politics and geography of the country. This included devolved powers in many legislative areas including health and social care, planning and the environment. Legislation such as the Active Travel (Wales) Act [15] demonstrated that Wales was an early adopter in recognising the relationship between environment, spatial planning and health and well-being. Additionally, it established the key role local authorities should have in delivering the legislation in order to facilitate health improvement and enable healthy behaviours, such as physical activity, to benefit both the environment and individual health. This inherent link between the spatial planning system and health and well-being has been strengthened by the publication of studies, data and case studies that demonstrate the significant potential of the two sectors working together for mutual benefit. A series of Welsh policy and strategies have also reiterated and reinforced the connection between local planning and health and well-being:

Policy	Year	Relevance
Future Wales	2019	Health and well-being outcomes should be central to the planning process
Healthy Weight : Healthy Wales	2019	Integrated approach to healthy-weight using planning policy, national guidance and Health Impact Assessments
Climate Change Emergency Declared	2019	Commitment to creating low carbon economy based on sustainable development and environmental legislation
Prosperity for All: A Low Carbon Wales	2019	A plan to cut emissions and improve efficiency to increase wider benefits for Wales, increasing well-being and tackling inequality
Planning Policy Wales (ed.10)	2018	"Planning decisions affect every area of a person's life"
Prosperity for All: The National Strategy	2017	Requires coordinated planning between local authorities, health bodies, housing associations and other partners

Public Health (Wales) Act	2017	Public bodies to carry out specific health impact assessments
Environment (Wales) Act	2016	Management of a sustainable environment
Well-being of Future Generations of (Wales) Act	2015	"Health needs to be an intrinsic part of the planning process"
Planning (Wales) Act	2015	National, regional and local development planning for Wales
Active Travel (Wales) Act	2013	Requires local authorities to create and maintain active travel routes

Figure 1: Policy in Wales linked to health and well-being

Many of these policies are featured in a practical resource for public health, spatial planning officers and policy makers *"Planning for Better Health and Well-being in Wales: A Briefing"* (2016). This was a collaboration between the Town and Country Planning Association (TCPA) and the Wales Health Impact Assessment Support Unit (WHIASU), which is based in the World Health Organisation Collaborating Centre (WHO CC) on 'Investment for Health and Well-being' Directorate, Public Health Wales (PHW) [16]. 'Planning for Better Health and Well-being' aimed to provide more information and context on the public health, health care services and planning systems, policies and obligations and the structures and professionals involved in order to foster better health and well-being into spatial planning processes. These obligations include the Active Travel Act and PPW that aim to create and maximise fully integrated and accessible networks for walking, cycling and public transport [2, p. 48]. It also highlighted how environmental, social and spatial planning factors, also known as the social determinants of health, can have an impact on population health and well-being, and inequalities.

Section 2: The Planning System

The spatial planning system has great potential to influence overall health and well-being, including addressing the increasing rates of obesity in society. In a publication by the Town and Country Planning Association 'Planning Healthy-Weight Environments' [17], six elements were identified that contribute to healthy-weight in the planning environment. These include movement and access, open spaces, food, neighbourhood spaces, building design and local economy [Figure 2]. These are core elements that should be taken into account in planning policy. It is becoming more routine for national planning policies to contain sections on health and mental well-being.

This section focuses on how the planning system in Wales works and interacts with health and well-being. Section 2.1 to 2.5 provide an overview and those who are familiar with the planning system in Wales, the hierarchy of plans and documents may wish to move onto Section 2.6.



Figure 2: Planning Healthy-Weight Environments [18]

2.1 National Planning Policy

The National Development Framework

The most recent national development plan for Wales, Future Wales (previously known as the National Development Framework) 2020-40, prioritises 'a policy framework requiring that physical and mental health and well-being outcomes are central to spatial decision making' [19, p. 3]. Future Wales will be a 20-year plan for land use planning and will sit as the primary plan in the hierarchy of planning policy [Figure 3].

Just as longer term planning policies for Wales, such as Future Wales, place health and well-being at their centre, current health strategies and plans also highlight the spatial planning sector as integral to good health and well-being. As the Well-being of Future Generations (Wales) Act 2015 reflects, whilst a shift towards healthier communities in Wales can occur with investment in a wellness system with integrated planning and investment, it will not succeed if the broader determinants of health are ignored and health is not considered as a part of all policies [3].



Figure 3: Hierarchy of Development Planning in Wales

2.2 Planning Policy Wales and Placemaking



“Placemaking’ is a holistic approach to the planning and design of development and spaces, focused on positive outcomes. It draws upon an area’s potential to create high quality development and public spaces that promote people’s prosperity, health, happiness, and well-being in the widest sense.” [2, p. 16]

Planning Policy Wales, Edition 11

Planning Policy Wales 11 (PPW) sets out the land use planning policies of the Welsh Government, ensuring that the planning system contributes to sustainable development and the maximisation of well-being benefits for Wales, as required by the Planning (Wales) Act 2015. It promotes action at all levels of the planning system and the ‘placemaking’ process within it is central to establishing sustainable places and communities. Although placemaking is a process, it is seen as having elevated importance and draws a diverse range of groups and factors together, reflecting a whole-systems approach if implemented effectively. It takes into consideration all population groups and individuals with a personal or professional interest in the development of a place, as well as encompassing a consideration of both large-scale factors such as climate change and relevant local contextual issues [Figure 4 & Figure 5].

The four areas that contribute to placemaking are:

- Strategic and Spatial Choices
- Active and Social Places
- Distinctive and Natural Places
- Productive and Enterprising Places

In tandem with this approach, PPW highlights five key outcomes that should be achieved via the creation of sustainable places [Figure 5]:

- Growing our economy in a sustainable manner
- Making best use of resources
- Facilitating accessible and healthy environments
- Creating and sustaining communities
- Maximising environmental protection and limiting environmental impact

Steps to achieve national sustainable placemaking outcomes:

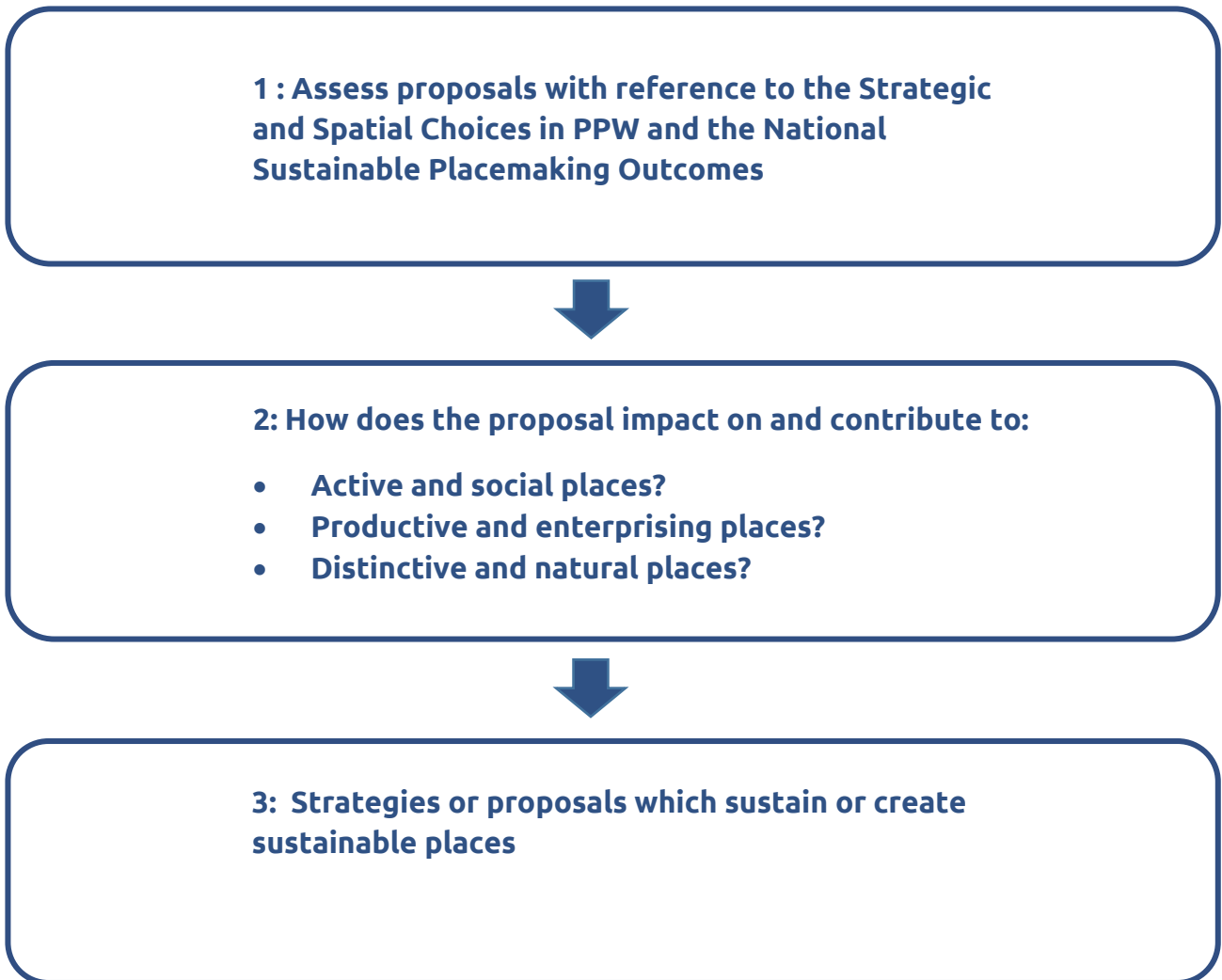


Figure 4: Steps to achieve national sustainable placemaking outcomes



Figure 5: National Sustainable Placemaking Outcomes [2, p. 20]

2.3 Local Development Plans

Local authorities, also known as Local Planning Authorities (LPAs), have powers that can play a crucial role in creating healthy spaces, places and communities. They can achieve this by having an effective Local Development Plan (LDP): a statutory land use plan for each local authority, setting out a vision, strategy and policies for local development. LDPs that incorporate health and well-being as key components are able to create environments that can halt and potentially reverse the increasing trend of unhealthy behaviours. The places and spaces created through LDPs can enhance access to green (natural environment) and blue (water) spaces; encourage active travel and physical activity; increase opportunities for social cohesion; support mental well-being and use planning legislation and regulation to offer a diverse range of healthy food choices. These elements can be tied to other areas of local development such as economic growth and adequate levels of good quality housing [2, p. 72].

Through effective working relationships with public health planners, developers, transport planners and environmental health officers, local planning policy officers are able to influence some of the key determinants of a healthy environment.

The COVID-19 pandemic and policies to address it have also highlighted the importance of the role of LDP's in enabling healthy places with space for: social distancing; enabling active travel; facilitating home and remote working and promoting local neighbourhood foundational economies; and ensuring housing provision that has access to open environments in which to take physical activity.

2.4 The use of Supplementary Planning Guidance

Supplementary Planning Guidance (SPG) is created by local planning authorities to provide more detail on certain proposals and policies contained within an LDP, for example for specific development areas or for open recreational space. As such, an SPG can be a useful tool when engaged with by developers as it provides clarity for those formulating proposals, potentially saving the time and expense of having to rework plans at a later stage. In addition, research evidence has shown that there are aspects of an SPG that are beneficial to health and well-being which can also be beneficial to business and economic development. For example, evidence from a variety of countries shows that investing in more pedestrian friendly spaces in towns can increase revenue and footfall in shops located in those areas, by as much as 40% [20, p. 23].

As laid out in PPW, 'planning authorities should develop and maintain places that support healthy, active lifestyles' [2, p. 31]. The adaptable Healthy-Weight Environment

SPG template, which is published alongside this document, can be tailored according to each local geographical area's LDP, and can assist LAs and applicants to fulfil these requirements. Although SPGs are given less consideration than LDPs, they can be taken into account as a material consideration in deciding on planning applications. For example, there have been reports from around the UK of planning officers who, in spite of there being a local policy restricting hot food takeaways (HFT), have granted permission to premises because there was no SPG to provide guidance. An SPG could have provided evidence from which to make an assessment based on local health needs and data, thereby providing a local public health context [21, p. 23].

2.5 Soundness test for local plans

The Planning Inspectorate (PINS) in Wales deals with planning appeals, examines LDPs for 'soundness' (or robustness) and ensures there is consistency in terms of the decision-making process, with the aim to complete these in a fair, open and timely way. As laid out in the Development Plans Manual Edition 3 [22] the LA is required to submit a local plan for examination that fulfils the following 'tests of soundness':

Preparation Requirements:

- Has preparation of the plan complied with legal and regulatory procedural requirements?
- Is the plan in general conformity with Future Wales (NDF) and/or Strategic Development Plan (SDP)?

Test 1: Does the Plan Fit? (Is it clear that the LDP is consistent with other plans?)

- Does it have regard for national policy, such as Future Wales, SDP, or Area Statements?

Test 2: Is the Plan Appropriate? (Is it appropriate for the area in light of the evidence?)

- Is it locally specific, addresses key issues, sustainable and evidence based?

Test 3: Will the Plan Deliver? (Is it likely to be effective?)

- Can it be implemented, is there sufficient support, can it be monitored effectively?

[22, p. 166]

2.6 Up to date evidence to support local policy

Localised evidence can strengthen LDP policies and decisions, ensuring that they meet the 'tests of soundness', thereby supporting local planning teams in the event of planning appeals. Evidence and data can draw on what is available nationally, such as data describing the wider determinants of health and health inequalities. This type of data can be found by utilising resources such as the Public Health Outcomes Framework [23] and the Strategic Health Assets Planning and Evaluation (SHAPE) tool [24]. LDPs should include local evidence, data and knowledge to support the policy, including any specific geographic areas or business activity where actions can be focused. Local data can include:

- levels of overweight and obesity, healthy eating, for example in schools, and associated long term health conditions across all ages;
- levels of disease closely associated with obesity and inactivity such as type 2 diabetes and cardiovascular disease;
- levels of deprivation and geographical locations of vulnerable and at-risk population groups;
- descriptions of the local food environment, which includes food retail premises and consideration of other sources of healthier food e.g. supermarkets, grocers;
- location of current food retail premises and areas of recent planning applications and decisions, for example over the last 3-5 years;
- location of schools or development sites to be covered by the proposed policy;
- local policies being applied in support of promoting healthy behaviours, such as Healthy Schools, Eco Schools and 20 mph zones;
- community views on food availability, shopping centres, high streets or planning policy;
- number of businesses and applications likely to be affected by a new policy.

Local public health teams (LPHT), under the leadership of the Director of Public Health, are responsible for providing specialist public health support to the Local Health Boards (LHBs) and other local and national stakeholders [16]. LPHTs also plan, develop, implement and evaluate a range of public health programmes and services that focus on health improvement, health protection and disease prevention. It is therefore important for these teams to liaise with the local planning policy team, to ensure a robust evidence base and supporting context as part of the submission for any planning application consultation process. This should reflect local and national health and well-being objectives such as improving levels of physical activity or reducing levels of obesity.

2.7 Joining up public health strategies with planning

Support for health promoting decisions on planning applications and appeals can be more successful if there are other complementary non-planning approaches, interventions and strategies in place at a local level, and national drivers and policies to support these. For example, if an LA promotes healthy places and healthy eating or if schools have a healthy eating policy / are part of a healthy schools scheme, or strategies for town centre and local high street regeneration are in place, then it is easier to make the case for a more balanced food offer to internal and external policy and decision makers and local stakeholders. This may include the rejection of further hot food takeaways if they are within a defined distance from schools, or if there are an excessive number in a community, or rejecting the extension of their licensing hours [Case Study E.]

To ensure that future planning decisions dovetail with broader strategies, links should be made to policies and priorities included in other statutory plans developed by the LA – such as Well-being Assessments (developed as part of the Well-being of Future Generations (Wales) Act), and other national policies and plans such as the Public Health (Wales) Act and ‘Healthy Weight: Healthy Wales’. Planning inspectors can use these links as a material consideration in determining planning applications. Questions in relation to healthy weight that are likely to be particularly relevant are:

- Is there an agreed healthy-weight, obesity, or physical activity strategy adopted by the LA?
- Are there relevant priorities set out by local healthcare system partners, for example the Health Board?
- Do these policies and priorities refer to restricting hot food takeaways, seeking a balanced food offer, or enabling a healthy environment?
- Have local communities and schools been engaged and do they support the proposals?

The majority of schools in Wales participate in the Welsh Network of Healthy Schools Scheme (WNHSS) and can achieve a National Quality Award (NQA), which recognises excellence in school health related practice, such as: food, fitness, mental and emotional health and well-being. Relevant questions in relation to schools might include:

- Are schools in your area working towards or have they achieved the National Quality Award (NQA)?
- Do the schools have a policy or policies in place that follow national and local guidance as set out in the NQA guidance?

2.8 Understanding the impact of local planning policies and guidance

Local planning authorities have methods in place to monitor the performance of planning policies. These methods are agreed internally and with the Planning Inspectorate and are included in the LDP at consultation stage. The performance of the planning policies are monitored on an annual basis through the preparation of an Annual Monitoring Report (AMR), which is submitted to Welsh Government each year. The AMR provides a basis to monitor whether the LDP is performing as expected and if not whether a review of the plan should be triggered. LAs which have established policies for healthy weight environments (be it within the LDP or as part of the SPG) have been able to refuse planning applications for new establishments within their preferred exclusion areas. Additionally LAs have been able to reject planning appeals submitted by businesses or individuals via the Planning Inspectorate (PINS), on the same grounds.



Whilst the main focus of this resource and the creation of the SPG template has been primarily driven by the need to enable action to support the aims of PPW, 'Healthy Weight: Healthy Wales' and Future Wales, it cannot do this in isolation. This pandemic and the ways the population interacts with the environment, the food environment and services presents an opportunity to reflect on the development of policies to address broader factors, for example hot food takeaways (HFTs) and additionally focus on the creation or strengthening of healthier, less obesogenic environments. The following section and SPG template supports this approach.

Section 3: Healthy-Weight Environments



“Our life expectancy as a population has remained static in recent years and obesity related illnesses and death, linked to poor diets and sedentary lifestyles, continues to increase at an alarming rate.” [7, p. 3]

Healthy Weight: Healthy Wales

Evidence has been accumulating over many years of the pervasive and wide-ranging impact being overweight or obese can have, in all areas of people’s lives [7]. Research evidence suggests that lifespan is reduced and there is an increased chance of developing a range of conditions. These include Type 2 diabetes, hypertension, cardiovascular disease including stroke, as well as some types of cancer, kidney disease, obstructive sleep apnoea, gout, osteoarthritis, and liver disease, amongst others [25]. Additionally, quality of life can be affected in other ways from mental health and well-being, through to weight-based stigma and reduced work opportunities. Just as the impacts of obesity can be severe and wide-ranging, a successful response must be robust, comprehensive and evidence based. The risks that being overweight and obese can bring have also been brought into sharp focus with the COVID-19 pandemic – a recent report noted that those who are classed as obese or morbidly obese have higher levels of COVID-19 related morbidity and mortality [26]. For example a report by Hamer et al in the UK, showed that compared to patients with BMI <25kg/m², patients living with overweight or obesity had an increased risk of hospitalisation, (RR 1.32 and 1.97 for each category) [27](cited in [26]).

Key publications in the UK, such as the Foresight Report [28] and Marmot Review [29], highlighted weight as being influenced by a broad set of factors, beyond a focus on personal choice, including local environment and social context. This shift to considering the environment in which people make choices, and specifically the built environment, highlighted an approach to spatial planning whereby health and well-being are integral and routine. From this perspective, spatial planning provides opportunities to promote active travel between the workplace, home and social spaces; create green and blue infrastructure in urban environments; assess the local food environment; support individual mental well-being; and consider how all of these factors interact to create healthy communities and social cohesion. There are now many examples of where planners and local planning authorities have effectively integrated a consideration of health and well-being into the built environment, with examples contained in Section 3: Case Studies [Case Study H and I].

Given the nuanced and complex causes of being overweight, it is beyond the scope of local government or any single agency to make a demonstrable difference without working in multi-level partnership. There are established health inequalities associated with obesity according to categories such as occupation status, with a higher prevalence amongst individuals in manual or routine roles compared to managerial or professional ones. However, these inequalities can often evade simple categorisation or predictions. For example, research looking at future levels of obesity in the United Kingdom in 2035, ('Future trends in social inequalities in obesity in England, Wales and Scotland'), anticipated an overall widening of social inequalities in relation to occupation status, but a potential reduction in the prevalence of obesity in females according to their levels of educational attainment [30].

The complex set of drivers for becoming overweight are therefore best addressed via a whole-systems approach, where local government, central government, planning agencies, health bodies, environment agencies and individuals all have a role to play. As the authors of the above report conclude, "a population strategy of prevention focused on the structural determinants of obesity is needed to change the trajectory of obesity prevalence trends and to tackle health inequalities" [30, p. 56]. An additional benefit of this approach is it reduces the burden of responsibility on any one sector or body. There are nonetheless many contributing factors that are within the remit of public bodies to influence and improve, and it is these that this document focuses on.

3.1 The Scale of Obesity in Wales

Levels of obesity in Wales are of increasing concern as the proportion of the population affected grows [Figure 6]. Having a high body mass index (BMI) has become the leading cause of years lived with a disability (YLD) and is associated with an increased risk of mortality [31, p. 31].

In Wales, almost 60% of adults (1.5 million) are either overweight or obese, of which 23% are obese [32, p. 16]. Without any intervention this overall figure is set to rise to 64% by 2030 (an extra 160,000 people), with all the associated costs to the National Health Service (NHS) and other public services, in addition to the personal challenges for individuals [7, p. 2].

OBESITY

The scale of the problem in Wales



Figure 6: Public Health Wales, the Case for Action on Obesity in Wales [31, p. 12]

3.2 Childhood Obesity

27% of 4-5 year olds are overweight or obese in Wales, and 12% are obese [32, p. 12]. Obesity in children is of a particular concern as research has shown that children who are obese are five times more likely to be obese as adults, compared with children who are not obese [33]. The health and societal consequences of obesity in childhood include both impacts on the child's health, for example musculoskeletal problems, Type 2 diabetes, depression, low self-esteem, bullying, and impacts on health in adulthood, for example higher incidences of cardio-metabolic disease, some cancers and musculoskeletal conditions [34] [35].

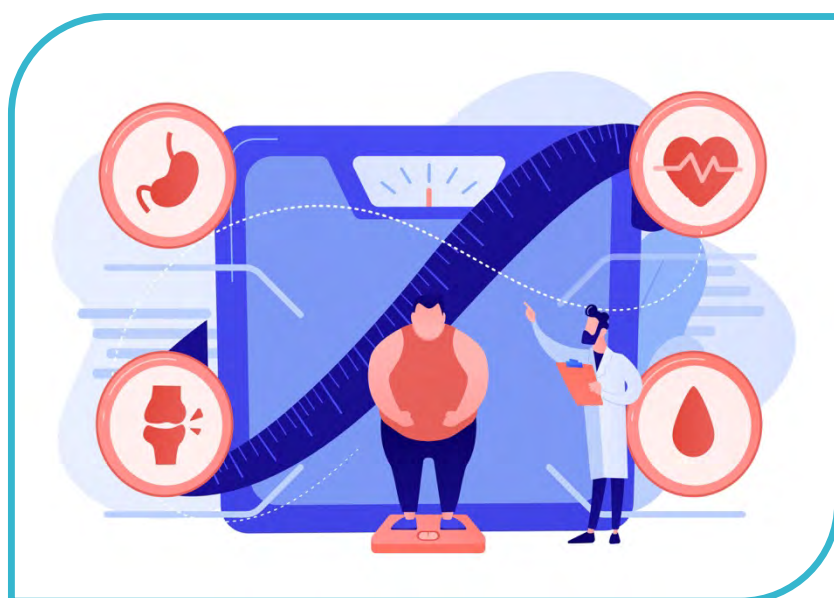
Figure 7 shows that in children aged 4-5 years, there are higher levels of overweight and obesity for those in the least deprived fifth of the population compared with the most deprived fifth. This is also reflected in the figures for adults.

Percentage of 4-5 year olds overweight or obese according to level of deprivation

	Obese and Overweight	Obese
Most deprived fifth	30%	15%
Least deprived fifth	21%	9%

Figure 7: Public Health Wales Observatory: Obesity in Wales [32, p. 12]

3.3 Annual costs of obesity to society



As well as diet related factors now being the leading cause of premature death and disability in Wales [7, p. 9], there is a huge economic cost to Wales in being overweight and inactive.

One study estimated the annual cost of obesity alone to the NHS in Wales was over £73 million in 2008-09, which increased to nearly £86 million if both obesity

and overweight were included [36, p. 11]. These were highlighted by the authors as conservative estimates which will have increased over the following decade. A more recent study looking at projected costs to the NHS in Wales states that if levels of overweight and obesity continue to rise, it will cost an estimated £465 million per year by 2050, with a cost to society and the economy as a whole of £2.4 billion [37, p. 8].

Studies looking at the economic cost of inactivity to the Welsh economy, have reached figures varying from £314 million per year, up to £650 million [38, p. 7].

Section 4: Encouraging Healthier Eating Through the Local Food Environment

A high proportion of local planning authorities across the UK have policies in place to address the proliferation or clustering of hot food takeaways (HFTs). Many LAs in Wales have policies on restricting the location or number of HFTs, for example Wrexham and Cardiff [39] [40]. Wales has the highest density of HFTs when compared to the UK average, at 65 per 100,000 people, compared to 61 per 100,000 on average for the UK [41], with significant variations in density between some LAs [Figure 8].

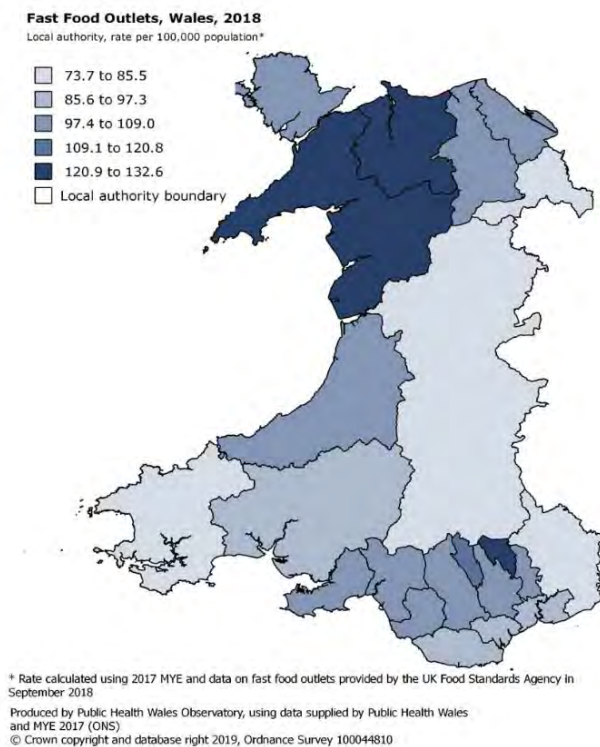


Figure 8: Fast Food Outlets Wales [42, p. 7]

4.1 Evidence

The relationship between HFTs and unhealthy weight is complex, with many interacting variables. Reports such as the Marmot Review have urged 'caution' in drawing too many conclusions from studies that are observational and do not prove causality [29, p. 132]. Although there is reasonably strong evidence linking HFT density to cardiovascular

disease, when it comes to weight, there is frequently contradictory evidence, and it is has been difficult to identify high quality evidence demonstrating a causal link [43]. A meta-analysis of 74 international studies by the Institute of Economic Affairs, found that only 20% of studies showed a positive correlation between density of HFTs and a higher Body Mass Index (BMI). The analysis showed 20% had mixed results, and 60% found no positive correlation (of which 15% found lower BMI for populations living in high density HFT areas) [44, p. 31]. Interestingly, when a ban on new take away restaurants in one district of Los Angeles from 2008 was reviewed in 2015, it was found that the average BMI for that district had increased, when compared to other districts [44, p. 39]. The study identified that some of the policies overlooked the fact that a large proportion of fast food is delivered, although this would not hold true for policies tackling HFT proximity to schools.

Currently much of the evidence is contradictory, given it is an underdeveloped area of research. Clearer links may emerge as a more consistent approach to research in this area develops and results become easier to compare and evaluate between studies. While acknowledging that this is currently an under-researched area, those that support the link between HFT density and weight suggest, “In the past decade, the research base has grown significantly; while frustratingly some results are still inconclusive or contradictory, it might be argued enough evidence exists to act upon.” [45]. There is also a consensus that this approach has more value when seen in the context of a whole systems approach to food, weight and overall health and well-being. For example, reducing HFTs may not be particularly effective if it is not dovetailed with efforts to develop a more ‘balanced offer’ of affordable food options, green and blue space, active travel and similar initiatives. It is also worth considering that food outlets do on some level fulfil economic, social and nutritional purposes and caution should be taken in creating a blanket approach that risks ignoring these factors or unduly labelling HFTs as essentially negative.

4.2 Exclusion Zones

‘Healthy Weight: Healthy Wales’ supports exclusion zones for the establishment of hot food takeaways (HFTs) around both schools and communities. Wrexham County Borough Council is an example of an LA that has implemented more specific restrictions, including a 400-metre ban on new HFTs around schools, [Case Study E] [46]. In addition, Public Health Wales and Cardiff and Vale University Health Board have undertaken a systematic mapping of schools in Cardiff, looking at levels of obesity and deprivation in relation to HFTs [47].

These approaches to exclusion zones can be placed within a broader context of other policies that can be implemented [7, p. 11]:

- Support to increase the availability of healthier food options on our high streets;
- Procurement and contracting in the public sector supporting the purchasing and selling of healthier food and drink;
- A Refill Nation, where access to free drinking water will be common place in our cities, towns and communities;
- Supporting local food businesses to develop healthy food choices and to increase more local food growing opportunities, which will impact on the environment and support action on climate change.

4.3 The Use of Class Orders and Healthier Catering

In Wales, HFTs are grouped into class order A3, alongside other establishments selling hot food and drinks. 'Use classes' place land and buildings into categories for the purpose of planning regulations. The class order of A3 for HFTs in Wales is different to England, where HFTs are given a separate class order (A5). Other use class orders include shops (A1) and financial and professional services (A2), as laid out in the table below [Figure 9].

Figure 9 highlights the range of premises selling food, both in the same category as HFTs (A3) and in other use class orders. For example, in class A1 (shops), businesses such as newsagents or sandwich shops can sell a wide array of energy dense or unhealthy foods that can negatively impact health and weight, whilst not being subject to the same focus or restrictions as HFTs. Despite steps being taken in respect to HFTs, the current reality is that it is neither feasible to restrict the location of all premises selling food nor what they sell. This position again confirms the need to take a whole-systems approach, whereby taking steps to create a healthy food environment, is dovetailed with strategies that encourage active travel and access to green and blue space.

Class Orders in Wales	
A3	Restaurants, Drinking Establishments, Takeaways
Includes in-house consumption of food (restaurants, snack bars, cafes, drinking establishments) and consumption off premises (hot food takeaways).	
A2	Financial & Professional Services
Financial services such as banks and building societies, professional services (other than health and medical services) including estate and employment agencies and betting offices.	
A1	Shops
Shops, retail warehouses, hairdressers, undertakers, travel and ticket agencies, post offices (but not sorting offices), pet shops, sandwich bars, showrooms, domestic hire shops, dry cleaners and funeral directors.	

Figure 9: Class Orders in Wales [48]

However, whilst there has been an explicit focus on HFTs and their role in levels of obesity and obesogenic environments, the importance of the wider environment and the accessibility, affordability and supply of fresh produce should be given equal weight, in order to avoid the creation of 'food deserts' and foster a health promoting food environment.

Section 5: Enabling Well-being Through Good Neighbourhood Design

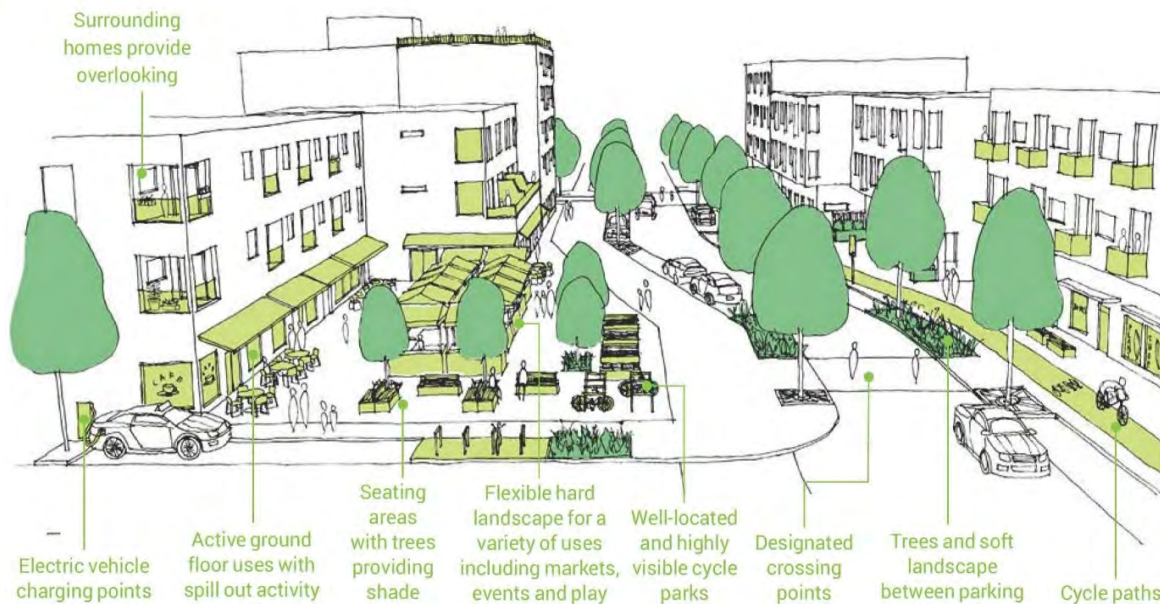


Figure 10: National Design Guide (UK Ministry of Housing, Communities and Local Government) [49, p. 31]

There is an approach to improving health that emphasises the personal responsibilities of the individual over other factors: to be more active, to eat more healthily and not smoke [50]. However, focusing too much on changing individual behaviour does not reflect the need to consider the wider factors that create the conditions for behavioural choices that can lead to the creation of obesogenic environments.

In relation to planning for healthy environments, a useful question is ***'what barriers do people face in their local environments to achieving good physical, mental and social well-being?'*** Well-being should be considered in the round, recognising that physical well-being can benefit and sustain mental well-being and vice versa. Considering for a moment the different parts of this whole, encouraging physical well-being is about recognising barriers to physical activity: green infrastructure, spaces for play, active travel and so on. From a nutritional direction, it may be about providing a more balanced food offer, education around food, and allotment spaces. For mental well-being, there may be a lack of shared public spaces or meeting places. These can provide opportunities for informal social interaction and activities that bring people together to reduce isolation. There may also be a need to reduce noise exposure and increase peaceful, safe, green and natural spaces that offer a chance for relaxation, connection with nature, and calm. Bringing together the examples above, we can begin to see how

these elements interact to contribute to overall well-being. An allotment provides opportunities for social interaction, physical activity and healthy eating. Green infrastructure can create opportunities for socialising and activity, such as walking groups or team sports.



“How good a city is at facilitating exchange determines its health – economic, social, cultural and environmental. Public space forms a vital conduit in this exchange process, providing platforms for everyday interaction and information flows – the basis and content for the public life of cities.” [51]

Demos (UK think-tank): ‘People Make Places: growing the public life of cities’ [51, p. 9]

5.1 Neighbourhood Design for Physical Activity

The proportion of adults meeting recommended levels of physical activity in Wales is low, even when compared to other nations in the UK.

Only 51% of women and girls in Wales undertake the recommended amount of 150 minutes of physical activity per week, compared with 59% in both Scotland and England [52, p. 53]. Similarly, only 57% of Welsh males meet recommended physical activity levels, compared to 69% in Scotland and 63% in England [52, p. 53].

Deprivation is a key factor in relation to levels of activity, with 47% of the most deprived fifth of the population reaching sufficient levels as opposed to 62% for the least deprived fifth [52, p. 54]. As is the case with most health determinants, there are diverse reasons for these figures, such as geography, which would necessitate a different approach for rural and urban areas:



“We need to understand these barriers and understand what would make physical activity easier and more appealing. We can then ensure that some of the structural barriers are addressed and that a more varied offer for children, young people and families is provided to keep people active for life.”

Healthy Weight: Healthy Wales Delivery Plan [53, p. 16]

Active Design

There are various elements that can contribute to increasing physical activity in a healthy environment such as travel planning, active design, access to green and blue spaces, allotments, safe places, clean air and a positive soundscape. In one study, people with good access to green spaces were 24% more likely to be active [54, p. 1]. Sport England's publication 'Active Design' [55] provides details, case studies and a framework describing how to incorporate active lifestyles and sport into cities, towns and villages. They provide a checklist for those seeking to plan for active design [55, p. 79] based around 10 principles [55, p. 10]:

The Ten Principles of Active Design

- 1. Activity for all –**
Enabling those who want to be active, whilst encouraging those who are inactive to become active.
- 2. Walkable Communities –**
Homes, schools, shops, community facilities, workplaces, open spaces and sports facilities should be within easy reach of each other.
- 3. Connected walking & cycling routes –**
Prioritising active travel through safe, integrated walking and cycling routes.
- 4. Co-location of community facilities –**
Creating multiple reasons to visit a destination, minimising the number and length of trips and increasing the awareness and convenience of opportunities to participate in sport and physical activity.
- 5. Network of multifunctional open spaces –**
Providing multifunctional spaces opens up opportunities for sport and physical activity and has numerous wider benefits.
- 6. High quality streets & spaces -**
Well-designed streets and spaces support and sustain a broader variety of users and community activities.
- 7. Appropriate infrastructure –**
Providing and facilitating access to facilities and other infrastructure to enable all members of society to take part in sport and physical activity.
- 8. Active buildings -**
Providing opportunities for activity inside and around buildings.
- 9. Management, maintenance, monitoring & evaluation -**
A high standard of management, maintenance, monitoring and evaluation is essential to ensure the long-term desired functionality of all spaces.
- 10. Activity promotion & local champions -**
Physical measures need to be matched by community and stakeholder ambition, leadership and engagement.

In publications such as the '*Healthy Weight: Healthy Wales Delivery Plan 2020-2022*' there is strong support for investment in the creation of environments that encourage active lifestyles. These environments make it easier for individuals to engage with the outdoors, more feasible to opt for active travel to work and leisure, promote access to Wales' natural habitats and active play and travel for children. In the document, there are a number of financial and strategic commitments aimed at encouraging active travel [53]:

- £30 million for local authorities to invest in active travel schemes, walking and cycling networks;
- £5 million investment in a Safe Routes in Communities Grant;
- £4 million Road Safety Grant;
- Actions to implement a 20mph default speed limit in residential areas;
- Encourage ideas to promote spaces for travel or play;
- Launch a revised 'Active Travel Promotion in Schools' programme;
- Implement a national 'Hands Up' travel survey to understand pupils' mode of travel to school and repeat this annually;
- Working with Transport for Wales to improve active travel opportunities within the public transport network.

Areas for Play



"Play is so critically important to all children in the development of their physical, social, mental, emotional and creative skills that society should seek every opportunity to support it and create an environment that fosters it. Decision making at all levels of government should include a consideration of the impact of those decisions, on children's opportunities to play." [56]

Welsh Government Play Policy

There has been increased interest in the importance of play for children, both as a form of exercise and for mental well-being. These include more traditional play areas in parks and more innovative approaches such as 'Play Streets' [Case Study J]. The Welsh Government's publication '*Wales - a Play Friendly Country*' provides statutory guidance to Local Authorities, both for assessing and the provision of play opportunities [57]. Wales is the first country in the world to legislate for children's play.

As well as the benefits for physical and mental health and well-being, creating high quality, easily accessible and free areas for play, is seen as being able to counter some of the inequalities created by poverty:



“High quality play opportunities for all children may contribute to mitigating the negative effects of poverty on children’s lives and help to build their resilience. Play can also be a means of reducing inequalities between children living in families that can afford costly recreational provision and those that cannot so reducing poverty of experience for all children.” [57, p. 4]

Welsh Government Play Policy

Play Wales is an independent charity, funded by the Welsh Government, which advocates for the benefits and increased provision of opportunities for play for children. There are a range of factors that can prevent or discourage both parents and children themselves from play. These include: safety fears, traffic, time pressures and reduction in spaces to play and it notes “our experience shows that play friendly adults in communities helps to remove or reduce these barriers, meaning more children can have a greater freedom to play out with confidence”. [58]

In addition, Play Wales runs the campaign Playful Childhoods, which contains practical information for parents and communities on how to create areas for play, which are both safe and enjoyable for children. More specifically, it includes:

- Practical ideas about providing time, space and objects to play with;
- Top tips, ‘how to’ guides and ideas for children’s play;
- Information on raising awareness about the importance of play;
- Guidance about planning a community play area;
- Examples of playful communities and projects;
- Links to information on play opportunities available in every LA in Wales;
- A blog featuring regular guest articles and up-to-date information about children’s play. [59]

5.2 Travel Environment

A well-considered travel environment can: create connected and accessible communities; maximise opportunities for active travel and public transport; can lead to a reduction in traffic and the need for new roads; and improve air quality. Evidence shows that regular walking reduces the risk of all causes of mortality by up to 20% and the risk of developing cardiovascular disease by up to 30%, additionally reducing the risk of high blood pressure, stroke and high cholesterol [60, p. 11]. Walking and cycling have been shown to improve mental health and well-being in addition to physical health. During the COVID-19 pandemic many more people started to engage in taking these forms of activity under the lockdown policies implemented in Wales [8].

Active Travel

The Active Travel Act 2013 plays a vital role in maintaining and developing an infrastructure for active travel, requiring that every year LAs must complete:

- i) new active travel routes and related facilities, and
- ii) improvements of existing active travel routes and related facilities [15, p. 7]

Building on this, by 2030 the Welsh Government aims to have developed the incentives and infrastructure to increase the appeal and feasibility for active travel in Wales [7]. This applies to new developments, where networks can be more easily integrated as well as using strategies such as 20 mph speed limits to encourage walking and cycling in existing communities. Future Wales aims to promote the growth of communities around existing towns with local job opportunities and facilities that limit residents' travel time. This creates another platform from which to promote opportunities for active travel and enabling greater levels of health and well-being. However, there is an acknowledgment for many rural communities, active travel and public transport can and will necessarily have limitations. [2, p. 34]

Cycling

As with many other strategies to improve physical activity and promote healthy-weight, any particular scheme is best considered in the context of where it is to be sited and where it might dovetail with other complementary schemes and policies. For example, although there is mixed evidence for increasing levels of cycling by creating bicycle lanes in isolation from other initiatives, results in one study were much more positive where there was a higher proportion of workplace cycling initiatives [61, p. 22]. In Wales, the numbers of people cycling at least once a week has changed relatively little since 2013 hovering at around 6% [62, p. 3], although some surveys reflected increased numbers during the COVID-19 pandemic.

Additionally, benefits to the UK economy are an estimated £3bn a year through bicycle sales, manufacturing, reduced traffic congestion, lower pollution levels, and lower NHS costs [63]. A review of Cycling Demonstration Towns (CDT) by the Department of Transport, calculated that for every £1 spent on the CDT programme, between £2.60

and £3.40 of benefits were gained due to morbidity and non-morbidity effects [64, p. 20]. Importantly, it is much more cost effective to factor in active travel routes during initial planning for new sites or routes, compared to retrofitting [65, p. 13].

Walking

The number of people walking as a means of travel has shown a decreasing trend, with those walking at least once a week as active travel, decreasing from 64% in 2014-15 [66, p. 7] to 57% in 2018-19 [62, p. 3]. There are large difference between regions, with Cardiff having the greatest proportion of residents walking at least 10 minutes a month as a form of transport (80%), compared to Ceredigion, which has the smallest (52%) [62, p. 8]. Looking at the proportion of people who walked daily as a form of transport, the difference is even more striking with Cardiff at 40% and Powys at 14%. Additionally there is a noticeable difference between levels of daily walking when comparing urban (28%) with rural (17%) populations [62, p. 9]. It is worth noting that there is no clear correlation between walking and cycling levels in different areas. For example, Caerphilly is ranked 16 out of 22 for levels of cycling but second for levels of walking.

These differences between urban and rural areas are understandably influenced by factors such as distances from the home to local facilities and shops. Consequently, the focus in these settings may be best suited on opportunities for active travel for shorter journeys, for example residents living closer to town centres. Future developments such as wider availability of electric bicycles may help to overcome some of the challenges in rural areas. These variations and lack of consistency again require a more nuanced appreciation of local environments and trends, rather than blanket solutions.

5.3 Open, Green and Blue Space and Infrastructure

There is strong commitment in a number of recent Welsh Government policies, such as the Future Wales (NDF), PPW, Area Statements as part of the Environment Act 2015 and 'Healthy Weight: Healthy Wales', to create both more open spaces for leisure and play, as well as to create improved links to the natural environment. It is also important that in addition to creating these spaces, that there is green and blue infrastructure integrated throughout towns and cities, rather than just creating 'islands', which people have to access by car. This attention to placemaking ensures that residents have opportunities to engage with the natural environment throughout the day and further encourages active travel. A good example of this is the 'Greener Grangetown' project in Cardiff [Case Study H.]

Additionally, the Environment (Wales) Act 2016 requires Natural Resources Wales (NRW) to produce Area Statements for regions of Wales considered appropriate for national natural resources policies. It ensures that all regions of Wales are covered by at least one statement. Each of these Area Statements should:

- (a) explain why a statement has been prepared for the area regarding:
 - (i) the natural resources in the area,
 - (ii) the benefits which the natural resources provide, and
 - (iii) the priorities, risks and opportunities for the sustainable management of natural resources which need to be addressed;
- (b) explain how the principles of sustainable management of natural resources have been applied in preparing the statement;
- (c) state how NRW proposes to address the priorities, risks and opportunities, and how it proposes to apply the principles of sustainable management of natural resources in doing so;
- (d) specify the public bodies which NRW considers may assist in addressing the priorities, risks and opportunities [67].

Guidance for the maintenance and creation of open spaces for play, leisure and growing is provided by Fields in Trust [68], part of the National Playing Fields Association (NPFA). Fields in Trust currently safeguards 2,600 sites across the UK, equivalent to 30,000 acres, with 280 sites in Wales.

Fields in Trust have published 'Guidance for Outdoor Sport and Play: Beyond the 6 Acre Standard (Wales)', which provides practical information on the preservation and sustainable development of open spaces with technical guidelines [69].

Benefits of Green and Blue Space

Research has shown that people who have good access to green space are 24% more likely to be active [70, p. 1]. For example 'Healthy Weight: Healthy Wales' gives special emphasis to the importance of open space in relation to healthy weight. These types of space include parks, forests, beaches, national trails, rights of way and rivers. There is a commitment by 2030 to have:



- Better promotion of, and more opportunities to access, local green spaces and rights of way for recreation;
- Innovative green spaces in areas of deprivation, creating greater opportunities for walking or cycling;
- An increased appreciation of National Parks and Areas of Outstanding Natural Beauty and their contribution to the health and quality of life of people who live in or visit them [7, p. 13].

There is also a strong commitment in PPW for planning authorities to, at the very least conserve and where possible enhance local landscapes [2, p. 133]. More broadly, this includes a consideration of local features with qualities or characteristics that have special significance, or may have the designation of Special Landscape Areas (SLAs), to be specified by the Local Planning Authority.

In balancing development against conservation, PPW asserts:



“The protection and enhancement of biodiversity must be carefully considered as part of green infrastructure provision alongside the need to meet society’s wider social and economic objectives and the needs of local communities...With careful planning and design, green infrastructure can embed the benefits of biodiversity and ecosystem services into new development and places, helping to overcome the potential for conflicting objectives, and contributing towards health and well-being outcomes.” [2, p. 129]

5.4 Allotments and Community Growing

There has been a significant amount of research published which demonstrates the benefits of allotments and their popularity is indicated by frequently oversubscribed waiting lists [16, p. 34]. Gardening and community allotments have been reported widely as having numerous benefits, such as physical activity for all age groups and as occupational therapy to recover from a variety of disorders, conditions and diseases. Gardening and allotments have also been recognised as contributing to better mental health and well-being, a factor that has been identified as having a key role in promoting and maintaining healthy weight management [16, 45, 71].

In Wales, one indication of the importance of allotments to local communities is that a provision for them, community growing or similar projects is an integral part of many

Local Development Plans (LDPs), for example in Ceredigion and Newport [72, 73]. This reflects both their popularity and their many benefits. Evidence in Wales shows that the median level of provision for allotments, community gardens and urban farms was 0.3 hectares per 1,000 population [69, p. 12].



A source of advice on creating and maintaining allotments for planners and local government is the Welsh Government's 'Guidance for Traditional Allotments and Community Led Gardening Projects (March 2016)' [74]. There are also ambitions to simplify elements of the planning process in relation to allotments, such as the consultation 'Permitted Development and Allotments' [75] which, if approved, will simplify the process of erecting sheds and glasshouses in allotments.

Section 6: Neighbourhood Design for Social and Mental Well-being

For the majority of the population the built environment is a constant feature of their daily lives in the form of a place of work, residence or for leisure activity, and as such has the great potential to either promote or diminish well-being and encourage or erode social cohesion. There are, of course, social challenges and pressures that are beyond the ability of the planning system to influence. However, the layout of towns and cities can create an environment that promotes mental well-being and provides infrastructures, conduits and props for interaction in the public sphere, in addition to the benefits for physical health.

In the public sphere, for example streets, town centres and parks, there are a range of planning interventions that can be implemented to encourage a sense of place, belonging, socialising and cohesion. Again, these are steps that can play a role in promoting well-being and counteracting divisions in communities, reducing isolation and a trend towards loneliness in certain sectors of society, by creating opportunities for interaction and engagement - even during social distancing due to the COVID-19 pandemic. Data



from the National Survey for Wales demonstrates that people describing themselves as lonely had increased from 28% in 2016-17 to 30% in 2017-18 [76]. In addition, the survey shows that whilst loneliness is more common in the age group 16-44 it is a challenge faced by all generations. Public Health Wales carried out a public engagement survey during the COVID-19 pandemic, to gauge the ways in which the Welsh population were being affected, both by the pandemic and the restrictions put in place [77]. Results from week six of the survey showed that 34% of respondents said they had felt lonely in the last seven days with 39% feeling isolated.

Importantly, in order to create spaces that serve all of the community, it is necessary to consider what each group looks for and would benefit from, in the public sphere. One example provided by Demos is that neglecting to provide engaging spaces for young people leaves them with a lack of places for socialising: "*obliging them to carve it out for*

themselves on street corners and benches. Other people often found it hard to read their behaviour and so reacted with unease to their presence." [51, p. 52]. This feeds back into the theme of 'community safety' (see Section 6.1) and whether other parts of the community consequently feel at ease to enjoy and interact with public spaces to their full potential.

High quality green and natural space has benefits for all communities and ages and ensuring that these are easily accessible will especially benefit older people and people with physical disabilities, who may otherwise have difficulty travelling to them. For these groups, the opportunities to socialise and be physically active are especially important given these restraints [78, p. 10].

Green, blue and other natural spaces also have great potential to positively impact on mental health and well-being. There is an evolving body of evidence that recognises this link, with PPW highlighting this relationship in a planning context:

"Distinctive and Natural places must maintain or incorporate green infrastructure, recognising the wide ranging role it can play, as key components of their natural and built fabric. Doing so will maximise health and well-being of communities." [2, p. 123].

The research that underpins this approach is broad and has been gathering momentum as more evidence emerges. The range of factors that can contribute to mental health and well-being are broad and complex. For this reason, it has taken time to establish clear direct links between green, blue and natural spaces and mental health and well-being, which are independent of factors such as deprivation, for example.

One study in the Netherlands, looking at rates of depression and anxiety in relation to proximity to green space, adjusting for confounding factors such as income, identified the following relationship:

"For anxiety disorders, the annual prevalence for people with average characteristics with 10% green space in a 1 km radius was 26 per 1000 people and for those with 90% green space in a 1 km radius 18 per 1000 people. For depression these figures are respectively 32 and 24 per 1000." [79].

A study by the University of Exeter ('Would You Be Happier Living in a Greener Urban Area? A Fixed-Effects Analysis of Panel Data'), used data from 10,000 participants to provide evidence of a link between green space and mental health and well-being [80]. Adjusting for other factors such as income, marital status and health, the authors found that residents "have both lower mental distress and higher well-being when living in urban areas with more green space" [80, p. 920]. Whilst acknowledging that the benefits on an individual level may seem less significant, they emphasise that the cumulative effect on a community or regional level creates a compelling rationale for this approach to feature more prominently in planning policy. The authors assert that "significant

aggregate gains can be made from increasing the amount of green space in urban settings” [80, p. 927].

6.1 Perceptions of Safety

An important consideration when designing healthy environments is the sense of safety that they offer, which can influence the degree to which people want to engage in them and with others. ‘Safety’, as highlighted in national planning and development strategies can take a number of forms:

- Providing safe environments that tackle anti-social behaviour and crime;
- Provide road safety, for pedestrians and cyclists;
- Create spaces for play that parents feel are safe for children;
- Feeling safe around strangers [2, p. 29].

Creating safe environments, when implemented with other policies around green infrastructure and active travel, encourages physical activity throughout the environment. This avoids the need to drive to pockets of safer, greener areas for physical activity or play, and can encourage people to get active in their local neighbourhood.

Environments in which people feel safe from antisocial behaviour or crime are also ones in which people will willingly spend more time and can increase opportunities for socialising and social cohesion. These can be achieved in a number of ways, some of which are outside of the remit of planning, such as policing. Nonetheless, there are interventions and policies that the planning system can promote to both discourage antisocial behaviour and to support the population to feel more reassured in their local environment. This can also lead to limiting the need for more intrusive surveillance such as cameras. They include:

- buildings around the edges of a space;
- active frontages along its edges, provided by entrances onto the space and windows overlooking it, so that people come and go at different times;
- natural surveillance from inside buildings provided by windows and balconies, so that users of the space feel they might be overlooked by people from inside;
- reasons for people to enter into the space, for an activity or destination or because it is on a natural line of direction of travel;
- risk assessment and mitigation at an early stage of the design process, so security measures can be integrated into positive design features.

National Design Guide (UK Ministry of Housing, Communities and Local Government) [49, p. 32]

One important point noted by Demos regarding the shared use of the public sphere with strangers, is how 'props', for example street furniture can be utilised to dispel and dissipate mistrust between different sectors and groups in society:



“ When users of a public space have a sense that other people appear to have a reason to be there, for example walking a dog, taking children out or painting a picture, they tend to be more comfortable sharing a space with them... and importantly help people interact. Get the prop right and people feel they have permission to engage in more public, social behaviour.”

Demos: People Makes Places [51, p. 66]

Public engagement and 'ownership'

Having a sense of control and involvement in decisions that affect your life and participation in the community are important protective factors for mental well-being (Cooke et al. 2011). The National Survey for Wales (2018/19) reports that only 18% of respondents say that they agree (15%) or strongly agree (3%) that they feel that they can influence decisions in their local area [81].

A range of processes and methods can facilitate and enable residents to participate, engage and collaborate in the design of local developments. Research has shown that widespread engagement with the community on public developments engenders a sense of partnership and 'ownership', for example, the 'Drift Park' in Rhyl, Denbighshire [Case Study B]. The development incorporates five sheltered gardens, a water play garden and mini golf. There was extensive engagement with the local community on their preference, design input from local schools and groups, a three-day exhibition and ongoing consultation. One added benefit of this process was that vandalism was minimised and was seen as reflecting the successful engagement and resulted in associated cost savings [82].

Creating appropriate spaces for all sectors of society is undoubtedly challenging. By looking at the range of case studies in this resource, and the existing and emerging recommendations in the literature covered throughout this resource and the SPG, this could become a process that may be easier to facilitate.

Section 7: Air Quality and the Soundscape

The quality of the air we breathe and the soundscape in which we live, work and relax, have a range of direct consequences for health and well-being. In addition, noisy and polluted environments discourage or diminish the benefits of active travel, play, physical activity or spaces for socialising. The importance of this is recognised specifically in government policies such as the 'Noise and Soundscape Action Plan 2018-2023 for Wales' [83], 'Local air quality management in Wales' [84], and more broadly in planning policy:



“Clean air and an appropriate soundscape contribute to a positive experience of place as well as being necessary for public health, amenity and well-being. They are indicators of local environmental quality and integral qualities of place which should be protected through preventative or proactive action through the planning system.” [2, p. 152]

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7.1 Air Quality

Outdoor air pollution is known to be the largest environmental risk to health and inhaling pollutants such as nitrogen dioxide (NO₂) and fine particulate matter (PM_{2.5}) can cause a range of health problems [85]. These include heart and lung diseases; conditions such as dementia, low birth weight, diabetes; and more short-term health effects such as eye, nose and throat irritation [Figure 11]. Many city dwellers across the United Kingdom (UK) are exposed to concentrations of NO₂ that exceed recommended limits [86].

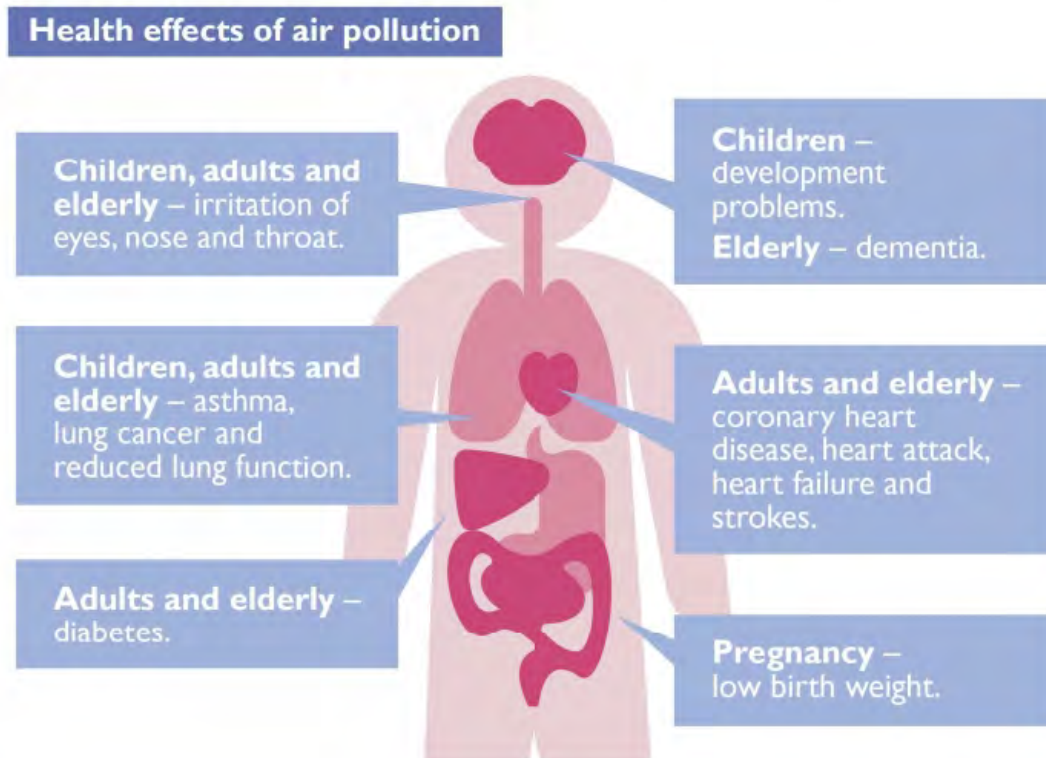


Figure 11: Health effects of air pollution – The Clean Air Plan for Wales [87, p. 24]

Although Wales generally has lower annual mean concentrations of air pollutants compared to some other parts of the UK [88, p. 5], there are nonetheless 45 declared Air Quality Management Areas (AQMAs) in Wales at the time of writing, reflecting levels of pollutants above guideline levels [89].

Broader and more long-term strategies, such as those contained within PPW [2, p. 152] and the Clean Air Zone Framework for Wales [90], outline methods to reduce car usage and promote the use of less polluting vehicles. Achieving these aims would reduce the more immediate physical threat posed to pedestrians and cyclists by high numbers of vehicles on the road and could improve air quality for all.

In the shorter term, there are some strategies that planning authorities can use to reduce the negative effects polluting vehicles have on individual health. For example, although playing or exercising in polluted areas reduces the health benefits of those activities due to harmful chemicals being inhaled more deeply, moving a few streets away from a busy road can reduce their impact [91]. Therefore, planners can recognise opportunities to use strategies such as green infrastructure or cycle and pedestrian routes, to create more distance from polluting vehicles, in tandem with larger scale projects to reduce car usage.

Levels of nitrogen dioxide and particulate matter, the most harmful pollutants, have fallen across Wales since records began. Figure 12 shows how levels of nitrogen dioxide have decreased over the years, at various testing sites across Wales. However as can be seen in this graph, these levels are still prone to increasing or levelling out in certain years. As such, concerted efforts need to be taken to continue to improve air quality in Wales and utilise relevant planning tools where they exist.

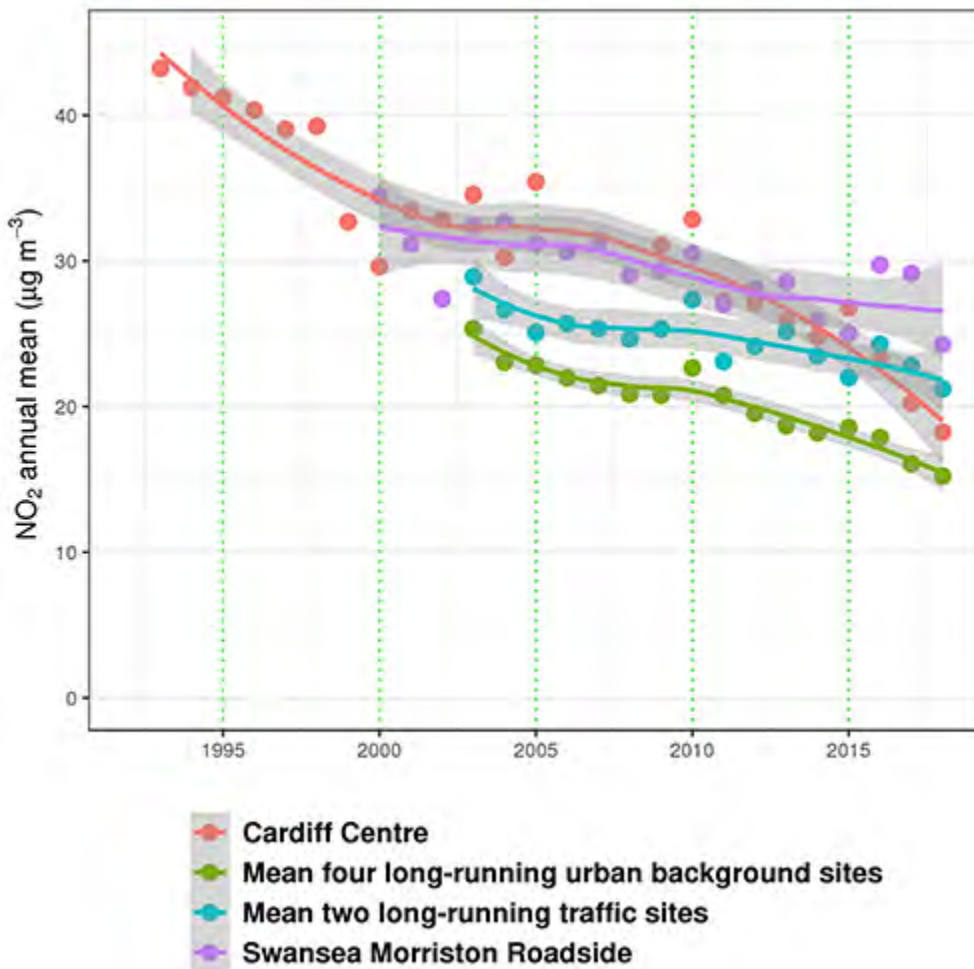


Figure 12: Annual Mean Nitrogen Dioxide Concentration at Long-running sites in Wales (Air Quality in Wales)

Both rural and urban communities contribute to poor air quality through a wide range of activities and factors [Figure 13], and as such regional and local planning and legislation can work to mitigate these. At the same time, the impact of poor air quality can be felt both in rural and urban locations in spite of the understandable focus on cities and major towns. Polluting vehicles, industries and activities have an ability to affect local, regional, national and international air quality, wherever they are located. Additionally, those regions of Wales that have higher levels of good air quality need to ensure that this continues into the future.



Figure 13: Principle Sources of Air Pollution (Defra) [93, p. 24]

While some local authorities already have SPGs specifically for air quality, for example Newport City Council [94], quite often they are integrated into a broader LDP for example in Denbighshire [95], or not included at all. As there is such a well-established link between poor air quality and health, there is added benefit from contextualising it in relation to spatial planning using SPGs and other tools.

In the Welsh Government’s 2017 policy paper ‘*Local air quality management in Wales*’, there is a reminder that addressing poor air quality should not be carried out as a short-term solution or in isolation from other related health outcomes. Instead, it should be “*integrated with land use and transport planning, public health, active travel, green infrastructure, road safety and climate change wherever potential long-term synergies and conflicts with those other policy areas are known to exist*” [96, p. 6]. From this perspective, all factors should be considered in tandem, whatever the initial planning focus may have been.

There are also co-benefits to addressing the causes of air pollution in conjunction with effective transport planning. The Welsh Government’s strategy to improve air quality, ‘*Clean Air Plan for Wales: Healthy Air, Health Wales*’, highlights a range of methods for how this integration can work [87]. One example given is the use of Workplace Parking Levies, whereby money is raised from employers charged for parking provision [87, p.

33]. It is anticipated that this would not only discourage car use and so reduce road congestion and air pollution, but will also provide money to reinvest directly into local transport provision.

Just as evidence shows that well connected communities with traffic calming or traffic free routes encourages cycling and walking, this switch to active travel in turn reduces traffic pollution. In turn, this reduces the need for new roads, thus setting up a reinforcing process that benefits and promotes better air quality and health and well-being [65, p. 13].

7.2 Air Quality and Deprivation

As with most other factors that contribute to poor environments, there is a correlation between the highest levels of nitrogen dioxide and the highest levels of deprivation [Figure 14]. This contributes to an increased prevalence of pollution-related health problems, such as lung disease, both for people living in these areas of deprivation and those travelling through them [85]. In tandem with the other factors and determinants discussed previously, these environments can fail to provide good quality and healthy areas in which individuals can establish healthy routines, activities and choices. The Public Health Wales publication *'Making a Difference: Reducing health risks associated with road traffic air pollution in Wales'*, describes how poorer air quality and areas of deprivation combine to create: *"a triple jeopardy, where air pollution, impaired health and deprivation interactions can create disproportionate disease burdens between and within communities, contributing to health inequalities."* [97, p. 5]



Figure 14:: Wales' local annual mean air pollutant concentrations (and ranges) by income deprivation status, 2011-13 [88, p. 6]

Finally, there are economic benefits to improving air quality. A 2017 study undertaken by The National Institute for Health and Care Excellence (NICE) found evidence to show that for every £1 spent on creating low-emission-zones in towns and cities, there was a £29 cost benefit [98, p. 39].

7.3 The Soundscape

Noise



“Noise, meaning unwanted or harmful sound, can, in the short term, disrupt sleep and increase levels of stress, irritation and fatigue, as well as interfering with important activities such as learning, working and relaxing. In other words, it reduces the quality of our lives.”

Welsh Government Noise and Soundscape Action Plan [83, p. 1]

The soundscape is widely acknowledged in international and national evidence and policy as playing an important role in physical and mental health and well-being. Research by the World Health Organisation (WHO) on the impact of traffic noise on health, highlighted cardiovascular disease, sleep deprivation, reduced childhood cognition and stress as some areas of health that can be affected [99]. The report concluded that a million healthy life hours were lost in Western Europe every year due to the effects of excessive noise [99, p. v].

A series of publications have identified a range of health conditions as being influenced by a noisy environment, for example hypertension, heart disease, stroke and diabetes [100, 101, 102]. One research project in Sweden, of more than 5,000 individuals, found increased levels of central obesity, proportional to the level, types and combinations of traffic noise (road, rail, air) [103]. Whilst acknowledging the complexity and potential ambiguity of such a study, they proposed that the production of cortisol in response to stress could lead to storage of fat around the abdomen. Other studies have found an association between road noise and a rise in BMI [104].

Noise is often inextricably linked with other environmental hazards, such as poor air quality. An environment that has a combination of poor air quality, excessive noise and is perceived as unsafe due to high amounts of traffic both discourages physical activity and reduces the health and well-being benefits of activity in these environments. As such, efforts to tackle noise will often involve addressing these other factors at the

same time; recognising the links will result in a more effective approach: *“Environmental noise may occur in combination with other environmental hazards, notably other types of emissions from road traffic and industry. Interventions to tackle noise should also aim to improve health from reduced exposure to other pollutants, and/or have indirect health co-benefits, for example, from reduced congestion, improved road safety and active travel.”* [83, p. 13]

Figure 15 shows that the proportion of people bothered by unwanted noise increases by settlement size. Figure 16 demonstrates a correlation between deprivation and noise pollution, with those living in the most deprived areas most affected.

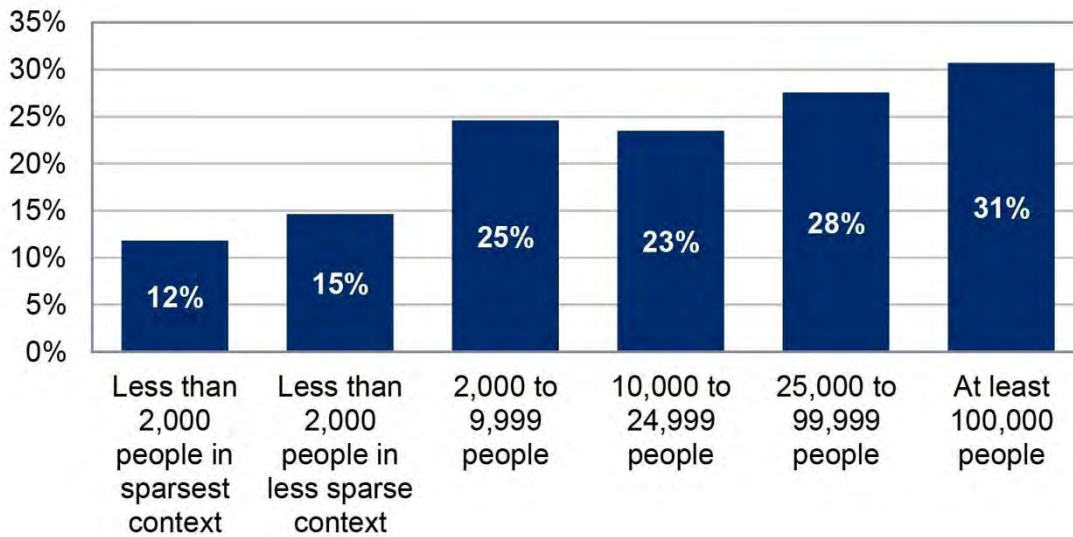


Figure 15: Percentage of people bothered by noise, according to settlement size [83, p. 116]

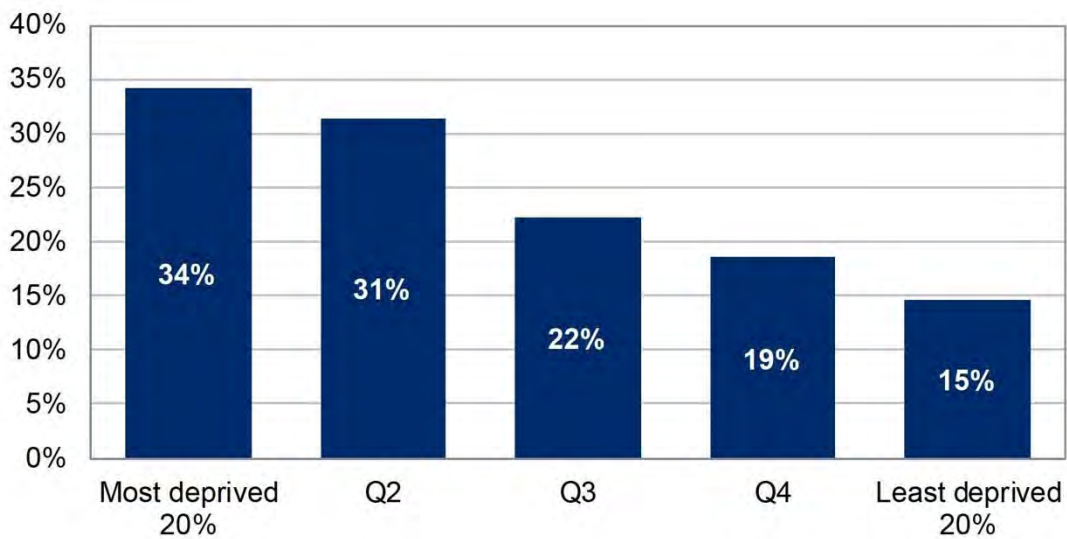


Figure 16: Percentage of people bothered by noise, by level of area deprivation [83, p. 118]

Addressing the soundscape via planning is also about a consideration of positive sounds, rather than just mitigating against noise.

Planning Policy Wales reflects the importance of soundscapes to positively influence health, whether that be via creating sufficient open green and blue space for their positive soundscapes or preserving historic and cultural sites for their tranquil and restorative qualities [2, p. 157]. Again, the benefits can be more powerful in a broader context: "*An area may offer peace and quiet or a positive soundscape where natural sounds such as flowing water, birdsong, the wind in the trees and human conversation are more prominent than background traffic noise*" [83, p. 29].

Section 8: Concluding Remarks

The Welsh Government's strategic planning policy for the next two decades, the National Development Framework 2020-40 [13], recognises the integral relationship between health, well-being and spatial planning and advocates for a planning policy that places physical and mental health as one of its central themes. Local authorities are therefore required to formulate and put into action plans and policies that both improve overall health and well-being and decrease health inequalities.

The creation of healthy environments can be enabled through a careful consideration of the various elements and determinants outlined in this document. These environments are more effective when adapted to the local context and respond to the needs of the local communities and populations. In addition to the co-benefits from healthy environments to physical health, there are a range of benefits for social cohesion and the mental well-being of individuals and the wider community. The COVID-19 pandemic has also explicitly demonstrated how environments can contribute to health and well-being in a range of ways, for example the proximity and quality of space for physical activity and the need for more space to facilitate active travel and social distancing for pedestrians.

As has been seen throughout this resource, a consistent link between the factors governing health inequalities is deprivation and poverty. From access to green and blue spaces to density of hot food takeaways, from poor air quality through to leisure time, deprivation has a role, both as cause and consequence of ill health. Undoubtedly, the relationship between health and deprivation is a complex one, with many intertwining variables but it is nonetheless always there and needs to be taken into account in planning for healthy environments.

This document has shown how the planning system has further potential to create social, engaging, cohesive spaces with opportunities for health. It has highlighted practical steps to achieving this, such as increasing opportunities for active travel and play, ensuring housing with easy access to green space and improving air quality. There are additionally many examples of where planning has already been used to benefit health and well-being. Further unlocking the potential of the planning system, by incorporating the approaches from this resource and the SPG, would mean supporting physical, community and mental well-being and making planning and health policies successful realities. Local Planning Authorities have a core role to play along with the health system:



“High quality places are barrier-free and inclusive to all members of society. They ensure everyone can live, work, travel and play in a way that supports good physical and mental health. Our built and natural environments should be planned to promote mental and physical well-being.” [2, p. 18]

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Glossary

Green and Blue Space		Areas of grass, trees or vegetation, and water features
Local Planning Authority	LPA	A public authority whose duty it is to carry out specific planning functions for a particular area. All references to local planning authority apply to the district council, county council and National Park Authority.
Local Development Plan	LDP	A LA's plans setting out the specific development, planning policy and vision for their area, covering a 10-year period, in line with PPW.
Material Consideration		Any consideration that relates to the purpose of planning legislation, which is to regulate the development and use of land in the public interest, and fairly and reasonably relates to the application concerned.
National Development Framework (2020)	NDF	Known as Future Wales, this is the Welsh Government's plan for spatial development and land use for the whole of Wales.
Place making		An approach to planning and development focused on creating sustainable, healthy places that consider factors from the global level down to the local.
Planning Policy Wales Edition 11 (2018)	PPW	The planning strategy for Wales, setting out planning requirements and delivering the vision of Wales set out in the Well-being of Future Generations Act.
Soundscape		The acoustic environment as perceived or experienced and/or understood by a person or people, in context.
Strategic Development Plans	SDPs	A development plan for the different regions of Wales, drawn up by the Local Planning Authorities in that region and ratified by the Welsh Government.
Supplementary Planning Guidance	SPG	Produced by local authorities to build upon and provide more detailed advice on the policies contained in a Local Development Plan.
Use Class Order		The categories that different types of establishment are put into, for the purposes of planning.
Well-being of Future Generations Act (2015)	WFGA	An act defining the requirements of Public Bodies to consider the impacts of decision making on areas such as poverty, health inequalities and climate change, in line with the sustainable development principle.
Whole systems approach		A local whole systems approach responds to complexity through an ongoing, dynamic and flexible way of working. It enables local stakeholders, including communities, to come together, and share an understanding of the reality of the challenge.

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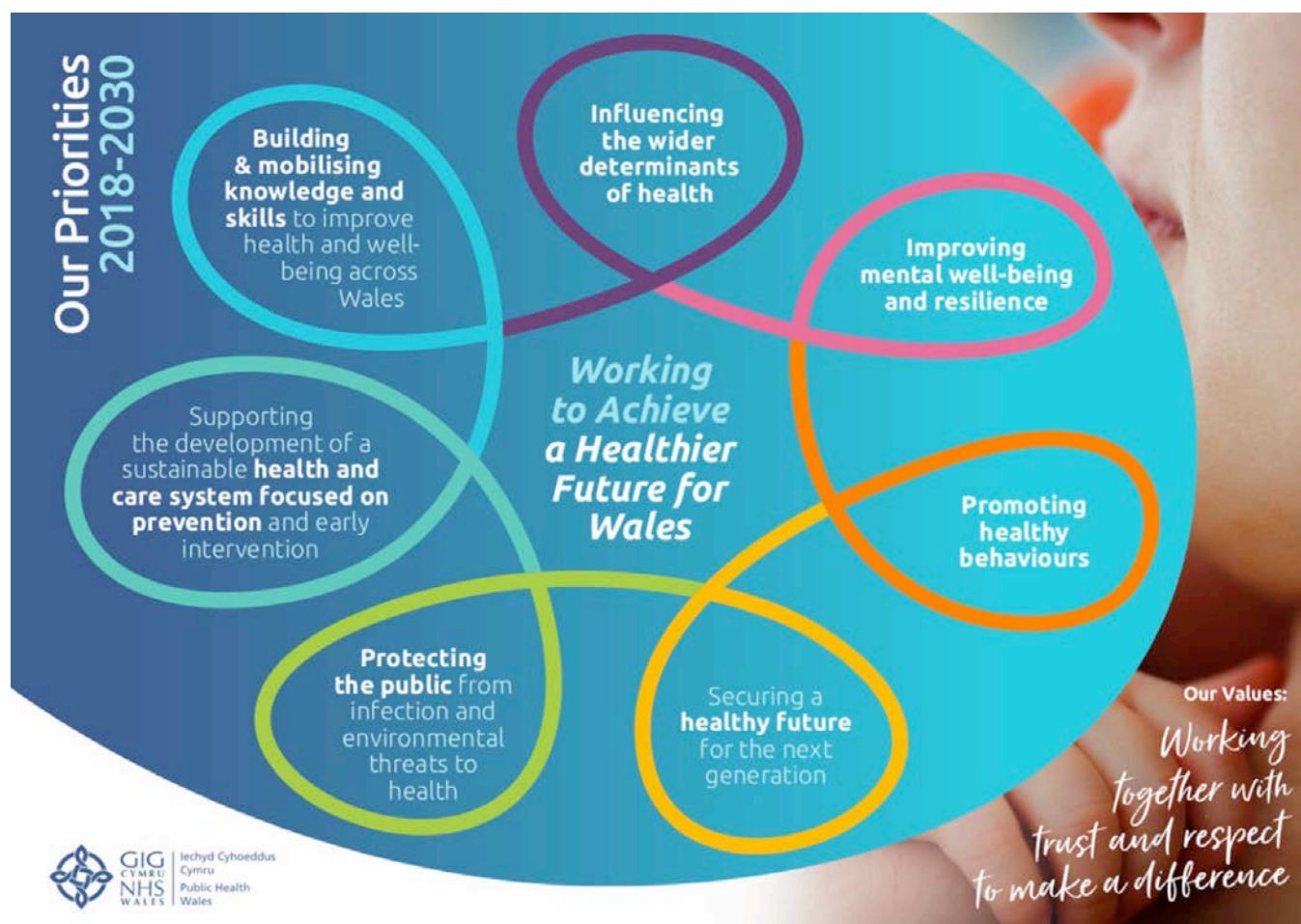
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About Public Health Wales

Public Health Wales is one of the 11 organisations which makes up NHS Wales and is the national public health agency in Wales.



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